18 August, 2017

The Companies Officer
Australian Securities Exchange Ltd
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Fortescue Ore Reserves and Mineral Resources Update: Operating Properties

Fortescue Metal Group (ASX:FMG, Fortescue) presents the Ore Reserves and Mineral Resources statement for its Hematite and Magnetite properties at 30 June 2017.

Ore Reserves and Mineral Resources are reported in accordance with the Australian 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 2017 Annual Report and should be read in conjunction with the enclosed supporting technical information (Attachment 1 – Hematite Ore Reserve and Mineral Resources Report and Attachment 2 – Magnetite Ore Reserve and Mineral Resources Report).

Hematite Ore Reserve and Mineral Resource – Operating Properties

	Reporting	30 June 2017		30 June 2016	
	Basis	Million tonnes	Fe%	Million tonnes	Fe%
Ore Reserves	(Dry Product)	2,191	57.2	2,173	57.2
Mineral Resources	(Dry In-Situ)	5,279	56.0	5,261	56.0

Operating properties include the Chichester and Solomon Hubs. Ore deposit types include Bedded Iron (BID), Channel Iron (CID) and Detrital Iron (DID) mineralisation.

The Iron Bridge Magnetite resource has continued to grow as further infill drilling has better defined the orebody dimensions and grade. The full depth and strike extents of this large resource remain untested, with current work focussed on the upper portions (to 450 metres depth) of the deposit.

Magnetite Ore Reserve and Mineral Resource – Operating Properties

	Reporting	30 June 2017		30 June 2016	
	Basis	Million tonnes	Fe%	Million tonnes	Fe%
Ore Reserves	Dry In-Situ tonnes prior to processing. Estimated Fe grade for product.	705	67.2	705	67.2
Mineral Resources	(Dry In-Situ tonnes and grades)	7,892	30.3	6,706	31.4

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Chief Executive Officer, Mr Nev Power said “We are pleased to report Ore Reserves and Mineral Resources at our operating properties are maintained in both tonnes and grade, supporting our long mine lives. Work is progressing on our Firetail replacement options with both Western Hub and Nyidinghu providing excellent opportunities for future development.”

Yours sincerely
Fortescue Metals Group Ltd

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Background

The Iron Bridge Magnetite project is an Unincorporated Joint Venture (UJV) between FMG Iron Bridge Limited 69% (88% Fortescue and 12% Baosteel) and Formosa Steel IB Pty Ltd 31% (a 100% owned entity of Formosa Plastics Group).

Attachment 1 - Hematite Ore Reserves and Mineral Resources Report

Fortescue Hematite Mineral Resource Reporting as at 30th June 2017
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

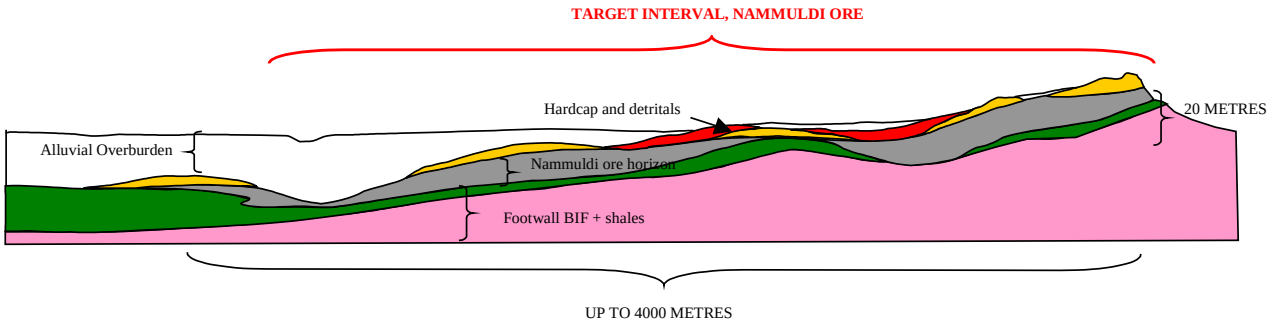
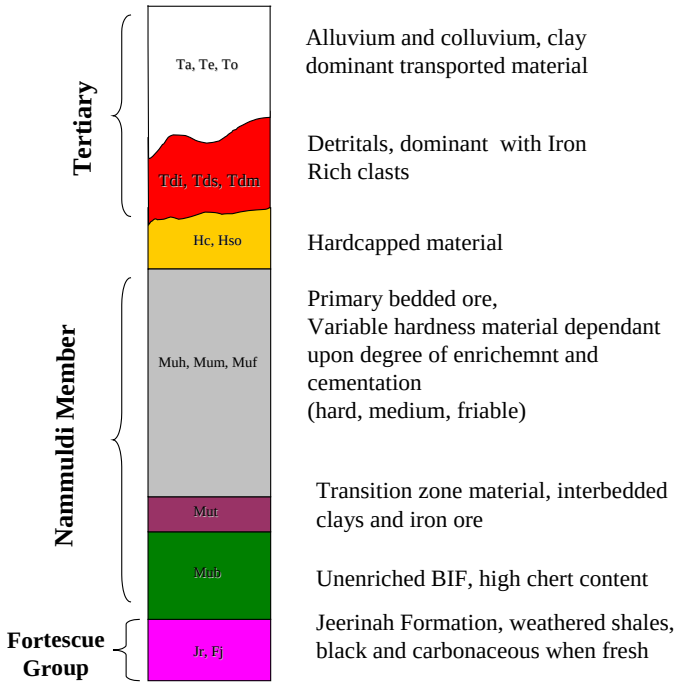


Figure 2

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 ore minerals are 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 within the prospects is a martite-goethite ore 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 ore resources 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 ore (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, 236 diamond drill holes were drilled, 37 twinned with RC drill holes to check geological and grade continuity, the remainder to provide material for metallurgical test work or as downhole geophysical calibration holes). Drill hole spacing ranges from 800 x 200m to a staggered 50 x 50m pattern, in the area of the test pit at Cloudbreak this was reduced to 12.5 x 12.5m (with some areas at 6.25 x 6.25m). 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 were collected over 1m intervals (GC samples over 0.5m and 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, standards at a rate of 1 in 50 samples (Exploration and GC drilling) and duplicates at a rate of 1 in 33 samples (Exploration and GC drilling). 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, 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 2016) and mined out exclusion zones. Adjustments were then made to the Measured Mineral Resources to subtract the mining tonnage (assumed at average grade) for May and June, and to add in the stockpiled tonnes.

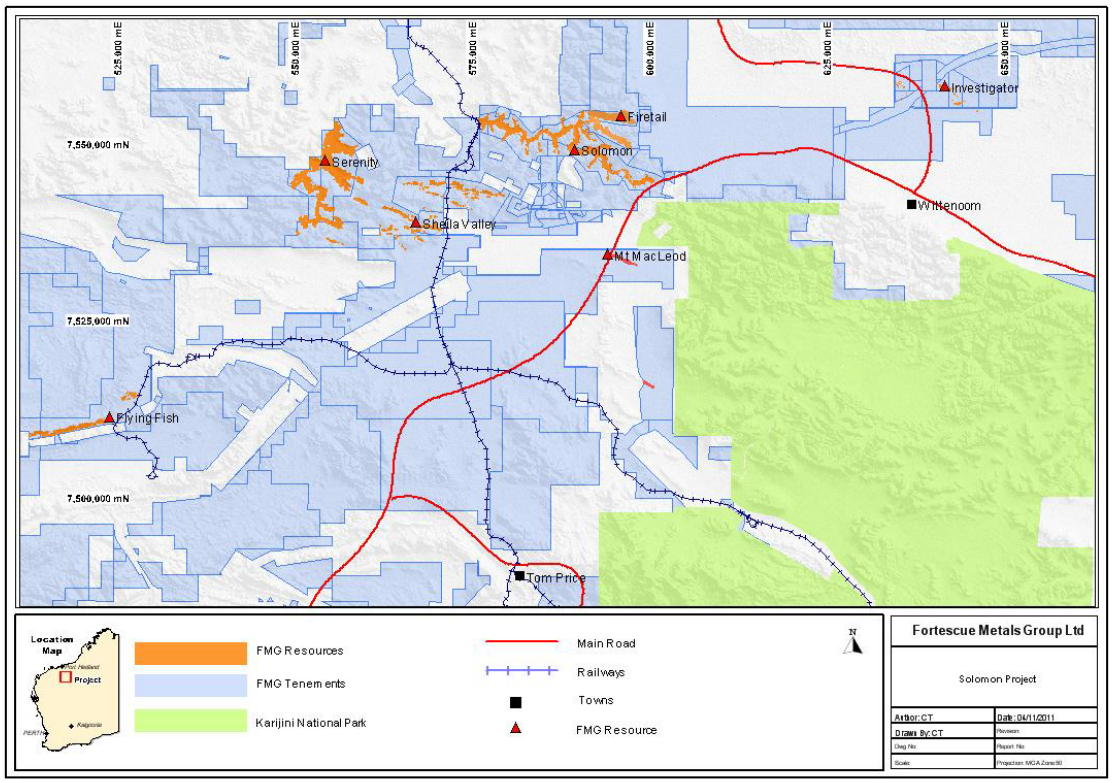
Solomon Deposits (Firetail, Kings & Queens)

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 ~225 diamond drills holes were drilled,

9 of these were twinned with RC drill holes to check geological and grade continuity, the remainder to provide material for metallurgical test work. 133 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, 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 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 Models

Firetail	**Kings**	**Queens**
Detritals	Detritals	Detritals
Hardcap	Hardcap (CID)	Oakover
CID Lower	CID Upper	Hardcap
Joffre	CID Lower	CID Upper
Whaleback Shale	Bedded	CID Lower
D4	Joffre	Peat
D3	D4	Bedded
D2	D3	Dolerite Dykes
D1	D2	
Mt. McRae Shale	D1	
	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 Firetail and Queens, sub-celling to 5.0mE x 5.0mN x 0.25mRL was used and in Kings a minimum block size of 12.5mE x 12.5mN 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.

