20 May 2014

The Companies Officer
Australian Stock Exchange
Exchange Plaza
2 The Esplanade
Perth WA 6000

Dear Sir

FORTESCUE SUBSTANTIALLY INCREASES GREATER SOLOMON MINERAL RESOURCE

Fortescue Metals Group (ASX: FMG, Fortescue) is pleased to announce a 1.16 billion tonne (Bt) addition to its Greater Solomon Mineral Resource following a program of exploration drilling. The Greater Solomon Area includes all development properties within a radius of approximately 50 kilometres around the Solomon Operating Hub and is shown in more detail in Figure 2. The Greater Solomon Mineral Resource has increased to 2.66Bt and together with the total Mineral Resource for the Solomon Hub (which includes the Firetail and Kings Valley projects) totals over 4.5Bt.

The additional tonnes include bedded mineralisation ("BID") in Brockman and Marra Mamba Iron Formations, Channel Iron Deposits ("CID") and Detrital Iron Deposits ("DID"). The mineralisation occurs both at surface and beneath alluvial cover. Further details are provided later in this release.

Fortescue intends to undertake further drilling to convert selected portions of the Inferred Mineral Resource to Indicated status in the short to medium term, and to evaluate the possibility of transporting the ore to the company's existing ore processing facilities (OPFs) at the Solomon Hub.

Fortescue has also identified several new BID targets within the existing Solomon Hub and plans to test these throughout FY 2015. If converted to a Mineral Resource, Fortescue will determine whether the ore is suitable to transport by conveyor network or haulage by road to the existing OPFs.

Fortescue also intends to drill several small near surface targets identified along the Chichester Range up-dip from existing pits. The drilling program, scheduled for June and July 2014, is expected to support an Indicated Mineral Resource estimate. An update for the Chichester Hub will be published later in 2014.

Fortescue is also pleased to announce an increase in the Mineral Resource inventory at its Eliwana-Flying Fish Project, this has previously reported under the name Western Hub. The Inferred Mineral Resource is now estimated at 740 million tonnes (Mt), an increase of 116Mt over the estimate announced in 2011.

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Review of the Greater Chichester Mineral Resource

The Greater Chichester Area includes all Development properties along the Chichester Range outside of the two Chichester Operating Areas, Cloudbreak and Christmas Creek Figure 1. Fortescue has conducted a review of its previously published Mineral Resources. It has been determined that, where feasible, the cut-off grades outside of the operation hubs should be consistent with cut-off grades within the hubs.

As a result, the Mt Nicholas estimate, originally announced in April 2004, has been removed from Fortescue's Mineral Resource Inventory pending a detailed review. The estimate was reported using a cut-off grade lower than the cut-off currently applied to estimates in the Chichester Operating Hub.

An updated estimate is being completed for Mt Lewin and a new estimate is being prepared for Kutayi, a body of mineralisation located between Christmas Creek and Mt Lewin (Figure 1). An update to the Greater Chichester Area Mineral Resource will be released later in 2014.

Yours sincerely
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Company Secretary

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GREATER SOLOMON

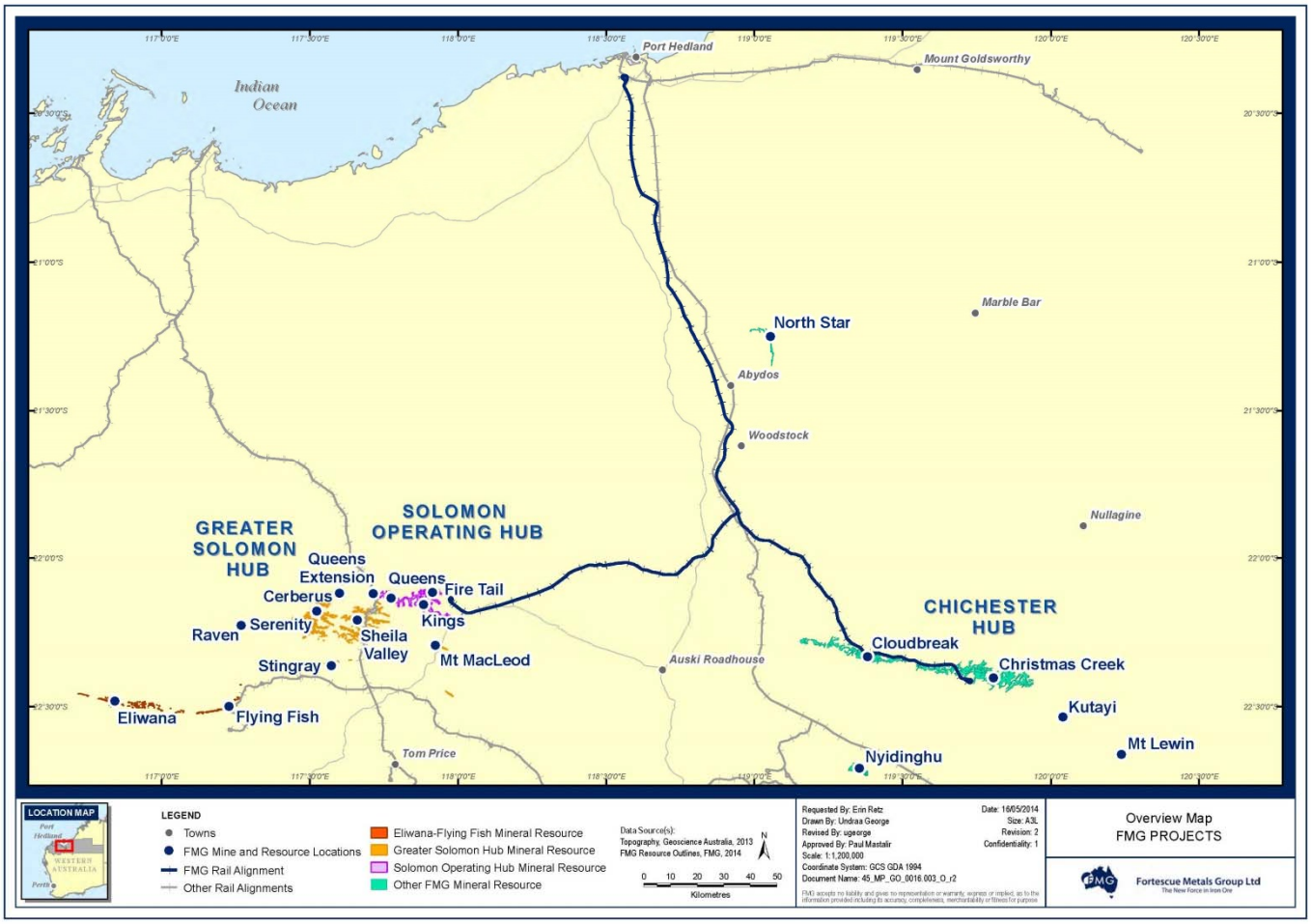

Figure 1: Fortescue Mineral Resource and Operations overview.

Updated estimates have been produced for Fortescue's Greater Solomon 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 Edition). The Mineral Resources have been classified as Indicated and Inferred.

The Serenity, Sheila Valley, Cerberus and Queens Extension deposits are located approximately 50-70km north-west of Tom Price and 25-50 km west of the Solomon processing facilities in the Pilbara region of Western Australia. Mineralisation within these deposits is hosted by buried Channel Iron Deposits (CID), Bedded Iron Deposits (BID) and Detrital Iron Deposits (DID). Outcropping geology in the area is the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which contain BID mineralisation. Incised into this bedrock geology are large Channel systems which contain the DID and CID mineralisation.

The Serenity CID system is a series of channels covering an area of 18km in a north-south direction and 16km in an east-west direction. The average width of mineralisation across the valleys is approximately 800 metres. The Cerberus CID system is found northeast of Serenity and covers an area approximately 4km north-south with a 400m wide valley. The Queens Extension CID is a continuation of the Solomon Queens

CID channel to the west of the Rio Tinto Hamersley railway line. The extension is 3km long in an east-west direction bringing the total Queens channel to a total of 18km in length. The Sheila Valley system lies between the Serenity deposit and the operations at Solomon. This consists of a series of northwest-southeast trending valleys between 5km and 16km in length with a central north-south channel. The width of mineralisation across the valley is up to 1km. Mineralisation occurs from surface and up to depths of approximately 150 metres throughout these deposits. The defined mineralised units are up to 60 metres in thickness.

