# Brockman Upgrades Marillana Resource to I.I Billion Tonnes of Iron Ore Landmark Upgrade Propels Brockman into the Major League 

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- Total Mineral Resource estimate of I.I billion tonnes of iron ore at Marillana <br> - Includes 338Mt of Indicated Resources within the North-West Sector <br> - Potential for +550Mt of Final Product grading 57.5-59.5\% Fe <br> - Further RC, Sonic and Caldwell drilling proceeding to extend mineralisation estimate and further refine metallurgical testwork
}

Brockman Resources Limited is very pleased to announce a substantial upgrade in the Mineral Resource for its $100 \%$-owned Marillana Iron Ore Project in Western Australia, with the overall tonnage of haematite mineralisation increasing to over 1.1 billion tonnes. This encompasses both Channel Iron Deposits (CID's) with grades ranging from 55-60\% ( $55 \%$ Fe cut-off) and detrital ore with grades ranging from $40-62 \% \mathrm{Fe}$ (see Tables 1 and 2). A plan showing the extent of the resource envelope is presented as Figure 1 and a cross-section of the resource model is shown as Figure 2.

The Mineral Resource estimation was prepared by Perth-based Snowden Mining Industry Consultants Pty Ltd ("Snowden") within various grade envelopes and geological domains. The methodology and procedures used for the Mineral Resource estimate are provided in the appended summary by Snowden. The Mineral Resource estimated is in accordance with the guidelines of the 2004 JORC Code.

The upgraded Mineral Resource inventory is based on three deposits, the North-West Sector, Rockhole Bore and Abalone and represents a substantial increase on the previously announced Indicated Mineral Resource for the North-West Sector alone of 43.5 million tonnes at $57.6 \% \mathrm{Fe}$.

The new resource inventory is expected to substantially reposition the Marillana Project as a potentially world-class iron ore project, capable of producing beneficiated ore as a Direct Shippable product with an average grade of $+59 \% \mathrm{Fe}$. This would underpin a long-term, high quality iron ore export business.

Based on preliminary beneficiation testwork on the detrital mineralisation, the Company estimates that the Project has the potential to produce in excess of 550 million tonnes of marketable product grading 57.5-59.5\% Fe (DSO plus beneficiated ore).

[^0]The resource estimate includes the previously reported Channel Iron Deposit (CID) mineralisation at the North-West Sector, as well as initial estimates for the CID and detrital mineralisation at the Rockhole Bore and Abalone deposits and the detrital mineralisation at the North-West Sector. Significantly, it includes an Indicated Mineral Resource for the detrital mineralisation at the NorthWest Sector of 232 million tonnes, which has previously been considered as waste in mining studies of the CID mineralisation.

Table 1 Direct Shipping Mineral Resource Summary (within a 55\% Fe mineralisation envelope).

| Deposit | Material <br> Type | Category | Tonnes <br> (Mt) | Fe <br> (\%) | $\mathrm{Fe}(\mathbf{C a})$ <br> $\mathbf{\%}$ | $\mathbf{A l}_{2} \mathbf{O}_{\mathbf{3}}$ <br> $(\%)$ | $\mathbf{S i O}_{\mathbf{2}}$ <br> (\%) | $\mathbf{P}$ <br> (\%) | $\mathbf{L O I}$ <br> (\%) |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| North-West Sector | CID | Indicated | 47.2 | 57.6 | 63.1 | 3.78 | 3.70 | 0.08 | 8.7 |
| Subtotal |  | Indicated | $\mathbf{4 7 . 2}$ | $\mathbf{5 7 . 6}$ | $\mathbf{6 3 . 1}$ | $\mathbf{3 . 7 8}$ | $\mathbf{3 . 7 0}$ | $\mathbf{0 . 0 8}$ | $\mathbf{8 . 7}$ |
| Rockhole Bore | CID | Inferred | 4.7 | 56.6 | 61.2 | 4.71 | 5.48 | 0.05 | 7.5 |
| Rockhole Bore | Detrital | Inferred | 4.3 | 56.5 | 58.7 | 6.11 | 7.90 | 0.07 | 3.8 |
| Subtotal |  | Inferred | $\mathbf{9 . 0}$ | $\mathbf{5 6 . 6}$ | $\mathbf{6 0 . 0}$ | $\mathbf{5 . 3 8}$ | $\mathbf{6 . 6 3}$ | $\mathbf{0 . 0 6}$ | $\mathbf{5 . 7}$ |
| TOTAL |  |  | $\mathbf{5 6 . 2}$ | $\mathbf{5 7 . 5}$ | $\mathbf{6 2 . 6}$ | $\mathbf{4 . 0 3}$ | $\mathbf{4 . 1 7}$ | $\mathbf{0 . 0 8}$ | $\mathbf{8 . 2}$ |

