



## *Building a Global Manganese Business*

Vincent Algar  
Managing Director



## Disclaimer



### ***Forward Looking and Exploration Target Statements***

Some statements in this announcement regarding future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's exploration programme, outlook, target sizes, resource and mineralised material estimates. They include statements preceded by words such as "potential", "target", "scheduled", "planned", "estimate", "possible", "future", "prospective" and similar expressions. The terms "Direct Shipping Ore (DSO)", "Target" and "Exploration Target", where used in this announcement, should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. Exploration Targets are conceptual in nature and it is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Reserve

### ***Reference to reserves***

While Shaw River Resources remains optimistic of the reserve potential of its tenements any reference to "reserves" or use of the term "ore" in this document is/are conceptual in nature. Further work is required to determine mineral reserves.

### ***JORC Compliance***

The information in this report to which this statement is attached that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Vincent Algar who is a Member of the Australasian Institute of Mining and Metallurgy. Vincent Algar is a full-time employee of the Company. Vincent Algar 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'. Vincent Algar consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



# Corporate Overview ASX: SRR



Ordinary Shares on issue (SRR)	326.5 million
Options (mostly ~20 cents)	21.5 million
Market Cap at 26 cents	A\$84.9 million
Cash	A\$6.0 million
Top 20	68%
- Atlas Iron Limited	45.4%
- OM Holdings	11.1%

## Tony Walsh

Chairman & Non Executive Director



## Vincent Algar

Managing Director



## Ken Brinsden

Non Executive Director





# Why Manganese?





## Manganese – No Substitute

- Most used metal after Iron, Aluminum and Copper
- Critical component in modern steelmaking
- Increases hardness, toughness, stiffness and wear resistance as an alloying element
- **No satisfactory substitute**



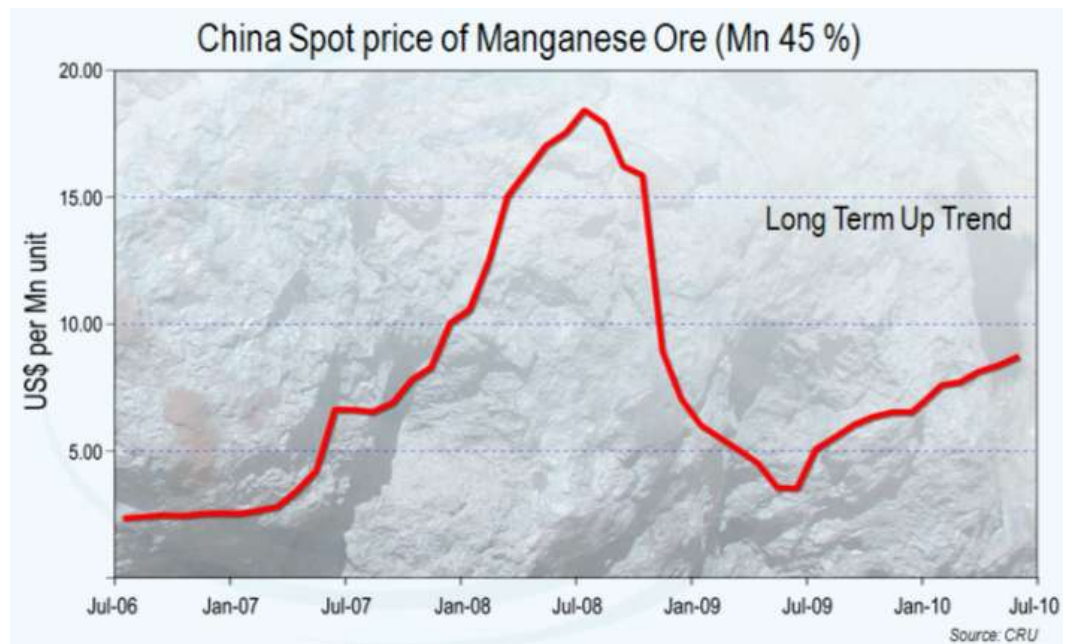
Annual Global Manganese Ore  
Production 54 Million Tonnes



# Manganese Mining “The Value Proposition”



- Manganese usage in steel is increasing
- New high grade, high quality, consistent manganese supply in demand
- Long term pricing gives ore a high in-situ value
- Simple processing means CAPEX for plant is low (compared to gold, base metals)
- Value allows higher margins compared to other bulks
- Short timeframe from discovery to mining
- Short payback period





