# Jupiter Mines Limited

## Building a new supplier of raw materials for the steel industry

Investor Presentation October 2010





Pallinghurst had identified four key opportunities (platforms) and maintains a hands-on role in the development of these platforms.



## **Jupiter Snapshot**

Key statistics (A\$)



#### One year share price / volume history



Post Transaction Ownership Structure

Pallinghurst Co-Investors

Investec

AMCI

EMG

Balance

L.

POSCO Australia

Pallinghurst Steel Feed

Red Rock Resources





- On 12<sup>th</sup> August an EGM of Jupiter shareholders overwhelming approved the acquisition of a 49.9% stake in Tshipi from the Pallinghurst Co-Investors for New Jupiter Shares.
- All conditions have been met and the issuing of the Jupiter consideration shares will be a formality over the next two three weeks.
- Jupiter Mines is presently developing the next step in its SFC strategy.



- No economic growth without steel, and no steel without:
  - Iron Ore;
  - Manganese; and
  - Coking Coal.
- Top quality iron ore reserves are concentrated in Australia and Brazil:
  - 97% of Australia's iron ore production is from Western Australia;
  - Pallinghurst's iron ore investment (Jupiter) is in the Yilgarn region of Western Australia.
- Manganese reserves are concentrated in South Africa:
  - 80% of the world's economic manganese resources are found in the Kalahari Manganese Field, South Africa;
  - Jupiter's prime manganese asset (Tshipi) has an exceptional location within the Kalahari Manganese Field.
- The steel industry has consolidated from a highly fragmented industry, into one controlled by the "majors".
- The next phase, upstream integration, has started as the majors (Arcelor Mittal, Tata, POSCO and Chinese) compete for equity access to long-term raw material supplies (iron ore, coking coal and manganese). Consolidation in iron ore is advanced; similar changes will follow in the manganese and coking coal sectors.
- SFC strategy will compete in that space: supplying raw materials to the steel industry.
- POSCO, the world's 4<sup>th</sup> largest (US\$34Bn) steel producer has invested in that Pallinghurst strategy.



### Jupiter's Australian DSO/Hematite and Magnetite Strategy - Central Yilgarn Consolidation



- Jupiter has positioned itself as the consolidator of undeveloped Central Yilgarn iron ore deposits. If successful, these might be included in a joint venture with existing and planned future iron ore operations of the Central Yilgarn Region.
- The Project would augment existing rail infrastructure and utilise spare Cape-size ship loading capacity at Esperance Port. Exports might be increased from the current 8.0 mtpa to approximately 20 mtpy in **"BROWNFIELD**" expansion mode. This would require significantly less capex (est. US\$1bn) compared to a new greenfield operation of similar capacity elsewhere in Australia.
- In combination with CNR operations (based on train loading at Koolyanobbing) and the development of other iron ore resources in the Central Yilgarn Region, the expanded direct shipping ore production could increase to about 16 mtpy. Adding the possible Mt. Ida magnetite concentrate production (initially at 5.0 mtpy but possibly expanded to 15 mtpy) could provide a long term export of iron ore from Esperance of +20 mtpa for more than 20 years.

The potential and grade of the Mt Ida Project is conceptual in nature. There has been insufficient drilling to define a Mineral Resource and it is uncertain whether further exploration will allow determination of a Mineral Resource.

## Jupiter Mines Limited Central Yilgarn Region - Infrastructure Leinster



## Jupiter's Australian Magnetite Strategy – Mt Ida Magnetite Project



• Exploration drilling to date has generated a Conceptual Exploration Target of 1.1 to 1.3 billion tonnes of magnetite at 30% to 40% Fe (developed under JORC Guidelines).

#### Mt IDA- PHASE 1

- An initial JORC inferred resource is expected in the December quarter with the 11,000 metre RC drilling programme currently underway.
- The aim is to define a JORC resource of 400m tonnes of magnetite by end December 2010.
- From the Conceptual Exploration Target, further drilling may be undertaken in 2011 to target the High Grade Magnetite. Upon completion of the 11,000 metre drill program a scoping study will be commenced.
- 7.5km strike length, low stripping ratio, high recoveries, and an exceptionally clean concentrate – "one of the best I have seen" according to the late Geoff Wedlock.

