

**Fortescue Metals Group Ltd**

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The Companies Officer  
Australian Securities Exchange Ltd.  
2 The Esplanade  
Perth WA 6000

Dear Sir

**1.23 Billion tonne Maiden Resource for Glacier Valley**

Fortescue Metals Group ("Fortescue" "ASX: FMG") announces a 1.23 billion tonne (Bt) Inferred Resource Estimate for its Glacier Valley tenement area. Glacier Valley is held by Fortescue but is subject to a joint venture (JV) arrangement with an Australian subsidiary of China's Baosteel Group Corporation ("Baosteel"). The details of the JV were originally released on 28 August 2007. The exploration expenditure associated with the resource definition enables Baosteel to move to a 35% interest in the JV. Upon expenditure of an additional agreed amount to cover feasibility studies, Baosteel can move to a 50% interest. Additional work is required before the boundaries of the JV area can be finalised.

The tenement is approximately 100 kilometres south of Fortescue's Herb Elliott port facility at Port Hedland and approximately 25 kilometres to the east of Fortescue rail line.

Full details of the resource estimate and the Competent Persons statement are provided in the Attachment to this release with the tables below showing: Table 1 - Glacier Valley Inferred Resource Estimate and Table 2 - Summary of Davis Tube Analysis. In summary, the Glacier Valley material shows the characteristics of a quality magnetite deposit with an "in situ" Fe grade of 33% that can be beneficiated to a processed Fe grade of around 67% based on a recovery rate of 29%.

**Table 1: GLACIER VALLEY INFERRERD RESOURCE ESTIMATE**

|              | Tonnes (Bt) | Density    | Fe %        | SiO <sub>2</sub> % | Al <sub>2</sub> O <sub>3</sub> % | P %          | S %          | LOI %       |
|--------------|-------------|------------|-------------|--------------------|----------------------------------|--------------|--------------|-------------|
| <b>TOTAL</b> | <b>1.23</b> | <b>3.4</b> | <b>33.1</b> | <b>38.8</b>        | <b>1.59</b>                      | <b>0.105</b> | <b>0.134</b> | <b>7.65</b> |

**Table 2: SUMMARY OF DAVIS TUBE ANALYSIS**

|              | P80 (um)  | Recovery % | Fe %        | SiO <sub>2</sub> % | Al <sub>2</sub> O <sub>3</sub> % | P %          | S %          | LOI %        |
|--------------|-----------|------------|-------------|--------------------|----------------------------------|--------------|--------------|--------------|
| <b>TOTAL</b> | <b>28</b> | <b>29</b>  | <b>67.3</b> | <b>5.1</b>         | <b>0.18</b>                      | <b>0.020</b> | <b>0.012</b> | <b>-2.61</b> |

Yours sincerely

**Fortescue Metals Group Ltd**

**Rod Campbell**  
Company Secretary

**The New Force in Iron Ore**

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## ATTACHMENT

### Geological Summary

The host to the magnetite mineralisation in the Darby area of Glacier Valley is the main BIF member of the Pincunah Formation. The Pincunah Formation is one of several prominent BIF units within the greenstone belts of the Pilbara Craton which host primary magnetite mineralisation.

The BIF member varies in stratigraphic thickness from about 350 to over 450 metres and forms a north-south flat topped strike ridge approximately 80 to 120m high. The strata strike north-south and are subvertical varying from dipping at approximately 80 degrees west to 70 degrees east. Due to subvertical dip of the strata drill holes were drilled at 60 degrees to the west.

Small scale folding is common, however, there is little macroscopic folding. The area is cut by a number of faults which are generally parallel or sub parallel to strike. Magnetic susceptibility measurements of partial oxidised outcrop of the BIF typically vary from 1,000 to 10,000 x10<sup>-5</sup> SI units with isolated highs of up to 30,000 x10<sup>-5</sup> SI units (magnetic susceptibility is a measurement of the relative proportion of magnetite present).

From work completed to date, the Pincunah BIF has a minimum depth extent of 300m at a similar thickness and composition and that the potential for tonnes of available magnetite mineralisation is only limited by the economics of mining rather than geological constraints.

