Havilah Resources

A New Mining Force in South Australia

Maldorky Iron Ore Project :
A Different Approach

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Magnetite Strategy Presentation, 12th May 2016

SOUTH AUSTRALIA

Government of South Australia
Department of State Development

www.havilah-resources.com.au

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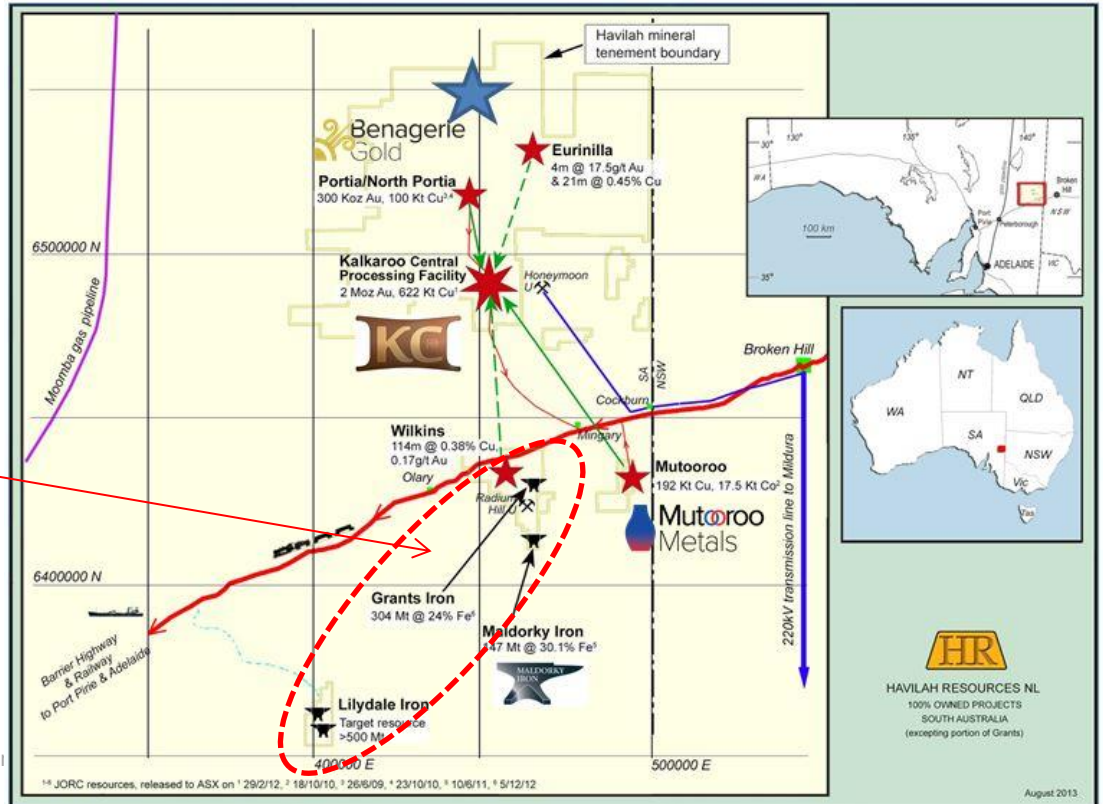
Competent Person Statement

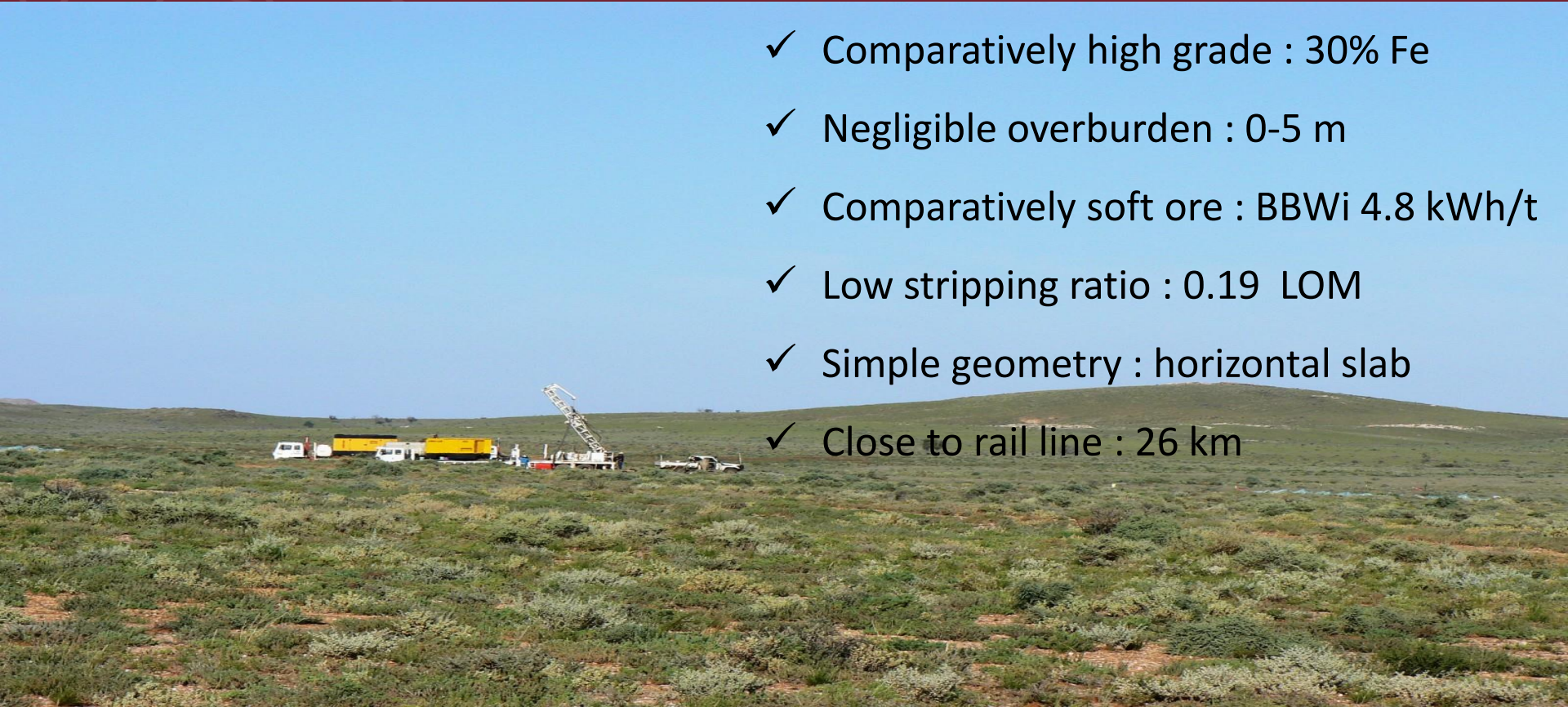
The information in this presentation that relates to Exploration Targets , Exploration Results, Mineral Resources and Ore Reserves is based on data compiled by geologist, Dr Chris Giles, a Competent Person who is a member of The Australian Institute of Geoscientists. Dr. Giles is a director of the Company and is employed by the Company on a consulting contract. Dr. Giles has sufficient experience, which is relevant to the style of mineralisation and type of deposit and activities described herein to qualify as a Competent Person as defined in the 2012 Edition of ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Dr. Giles consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears. Information for Kalkaroo and Croziers has been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. All other information was prepared and first disclosed under the JORC Code 2004.

