

**JUPITER MINES
LIMITED**

ABN 51 105 991 740

ASX Release

23 February 2009

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Issued Capital:

Shares: 169,207,544
Unlisted Opts: 15,600,000

ASX Symbol: JMS

Currently Exploring for:

- Iron Ore
- Nickel
- Uranium
- Gold

Jupiter Mines Limited

SUBSTANTIAL INCREASE IN HIGH-GRADE HEMATITE RESOURCE AT MT MASON, CENTRAL YILGARN

KEY POINTS

- Substantial increase in the Inferred Resource for the Mt Mason Project (Central Yilgarn Iron Project) to 5.75 million tonnes at 59.9% Fe (55% Fe cut-off grade) as a result of successful drilling programs completed in 2008
- Upgraded resource represents an increase of 3.55 million tonnes or 160% over the original Inferred Resource of 2.2 million tonnes announced in October 2007
- Mt Mason resource model has now been updated with all drill assay data returned
- Further potential for high grade hematite mineralisation exists with the resource remaining open to the north-east.

Jupiter Mines Limited (**ASX: JMS**) is pleased to announce a substantial upgrade in the **high grade hematite resource** at its 100%-owned **Mt Mason Project**, part of the Company's Central Yilgarn Iron Project (CYIP) in Western Australia, to **5.75 million tonnes at 59.9% Fe, 3.5% Al₂O₃, 7.4% SiO₂, 0.064% P and 3.0% LOI using a 55% Fe cut-off grade.**

A schedule of grades and tonnes is summarised in Table 1.

The upgraded resource represents a 160% increase over the previous Inferred Resource announced in October 2007, and was the result of a very successful drill program which included significant previously announced intersections including holes 08RCMM09 (61m @ 65.5% Fe from 16m), 08RCMM013 (64m at 60.6% Fe) and 08RCMM014 (64m at 60.5% Fe) (see Attachment 1).

Importantly the resource remains open to the north-east and this zone will be targeted with further drilling by Jupiter, in conjunction with in-fill drilling on the current Inferred Resource. The objective of future drill programs will be to increase the resource, upgrade the resource into Measured and Indicated categories, and to conduct a metallurgical test work program in order to progress the Project.

Several internal shale units have been identified within the resource which have been excluded from the current resource estimate and reported as a separate material due to their close relationship with the mineralisation.

The Central Yilgarn region remains a key focus for Jupiter and results from the Company's 2008 drill campaign have reinforced the area's significant iron ore exploration potential. Further drilling is planned in this region in 2009.

Yours faithfully
Jupiter Mines Limited

Greg Durack
Chief Executive Officer

The potential quantity and grade of the of the Inferred Resource at Mt Mason, and also any potential resource at CYIP, are conceptual in nature and are for exploration purposes only. There has been insufficient exploration to define a Mineral Resource and it is uncertain if future exploration will result in the determination of a Mineral Resource.

Exploration Manager: Charles William Guy Competent Person

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Charles William Guy who is a Member of the Australian Institute of Geoscientist and a full- time employee of Jupiter Mines Limited. Charles William Guy has sufficient experience which is relevant to the style of mineralisation and 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 Resources and Ore Reserves’. Charles William Guy consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears Charles William Guy holds the position of Exploration Manager with Jupiter Mines Limited.