The Stingray and Mount MacLeod deposits are located south of the Hamersley range 40km northwest and northeast of Tom Price respectively. Mineralisation within these deposits is BID mainly hosted by Marra Mamba Iron Formation. Outcropping geology in the area is the Mount Newman, MacLeod and Nammuldi Members of the Marra Mamba Iron Formation. The local structure is dominated by southeast trending folds.

The Stingray deposit has five areas of mineralisation ranging in size from 800m to 2km in length and 150m to 300m in width covering an area of 10km in an east-west direction and 3km north-south. The Mount MacLeod deposit has two areas of mineralisation 17km apart. The northern area is 6km in length and 800m across and the southern area is 3km in length and 400m across. Mineralisation occurs at depths of up to 60-100m across the deposits. The thickness of mineralisation is generally 15-20m and up to 50m at Mount MacLeod.

The Raven deposit is located in the Hamersley range 25km west of the Serenity project and 75km northwest of Tom Price. Mineralisation consists of BID hosted by the Dales Gorge Member of the Brockman Iron Formation. Outcropping geology is the Dales Gorge and Whaleback Shale Members of the Brockman Iron Formation and McRae Shale. The units are gently folded trending southeast.

Mineralisation at Raven covers an area of approximately 2km by 700m. Mineralisation occurs at surface and up to depths of 130 metres. The thickness of mineralisation averages 60 metres.

For all deposits in Greater Solomon, drill samples are all from Reverse Circulation (RC) drilling rigs with cone splitters. Diamond holes have been drilled in the area and have been used to aid interpretation. RC drill holes have been drilled on a nominal 200m x 50m, 200m x 100m and 400m x 100m spaced grid. At Serenity an area of drill holes with spacings of 12.5m x 12.5m, 25m x 25m and 50m x 50m was also drilled to gain a greater understanding of the short range grade and geological continuity.

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, lab 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 had 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, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, and LOI total. However, only Fe, SiO_2, Al_2O_3, 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 calculated from bulk density measurements on diamond core drilled at Serenity, Queens and Sheila Valley, and down-hole geophysical measurements throughout the deposits. Average rounded densities by geological unit and mineralisation have been applied globally to the model.

The cut-offs used to report the Mineral Resources vary slightly across the deposits to ensure similar grades to Fortescue's current production specifications. Bedded material at Serenity and Mount MacLeod is reported at greater than or equal to 50% Fe, while bedded material at Sheila Valley, Queens Extension and Raven is reported at greater than or equal to 52% Fe. All material within the mineralised envelopes at Stingray is reported. These mineralised envelopes were created based on cut-offs of 50% Fe, 12% SiO_2 and 4% Al_2O_3. All detrital mineralisation at Serenity, Cerberus, Sheila Valley and Queens Extension is reported at greater than or equal to 54% Fe. CID material at Serenity and Cerberus is reported at greater than or equal to 50% Fe, Queens Extension at greater than or equal to 52% Fe and Sheila Valley at greater than or equal to 54% Fe.

The estimates have been classified as Inferred Mineral Resources with a portion of the Serenity estimates classified as an Indicated Mineral Resource 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 Greater Serenity is shown in Table 1.

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 Attachment 1.

Table 1: Greater Solomon Hub Mineral Resource Summary.

Ore Type	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%
Serenity Indicated						
DID	79	57.8	8.34	4.85	0.056	3.3
Upper CID	103	57.0	5.50	2.56	0.085	9.9
Lower CID	72	54.6	6.61	3.20	0.108	11.5
SUB TOTAL	**254**	**56.6**	**6.70**	**3.45**	**0.083**	**8.3**
Serenity Inferred						
DID	424	56.7	9.33	5.02	0.046	3.5
Weathered CID	33	52.7	11.80	2.97	0.061	9.0
Upper CID	74	56.0	6.14	3.27	0.074	9.9
Lower CID	148	55.2	7.03	3.46	0.093	10.0
Brockman BID	467	56.9	5.97	3.01	0.114	8.9
SUB TOTAL	**1,146**	**56.4**	**7.53**	**3.83**	**0.082**	**7.1**
Serenity Combined						
TOTAL	**1,400**	**56.5**	**7.38**	**3.76**	**0.082**	**7.3**
Cerberus Inferred						
DID	35	56.7	7.84	5.44	0.051	4.6
Lower CID	41	56.7	5.43	3.67	0.096	9.2
TOTAL	**76**	**56.7**	**6.53**	**4.48**	**0.076**	**7.1**
Sheila Valley Inferred						
DID	353	57.2	7.99	4.90	0.059	4.2
Lower CID	93	56.0	6.07	4.00	0.087	9.2
Brockman BID	369	57.3	5.95	2.87	0.111	8.5
TOTAL	**815**	**57.1**	**6.84**	**3.88**	**0.086**	**6.7**
Queens Extension Inferred						
DID	5	56.4	9.19	3.93	0.060	4.9
Weathered CID	3	53.6	11.00	1.91	0.046	9.8
Upper CID	10	57.7	5.01	1.34	0.064	10.7
Lower CID	59	55.2	5.94	3.03	0.083	11.4
Brockman BID	1	57.6	4.50	3.30	0.104	9.1
TOTAL	**79**	**55.6**	**6.22**	**2.84**	**0.078**	**10.8**
Mount MacLeod Inferred						
Marra Mamba BID	201	57.4	4.95	3.02	0.057	8.7
TOTAL	**201**	**57.4**	**4.95**	**3.02**	**0.057**	**8.7**
Stingray Inferred						
Marra Mamba BID	36	58.5	5.05	2.56	0.052	8.2
TOTAL	**36**	**58.5**	**5.05**	**2.56**	**0.052**	**8.2**
Raven Inferred						
Brockman BID	52	58.7	5.73	2.32	0.123	7.4
TOTAL	**52**	**58.7**	**5.73**	**2.32**	**0.123**	**7.4**
Greater Solomon Hub Combined						
GRAND TOTAL	**2,658**	**56.8**	**6.91**	**3.69**	**0.082**	**7.3**

Tonnage figures have been rounded and as a result may not add up to the totals quoted.