Table 2 - Hematite Operational Mineral Resources (as at 30th June 2017)

	Mineral Resources - as at 30th June 2017						Mineral Resources - as at 30th June 2016					
Category	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	478	56.7	5.60	3.45	0.056	8.6	514	56.8	5.48	3.40	0.055	8.6
Indicated	438	56.1	6.70	3.46	0.059	8.1	438	56.1	6.70	3.45	0.059	8.1
Inferred	138	56.3	6.46	3.53	0.052	7.8	138	56.3	6.47	3.53	0.052	7.8
Total	**1,055**	**56.4**	**6.17**	**3.46**	**0.057**	**8.3**	**1,090**	**56.5**	**6.10**	**3.44**	**0.057**	**8.3**
Christmas Creek												
Measured	522	56.9	6.12	3.12	0.047	8.0	535	57.0	6.15	3.07	0.047	8.0
Indicated	1,088	56.1	6.74	3.67	0.050	7.8	1,054	55.9	6.77	3.71	0.049	7.9
Inferred	505	55.6	7.09	3.74	0.054	7.8	480	55.5	7.12	3.73	0.054	7.9
Total	**2,115**	**56.2**	**6.67**	**3.55**	**0.050**	**7.9**	**2,069**	**56.1**	**6.69**	**3.55**	**0.050**	**7.9**
Sub-Total Chichester Hub												
Measured	1,000	56.8	5.87	3.28	0.051	8.3	1,048	56.9	5.82	3.24	0.051	8.3
Indicated	1,526	56.1	6.73	3.61	0.053	7.9	1,492	56.0	6.75	3.64	0.052	7.9
Inferred	643	55.8	6.95	3.69	0.054	7.8	619	55.7	6.98	3.68	0.054	7.9
Total	**3,170**	**56.2**	**6.50**	**3.52**	**0.052**	**8.0**	**3,159**	**56.2**	**6.49**	**3.51**	**0.052**	**8.0**
Firetail												
Measured	21	58.1	5.43	2.93	0.128	7.9	32	57.7	5.91	3.18	0.128	7.7
Indicated	193	58.3	6.62	2.78	0.113	6.6	146	59.0	6.12	2.63	0.111	6.2
Inferred	134	57.2	7.34	3.36	0.107	7.0	132	57.3	6.92	3.38	0.108	7.1
Total	**348**	**57.9**	**6.83**	**3.01**	**0.111**	**6.8**	**310**	**58.2**	**6.44**	**3.01**	**0.111**	**6.8**
Kings & Queens												
Measured	196	55.0	7.81	2.92	0.086	9.9	222	55.2	7.31	2.90	0.091	10.1
Indicated	893	55.2	8.00	3.37	0.073	9.1	729	55.6	7.98	3.29	0.064	8.6
Inferred	671	54.9	8.22	3.60	0.079	9.0	836	55.5	7.78	3.48	0.076	8.7
Total	**1,761**	**55.1**	**8.06**	**3.41**	**0.076**	**9.2**	**1,788**	**55.5**	**7.81**	**3.33**	**0.073**	**8.8**
Sub-Total Solomon Hub												
Measured	217	55.3	7.59	2.92	0.090	9.7	254	55.5	7.14	2.94	0.096	9.8
Indicated	1,087	55.7	7.75	3.27	0.080	8.7	876	56.2	7.67	3.18	0.072	8.2
Inferred	805	55.3	8.07	3.56	0.083	8.7	968	55.8	7.67	3.46	0.080	8.5
Total	**2,109**	**55.5**	**7.86**	**3.34**	**0.082**	**8.8**	**2,097**	**55.9**	**7.60**	**3.28**	**0.079**	**8.5**
Combined												
Measured	1,218	56.6	6.18	3.21	0.058	8.6	1,307	56.4	6.05	3.17	0.059	8.6
Indicated	2,613	55.9	7.15	3.47	0.064	8.2	2,368	56.0	7.09	3.47	0.060	8.0
Inferred	1,448	55.5	7.58	3.62	0.070	8.3	1,587	55.7	7.40	3.55	0.070	8.2
Total	**5,279**	**56.0**	**7.04**	**3.45**	**0.064**	**8.3**	**5,261**	**56.0**	**6.93**	**3.42**	**0.063**	**8.2**

Notes:

- Chichester and Solomon Mineral Resources are compared with those at 30th June 2016.
- Chichester Mineral Resources are reported at a 53.5% Fe cut-off, Solomon Mineral Resources are reported at a 51.5% Fe cut-off
- Chichester Hub Mineral Resources now include those at Kutayi which were previously reported under Development Properties
- Mineral Resources are inclusive of Ore Reserves and Stockpiles

Fortescue Hematite Ore Reserve Reporting as at 30th June 2017

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.

Each of the BID and CID products includes a premium and a lower quality variety. The BID products are Fortescue Blend (FB) and Super Special Fines (SSF). The CID products are Kings CID (KCID) and Pilbara CID (PCID). 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 Reserve generation process collectively for all deposits.

Mining Models

Mining Models consist of regularised resource models overprinted with grade control models and application of reconciliation grade adjustment factors to incorporate historical mining losses and dilution into the in-situ estimates and OPF upgrade performance to estimate products generated by the ore processing facilities (OPFs). 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 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 and actual OPF performance. The Firetail OPF is operating in “dry” mode and therefore has no beneficiation factors applied.

Scheduling Inventory

Pit optimisation software is used to determine how 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 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 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) to manufacture the two BID blended products, FB and SSF. The two CID products, KCID and PCID are 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 a 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, 2017. Individual BID deposits included in the Ore Reserve include Cloudbreak, Christmas Creek and Firetail. The Kutayi Deposit, which is an easterly extension of the Christmas Creek deposit, has been added to Ore Reserves as a brownfields extension of Christmas Creek Ore Reserve for the first time in this year’s Ore Reserves update. 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:

Cloudbreak	- 53.0% Fe in-situ cut-off

Christmas Creek	- 53.0% Fe in-situ cut-off
Firetail	- 53.5% Fe in-situ cut-off
Kings	- 52.5% Fe in-situ cut-off
Queens	- 53.5% Fe in-situ cut-off

Ore Reserves are summarised in Table 3.

Table 3 - Hematite Ore Reserves as at 30th June, 2017

	2017 Ore Reserves						2016 Ore Reserves					
	Product Tonnes (dmt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %	Product Tonnes (dmt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %
Cloudbreak												
Proven	304	57.5	5.21	2.81	0.052	8.49	291	57.6	5.15	2.82	0.054	8.50
Probable	289	57.2	5.97	2.75	0.058	8.00	249	57.1	5.95	2.84	0.059	7.97
Total	593	57.4	5.58	2.78	0.055	8.25	541	57.3	5.52	2.83	0.056	8.25
Christmas Creek												
Proven	326	57.1	5.86	2.81	0.043	7.81	325	57.4	5.73	2.77	0.043	7.47
Probable	597	57.0	5.96	3.03	0.047	7.57	579	57.1	5.62	3.05	0.049	7.34
Total	924	57.0	5.93	2.95	0.046	7.66	904	57.2	5.66	2.95	0.047	7.38
Sub-Total Chichester Hub												
Proved	631	57.3	5.54	2.81	0.047	8.14	616	57.5	5.45	2.79	0.048	7.96
Probable	886	57.1	5.96	2.94	0.051	7.71	828	57.1	5.72	2.99	0.052	7.53
Total	1,517	57.2	5.79	2.88	0.049	7.89	1,444	57.3	5.61	2.91	0.050	7.71
FireTail												
Proved	13	59.0	5.57	2.40	0.114	7.18	19	58.4	5.79	2.70	0.127	7.29
Probable	112	59.3	5.75	2.53	0.107	6.38	100	59.2	5.83	2.51	0.111	6.23
Total	125	59.2	5.73	2.51	0.107	6.46	119	59.1	5.82	2.54	0.113	6.40
Kings & Queens												
Proved	103	56.3	6.60	2.40	0.073	9.95	120	56.0	6.81	2.51	0.077	10.15
Probable	446	56.9	6.36	2.61	0.064	9.13	489	56.6	6.85	2.73	0.062	8.87
Total	548	56.8	6.40	2.57	0.065	9.29	609	56.5	6.85	2.69	0.065	9.12
Sub-Total Solomon Hub												
Proved	116	56.6	6.48	2.40	0.078	9.64	138	56.3	6.67	2.53	0.084	9.76
Probable	558	57.4	6.23	2.59	0.072	8.58	590	57.1	6.68	2.69	0.070	8.42
Total	674	57.3	6.28	2.56	0.073	8.76	728	56.9	6.68	2.66	0.073	8.67
Combined												
Proved	746	57.2	5.69	2.75	0.052	8.37	755	57.3	5.68	2.74	0.055	8.29
Probable	1,444	57.2	6.07	2.80	0.059	8.05	1,418	57.1	6.12	2.87	0.059	7.90
Total	2,191	57.2	5.94	2.78	0.057	8.16	2,173	57.2	5.97	2.82	0.058	8.03

- The diluted mining models used to report the 2017 Ore Reserves are based on Christmas Creek Mineral Resource model reported in 2016, Firetail Mineral Resource model revised in 2014, Cloudbreak Mineral Resource model completed 2016 and Kings Mineral Resource model release in 2017. Diluted mining models are validated by reconciliation against historical production.
- Proved Ore Reserves are inclusive of ore stockpiles at the mines totalling approximately 20.8mt 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 in resource estimation. For Cloudbreak this included 731,906 samples from 20,755 holes. For Christmas Creek this included 596,695 samples from 22,619 holes. For Cloudbreak and Christmas Creek additional samples from Grade Control drilling were also used for resource estimation of local Grade Control Models. For Kutayi this included 8,215 samples from 358 holes 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 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).
	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. 201 vertical diamond drill holes were completed during the Exploration Phase. Some of these were drilled as twins to RC holes, the rest were drilled to provide samples for metallurgical test work. Limited analytical information located. Most holes were PQ size, core not oriented as holes drilled vertically. A further 23 diamond drill holes were completed during 2015, to provide additional material for metallurgical testwork. 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 incorporated into updated resource 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.
	37 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.

Criteria	Commentary
	Qualitative – texture logging completed over the whole drill hole, based on this 'ore' +/- 3-4m surrounding waste is submitted for analysis. Some risk of material being mis-logged and therefore not analysed.
	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), Ultratrace 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 three 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, 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.

Criteria	Commentary
	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.
	37 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 samples 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). During creation of the updated resource models it was noted that some of the selected drill holes had not been surveyed (99 at Cloudbreak, 35 at Christmas Creek). These holes were subsequently excluded from resource estimation. Grade Control Drilling – holes are occasionally missed during survey (observed when modelling commences, re-surveys requested. If holes cannot be re-located then they are omitted from 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 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.

Criteria	Commentary
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. 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: M46/356, E46/590, M45/1128, M46/454, M46/450, M46/407, M46/408, M46/410, E45/2498, M45/1102, M45/1103, M45/1104, M46/357, M46/409, M46/453, M46/401, M46/404, M45/1142, M46/449, M46/452, M45/1105, M45/1106, M45/1107, M46/411, M45/1124, M45/1125, M45/1126, M45/1127, M45/1138, M45/1140, M45/1083, M45/1082 and M45/1139. The Cloudbreak project area is within the external boundaries of the Nyiyaparli and Palyku registered native title claims. 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, and cash compensation. 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 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, M46/317, M46/418, M46/419, M46/420, M46/421, M46/422, M46/423 and M46/424. The Fortescue Christmas Creek mine and resource development proposed activity area will be undertaken within the Nyiyaparli native title claim 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 claim 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-

Criteria	Commentary
	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 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 Exploration Licence E46/567, and is also within the Nyiyaparli native title claim 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	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
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
Database integrity	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 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.
	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 CP 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, eleven geological zones are interpreted on the basis of geochemistry and down hole geophysical logging: overburden, U8, U7U, U7l, U6, U6l, U5, U5l, U4, U3, U2 & U1. The U7U, U7l, U6, U6l & U5 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.

Criteria	Commentary
	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) and 50 texture codes. Drill hole sample data was flagged using three dimensional wireframes provided by Fortescue. 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.

Criteria	Commentary
	For both Resource Models, some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	The updated resource models were 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); • Block total assay check; • Un-estimated block check; • Reconciliation against production.
Moisture	The tonnages are estimated on a dry basis.
Cut-off parameters	A cut-off of greater than or equal to 53.5% Fe was used to report the tonnages of all stratigraphic units. 53.5% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications.
Mining factors or assumptions	It has been assumed that current mining methods (surface miner) 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.
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 very good. 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.