The potential and grade of the Mt Ida Project is conceptual in nature. There has been insufficient drilling to define a Mineral Resource and it is uncertain whether further exploration will allow determination of a Mineral Resource.

## Mt Ida Magnetite Project – Next Steps

Upon a Scoping Study positive outcome:

- Target 750m tonnes into JORC resource (after phase 2 drilling);
- Establish exploration camp, sample / core shed at site;
- RC and Diamond Drilling totaling 25 000 meters;
- Drill program staged on meeting set milestones;
- Conduct metallurgical test work program;
- Hydro-geological, water exploration to secure supply; and
- Complete a Prefeasibility Study.





## Manganese Market – Leveraged to Recovering Steel Demand

## Due to its primary use, manganese demand is influenced by trends in global carbon steel production.

#### **Manganese production**

- ~ 90% of manganese used in steelmaking influenced by trends in global carbon steel production
- No satisfactory substitute as a hardening alloy element and de-oxidant in steel
- In 2007, for every tonne of steel 9.5kgs of manganese was required (increase from 8.7kg/tonne in 2005)
- Forecast steel growth implies the need for a new Woodie Woodie mine every year



#### Growth in manganese content in steelmaking





#### Global manganese ore supply and demand forecasts



#### Manganese price



## Manganese Market – Chinese Imports to Significantly Increase

Chinese manganese imports are likely to rise given increasing local production costs and tightening environmental regulation.

#### Shifting Chinese manganese demand

- China circa. 50% of global steel production
- Consumes 26 mtpa of manganese ore
  - 7 mtpa imported medium to high grade
  - 19 mtpa local low grade (avg ~22%)
- Higher grade imported ore blended with low grade Chinese ore
- Local low grade production affected by:
  - Increases in cost of electricity and coke (more energy required than a higher grade ore)
  - Tightening environmental regulation
- Chinese steelmakers likely to move to more imported higher grade ore - RSA/Aus
- In Q3 2009, China became a net importer of manganese alloys for the first time
- If China switches all domestic production to Tshipi "type" ore, then an extra five new Tshipi sized mines will be required
- India another China in the making?

#### **Global steel production forecasts**



#### 2008 global manganese ore production





## Jupiter's South African Manganese Asset - Tshipi



Tshipi Bokone. Tshipi is presently conducting exploration activities on this property. The Northern Property is likely to include deeper outlier ore bodies

Ntsimbintle Gloria Property. Tshipi has an option to acquire this property from Ntsimbintle. Ntsimbintle is in the process of concluding technical studies on this property.

Tshipi Borwa: A world class open pit manganese property.



## Jupiter's South African Manganese Asset - Tshipi



The BHP controlled Mamatwan mine and sinter operation, adjacent to the Tshipi Borwa project – Jupiter has no interest in the this asset.

- South Africa hosts 80% of the world's economic manganese resources – approx. 13 billion tonnes.
- Kalahari Manganese Field ("KMF") hosts the bulk of these resources.
- The KMF hosts seven large mining operations including the BHP controlled mines of Wessels and Mamatwan. Only two of the operations in the KMF are presently open pit.
- The KMF has been supplying manganese to world markets for over 70 years and contains enough resources to continue to produce ore for another 100 years.
- Jupiter owns 49.9% of Tshipi which wholly owns the Tshipi Borwa Project: one of the last largest open pit projects in the KMF – 163mt (shallower than 250m) of manganese ore at 37% Mn content plus significant geological upside.
- Tshipi Borwa has been planned to produce 2.4mtpa (including fines) of manganese ore, the project has the ability to easily expand operations.

## Jupiter's South African Manganese Asset – Tshipi Borwa



- The Tshipi Borwa project (49.9% owned) is located adjacent to the Mamatwan mine, majority owned by BHP Billiton.
- Mamatwan has been a consistent manganese ore producer for over 46 years.
- Tshipi has completed extensive drilling, resource definition and a feasibility study.
- Project "go-ahead" should be given in 2010/2011, with production in late 2011/early 2012.
- Planned Tshipi Borwa production is 2.4mt of Manganese ore per annum. Mine capacity can be easily increased.
- No major obstacles expected in the development of Tshipi Borwa : moderate capex (US\$200m) and open pit mining.
- Regional consolidation and infrastructure sharing is being considered by Tshipi and the other operators in the KMF. If successful this could add significant value to all stakeholders.