Location – Braemar Iron Province

Havilah iron ore projects

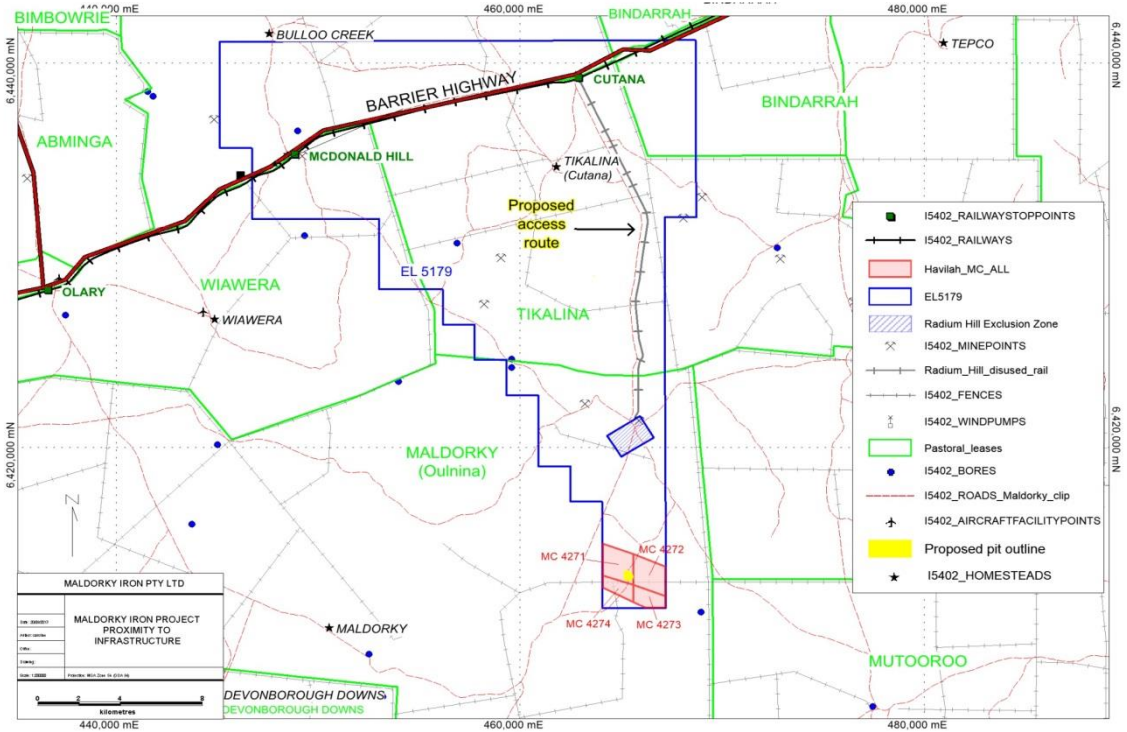


Maldorky Key Attributes



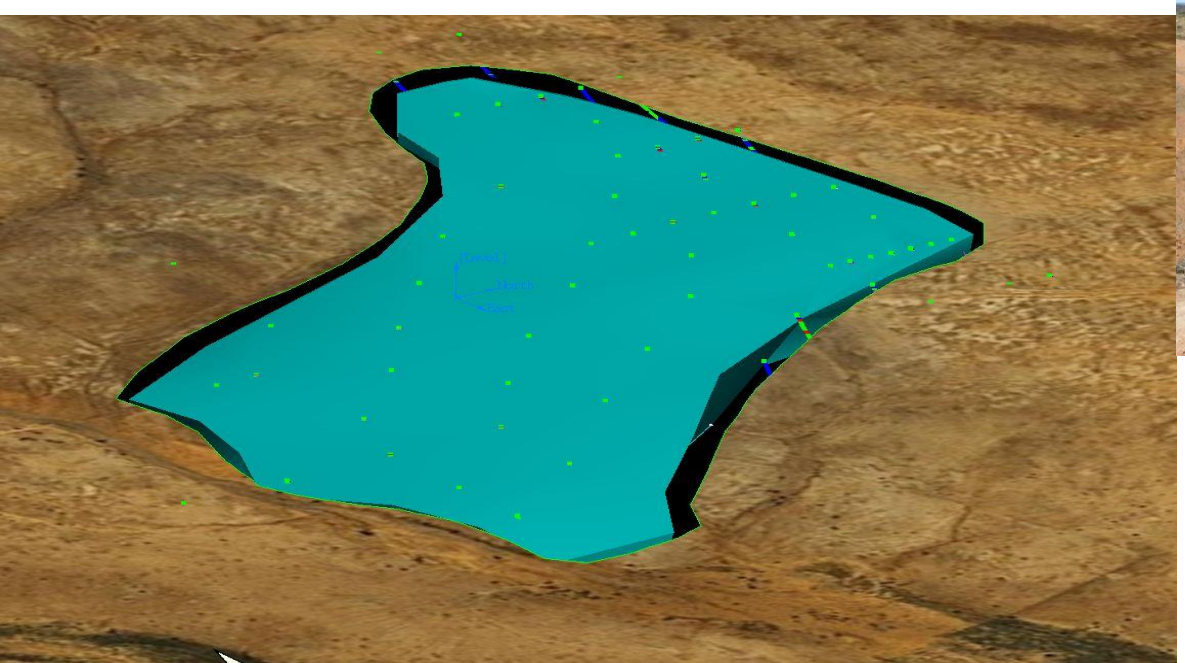
- ✓ Comparatively high grade : 30% Fe
- ✓ Negligible overburden : 0-5 m
- ✓ Comparatively soft ore : BBWi 4.8 kWh/t
- ✓ Low stripping ratio : 0.19 LOM
- ✓ Simple geometry : horizontal slab
