Fortescue

18 August, 2017

The Companies Officer
Australian Securities Exchange Ltd
Level 40, Central Park
152-158 St Georges Terrace
Perth WA 6000

Fortescue Mineral Resources Update: Development Properties

Fortescue Metals Group (ASX: FMG, Fortescue) presents the attached Mineral Resources statement for its Western Hub and Greater Chichester Hub Development Properties at 30 June, 2017.

The Report updates the Inferred Mineral Resources estimates in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2012 (the JORC Code) as required by the Australian Securities Exchange. The annual summary will be included in Fortescue's 2017 Annual Report and should be read in conjunction with the enclosed statement.

Summary Mineral Resources Development Properties - Hematite

	June 2017		June 2016	
	In-situ tonnes (mt)	Fe%	In-situ tonnes (mt)	Fe%
Greater Chichester	433	56.4	491	57.1
Greater Solomon	2,658	56.8	2,658	56.8
Western Hub	2,125	57.9	740	59.1
Nyidinghu	2,463	57.4	2,463	57.4
Total Development Mineral Resources	7,680	57.3	6,353	57.4

The Western Hub Inferred Mineral Resource has increased by 1.4 billion tonnes (bt) to 2.13bt following a program of exploration drilling. The area includes the deposits of Eliwana and Flying Fish and the previously unreleased deposits of Cobra, Lora, Wyloo North, Elevation, Farquhar, Boolgeeda CID and Zorb. The additional tonnes include high grade Bedded Iron Deposits (BID) in both the Brockman and Marra Mamba Iron Formations, along with Channel Iron Deposits (CID) and Detrital Iron Deposits (DID).



Further drilling has been designed to convert selected areas of the Inferred Mineral Resources to Indicated and Measured status as part of the feasibility studies and a further update is expected to be made in coming months.

In addition, Fortescue has announced a change in the Mineral Resource inventory at its Greater Chichester Hub with the Inferred Mineral Resources now estimated at 433 million tonnes (mt) following the transfer of the Kutayi deposit to the Chichester operating properties, partly offset by increases in the White Knight and Investigator Mineral Resources.

Chief Executive Officer, Nev Power said, "It is pleasing to see this significant increase in the Western Hub Mineral Resources. Ongoing work in FY18 is expected to further increase these Resources as we continue to focus on understanding the potential of both the Western Hub and Nyidinghu as Firetail replacement options."

Yours sincerely
Fortescue Metals Group Ltd

Alison Terry Company Secretary

Media contact:

Michael Vaughan, Fivemark Partners E: mediarelations@fmgl.com.au

M: +61 422 602 720

Investor Relations contact:

Stuart Gale

E: investorrelations@fmgl.com.au

WESTERN HUB

Updated Mineral Resource estimates have been produced for Fortescue's Western Hub. These were done with the intention of updating both the existing estimation footprint and the stratigraphic interpretation. The Inferred Mineral Resource estimates are in compliance with the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code, 2012).

Deposits in the Western Hub are located approximately 100-140km west and north-west of Tom Price and are 100-150km west of Fortescue's Solomon operations in the Pilbara region of Western Australia.

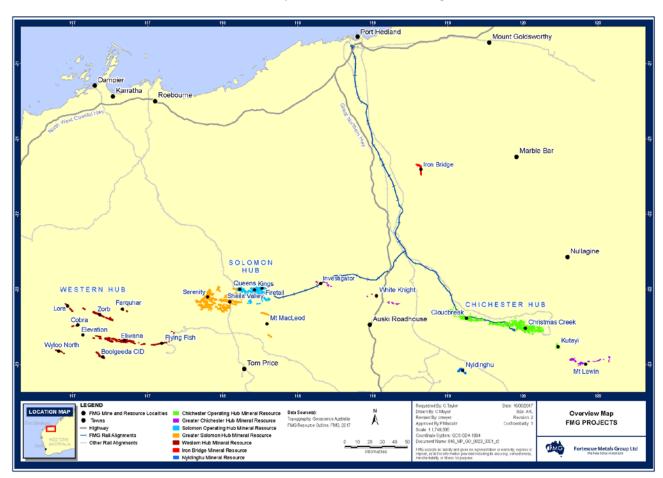


Figure 1: Fortescue Mineral Resource and operations overview.

The Eliwana and Flying Fish deposits are situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. The deposits cover a narrow zone that follows the outcrop of mineralised Marra Mamba and Brockman Iron Formations. Tertiary sediments occur in the valley separating these outcropping formations. Mineralisation predominantly occurs as bedded iron deposits (BID) with some detrital iron deposits (DID). Mineralisation is distributed variably within an area of approximately 60km along strike and 3.5km across strike. Mineralisation occurs at surface and extends to depths of 300m below surface. Further drilling over the project areas has resulted in an increase of the Inferred Mineral Resource by 340mt

The Lora, Cobra and Elevation deposits are found along the western margin of the Hamersley Basin. These deposits contain BID mineralisation hosted by the Brockman Iron Formation and minor DID. Cobra has mineralisation that covers an area approximately 5km along strike and 1km across strike, and occurs from surface to depths of 150m. At Lora mineralisation covers an area approximately 8km along strike and 600m

across strike. Mineralisation occurs at surface and extends to depths of 130m with an average thickness of 30m. At Elevation the mineralisation covers an area 1.5km by 300m with an average thickness of 40m.

The Farquhar deposit is situated in the western Hamersley Province. The deposit consists of BID with mineralisation hosted by the Dales Gorge Member of the Brockman Iron Formation and is controlled by northwest trending structures. Mineralisation is distributed variably across an area approximately 5km along strike and 500m across strike. Mineralisation occurs at surface and extends to depths of 50m.

The Wyloo North deposit is situated on the northern rim of the Wyloo Dome in an area of significant deformation. The deposit contains BID with mineralisation hosted by the Joffre Member of the Brockman Iron Formation and is controlled by northwest trending sub-vertical faults. Mineralisation covers an area approximately 7km along strike and 500m across strike. Mineralisation occurs at surface and extends to depths of 180m at an average thickness of 40m.

The Zorb and Boolgeeda deposits are channel iron deposits (CID) in the Western Hub. The Zorb CID is located in a valley bounded by Marra Mamba and Brockman Iron Formations. Preservation of the CID also occurs in a small syncline within the Marra Mamba. There is no outcropping CID in the area. Mineralisation is hosted by CID lower and CID upper with minor DID. The channel covers an area 25km long and is approximately 1km wide.

The Boolgeeda CID occurs in a channel in the central part of the drainage system and as a series of mesas at the northwest and southeast ends. In the central area the CID is covered by 20-50m of detritals. Throughout the area the CID mineralisation is found from surface and up to depths of 80m at an average thickness of 30-40m. The main area of mineralisation covers an area approximately 8km along the channel and up to 600m across the channel.

For all deposits in the Western Hub, drill samples are from Reverse Circulation (RC) drilling rigs with cone splitters. RC drill holes have been drilled on a nominal 100m x100m, 200m x 100m, 400m x 100m and 800m x 100m spaced grid.

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

Grades estimated in the models were Fe, SiO2, Al2O3, P, Mn, MgO, CaO, TiO2, Na2O, S, K2O, and LOI total. However, only Fe, SiO2, Al2O3, P and LOI total are quoted here as the other elements are not considered significant. Variography and detailed statistics using Snowden Supervisor software was used to determine the estimation parameters for the grade modelling. Ordinary Kriging and inverse distance cubed were used as modelling techniques to estimate grades. Estimation was done using Vulcan software.

Density has been determined from down-hole geophysical measurements throughout the deposits. These have been compared with bulk density measurements on diamond core drilled at Eliwana. Average rounded densities by geological unit and mineralisation have been applied globally to the models.

The cut-offs used to report these Mineral Resources vary slightly across the deposits to deliver similar grades to Fortescue's current production specifications. BID at Eliwana, Flying Fish, Cobra, Farquhar, Elevation and Wyloo North is reported at greater or equal to 50% Fe, while BID at Lora is reported at greater than or equal to 54% Fe. DID at Eliwana and Flying Fish is reported at greater than or equal to 52% Fe, and at Lora to

greater than or equal to 54% Fe. Red ochre detritals at Flying Fish are reported at greater than or equal to 50% Fe. The Zorb CID Upper is reported at greater than or equal to 50% Fe and the CID Lower at greater than or equal to 53% Fe. The Boolgeeda CID is reported at greater than or equal to 52% Fe

The estimates have been classified as Inferred Mineral Resources and reported in accordance with the JORC Code, 2012 Edition. The classification is derived from consideration of the confidence in geological and mineralisation continuity, sample spacing, sample statistics, estimation parameters, interpretational uncertainties, mapping and the potential for economic extraction. The Mineral Resource summary for these deposits is shown in Table 1.

Table 1: Western Hub Mineral Resource summary.