Mining Consultant- David Milton (Mt Mason Inferred Resource) Competent Person

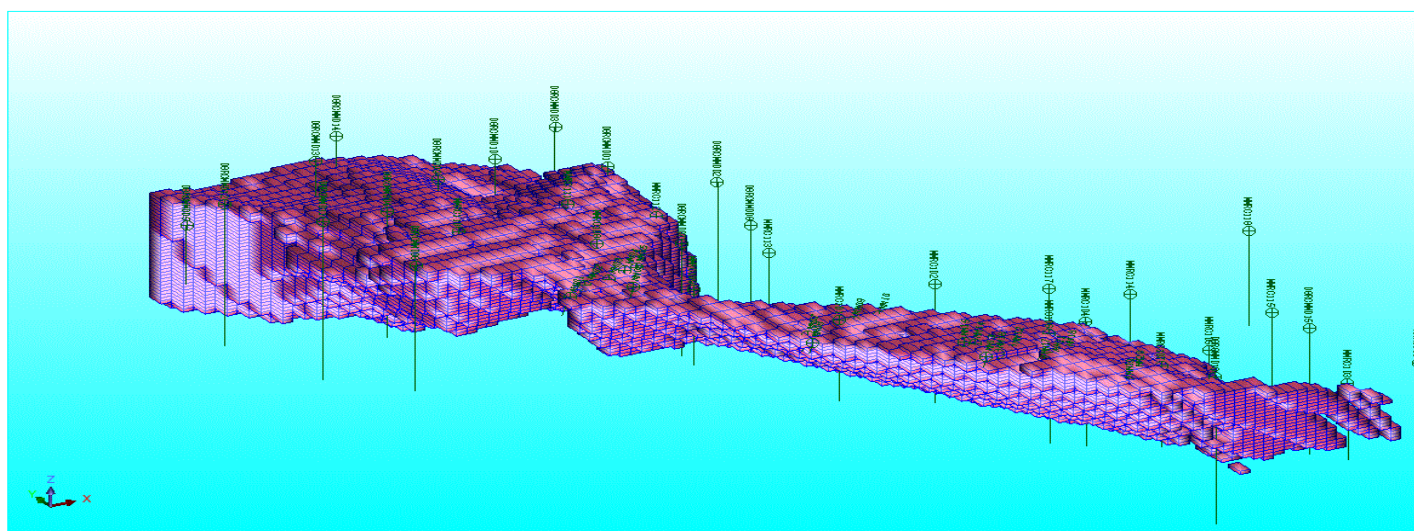
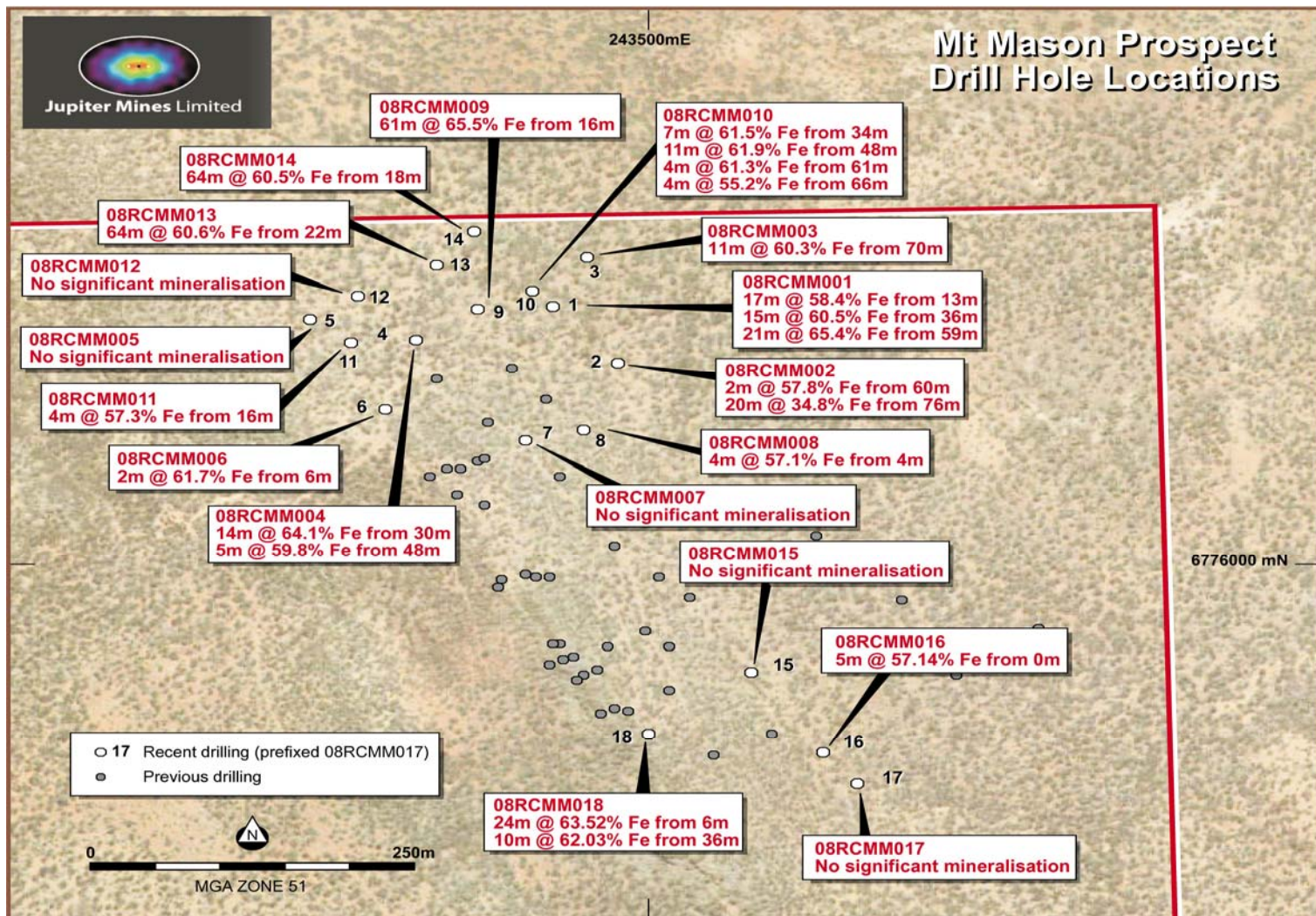
The information in this report that relates to Mineral Resources of Mt Mason is based on information compiled by Mr David Milton, who is a Member of the Australian Institute of Mining and Metallurgy and a full time consultant. Mr David Milton has sufficient experience in the type of deposits under consideration and to the activities undertaken to qualify as a Competent Person as defined in the December 2004 Edition of the Australasian Code for reporting Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in the report of the matters based on his information in the form and the context in which it appears.