$\mathrm{Fe}(\mathrm{Ca})$ represents calcined Fe and is calculated by Brockman using the formula $\mathrm{Fe}(\mathrm{Ca})=\mathrm{Fe} \% /((100-\mathrm{LOI}) / 100)$

Table 2 Beneficiation Feed Mineral Resource Summary (within a 40\% Fe mineralisation envelope). Resources are in addition to the Direct Shipping Resources in Table 1.

| Deposit | Material <br> Type | Category | Tonnes <br> $\mathbf{( M t )}$ | Grade <br> (\% Fe) | *Tonnes (Mt) <br> after <br> beneficiation | *Grade (\%Fe) <br> after <br> beneficiation |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| North-West Sector | Detrital | Indicated | 232 | 43.2 | 109 | $59.5-59.8$ |
| North-West Sector | CID | Indicated | 59 | 46.4 | 28 | $59.5-59.8$ |
| Subtotal |  | Indicated | 291 | 43.9 | 137 | $59.5-59.8$ |
| Rockhole Bore | Detrital | Inferred | 375 | 43.7 | 176 | $59.5-59.8$ |
| Rockhole Bore | CID | Inferred | 44 | 45.1 | 21 | $59.5-59.8$ |
| Abalone | Detrital | Inferred | 300 | 44.5 | 141 | $59.5-59.8$ |
| Abalone | CID | Inferred | 52 | 47.3 | 24 | $59.5-59.8$ |
| Subtotal |  | Inferred | $\mathbf{7 7 1}$ | $\mathbf{4 4 . 3}$ | $\mathbf{3 6 2}$ | $59.5-59.8$ |
| TOTAL |  | $\mathbf{1 0 6 2}$ | $\mathbf{4 4 . 2}$ | $\mathbf{4 9 9}$ | $59.5-59.8$ |  |

* Indicative figures only, based on average results of beneficiation testwork (see ASX release dated 18 January, 2008).


## Beneficiation Testwork

Preliminary beneficiation testwork on the detrital mineralisation (including pisolite detritals and mixed detritals - "detritals") at the Marillana Project has demonstrated the potential to upgrade the detrital mineralisation to a $+59 \%$ Fe product (as reported in the Company's ASX release of January 18, 2008 and summarised in Table 3 below), with an average weight recovery of $47 \%$. The Company is confident that further beneficiation testwork (in progress) will improve these weight recoveries. The relationship between the different mineralisation types is shown schematically in Figures 3 and 4.

Based on this testwork, the Marillana Project has the potential to produce a shipping inventory (DSO plus beneficiated mineralisation) of greater than 550 Mt grading $+59 \% \mathrm{Fe}$ (weighted average).