- ✓ Close to rail line : 26 km

Tenement and local logistics



Deposit is Simple and At Surface

- **147Mt @ 30.1% Fe** Indicated Resource*
  (applying an 18% Fe cutoff)



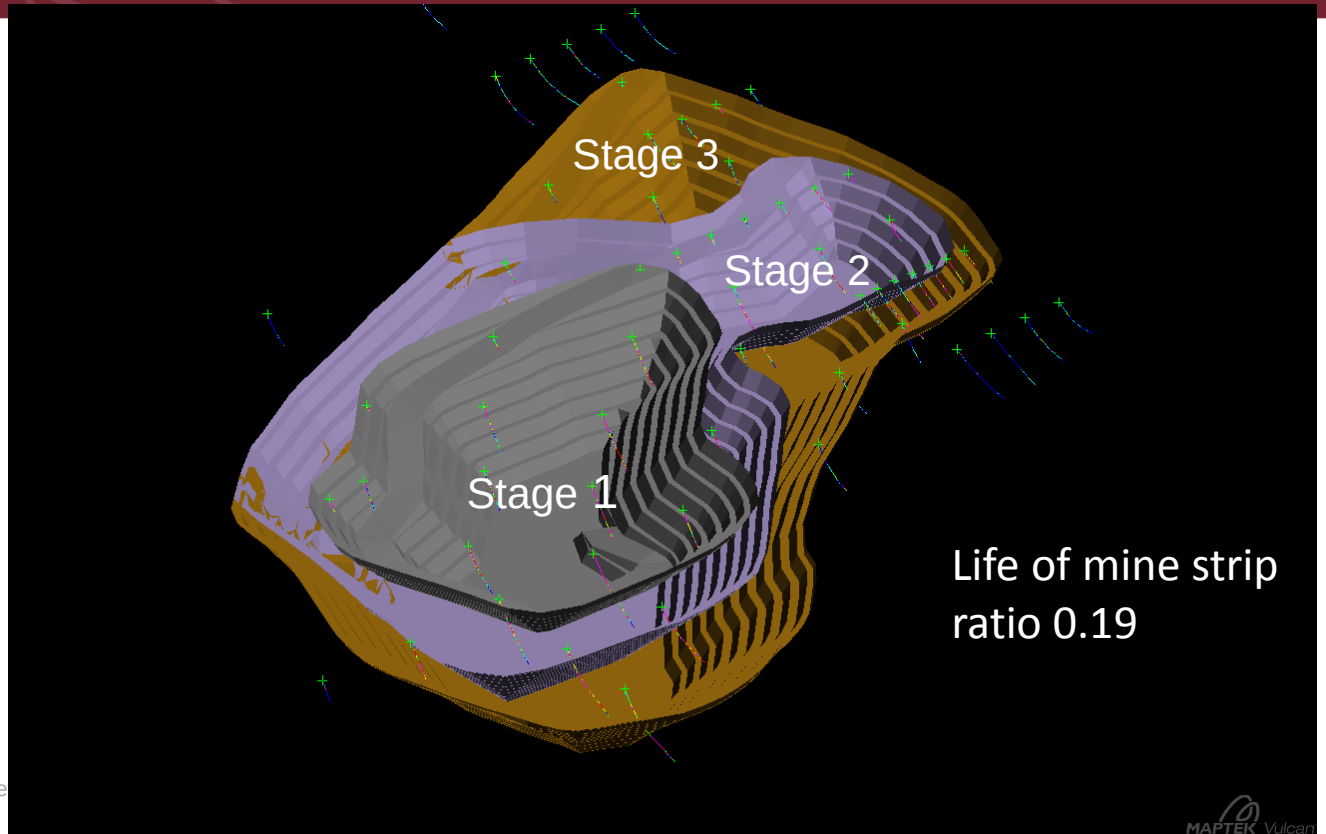
Ore outcrop in pump test pit

- Flat lying rectangular slab of iron ore up to 120m thick lying 0-5m below surface

