

# Tshipi é Ntle

a new consistent manganese supply with which to build tomorrow's cities

## **Table of contents**



- Introduction to Tshipi
- The significance of the Kalahari Manganese Field
- The Tshipi Borwa Project
- Logistics
- What makes Tshipi different

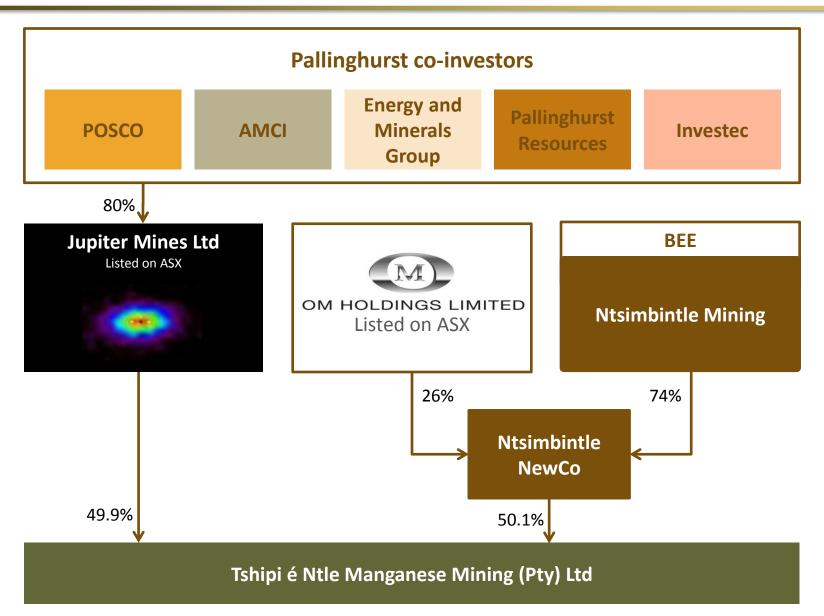
## **Company Snapshot**



- Tshipi é Ntle Manganese Mining (Pty) Ltd is a privately owned company that is presently building a new large open pit manganese mine adjacent to the Mamatwan Mine, South Africa.
- The decision to proceed with the Tshipi Borwa mine was given in Q1 2011 and Tshipi has made significant inroads with mine development.
- The Tshipi Borwa mine:
  - Has a 163 million tonnes resource base @ 37% all of which can be mined by open pit.
  - Will cost approximately \$200m to develop, shareholders fully funded with cash on their balance sheets.
  - Is scheduled to produce its first manganese ore in second half 2012.
  - The mine will annually produce 2.4mt for over 60 years; being an open pit mine its production capacity can be easily increased.
  - Is owned by two distinct shareholder groups:
    - Ntsimbintle, a controlling Black Economic Empowerment mining house representing many divergent broad based BEE shareholders including Safika Resources, Nkonjane and Kgalagadi Trust and the ASX listed OMH, and
    - Jupiter Mines Limited an ASX listed company controlled by the Pallinghurst Co-Investors.

## **Tshipi Ownership Structure**





## The Significance of the Kalahari Manganese Field



There are several mineral deposits that are often quite difficult to comprehend in terms of size and extent.

Some of these geological "anomalies" include:

#### The Witwatersrand Gold Basin:

- The Witwatersrand basin is approximately 350 km long and 200 km wide.
- The richest gold field ever discovered, after over 125 years of continuous mining it still hosts over 40% of the worlds gold resources.
- It has produced over 50 million kilograms of gold about half the gold ever produced.