# PROJECTS

- Namibia
- Pilbara
- Ghana





## Otjo – Transformational Acquisition for Shaw River

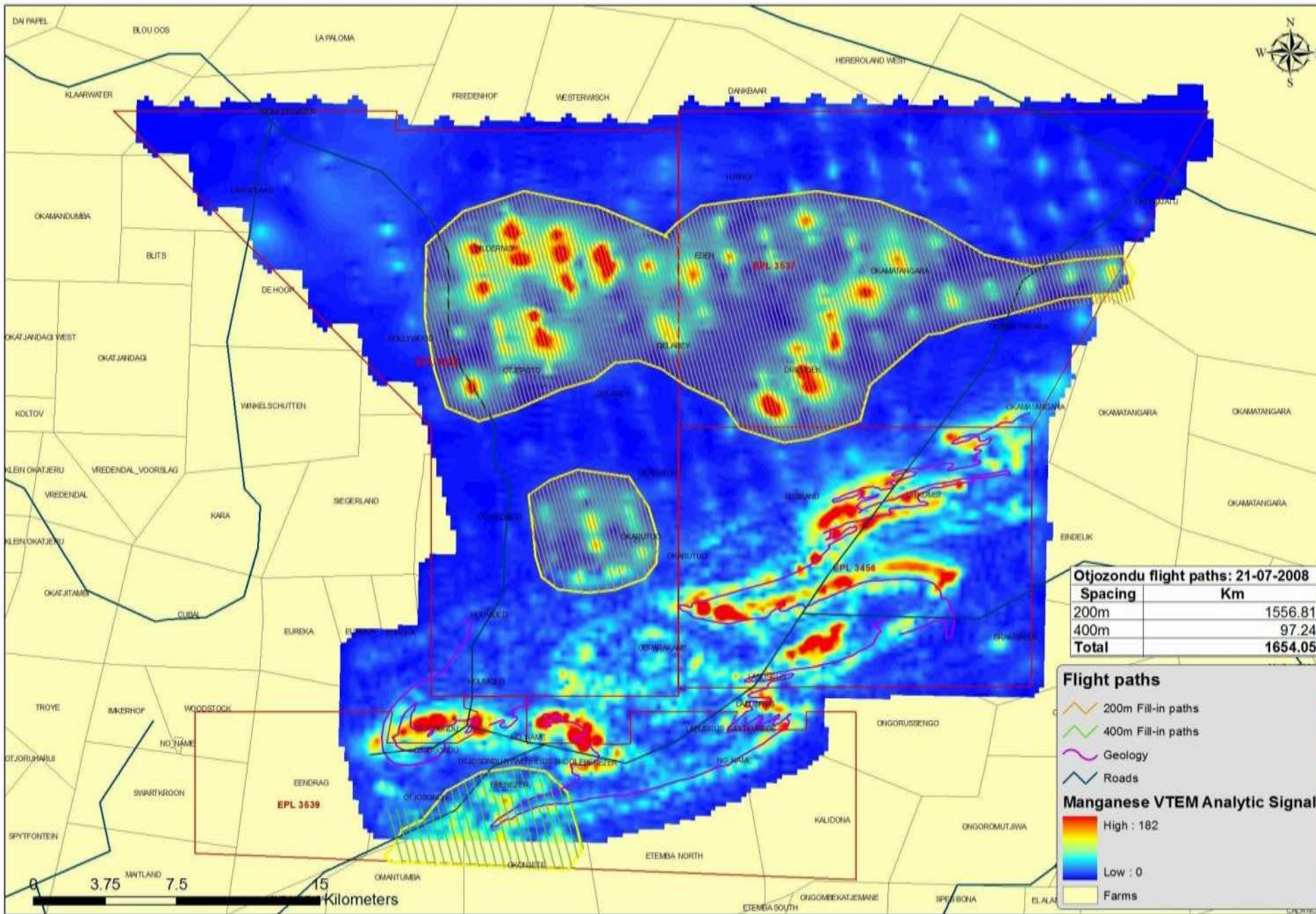


- Shaw River has acquired 75.5% of the Otjozundu Manganese Project (Otjo) in Namibia.
- Exploration target of 35Mt to 50Mt grading 23% to 27% Mn
- Significant exploration upside – only 24% of 44km known strike of manganese horizons tested
- Road, rail and port infrastructure in place
- Feasibility study to commence immediately
- Targeting initial production at double current capacity in 2012









Otjozondu flight paths: 21-07-2008

Spacing	Km
200m	1556.81
400m	97.24
<b>Total</b>	<b>1654.05</b>

**Flight paths**

- 200m Fill-in paths
- 400m Fill-in paths
- Geology
- Roads

**Manganese VTEM Analytic Signal**

- High : 182
- Low : 0
- Farms

3.75 7.5 15 Kilometers





# Otjo – Excellent Infrastructure







## Otjo – Near Term Production



- Production at Otjo has been underway on a small scale since the 1950's
- Recent trial mining and jig processing operations have produced up to 10,000 tonnes per month producing 36 to 38% Mn ore for export
- Shallow drill-and-blast mining method with a crusher and jigging plant
- Technical due diligence supports mining by 2012
- High value product => currently manganese is selling for US\$5.3-7.5/dmtu FOB, implying an expected sales price of approximately US\$200 – US\$300/tonne into China