Criteria	Commentary
Audits or reviews	An external audit of the CB resource model has been conducted and 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).
	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 Institute of Materials, Minerals and Mining. 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 in resource estimation. For Firetail this included 60,291 samples from 1,892 holes. For Kings this included 660,498 samples from 16,089 holes. For Queens this included 66,401 samples from 1,565 holes. 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 used to assist with determining sampling quality at the rig. Geophysical probes 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 12 inclined holes at Firetail 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. Large diameter (Bauer) holes drilled in the shallow parts of the deposit (limited due to working depth of rigs). Data used for metallurgical test work and not incorporated into resource models. Approximately 1meter diameter holes.
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 occurred.
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 testwork. For DDH whole core was sampled.
	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 was undertaken by SGS Perth laboratory.
	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, Ultratrace 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".
	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. No down hole surveys are available as the majority of drill holes are vertical and less than 200m in total depth, therefore any deviations from vertical would be negligible. Collar survey data is validated against planned coordinates and dtm surface.
	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.
	The topography was created from 1 metre contours from LIDAR data. Vertical accuracy of the LIDAR data is +/-0.2 metres.

Criteria	Commentary
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 12 holes are vertical (the inclined holes were drilled to test for mineralisation in the Joffre, they were not down hole surveyed). 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: M47/1413, M47/1431 The Kings deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E47/1334, M47/1409, M47/1411, M47/1431, M47/1453, M47/1474, M47/1475 and M47/1511. The Queens deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E47/1333, E47/1821, M47/1410, M47/1411.
	The Solomon project area intersects with the Eastern Guruma native title determination area and the Yindjibarndi #1 registered native title claim area. 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 Claimants over the tenure associated with the Solomon Mineral Resource and Ore

Criteria	Commentary
	Reserve; however, Fortescue conducts regular heritage surveys and consultation with the Yindjibarndi People, ensuring legislative compliance. Fortescue meets regularly with the Yindjibarndi Native Title Claimants 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. 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).
	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 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 customized 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

Criteria	Commentary
	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 CP and resource modelling/estimation geologist(s), were 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 estimate. 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.
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 done 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. 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, 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. Sub blocking down to 5m x 5m x 0.25m was used along domain boundaries to better define the domain interface.

Criteria	Commentary
	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 100mE x 50mN x 1mRL. Sub blocking down to 5m x 5m x 0.25m 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 sh ow 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.
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

Criteria	Commentary
	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. Fortescue has a resource estimation audit by Optiro for the Solomon Project. Overall, Optiro considers the methods used to categorise the Kings and Firetail Mineral Resource estimates to be fair, reasonable and consistent with industry standards in the iron ore sector. Recommendations include 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 Solomon 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 David Frost-Barnes who is a Member of Institute of Materials, Minerals and Mining. Mr Robinson and Mr Frost-

Barnes are full time employees of Fortescue Metals Group Limited. Mr Robinson and Mr Frost-Barnes 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 and Mr Frost-Barnes 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
Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The Chichester and Solomon individual resource models described in Section 3, depleted by mining to 31 April 2017, 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 2017). 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. The Ore Reserves reported are a component of the Mineral Resources.
Site visits	Periodic site visits are undertaken by the Competent person to monitor on-going mining and processing operations relevant to estimation of Ore Reserves.
Study status	Cloudbreak and Christmas Creek (CC) Ore Reserves relate to operating properties that have been established for over 7 years. The Firetail deposit has been mined and processed for approximately four years while mining and processing has occurred at the Kings CID deposit for three 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 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 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. This year’s Ore Reserves update includes the addition of the Kutayi deposit. This deposit lies within road haulage distance of CC operations, and is constituted on the same body of Mara Mamba mineralisation. The deposit has been included in the 2016 Life of Mine plan, and is treated as a brownfields extension of the Christmas Creek mining operation. The Ore Reserves mine plan includes appropriate capital expenditure for the establishment of the new mining area and transport of ore to CC Ore Processing Facility and train load out.
Cut-off parameters	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 collective BID and CID product specification. 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 SiO2 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 between 52.5% and ˜53.5%.
Mining factors or assumptions	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.

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. However in order to account the extra waste inclusion during engineering pit design, a slightly larger optimum pit shell is used to reflect the reality. 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 Mt per annum of (wet) product. 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. CC1 and CC2 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 the last 12 months operating history and additional recent test-work. 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.

Criteria	Commentary
	Operating licences (L8199/2007/2 for CB and L8454/2010/2 for CC) and various Works Approvals issued by the WA Department of Environment and Regulation (DER) are in place for both sites. 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 Commonwealth Department of the Environment (DoE) under the Environmental Protection and Biodiversity and Conservation Act 1999 (EPBC Act). The Solomon project is also subject to regulation by the DER 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 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 and Petroleum. Fortescue also holds a number of licences under the Rights in Water and Irrigation Act 1914 for the abstraction of groundwater. 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.
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. Forecast metal prices and exchange rates are based on analysis of internal and external sources. 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	The individual Cloudbreak, Christmas Creek and Firetail BID OPF products are blended at the port to create 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) and Pilbara (PCID) CID products. The KCID product is sold based on Fe content at a price adjustment to the 62% Fe benchmark price. Forecast sales prices and adjustments used to determine 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.

Criteria	Commentary
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	The Cloudbreak and Christmas Creek project areas are within the external boundaries of the Nyiyaparli and Palyku registered native title claims. 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. The Wunna Nyiyaparli native title claim was initially registered in 2013. Its boundaries overlap a small portion of the Nyiyaparli People's native title claim and covers precisely the area described by the Roy Hill pastoral lease. The Wunna Nyiyaparli native title claim was initially de-registered and subsequently dismissed as a result of Federal Court litigation. Fortescue understands that the dismissal is now the subject of an appeal. While Fortescue does not intend entering into an agreement with the overlapping claim, it has secured all tenure required to access and develop the Chichester 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. 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 ILUAbinds 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. It is anticipated that the remaining ILUAs with the Palyku and Kariyarra People will be registered before end-2017. The ILUAs augment rather than replace the LAAs. The Solomon project area is within the Eastern Guruma native title determination area and the Yindjibarndi #1 registered native title claim 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 the majority of the Yindjibarndi People through their Wirlu-Murra Yindjibarndi Aboriginal Corporation

Criteria	Commentary
	(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. This year, Mr Chris Fowers has joined Mr Oliver Wang as contributing Competent Person. Mr Martin Slavik remains lead Competent Person Hematite Ore Reserves.
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 Cloudbreak (CB) deposit to the EOFY2017 Fortescue Ore Reserve has been carried out by external AMC Consultants in May and June 2017. The final report of this review has been submitted to the Fortescue Audit and Risk Management Committee (ARMC) for reporting to Board. The review forms part of an ongoing program of review and audit agreed with the ARMC. 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 these will be adopted over the coming year. 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 ARMC of Fortescue Board of Directors.
Discussion of relative accuracy/ confidence	The Fortescue Chichester sites 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 excavator mining in the Chichesters 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. Reconciliation performance at Solomon (Firetail BID mining and processing) indicates that planned tonnage and quality outcomes are being met. CID mining and processing at the Kings deposit has operated for 3 years, operating data have been used to adjust Mining model predictions to better match the observed performance.

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 Martin Slavik (lead CP) and Mr Oliver Wang and Mr Chris Fowers (assisting CPs), all Competent Persons are Members of The Australasian Institute of Mining and Metallurgy. Mr Slavik, Mr Wang and Mr Fowers are full time employees of Fortescue Metals Group Limited. Mr Slavik, Mr Wang and

Mr Fowers 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 Slavik, Mr Wang and Mr Fowers consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Attachment 2 - Magnetite Ore Reserve and Resources Report

Iron Bridge Magnetite Mineral Resources Reporting

as at 30th June 2017

Magnetite Mineral Resources

An updated Magnetite Mineral Resource estimate has been produced for the Iron Bridge Project, incorporating the North Star, Eastern Limb, Glacier Valley and West Star deposits. This includes a total of 900 Reverse Circulation (RC) drill holes totalling 155,496 metres.

Drilling activity has been carried out in conjunction with the Stage 1 Mine Development, and ongoing Feasibility Studies.

The operation is a Joint Venture between Fortescue Iron Bridge Pty Ltd (69%) and Formosa Steel IB (31%); it covers granted mining leases M45/1226 (North Star) and M45/1244 (Glacier Valley).

The Mineral Resource Estimate is reported in compliance with the 2012 Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (JORC 2012). Only Mineral Resources are being reported, including material in the Measured, Indicated and Inferred Categories.

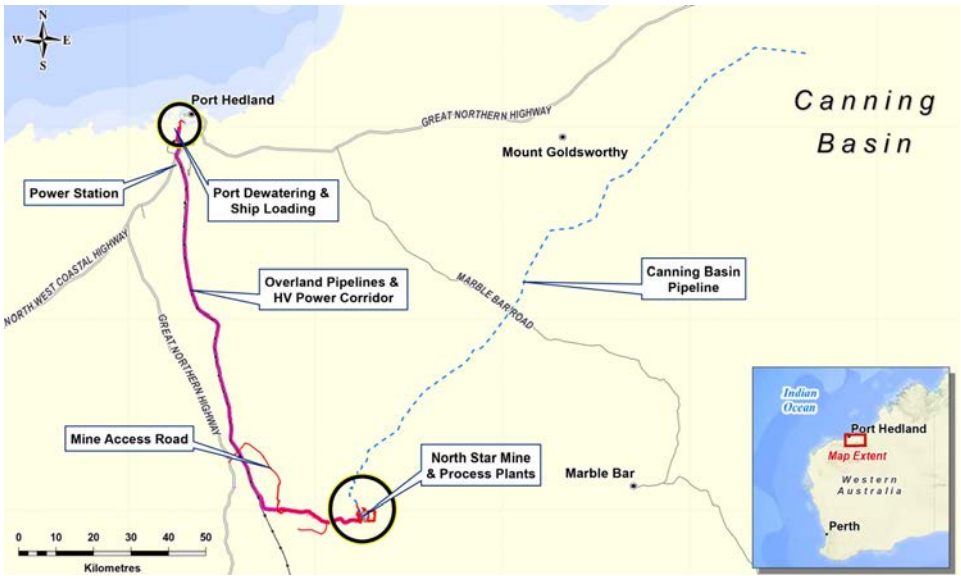
Project location

The project area is located approximately 110 km south of the town of Port Hedland in the Pilbara region of Western Australia (Figure 4), where Fortescue's port facility is located. The project is also located within 25km of the existing Fortescue rail line.

Access to the project region is via the Great Northern Highway sealed road southerly from Port Hedland, and then via well maintained gravel roads to the Project area.

A feasibility study has been completed aimed at developing the Magnetite project by mining and processing at site, and then pumping fine grained concentrate to Port Hedland for drying and shipping through the Fortescue port facilities. An initial (Stage 1) processing facility has been constructed and successfully operated to trial innovative processing solutions which reduce operational costs. Over 1 million tonnes of oxide and magnetite ore had been processed during 2015 to 2016.