#### The Bushveld Complex:

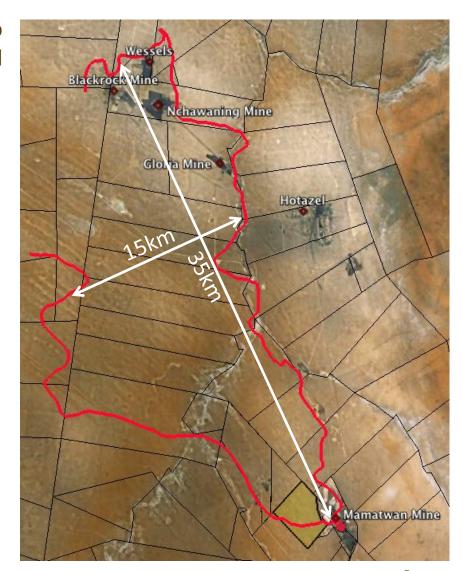
- 90% of the world's PGE reserves.
- 60 percent of the world's known chrome reserves.
- 66 000 square kilometers, approximately 440 km, and 350 km.
- Contains also significant amounts of nickel, copper, vanadium, magnetite and fluorspar.

## The Kalahari Manganese Field



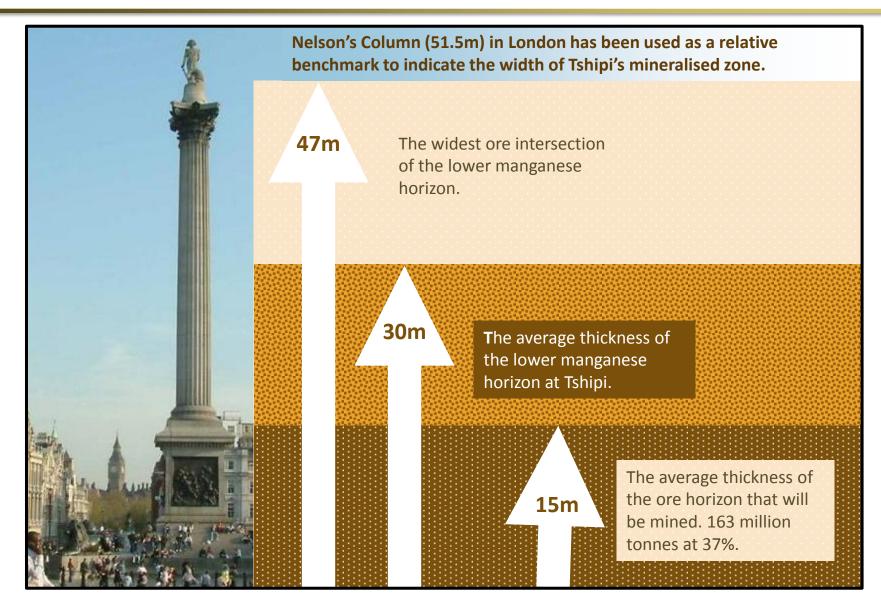
The Kalahari Manganese Field (KMF) is also one of the world's most significant mineral deposits:

- It has been estimated to host 80% of the world's economic minable manganese.
- The KMF is 15 km wide and 35 km long.
- It has been consistently producing manganese since 1927.
- The manganese ore horizon is present in consistent thick seams and occur on a scale that to date has not been observed anywhere in the world.
- A new mine, the Tshipi Borwa Mine, will ensure that the KMF will continue to supply manganese for decades to come.
- Tshipi Borwa is located on the southern shallow sub-outcrop of the KMF.