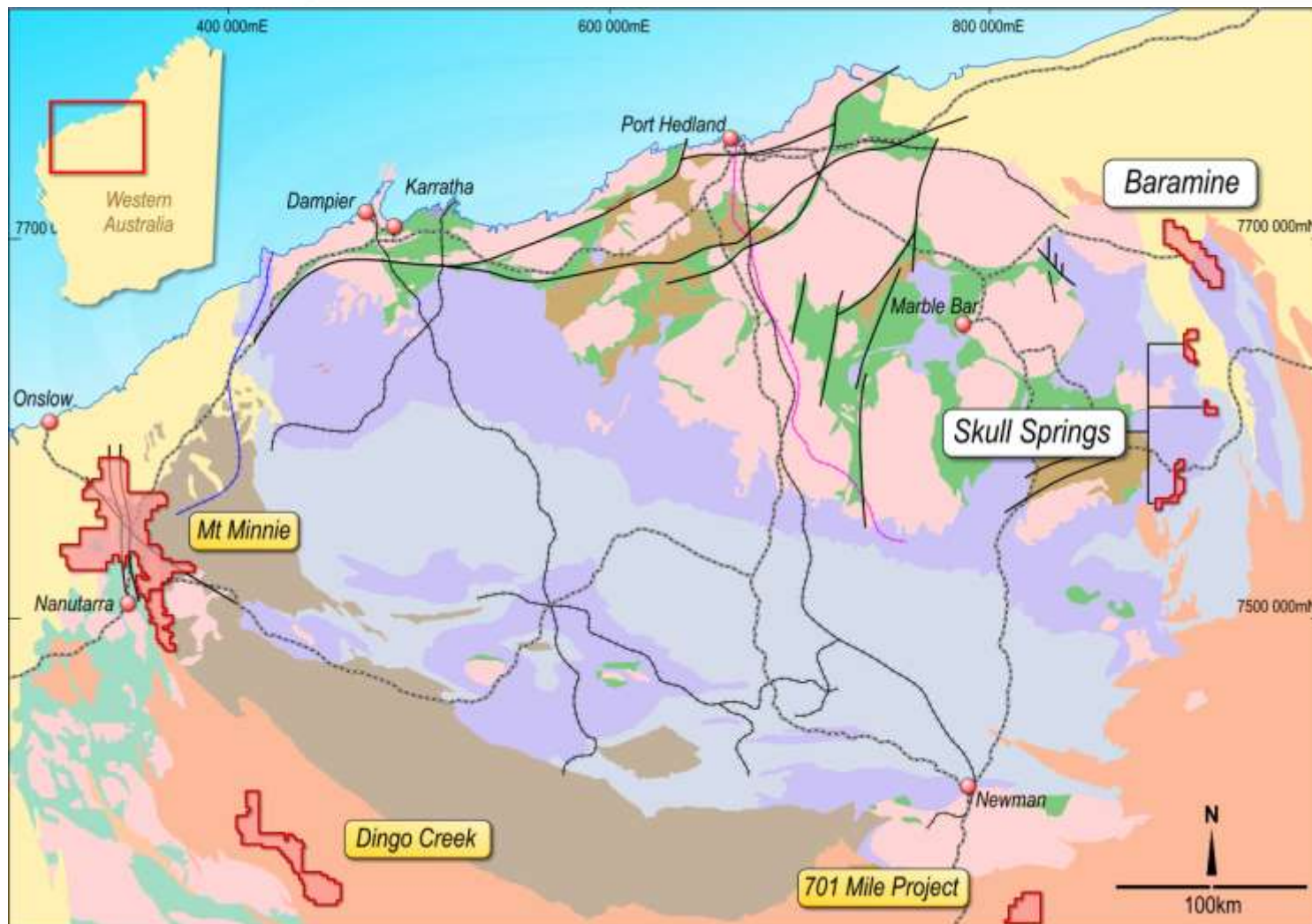
## Otjo – Plans for 2011

- Maiden JORC resource expected at Otjo in Q1 2011, based on existing drilling data(22,000m of diamond , 11,000m RC)
- Resource/Reserve definition drilling programs to commence in April 2011
- Feasibility Study will be completed in 2011. To include:
  - Increased definition of Resources
  - Mineral processing optimisation
  - Supply chain optimisation
  - Market analysis and customer selection
- Otjo will quickly become a major, low-cost manganese producer generating significant future cashflows





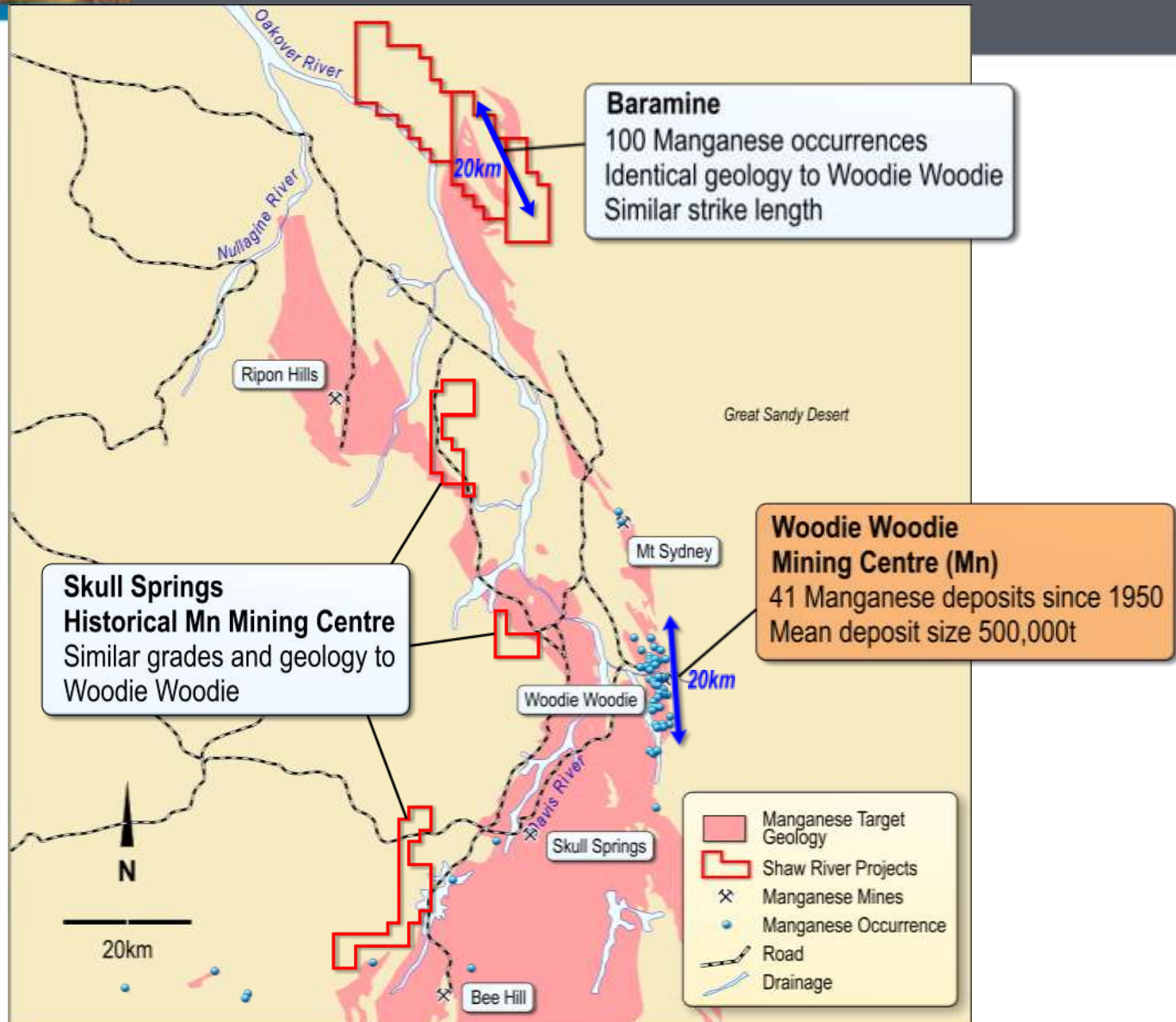
# Australian Manganese Project Locations