Ore Type	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phosphorus	Loss On Ignition LOI %
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Detritals	116	55.3	7.89	5.89	0.048	5.8
Brockman BID	628	59.4	5.07	2.68	0.139	6.5
Marra Mamba BID	132	59.1	5.04	2.29	0.061	7.1
TOTAL	875	58.8	5.45	3.05	0.115	6.5
		Flyi	ng Fish			
Detritals	43	58.1	5.25	4.19	0.058	6.6
Marra Mamba BID	162	60.8	3.64	1.90	0.060	6.7
TOTAL	205	60.2	3.98	2.38	0.059	6.7
	_	C	obra	T	1	T
Brockman BID	152	58.6	5.90	2.54	0.149	7.1
	_		Lora		1	T
Detritals	19	57.3	7.64	4.06	0.079	5.3
Brockman BID	105	58.9	4.75	3.17	0.163	7.2
TOTAL	124	58.6	5.19	3.31	0.151	6.9
		;	Zorb	.	1	r
CID Upper	11	56.2	6.68	1.42	0.021	10.3
CID Lower	325	54.5	6.56	3.20	0.041	11.2
TOTAL	337	54.6	6.57	3.14	0.040	11.2
		Fai	rquhar	1	T	ı
Brockman BID	41	58.2	5.56	2.98	0.123	7.6
		Ele	vation	1	T	ı
Brockman BID	33	59.4	4.75	2.68	0.129	7.0
		Boolg	eeda CID	T	T	Г
CID Lower	258	55.5	5.74	2.89	0.049	11.4
	T	Wylo	oo North	T	T	T
Brockman BID	101	60.4	5.38	2.60	0.107	5.0
		Western F	lub Combine	ed .	T	Г
GRAND TOTAL	2,125	57.9	5.53	2.93	0.094	7.9

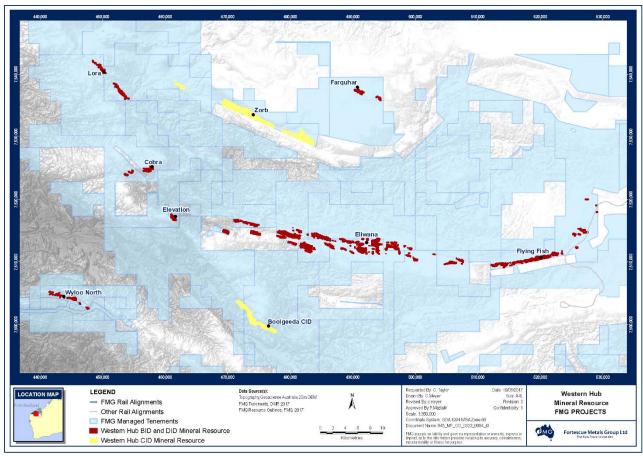


Figure 2: Location of Western Hub Mineral Resources.

The Mineral Resource inventory compared with the previous reporting period for these deposits is shown in Table 2. In accordance with the requirements of the JORC Code, 2012 Edition for reporting Mineral Resources, the JORC Code, 2012 Edition Table 1 for each estimate is provided in the attachment.

Table 2: Western Hub total Mineral Resource inventory.

		June 2017					June 2016					
Project	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %
					We	stern Hub						
Eliwana	875	58.8	5.45	3.05	0.115	6.5	560	58.8	5.57	3.03	0.102	6.4
Flying Fish	205	60.2	3.98	2.38	0.059	6.7	180	59.9	4.11	2.41	0.057	6.8
Cobra	152	58.6	5.90	2.54	0.149	7.1	-	-	-	-	-	-
Lora	124	58.6	5.19	3.31	0.151	6.9	-	-	-	-	-	-
Zorb	337	54.6	6.57	3.14	0.040	11.2	-	-	-	-	-	-
Farquhar	41	58.2	5.56	2.98	0.123	7.6	-	-	-	-	-	-
Elevation	33	59.4	4.75	2.68	0.129	7.0	-	-	-	-	-	-
Boolgeeda	258	55.5	5.74	2.89	0.049	11.4	-	-	-	-	-	-
Wyloo North	101	60.4	5.38	2.60	0.107	5.0	-	-	-	-	-	-
TOTAL	2,125	57.9	5.53	2.93	0.094	7.9	740	59.1	5.21	2.88	0.091	6.5

GREATER CHICHESTER HUB

Updated estimates have also been produced for the White Knight and Investigator deposits in Fortescue's development properties in the Chichester Hub. These updates were done with the intention of updating both the existing estimation footprint and the stratigraphic interpretation. The Mineral Resource estimates are in compliance with the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code, 2012). The Mineral Resources have been classified as Inferred. The Kutayi deposit has been transferred to the Chichester operating properties. The resulting reduction in tonnes in the Greater Chichester Hub is partly offset by these updates to White Knight and Investigator.

The White Knight and Investigator deposits are located 50 and 100km west of Fortescue's Cloudbreak operations in the Chichester Ranges in Western Australia. Mineralisation within these deposits is hosted by bedded iron deposits (BID) in the Nammuldi Member of the Marra Mamba Iron Formation. 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 throughout the prospect areas.

White Knight covers an area approximately 20km along strike and 2km across strike. Further drilling over the project area has resulted in an increase of the Inferred Mineral Resource by 40mt. Mineralisation extends from surface and up to depths of 60m at an average thickness of 10m. Investigator covers an area approximately 13km along strike and 4km across strike. Further drilling at Investigator has resulted in an increase of the Inferred Mineral Resource by 9mt. Mineralisation extends from surface and up to depths of 50m at an average thickness of 6m.

For the White Knight and Investigator deposits in the Chichester Hub, drill samples are from Reverse Circulation (RC) drilling rigs with cone splitters. RC drill holes have been drilled on a nominal 200m x 100m and 400m x 100m spaced grid.

All data is captured electronically and has to pass extensive quality assurance and quality control (QAQC) procedures. QAQC is an ongoing process and includes validation of drill hole collar coordinates, field standards, laboratory standards, field duplicates and twin holes as well as 'round robin' checks between laboratories. No significant issues were identified with precision, accuracy or bias. The estimations incorporate all of the validated RC holes drilled in the area by Fortescue that have collar and assay information loaded into the acQuire database. There has not been any significant subsequent drilling in these areas since the estimates were completed.

Geological logging, geochemistry and geophysical data were used to identify the stratigraphic units which were then modelled in 3D. Grades estimated in the models were Fe, SiO2, Al2O3, P, Mn, MgO, CaO, TiO2, Na2O, S, K2O, and LOI total. However, only Fe, SiO2, Al2O3, P and LOI total are quoted here as the other elements are not considered significant. Variography and detailed statistics using Snowden Supervisor software was used to determine the estimation parameters for the grade modelling. Ordinary Kriging and inverse distance cubed were used as modelling techniques to estimate grades. Estimation was done using Vulcan software.

Density has been determined from down-hole geophysical measurements throughout the deposits. Average rounded densities by geological unit and mineralisation have been applied globally to the models.

The cut-offs used to report these Mineral Resources were selected to deliver similar grades to Fortescue's current production specifications. BID at White Knight and Investigator is reported at greater than or equal to 54% Fe

The estimates have been classified as Inferred Mineral Resources and reported in accordance with the JORC Code, 2012 Edition. The classification is derived from consideration of the confidence in geological and mineralisation continuity, sample spacing, sample statistics, estimation parameters, interpretational uncertainties, mapping and the potential for economic extraction. The Mineral Resource summary for these deposits is shown in Table 3.

Table 3: White Knight and Investigator Mineral Resource summary.

Ore Type	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phosphorus P %	Loss On Ignition LOI %	
White Knight							
Marra Mamba BID	98	56.2	7.17	3.18	0.068	8.0	
Investigator							
Marra Mamba BID	56	56.6	6.26	3.08	0.067	8.8	

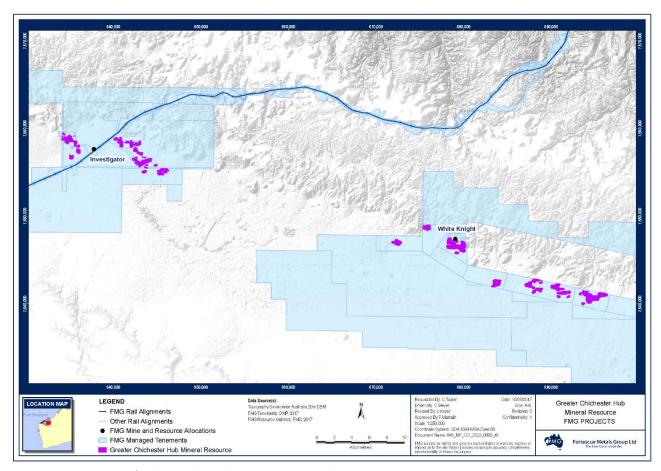


Figure 3: Location of White Knight and Investigator Mineral Resources

The Mineral Resource inventory compared with the previous reporting period for these deposits is shown in Table 4. In accordance with the requirements of the JORC Code, 2012 Edition for reporting Mineral Resources, the JORC Code, 2012 Edition Table 1 for each estimate is provided in the attachment.