* refer to table at the end of this presentation

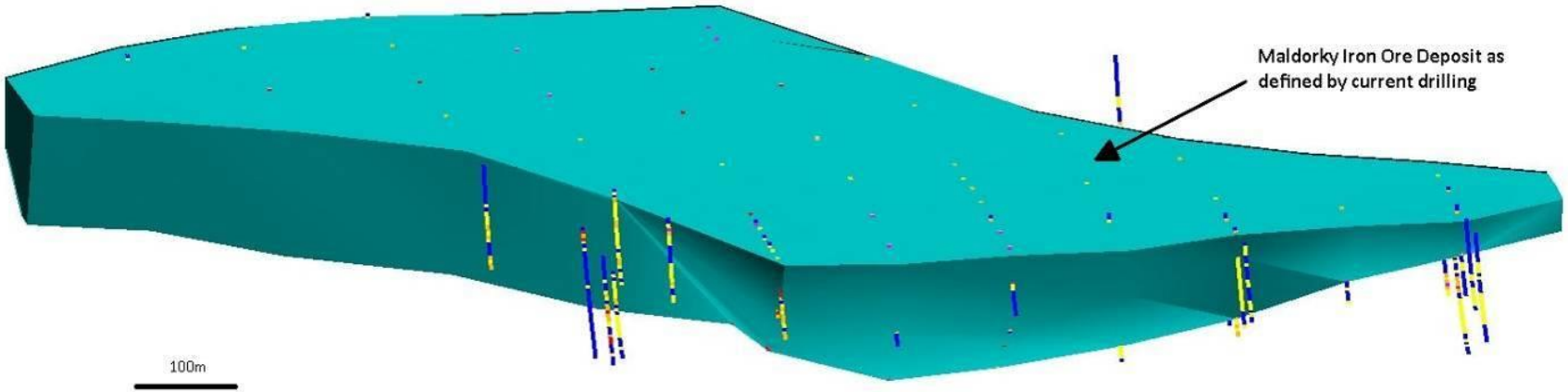
Staged Open Pit Design

Simple three stage open pit design captures 139Mt of the 147Mt resource



Simple Geometry – Flat Slab

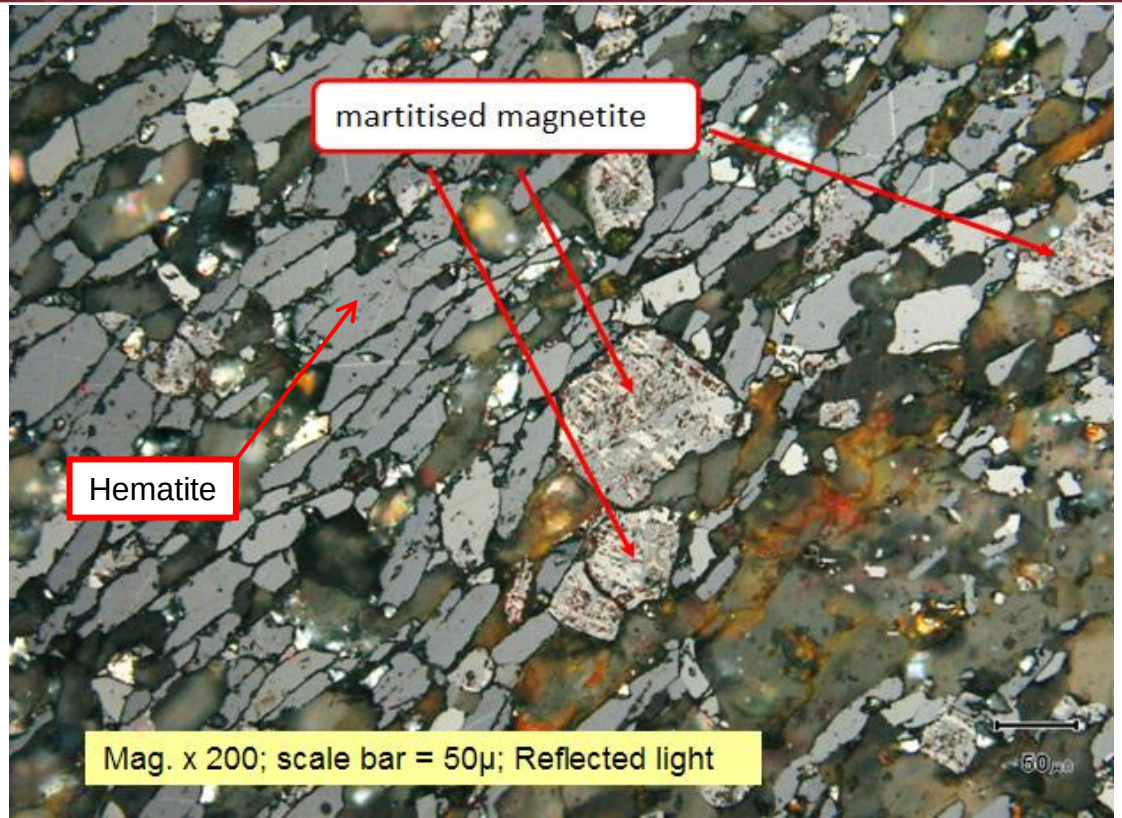
- Simple open pit mining geometry
- Minimal overburden and internal waste



Hematite – Magnetite Ore

Challenge :
All Braemar iron ore deposits contain some hematite. How is the most efficient way to recover it ?