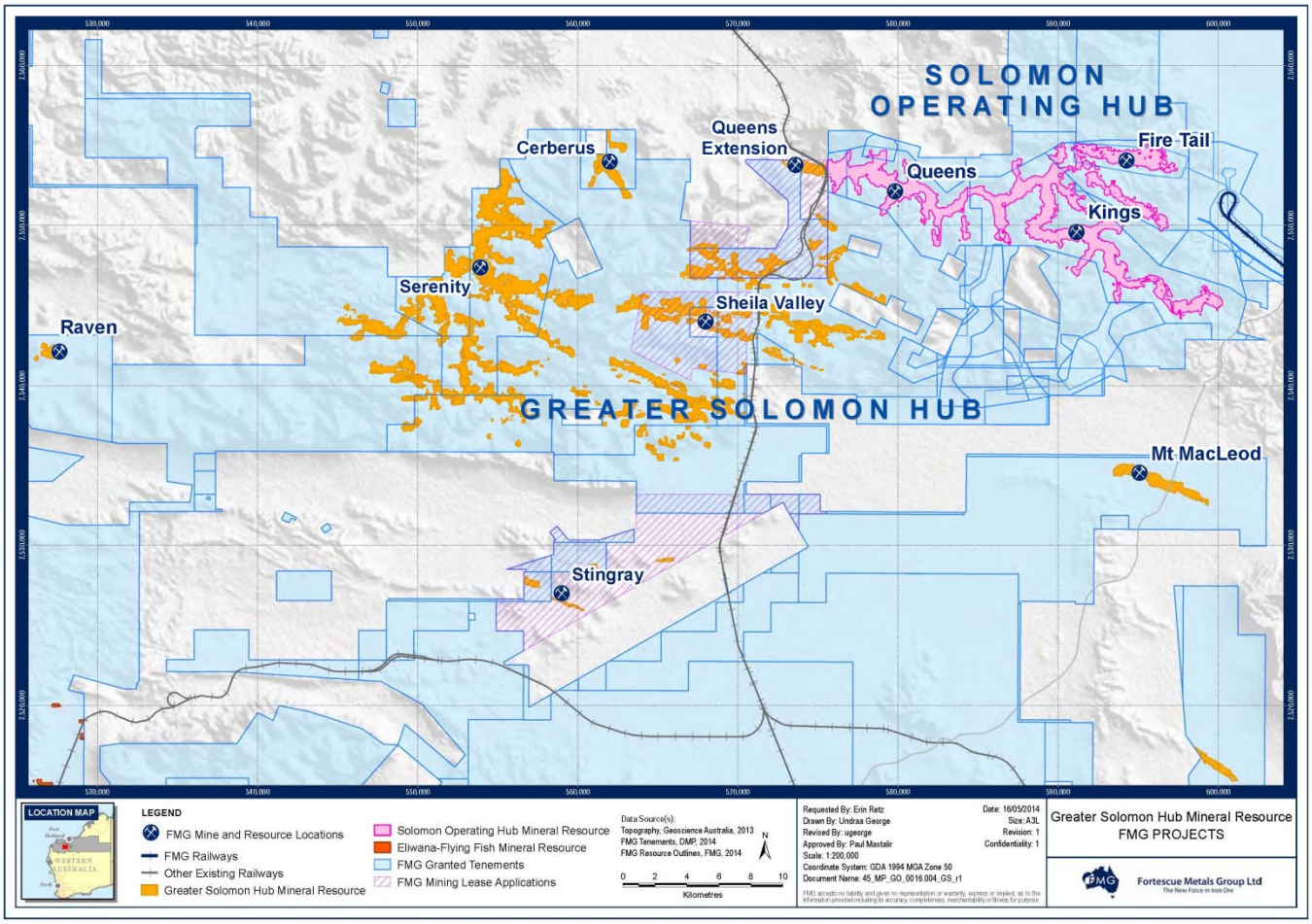

Figure 2: Location of Greater Solomon Hub Mineral Resources.

ELIWANA –FLYING FISH

An updated estimate has been produced for the Eliwana and Flying Fish deposits. This update was 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 Edition). The Mineral Resources have been classified as Inferred.

The Eliwana and Flying Fish deposits are located approximately 80km north-west of the Tom Price Township in the Pilbara region of Western Australia (Figure 1). The projects are situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. Geographically, the deposits cover a relatively 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 is predominantly hosted by bedded mineralisation (BID) with some detrital mineralisation (DID). Mineralisation is distributed variably within an area of approximately 60 km in an east west direction and 3.5km in a north south direction. Mineralisation occurs at surface and extends to depths of 300m below surface.

Drill samples are all from Reverse Circulation (RC) drilling rigs with cone splitters. Diamond holes have been drilled in the area and have been used to aid interpretation. 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 analysis and includes validation of drill hole collar coordinates, field standards, lab standards, field duplicates as well as 'round robin' checks between laboratories. No major issues were identified with precision, accuracy or bias. This estimation incorporates all of the validated RC holes drilled in the Eliwana and Flying Fish area by Fortescue that had collar and assay information loaded into the acQuire database by July 2013. There has not been any significant subsequent drilling in the area.

Geological logging, geochemistry and geophysical data were used to identify the stratigraphic units which were then modelled in 3D. A categorical indicator approach was used to define the mineralisation envelopes which were used for sample coding and block model construction.

Grades estimated in the models were Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI total, LOI 371˚, LOI 650˚ and LOI 1000˚. However, only Fe, SiO_2, Al_2O_3, P and LOI Total are quoted here as the other elements are not considered significant. Variography and detailed statistics were used to determine the estimation parameters for the grade modelling. Ordinary Kriging was the modelling technique used to estimate grades. Estimation was done using Vulcan software.

Density has been calculated from down hole gamma-gamma measurements completed throughout the deposit. Average rounded densities by geological unit and mineralisation have been applied globally to the model.

A cut-off of greater or equal to 50% Fe was used to report all BID across the projects. This cut-off is similar to Fortescue's current production specifications and gives similar Fe and contaminant grades. A cut-off of greater or equal to 52% Fe was used to report DID due to the elevated Al_2O_3 content at a 50% Fe cut-off.

The Eliwana and Flying Fish 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 2.

In accordance with the requirements of the JORC Code, 2012 Edition for reporting Mineral Resources, the JORC Code, 2012 Edition Table 1 is provided in Attachment 2.

Table 2: Eliwana-Flying Fish Mineral Resource Summary.

Ore Type	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%
Eliwana Inferred						
DID	109	55.1	8.13	6.02	0.048	5.7
Brockman BID	327	59.8	4.91	2.35	0.137	6.4
Marra Mamba BID	124	59.3	5.05	2.18	0.060	7.1
TOTAL	**560**	**58.8**	**5.57**	**3.03**	**0.102**	**6.4**
Flying Fish Inferred						
DID	40	57.6	5.15	4.53	0.051	6.9
Marra Mamba BID	140	60.5	3.84	1.87	0.058	6.8
TOTAL	**180**	**59.9**	**4.11**	**2.41**	**0.057**	**6.8**
Eliwana-Flying Fish Combined						
GRAND TOTAL	**740**	**59.1**	**5.21**	**2.88**	**0.091**	**6.5**

Tonnage figures have been rounded and as a result may not add up to the totals quoted.

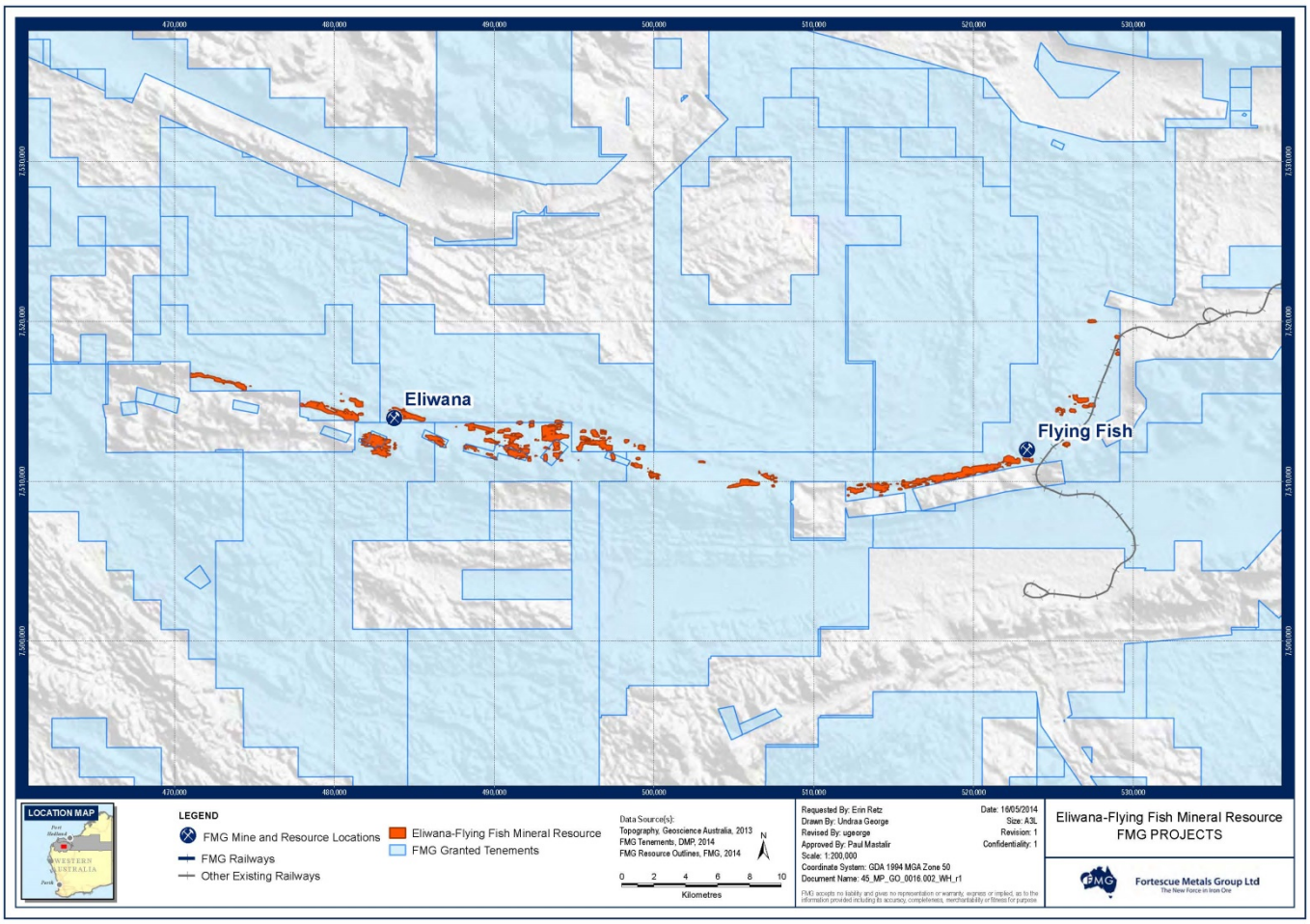

Figure 3: Outlines of Eliwana-Flying Fish Mineral Resources.