Table 4: Greater Chichester total Mineral Resource inventory.

		June 2017					June 2016					
Project	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO2 %	Alumina Al2O3 %	Phos P %	Loss On Ignition LOI %
	Greater Chiches				er Chichest	er						
Kutayi	-	-	-	-	-	-	106	57.9	6.61	3.04	0.052	6.6
Mount Lewin	280	56.4	7.24	4.11	0.053	6.3	280	56.4	7.24	4.11	0.053	6.3
White Knight	98	56.2	7.17	3.18	0.068	8.0	58	57.9	5.36	2.44	0.088	7.8
Investigator	56	56.6	6.26	3.08	0.067	8.8	47	58.8	4.37	2.29	0.060	8.6
TOTAL	433	56.4	7.10	3.77	0.058	7.0	491	57.1	6.6	3.51	0.058	6.8

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Mr Stuart Robinson who is a Fellow of The Australasian Institute of Mining and Metallurgy, and Mr Nicholas Nitschke and Ms Erin Retz who are Members of The Australasian Institute of Mining and Metallurgy. Mr Stuart Robinson, Mr Nicholas Nitschke and Ms Erin Retz are full time employees of Fortescue Metals Group Ltd. Mr Robinson, Mr Nitschke and Ms Retz have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Robinson, Mr Nitschke and Ms Retz consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

WESTERN HUB – JORC CODE, 2012 EDITION TABLE 1

Eliwana

JORC Table 1: Eliwana

Criteria	Commentary
	A total of 1,641 reverse circulation drill holes and 76,357 1m composite samples were used in the model. Diamond drill holes have been completed in the area for metallurgical test work but not used for the Mineral Resource estimate. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
Sampling techniques	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. The majority of the RC holes are vertical with only 14 being drilled on an angle.
Drill sample	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 91% of samples were recorded as good, 4% were recorded as moderate and 3% were recorded as poor. 2% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis and diamond holes have been photographed. Diamond drilling was conducted for metallurgical.
	diamond holes have been photographed. Diamond drilling was conducted for metallurgical purposes. All drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
Sub-sampling	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
techniques and sample	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
preparation	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	No geophysical tools were used to determine any element concentrations used in the estimate.

	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated. Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
Verification of sampling and assaying	Twin RC drill holes have been completed in the project area. Results of the twin hole analysis mostly show good correlation between the original RC drill hole and the twin. Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology. Samples returning below detection limits were given the result of half the detection limit. Missing
Location of data	data was set to -99 and those samples were excluded from statistical analysis and estimation. Drill hole collar locations have been surveyed using a differential GPS by Down Under Surveys, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. Down hole surveys have been completed on approximately 10% of drill holes. Collar survey data is validated against planned coordinates and the topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50. The topography was created from 0.5m or 2m contours produced from 1 metre LIDAR data. Vertical and horizontal accuracy of this data is+/-0.15 metres.
Data spacing and distribution	The grade estimate used predominantly vertical RC drill holes which occur nominally on 100m by 100m, 200m by 100m and 400m by 100m spacings with some more sparsely drilled areas for assays and geology. This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource No sample compositing was conducted for this estimation.
Orientation of data in relation to geological structure	Drill holes have been predominantly drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity. No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures. For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: P47/1670, P47/1668, P47/1667, E47/1195, E47/1300, E47/1196, E47/1301, E47/1302 and M47/1509. These are all live, granted tenements. Mining Lease applications M47/1524, M47/1523 and M47/1522 were applied for over part of the project area and are pending grant. E47/1195 and E47/1196 are subject to a royalty deed with a third party.
Sidius	The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Exploration work prior to Fortescue within the Eliwana project area has been conducted since the mid-1970s. Several companies have held ground within the region including Robe River Mining Company Pty. Ltd., Hamersley Iron Pty. Ltd., Talisman Mining Ltd. and De Beers Australia Exploration Ltd. No historical data has been used by Fortescue.
Geology	The Eliwana project is situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. Geographically, the Eliwana deposit covers a relatively narrow (average width of approximately 2km) zone which follows the outcropping of mineralised Marra Mamba and Brockman Iron Formations.
Drill hole	Collar details of the RC drill holes used in the Eliwana estimate are not being reported here.
Information	Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Eliwana please refer to: Section 3 Estimation and Reporting of Mineral Resources.

Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
	The density study carried out at Eliwana is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
Other substantive exploration data	Geological surface mapping of the Eliwana project has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Eliwana. Extensions to known mineralisation may occur in the Eliwana area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Eliwana is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation is distributed variably within an area of approximately 40 km in an east west direction and 3.5 km in a north south direction. Mineralisation occurs at surface and extends to depths of up to 300 metres below the ground surface. The reported tonnes and grade in the Inferred Mineral Resource occur at depths of up to 300 metres.
	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated approximately half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones.
Estimation and modelling techniques	Check estimates were completed in selected areas of the deposit using inverse distance cubed. Strings from the previous resource estimate were initially used to aid in the geological interpretation. An increase of 314 million tonnes with minor variation in grade has occurred when compared to the previous Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas.
	No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.

Size and orientation of parent blocks reflected half or a quarter of the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface. Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. Estimation search ellipse distances along strike range from 250m to 1200m and across strike from 100m to 600m. The radii of the search in the z direction ranged from 2m to 20m. The minimum number of samples used in searches ranged from 2 to 11 and the maximum number of samples was either 20 or 30. The maximum number of samples per drill hole was set to 3 or 5. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO₂ and Al₂O₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2. Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples. Global change of support was also used to validate the estimate in selected areas of the model. Moisture Tonnages are estimated on a dry basis. A cut-off of 50% Fe was used to report the tonnages of all stratigraphic units excluding detritals. Cut-off 50% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications. A higher cut-off of 52% Fe was used for detritals due to its elevated parameters Al₂O₃ content at a 50% Fe cut-off. It is assumed that mining will be carried out with medium to large scale mining equipment using 5 Mining factors or metre bench heights. These methods will be similar to analogous Fortescue operations where assumptions conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies. It is assumed that similar metallurgical techniques to analogous Fortescue operations will be Metallurgical utilised. The expectation is that material will be dry-processed by screens and crushers. Final factors or assumptions processing methods will be defined by further mining studies. Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or **Environmental** into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard factors or procedures. Some beneficiation may take place but reject is considered to be inert and there are assumptions no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facilities and use tailings disposal infrastructure. Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with densities collected from diamond core drilled within the project, and analogous deposits, then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. Bulk density These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled throughout the project. Down-hole geophysical measurements are grouped by geological and mineralisation domains. The densities used are similar to known densities for current and historical mines, of similar geology and mineralisation, across the Pilbara.

Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence. The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal peer reviews have been completed during all stages of the estimate. An external audit of the previous Inferred Mineral Resource was completed by Snowden with no significant flaws identified. Similar processes have been used for this estimate.
	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
Discussion of	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
relative accuracy/ confidence	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

Flying Fish

JORC Table 1: Flying Fish

Criteria	Commentary
	A total of 554 reverse circulation drill holes and 19,124 1m composite samples were used in the model. 14 diamond drill holes have been drilled in the area and were geologically logged but were not sampled. Samples sent for element and analytical work were selected based on potential oregrade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
Sampling techniques	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample	PQ sized diamond drill holes were drilled as twins to reverse circulation holes and not oriented. The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 92% of samples were recorded as good, 4% were recorded as moderate and 2.5% were recorded as poor. 1.5% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade. Geological logging was completed by geologists experienced in iron mineralisation. The standard
Logging	of logging is suitable to support an estimate of Mineral Resources. For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis and diamond holes have been photographed. Diamond drilling was conducted for metallurgical purposes.
	All drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
Sub-sampling techniques and sample preparation	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.