The Pincunah BIF at Glacier Valley can be divided into two magnetite rich domains based on the dominant iron mineralogy together with an upper oxidized domain. Depth of oxidation is variable but averages approximately 40m. Critically, no asbestos has been detected at Glacier Valley during mapping, drilling, logging, environmental dust sampling, metallurgical test work, petrology or mineralogical characterisation. Based on preliminary drilling, the most prospective area was drilled by RC on a 400 by 100m grid to a vertical depth of 300m. Additionally, four RC holes were twinned by PQ/HQ diamond holes to provide for metallurgical samples and to aid in understanding of the geology of the BIF. Metallurgical test work of the diamond core is ongoing. Total drilling in the area under consideration includes 36 RC drilling totalling 10,124m and four diamond holes totalling 1,293m of coring (954m PQ, 339m HQ).

A total of 4,681 samples from 36 RC holes in a two phase drilling program were used in the Glacier Valley resource estimate which has been projected up to 100 m down dip from the base of drilling. The drill hole spacing is based on a nominal 400 by 100m grid with all holes angled at 60 degrees towards 270 degrees except for one which is angled in the opposite direction. All RC holes were sampled at one or two metre intervals with two identical samples bagged for each interval providing one sample for chemical analysis and one for metallurgical test work. Each interval was analysed for the standard iron ore suite of elements by XRF, multistage LOI by thermogravimetry and FeO by volumetric titration by Ultratrace Laboratories in Perth. Holes were geologically logged including textural logging of chips, stratigraphy, colour and magnetic susceptibility of each interval.

The block model was built using 200m (n/s) x2m (e/w) x 25m (vertical) cells with subcells down to 1/10th of the primary cell size to better resolve domain interfaces. Estimation was conducted using the Inverse Distance method with one general orientation reflecting the strike, sub-vertical dip and plunge of the stratigraphy. Three phases of estimation were used with the primary ellipse designed to intersect samples from at least one drill line either side of the cell to be filled. Two mineralised domains were interpolated

separately as well as an overlaying oxidised domain. A cut off equivalent to a Davis Tube recovery of 20 per cent was applied to each domain.

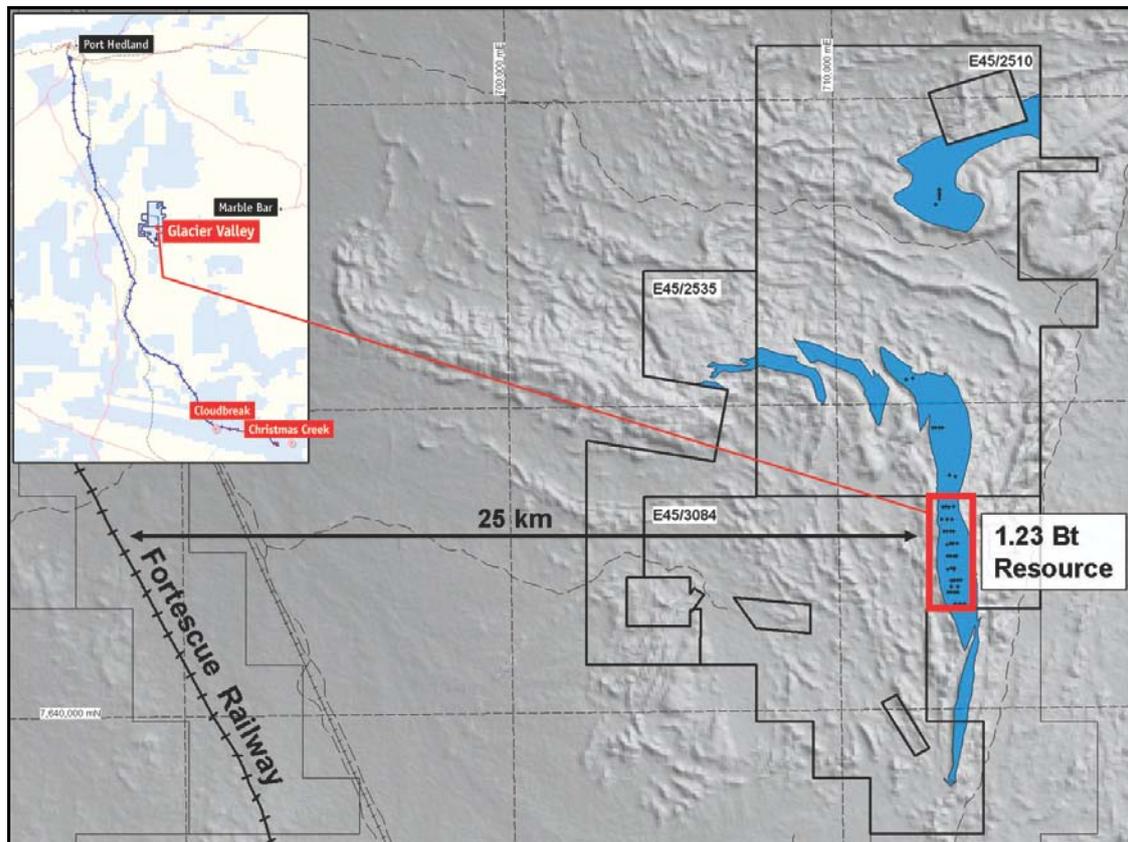
Basic geostatistical evaluation was conducted on the data set and the data has been used as received. Visual validation was conducted on a sectional basis with no errors found. Density varies between 3.1 and 3.9 based on core measurements and theoretical calculated densities for the rock type. An average of 3.4 was used for magnetite mineralisation.