Figure 4 – Project location and projected infrastructure

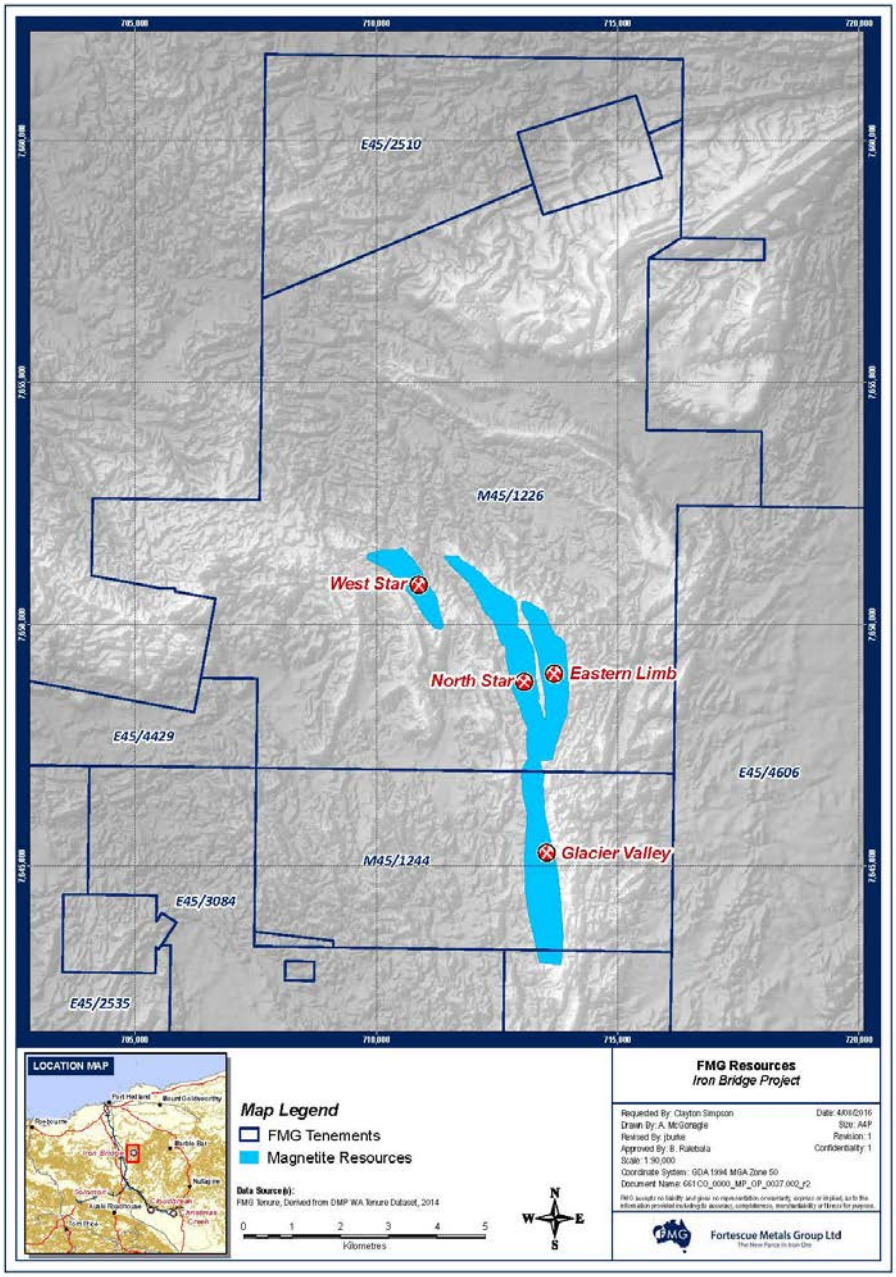


Geology

The project lies within the northern part of the Pilbara Craton, which is an Archaean Granite-Greenstone Terrane (2940-3515Ma). The magnetite resources are hosted by Banded Iron Formations (BIF's) in the Pincunah Member of the Soanesville Group which forms large north-south trending arcuate strike ridges up to 1,000m wide. Drilling has established resource continuity to a depth of more than 600m over a strike length of more than 15 km. The main mineralised zone is sub-vertical, dipping at a high angle to the West.

There are four main areas of focus within the project, the central North Star deposit, the Eastern Limb deposit adjacent to North Star, Glacier Valley to the south and West Star to the west (Figure 5). The South Star deposit (further south from Glacier Valley) is an exploration target and is not incorporated in these Mineral Resources.

Figure 5 – Deposit location and tenements



Data used for Mineral Resource Estimation

Data used for Mineral Resource Estimation is largely derived from RC drilling, using boosted high pressure air and cone splitters to maximise sample recovery and integrity. Diamond drill holes have also been drilled to provide geological control on RC drill hole logging, as well as metallurgical and geotechnical samples.

RC drilling at North Star has been completed to a 25m x 25m pattern in the Stage 1 mining area, with 50m x 50m spacing in the main South Core domain. Other areas generally have broader 200m x 100m spacing with 400m x 100m towards the Northern extremities of the project. Drilling has confirmed the continuity of the BIF and mineralisation to depths of 450m below surface.

Drilling at Eastern Limb is spaced at 100m x 50m with the extremities at 400m x 100m. Drilling has confirmed the continuity of the BIF and mineralisation to depths of 450m below surface.

Drilling at Glacier Valley is spaced at 200m x 100m with the extremities at 400m x 100m, and a small area of infill at 100m x 100m. Drilling has confirmed the continuity of the BIF and mineralisation to depths of 450m below surface.

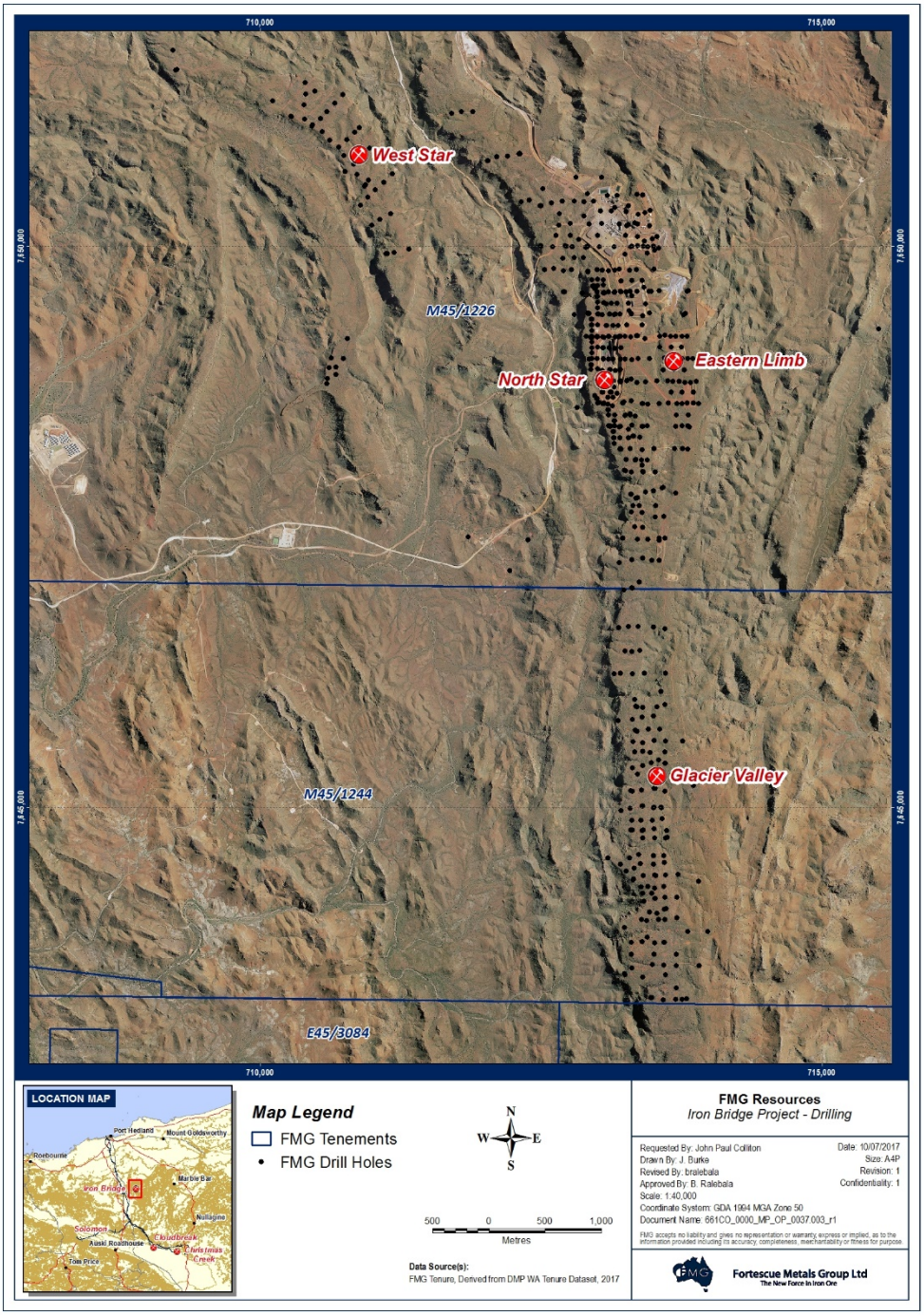
Drilling at West Star was completed with holes spaced 100 metres along lines separated 200 to 300 metres apart. Drilling has confirmed the continuity of the BIF and mineralisation to depths of over 300 m below surface.

All data is logged electronically to ensure data integrity and protection, and Fortescue follows stringent QAQC procedures in data handling and testing, including validation of drill hole coordinates, assay samples and lab standards, field duplicates, twin holes, and round robin laboratory audits. To date, no issues of sample bias or assay precision or accuracy have been encountered.

The Mineral Resource estimate includes all validated drill holes and available assay data that has passed QAQC checks. Stratigraphy and mineralisation domains have been produced from geological mapping and drill hole logging, and validated by geochemical data and geophysical down-hole logging data.

Deposit areas and drill spacing are shown in Figure 6.

Figure 6 – Deposit areas and drilling



Mineral Resource Estimation Methodology

The primary data estimated initially is Mass Recovery, which is a combination of Davis Tube Recovery (DTR) composite data and downhole geophysical measurement of Magnetic Susceptibility (MagSus).

The geological interpretation has been used to guide the definition of mineralisation domains, which are based on an Ordinary Kriging Indicator estimate of Mass Recovery. The central part of North Star has a wide, clearly defined higher grade core of magnetite mineralisation, with multiple, less continuous lenses in

the footwall and hangingwall. Areas to the north and south, plus Eastern Limb, Glacier Valley and West Star, tend to have a less well-developed core, but several quite continuous magnetite zones.

Logging of weathering and geochemistry have been used in combination to define a sub-horizontal Oxide domain, with Fresh material below.

Only data in each mineralised domain is used to estimate that domain. Search ellipse orientations are based on a combination of variography and drill spacing. An unfolding methodology based on the geological interpretation was used to account for variations in dip and strike.

Search ellipse dimensions varied depending on drill hole spacing and were also related to anisotropy observed in the variography.

A multiple search pass strategy was adopted, whereby the search was expanded if a first search failed to find enough samples to estimate blocks. In the first search pass, a minimum of eight composites and two drill holes was required to estimate a block, with relaxed parameters in the expanded second search.

The standard suite of iron ore XRF analyses has also been estimated as both in-situ head grades and recovered concentrate grades.