Table 3: Greater Solomon Hub total Mineral Resource inventory.

	Mineral Resources as at May 2014						Mineral Resources as at June 2013					
Project Area	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%
GREATER SOLOMON HUB INDICATED												
Serenity	254	56.6	6.70	3.45	0.083	8.3	-	-	-	-	-	-
SUB TOTAL	**254**	**56.6**	**6.70**	**3.45**	**0.083**	**8.3**	**-**	**-**	**-**	**-**	**-**	**-**
GREATER SOLOMON HUB INFERRED												
Serenity	1146	56.4	7.53	3.83	0.082	7.1	1,099	56.2	7.48	3.86	0.081	7.4
Sheila Valley	815	57.1	6.84	3.88	0.086	6.7	281	58.2	6.29	3.54	0.087	6.1
Queens Extension	79	55.6	6.22	2.84	0.078	10.8	-	-	-	-	-	-
Cerberus	76	56.7	6.53	4.48	0.076	7.1	-	-	-	-	-	-
Mount MacLeod	201	57.4	4.95	3.02	0.057	8.7	121	58.0	4.25	2.77	0.050	8.7
Stingray	36	58.5	5.05	2.56	0.052	8.2	-	-	-	-	-	-
Raven	52	58.7	5.73	2.32	0.123	7.4	-	-	-	-	-	-
SUB TOTAL	**2,404**	**56.8**	**6.93**	**3.71**	**0.081**	**7.2**	**1,501**	**56.8**	**7.00**	**3.71**	**0.079**	**7.3**
GREATER SOLOMON HUB COMBINED												
TOTAL	**2,658**	**56.8**	**6.91**	**3.69**	**0.082**	**7.3**	**1,501**	**56.8**	**7.00**	**3.71**	**0.079**	**7.3**

Tonnage figures have been rounded and as a result may not add up to the totals quoted.

Table 4: Eliwana-Flying Fish total Mineral Resource inventory.

	Mineral Resources as at May 2014						Mineral Resources as at June 2013					
Project Area	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%	In-situ Tonnes (Mt)	Iron Fe%	Silica SiO_2%	Alumina Al_2O_3%	Phos P%	Loss On Ignition LOI%
INFERRED												
Eliwana	560	58.8	5.57	3.03	0.102	6.4	414	58.6	5.77	3.21	0.110	6.4
Flying Fish	180	59.9	4.11	2.41	0.057	6.8	210	59.0	4.80	2.75	0.053	7.0
TOTAL	**740**	**59.1**	**5.21**	**2.88**	**0.091**	**6.5**	**624**	**58.7**	**5.44**	**3.06**	**0.091**	**6.6**

Tonnage figures have been rounded and as a result may not add up to the totals quoted.

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

ATTACHMENT 1: GREATER SOLOMON HUB JORC TABLE 1

JORC Table 1: Serenity - Greater Solomon

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	102,589 1m composite samples were used in the estimation and are from 2,594 reverse circulation drill holes. 77 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 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. Most drill hole locations were determined by survey contractors.
	The majority of samples were taken on 1m intervals from reverse circulation drill holes. 4 samples were taken on 2m intervals. 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.
	PQ sized diamond drill holes were drilled as twins to reverse circulation holes and not oriented.
Drill sample recovery	The quality of each sample was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 86.8% of samples were recorded as good, 7.4% were recorded as moderate, 3.4% were recorded as poor and 2.3% 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. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis and all of the diamond holes have been photographed. Diamond drilling was conducted for metallurgical purposes.
	100% of RC drill holes and 100% of diamond 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 (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 or Genalysis laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. It should be noted that due to laboratory turn around, the 3 point LOI analysis was not undertaken for a small quantity of samples with only the LOI 1000 being completed. This primarily affects some of the early assays from the project. A three point LOI was subsequently carried out on almost all samples with a Fe grade greater than 50%. Three point LOI are missing on approximately 14% of samples.
	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 indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	21 twin RC holes have been completed in the area. Results of the twin analysis have shown good correlation between the original RC holes and twin holes.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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. Collar locations of four RC holes could not be verified so their planned easting and northing coordinates were used and their RL value was set to the RL of the topography at that location. 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 1 metre contours produced from 1 metre LIDAR data and 5 metre contours produced from Landgate 20 metre DEM. Vertical accuracy of the LIDAR data is+/-0.2 metres.
Data spacing and distribution	The grade estimate used vertical holes RC drill holes which occur nominally on 200m x 50m, 200m x 100m and 400m x 100m spacing for assays and geology. An approximate 300,000m^2 area of drill holes with spacings of 12.5m x 12.5m, 25m x 25m and 50m x 50m was also drilled to gain a greater understanding of the short range grade and geological continuity.
	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for an Indicated and Inferred Mineral Resource
	No sample compositing was conducted for this estimation.
Orientation of data in relation to geological structure	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 assume geological and grade continuity in areas of 200m x 50m nominal spaced drilling and imply geological and grade continuity in the remaining areas.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Serenity deposit is located within Exploration and Mining Licences E47/1306, E47/1352, E47/1372, E47/1524, M47/1407 and M47/1408. E47/1306 and M47/1407 are held by Flinders Mines Limited and Fortescues holds 100% beneficial interest in iron ore, Flinders hold a capped iron ore royalty on the tenure. All other licences are 100% Fortescue owned.
	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has a current Land Access Agreement with the Registered Native Title Body Corporate.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP (under The Broken Hill Propriety Company Ltd) and Rio Tinto (under the name of Hamersley Exploration and Hamersley Iron Ltd.) have performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	Mineralisation within the Serenity deposit is hosted by buried Channel Iron Deposit (CID), Bedded mineralisation (BID) and Detrital mineralisation (DID). Outcropping geology in the project is the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which contain BID mineralisation. Incised into this bedrock geology are large Channel systems which contain the DID and CID mineralisation

Drill hole Information	Collar details of the RC drill holes used in the Serenity 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 Serenity 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 Serenity is discussed in: *Section 3 Estimation and Reporting of Mineral Resources.*
	Geological surface mapping of the Serenity 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 Serenity. Extensions to known mineralisation may occur in the Serenity area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used. Adjustments were made to various details of 9 holes prior to resource estimation after rigorous cross checks which represents approximately 0.03% of the data.
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 DID and CID stratigraphy of Serenity is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Further closer spaced drilling may improve the confidence in the stratigraphic interpretation of the BID mineralisation Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Indicated and Inferred Mineral Resource.
	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 Serenity occurs in an area covering approximately 18km in a north-south direction and approximately 16km in an east west direction. Mineralisation occurs at surface and occurs at depths of up to approximately 150 metres. The defined mineralised units are approximately between 1m and 60m thick.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades. 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 which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to some elements where a coefficient of variation was greater than 1.2.
	No check estimates were completed. However, an internal peer review has been conducted. Strings from the previous resource estimate were initially used to aid in the geological interpretation. An increase of 301 million tonnes and a slight variation in grade has occurred when compared to the previous 2011 Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas.
	No assumptions regarding the recovery of by-products have been made.