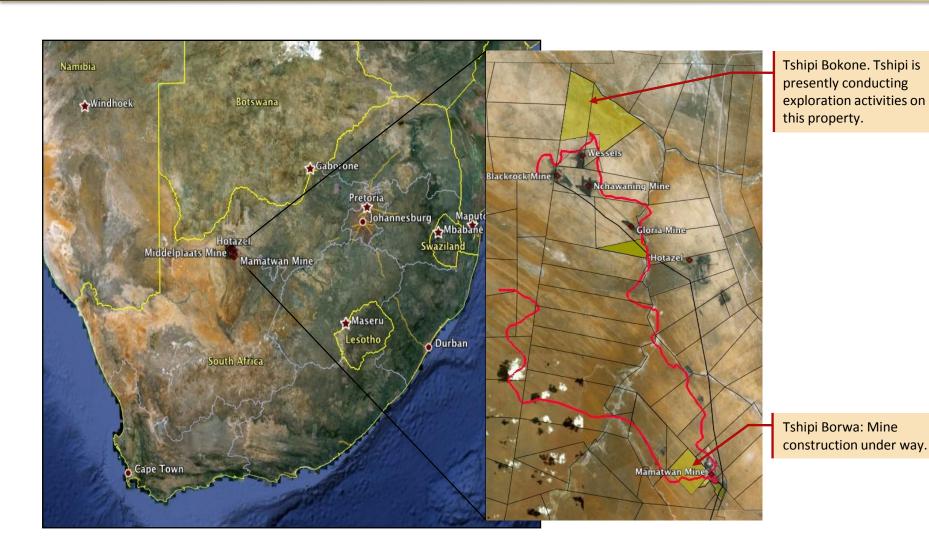
## The extent of Tshipi Borwa's Mineral Deposit