Opportunity:
Better Fe yields



Low Impurity Gravity Concentrate

Low energy grinding to 106u and use of cyclones, jigs, reverse classifiers to concentrate

Fe	65.2%
SiO2	4.94%
Al2O3	0.47%
CaO	0.25%
MgO	0.12%
K2O	0.06%
MnO	0.05%
TiO2	0.37%
P	0.06%
LOI	0.44%

Favourable Physical Properties

	MALDORKY	BANDED IRON
UCS (MPa)	58	~350
BAi (Abrasion Index)	0.033	0.3 – 0.7
BBWi – 106u (kWh/t)	4.7	15 - 30
BRWi – 1180u (kWh/t)	8.9	15-25
Est power (kWh/ t concentrate)	~27	~57

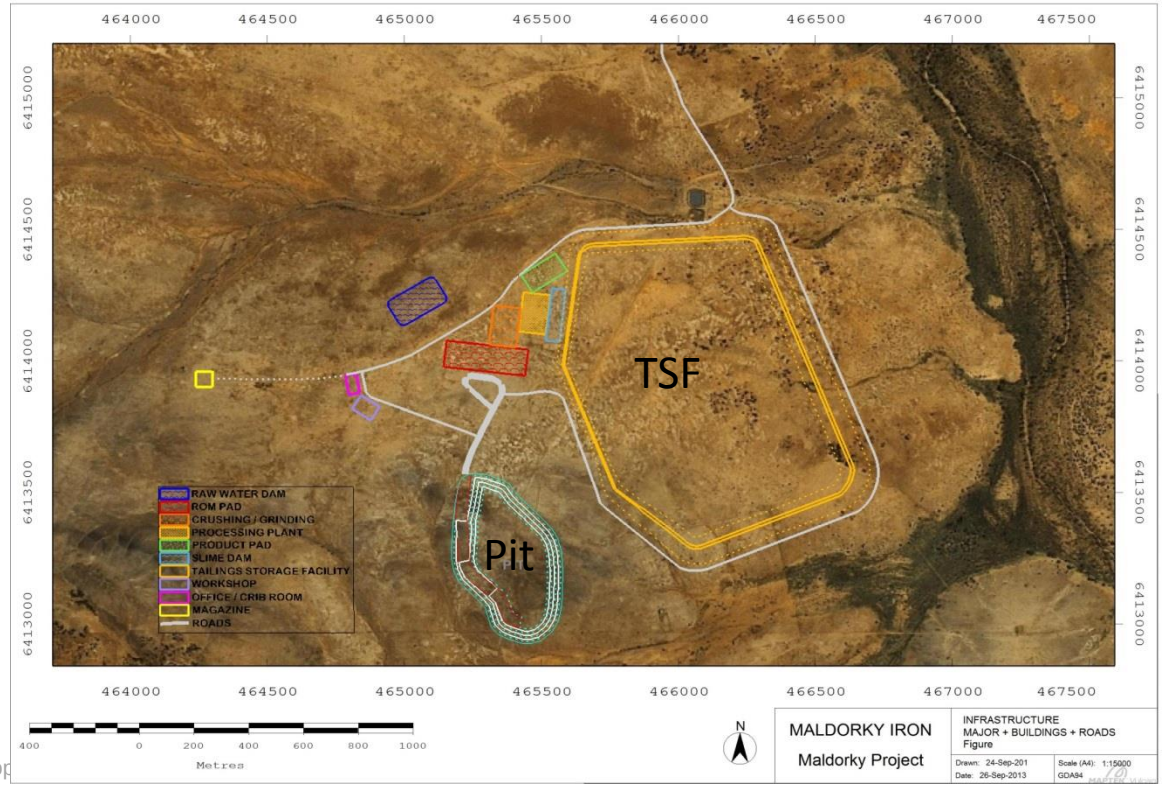
Materials testing conclusion :

- Soft
- Weakly abrasive
- Not power hungry in a ball or rod mill

This is because :

- Highly fissile due to cleavage
- Carbonate rich matrix
- Lack of silica

ML Application Lodged With DSD



Transport Route

Challenge :
Multi-use port and handling facility near Wallaroo is essential to open up the Braemar Iron Province.

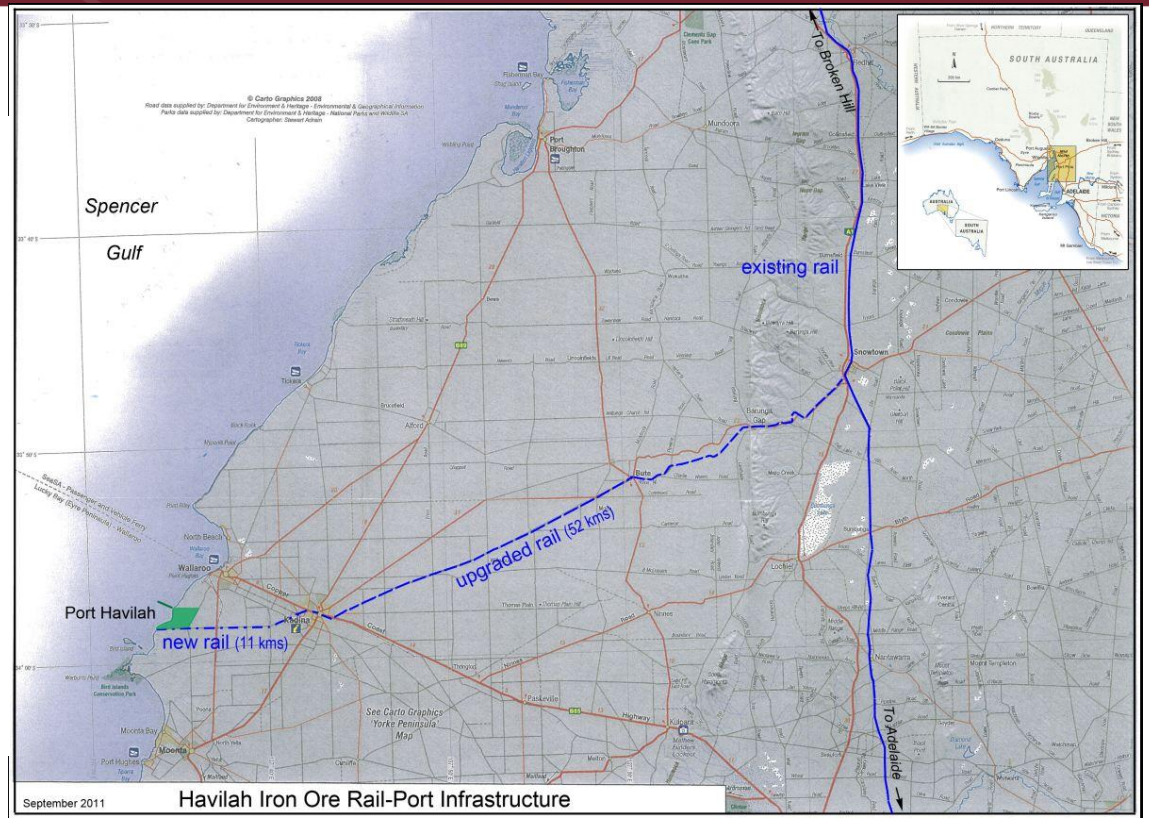
Opportunity :
A game changer for eastern SA. Benefits both miners and farmers.

