

**JUPITER MINES  
LIMITED**

ABN 51 105 991 740

**ASX Release**

15 March 2011

**JUPITER MINES LTD**

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**Directors/Officers**

Brian Gilbertson  
Paul Murray  
Andrew Bell  
Priyank Thapliyal  
Sun Moon Woo

Greg Durack  
Robert Benussi  
Charles Guy

**Issued Capital:**

Shares: 1,486,756,465  
Deferred Shares: 262,255,799  
Unlisted Opts: 6,000,000

**ASX Symbol:** JMS

**Currently Developing:**

- Iron Ore
- Manganese

## Jupiter Mines Limited

### ROBUST SCOPING STUDY DELIVERED ON THE MT IDA MAGNETITE PROJECT

#### KEY POINTS

- **Scoping Study based on a 20 year mine life, mining 25 mtpa to produce 10 mtpa of Magnetite concentrate**
- **Base Case capital cost is \$1,583 million, and operating costs \$62.78 per tonne of concentrate FOB**
- **Project NPV is \$1,685 million at an 8% pa discount rate and the IRR is 19.8% pa (based on a number of early-stage assumptions)**
- **Scoping Study on Mt Mason DSO Hematite Project in progress**

Jupiter Mines Limited (ASX: JMS) is pleased to announce that it has completed the Scoping Study on the Mt Ida Magnetite Project (Mt Ida).

The Scoping Study, carried out by ProMet Engineers Pty Ltd, indicates a financially robust magnetite operation. The major infrastructure already exists and requires little upgrading.

The Scoping Study was based on the Mt Ida maiden inferred mineral resource of 530 million tonnes grading 31.9% Fe at the Central Area (which represents only 30% of the magnetite mineralisation strike length). An open pit contract mining operation will extract 25mtpa ROM ore to produce 10mtpa of high grade magnetite concentrate, with an iron grade in excess of 68% Fe, a silica content of 4.5%, and very low levels of impurities (sulphur, phosphorous and alumina). An average 43.4% weight recovery was assumed, based on test work already completed. Given the exceptional grade and quality of the concentrate Jupiter anticipates a premium to benchmark iron ore prices.

The process flowsheet utilises two stage HPGR technology (high pressure grinding rolls), whereafter the rock is progressively ground to 80% passing 25micron using ball mills and energy efficient tower mills. The magnetite is recovered using magnetic separation. A final grade concentrate is then produced after a single stage of reverse flotation to reduce the silica levels to specification. The process flowsheet has been developed to be scaleable in 5 mtpa concentrate production increments. (See Attachment 1 – Process Flow Diagram)

The Base Case assumes the pumping of magnetite concentrate from Mt Ida to a rail load out site south of Menzies where the concentrate is dewatered, filtered and loaded onto trains for transportation to the Port of Esperance. The Base Case also assumes the establishment of a 120 MW gas fired power station at Menzies owned and operated by a third party with power reticulated to site. The power station will source gas from the existing Goldfields Gas Transmission Pipeline.

The total Capital Cost of the project is estimated to be \$1,583 million (see Table 1) with an Operating Cost of \$62.78 per tonne of magnetite concentrate produced, FOB Esperance (see Table 2). Using 100% equity financing, ignoring taxation, and assuming a concentrate value of \$110 per tonne and a 5% concentrate royalty, the Project generates an NPV of \$1,685 million @ an 8 % pa discount rate, and an IRR of 19.8% pa.

The Base Case study assumes a concentrator at Mt Ida, third party power and concentrate pumped to the rail head at Menzies for dewatering, filtering and train-loading.