	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O and LOI Total has been estimated.
	Ordinary Kriging into parent cells of 100mE x 50mN x 1mRL, 50mE x 100mN x 1 mRL, 100mE x 25mN x 1mRL and 25mE x 100mN x 1mRL were used. Size and orientation of parent blocks reflected half the nominal drill spacing and orientation of mineralisation. Sub blocking down to 5mE x 5mN x 0.25mRL 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. First pass estimation search distances along strike are all 300m, and across strike range from 75m to 150m. Estimation search distances for subsequent estimation passes along strike range from 300m to 1300m and across strike range from 150m to 1000m. 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_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 was used to report the tonnages of all stratigraphic units excluding detritals. 50% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications. A higher cut-off of greater than or equal to 54% Fe was used for detritals due to its elevated Al_2O_3 content at a 50% Fe cut-off.
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 such as Kings where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such as Kings will be utilised. The expectation is that it will be a wet process as applied at Kings. 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 is 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 bulk density measurements on diamond core and down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.

	Physical density measurements are measured from diamond PQ core. Physical density measurements are taken at least 4 weeks after the core has been drilled to drive off any excessive moisture. Although the core has not been oven dried the core has been dried in the high temperatures, high evaporation rates and low humidity of the Pilbara would have driven off any free moisture. Lengths of core are marked out for bulk density measurements by a geologist after it has been logged. Minimum 0.3m lengths of relatively intact core are selected at a frequency of about one to three samples per core tray. The start and finish of the selected lengths do not cross over a geological boundary. Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in the area. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource is classified as Indicated and 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. All geological units have been classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the estimate.
Discussion of relative accuracy/ confidence	An approximate 300,000m^2 area of drill holes with nominal spacings of 12.5m x 12.5m, 25m x 25m and 50m x 50m was used to gain a greater understanding of the short range grade and geological continuity in the Serenity deposit. Grade and geological continuity is sufficient for an Indicated and 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 assume the grade and geological continuity in the area of the Indicated Mineral Resource and imply the grade and geological continuity in the area of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Cerberus - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	3,758 1m composite samples from 83 reverse circulation (RC) drill holes were used in the estimation. 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. All 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	RC 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 was recorded by the logging geologist at the time of drilling and categorised as good, medium or poor. 91% of samples were recorded as good, 6% as medium, 2% as poor and less than 1% of samples had no quality 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 a Mineral Resource.
	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.
	100% of 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 (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 sample size is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS or Genalysis Perth laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	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 indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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 licenced contractors Down Under Survey, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. 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 1 metre 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 all vertical RC drill holes which occur nominally on (easting by northing) 200m x 400m spacing 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 drilled mostly as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature with some local folding, 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) has 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 by Snowden, here there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
	The Cerberus deposit is located within 100% owned Fortescue Exploration Licences E47/1579 and E47/1372.

Mineral tenement and land tenure status	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has a current Land Access Agreement with the Registered Native Title Body Corporate.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP (under The Broken Hill Propriety Company Ltd) and Rio Tinto (under the name of Hamersley Exploration and Hamersley Iron Ltd.) have performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	Mineralisation in the Cerberus project is hosted by buried Channel Iron Deposit (CID) and Detrital mineralisation (DID). The Cerberus system is a continuation of the Serenity CID estimate previously reported by Fortescue.
Drill hole Information	Collar details of the RC drill holes used in the Cerberus estimates are found in the resource report.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Cerberus 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	Geological surface mapping of the Cerberus 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 most 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 Cerberus. Extensions to known mineralisation may occur in the area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and 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. No adjustments were made to the data.
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, 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 Cerberus is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	The major factor affecting the confidence in the grade and geological continuity is the drill spacing. 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 within an area of approximately 5 km along strike and up to 500m across the channel. Mineralisation occurs at depths of 20-30m from surface and is approximately 20-15m thick. The reported tonnes and grade in the Inferred Mineral Resource occur at depths up to 60 metres.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades of mineralised zones. Inverse Distance Cubed was used in the waste zones. 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 from the analogous Serenity deposit, which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to elements where a coefficient of variation was greater than 1.2.

	An Inverse Distance Cubed check estimates was completed on the mineralised zones.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Ordinary Kriging into parent cells of 100mE x 200mN x 1mRL was completed which represents half the nominal drill spacing. Sub blocking down to 5mE x 5mN x 0.25mRL was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each variable, gradually increasing search ellipse distances with each pass. These were primarily defined by sample spacing within each domain with input from variogram ranges. The first pass estimation search distance was 700m along strike, 300m across strike and 2m in the Z direction. The minimum number of samples used in searches ranged from 7 in the first pass to 2 in the final passes. The maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set at 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, e.g. Fe and SiO_2. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of 0.7 or greater.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO_2 and Al_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 all 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 50% Fe was used to report the grades and tonnages of the CID, and 54% Fe for the DID. 50% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications. The higher cut-off for DID was due to its elevated Al_2O_3 content at a 50% Fe cut-off.
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 such as Kings where conventional: truck & shovel; drill & blast and; grade control methods are used. Final processing methods will be defined by further mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such Kings CID will be utilised. The expectation is that it will be a wet process as applied at Kings. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	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 Cerberus and the analogous Serenity deposit. Average rounded densities by geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.
	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 of analogous Fortescue deposits. 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 is 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. All units are classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 bulk density measurements.
	The global estimate is sufficient to imply the grade and geological continuity of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Sheila Valley - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	45,465 1m composite samples were used in the estimation and are from 1,331 reverse circulation (RC) drill holes. 9 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 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. Most drill hole locations were determined by survey contractors.
	The majority of samples were taken on 1m intervals from reverse circulation drill holes. All samples for four drill holes were taken on 2m intervals. 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	RC drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. All drill holes are vertical.
	PQ sized diamond drill holes were drilled as twins to reverse circulation holes and not oriented.
Drill sample recovery	The quality of each sample was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 92.1% of samples were recorded as good, 3.4% were recorded as moderate, 2.6% were recorded as poor and 1.9% 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. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis and all of the diamond holes have been photographed. Diamond drilling was conducted for metallurgical purposes.
	100% of RC drill holes and 100% of diamond 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 (SGS) or 85% passing through 75 microns (UltraTrace and 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 UltraTrace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. It should be noted that due to laboratory turn around, the 3 point LOI analysis was not undertaken for a small quantity of samples with only the LOI 1000 being completed. This primarily affects some of the early assays from the project. A three point LOI was subsequently carried out on almost all samples with a Fe grade greater than 50%. Three point LOI are missing on 6% of samples.
	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 reasonable confidence in XRF analysis at each laboratory. Analysis of field standards indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	11 twin holes have been completed in the area with preliminary visual inspections being completed. A formal twin hole analysis will be completed in the future.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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. All drill hole collars of RC holes used in the estimate have been surveyed. Pilbara Wireline Services completed a down hole survey on one hole used in the estimate. 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 1 metre contours produced from 1 metre LIDAR data and 5 metre contours produced from Landgate 20 metre DEM. Vertical accuracy of the LIDAR data is+/-0.2 metres.
Data spacing and distribution	The grade estimate used vertical holes RC drill holes which occur nominally on 200m x 50m, 200m x 100m, 400m x 100m, 400m x 200m and 800m x 200m spacings 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 drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature, these vertical holes are sufficient to imply geological and grade continuity.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Sheila Valley deposit is located within 100% owned Fortescue Prospecting, Exploration and Mining Licences P47/1309, E47/1333, E47/1372, E47/1763, E47/1821 and M47/1417. The deposit is also located within pending Mining Leases M47/1456, M47/1457, M47/1458, M47/1459 and M47/1493.
	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has a current Land Access Agreement with the Registered Native Title Body Corporate.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP (under The Broken Hill Propriety Company Ltd) and Rio Tinto (under the name of Hamersley Exploration and Hamersley Iron Ltd.) have performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.