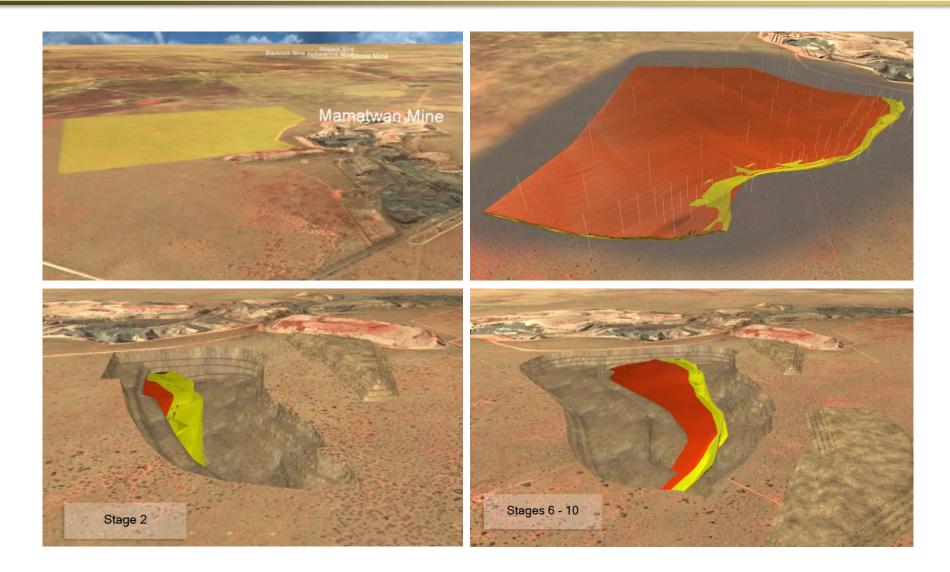
## **Tshipi Project Location**





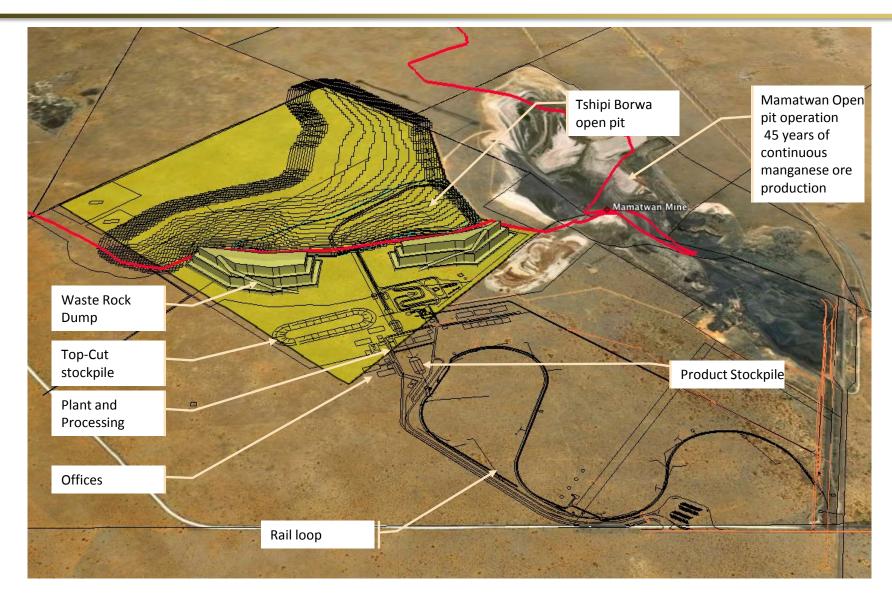
## **Tshipi Planned Development**





## Tshipi Borwa – Planned Surface Infrastructure





## Mining & Processing



#### Mining

- Open Pit Mining
- As the manganese ore horizon commences at 70m below surface only 15 million tonnes of overburden will need to be removed before Tshipi can commence mining at the full rate of 2.4mtpa ROM (pre-strip).

#### **Processing**

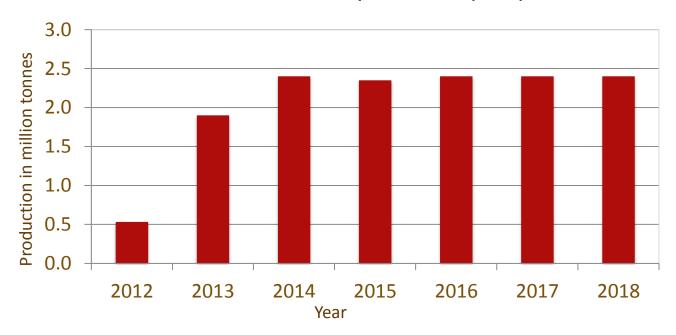
- Only crushing and screening will be needed to produce a saleable ore product.
- Tshipi will produce a standard Mamatwan grade manganese ore with properties as shown.

Lumpy Product Specifications	
Mn	37%
Fe	5.0%
SiO <sub>2</sub>	5.5%
Al <sub>2</sub> O <sub>3</sub>	0.3%
P <sub>2</sub> O <sub>5</sub>	0.04%
CaO	15.5%
MgO	3.4%
LOI	17%
Size	90% -75mm; +1.5mm

## **Production Profile**

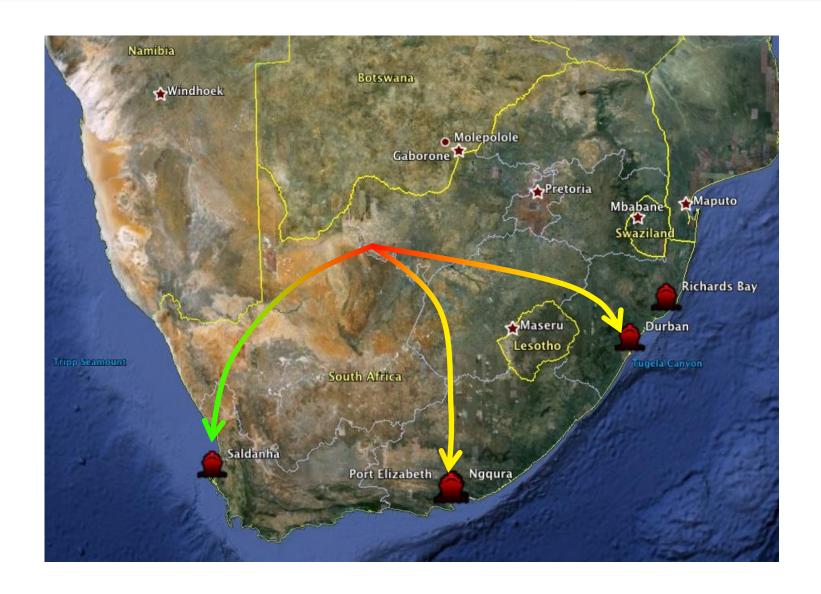


- Production was planned to be at 2.4mtpa of fine and lumpy material in steady state. The production is only from the lower 15m of the lower manganese ore horizon.
- Upper body, and the Top-Cut layers offer potential upside. Generally these seams have a lower grade.
- The mine life should be in excess of 60 years, all open pit.