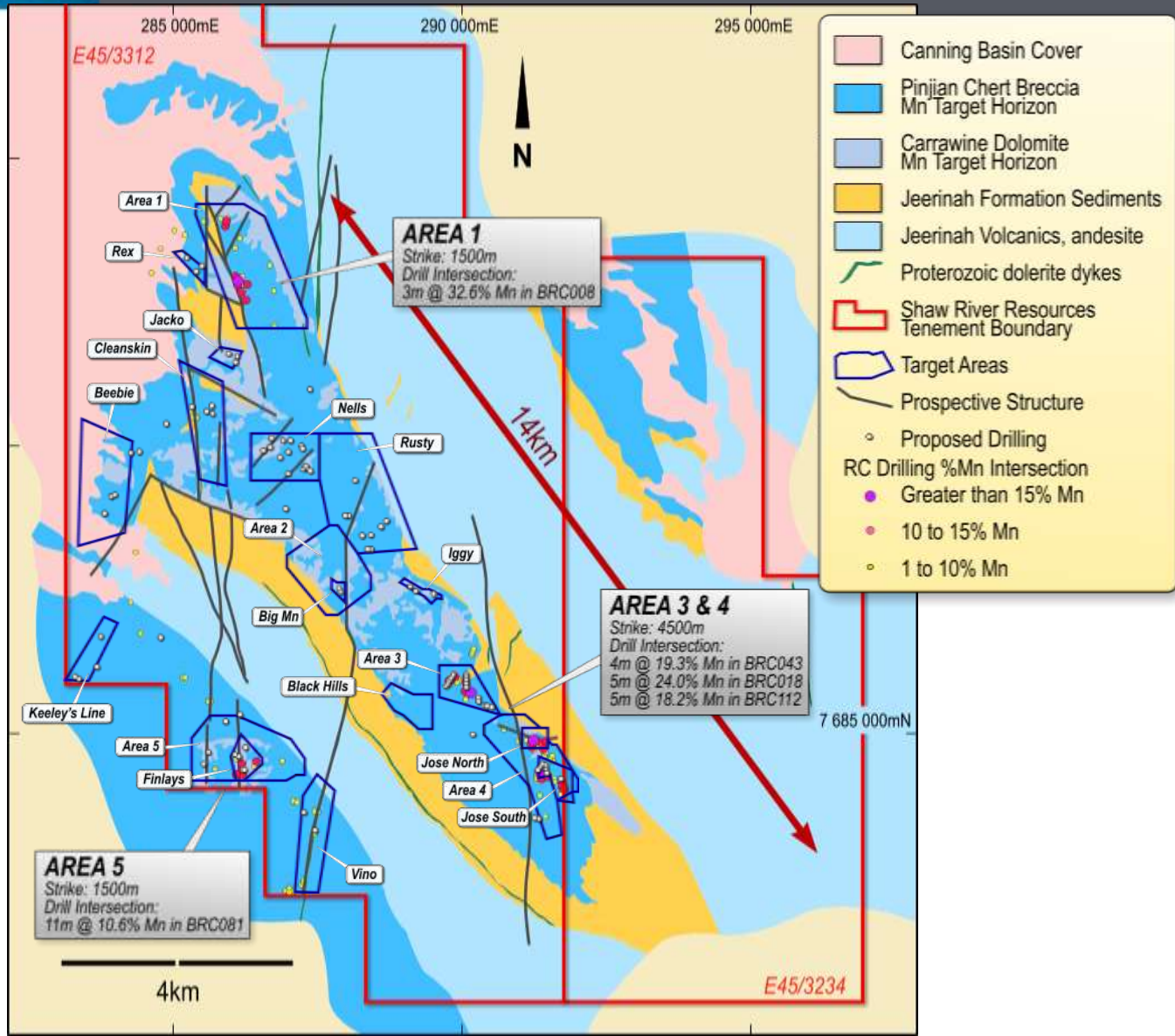




# Prime Locations East Pilbara Manganese



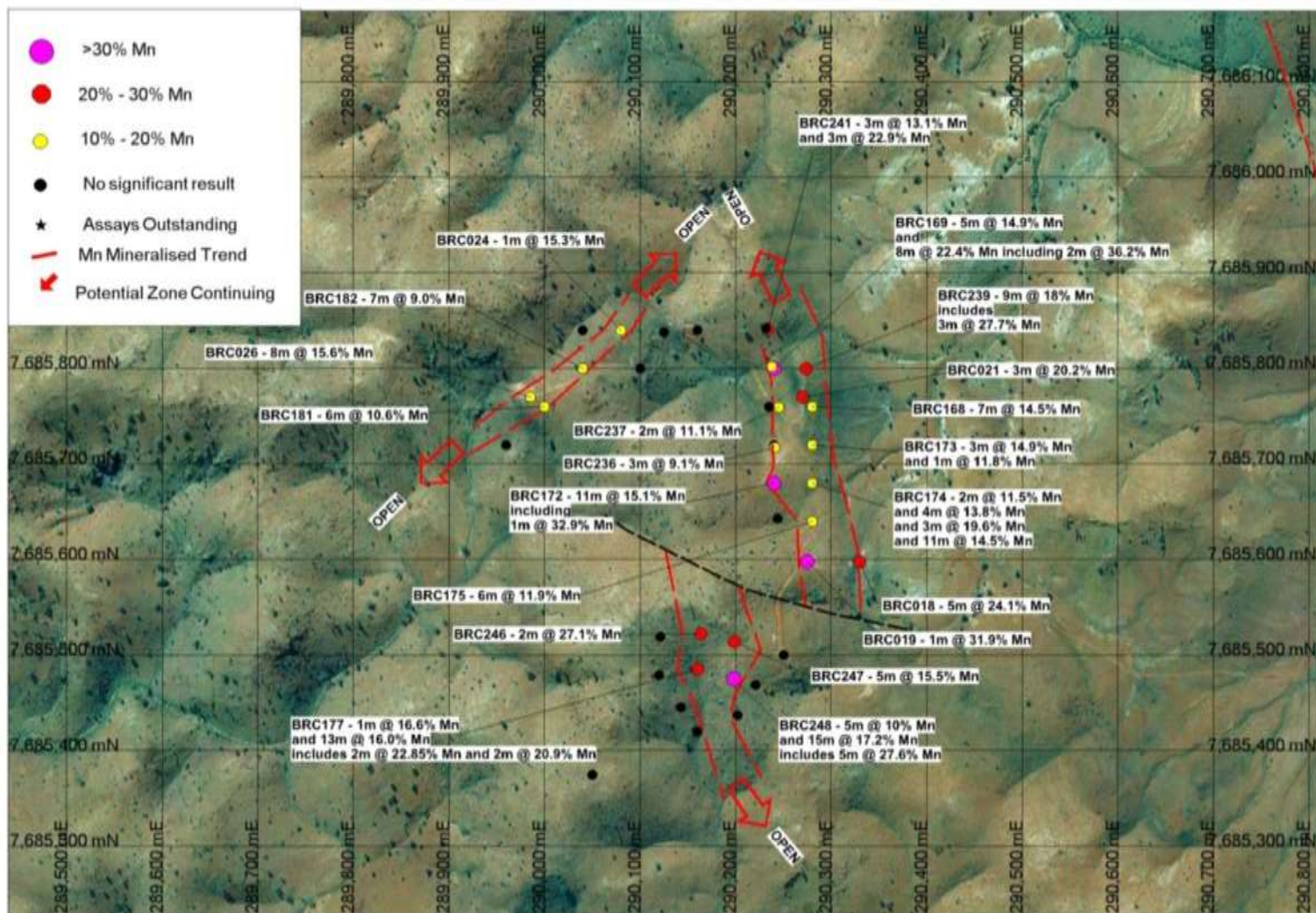
# Baramine Manganese Project (70% SRR Mn, Fe)