Geology	Mineralisation within the Sheila Valley deposit is hosted by buried Channel Iron Deposit (CID), Bedded mineralisation (BID) and Detrital mineralisation (DID). Outcropping geology in the project is the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which contain BID mineralisation. Incised into this bedrock geology are large Channel systems which contain the DID and CID mineralisation
Drill hole Information	Collar details of the RC drill holes used in the Sheila Valley 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 Sheila Valley 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 Sheila Valley is discussed in: *Section 3 Estimation and Reporting of Mineral Resources*
	Geological surface mapping of the Sheila Valley 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 Sheila Valley. Extensions to known mineralisation may occur in the area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used. Adjustments were made to various details of 26 holes prior to resource estimation after rigorous cross checks which represents approximately 2% of the data.
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 DID and CID stratigraphy of Sheila Valley is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Further closer spaced drilling may improve the confidence in the stratigraphic interpretation of the BID mineralisation. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	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 Sheila Valley occurs in an area covering approximately 17km in a north-south direction and approximately 20 km in an east west direction. Mineralisation occurs at the ground surface and occurs at depths of up to approximately 120 metres. The defined mineralised units are approximately between 1m and 100m thick.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades in mineralised domains and Inverse Distance Cubed was used to estimate grades in un-mineralised domains. 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 which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to some elements where a coefficient of variation was greater than 1.2.

	No check estimates were completed. However, an internal peer review has been conducted. Strings from the previous resource estimate were initially used to aid in the geological interpretation. An increase of 534 million tonnes and a slight variation in grade has occurred when compared to the previous 2012 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 ofFe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O , LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Estimation into parent cells of 100 mE by 50 mN by 1 mRL were used. Size and orientation of parent blocks reflected half to a quarter of the nominal drill spacing and orientation of mineralisation. Sub blocking down to 5 mE x 5 mN x 0.25 mRL 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 distances along strike range from 300m to 600m, and across strike are all 150m. Estimation search distances for subsequent estimation passes along strike range from 600m to 1200m and across strike range from 150m to 300m. 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 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 greater.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO_2 and Al_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 52% Fe was used to report the tonnages of BID mineralisation. 52% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specifications. A higher cut-off of 54% Fe was used for DID and CID mineralisation due to its elevated Al_2O_3 content.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment. These methods will be similar to analogous Fortescue deposits such as Kings and Firetail where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such Kings and Firetail will be utilised. The expectation is that there will be some dry crush and screen material with no metallurgy upgrades required, remaining material will be wet process as applied at Firetail and Kings. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	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 bulk density measurements on diamond core and down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.

	Physical density measurements are measured from diamond PQ core. Physical density measurements are taken at least 4 weeks after the core has been drilled to drive off any excessive moisture. Although the core has not been oven dried the core has been dried in the high temperatures, high evaporation rates and low humidity of the Pilbara would have driven off any free moisture. Lengths of core are marked out for bulk density measurements by a geologist after it has been logged. Minimum 0.3m lengths of relatively intact core are selected at a frequency of about one to three samples per core tray. The start and finish of the selected lengths do not cross over a geological boundary. 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 area. 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 is 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. All geological units have been classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Queens Extension - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	The Queens extension area contains 2,071 1m composite samples from 45 reverse circulation (RC) drill holes. The total Queens model uses 66,948 1m composite samples from 1,557 RC drill holes. No diamond drill holes have been drilled in the Queens extension area. 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. Most drill hole locations were determined by survey contractors. Some down-hole surveys were also completed by survey contractors.
	The majority of samples were taken on 1m intervals from reverse circulation drill holes. 4 samples were taken on 2m intervals. 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 was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 86% of samples were recorded as good, 8% were recorded as moderate, and 6% 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.
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. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis.
	100% of 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 (SGS).
	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 Perth laboratories for analysis. This laboratory has National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	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 indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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. 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 1m contours produced from filtered LIDAR data.
Data spacing and distribution	The grade estimate used all vertical RC drill holes which occur nominally on (easting by northing) 400m x 100m spacing 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 drilled mostly as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature with some local folding, these vertical holes are sufficient to imply geological and grade continuity.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Queens Extension deposit is located within 100% owned Fortescue Exploration Licence E47/1821 and pending Mining Licence M47/1493.
	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has a current Land Access Agreement with the Registered Native Title Body Corporate.

	The live tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP (under The Broken Hill Propriety Company Ltd) and Rio Tinto (under the name of Hamersley Exploration and Hamersley Iron Ltd.) have performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	Mineralisation within the Queens deposit is hosted by buried Channel Iron Deposit (CID), Bedded mineralisation (BID) and Detrital mineralisation (DID). Outcropping geology in the project is the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which contain BID mineralisation. Incised into this bedrock geology are large Channel systems which contain the DID and CID mineralisation
Drill hole Information	Collar details of the RC drill holes used in the Queens Extension estimate are not being reported here.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Queens Extension 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 Queens Extension is discussed in: *Section 3 Estimation and Reporting of Mineral Resources*
	Geological surface mapping of the Queens Extension 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 most 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 the area. Extensions to known mineralisation may occur.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used. Adjustments were made to 2 holes prior to resource estimation after rigorous cross checks.
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 the Queens deposit is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	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 occurs in an area approximately 2.5km along strike and 500m across the channel. The complete Queens CID channel covers a zone approximately 13km in an east-west direction and up to 3km in a north-south direction. Mineralisation occurs extends to depths of up to 120 metres below the ground surface.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades. 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 which were created using Supervisor software. The deposit was domained by

	stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to some elements where a coefficient of variation was greater than 1.2.
	No check estimates were completed. However, an internal peer review has been conducted.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI650 and LOI 1000 has been estimated.
	Estimation into parent cells of 100mE x 50mN x 1mRL was completed which represents approximately half the nominal drill spacing. Sub blocking down to 5mE x 5mN x 0.25mRL was used along domain boundaries to better define the domain interface.
	Up to four estimation passes were used for each variable, 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 was 500m along strike, and 250m across strike range. The radii of the search in the z direction was 2m. The minimum number of samples used in searches ranged from 2 to 11 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_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 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 52% Fe is used to report the tonnages of all CID and BID material. A cut-off of 54% Fe is used for all DID material. These cut-offs represents a similar cut-off to current product specifications for analogous Fortescue estimates.
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 such as Kings where conventional: truck & shovel; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such the Chichesters will be utilised. The expectation is that it will be a wet process as applied at Kings. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	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. Special consideration is being given to groundwater management due tot the close proximity to Weelumurra Creek.
Bulk density	Density has been calculated from bulk density measurements on diamond core and down-hole geophysical measurements throughout the deposit. Average rounded densities by geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.

	Physical density measurements are measured from diamond PQ core. Physical density measurements are taken at least 4 weeks after the core has been drilled to drive off any excessive moisture. Although the core has not been oven dried the core has been dried in the high temperatures, high evaporation rates and low humidity of the Pilbara would have driven off any free moisture. Lengths of core are marked out for bulk density measurements by a geologist after it has been logged. Minimum 0.3m lengths of relatively intact core are selected at a frequency of about one to three samples per core tray. The start and finish of the selected lengths do not cross over a geological boundary. 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 of diamond core drilled within the Queens project area. 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 is 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. All units have been classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Mt MacLeod - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	7,988 1m composite samples from 244 reverse circulation (RC) drill holes were used in the estimation. 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. All 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	RC 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 was recorded by the logging geologist at the time of drilling and categorised as good, medium or poor. 91.4% of samples were recorded as good, 4.3% as medium, 2.9% as poor and 1.3% of samples had no quality 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 a Mineral Resource.
	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.
	100% of 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 90% passing through 106 microns.

	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 sample size is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS Perth laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	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 indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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 licenced contractors Down Under Survey, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. 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 1 metre contours produced from 1 metre LIDAR data and 10 metre contours produced from Landgate 20 metre DEM. Vertical accuracy of the LIDAR data is+/-0.2 metres.
Data spacing and distribution	Drill hole data was collected on nominal grid spacings of 800m by 200m, 400m by 200m and 400m by 100m 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 drilled mostly as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature with some local folding, 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 by Snowden, here there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Mount MacLeod deposit is located within 100% owned Fortescue Exploration Licences E47/1390 and E47/1391 and pending Mining Licences M47/1477 and M47/1478.
	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has current Land Access Agreements with the Registered Native Title Body Corporate.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Robe River Associates Pty Ltd has performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.