Parent block size varied depending on drill hole spacing.

Oxide domain (25m x25m spacing): 10m x 12.5m x 3m blocks (East, North, RL).

Measured and Indicated (Fresh) domains: 10m x 25m x 12m.

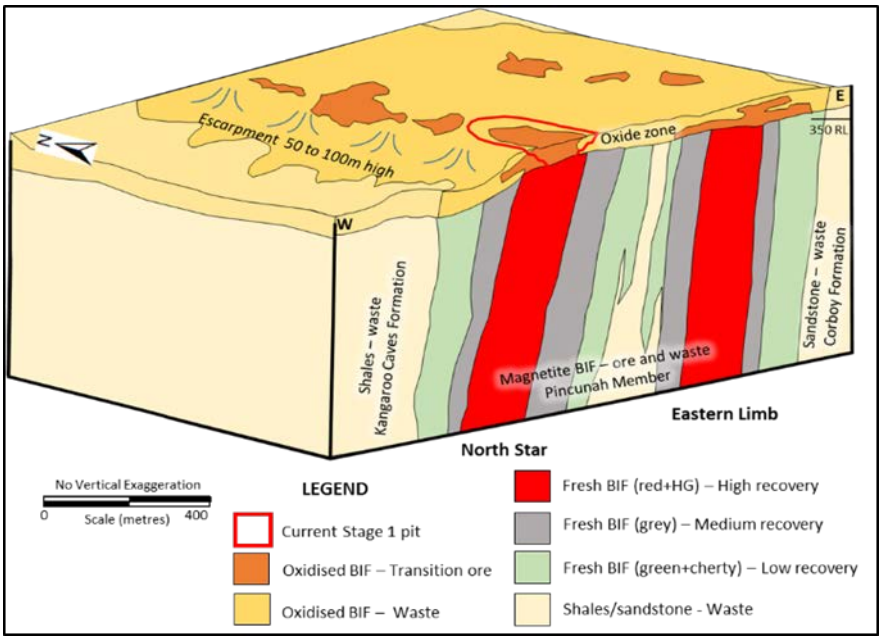
Inferred (Fresh) domains: 20m x 50m x 12m.

A range of criteria has been considered in determining this classification including geological continuity, data quality, drill hole spacing and estimation properties such as number of informing data and kriging variance. Measured Mineral Resources are based on close spaced drilling and no extrapolation. Indicated Mineral Resources use limited extrapolation and are confined to areas with 200m x 100m drill spacing or better. Inferred Mineral Resources are based on wider drill spacing and/or areas extrapolated at depth.

Tonnage estimates are based on dry bulk density values derived by interpolating (estimating) the density into the block model in areas of suitable down hole geophysical data coverage. Where data coverage was insufficient, default values by rock type (cluster) were attributed to the blocks. The assigned density values by rock type was as a results of a study, completing geostatistical analysis on the results from down hole geophysics as well as physical measurements on diamond core.

Typical section of lithology which drives Mass Recovery in the resource model is illustrated in Figure 7.

Figure 7 – Schematic North Star and Eastern Limb cross section showing rock units



Magnetite Mineral Resource Statement

Closer spaced drilling (at North Star, Eastern Limb and Glacier Valley) has confirmed the tonnage of higher confidence Measured and Indicated Mineral Resources, which can potentially be converted to an Ore Reserve. Mineralisation peripheral to the centrally drilled areas is classified as Inferred.

The major increase in total Mineral Resource tonnage for the 2017 update has occurred due to additional drilling at the Glacier Valley deposit confirming extensions to the previously known mineralisation. Converting material previously of low confidence into an Inferred or Indicated Mineral Resource.

Infill drilling also occurred around the North Star and Eastern Limb deposits, which confirm the dimensions and mineralisation of those deposits. As these deposits are adjacent and are likely to be mined together they are reported as one.

The West Star deposit was re-estimated using existing data with little change to overall tonnage or grade

All Mineral Resource estimations utilise a 9% Mass Recovery cut off.

Table 4 – Magnetite Mineral Resources of the North Star + Eastern Limb, Glacier Valley and West Star deposits as at 30th June 2017

	Magnetite Mineral Resources - as of 30th June 2017					Magnetite Mineral Resources - as of 30th June 2016				
Category	**In-situ Tonnes (mt)**	**DTR Mass Recovery %**	**In-situ Iron Fe%**	**In-situ Silica SiO_2%**	**In-situ Alumina Al_2O_3%**	**In-situ Tonnes (mt)**	**DTR Mass Recovery %**	**In-situ Iron Fe%**	**In-situ Silica SiO_2%**	**In-situ Alumina Al_2O_3%**
North Star + Eastern Limb (60.72% Fortescue)										
Measured	77	28.6	32.4	39.44	1.91	76	28.7	32.4	39.42	1.90
Indicated	989	27.8	31.1	40.48	2.28	936	26.8	31.1	40.50	2.29
Inferred	3,231	24.1	29.6	41.80	2.88	2,651	24.7	30.5	41.23	2.62
Total	**4,297**	**25.1**	**30.0**	**41.46**	**2.73**	**3,664**	**25.3**	**30.7**	**41.01**	**2.52**
Glacier Valley (60.72% Fortescue)										
Measured	-	-	-	-	-	-	-	-	-	-
Indicated	477	24.1	32.4	39.33	1.74	350	25.1	32.8	39.01	1.66
Inferred	2,844	20.5	30.7	40.69	2.19	2,434	22.2	32.4	39.06	1.76
Total	**3,321**	**21.1**	**30.9**	**40.50**	**2.13**	**2,784**	**22.5**	**32.5**	**39.06**	**1.74**
West Star (60.72% Fortescue)										
Measured	-	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-	-
Inferred	274	23.5	28.3	43.43	3.43	258	23.5	29.0	42.90	3.20
Total	**274**	**23.5**	**28.3**	**43.43**	**3.43**	**258**	**23.5**	**29.0**	**42.90**	**3.20**
Total Magnetite Mineral Resources										
Measured	77	28.6	32.4	39.44	1.91	76	28.7	32.4	39.42	1.90
Indicated	1,466	26.6	31.5	40.11	2.11	1,286	26.4	31.6	40.10	2.12
Inferred	6,350	22.5	30.0	41.38	2.60	5,344	23.5	31.3	40.32	2.26
Total	**7,892**	**23.3**	**30.3**	**41.12**	**2.50**	**6,706**	**24.1**	**31.4**	**40.27**	**2.22**

a) Magnetite Mineral Resource estimates, including the North Star, Eastern Limb, Glacier Valley and West Star deposits, are reported according to JORC 2012 standards

b) All reporting is based on Mass Recovery expressed as a 9% Davis Tube Recovery (DTR) cut-off.

c) All Mineral Resources are reported on a dry-tonnage basis

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Combined data from the North Star, Eastern Limb, Glacier Valley and West Star deposits utilised 900 Reverse Circulation (RC) drill holes (155,497 m), producing 67,748 drill chip samples, have been analysed, taken at 2m intervals down the drill hole, and this sampling was from top to bottom of the drill hole. Sample weights of 3-5kg were sent to the laboratories for standard Fe suite analysis. Laboratories used for this work have been Ultra Trace and Bureau Veritas. Diamond core drill holes have not been systematically assayed, instead being subject to bulk sample metallurgical test work. 27,978 DTR assay samples made from 2m and 4m composites of the 2m RC chip samples in the magnetite mineralisation zones have been used in the model. DTR (Davis Tube Recovery) analysis was carried out using the Povey method, with grinding to a nominal -53 micron grind size with p80 of 35 microns, and concentrates and tails were assayed by XRF to establish elemental abundances and metal concentrations. DTR assay work was conducted at Spectrolab in Geraldton, and Bureau Veritas in Perth (approximately 78% of samples). The 2m RC samples were dried and crushed to 3.35mm and sub-sampled with one 150g sub-sample used for standard XRF sample on the 2m interval, and a second 150g sub-sample taken and composited with an adjacent sample for DTR analysis and controlled Povey method pulsed pulverising to a nominal p100 of 53 microns for DTR and sizing analysis. Rig duplicates and Industry lab standards were included in each sample submission for checking lab and rig sampling QAQC. Results for standards and duplicates are analysed using acQuire software and proprietary statistical software programs, for precision and accuracy checks of laboratory processes and possible sampling bias. Samples outside of acceptable tolerances are rejected, and rig duplicates which are highly variable are re-assayed and where the variability is unacceptable the entire batch may be rejected. A number of metallurgical samples were taken from DD core for analysis of rock properties and comminution characteristics.
Drilling techniques	RC drilling was carried out using Schramm T685W drill rigs with boosted high pressure air capacity to maximise sample quality and recovery. McKay Drilling Pty Ltd have been contracted to carry out the RC Drilling. The drill hole diameter is approximately 140mm, and uses standard facing sampling hammer. Holes were drilled according to target and were drilled with azimuth 090 or 270, and dip -60, and for shallower infill pit drilling vertical holes were drilled. PQ3 Diamond drilling (DD) was also carried out for metallurgical sampling and geotechnical investigation and Core Drilling Services have been used for diamond drilling work using a UDR 200 rig. These drill holes were orientated according to target and all core was drilled with some degree of dip and has been orientated by site geologists and geologically logged and structurally/geotechnically logged prior to being used for metallurgical test work.
Drill sample recovery	RC sampling is monitored by rig geologists at all times, and sample logging includes an estimate of chip percentage as a measure of sample return and quality, and the amount of sample recovered for each 2m of drilling is also assessed for significant variations in sample quantity. Any large fluctuations in sample quantity is discussed with the drillers and continuously monitored. Rig duplicates are used to assess any sample bias which may results from rig sampling methods. Results of duplicate assays show some variation in elemental abundance between primary and duplicates samples, but the variability is random and cannot be attributed to rig sampling methods.