# Area 3 – Potential Resource Zone







## Baramine - Positive Beneficiation Test Results



- Beneficiation Test Results indicate Baramine Manganese intersections upgrade well to produce attractive Mn product using Dense Media Separation (DMS) to 43% Mn, 10% Fe
- Low Cost DMS processing plants are common in manganese operations
- Important Product Characteristics :
  - Grade of 43% Mn achieved from 20% Mn feed to DMS.
  - Mn Yield of 76% over 7 composites, 60% of Mn recovered overall from coarse and fine tests
  - Mn yield of 35% over 7 Composites, 28% Overall mass yield overall from coarse and fine tests
  - Iron of 10%, low contaminants , including P<0.04%
- Good results from multiple Baramine prospects produce compelling economic arguments – Drill Testing , scoping study to continue into 2011



# Pilbara - Activity & Upcoming News Flow



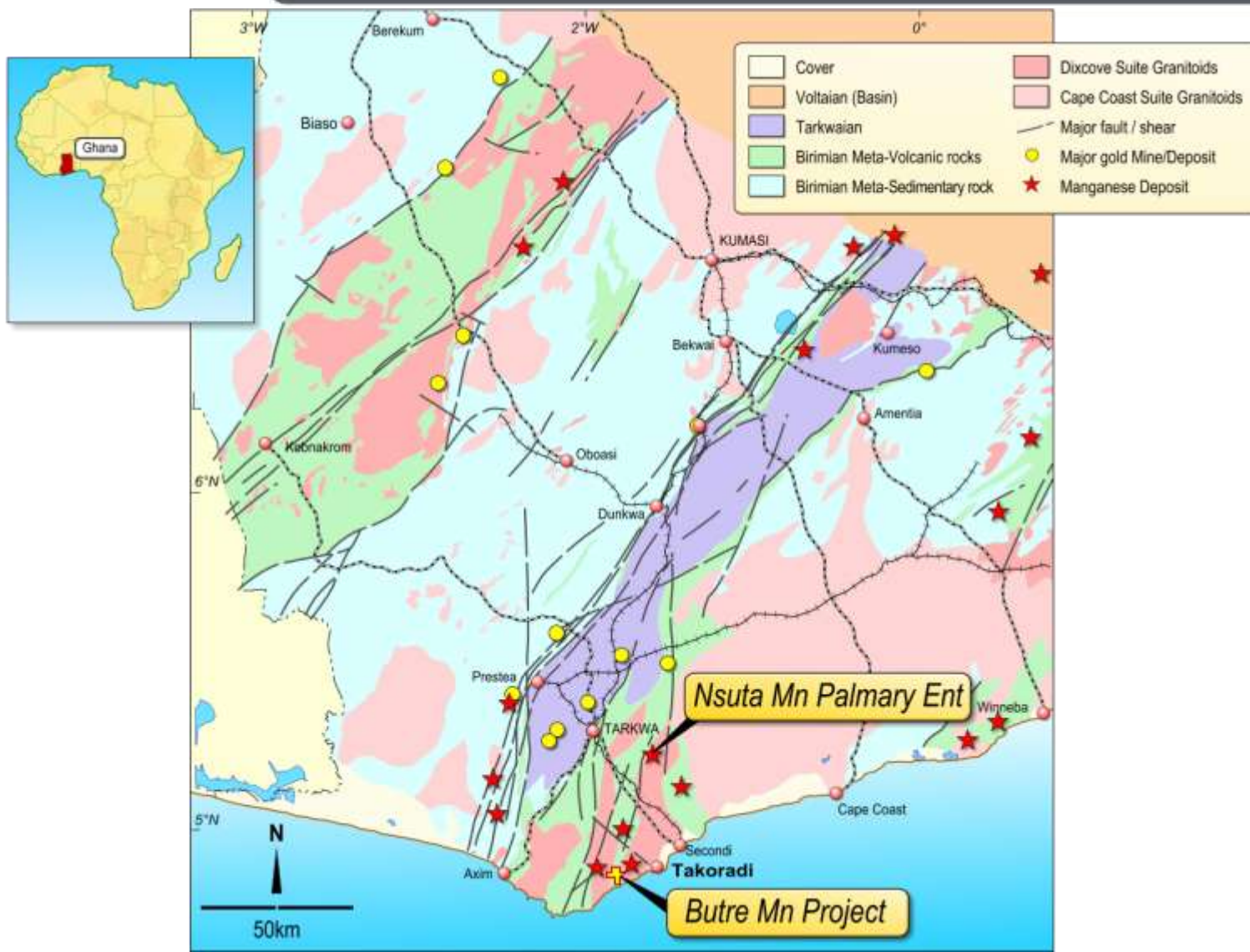
- **Baramine, Pilbara:**
  - 20,000 metre RC drilling to commence in Q2 2011
  - 1,000 metre diamond drilling program to determine beneficiation parameters to commence in 2011
  - Economic studies to commence in Q2 2011
- **Skull Springs, Pilbara:**
  - Q1 2011 - 1,200 metre first pass RC drilling programme