Geology	Mineralisation in the Mt MacLeod project is hosted by Marra Mamba Iron Formation (BID). Mineralisation occurs in southeast trending folds.
Drill hole Information	Collar details of the RC drill holes used in the Mt MacLeod 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 Mt MacLeod 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	Geological surface mapping of the Mt MacLeod 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 most RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on some RC drill holes
Further Work	Further infill drilling and metallurgical test work is planned for Mt MacLeod. Extensions to known mineralisation may occur in the area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and 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. Adjustments were made to various details of 7 holes prior to resource estimation after rigorous cross checks which represents approximately 3 % of the data.
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, 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 Mt MacLeod is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	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 expected that further drilling will not materially change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	The Mt MacLeod bedded mineralisation consists of two zones that have a strike length of up to 6km and a width of 600m. The bedded mineralisation is buried and occurs at depths of up to 100m below surface and the defined mineralised units are up to 50m thick.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades of all bedded zones. Inverse Distance Cubed was used in the mineralised detritals zones. 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 which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to elements where a coefficient of variation was greater than 1.2.
	No check estimates were completed. However, an internal peer review has been conducted. An increase of 81 million tonnes and a slight variation in grade has occurred when compared to the previous 2011 Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.

	Estimation into parent cells of 200 mE by 100 mN by 1 mRL was completed which represents half the nominal drill spacing. Sub blocking down to 5 mE x 5 mN x 0.25 mRL was used along domain boundaries to better define the domain interface.
	Up to four estimation passes were used for each variable, gradually increasing search ellipse distances with each pass. These were primarily defined by sample spacing within each domain with input from variogram ranges. The first pass estimation search distances range from 600m to 3500m along strike and 150m to 600m across strike. All first pass distances have a range of approximately 2m in the Z direction. Estimation search distances for subsequent estimation passes along strike range from 600m to 3500m and across strike range from 300m to 1200m. The radii of the search in the z direction ranged from approximately 5m to 30m.The minimum number of samples used in searches ranged from 5 in the first pass to 2 in the final passes. The maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set at 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_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 50% Fe was used to report the tonnages of BID mineralisation. 50% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specification.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue deposits such as Firetail where conventional: truck & shovel; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such the Chichesters will be utilised. The expectation is that it will be a wet process as applied at the Chichesters. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	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. 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 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.
	Down-hole geophysical probes measure the in situ bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities of analogous Fortescue deposits. 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 is 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. All units are classified excluding detritals.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 physical density measurements which will also aid in moisture adjustment of down-hole geophysical measurement values.
	The global estimate is sufficient to imply the grade and geological continuity of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Stingray - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	3,217 1m composite samples from 155 reverse circulation (RC) drill holes were used in the estimation. 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. All 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	RC 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 was recorded by the logging geologist at the time of drilling and categorised as good, medium or poor. 79% of samples were recorded as good, 17% as medium, 4% as poor and less than 1% of samples had no quality 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 a Mineral Resource.
	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 90% passing through 106 microns.
	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 sample size is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS Perth laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis.
	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. Field standard results are closely monitored and actions are underway to mitigate issues.

Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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 licenced contractors Down Under Survey, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. 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 5 metre contours produced from Landgate 20m DEM which was derived from aerial photography.
Data spacing and distribution	The grade estimate used all vertical RC drill holes which occur nominally on (easting by northing) 400m x 100m spacing 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 drilled mostly as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature, 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) has 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 by Snowden, here there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Stingray deposit is located within 100% owned Fortescue Exploration licence E47/1763 and pending Mining licence M47/1476.
	The tenements lie within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has current Land Access Agreements with the Registered Native Title Body Corporate.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Robe River Associates Pty Ltd has performed exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	Stingray is situated on the eastern margin of the northern limb of the Jeerinah Anticline. Mineralisation in the Stingray project is hosted by Marra Mamba Iron Formation (BID). The Mount Newman, MacLeod and Nammuldi Members are all found in outcrop in the area.
Drill hole Information	Collar details of the RC drill holes used in the Stingray 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 Stingray 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	Geological surface mapping of the Stingray 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 most RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.

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

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and 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. No adjustments were made to the data.
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, 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 Stingray is not well known, further drilling will provide a better definition of the units within the Marra Mamba Iron Formation, but this is not assumed to have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	The major factor affecting the confidence in the grade and geological continuity is the drill spacing. 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 within five pods that vary in size from 0.8-2km in length and 150-300m in width. Mineralisation occurs at depths of 20-30m from surface and is approximately 20-15m thick. The reported tonnes and grade in the Inferred Mineral Resource occur at depths up to 60 metres.
Estimation and modelling techniques	Inverse Distance Cubed was used all mineralised and waste zones. Estimation was done using Vulcan software. Mineralisation was extrapolated half the distance of drill spacing away from the drilling. Estimation parameters were derived from drill spacing and geological understanding of the deposit. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to elements where a coefficient of variation was greater than 1.2.
	An Ordinary Kriging check estimate was completed on the mineralised zones using variography from the neighbouring analogous Mount MacLeod deposit.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.
	Estimation into parent cells of 200mE x 50mN x 1mRL was completed which represents half the nominal drill spacing. Sub blocking down to 5mE x 5 mN x 0.25mRL was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each variable, gradually increasing search ellipse distances with each pass. These were primarily defined by sample spacing within each domain. The first pass estimation search distance was 700m along strike, 300m across strike and 2m in the Z direction. The minimum number of samples used in searches ranged from 7 in the first pass to 2 in the final passes. The maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set at 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, e.g. Fe and SiO_2.
	The definition of mineralised zones within each stratigraphic unit was accomplished by creating manual wireframes. Statistical analysis of each stratigraphic domain revealed appropriate geochemical mineralisation thresholds for Fe, SiO_2, and Al_2O_3. These thresholds were used to code the samples as mineralised or unmineralised. Mineralisation envelopes were created around these mineralised samples. 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 declustered and top-cut 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	All material within the mineralised zones is reported.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue deposits such as Firetail where conventional: truck & shovel; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such the Chichesters will be utilised. The expectation is that it will be a wet process as appled at the Chichesters. 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. 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 analogous Mount MacLeod deposit. Average rounded densities by geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.
	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 is 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. All units are classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 of the Inferred Mineral Resource.
	No production data is available at this stage.

JORC Table 1: Raven - Greater Solomon
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	2,077 1m composite samples from 46 reverse circulation (RC) drill holes were used in the estimation. 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. All 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	RC 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 was recorded by the logging geologist at the time of drilling and categorised as either good, medium or poor. 84.6% of samples were recorded as good, 4.5% as medium, 5.0% as poor and 5.8% of samples had no quality 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 a Mineral Resource.
	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 (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 sample size is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to either SGS (50%) or Genalysis (50%) Perth laboratories for analysis. Both laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S, and K_2O by X Ray Fluorescence (XRF) with 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. Field standard results are closely monitored and actions are taken immediately to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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. RL values of 7 RC holes could not be verified so their surveyed easting and northing coordinates were used and their RL value was set to the RL of the topography at that location. 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 5 metre contours produced from Landgate 20 metre DEM.