All drill hole data is collected and stored in a digital format with appropriate validation checks to ensure integrity of the database. QA/QC techniques are standard for all Fortescue operations, being an average of one field standard per 100 lab submitted samples, and an average of three rig duplicates per 100 samples. There were 130 duplicate samples available for review in the Glacier Valley project.

Based on sample density and confidence in the predictability of the distribution of secondary siderite, the resource has been categorised as Inferred as per the JORC Code 2004.

**Table 1: GLACIER VALLEY INFERRED RESOURCE ESTIMATE**

|              | Tonnes (Bt) | Density    | Fe %        | SiO <sub>2</sub> % | Al <sub>2</sub> O <sub>3</sub> % | P %          | S %          | LOI %       |
|--------------|-------------|------------|-------------|--------------------|----------------------------------|--------------|--------------|-------------|
| <b>TOTAL</b> | <b>1.23</b> | <b>3.4</b> | <b>33.1</b> | <b>38.8</b>        | <b>1.59</b>                      | <b>0.105</b> | <b>0.134</b> | <b>7.65</b> |



Location diagram showing Fortescue tenure, Pincunah Formation (blue), area of resource estimation and drilling.

Metallurgical test work completed to date includes Davis Tube analysis and mineralogical characterisation. RC samples for selected holes were composited together based on similar lithology and magnetic susceptibilities. A total of 31 composites averaging 66m in length were processed. Samples were crushed and ground using a bench top ball or rod mill to a number of grind sizes to understand the optimum grind size for the liberation of magnetite. Grinding via a ball or rod was used rather than a ring mill as it better duplicates the sizing distribution produced in a full scale processing plant. Summary results are shown in Table 2.

Mineralogical characterisation was carried out by petrographic examination of the BIF, and Davis Tube concentrate and tails. Additionally quantitative XRF mineralogy was carried out on some Davis Tube tails. Based on this work, the magnetite is non oxidised, euhedral and has little to no inclusions of gangue making it highly amenable to commercial separation. Petrographic analysis indicates that it may be possible to further upgrade the magnetic concentrate by reverse flotation.

**Table 2: SUMMARY OF DAVIS TUBE ANALYSIS**

|              | P80<br>(um) | DTR<br>%  | Fe<br>%     | SiO2<br>%  | Al2O3<br>%  | P<br>%       | S<br>%       | LOI<br>%     |
|--------------|-------------|-----------|-------------|------------|-------------|--------------|--------------|--------------|
| <b>TOTAL</b> | <b>28</b>   | <b>29</b> | <b>67.3</b> | <b>5.1</b> | <b>0.18</b> | <b>0.020</b> | <b>0.012</b> | <b>-2.61</b> |

*COMPETENT PERSONS STATEMENT*

*The information in the report to which this statement is attached that relates to Mineral Resources is based on information compiled by Mr Doug Kepert who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Kepert is full time employee of Fortescue Metals Group Ltd and provided geological interpretations for Mineral Resource calculations and compiled the exploration results. Mr Kepert has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kepert consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*