Table 1 Mt Mason cumulative tonnes at various iron cut off grades

Fe % Range	Tonnes (thousands)	Fe %	Al ₂ O ₃ %	SiO ₂ %	P %	LOI %
> 50	5,960	59.7	3.5	7.5	0.064	3.0
>51	5,950	59.7	3.5	7.5	0.064	3.0
>52	5,940	59.7	3.5	7.5	0.064	3.0
>53	5,930	59.7	3.5	7.5	0.064	3.0
>54	5,880	59.8	3.5	7.5	0.064	3.0
>55	5,750	59.9	3.5	7.4	0.064	3.0
>56	5,535	60.1	3.5	7.2	0.064	3.0
>57	4,910	60.5	3.5	6.6	0.063	3.0
>58	4,180	61.1	3.4	6.0	0.061	2.9
>59	3,405	61.7	3.2	5.5	0.057	2.8
>60	2,825	62.1	3.1	5.1	0.056	2.7
>61	2,015	62.8	2.9	4.6	0.054	2.6
>62	1,235	63.6	2.7	3.9	0.047	2.4
>63	745	64.4	2.4	3.3	0.041	2.2
>64	345	65.5	2.0	2.7	0.029	1.4
>65	255	65.9	1.9	2.5	0.025	1.2

Note the above table excludes the internal shales which are estimated at 730 thousand tonnes and contain 33% Fe, 13.7% Al₂O₃, 30% SiO₂, 0.085% P and has a 7.7% LOI

Attachment 1: Mt Mason Prospect Drill Hole Locations and Resource Block Model



Mt Mason Resource Block model at a cutoff grade of 55% iron, oblique view

23rd February 2009

Mr Robert Benussi
Company Secretary
Jupiter Mines Limited

Dear Robert,

Re: Consent to publicly release Mt Mason Resource Information

I consent to the public release of the resource statements on the Mt Mason Project (Central Yilgarn Iron Project) based on the February 2009 resource estimate made by me in my report titled “Jupiter Mines Limited, Mt Mason Resource Report, February 2009”.

This report concludes that:

*“The recent drilling program at Mt Mason has resulted in an increase of the Inferred Resource at a 55% Fe cut off from 2.2 million tonnes to **5.75 million tonnes of 59.9 % Fe, 3.5% Al₂O₃, 7.4 % SiO₂, 0.064% P and has a 3.0% LOI, an increase in tonnage by 3.55 million tonnes.**”*

It is noted that the several internal shale units have been recognized and these have been excluded from the mineralization estimate as a separate material. The shale has been reported as a separate material in the final report due to its close relationship with the mineralization. The resource estimate is compliant with the JORC 2004, Table 1 guidelines.

Importantly the resource remains open to the north east. Additional drilling is required to close out the mineralization in this direction.”

The report includes a table, Table 1, of resources cumulatively calculated at various iron cut off grades.

The public release should be accompanied by the following footnote.

“The information in this report that relates to Mineral Resources of Mt Mason is based on information compiled by Mr David Milton, who is a Member of the Australian Institute of Mining and Metallurgy and a full time consultant. Mr David Milton has sufficient experience in the type of deposits under consideration and to the activities undertaken to qualify as a Competent Person as defined in the December 2004 Edition of the Australasian Code for reporting Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in the report of the matters based on his information in the form and the context in which it appears.”



Yours, sincerely

Mr. D.W.Milton

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