**Table 1: Base Case Capital Cost**

	\$million	
Prestrip	50.0	Estimate
Mining Establishment	30.0	Estimate
Concentrator, filters and bins	897.0	Including 20% contingency
Tailings Disposal	47.2	Paste thickener and coffer dam
Construction Camp	97.5	1500 people at \$65,000/man
Concentrate and return water pipeline	214.5	
Bore Field, power and water line	38.8	80kms
Power Line, Menzies to Mt Ida	111.6	
Unit Trains	96.0	5 unit trains
	<b>1 582.6</b>	

**Table 2: Base Case Operating Cost**

Area		Annual Cost \$M	Unit cost	\$/T conc	Cum \$/T conc
Administration	\$/t Conc	9.1	0.90	0.90	0.90
Mining/Crushing	\$/t Ore	167.4	6.53	16.73	17.64
Concentrator	\$/t Conc	230.1	23.00	23.00	40.64
Filter Plant	\$/t Conc	14.5	1.44	1.44	42.09
Pipeline	\$/t Conc	10.4	1.03	1.03	43.12
Transport	\$/t Conc	147.2	14.71	14.71	57.83
Port	\$/t Conc	45.8	4.57	4.57	62.40
Admin-HQ	\$/t Conc	3.8	0.38	0.38	62.78
<b>Overall</b>	<b>\$/t Conc</b>	<b>627.8</b>		<b>62.78</b>	

Alternative infrastructure options have also been considered (see Table 3), including a Jupiter-owned power station (at Menzies and at site) and using rail transportation for concentrate from Mt Ida to Menzies (instead of a pipeline).

- Installing Jupiter's own power station in Menzies but still using a concentrate pipeline to Menzies increases the capital by \$168.8million but reduces the operating cost by \$5.84/t, to give a project IRR of 20.6% pa.
- Switching to all rail transport and moving the power station to site increases capital costs by \$178m with an operating saving of \$3.88/t, representing a potential 4 year payback on the extra capital and an IRR of 19.7% pa.
- Switching to all rail transport but keeping the power station in Menzies will cost an extra \$235 million and save only \$3.88/t which lowers the IRR to 19.1% pa.

**Table 3: Alternative Infrastructure Development Options**

	Infrastructure Location	Capital Cost \$ Million	Operating Cost \$/tonne of Concentrate	IRR % pa
<b>Base Case</b>	Concentrate pipeline, power line, Third Party Power at Menzies	1,582.6	62.78	19.8
<b>Option 1</b>	Concentrate Pipeline, power line, Owner Power, Menzies	1,751.4	56.94	20.6
<b>Option 2</b>	Rail to Menzies, Owner power at Mt Ida	1,760.1	58.90	19.7
<b>Option 3</b>	Rail to Menzies, Owner power at Menzies, power line	1,818.0	58.90	19.1

**Notes:**

- Based on a 20 year mine life at 25 mtpa producing 10 mtpa of Magnetite Concentrate
- Based on a waste to ore strip ratio of 1.5 to 1
- Inclusive of a royalty of 5%, assuming full equity financing and ignoring taxation
- Concentrate price of \$110 per tonne
- All \$ are Australian, excepting Graph 1 which is in US\$.

Based on these attractive Scoping Study results, a full Feasibility Study will now be launched for completion at the end of 2012, so to identify the best strategic option to develop the Project.

Jupiter also has a Scoping Study underway on the Mt Mason DSO Hematite Project, due for completion in late April. Mt Mason has an inferred resource of 5.75 m tonnes at 59.9% Fe and offers an opportunity to generate early cash flows from a 1.5 mtpa DSO operation commencing in early 2013. Jupiter plans to undertake a Feasibility Study on Mt Mason concurrently with that for Mt Ida.

A 40 man exploration camp is being established at the Company's Central Yilgarn Iron Project site. Drilling contracts are currently out to tender with a major drill campaign to commence in early May. This program is intended to increase the confidence level in the current resources and the size of the inferred resource base.

Jupiter is well funded to deliver the Feasibility Studies on both Mt Ida and Mt Mason These projects broaden the foundation for Jupiter's strategy to provide raw material feedstock for the production of steel.