## **Tshipi Geology**





•Tshipi will require only approximately 4km of new rail infrastructure in order to connect the mine with an existing Transnet owned railway.

•Most rail access within South Africa is owned and controlled and run by the state owned Transnet.

•Port Elizabeth remains the prime bulk exporting port, with Durban playing an increasingly more important role.

•Transnet is presently conducting a study into the expansion of Saldanha to accommodate up to 12mtpa of manganese ore.

•Tshipi continues to work with and engage with Transnet.

•Tshipi short term solutions will involve Durban and Port Elizabeth, with a long term solution likely involving Saldanha.

## Jupiter's Australian Manganese Asset – Oakover Manganese Project



- Five exploration licences, 890km<sup>2</sup>.
- 60km north of the Woodie Woodie manganese mine (Consolidated Minerals).
- First phase drill programme completed in June 2010 intercepted significant manganese mineralisation.
  - 2m at 35.3% Mn from 17m;
  - 4m at 31.2% Mn from 33m (including 1m at 49.6%);
  - 4m at 26.8% Mn from surface;
  - 6m at 25.0% Mn from 12m; and
  - 19 significant intercepts of over 15% Mn encountered.
- First pass drilling results confirms the presence of host rocks similar to Woodie Woodie Manganese mine.
- Possible marketing synergies on account of blending opportunity with Tshipi product due to complementary ore characteristics.

The potential and grade of the Oakover Project is conceptual in nature. There has been insufficient drilling to define a Mineral Resource and it is uncertain whether further exploration will allow determination of a Mineral Resource.

## **Oakover Manganese Project**

- On eastern tenement VTEM survey recently flown
- A number of anomalous zones identified

- Heritage Surveys planned to clear drill lines in the March quarter
- First pass drill program to be completed early 2011







- Gravity survey recently completed over VTEM C11 & C12 anomalies.
- Drill program currently being planned on gravity anomalies in the December quarter.



Jupiter is evaluating additional acquisition opportunities that would significantly advance its SFC. The key commodities being considered are:

•Coking coal

•Iron Ore

•Manganese





Jupiter which was a junior explorer (A\$20 million market Capitalization) will soon transform into a A\$609m company, with promising manganese and iron ore assets and blue-chip long-term supportive shareholders on it's register. This will form the platform from which Jupiter will further advance its SFC strategy.

#### 2010-11 Targets

- Trigger the development of Tshipi.
- Progress Mt Ida by delivering a magnetite resource confirmation and a feasibility study.
- Progress discussions to consummate an infrastructure sharing MOU with Portman to facilitate the consolidation of resources, and mining capital costs reduction. This will allow an increased level of iron ore production in the Yilgarn via the port of Esperance.
- Advance corporate opportunities to enhance our iron ore, manganese and coking coal ambitions.



## **Competent Person Statements**

During 2008 and 2009, Tshipi é Ntle carried out a comprehensive drilling campaign which was the basis for the completion of a feasibility study. A Mineral Resource estimate has been prepared for the Tshipi Kalahari Manganese Project which is compliant with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves ("the SAMREC Code (2007")), and the Australian JORC 2004 Code.

The Mineral Resource estimate totals 163.2 million tonnes at 37.1% Mn with significant potential for additional resources beyond the currently defined levels.

#### V M Simposya

BSc (Geology), MSc (Mining Engineering), is a Partner and Principal Geologist with SRK and is registered Professional Natural Scientists (Geological Science) Pri. Sci. Nat., and also member of South African Institute of Mining and Metallurgy (SAIMM). He is responsible for signing off Mineral Resources as a Competent Person for the SAMREC Code, the JORC Code and the NI 43-101 and has consulted extensively for various financial institutions. He has over 30 years experience in the mining industry with expertise in geological modelling and resource estimation.

#### Exploration Manager: Charles William Guy

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.

#### Conceptual Target Statement for Mt Ida Magnetite Project

Mr Darryl Mapleson who is a member of the Australasian Institute of Mining and Metallurgy has compiled the information within this report that relates to mineralisation. Mr Mapleson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2004 edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion of this information in the form and context in which it appears in this report.



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