Criteria	Commentary
	Samples with high variance are rejected from the database if the variance is limited to a minor number of elements, and the entire batch maybe rejected if the rig duplicate results are outside of acceptable limits. Where this occurs the lab is requested to re-analyse the samples. RC drilling is carried out with the use of boosted high pressure air to maximise sample quality and quantity. Analysis of sample duplicates shows that sample size is not a factor in assay quality. Diamond core is logged by geologists and the recovery of core recorded.
Logging	Trained geologists with experience in iron ore and magnetite mineralisation have been employed to perform the geological logging of RC chip samples. Geological logs are recorded for each 2m sample interval. Logging is both quantitative and qualitative with measurement of mineral and lithological abundances, as well as recording physical properties of grain size and shape, recovery, moisture level, and some general properties derived from rig performance (hard slow drilling, easy drilling, difficult sampling due to clay etc.).
Sub-sampling techniques and sample preparation	Diamond core is not used for systematic sample assay, but is used for metallurgical test work including DTR and ore processing test work, as well as comminution and rock property characterisation. RC sampling is carried out using cone splitters on the rig. Two samples are taken for each 2m of drilling, one is dedicated to assay work and one is reserved if required for QAQC or additional test work. Sample size is monitored by rig geologists for inconsistency, as is cyclone cleaning and sampling by drill crews. Samples collected from the cone splitter are equivalent to approximately 6-7% of the total sample for each 2m interval. Cone splitters are the preferred rig sampling splitter and provide a good quality sample in both dry and wet. Drilling is generally dry with very little ground water encountered, and only sufficient water for dust suppression is injected in drilling.
Quality of assay data and laboratory tests	All RC samples were assayed at either Ultra Trace or Bureau Veritas (with Ultra Trace doing the actual XRF analysis), and these are NATA accredited laboratories. Fortescue carries out blind audits of all laboratories for comparison of assay results, and Ultra Trace has demonstrated acceptable results in these tests. Both a standard and extended Fe suite has been used, with the extended suite used in post 2012 sample assays. The following elements have been assayed and are recorded within the block model: Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, As, Ba, Cl, Co, Cr, Cu, Ni, Pb, Sn, Sr, V, Zn, Zr, FeO, Satmagan/magnasat (Fe_3O_4), and three LOI's at 371, 650 and 1000°C, plus total LOI. DTR concentrate and tails samples collected from Davis Tube process, and then assayed using XRF, and reported analyses include all of the above listed elements for each of concentrate grades and tailings grades. Concentrate grades are not available from low grade areas where there is insufficient sample recovered during the DTR for XRF analysis. Additional data reported for DTR assays includes, concentrate grade (weight%) tails grade (weight%), sizing analyses, p100 weights for each pass of pulverizing, as well as the overall p80 sizing Rig duplicates are taken every 30 samples, and a laboratory standard or Fortescue coarse reference standard is included for each sample batch (approximately 1 per 100 samples). Each laboratory also carries out internal checks and sample assays, including the use of standards. Results for these standards and duplicates are statistically validated as part of the QAQC of assay results. Early drilling at both North Star and Glacier Valley not did have systematic DTR sampling composites analysed. A measure of DTR recovery or mass recovery is calculated for these intervals based on magnetic susceptibility measurements and satmagan assay values, to infill where DTR assay data is not available.

Criteria	Commentary
	The DTR MagSus relationship was updated with additional data in 2015 as part of the previous Mineral Resource Estimate.
Verification of sampling and assaying	Drill logging is validated against assay data and geophysical signals to verify intersections and interpretations by site geologists. Senior geologists then review the intersections and drilling in cross-section and 3D to verify targets and drilling effectiveness. DD holes are used as twin holes across the mineralisation to verify geological logging, and provide samples for petrographic and XRD work for mineral identification, and mineralisation characteristics. Data is logged into Toughbooks on the rig then directly loaded into an acQuire database to avoid transcription error. There is no adjustment to assay data.
Location of data points	Down Under Surveys (DUS) or Survey Group Pty Ltd were commissioned to pick up all drill collars to DGPS accuracy of 3cm Easting and Northing, and 5cm in elevation. Coordinates are given in Map Grid Australia format (GDA94) and heights are given in Australian Height Datum. The area lies within UTM Zone 50. Drill holes with a down hole gyro survey using gyro-smart tools has been carried out by DUS and Pilbara Wireline Services, to verify dip and azimuth of drilled holes.
Data spacing and distribution	Drill hole spacing for the Mineral Resource Estimate varies from 35m x 35m in the Stage 1 mining area of North Star, to 50m x 50m in the remainder of the central part of North Star. In the north of North Star drill spacing is 200m x 100m to 400m x 50m. In the south of North Star drill spacing is 200m x 100m. In Eastern Limb, drill; spacing varies from 100m x 50m in a limited area to typically 200m x 100m, with some areas of 400m x 100m. In Glacier Valley, drill; spacing varies from 50m x 50m in a limited area to typically 200m x 100m, with some areas of 400m x 100m. In West Star, drill spacing are nominally 100 m spaced holes along lines separated 200 to 300 metres apart. The Mineral Resource Estimate includes material in the Measured, Indicated and Inferred categories and the classification is considered to reflect the confidence in the continuity of geology and mineralisation. 2m drill hole samples have been composited to 4m for DTR analysis.
Orientation of data in relation to geological structure	The structure of the mineralisation is sub-vertical with an overall dip to the west of 70-80o and drill holes have been drilled at angles (-60°) which allow transection through the strata even at low angles to reduce the risk of bias. Check drilling in opposite directions is carried out to ensure there is a comparison of cross strata variability to assess any potential sampling bias. Analyses of drill core structures is also carried out to assess the attitude of the geological units to guard against significant down hole sample bias.
Sample security	Sampling and sample security is in accordance with Fortescue standard procedures. Samples are delivered from site to Linfox distribution Centre for dispatch to the assay laboratory, and samples are tracked during this process. Sample tracking is based on sample ID and this is monitored from drill site to laboratory via the acQuire database. Upon receipt of a sample dispatch at the laboratory, a sample quality check and inventory check is carried out and any missing or damaged samples is communicated and this is then investigated and reconciled prior to sample processing.
Audits or reviews	No external sampling audit has been carried out for this work on this Project. In internal Audit by Fortescue Resource estimation group has been carried out on the Resources which were compiled by an external consultant.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The North Star, Eastern Limb and West Star Resources are contained within granted Mining Lease M45/1226. The Glacier Valley resources are contained within granted Mining Lease M45/1244. Both tenements are held in held in Joint Venture between Fortescue Iron Bridge (69%) and Formosa Steel Iron Bridge (31%).
Exploration done by other parties	There is no material data from other parties used in this resource estimation.
Geology	Predominantly the mineralisation lies within the Pincunah Member, which is part of the Soanesville Group, which is part of the Pilbara Super Group in the East Pilbara Terrane. Regionally the rock sequence is dominated by mafic to andesitic volcanics and volcaniclastics, BIF's and terrigenous clastic sequences intruded by Archaean granitoids. In the project area the rocks have been tightly folded, having a general strike of north-south with a steep sub-vertical dip. The main zones of mineralisation at North Star, West Star and Glacier Valley is the Pincunah Member, which is comprised of sedimentary BIF with magnetite mineralisation, and which dips steeply to the west overall at approximately 70-80º. The lithologies of the BIF sequences show a significant siderite and stilpnomelane component, along with the chert and magnetite bands. No asbestiform minerals have been detected.
Drill hole Information	Exploration results are not being reported. Drill hole collar location information is provided in the Mineral Resource Estimation summary.
Data aggregation methods	Exploration results are not being reported. Compositing and other data aggregation methods are contained in the Mineral Resource Estimation summary.
Relationship between mineralisation widths and intercept lengths	Exploration results are not being reported. Use of intersection data is discussed in Section 3.
Diagrams	Exploration results are not being reported.
Balanced reporting	Exploration results are not being reported.
Other substantive exploration data	Exploration results are not being reported. All additional mapping, sampling and geophysical investigations relevant to the Mineral Resource Estimate are described in Section 3.
Further work	Drilling and metallurgical test work is continuing as part of ongoing feasibility programs. Mineralisation in the area of the Resource Estimate is well outlined, and covered by drilling, however there is potential for further resources to be reported in adjacent areas.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	RC drilling data is recorded on Toughbooks with project specific logging templates which capture the data in an acQuire database. Validation of logging is carried out by programs within the acQuire database, and a database administrator is employed to ensure that data is managed properly. Validation of logging in relation to cross sections and assays is carried out when all data has been received, and adjustments/corrections are made when required. Assay data is checked for QAQC within the acQuire database to ensure that rig duplicates and lab standards are within acceptable certification tolerances. Anomalous assay results are also visually checked against geological sections.

Criteria	Commentary
	Downhole geophysical data is calibrated against dedicated calibration holes with reporting of calibration results on a weekly basis. Drill hole data is imported into Micromine 2014 (V15.0) mining software for further validation, including: Checks for duplicate collars. Checks for missing samples. Checks for down hole from-to interval consistency. Checks for overlapping samples. Checks for samples beyond hole depth. Checks for missing assays. Checks for down-hole information beyond hole depth. Checks for missing down-hole information. Checks for missing or erroneous collar survey.
Site visits	The Competent Person has conducted a site visit, which included a review of the overall site and outcrops. RC and DD hole locations were visited and drilling activities viewed. Diamond core logging was reviewed on site and found to be competent. RC cuttings were viewed on the ground and found to be consistent with assaying and logging. The Competent Person has confirmed that all geological, logging work etc. is carried out to a standard that will ensure the appropriate level if confidence in the resulting data and Mineral Resource Estimate.
Geological interpretation	The geological interpretation has been developed over several years, and this model has been independently evaluated, and the geological interpretation has been shown to be robust and consistent between all models. An Indicator Modelling method has been applied to provide an alternative domain definition, particularly in the hangingwall and footwall zones, which are difficult to interpret manually. The DTR composite data has been used to define indicators (Zero/one values) at a grade threshold of 5% DTR, to represent the broad magnetite mineralisation envelope, and 20% DTR to represent the core, or higher grade material. This methodology has confirmed and agrees with existing geological models of geology and mineralisation, both in area where a clear magnetite core occurs and in areas of thinner bands of alternating mineralised and unmineralised material. Logging of weathering and geochemistry have been used to define sub-horizontal Oxide domain, with Fresh material below.
Dimensions	North Star comprises three distinct mineralisation style areas, North, Central and South, which are separated by assumed fault zones. The Northern part of North Star extends approximately 2.4 km in strike length, 200m to 400m across strike and has been modelled to a vertical depth of approximately 600m. The Central part of North Star extends approximately 1.9 km in strike length, 400m across strike and has been modelled to a vertical depth of approximately 600m. The Southern part of North Star extends approximately 1 km in strike length, 200m across strike and has been modelled to a vertical depth of approximately 600m. Eastern Limb extends approximately 2.5km in strike length, 200m to 300m across strike and has been modelled to a vertical depth of approximately 400m. Glacier Valley extends approximately 3.4 km in strike length, 200m to 300m across strike and has been modelled to a vertical depth of approximately 600m. West Star is approximately 3.5 km in strike length overall, of which 1.8 km strike length has been modelled. The mineralisation is typically 150m to 200m across strike and has been limited to a depth extent of approximately 200m.

Criteria	Commentary
Estimation and modelling techniques	DTR is sampled on a 4m composite basis. Assay data has been composited to 4m. Initial statistical analysis was carried out on a range DTR Indicators to provide geostatistical parameters for DTR Indicator domain modelling. Composite data was flagged with these domains and further statistical analysis was carried out to confirm the validity of these domains. Geostatistical analysis was carried out on a domain basis, and generally produced robust variograms with a low nugget effect and long ranges along strike. Short ranges were generally observed across the mineralised structures. Down dip variograms were less robust largely due to vertical and high-angle drilling and the sub-vertical nature of the mineralisation. Variograms were in all cases sufficient to define kriging parameters for the Ordinary Kriging process used in generation of the block model. Search ellipse orientations for the estimation are based on a combination of variography and drill spacing. An unfolding methodology based on the geological interpretation was used to account for variations in dip and strike. Search ellipse dimensions varied depending on drill hole spacing were related to anisotropy observed in the variography. A multiple search pass strategy was adopted, whereby the search was expanded if a first search failed to find enough samples to estimate blocks. In the first search pass, a minimum of eight composites and two drill holes was required to estimate a block, with relaxed parameters in the expanded second search. Only data in each mineralised indicator domain was used to estimate that domain. Analysis of the correlation of DTR with Magnetic Susceptibility (MagSus) data was carried out to develop a linear regression to convert MagSus to a DTR equivalent where no DTR data is available. No top cuts were applied. No assumptions were made about modelling of selective mining units. Mass Recovery (a combination of DTR and regressed MagSus) is the primary variable estimated within the domains defined by the DTR Indicator. The standard suite of iron ore XRF analyses has also been estimated as in-situ head grades. In addition, the DTR composite data set has been used to estimate recovered concentrate grades for the same suite of analyses. Parent block size varied depending on drill hole spacing. Oxide domain 35m x35m spacing : 10m x 12.5m x 3m blocks (East, North, RL) Measured and Indicated (Fresh) domains: 10m x 25m x 12m Inferred (Fresh) domains: 20m x 50m x 12m Modelling results have been compared to the previously published (2012) resource estimates and have produced lower tonnages but higher DTR grades. This is due to the exclusion of poorly-informed low grade material in the hangingwall and footwall and to improved variography resulting in smaller searches and less grade smoothing. Validation of the final resource has been carried out in a number of ways, including: Drill Hole Section Comparison Comparison by Mineralisation Zone Swathe Plot Validation Model versus Declustered Composites by Domain All modes of validation have produced acceptable results. As there has been no mining of ore material to date, no reconciliation data is available.
Moisture	Tonnages are estimated on a dry basis.