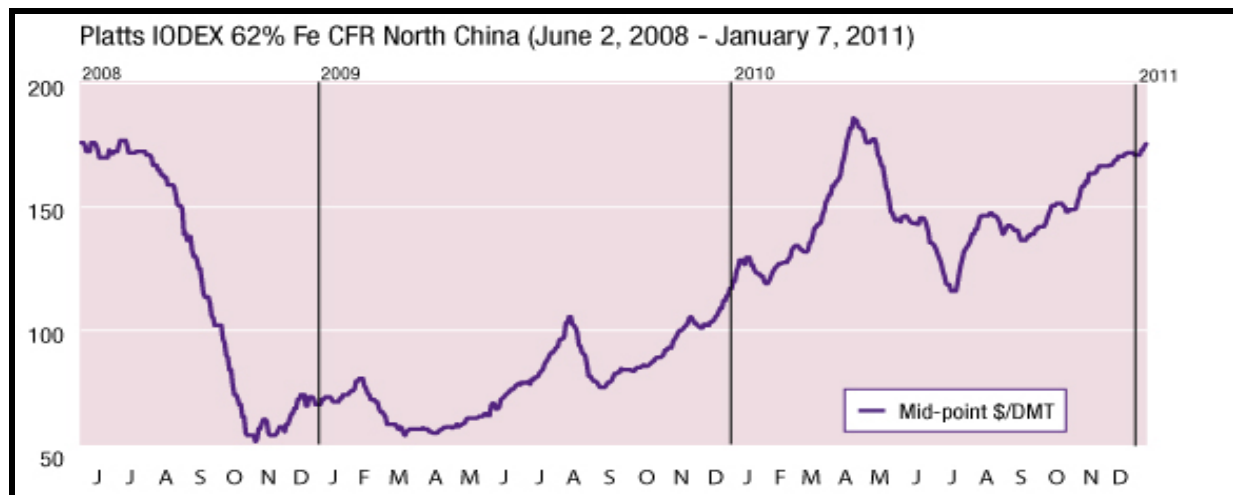
Jupiter's Chairman Mr Brian Gilbertson commented "The Mt Ida Magnetite Project has the potential to transform the Central Yilgarn into an important Australian iron ore province. The Pallinghurst Co-investors remain fully supportive of these initiatives.

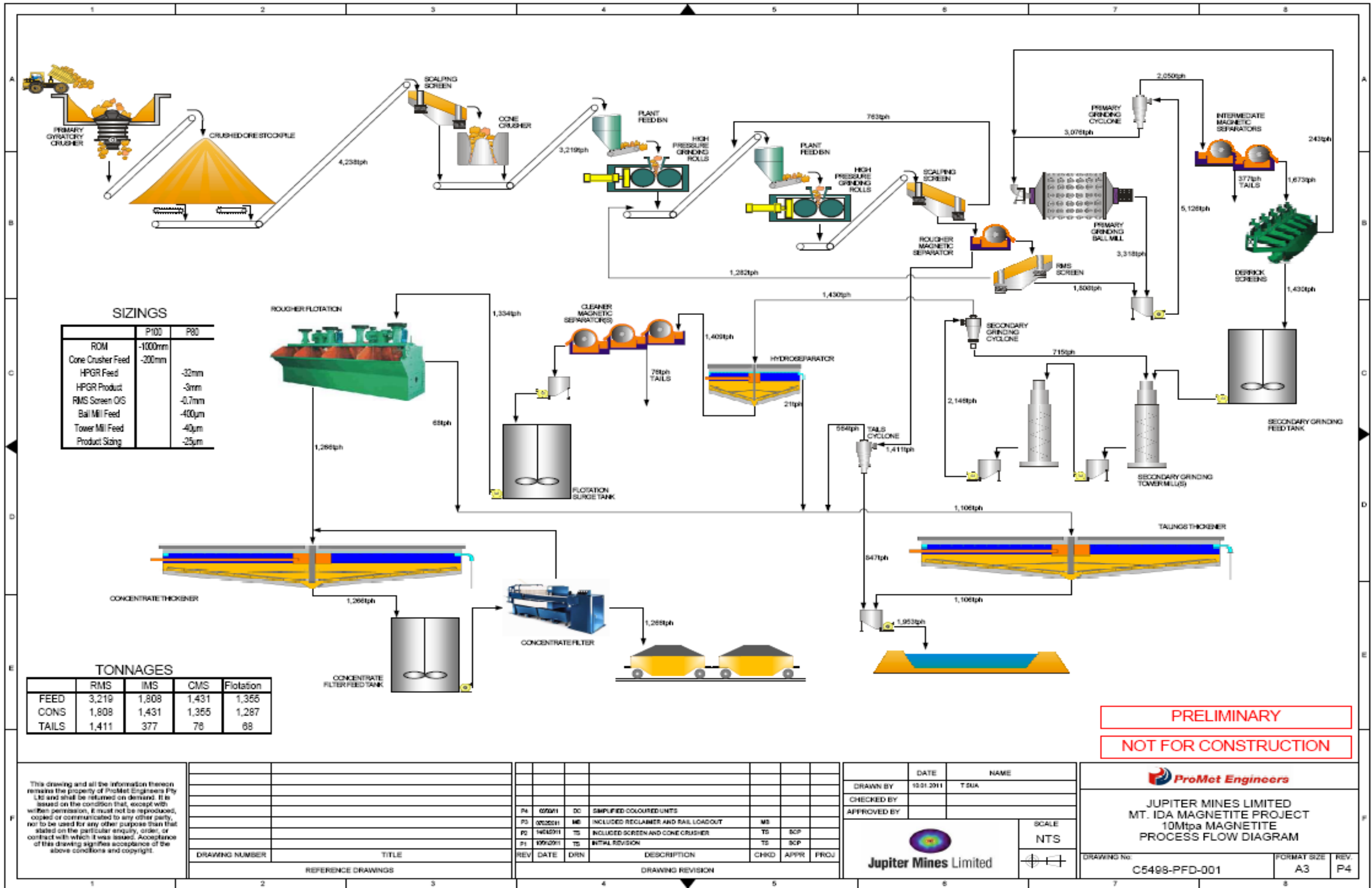
Yours faithfully  
**Jupiter Mines Limited**