Data spacing and distribution	Drill hole data was collected on nominal grid spacings of 200m by 200m and 200m by 100m where possible 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 drilled mostly as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature with some local folding, 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 out using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit by Snowden, here there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Raven deposit is located within 100% owned Fortescue Exploration Licence E47/1523.
	The tenement lies within the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has current Land Access Agreements with the Registered Native Title Body Corporate.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	BHP Billiton Iron Ore has performed exploration for iron nearby to the project boundaries. No historical data has been used by Fortescue.
Geology	Mineralisation in the Raven project is hosted by Brockman Iron Formation (BID). Mineralisation generally occurs in the northern limb of a east-west trending fold.
Drill hole Information	Collar details of the RC drill holes used in the Raven 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 Raven 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	Geological surface mapping of the Raven 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 most RC drill holes including: natural gamma, magnetic susceptibility and gamma gamma density.
	The estimated groundwater level has been recorded on some RC drill holes
Further Work	Further infill drilling and metallurgical test work is planned for the Raven project. Extensions to known mineralisation may occur in the area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and 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. No adjustments were made to any details of the 46 holes prior to resource estimation.
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; 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 Raven is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	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 expected that further drilling will not materially change the grade and geological continuity. The geological continuity is generally good compared with analogous areas.
Dimensions	The Raven bedded mineralisation zones comprise a strike length of up to 1.5km and a width of up to 800m. The bedded mineralisation is mostly at surface however also occurs at depths of up to 130m below surface and the defined mineralised units are up to 100m thick.
Estimation and modelling techniques	Inverse Distance Cubed was used to estimate grades of all zones due to an inability to generate variograms for use in Ordinary Kriging given the relatively small data set. 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/un-mineralised zones. Top-cuts were applied to elements where a coefficient of variation was greater than 1.2.
	A check estimate was completed for comparison using Ordinary Kriging. Kriging parameters were derived from variograms created for the analogous Fortescue Sheila Valley deposit which were created using Supervisor software. An internal peer review has also been conducted.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650, and LOI 1000 has been estimated.
	Estimation into parent cells of 50mE x 50mN x 1mRL was completed which represents a quarter of the nominal drill spacing. Sub blocking down to 5mE x 5mN x 0.25mRL was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each variable, gradually increasing search ellipse distances with each pass. These were primarily defined by sample spacing within each domain. The first pass estimation search distance was 300m along strike and 150m across strike. All first pass distances have a range of 10m in the Z direction. Estimation search distances for subsequent estimation passes along strike range from 600m to 1200m and across strike range from 300m to 600m. The radii of the search in the z direction ranged from approximately 20m to 30m. The minimum number of samples used in searches ranged from 7 in the first pass to 2 in the final passes. The maximum number of samples was 30 for all searches. The maximum number of samples per drill hole was set at 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_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 mineralisation. 52% Fe has been used for analogous Fortescue estimates and represents a similar cut-off to current product specification.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue deposits such as Firetail where conventional: truck & shovel; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such as Firetail will be utilised. The expectation is that it will be a dry process as applied at Firetail. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. It is assumed material will be transported to existing ore processing facilities and use current tailings disposal infrastructure.
Bulk density	Density has been estimated from down-hole geophysical measurements throughout the deposit which have been compared to values used at analogous projects such as Firetail and Eliwana. Resulting density values by each geological unit and mineralisation have been 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 measurements are filtered to remove outliers using standard statistical methods and validated against caliper measurements.
	Down-hole geophysical probes measure the in situ bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities of analogous Fortescue deposits. 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 is 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. Only the Dales Gorge Member and Whaleback Shale Member units are classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the 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 physical density measurements which will also aid in moisture adjustment of down-hole geophysical measurement values.
	The global estimate is sufficient to imply the grade and geological continuity of the Inferred Mineral Resource.
	No production data is available at this stage.

ATTACHMENT 2: ELIWANA-FLYING FISH JORC TABLE 1

JORC Table 1: Eliwana and Flying Fish
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	54,248 1m composite samples were used in the estimation and are from 1,494 reverse circulation drill holes. 13 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 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. Most drill hole locations were determined by survey contractors. Some down-hole surveys were also completed by survey contractors.
	The majority of samples were taken on 1m intervals from reverse circulation drill holes. 4 samples were taken on 2m intervals. 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 holes are vertical with only 13 being drilled on an angle.
	PQ sized diamond drill holes were drilled as twins to reverse circulation holes and not oriented.
Drill sample recovery	The quality of each sample was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 90.4% of samples were recorded as good, 4.3% were recorded as moderate, 2.1% were recorded as poor and 3.2% 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. For diamond holes: stratigraphy, mineralogy and colour were recorded. Chip trays from RC holes were collected on an intermittent basis and approximately 50% of the diamond holes have been photographed. Diamond drilling was conducted for metallurgical purposes.
	Greater than 99% of RC drill holes and 50% of diamond 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 (SGS) or 85% passing through 75 microns (UltraTrace and 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 UltraTrace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. It should be noted that due to laboratory turn around, the 3 point LOI analysis was not undertaken for a small quantity of samples with only the LOI 1000 being completed. This primarily affects some of the early assays from the project. A three point LOI was subsequently carried out on almost all samples with a Fe grade greater than 50%. Three point LOI are missing on 1% of samples.
	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 indicates an ongoing issue with laboratory sample preparation and standard certification. Field standard results are closely monitored and actions are underway to mitigate issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Group Managers.
	52 twin holes have been completed in the area with preliminary visual inspections being completed. A formal twin hole analysis will be completed in the future.
	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.
	Some conversions of MnO% to Mn% have been made to the assay data used in the grade estimation. 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. Collar locations of two RC holes could not be verified so their planned easting and northing coordinates were used and their RL value was set to the RL of the topography at that location. Down hole surveys were completed by Pilbara Wireline Services on 9 out of 13 angled holes and approximately 10% of vertical 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 0.5 metre 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 mostly vertical holes with 13, 60˚ angled RC drill holes which occur nominally on (easting by northing) 200m x 100m and 400m x 100m spacing 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 drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal or gently dipping in nature, these vertical holes are sufficient to imply geological and grade continuity.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Eliwana and Flying Fish deposits are located within 100% owned Fortescue Exploration and Prospecting Licences, E47/1195, E47/1196, E47/1300, E47/1301, E47/1302, E47/1373, P47/1398, P47/1399, P47/1400, P47/1401 and P47/1402.
	The tenements lie within the Puutu Kunti Kurrama and Pinikura Native Title Claim (WC2001/005) along with the Eastern Guruma Native Title Determination (WAD6208/1998). Fortescue has current Land Access Agreements with the Native Title Claim Group and the Registered Native Title Body Corporate, respectively.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Exploration work prior to Fortescue within the Eliwana and Flying Fish 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 and Flying Fish projects are situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. Geographically, the Eliwana and Flying Fish deposits cover a relatively narrow (average width of approximately 2km) zone which follows the outcropping of mineralised Marra Mamba and Brockman Iron Formations.
Drill hole Information	Collar details of the RC drill holes used in the Eliwana and Flying Fish estimates are not being reported here. Significant intersections have been released previously.

Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Eliwana and 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 Eliwana and Flying Fish is discussed in: *Section 3 Estimation and Reporting of Mineral Resources*
	Geological surface mapping of the Eliwana and 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 most 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 and Flying Fish. Extensions to known mineralisation may occur in the Eliwana area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. AcQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used. Adjustments were made to various details of 31 holes prior to resource estimation after rigorous cross checks which represents approximately 2% of the data.
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 Eliwana and Flying Fish is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing, this is sufficient for an Inferred Mineral Resource.
	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 60 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 up to 300 metres.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades. 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 which were created using Supervisor software. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones. Top-cuts were applied to some elements where a coefficient of variation was greater than 1.2.
	No check estimates were completed. However, an internal peer review has been conducted. Strings from the previous resource estimate were initially used to aid in the geological interpretation. An increase of 113 million tonnes and a slight variation in grade has occurred when compared to the previous 2011 Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated.

	Ordinary Kriging into parent cells of 100mE x 50mNxy 1mRL or 50mE x 25mN x 1mRL was completed which represents approximately half to a quarter of the nominal drill spacing. Sub blocking down to 5mE x 5mN x 0.25mRL was used along domain boundaries to better define the domain interface.
	Up to four estimation passes were used for each variable, 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 distances along strike range from 300m to 1500m, and across strike range from 150m to 750m. 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 30 for all searches. 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 greater for the Eliwana model.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO_2, and Al_2O_3, for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the declustered and top-cut 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 50% Fe was used to report the tonnages of all stratigraphic units excluding detritals. 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 Al_2O_3 content at a 50% Fe cut-off.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights. These methods will be similar to analogous Fortescue deposits such as Firetail where conventional: truck & shovel; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such Firetail will be utilised. The expectation is that there will be some dry crush and screen material with no metallurgy upgrades required. The remaining material will be wet process as applied at the Chichesters, Firetail and Kings. 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.
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.
	It is assumed that bedded material with a higher shale content has a lower density value than that with a lower shale content. 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 is 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 semivariograms ranges of influence. All units in the Marra Mamba Iron Formation have been classified excluding the Nammuldi Member. All units within the Brockman Iron Formation excluding the Yandicoogina Shale Member have been classified. Tertiary Detritals and Red Ochre Detritals have been classified. All remaining stratigraphic units are not classified.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal audits have been completed during all stages of the estimate. An external review of the estimate has been completed by RungePincockMinarco.
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 bulk density measurements.
	The global estimate is sufficient to imply the grade and geological continuity of the Inferred Mineral Resource.
	No production data is available at this stage.