*Refer to table at the end of this presentation

Snowtown to Wallaroo Rail Option

Challenge :
Financing to refurbish and renew the Snowtown – Wallaroo rail line link.

Opportunity :
Corridor still exists. Shortest route to the coast. Enhances usefulness of a port and vice versa.

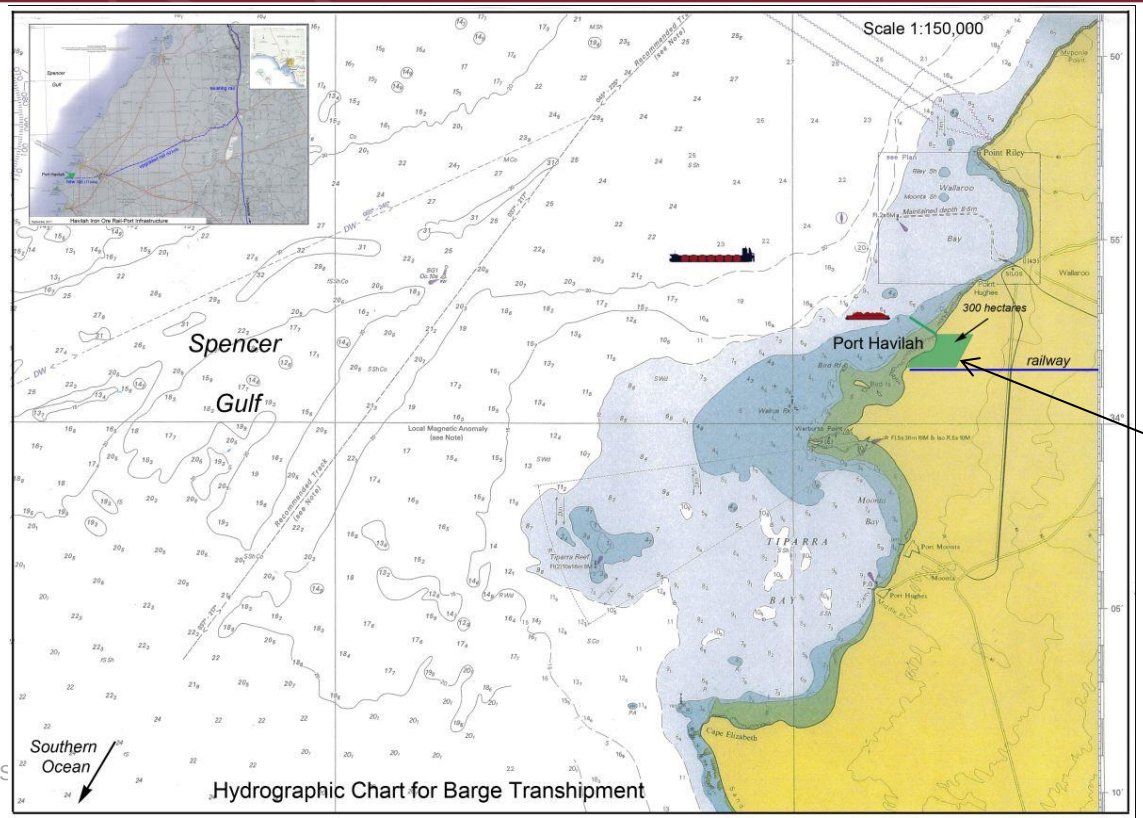


Snowtown to Wallaroo Railway

Snowtown interchange

Old Standard and Broad Gauge Track and rail corridor still in place

Deep water in Spencer Gulf

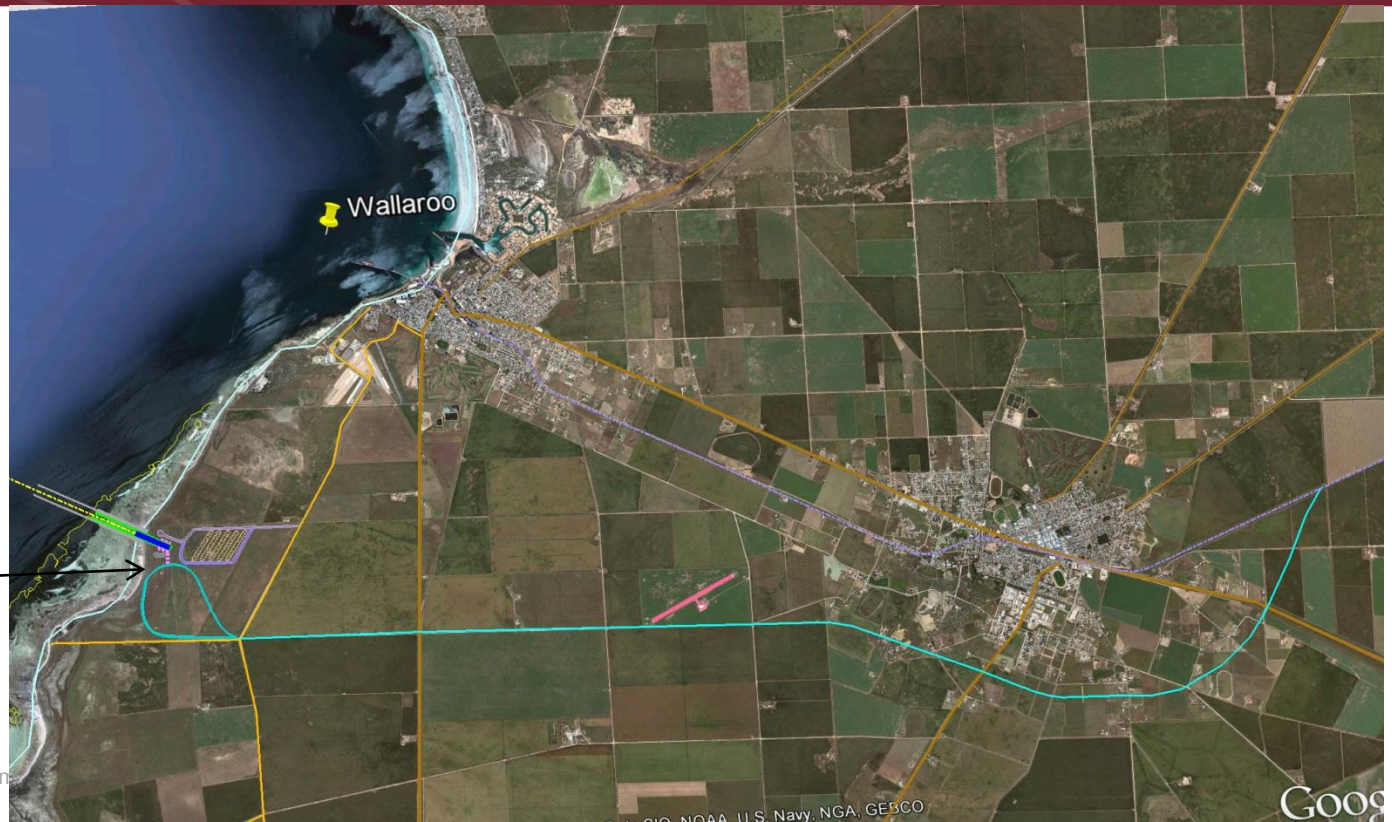


Havilah has access to 300Ha of land south of Wallaroo

Rail Route Kadina to Coast

Challenge :
Building new railway around Kadina to the coast.