Criteria	Commentary
Cut-off parameters	The DTR cutoff grade used for Mineral Resource Reporting (currently 9% DTR) was determined by Whittle optimisation of the previous Resource Model, based on the V3 Feasibility study.
Mining factors or assumptions	Mining will be by conventional open pit methods. Mining dilution and ore loss are not included in the Mineral Resource Estimate. The cost estimation for economic evaluation of the mineralisation has been carried out in detail by industry experts and modelled during V3 Feasibility Studies. Independent assessment has been carried out by several joint venture partner organisations. Parameters and costs are also derived from Fortescue operational data and costs from existing operations within the Pilbara Region.
Metallurgical factors or assumptions	Metallurgical test work and variability sampling for grade recovery and comminution work has been carried out at several different laboratories as well as independently by Joint Venture partners and product manufacturers and suppliers. Industry standard DTR sampling has been used as the basis for the Mineral Resource Estimate. Where DTR is not available, a regression based on DTR versus Magnetic Susceptibility has been used. Recovered concentrate grades have been estimated based on DTR results. Additional metallurgical test-work is planned to further define metallurgical parameters.
Environmental factors or assumptions	Approval for Stage 1 Mining of the North Star deposit has been granted. DMP have approved processing of the magnetite ores on site at North Star for an initial Stage 1 Mining operation, 10Mt per annum operation for dry mining and processing. Application has been made for wet processing, and is expected to be approved in the near future. Primary approvals for Iron Bridge North Star Magnetite project (also known as stage 2) are complete. This includes EPA part IV assessment, with approval given from both State and Federal governments. Secondary approvals will be granted before stage 2 mining progresses. These include detailed mining proposals, mine closure plan, works approvals, water extraction, port approvals, dangerous goods, aboriginal heritage and local government.
Bulk density	The bulk density has been estimated in the Mineral Resource model using down hole geophysical data where the density of data is suitable. Outside of these higher confidence areas, default values were given aligned to rock type. A correlation study between down hole geophysics and physical density (diamond core) measurements before assigning default values. Downhole geophysical density measurements are calibrated to caliper measurements of hole diameter to ensure the impact of cavities and other hole irregularities on the calculated density measurement are taken into account. Bulk density default values used in the Mineral Resource Estimate are considered to be dry, and are given values according to deposit area and specific rock type as summarised; Oxide ore 2.7 to 3.0 $t/m^{3.}$ Oxide waste 1.9 to 2.8 $t/m^{3.}$ Fresh ore 3.2 to 3.5 $t/m^{3.}$ Fresh waste 2.7 to 3.1 $t/m^{3.}$
Classification	The Mineral Resource has been classified in the Measured, Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: Geological continuity. Data quality. Drill hole spacing. Modelling techniques.

Criteria	Commentary
	Estimation properties including search strategy, number of informing data, average distance of data from blocks and kriging output from the interpolation. Measured Resources have no extrapolation and are in areas with a maximum of 50m by 50m drill spacing. Indicated Resources have a limited amount of extrapolation, based on geostatistical and geological continuity as observed in the data, and generally have a maximum drill spacing of 100m x 200m. The limit of extrapolation of the Inferred classification in the more widely spaced areas of the deposits has been determined after review of continuity in closer spaced drilled areas and areas with deep drilling. The Mineral Resource Classification reflects the views of the Competent Person.
Audits or reviews	No independent audits or reviews have been carried out. An internal audit of Resources has been carried out by the Fortescue Resource estimation team and has found the consultant report to be acceptable.
Discussion of relative accuracy/ confidence	Calculated accuracy and confidence in the Mineral Resource Estimate are not explicitly stated. However, relative accuracy is reflected in the resource classification, based on relative kriging variance output from the estimation algorithms. A subjective qualitative risk analysis assessment has also been carried out, with the overall risk level varying from Low to High according to the Mineral Resource classification. Overall the risk is considered to be Moderate. The Measured and Indicated components of the Mineral Resource Estimate are considered to represent a local estimate as there is reasonable confidence in the location of mineralisation and waste domains. Inferred components of the Mineral Resource Estimate are considered to be global in that there is less certainty, particularly at depth, of the precise nature and location of the mineralisation. No production data is yet available for comparison.

Competent Person's Statements

The detail in this report that relates to Magnetite Mineral Resources is based on information compiled by Mr Lynn Widenbar, an independent consultant for Widenbar and Associates. Mr Widenbar has supplied technical input for Magnetite Mineral Resources estimations and compilation of exploration results.

Mr Widenbar is a Member of the Australasian Institute of Mining and Metallurgy. Mr Widenbar has sufficient experience relevant to the type of mineralisation and type of deposit under consideration to be qualified as a Competent Person as defined in the JORC Code.

Mr Widenbar has consented to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Iron Bridge Magnetite Ore Reserves Reporting
as at 30th June 2017

Magnetite Ore Reserves
Iron Bridge Ore Reserves are based on the onsite processing of fresh magnetite mineralised material into a saleable concentrate product that is pumped by slurry pipeline to port.

The following supporting data addresses the Ore Reserve generation process used for the North Star deposit. The surrounding deposits of Eastern Limb, Glacier Valley and West Star have not been considered for this estimation.

Mining Model
The in-situ deposit Resource model is the basis for the mining model used for Ore Reserves reporting.

Regularisation is used to incorporate mining losses and dilution into the in-situ Resource model and create a mining model that simulates the predicted concentrate product. Grades and other block attributes are regularised into 10 m x 25 m x 12 m blocks to simulate a selective mining block (SMU). The regularisation process employed combines sub-cells used to define boundaries into a regular model.

Scheduling Inventory
Pit optimisation software is used to determine the pit geometry that provides the highest value for a deposit considering parameters such as slope angles, mining, processing and selling costs, cut-off grades (mass recovery), product prices and plant recoveries.

A combination of incremental value, physical operating constraints and strip ratios are then used to identify the geometry of mining cutbacks inside the final selected pit.

Mine Scheduling
Mine scheduling aims to maximise value and maintain targeted ore quality. In general terms this equates to deferring higher strip ratio, higher cost mineralisation until later in the collective scheduled mine life.

Concentrate produced at North Star is pumped to port through a slurry pipeline.

A commercial linear programming software package is used to model the mining sequence, the Ore Processing Facility (OPF) and different ore feeds to maximise Net Present Value (NPV) for the nominated parameters and constraints. Major constraints include the nominated concentrate product tonnage and grade specifications, matched to the logistics capacity of the slurry pipeline and port. The material selection to satisfy processing requirements is based on a cut-off grade (mass recovery) ore definition, derived from mining, processing and selling costs.

Pre-defined grade bins by rock type, mass recovery and Mineral Resource classification are created to track weathering and mass recovery by grade-based blending. This simplifies the scheduling and allows selective stockpiling and reclaiming of targeted quality material at different periods throughout a mine's life to meet shorter term blending requirements. Since mineralisation distributions and presentation will vary with time, so too may the shorter term effective ore cut-off grade. The Ore Reserve cut-off can be approximated by a mass recovery cut-off that closely reproduces that portion of the scheduling inventory that is converted into specification product over the life of the Ore Reserve schedule.

Financial Analysis

The scheduling programme includes revenue and cost information to maximise NPV. The schedule software assesses the value generated by each block to determine whether the block is fed directly to the plant, stockpiled or treated as waste. Further financial analysis to determine more realistic absolute financial indicators and sensitivity analysis are performed separately using the tonnes and grades extracted from the schedule.

Table 4 - Magnetite Ore Reserves of the North Star deposit as at 30th June 2017

Category	Magnetite Ore Reserves - as of 30th June 2017					Magnetite Ore Reserves - as of 30th June 2016				
	In-situ Tonnes (mt)	DTR Mass Recovery %	Product Iron Fe%	Product Silica SiO_2%	Product Alumina Al_2O_3%	In-situ Tonnes (mt)	DTR Mass Recovery %	Product Iron Fe%	Product Silica SiO_2%	Product Alumina Al_2O_3%
North Star (60.72% Fortescue) - Eastern Limb currently not assessed										
Proved	-	-	-	-	-	-	-	-	-	-
Probable	705	27.2	67.2	5.52	0.25	705	27.2	67.2	5.52	0.25
Total	**705**	**27.2**	**67.2**	**5.52**	**0.25**	**705**	**27.2**	**67.2**	**5.52**	**0.25**
Glacier Valley (60.72% Fortescue)										
Proved	-	-	-	-	-	-	-	-	-	-
Probable	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
West Star (60.72% Fortescue)										
Proved	-	-	-	-	-	-	-	-	-	-
Probable	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Total Magnetite Ore Reserves										
Proved	-	-	-	-	-	-	-	-	-	-
Probable	705	27.2	67.2	5.52	0.25	705	27.2	67.2	5.52	0.25
Total	**705**	**27.2**	**67.2**	**5.52**	**0.25**	**705**	**27.2**	**67.2**	**5.52**	**0.25**

a) Magnetite Ore Reserves are a result of a mining study only upon the North Star deposit. Utilising 705 Mt of Measured plus Indicated Mineral Resources reported within a defined pit design.

b) All reporting is based on Mass Recovery expressed as a 9% Davis Tube Recovery (DTR) cut-off.

c) All Ore Reserves are reported on a dry-tonnage basis.