	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. No geophysical tools were used to determine any element concentrations used in the estimate.
data and	
laboratory tests	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	Twin RC drill holes have been completed in the project area. Results of the twin hole analysis mostly show good correlation between the original RC drill hole and the twin.
Verification of	Sample data is stored using a customised acQuire database, which includes a series of automated
sampling and	electronic validation checks. Fortescue data entry procedures are documented and readily
assaying	available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
	data was set to -99 and those samples were excluded from statistical analysis and estimation.
Location of data	Drill hole collar locations have been surveyed using a differential GPS by Down Under Surveys, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. Down hole surveys have been completed on 47 drill holes. Collar survey data is validated against planned coordinates and the topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 2 metre contours produced from 1 metre LIDAR data. Vertical and horizontal accuracy of this data is+/-0.15 metres.
Data angaing and	The grade estimate used vertical RC drill holes which occur nominally on a 200m by 100m spacing with some more sparsely drilled areas for assays and geology.
Data spacing and distribution	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of
data in relation to	the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply
geological	geological and grade continuity.
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
	All sampling has been carried using Fortescue standard procedures.
Audits or reviews	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the granted tenements which cover the project area: E47/1302 and E47/1373. A Mining Lease application 47/1526 was applied for over the area by FMG Pilbara Pty Ltd and is pending grant. The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001) and the Eastern Guruma native title determination (WAD6208/1998). Fortescue has current Land Access Agreements with the PKKP native title holders and the Eastern Guruma Prescribed Body Corporate. The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done	Rio Tinto have performed exploration for iron within the Flying Fish project area. No historical data
by other parties	has been used by Fortescue.

Geology	Mineralisation within the Flying Fish deposit is hosted within Detrital Iron Deposits (DID) and Bedded Iron Deposits (BID). Bedded mineralisation is found within the Mount Newman and MacLeod Members of the Marra Mamba Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the Flying Fish estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Flying Fish please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Other substantive exploration data	The density study carried out at Flying Fish is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Geological surface mapping of the Flying Fish projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
·	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Flying Fish. Extensions to known mineralisation may occur in the Flying Fish area.

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Flying Fish is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	The main area of mineralisation occurs over an area 11km along strike and 400m across strike. Mount Newman Mineralisation occurs at surface in the north and at depths up to 200m to the south. The thickness of mineralisation averages 20m throughout the deposit and is found up to 50m in areas. The red ochre detrital mineralisation occurs in a series of pods ranging in size from 200m to 800m and thicknesses of 20m to 150m.
Estimation and modelling techniques	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones.
	Check estimates were completed in selected areas of the deposit using inverse distance cubed. Strings from the previous resource estimate were initially used to aid in the geological

interpretation. An increase of 27 million tonnes with minor variation in grade has occurred when compared to the previous Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas. No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO₂, Al₂O₃, P, Mn, MgO, CaO, TiO₂, Na₂O, S, K₂O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated. Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface. Up to four estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. Estimation search ellipse distances along strike range from 300m to 2000m and across strike from 150m to 1000m. The radii of the search in the z direction ranged from 2m to 20m. The minimum number of samples used in searches ranged from 2 to 7 with a maximum of 30 samples for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO₂ and Al₂O₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2. Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples. Moisture Tonnages are estimated on a dry basis. A cut-off of greater than or equal to 50% Fe was used to report the tonnages of the Mount Cut-off Newman and red ochre detrital units. This has been used for analogous Fortescue estimates and parameters represents a similar cut-off to current product specifications. A cut-off of 52% Fe was used to report the tonnages of the remaining units. It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue operations where Mining factors or conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The assumptions impact of dilution will be assessed as part of the mining studies. Metallurgical It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be dry-processed by screens and crushers. Final factors or assumptions processing methods will be defined by further mining studies. Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or Environmental into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard factors or procedures. Some beneficiation may take place but reject is considered to be inert and there are assumptions no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facilities and use tailings disposal infrastructure. Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with densities collected from diamond core drilled within the project, and analogous deposits, then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly Bulk density in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk

	densities from diamond core drilled throughout the project. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historical mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal peer reviews have been completed during all stages of the estimate. An external audit of the previous Inferred Mineral Resource was completed by Snowden with no significant flaws identified. Similar processes have been used for this estimate.
	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
Discussion of relative accuracy/ confidence	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

Cobra

JORC Table 1: Cobra

Criteria	Commentary
Sampling techniques	A total of 91 reverse circulation drill holes and 5,958 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample recovery	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 90% of samples were recorded as good, 6% were recorded as moderate and 4% were recorded as poor. No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All drill holes were geologically logged.
Sub-sampling techniques and sample preparation	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.

Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
No geophysical tools were used to determine any element concentrations used in the estimate.
Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
No twin holes have been completed at this stage of the project. Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology.
Samples returning below detection limits were given the result of half the detection limit. Missing data was set to -99 and those samples were excluded from statistical analysis and estimation.
Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. Down hole surveys were completed by PWS on 12% of the drill holes using a gyroscopic survey tool. Collar survey data is validated against planned coordinates and the topographic surface.
Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.
The topography was created from 2 metre contours produced from Fortescue Exploration DEM from 2014.
The grade estimate used vertical RC drill holes which occur nominally on a 200m by 100m spacing with some more sparsely drilled areas for assays and geology.
This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
No sample compositing was conducted for this estimation. Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of
the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply
geological and grade continuity.
No material relationship is apparent between sampling bias and geological orientation.
To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
All sampling has been carried using Fortescue standard procedures.
For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the live, granted Exploration Licence E47/1351.
	The tenement is within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Rio Tinto have performed exploration for iron within the Cobra project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the Cobra deposit is hosted by a Bedded Iron Deposit (BID). Bedded mineralisation is found within the Brockman Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the Cobra estimate are not being reported here. Significant intersections have been released previously.

Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Lora please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: <i>Orientation of data in relation to geological structure</i> in <i>Section 1 Sampling Techniques and Data</i> 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	The density study carried out at Cobra is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Geological surface mapping of the Cobra project has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Cobra. Extensions to known mineralisation may occur in the Cobra area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material. Geological interpretation is based on geological logging, down hole geophysics and geochemistry
	of RC drill samples.
Geological interpretation	The stratigraphy of Cobra is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation within the Cobra model area occurs over two areas approximately 2km apart. Mineralisation within the western area occurs around 2 km along strike and 1.5 km across strike in its widest part. Mineralisation within the eastern area occurs around 2 km along strike and 1 km across strike in its widest part. BID mineralisation occurs at the surface and extends to depths of around 200m below the ground surface. True thickness of the BID mineralisation ranges from approximately 1m to 150m
Estimation and	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy and mineralised/unmineralised zones.
modelling	No check estimate has been conducted. This is the maiden Mineral Resource for this deposit.
techniques	No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.

Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface. Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. The estimation search ellipses ranged from 300m x 150m x 10m to 600m x 300m x 20m for all units. The minimum number of samples used in searches ranged from 2 to 7 and the maximum number of samples was 15 for all searches. The maximum number of samples per drill hole was set to 5. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe and SiO₂ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. No Top-cuts were applied during estimation due to the relatively low level of population skew which is typical for an iron ore deposit. Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples. Tonnages are estimated on a dry basis. Moisture A cut-off of 50% Fe was used to report the tonnages of all stratigraphic units. 50% Fe has been Cut-off used for analogous Fortescue estimates and represents a similar cut-off to current product parameters specifications. It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue operations where Mining factors or conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The assumptions impact of dilution will be assessed as part of the mining studies. It is assumed that similar metallurgical techniques to analogous Fortescue operations will be Metallurgical factors or utilised. The expectation is that material will be dry-processed by screens and crushers. Final assumptions processing methods will be defined by further mining studies. Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or Environmental into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard factors or procedures. Some beneficiation may take place but reject is considered to be inert and there are assumptions no foreseen problems with tailings disposal. It is assumed material will be transported to an existing ore processing facility and use existing tailings disposal infrastructure. Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. Bulk density These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains. The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara. The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation Classification continuity based on the semivariogram ranges of influence.

	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
Discussion of relative accuracy/confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the
	Inferred Mineral Resource.
	No production data is available at this stage.

Lora

JORC Table 1: Lora

Criteria	Commentary
Sampling techniques	A total of 107 reverse circulation drill holes and 7,305 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 91% of samples were recorded as good, 6% were recorded as moderate and 2% were recorded as poor. 2% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
Sub-sampling techniques and sample preparation	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.

Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of field standards have indicated high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated. Significant intersections have been visually verified by Fortescue's Exploration Group Managers. No twin holes have been completed at this stage of the project. Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology. Samples returning below detection limits were given the result of half the detection limit. Missing data was set to -99 and those samples were excluded from statistical analysis and estimation. Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole surveys have been completed. Collar survey data is validated against planned coordinates and the topographic surface. Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50. The topography was created from 2 metre contours produced from Fortescue Exploration DEM from June 2014. The grade estimate used vertical RC drill holes which occur nominally on a 100m by 200m spacing with some more sparsely drilled areas for assays and geology. This le	Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. No geophysical tools were used to determine any element concentrations used in the estimate.
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Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the live, granted Exploration Licences that cover the project area: E47/1832 and E47/1988.
	The tenements are within the Kuruma Marthudunera (combined) native title claim (WC1999/012), Kuruma Marthudunera (Part A) native title determination (WAD6090/1998), and the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders. The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Rio Tinto have performed exploration for iron within the Lora project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the Lora deposit is hosted by Detrital Iron Deposits (DID) and Bedded Iron Deposits (BID). Bedded mineralisation is found within the Brockman Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the Lora estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Lora please refer to: Section 3 Estimation and Reporting of Mineral Resources.

Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Other substantive exploration data	The density study carried out at Lora is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Geological surface mapping of the Lora projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma,
	magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Lora. Extensions to known mineralisation may occur in the Lora area.
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Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Lora is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation at Lora occurs in two areas approximately 2km apart, each zone is 3km by 600m in size. Mineralisation occurs at surface and to depths of up to 130 metres. The defined mineralised units are between 5m and 100m thick with an average thickness of 30-40m.
Estimation and modelling techniques	Inverse distance cubed was used to estimate all units. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones.
	No check estimate has been conducted. This is the maiden Mineral Resource for this deposit.
	No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.

	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 600m, and across strike 200m. Estimation search distances for subsequent estimation passes along strike range up to 1200m and across strike range to 400m. The radii of the search in the z direction ranged from 2m to 10m. The minimum number of samples used in searches ranged from 2 to 7 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture Cut-off parameters	Tonnages are estimated on a dry basis. A cut-off of greater than or equal to 54% Fe was used to report the tonnages of both BID and DID mineralisation. This has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 3 metre bench heights. These methods will be similar to analogous Fortescue operations where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be dry-processed by screens and crushers. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facility and use tailings disposal infrastructure.
Bulk density	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains. The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity. The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate. Grade and geological continuity is sufficient for an Inferred Mineral Resource.
	Grade and geological continuity is sufficient for an inferred mineral Resource.

Discussion of relative accuracy/ confidence	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

Zorb

JORC Table 1: Zorb

Sampling techniques reg	total of 462 reverse circulation drill holes and 18,687 1m composite samples were used in the odel. Samples sent for element and analytical work were selected based on potential ore-grade aterial with a reasonable envelope both above and below this interval. Most holes where ossible undergo down hole geophysical logging. nalytical standards were used to assist in checking laboratory results. Field duplicates were used
techniques to e	valutical etandards were used to assist in checking laboratory results. Field duplicates were used in
	assist with determining sampling quality at the rig. Geophysical probes were calibrated on a gular basis using static methods and specific calibration holes. Drill hole locations were etermined by survey contractors.
ар	I samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing oppoximately 1 to 3 kilograms was collected for each metre which was transported to a summercial laboratory and then pulverised for XRF analysis.
Drilling Re	everse circulation drill holes of approximately 140mm diameter were completed using a standard ce sampling hammer. All drill holes are vertical.
of go	ne quality of each sample sent to the laboratory was recorded by the logging geologist at the time drilling and categorised as either poor, moderate or good. 88% of samples were recorded as good, 7% were recorded as moderate and 4% were recorded as poor. 1% of samples were not corded.
	o major issues with the sample collection system were identified during drilling. Minimal loss of les was achieved through the use of an automated sample collection and splitting system.
Th	nere is assumed to be no expected relationship between sample recovery and grade.
of	eological logging was completed by geologists experienced in iron mineralisation. The standard logging is suitable to support an estimate of Mineral Resources.
Logging mo into	or RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, oisture and sample quality were recorded. Chip trays from RC holes were collected on an termittent basis.
	I RC drill holes were geologically logged.
sai col	rilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These amples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are ollected using the same technique as dry samples, with thorough cleaning of sampling system etween samples. Wet samples are allowed to dry before being processed.
Th into	ne sample collected from the cone splitter represents approximately 6 to 7% of the total sample terval. Cone splitters are the preferred splitting system used by Fortescue as they generally give e most representative sample in both dry and wet conditions.
techniques and At	the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 icrons (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
	parse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) ere used as a quality control measure at different sub-sampling stages.
Riç sai	g duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 amples sent to the laboratory. An analysis of these duplicate samples indicates that they are of bod quality and repeatable.
	o formal analysis of the appropriateness of sample size compared to grain size has been ompleted but the sampling regime is considered to be industry best practice.
All har Quality of assay ele data and Flu	I samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories ave National Association of Testing Authorities, Australia (NATA) accreditation. The standard ements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray uorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 egrees Celsius. This is considered a total analysis.
No	o geophysical tools were used to determine any element concentrations used in the estimate.

	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	No twin holes have been completed at this stage of the project.
Verification of sampling and assaying	Sample data is stored using a customized acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
Location of data	data was set to -99 and those samples were excluded from statistical analysis and estimation. Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole surveys have been completed. Collar survey data is validated against planned coordinates and the topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 2 metre contours produced from Fortescue Exploration DEM from June 2014.
Data spacing and	The grade estimate used vertical RC drill holes which occur nominally on an 800m by 100m spacing with a small area at 400m by 100m and some more sparsely drilled areas for assays and geology.
distribution	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of data in relation to geological	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the live, granted Exploration Licence E47/1832 and the pending Mining Lease M47/1497.
	The tenements are within the Kuruma Marthudunera (combined) native title claim (WC1999/012), Kuruma Marthudunera (Part A) native title determination (WAD6090/1998) and the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done	Rio Tinto have performed exploration for iron within the Zorb project area. No historical data has
by other parties	been used by Fortescue.
Geology	Mineralisation within the Zorb deposit is hosted by a Channel Iron Deposit (CID). Outcropping geology in the project are the Marra Mamba and Brockman Iron Formations. Incised into this bedrock are large channel system which contain the CID.
Drill hole Information	Collar details of the RC drill holes used in the Zorb estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Zorb please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.

Balanced	No exploration results are being reported and this is not pertinent to the reporting of Mineral
reporting	Resources.
Other substantive exploration data	The density study carried out at Zorb is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Geological surface mapping of the Zorb projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Zorb. Extensions to known mineralisation may occur in the Zorb area.

	tion and Reporting of Mineral Resources Commentary
Criteria	,
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Zorb is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation at Zorb occurs in an area covering approximately 30 km along strike in an east-west direction and 300 to 800 m across strike. Mineralisation occurs at depths of 20-60 metres from the surface and to depths of up to 100 metres. The defined mineralised units are approximately between 5m and 50m thick.
Estimation and modelling techniques	Ordinary Kriging was used to estimate all CID mineralised units and inverse distance cubed was used for all remaining mineralised and unmineralised units. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. Kriging parameters were derived from semivariograms for an analogous deposit which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones. An inverse distance cubed check estimate was completed on the CID mineralised units. This is the maiden Mineral Resource for this deposit. No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.

	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 750m, and across strike 300m. Estimation search distances for subsequent estimation passes along strike range up to 2000m and across strike range to 2500m. The radii of the search in the z direction ranged from 2m to 10m. The minimum number of samples used in searches ranged from 2 to 7 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	A cut-off of greater than or equal to 50% Fe or 53% Fe was used to report the tonnages of the CID mineralisation. Simular cut-offs have been used for analogous Fortescue estimates and represents similar cut-offs to current product specifications.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 4 metre bench heights. These methods will be similar to analogous Fortescue operations where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be wet-processed. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facility and use tailings disposal infrastructure.
Bulk density	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been applied globally to the model. Where the sample population of a unit was inadequate, the average density of an analogous unit was used. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces.
	These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains. The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has not been classified. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity. The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.

Discussion of relative accuracy/confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
	Greater confidence in applied density values will be achieved through further physical density and
	down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the
	Inferred Mineral Resource.
	No production data is available at this stage.

Farquhar

JORC Table 1: Farquhar

Criteria	Commentary
Sampling techniques	A total of 53 reverse circulation drill holes and 2,235 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 92% of samples were recorded as good, 4% were recorded as moderate and 2.5% were recorded as poor. 1.5% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
Out a supplier	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
Sub-sampling techniques and sample	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
preparation	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
,	No geophysical tools were used to determine any element concentrations used in the estimate.