## **South African Ports**





## Logistics



- Port Elizabeth remains the prime bulk manganese exporting port.
- Transnet have submitted a "business case" for internal approval to expand Port Elizabeth from 4.4mtpa to 5.5mtpa expected completion March 2013.
- Durban is playing an increasingly more important role to the manganese industry, this
  is likely to grow in future.
- Durban Port is presently being upgraded to increase the port capacity to ±4mtpa (presently handling less than 1.2mtpa), it is unclear whether the rail design will match this capacity however Transnet are presently improving the rail service to Durban by granting manganese ore priority status and running longer, more efficient, trains.
- Tshipi has prequalified through Transnet's Manganese Export Capacity Allocation.
- Industry participants and Transnet are conducting a study into the expansion of Saldanha to 90mtpa – Manganese is being investigated at an annual rate of up to 12mtpa.
- Transnet is also exploring the establishment of a manganese terminal at the port of Ngqura (30km from Port Elizabeth).
- Tshipi short term solutions will involve Durban and Port Elizabeth, with a long term industry solution likely to involve Saldanha.

## Tshipi – Development History



Date	
October 2006	Ntsimbintle is awarded prospecting rights
November 2006	Drilling commences at Tshipi Borwa.
October 2007	Pallinghurst enters into an agreement to acquire up to a 49.9% stake in Tshipi.
May 2009	Tshipi Borwa Feasibility Study completed.
February 2010	OMH subscribes for an indirect 13% stake in Tshipi thereby fully funding Ntsimbintle.
March 2010	Jupiter Mines, a Pallinghurst investment company, agrees to acquire 49.9% of Tshipi. As a result the Pallinghurst Co-Investors control over a 80% stake in Jupiter.
April 2010	Ntsimbintle is awarded a Mining Right and an approved EMP.
September 2010	Transfer of the Mineral rights from Ntsimbintle to Tshipi approved by Minister of Mines.
January 2011	Jupiter raised \$150m primarily for Tshipi construction.
February 2011	Decision to commence construction.

Four and a half years from awarding of Mineral Rights to decision to mine.

### Conclusion



#### What makes Tshipi different?

- Exceptional ore resources Ore in continuous thick tabular mineralised zone;
- Open pit;
- Access to infrastructure;
- Easy mining with little processing; and
- Scalable.

#### All ensuring a low cost of production.

# But most importantly Tshipi benefits from having strong and supportive shareholders that:

- All work together to realise a common goal;
- Bring a complementary and unique skillset to the partnership;
- Have a desire to make a difference in the communities and country in which they operate and who wish to work towards that goal; and
- All independently have the financial capacity to bring Tshipi Borwa into production.



# These unique characteristics will ensure the successful construction and operation of the Tshipi Borwa Mine and with it a supply of manganese into the world markets for decades to come.

Thank you

Finn Behnken

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## **Competent Persons Statement**



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 plus a further 145 million tonnes @ 31.75% contained within the Top-Cut (see Jupiter Mines release dated 2010.11.09) with significant potential for additional resources beyond the currently defined levels.

#### V M Simposya Competent Person: Tshipi Kalahari Manganese Project Resource Statements

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.

The information in this announcement that relates to Exploration Results is based on information compiled by Mr VM Simposya who is a registered Professional Natural Scientist (Geological Science) Pri. Sci Nat, and also member of South African Institute of Mining and Metallurgy (SAIMM) and a full-time employee of SRK Consulting.

VMSimposya 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'. VM Simposya consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

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