Greg Durack  
**Chief Executive Officer**

**Graph 1 – The current Iron Ore Prices Chart**





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**ProMet Engineers**

**JUPITER MINES LIMITED  
MT. IDA MAGNETITE PROJECT  
10Mtpa MAGNETITE  
PROCESS FLOW DIAGRAM**

DRAWING No:	FORMAT SIZE:	REV.
C5498-PFD-001	A3	P4

## Competent Persons Statement

*The information in this release that relates to Exploration Results is based on information compiled by Mr Charles Guy, a Member of the Australian Institute of Geoscientists, and Mr Michael O'Mara a Member of the Australian Institute of Geoscientists.*

### **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 Geoscientists 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*

### **Senior Exploration Geologist: Michael O'Mara Competent Person Inferred Resource Statement**

*The information in this announcement that relates to Exploration Results, Mineral Resources or Ore reserves is based on information compiled by Mr Michael O'Mara who is a Member of the Australian Institute of Geoscientists and a full-time employee of Jupiter Mines Limited. Mr Michael O'Mara 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'. Michael O'Mara consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears Michael O'Mara holds the position of Senior Exploration Geologist with Jupiter Mines Limited.*

The estimated quantity and grade of the magnetite inferred resource has been restricted to magnetite Banded Iron Formation (BIF) in the area currently covered by drilling on an approximate 250m x 150m drill pattern at Mt Ida central using vertical holes. This is represented by an area approximately 2.2km (North North-east) \* 1km (east-west) on the Central Mt Ida mineral resource. Grade interpolation has been extrapolated using ordinary inverse distance squared on composited sample results and a nominal 15% Fe cutoff value for magnetite BIF mineralization. A digital terrain surface (based on magnetic survey flow), has been used to with structural mapping to limit extrapolation of the mineralization. Internal waste zones (mafic units) less than 5m within the BIF units have been included in the Inferred Resource model as internal dilution. Generally all oxide material occurs between the surface and a down hole depth of 50m. No oxide material is included in the Inferred Resource model. Densities of 3.2t/m<sup>3</sup> have been applied for evaluation of the magnetite mineralization.

While the Company is optimistic that it will report additional resources in the future, any discussion in relation to Exploration Target over and above the stated Inferred Resources is only conceptual in nature. There has been insufficient exploration to define a Mineral Resource over and above the Inferred Resource and it is uncertain if further exploration will result in determination of a Mineral Resource.

### **Consultant David Milton: Competent Person Inferred Resource Statement- Mt Mason**

*The information in this report that relates to Mineral Resources at 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 deposit under consideration and to the activities undertaken to qualify as a Competent Person as defined in the December 2004 Edition of the Australian 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 appear."*