Table 3 Summary of Detrital Mineralisation Upgrade Testwork.

| Sample No. | Head Grade <br> (\%Fe) | Recovered <br> Grade (\%Fe) | Upgrade <br> (\%) | Weight <br> Recovery <br> (\%) | Fe <br> Recovery <br> (\%) | Mineralisation <br> Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S3 | 47.6 | 59.8 | 26 | 61 | 77 | Pisolite |
| S6 | 39.3 | 59.5 | 51 | 33 | 50 | Detritals |
| Average | 43.4 | 59.65 | 38.5 | 47 | 63.5 |  |

## Summary

The upgraded resource represents the most significant development in Brockman's history, with the potential to propel the Company into the ranks of the more significant iron ore companies in Australia.

With its 2008 exploration and feasibility activities fully funded, Brockman is moving ahead with an aggressive development program. Additional programs of RC, Caldwell and Sonic drilling are planned to extend the known mineralisation at the Marillana Project, in parallel with metallurgical testwork.

A media release pertaining to this announcement will be released separately.


Mr A Zhang, who is a Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Yilgarn Mining Ltd provided the geological interpretations and the drillhole data used for the Mineral Resource estimation. Mr Zhang has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves. Mr Zhang consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.

The information in this report that relates to mineralisation and exploration results is based on information compiled by Mr Colin Paterson, who is a Member of the Australian Institute of Geoscientists. Mr Paterson is a full time employee of Brockman Resources Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Paterson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.


Figure I Marillana Iron Ore Project showing drill hole locations and extent of Mineral Resource wireframes.


Figure 2 Cross-Section AB through the North-west Sector and Rockhole Bore portion of the resource model showing geology and resource wireframes ( 10 times vertical exaggeration).


Figure 3 Schematic section through North-West Sector showing relationship of pisolite and detrital mineralisation to the CID ore.


Figure 4 Schematic section through Rockhole Bore showing relationship of pisolite and detrital mineralisation to the CID ore.

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28 February 2008

Mr Colin Paterson
Executive Director
Brockman Resources Ltd
Suite 6, Churchill Court
331-335 Hay Street
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Sent via email: colinpaterson@yilgarn.com.au
Dear Colin

## MARILLANA IRON ORE PROJECT MINERAL RESOURCE STATEMENT - FEBRUARY 2008

At your request, Snowden has completed a resource estimate for the North West Sector, Rockhole Bore and Abalone iron ore deposits that form part of the Marillana Iron Ore Project. The estimate was based on data and geological interpretations provided by Brockman Resources Ltd.

The following pages outline the basis and assumptions used to complete the estimate.

Sincerely
Matthew Nimmo
BSc (Hons), MAIG
Senior Consultant

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## 1 MARILLANA IRON ORE PROJECT RESOURCE STATEMENT FEBRUARY 2008

Snowden Mining Industry Consultants Pty Ltd ("Snowden") has, on behalf of Brockman Resources Ltd ("Brockman"), completed a Mineral Resource estimate for the North West Sector, Rockhole Bore and Abalone iron ore deposits that form part of the Marillana Iron Ore Project. The deposits form a sequence of iron mineralisation over a strike length of approximately 10 km with a width of approximately 1.2 km . The mineralisation occurs between 10 m to 50 m below surface and is approximately 18 m thick.

The Mineral Resource occurs as Detrital, Pisolite and CID (Channel Iron Deposit) material defined by geological interpretation and nominal grade constraints of $40 \% \mathrm{Fe}, 50 \% \mathrm{Fe}$, and $55 \%$ Fe respectively.

The high-grade CID with minor Pisolite material at a nominal cut-off grade of $55 \% \mathrm{Fe}$ is considered to most likely be direct ship material while the low-grade CID, Detrital and Pisolite material below that grade but at a nominal cut-off grade of $40 \% \mathrm{Fe}$ is likely to require beneficiation.