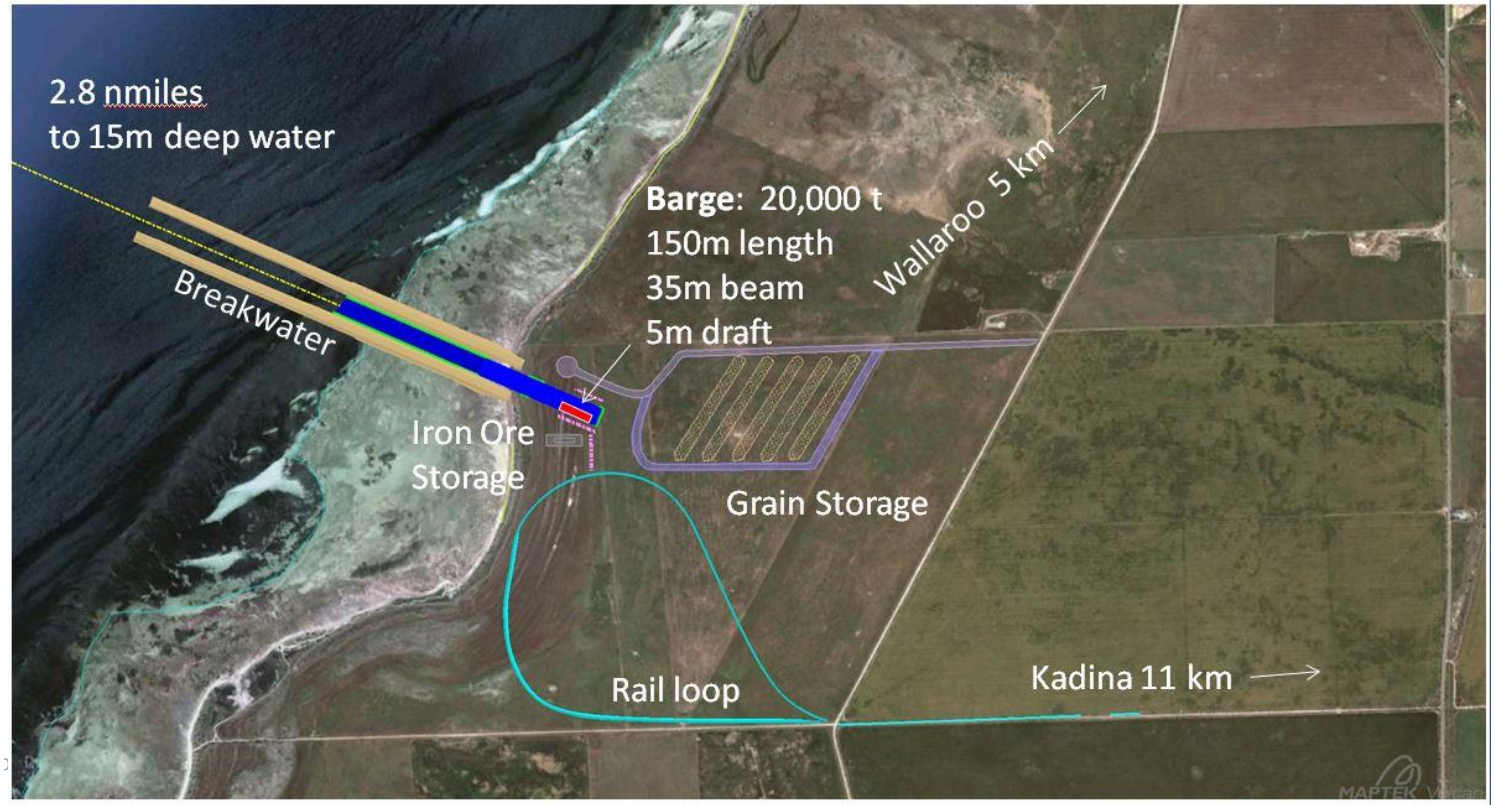
300Ha land available to Havilah



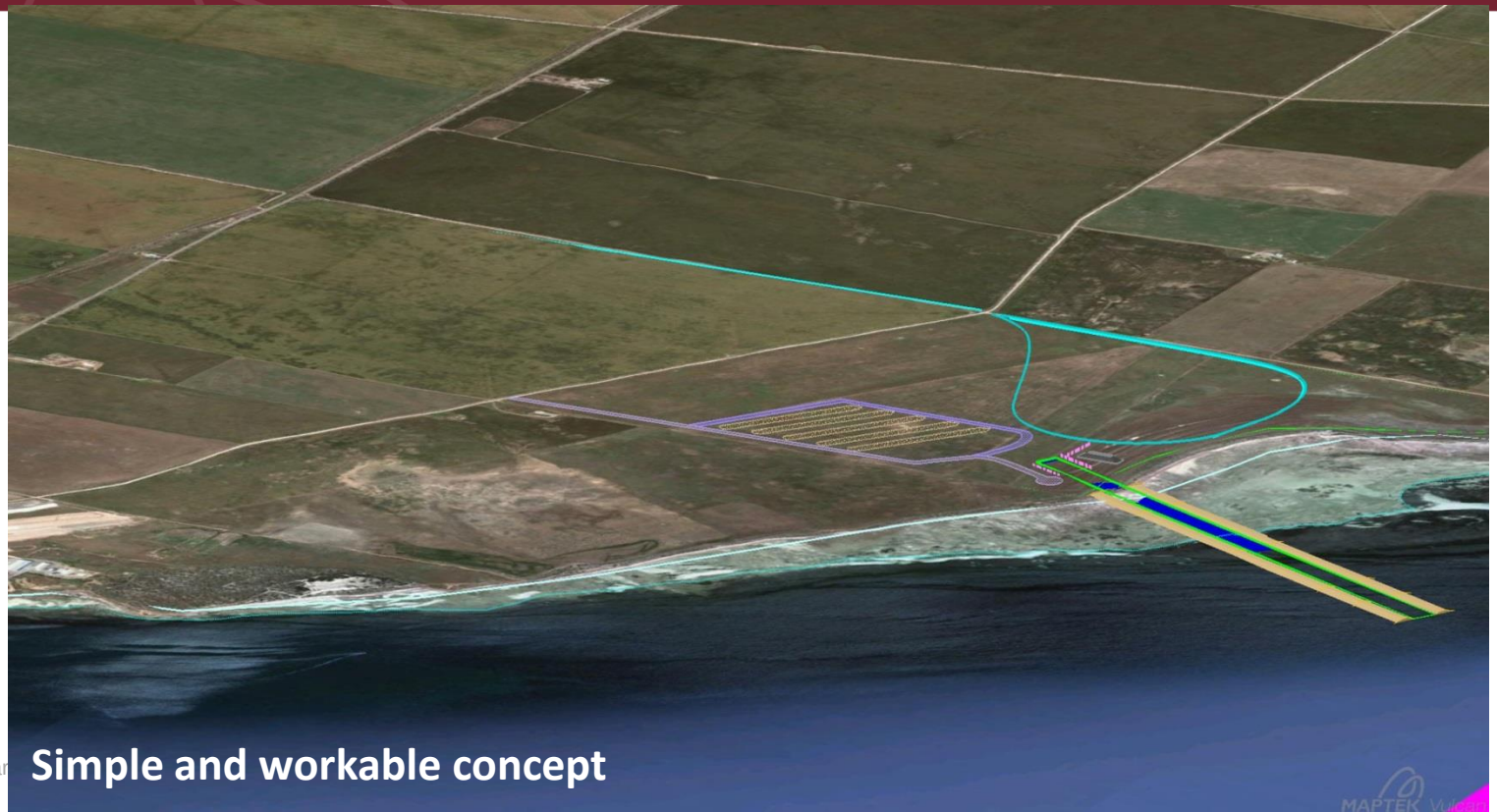
Barge Berth and Storage Layout

Challenge :
Attracting the finance to build this facility.

Opportunity :
Key strategic infrastructure that will allow substantial iron ore, hay and grain exports and fertilizer imports.



Oblique View From Northeast



Panamax Ship Off “Port Havilah”

Novel Low Capex Approach

- Relatively low mining and processing costs, higher grades and good logistics (proximity of rail and Broken Hill) allows us to consider low capex options.
- Start small (eg 1-2 Mtpa) and use existing rail and port infrastructure to minimise capex and progressively add capacity as infrastructure develops.
- Grants deposit (only 8km from rail) provides huge upside production capacity
- To expand we need cheap grid power, a port near Wallaroo and rail upgrades.
- Any option that is affordable and works is of interest to us.

Havilah Iron Ore Resource Inventory

Maldorky: 147,000,000 tonnes of 30.1% Fe

Grants: 304,000,000 tonnes of 24% Fe

Potentially Total: 159,000,000 tonnes of premium grade iron ore product

Project*	Resource Category	Tonnes (Mt)	Iron (%)	Iron tonnes	Est Yield
Maldorky[1]	Indicated	147,000,000	30.1%	59,000,000	40%
Grants[2]	Inferred	304,000,000	24%	100,000,000	33%
Total all projects	**All categories**	**451,000,000**		**159,000,000**	

** Based on JORC resources, details released to ASX on : 1. 10/6/11 2. 5/12/12 , applying an 18% cut-off in both cases*

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