# Butre Project, Ghana

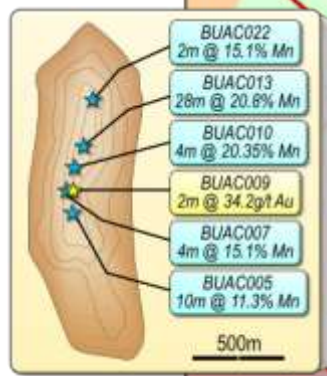
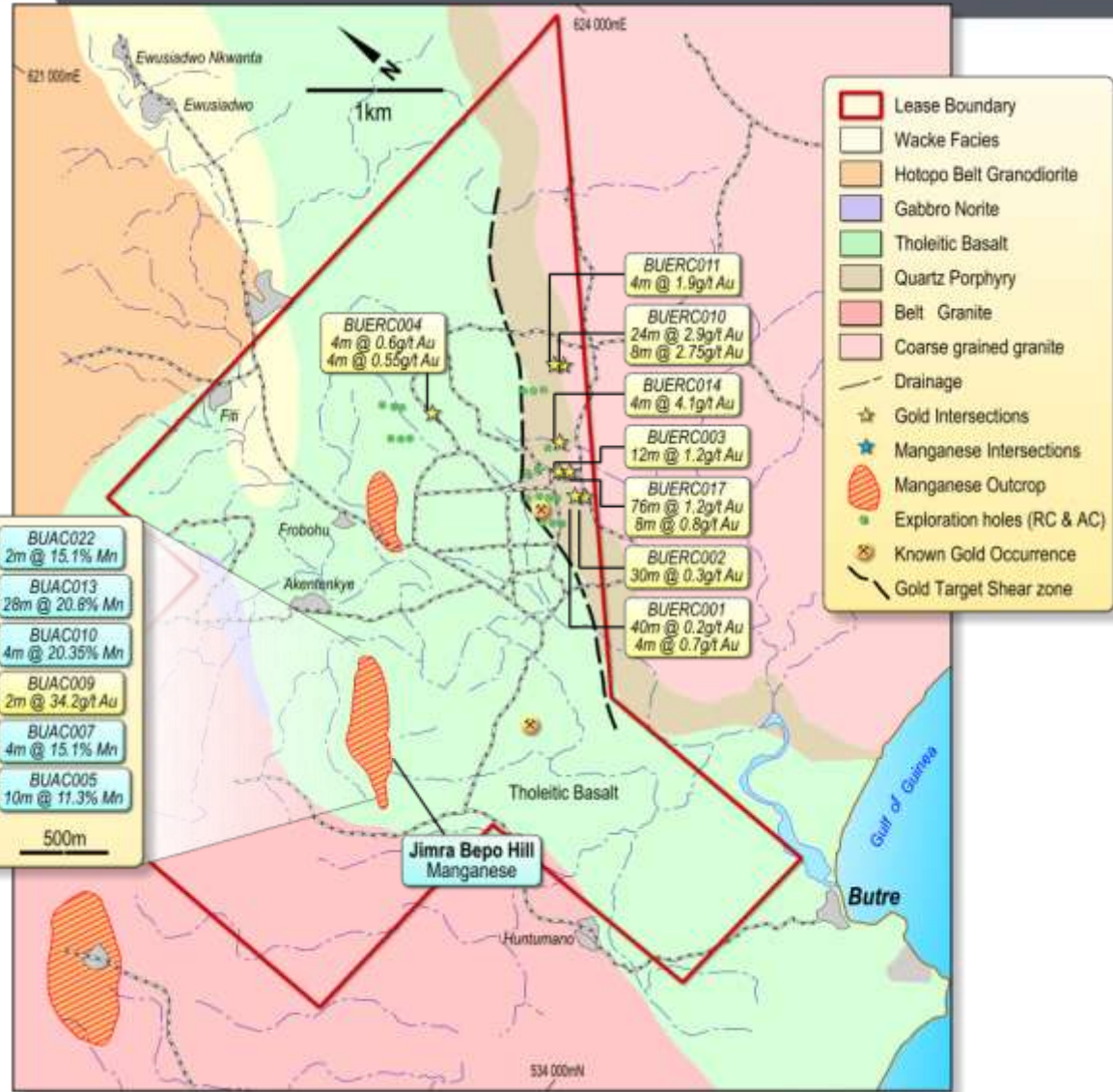
## 80% Shaw River