Marillana Iron Ore Project February 2008 Mineral Resource summary for Direct Ship material at a nominal cut-off grade of $55 \% \mathrm{Fe}$

| Deposit | Material Type | Tonnes <br> (Mt) | Fe <br> (\%) | $\begin{gathered} \mathrm{SiO}_{2} \\ (\%) \end{gathered}$ | $\mathrm{Al}_{2} \mathrm{O}_{3}$ (\%) | $\begin{gathered} \mathrm{TiO}_{2} \\ (\%) \end{gathered}$ | Mn <br> (\%) | CaO <br> (\%) | (\%) | $\begin{gathered} \mathrm{s} \\ (\%) \end{gathered}$ | MgO <br> (\%) | LOI <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indicated Mineral Resource |  |  |  |  |  |  |  |  |  |  |  |  |
| North West Sector | CID | 47.2 | 57.63 | 3.70 | 3.78 | 0.25 | 0.44 | 0.05 | 0.08 | 0.02 | 0.14 | 8.72 |
| Inferred Mineral Resource |  |  |  |  |  |  |  |  |  |  |  |  |
| Rockhole Bore | CID | 4.7 | 56.60 | 5.48 | 4.71 | 0.40 | 0.33 | 0.06 | 0.07 | 0.02 | 0.17 | 7.50 |
| Rockhole Bore | Detrital | 4.3 | 56.48 | 7.90 | 6.11 | 0.51 | 0.28 | 0.07 | 0.05 | 0.01 | 0.15 | 3.76 |
| Total |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 56.2 | 57.5 | 4.2 | 4.0 | 0.28 | 0.42 | 0.05 | 0.08 | 0.02 | 0.15 | 8.2 |

Values have been rounded to two or three significant figures to reflect the relative estimation precision of the resource classification.

Marillana Iron Ore Project February 2008 Mineral Resource summary for Beneficiation material at a nominal cut-off grade of 40\% Fe (additional to the Direct Ship material)


Values have been rounded to two or three significant figures to reflect the relative estimation precision of the resource classification.

The resource has been classified as Indicated and Inferred categories according to the 2004 edition of the JORC Code and is based on the data and mineralisation interpretations supplied by Brockman on the $14^{\text {th }}$ to $21^{\text {st }}$ of January 2008. The data used for the resource estimation is comprised of reverse circulation and sonic drilling. Snowden has reviewed the drilling and sampling data underlying the resource estimate, and, following suitable adjustments, can verify that the data is of sufficient quality to support the resource classification applied. Snowden has not visited the site to review the mineralisation and data collection processes.

Block ordinary kriging was used to estimate iron, silica, alumina, titanium, manganese, calcium, phosphorous, sulphur, magnesium and loss-on-ignition into a constrained cell model reflecting the interpreted geology. No grade capping was applied prior to estimation. A spatial transformation of the z-coordinate ("unwrinkling") was applied to the drillhole data and cell model prior to grade estimation to reduce the influence of the vertical surface undulations in the interpreted mineralisation grade shell. Search ellipses and ranges used in the estimation reflect the spatial continuity and the mineralisation trend of the mineralisation domains.

Snowden has based the resource classification upon a number of criteria, including the geological confidence, the integrity of the data, the spatial continuity of the mineralisation as demonstrated by variography, and the quality of the estimation.

An average in situ density was applied to the iron mineralisation on the basis of interpreted geology for determination of resource tonnage. A global density of $3.35 \mathrm{t} / \mathrm{m}^{3}$ for Detrital, $3.23 \mathrm{t} / \mathrm{m}^{3}$ for Pisolite and $2.83 \mathrm{t} / \mathrm{m}^{3}$ for CID mineralisation was used. These density values were derived from the average value of density measurements obtained from the sonic drilling collected by Brockman.

The information in this report that relates to Mineral Resources is based on information compiled by Mr M Nimmo and Mr A Zhang.

Mr M Nimmo, who is a Member of the Australian Institute of Geoscientists and a full-time employee of Snowden Mining Industry Consultants Pty Ltd produced the Mineral Resource estimate based on the data and geological interpretations provided by Brockman. Mr Nimmo has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as

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