	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any
	major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at
	each laboratory. Analysis of field standards have indicated issues with laboratory sample
	preparation and standard certification in the past. Field standard results have been closely
	monitored and such issues have now been mitigated
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	No twin holes have been completed at this stage of the project.
Verification of	Sample data is stored using a customised acQuire database, which includes a series of automated
sampling and	electronic validation checks. Fortescue data entry procedures are documented and readily
assaying	available. Only trained personnel perform further manual validation in order to confirm results
assaying	reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
	data was set to -99 and those samples were excluded from statistical analysis and estimation.
	Drill hole collar locations have been surveyed using a differential GPS by Down Under Surveys,
	with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole
	surveys have been completed. Collar survey data is validated against planned coordinates and the
Location of data	topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the
	Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 2 metre contours produced from Fortescue Exploration DEM
	from December 2015.
Data spacing and	The grade estimate used vertical RC drill holes which occur nominally on a 200m by 100m and 400m by 100m spacing with some more sparsely drilled areas for assays and geology.
distribution	This level of drill spacing is sufficient to establish the degree of geological and grade continuity
distribution	required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of
data in relation to	the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply
geological	geological and grade continuity.
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used
	and direct delivery to site laboratories has been carried out.
	All sampling has been carried using Fortescue standard procedures.
Audits or reviews	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this
Audits of reviews	project there were no major risk factors relating to the sampling and assaying of the data. Similar
	rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100%
	of all mineral rights in the live, granted Exploration Licence E47/1448.
Mineral tenement	The tenement is within the Kuruma Marthudunera (Part A) native title determination
and land tenure	(WAD6090/1998), and the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination
status	(WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title
	holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done	Multiple parties have previously held tenure within the Farquhar project area. No historical data
by other parties	has been used by Fortescue.
Coology	Mineralisation within the Farquhar deposit is hosted in a Bedded Iron Deposit (BID). Bedded
Geology	mineralisation is found within the Dales Gorge Member of the Brockman Iron Formation.
Drill hole	Collar details of the RC drill holes used in the Farquhar estimate are not being reported here.
Information	Significant intersections have been released previously.
Data aggregation	No exploration results are being reported. For methods used in the estimation of Farquhar please
methods	refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship	No exploration results are being reported. Please refer to: Orientation of data in relation to
between	geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation
mineralisation	with respect to drill hole angle.
widths and	
intercept lengths	
Diagrams	The Mineral Resource extents are shown in the release.
Balanced	No exploration results are being reported and this is not pertinent to the reporting of Mineral
reporting	Resources.
Other substantive	The density work carried out at Farquhar is discussed in: Section 3 Estimation and Reporting of
exploration data	Mineral Resources.

	Geological surface mapping of the Farquhar projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Farquhar. Extensions to known mineralisation may occur in the area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Farquhar is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation at Farquhar occurs in two areas approximately 2.5km apart, The west zone is approximately 1.5km along strike and 500m across strike. Mineralisation occurs at surface with a thickness of up to 50m. The east zone is approximately 800m along strike and 500m across strike. Mineralisation occurs at surface with a thickness of 10-30m. The total project area is 5km along strike
	Inverse distance cubed was used to estimate all domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones.
	No check estimate has been conducted. This is the maiden Mineral Resource for this deposit.
	No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
Estimation and modelling	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
techniques	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 300m, and across strike 200m. Estimation search distances for subsequent estimation passes along strike range up to 600m and across strike range to 600m. The radii of the search in the z direction ranged from 2m to 15m. The minimum number of samples used in searches ranged from 10 to 5 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. No assumptions behind the modelling of selective mining units have been made.

İ	Correlation between some elements has been noted during statistical analysis
	Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an
	indicator approach. The probability of any zone being mineralised was estimated using appropriate
	geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units.
	These thresholds were based on data population statistics and visual validation. A domain code
	was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	No Top-cuts were applied during estimation due to the relatively low level of population skew
	which is typical for an iron ore deposit.
	Visual validation of the block model coding of the domains was completed prior to estimation.
	Once estimated, the grade of all elements was also visually validated. Visual validation of both the
	domains and grade were completed in Vulcan by comparing section and plan slices of the block
	model against the drill holes. Statistics for the mean grade of the mineralised blocks within each
	stratigraphic unit were compared to the mean grade of the mineralised samples within each
	stratigraphic unit. Overall, the mean values between the model and samples are within an
	acceptable range. Trend analysis graphs have been created for each of the mineralised domains.
	These have been generated in Northing, Easting and RL, for all elements. The trend analysis
	graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend
	analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do
Moisture	areas with few samples. Tonnages are estimated on a dry basis.
	A cut-off of greater than or equal to 50% Fe was used to report the tonnages of the BID
Cut-off	mineralisation. This has been used for analogous Fortescue estimates and represents a similar
parameters	cut-off to current product specifications.
	It is assumed that mining will be carried out with medium to large scale mining equipment using 5
Mining factors or	metre bench heights. These methods will be similar to analogous Fortescue operations where
assumptions	conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The
,	impact of dilution will be assessed as part of the mining studies.
Metallurgical	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be
factors or	utilised. The expectation is that material will be dry-processed by screens and crushers. Final
assumptions	processing methods will be defined by further mining studies.
	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to
Environmental	be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or
factors or	into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard
assumptions	procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an
	existing ore processing facility and use existing tailings disposal infrastructure.
	Density has been calculated from down-hole geophysical measurements throughout the deposit.
	This data has been compared to the analogous deposit at Fortescue's Eliwana project. Average
	rounded densities by geological unit and mineralisation have been compared with analogous
	deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole.
Bulk density	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces.
Duik derisity	These measurements are not corrected for moisture but are validated against known dry bulk
	densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical
	measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historical mines, of similar
	geology and mineralisation, across the Pilbara.
	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and
Classification	data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation
Classification	continuity based on the semivariogram ranges of influence.
	The Mineral Resource classification reflects the views of the competent persons.
	Internal reviews have been completed during all stages of the estimate. External audits have been
Audits or reviews	completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws
	identified. Simular processes have been used for this estimate.
	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
Discussion of	Greater confidence in applied density values will be achieved through further physical density and
relative accuracy/	down-hole geophysical measurements.
confidence	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

Elevation

JORC Table 1: Elevation

Criteria	Commentary
Sampling techniques	A total of 40 reverse circulation drill holes and 2,070 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes, where possible, undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. The majority of drill holes are vertical.
Drill sample	The quality each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. Of these samples, 92.55% of samples were recorded as good, 3.72% were recorded as moderate and 3.74% were recorded as poor.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
Sub-sampling techniques and sample	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
preparation	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	No geophysical tools were used to determine any element concentrations used in the estimate.
	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	No twin holes have been completed at this stage of the project.

Verification of sampling and assaying	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology. Samples returning below detection limits were given the result of half the detection limit. Missing data was set to -99 and those samples were excluded from statistical analysis and estimation.
Location of data	Drill hole collar locations have been surveyed using a differential GPS by Down Under Surveys, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. Down hole surveys have been completed on 3 drill holes. Collar survey data is validated against planned coordinates and the topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 2 metre contours produced from Fortescue Exploration DEM from 2014.
	The grade estimate used mostly vertical drill holes which occur nominally on a 200m by 100m spacing with some areas drilled to 100m by 100m for assays and geology.
Data spacing and distribution	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource.
	No sample compositing was conducted for this estimation.
Orientation of	Drill holes have been drilled mostly as vertical holes, with one angled hole, in drill lines sub-
data in relation to geological structure	perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
	All sampling has been carried using Fortescue standard procedures.
Audits or reviews	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the live, granted Exploration Licences E47/1351 and E47/1194. E47/1194 is subject to a royalty deed with a third party.
	The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Goldfields Exploration Pty Ltd and Opaltrend Nominees Pty Ltd have previously held tenure within the Elevation project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the Elevation deposit is hosted in a Bedded Iron Deposit (BID) which is found within the Dales Gorge Member of the Brockman Iron Formation.
Drill hole	Collar details of the RC drill holes used in the Elevation estimate are not being reported here.
Information	Significant intersections have been released previously.
Data	No exploration results are being reported. For methods used in the estimation of Broadway please
aggregation methods	refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between	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
mineralisation	with respect to drill hole angle.
widths and	
intercept lengths	
Diagrams	The Mineral Resource extents are shown in the release.
Balanced	No exploration results are being reported and this is not pertinent to the reporting of Mineral
reporting	Resources.
	The density used at Elevation is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
Other	Geological surface mapping of the Elevation project has been carried out by Fortescue geologists.
substantive	Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
exploration data	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.

Further Work Further infill drilling and metallurgical test work is planned for Elevation. Extensions to known mineralisation may occur in the Elevation area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
Geological interpretation	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material. Geological interpretation is based on geological logging, down hole geophysics and geochemistry
	of RC drill samples. The stratigraphy of Elevation is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing. All samples are flagged with their host geological zone, only samples with the same geological zone
	as the block to be estimated can be used in grade estimation. It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation at Elevation covers an area approximately 1400 metres along strike and 300 metres across strike. Mineralisation occurs at surface and to depths of up to 110 metres. The defined mineralisation has an average thickness of 40 metres.
	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy and mineralised/unmineralised zones.
	An inverse distance cubed check estimate has been conducted. This is the maiden Mineral Resource for this deposit.
	No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
Estimation and modelling techniques	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 400m and across strike was 200m. Estimation search distances for subsequent estimation passes along strike range up to 600m and up to 300m across strike. The radii of the search in the z direction ranged from 5m to 20m. The minimum number of samples used in searches ranged from 2 to 10 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks.
	No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.