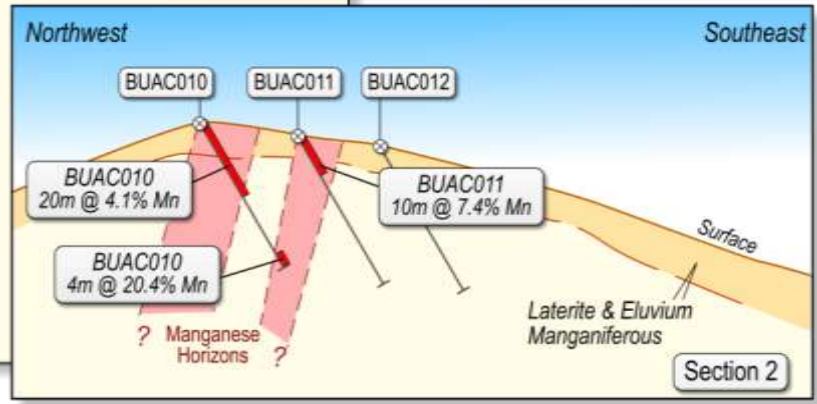
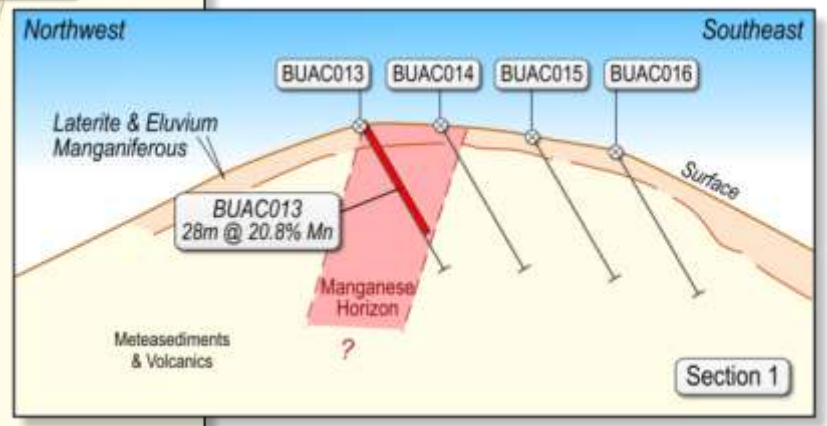
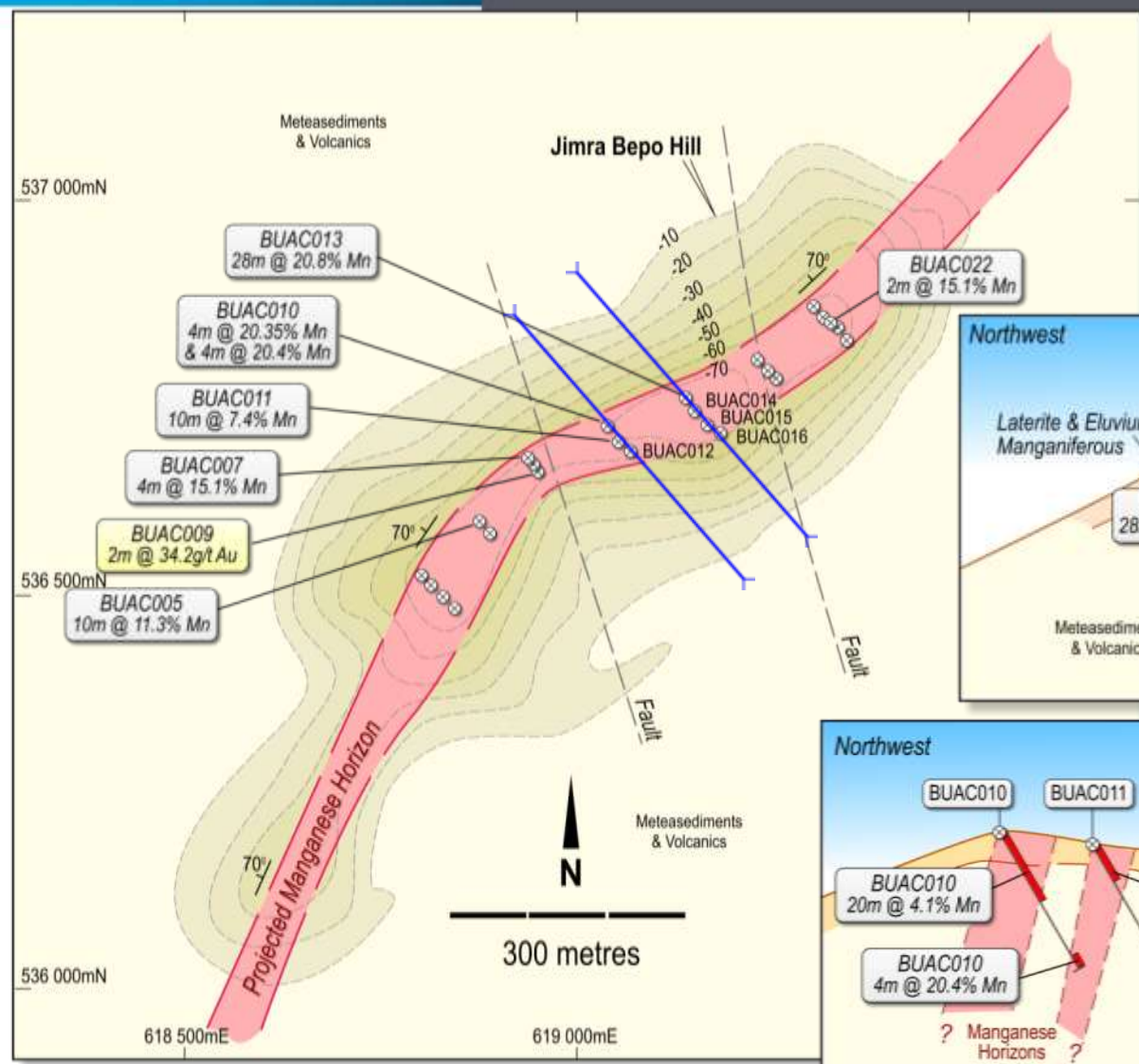


# Butre Manganese & Gold Project, Ghana





# Butre Manganese Drilling







## BUTRE Activity & Upcoming News Flow



- 1,500 metre RC drilling completed in February 2011, results due April 2011
- Bulk sampling results for beneficiation testing expected Q1 2011
- Scoping Study and mining permit applications to commence early in 2011 following next round of drillings and bulk test results.
- In light of Otjo Acquisition, Butre production from west coast of Africa will compliment Namibian production