JORC Code, 2012 Edition – Table 1

Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The Mineral Resource model for the Iron Bridge Project was developed by Widenbar Associates and audited by the Fortescue internal Resource Definition team. The Mineral Resource Model used for Ore Reserves was that as used for the JORC-2012 Mineral Resource Release current as at 30th June 2015. Mineral Resources are reported inclusive of Ore Reserves.
Site visits	A site visit by the competent person has not been undertaken as no notable mining activities have been undertaken at site since the previous visit by Mr Iain Cooper a former Golder employee (CP for 2015).
Study status	A pre-feasibility study was completed in April 2015.
Cut-off parameters	The processing costs and recoveries were supplied by Fortescue. Mining costs were based on cost modelling completed by Golder for earlier studies. Cut-off grades used in the study are: Stage 1 Plant Fresh – 9% Mass Recovery Stage 2 Plant Fresh – 9% Mass Recovery Calculated cut-off grades are marginally lower.
Mining factors or assumptions	The Resource model was generated in February 2015 and regularised to 10 m × 25 m × 12 m. No further regularisation has been carried out. The ore bodies planned to be mined in this study are bulk deposits and while some ore loss and dilution may occur along the edges, this edge dilution is not considered significant and has been accounted for in the regularisation process. No additional dilution has been included. The Ore Reserves are reported within a pit design which is based on open pit optimisation. The optimisation was carried out including Measured and Indicated Mineral Resource categories. The mining recovery factor used was 100%. This is accounted for in the regularisation process. The optimisation used a Platts reference price of US$72 per dry metric tonne of iron ore concentrate at 62% Fe. The geotechnical parameters used in pit design are based on a Feasibility Study developed by Golder (2014). The stage cutbacks were around 150 m with the minimum practical mining width of 40 m. The Inferred material was considered as waste in the optimisation process but included in Life of Mine schedule. There is ongoing drilling to upgrade the Inferred material. This is a standard truck and shovel iron ore operation located in the Pilbara region of Western Australia. Magnetite concentrate product will be transported through a slurry pipeline between Iron Bridge and Port Hedland.
Metallurgical factors or assumptions	The technology being utilised is all existing proven technology. The flowsheet does represent a departure from previous conventional norms however the dry cyclone technology around the HPGR's is well proven in the cement clinker industry. The Iron Bridge North Star flow sheet differs from conventional magnetite flow sheets in that dry cycloning is used around the HPGR's and no ball mill is included in the flowsheet. In these respects, the flowsheet proposed is both novel and different.

	There are three HPGR's and air classifiers with a cut point of 140 microns. This is unconventional but it overcomes the problem with moisture in wet screen oversize returns to the HPGR. While this causes problems with the HPGR's dust, Fortescue have included bag houses to capture fine dust. A pilot plant is operating on site and vendor testwork has been undertaken to support the flow sheet unit operations. The testwork has been independently audited and the results of which showed: Extensive geometallurgical testwork Mineralogical characterisation Carefully selected representative metallurgical holes Extensive metallurgical comminution testwork, Davis tube recovery testwork, batch and pilot testwork Extensive vendor testwork Site based pilot plant Variability testwork Tunra bulk solids testwork. A geometallurgical model is being developed using cluster analysis to assist with domaining and mineralogy. The geometallurgical model while still being developed, mineralogy is incorporated into the modifying factors where available. The assaying includes a large suite of deleterious elements.
Environmental	North Star Stages 1 and 2 have been subject to extensive Environmental baseline studies and had Environmental Impact Statements prepared and assessed by the Environmental Protection Authority (Western Australia) and the Department of Environment (Commonwealth). Stage 1 received Commonwealth Approval on 14th June 2013 following a decision by the Environmental Protection Authority not to assess the Project on 6th August 2012. Stage 2 of the Project was assessed under a bilateral agreement between the State and Commonwealth at a Public Environmental Review level. State approval was granted on 9th January 2015, followed by Commonwealth approval on 6th February 2015. Construction of the open cut mine and associated waste and tailings landforms are subject to assessment and approval by the Department of Mines and Petroleum. To date, the Stage 1 open cut mine, temporary waste rock landform, dry tailings landform and wet tailings storage facility have all been assessed via Mining Proposals and approved for construction. Further amendments to the mine including transition to Stage 2 will be subject to future assessment and approval. The North Star site has been subject to preliminary Acid and Metalliferous Drainage (AMD) assessment using desktop review as well as laboratory static and kinetic testwork. The project is expected to intersect Potentially Acid Forming (PAF) material, and further assessment by Golder Associates including the development of a detailed Sample and Analysis Plan and preparation of a detailed Geochemical Characterisation and AMD Assessment report has been completed. To support this, approximately 150 samples of waste rock were analysed at a laboratory in Q2 2015. Results of this round of analysis have assisted in increasing knowledge of potential for AMD at North Star including the development of an AMD model. Further work to better understand the potentially acid generating and acid neutralising components within the waste rock is planned. A field kinetic trial is underway to address sample representivity. This work will improve the overall AMD knowledge and allow for the planning of detailed AMD handling.
Infrastructure	The site is located approximately 120 km south of Port Hedland and 45 km to the east of Great Northern Highway. Access to the mine site will be via a dedicated mine site access road that connects to the Great Northern Highway. This will enable access for construction and ongoing support to the mining and processing operations.

	The mine will be operated on a fly in fly out basis with personnel flying into a dedicated air strip 15 km from the North Star mine site and 12 km from the village. Personnel will be bussed between the air strip and the village. The existing Japal village will be upgraded as part of the project to house the peak construction and on-going mine operations. The village will consist of all of the appropriate facilities including dry and wet mess, gym and other lifestyle facilities for operational personnel. All traffic to the North Star site must pass through the Gatehouse to gain access to the North Star mine, Stage 1 and Stage 2 process plants. The gatehouse area also includes the first aid and emergency response buildings. This is due to its close proximity to access points to all of the North Star operations including plant, mine and village. As the North Star site is located within mountainous terrain the location for the Stage 2 processing plant has been carefully chosen to minimise earthworks and haul distance from the mine. All of the required infrastructure for both the processing plant and mining ancillary items have been combined into an area adjacent to the processing plant giving the ability to combine services and reduce earthworks. The plant infrastructure area includes the following mining and plant infrastructure to enable support to both the mining and processing plant operations. • Main Administration Building and associated Crib Rooms and Ablutions • Control Room • Communications Room • Laboratory • HV/Drill/LV Workshops & Warehouse • HV Workshop Office, Crib Room and Ablutions • Lube Station • HV Go Line • Tyre Workshop • HV Refuelling • LV Refuelling • HV Washdown • LV Washdown • Diesel Fuel Facility • Water Treatment Facilities • Fixed Plant Workshop • Welding Workshop • Main Warehouse It is intended to supply power from Port Hedland via a dedicated power transmission line to a switch yard located at the plant infrastructure area. Concentrate from the processing plant will be conveyed via an above ground overland pipeline. The pipeline will follow the mine site access road and then the Fortescue rail to the Port where it will enter the North Star dewatering facility.
Costs	Projected capital and operating costs for mining have been developed based on production schedules over a period of more than 20 years to achieve an annual production rate of: • 1.3 to 1.6 Mtpa of product from the Stage 1 plant; and

	• 8.5 Mtpa of product from the Stage 2 plant. Estimation of the production rates and operating costs has been developed from first principles. Capital and operating costs are based on vendors quotes Costs include allowances for mining, administration, pumping slurry to the port and shipping. All costs and revenues are in AUD. An exchange rate of US$0.75:AU$1.00 has been applied. Royalties of 5% have been applied. The Iron Ore Price Forecast has been based on a combined CFR forecast from three leading pricing analytics groups, resulting in a base 62% Fe Platts reference price of US$72 per dry metric tonne.
Revenue factors	Revenue is based on a concentrate grade of 62% Fe with a Platts reference price of US$72/t concentrate and a premium of US$3.50 and US$1.16 per additional 1% Fe above 62% Fe.
Market assessment	The main product is magnetite slurry which will be pumped via a slurry pipeline to Port Hedland where it will be shipped by sea to customers expected to be mainly in China. The primary market is for a premium grade magnetite concentrate.
Economic	The project economic evaluation was based on a technical and economic model for the operation up to the final product to be transported by slurry pipeline and shipped at Port Hedland. The project is sensitive to the iron ore price, however follow-up long term forecasting by independent forecasters indicate that the price realised in Australian dollars is unchanged.
Social	The North Star mine is located on Unallocated Crown Land managed by the State. Other Project infrastructure including the camp, Stage 2 process plant, access roads and proposed infrastructure corridors are located on pastoral leases. Negotiations with the lease holders, including holders of titles granted under the Mining Act are underway to ensure project tenure can be granted and infrastructure constructed. The North Star Stage 1 is located on land subject to Native Title claims by the Kariyarra and Njamal People. Native Title Agreements have been struck with both groups. All Stage 1 and 2 project infrastructure footprints have been subject to Heritage (ethnographic and archaeological) survey carried out in consultation with the relevant native title group. The Western Australian Department of Environmental Regulation (DER) administer Part V of the Environmental Protection Act and issue Works Approvals and Operating Licences for the construction and operation of prescribed premises. North Star Stage 1 has sought and has in place appropriate Part V licences for the OPF, TSF and WWTP. Further Part V licences will be sought for Stage 2 infrastructure as required.
Other	All necessary Ministerial approvals for the construction and operation of Stages 1 and 2 of the North Star Project have been sought and secured. The construction of a concentrate filtration facility at Anderson Point to allow for the dewatering and stockpiling of magnetite concentrate may be subject to further environmental impact assessment and approval at State and Commonwealth level, and these negotiations with the relevant regulatory agencies are currently underway. Construction of the airport requires amendment to the existing State Ministerial approval, and this amendment is currently under assessment by the Office of the EPA. No approvals have been sought for the development of the Glacier Valley, South Star or West Star deposits, and these areas have not yet been subject to environmental baseline studies.

	Approval for the North Star Stage 2 project is subject to conditions imposed by the Minister for Environment. Several of these conditions restrict the commencement of ground disturbing activities until certain surveys and studies have been conducted. All necessary surveys are now complete, and the majority of required studies are with the Office of the EPA for review and approval. Mining within 150m of the Pilbara Leaf Nosed Bat (PLnB) roost cave identified as Cave 13 is prohibited by the current Stage 2 Ministerial Approval until such time as the Minister considers that the population of PLnB at North Star is not reliant on the cave (they have either relocated, or another population has been established in another suitable cave). Finalisation of engineering design for critical pipeline infrastructure to allow the transport of magnetite concentrate to export facilities in Port Hedland is yet to be concluded, and as such the application for tenure has not been submitted for assessment and approval. None of the above is expected to have a material impact on the development schedule for North Star Stage 2, as plans have been developed and action underway to address each of the points identified.
Classification	There is Measured, Indicated and Inferred Resources within the model. The Measured and Indicated Resources within the designed pits have been converted to Probable Ore Reserves.
Audits or reviews	No external audits of the Ore Reserves have been performed. An internal audit of Ore Reserves was conducted by Fortescue in Q2 2016. No fatal flaws contingent with the level of study (pre-feasibility standard) were identified with the Ore Reserves Estimation process during this audit. A metallurgical due diligence was been completed by METS on 2nd April 2015.
Discussion of relative accuracy/confidence	The study on which the Ore Reserves are based has been completed to a pre-feasibility standard; Pit designs are based on Whittle optimisations. The cost model is based on a life of mine schedule which has been developed using MineMax Scheduler. Costs have been developed from first principles and industry standards. All modifying factors have been applied to designed mining shapes on a global scale.

Competent Person's Statements

The detail in this report that relates to Estimated Magnetite Ore Reserves for the Iron Bridge project for fiscal year 2017 were compiled by Mr Glenn Turnbull, an independent consultant for Golder Associates.

Mr Turnbull is a Member of the Australasian Institute of Mining and Metallurgy. Mr Turnbull has sufficient experience that is relevant to estimation, assessment, evaluation and economic extraction of Ore Reserves, and to the activity for which he is accepting responsibility to be qualified as a Competent Person as defined in the JORC Code.

Mr Turnbull has consented to the inclusion in this report of the matters based on their information in the form and context in which it appears.