	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
Cut-off	A cut-off of 50% Fe was used to report the tonnages of the BID mineralisation. This has been used
parameters	for analogous Fortescue estimates and represents a similar cut-off to current product specifications.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 3 metre bench heights. These methods will be similar to analogous Fortescue operations where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations utilised. The expectation is that material will be dry-processed by screens and crushers. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an existing ore processing facility and use existing tailings disposal infrastructure.
Bulk density	Density has been calculated from down-hole geophysical measurements throughout the Eliwana and Boolgeeda CID deposit which are considered to be analogous to the Elevation deposit and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces.
Bain donoity	These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historical mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence. The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
Discussion of relative	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
accuracy/ confidence	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource. No production data is available at this stage.
	1 L

Boolgeeda CID

JORC Table 1: Boolgeeda CID

Criteria	Commentary
Sampling techniques	A total of 292 reverse circulation drill holes and 12,306 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a

	regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 91% of samples were recorded as good, 5% were recorded as moderate and 2% were recorded as poor. 3% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
Out and the	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
Sub-sampling techniques and sample	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
preparation	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Ovelity of access	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
Quality of assay data and	No geophysical tools were used to determine any element concentrations used in the estimate.
laboratory tests	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
\	No twin holes have been completed at this stage of the project. Sample data is stored using a customised acQuire database, which includes a series of automated
Verification of sampling and	electronic validation checks. Fortescue data entry procedures are documented and readily
assaying	available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
	data was set to -99 and those samples were excluded from statistical analysis and estimation. Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of bottor than 3 am for Facting and Northing and 5 am in clavation. No down hole
Location of data	with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole surveys have been completed. Collar survey data is validated against planned coordinates and the
points	topographic surface. Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.

	The topography was created from 2 metre contours produced from Fortescue Exploration DEM from June 2014.
Data spacing and distribution	The grade estimate used vertical RC drill holes which occur nominally on a 400m by 100m spacing with some more sparsely drilled areas for assays and geology.
	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of data in relation to geological	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity.
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: E47/1299, E47/1300 and E47/1301. These are all live, granted tenements.
	The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Rio Tinto have performed exploration for iron within the project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the Boolgeeda deposit is hosted within a Channel Iron Deposit (CID). Outcropping geology in the project is the Brockman Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the Boolgeeda estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Boolgeeda please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Other substantive exploration data	The density study carried out at Boolgeeda is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Geological surface mapping of the Boolgeeda projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Boolgeeda. Extensions to known mineralisation may occur in the area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and

	these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
0 1 : 1	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of Boolgeeda is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	The CID mineralisation is found from surface and up to depths of 80m at an average thickness of 30-40m. The main area of mineralisation covers an area approximately 8km along the channel and up to 600m across the channel. CID mesas cover areas up to 3000m by 600m.
	Ordinary Kriging was used to estimate all mineralised CID units and inverse distance cubed was used for all remaining mineralised and unmineralised units. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised zones.
	No check estimate has been conducted. This is the maiden Mineral Resource for this deposit.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. The estimation search ellipses ranges from 300m × 200m × 2m to
Estimation and modelling	900m x 400m x 10m for CID mineralised domains. The minimum number of samples used in searches ranged from 10 to 5 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks.
techniques	No assumptions behind the modelling of selective mining units have been made.
	Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an
	indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code
	was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the
	domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each
	stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis
	graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no

	bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	A cut-off of greater than or equal to 52% Fe was used to report the tonnages of the CID mineralisation. This has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 4 metre bench heights. These methods will be similar to analogous Fortescue deposits where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be wet-processed. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facility and use tailings disposal infrastructure.
	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole.
Bulk density	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains. The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence.
Audits or reviews	The Mineral Resource classification reflects the views of the competent persons. Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
Discussion of relative accuracy/ confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource. Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements. The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

Wyloo North

JORC Table 1: Wyloo North

Criteria	Commentary
Sampling techniques	A total of 121 reverse circulation drill holes and 7,162 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging. Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.

Drill sample recovery	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 92% of samples were recorded as good, 4% were recorded as moderate and 3% were recorded as poor. 1% of samples were not recorded. No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system. There is assumed to be no expected relationship between sample recovery and grade.
Logging	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources. For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis. All RC drill holes were geologically logged.
Sub-sampling	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed. The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
techniques and sample preparation	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis). Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job)
	were used as a quality control measure at different sub-sampling stages. Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Overline of a second	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
Quality of assay data and	No geophysical tools were used to determine any element concentrations used in the estimate.
laboratory tests	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers. No twin holes have been completed at this stage of the project.
Verification of sampling and assaying	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology. Samples returning below detection limits were given the result of half the detection limit. Missing data was set to -99 and those samples were excluded from statistical analysis and estimation.
Location of data points	Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole surveys have been completed. Collar survey data is validated against planned coordinates and the topographic surface. Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the
	Australian Height Datum. The project area lies inside UTM zone 50. The topography was created from 2 metre contours produced from government sourced contours.
Data spacing and distribution	The grade estimate used vertical RC drill holes which occur nominally on a 400m by 100m spacing with some more sparsely drilled areas for assays and geology. This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.

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

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: M47/1488, M47/1489 and M47/1490. These are all live, granted tenements. The tenure are subject to a royalty deed with a third party and a royalty is payable. The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders. The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Rio Tinto have performed exploration for iron within the Wyloo North project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the Wyloo North deposit is hosted by Bedded Iron Deposits (BID). Bedded mineralisation is found predominantly within the Brockman Iron Formation.
Drill hole	Collar details of the RC drill holes used in the Wyloo North estimate are not being reported here.
Information	Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Wyloo North please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: <i>Orientation of data in relation to geological structure</i> in <i>Section 1 Sampling Techniques and Data</i> 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.
, ,	The density study carried out at Wyloo North is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
Other substantive exploration data	Geological surface mapping of the Wyloo North projects has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Wyloo North. Extensions to known mineralisation may occur in the Wyloo North area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
Geological interpretation	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some

risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material. Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples. The stratigraphy of Wyloo North is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing. All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation. It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas Mineralisation at Wyloo North covers an area approximately 7km along strike and 500m across strike. Mineralisation occurs at surface and to depths of up to 180 metres. The defined **Dimensions** mineralisation has an average thickness of 40m. Inverse distance cubed was used to estimate all units. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/unmineralised An Ordinary Kriging check estimate has been conducted. This is the maiden Mineral Resource for this deposit. No assumptions regarding the recovery of by-products have been made. The iron ore suite of Fe, SiO₂, Al₂O₃, P, Mn, MgO, CaO, TiO₂, Na₂O, S, K₂O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated. Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 600m, and across strike 300m. Estimation search distances for subsequent estimation passes along strike range up to 800m and across strike range to 400m. The radii of the search in the z direction ranged from 2m to 30m. The minimum number of samples used in searches ranged from 3 to 7 and the maximum number of samples was 30 for all searches. The maximum number of samples Estimation and per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks. modellina No assumptions behind the modelling of selective mining units have been made. techniques Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO₂ and Al₂O₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation. Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2. Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples. Tonnages are estimated on a dry basis. Moisture A cut-off of greater than or equal to 50% Fe was used to report the tonnages of all bedded Cut-off stratigraphic units. This has been used for analogous Fortescue estimates and represents a similar parameters cut-off to current product specifications. It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue operations where Mining factors or conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The assumptions impact of dilution will be assessed as part of the mining studies.

Metallurgical factors or	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be dry-processed. Final processing methods will be
assumptions	defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an existing ore processing facility and use existing tailings disposal infrastructure.
Bulk density	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole.
	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
Discussion of relative accuracy/ confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

GREATER CHICHESTER HUB – JORC CODE, 2012 EDITION TABLE 1

White Knight

JORC Table 1: White Knight

Criteria	Commentary
Sampling techniques	A total of 270 reverse circulation drill holes and 7,087 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
Drill sample	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 80% of samples were recorded as good, 1% were recorded as moderate and 1% were recorded as poor. 18% of samples were not recorded.
recovery	No major issues with the sample collection system were identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
	Drilling samples are collected in labelled bags, 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 when a cone splitter was used 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.
Sub-sampling techniques and	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
sample preparation	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	No geophysical tools were used to determine any element concentrations used in the estimate. Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample

	preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	No twin holes have been completed at this stage of the project.
	Sample data is stored using a customised acQuire database, which includes a series of automated
Verification of	electronic validation checks. Fortescue data entry procedures are documented and readily
sampling and	available. Only trained personnel perform further manual validation in order to confirm results
assaying	reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
	data was set to -99 and those samples were excluded from statistical analysis and estimation.
	Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys),
	with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole
I ocation of data	surveys have been completed. Collar survey data is validated against planned coordinates and the
points	topographic surface.
points	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the
	Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 5 metre contours produced from government sourced contours.
	The grade estimate used vertical RC drill holes which occur nominally on a 400m by 200m spacing
Data spacing and	with some more sparsely drilled for assays and geology
distribution	This level of drill spacing is sufficient to establish the degree of geological and grade continuity
	required for an Inferred Mineral Resource
0 1 1 1 1	Some sample compositing was applied to unmineralised samples.
Orientation of	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of
data in relation to	the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply
geological	geological and grade continuity.
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used
	and direct delivery to site laboratories has been carried out.
	All sampling has been carried using Fortescue standard procedures.
Audits or reviews	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this
	project there were no major risk factors relating to the sampling and assaying of the data. Similar
	rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	Chichester Metals Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: E45/2499, M45/1086, M45/1087, M45/1088, M45/1089, M45/1090, M45/1091, M45/1092, M45/1093 and M45/1094.
	The tenements are within the Palyku native title claim (WC1999/016) and the Banjima People native title determination (WCD2014/001). Fortescue has a current Land Access Agreement with the Palyku native title claimants and Banjima native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Hancock Prospecting Ltd and Mount Newman Mining Ltd have performed exploration work in the Chichester Range within the White Knight project area. No historical data has been used by Fortescue.
Geology	Mineralisation within the White Knight deposit is hosted by Bedded Iron Deposits (BID). Bedded mineralisation is found within the Nammuldi Member of the Marra Mamba Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the White Knight estimate are not being reported here.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of White Knight please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: Orientation of data in relation to geological structure in Section 1 Sampling Techniques and Data for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced	No exploration results are being reported and this is not pertinent to the reporting of Mineral
reporting	Resources.
Other substantive	The density study carried out at White Knight is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
exploration data	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.

Further Work

Further infill drilling and metallurgical test work is planned for White Knight. Extensions to known mineralisation may occur in the White Knight area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
Geological interpretation	The stratigraphy of White Knight is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation is found from surface and up to depths of 60m at an average thickness of 10m. The mineralisation covers an area approximately 19km along strike and averages around 2km across strike.
	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy and mineralised/unmineralised zones.
	An increase of 40 million tonnes with minor variation in grade has occurred when compared to the previous Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
Estimation and modelling techniques	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 500m, and across strike 250m. Estimation search distances for subsequent estimation passes along strike range up to 1000m and across strike range to 500m. The radii of the search in the z direction ranged from 5m to 10m. The minimum number of samples used in searches ranged from 2 to 7 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks.
	No assumptions behind the modelling of selective mining units have been made.
	Correlation between some elements has been noted during statistical analysis. The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.

	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	A cut-off of greater than or equal to 54% Fe was used to report the tonnages of all bedded stratigraphic units. This has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 3 metre bench heights. These methods will be similar to analogous Fortescue deposits where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be wet-processed. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to existing ore processing facilities and use current tailings disposal infrastructure.
	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole.
Bulk density	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity.
Audits or reviews	The Mineral Resource classification reflects the views of the competent persons. Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
Discussion of relative accuracy/ confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource. Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements. The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource. No production data is available at this stage.
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Investigator

JORC Table 1: Investigator

Criteria	Commentary
Sampling techniques	A total of 664 reverse circulation drill holes and 12,072 1m composite samples were used in the model. Samples sent for element and analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Most holes where possible undergo down hole geophysical logging.

	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard
techniques	face sampling hammer. All drill holes are vertical.
	The quality of each sample sent to the laboratory was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 98% of samples were recorded as
Drill sample	good, 1% were recorded as moderate and 1% were recorded as poor. No major issues with the sample collection system were identified during drilling. Minimal loss of
recovery	fines was achieved through the use of an automated sample collection and splitting system.
	There is assumed to be no expected relationship between sample recovery and grade.
	Geological logging was completed by geologists experienced in iron mineralisation. The standard
	of logging is suitable to support an estimate of Mineral Resources.
Logging	For RC drill holes: stratigraphy, mineralogy, chip size, chip shape, chip recovery, hardness, colour, moisture and sample quality were recorded. Chip trays from RC holes were collected on an intermittent basis.
	All RC drill holes were geologically logged.
	Drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
Sub-sampling techniques and sample	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).
preparation	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO ₂ , Al ₂ O ₃ , P, MnO/Mn, MgO, CaO, TiO ₂ , Na ₂ O, S and K ₂ O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
Quality of assay data and	No geophysical tools were used to determine any element concentrations used in the estimate.
data and laboratory tests	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated issues with laboratory sample preparation and standard certification in the past. Field standard results have been closely monitored and such issues have now been mitigated.
	Significant intersections have been visually verified by Fortescue's Exploration Group Managers.
	Twin RC holes have been completed in the project area with preliminary visual inspections being
Verification of sampling and assaying	completed. A twin hole analysis will be completed in the future.
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily
	available. Only trained personnel perform further manual validation in order to confirm results
	reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing
	data was set to -99 and those samples were excluded from statistical analysis and estimation.
Location of data	Drill hole collar locations have been surveyed using a differential GPS (by Down Under Surveys), with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. No down hole surveys have been completed. Collar survey data is validated against planned coordinates and the
points	topographic surface.
•	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.

	The topography was created from 5 metre contours produced from government sourced contours.
Data spacing and distribution	The grade estimate used vertical RC drill holes which occur grid spacing ranging from 200m × 100m to 800m × 100m with a small amount of 100m × 100m spacing drilled areas for assays and geology.
	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of data in relation to geological	Drill holes have been drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity.
structure	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: E47/1016, E47/1436, M47/1433 and M47/1434. These are all live, granted tenements. An application for Retention Licence 47/14 was applied for over the area and is pending grant. The tenure are subject to a royalty deed with a third party and a royalty is payable. The tenements are within the Banjima People native title determination (WCD2014/001). Fortescue has a current Land Access Agreement with the Banjima native title holders. The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Hancock Resources Ltd has performed exploration for iron within the Investigator project area. Exploration has also been undertaken by other companies for non-iron commodities. No historical data has been used by Fortescue.
Geology	Mineralisation within the Investigator deposit is hosted by Bedded Iron Deposits (BID). Bedded mineralisation is found within the Nammuldi Member of the Marra Mamba Iron Formation.
Drill hole Information	Collar details of the RC drill holes used in the Investigator estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Investigator please refer to: Section 3 Estimation and Reporting of Mineral Resources.
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: <i>Orientation of data in relation to geological structure</i> in <i>Section 1 Sampling Techniques and Data</i> 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	The density study carried out at Investigator is discussed in: Section 3 Estimation and Reporting of Mineral Resources.
	Down hole geophysics has been carried out on some RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Investigator. Extensions to known mineralisation may occur in the Investigator area.

Criteria	Commentary
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
Database integrity	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.

Site visits	The Competent Person and Competent Persons team conducts regular site visits, approximately every two to three months when drilling operations are in progress to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
Geological interpretation	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
	The stratigraphy of Investigator is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	It is not expected that further drilling will change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	Mineralisation covers an area approximately 13km along strike and 4km across strike. Mineralisation occurs at surface and to depths of up to 50 metres. The defined mineralised units are between 1m and 24m thick with an average thickness of 6m.
Estimation and modelling techniques	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy and mineralised/unmineralised zones.
	An increase of 31 million tonnes with minor variation in grade has occurred when compared to the previous Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO ₂ , Al ₂ O ₃ , P, Mn, MgO, CaO, TiO ₂ , Na ₂ O, S, K ₂ O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests. First pass estimation search distance along strike was 500m, and across strike 250m. Estimation search distances for subsequent estimation passes along strike range up to 800m and across strike range to 400m. The radii of the search in the z direction ranged from 5m to 10m. The minimum number of samples used in searches ranged from 2 to 7 and the maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set to 3. A block discretisation of 4(x) by 4(y) by 1(z) was used for all blocks.
	No assumptions behind the modelling of selective mining units have been made. Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO ₂ and Al ₂ O ₃ for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no

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	bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
	A cut-off of greater than or equal to 54% Fe was used to report the tonnages of all bedded
Cut-off parameters	stratigraphic units. This has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 3 metre bench heights. These methods will be similar to analogous Fortescue operations where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations will be utilised. The expectation is that material will be wet-processed. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to existing ore processing facilities and use current tailings disposal infrastructure.
Bulk density	Density has been calculated from down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been compared with analogous deposits and then applied globally to the model. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole.
	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in analogous Fortescue projects. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Inferred. This takes into account drill spacing and data integrity, geological complexity, grade estimation quality, interpreted risk and mineralisation continuity based on the semivariogram ranges of influence.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal reviews have been completed during all stages of the estimate. External audits have been completed on estimates from analogous deposits by Optiro and Snowden with no significant flaws identified. Simular processes have been used for this estimate.
Discussion of relative accuracy/ confidence	Grade and geological continuity is sufficient for an Inferred Mineral Resource.
	Greater confidence in applied density values will be achieved through further physical density and down-hole geophysical measurements.
	The global estimate is sufficient to imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.
	1 10 production data to available at time stage.