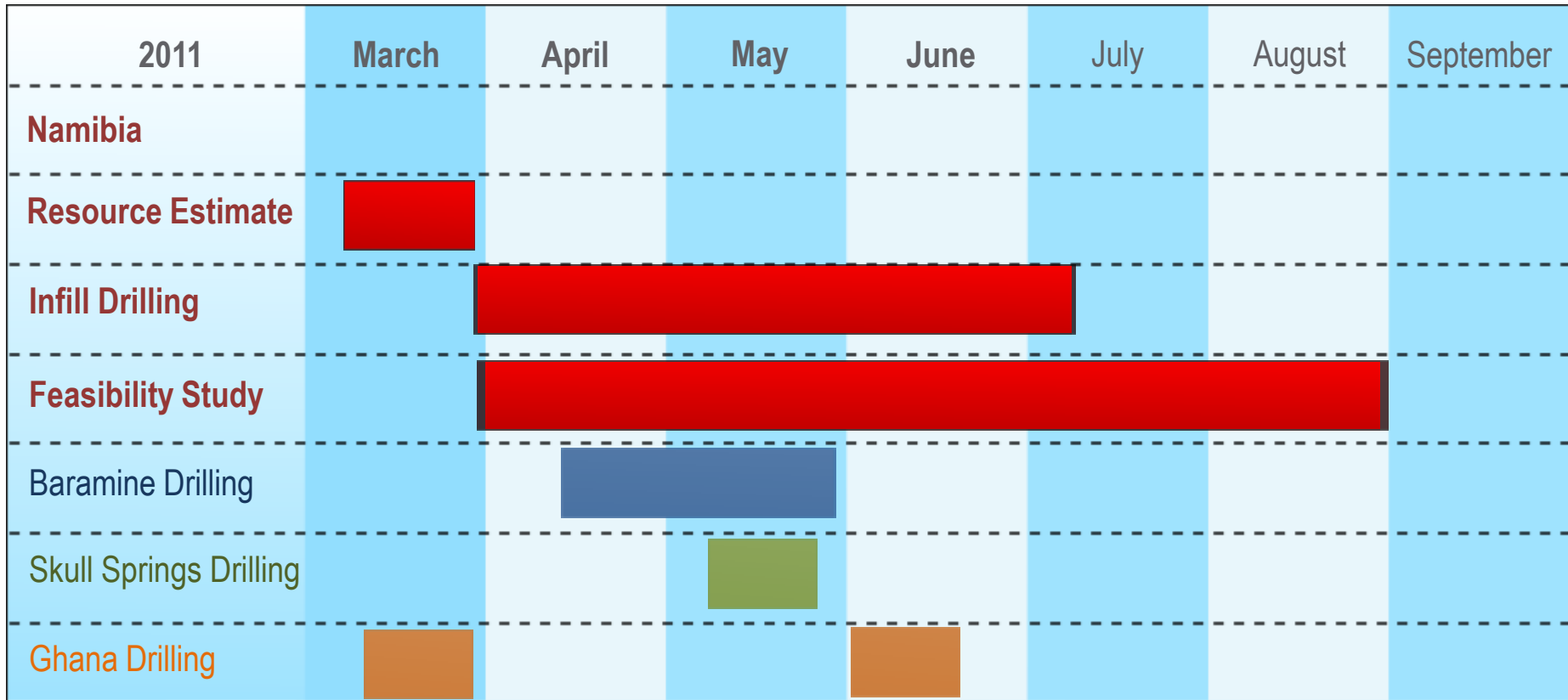




# PLANS



# Plans and Activities 2011





# Global Manganese Explorer and Producer



- Otjo catapults Shaw River to a near term producer of manganese
- Shaw River represents a globally unique investment into manganese exploration discovery and production
- Namibia, Australia and Ghana, are among the worlds best mining destinations
- Commodity cycle for iron and manganese shows significant supply pressure for low Phosphorous Si-Mn ores to supply the steel market into the near future
- Support from key shareholders AGO and OMH for SRR's high-value manganese strategy





# Otjo Mine Images



# Crushed Ore Stockpile - Otjo







# Processing Plant - Otjo







# Core Library - Otjo





# Crushing Plant - Otjo







# Broken Ore - Bosrand Orebody







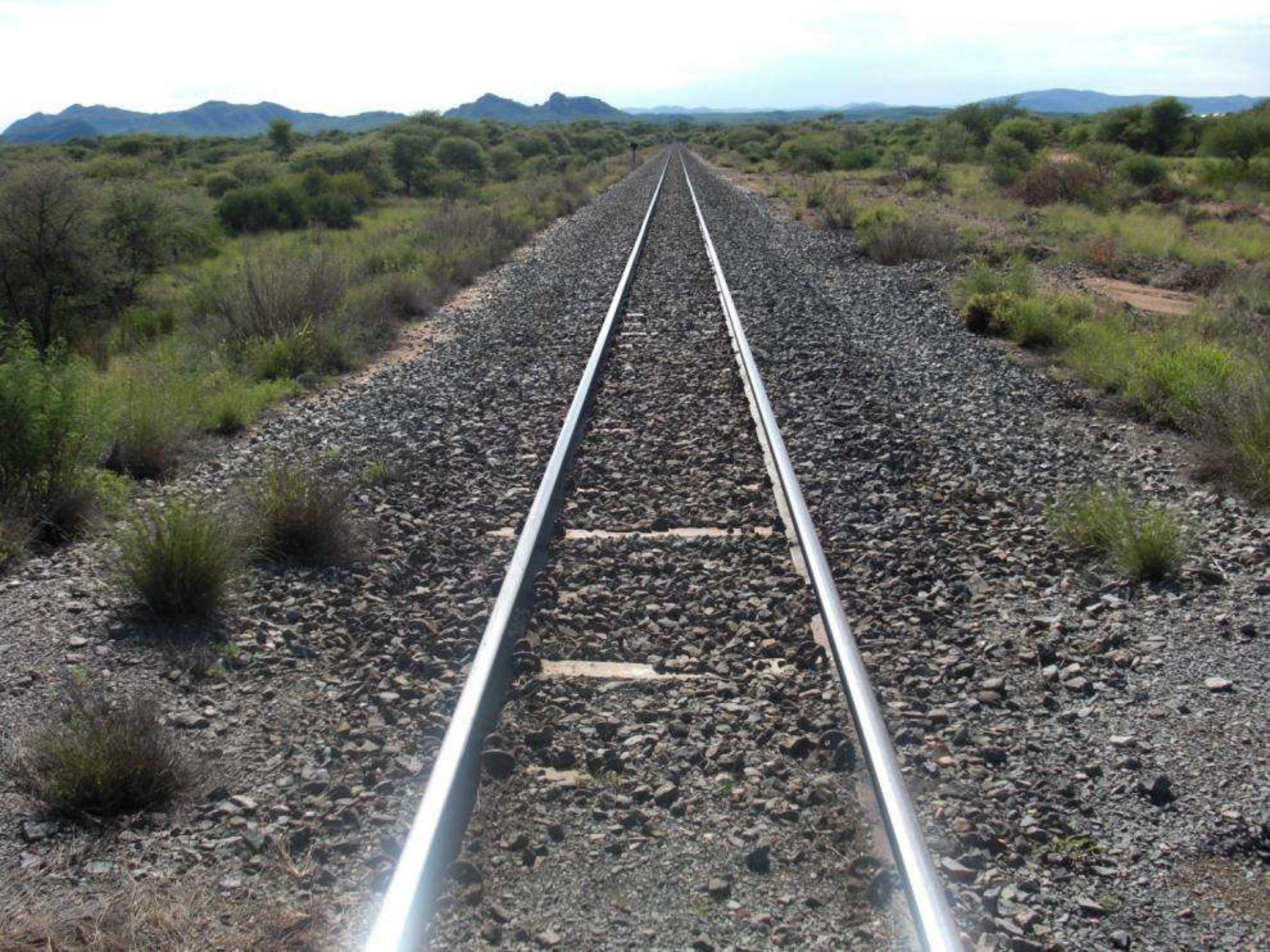














# Vincent Algar Managing Director



Shaw River  
Resources Limited

