

## **POSITIVE METALLURGICAL TEST WORK RESULTS AT CENTRAL EYRE IRON PROJECT**

### **Results Indicate Readily Upgradeable Ore Characteristics and a range of High Grade Saleable Concentrates**

**Iron Road Limited** (Iron Road, ASX:IRD, IRDO) is pleased to announce the results of an extensive metallurgical test work program carried out by ProMet Engineers based on various diamond core samples from the Boo-Loo prospect located within the Warramboos cluster of the Central Eyre Iron Project.

#### **Highlights**

- **A high grade blast furnace quality concentrate (~68% Fe) may be readily produced at a coarse grind size (65µm)**
- **Previous test work indicates that a high quality DRI concentrate (~70% Fe) may be produced at a 40µm grind**
- **Process design demonstrates nearly two thirds of plant feed is rejected (waste) following coarse grinding, substantially upgrading the ore grade prior to the energy intensive fine grinding circuit**
- **Ore grade more than doubled from 20.1% Fe to 45.8% Fe following first stage coarse grind (350µm)**
- **Power consumption and potential operating costs significantly reduced by first pass waste rejection**
- **Ore characteristics amenable to simple plant design utilising off the shelf processing technology currently in use**
- **Further process improvements under investigation**
- **Central Eyre Iron Project remains one of Australia's most significant emerging magnetite projects**

ProMet Engineers were engaged by Iron Road Limited to comprehensively investigate the metallurgical characteristics of the Warramboos mineralisation and recommend an initial process design for the Central Eyre Iron Project in South Australia. The study confirms viable process options for the project, using simple off the shelf processing technology. These options consist of a simple autogenous primary grind followed by fine grinding alternatives (Figure 1).

Test work confirmed that a high grade blast furnace quality concentrate (~68% Fe) can be produced at a coarse grind, with a range of finer grained products possible according to end-user needs. This has validated earlier Davis Tube Recovery test work.

Iron Road Managing Director, Andrew Stocks, said that the company was very pleased to have earlier processing assumptions validated.

“This study confirms our belief that the Central Eyre Iron Project hosts a very large and very coarse magnetite iron ore deposit that may be readily upgraded to produce a range of quality products.” said Mr Stocks.

“The results go further than this however and have very important implications for the project, as the fundamental challenge for us has centred on the relatively low in-situ iron grade. This test work demonstrates that early stage autogenous milling rejects a very large portion of the waste material prior to the energy intensive fine grinding circuit, thereby countering the perceived negative characteristic of this deposit.”

The Company believes that the processing options defined by ProMet Engineers compare very favourably to other Australian magnetite mining and concentration operations currently in production or under construction today.

Potential exists to further improve the base case processing options, allowing for further reductions in potential operating costs. Iron Road will now continue investigations based on the base case process routes outlined by ProMet Engineers. Further studies will include evaluation of the optimum export route.

“By completing this important test work we have demonstrated that Iron Road can produce a consistent, saleable iron product from the Central Eyre Iron Project. This places us in a position to continue to capitalise on the continued strength in the iron ore market and the strong and growing investment interest in the South Australian iron ore sector,” said Mr Stocks.

“Iron Road remains convinced that the Central Eyre Iron Project represents one of Australia’s most significant magnetite projects and we look forward to continuing to demonstrate this potential,” continued Mr Stocks.

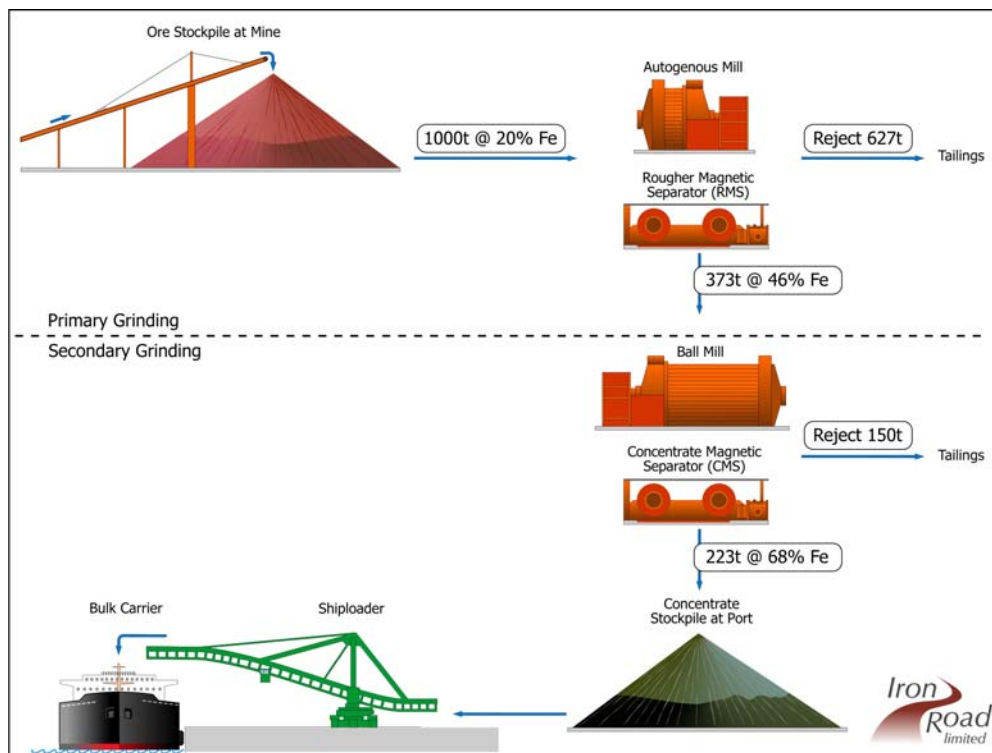


Figure 1 - Simplified process flow option – illustrating flow of hypothetical 1000t ore parcel

## Technical Overview

- **Coarse Grind** – Impact of grind on chemistry (silica) test work indicates that grinding to 80% passing minus 65µm (P80 at -65µm) produces a blast furnace quality concentrate. This suggests that a range of coarse grained products may be produced according to end-user needs.
- **Simple Beneficiation** – Using a conservative design approach of 80% passing minus 40µm (P80 at -40µm), test work indicates that a high grade concentrate may be produced using simple and proven two or three stage 'off the shelf' processing plant technology.
- **Upgradeability of Ore Feed** – Test work indicates ore head grades may be upgraded by ~2.3 times at the front-end of the processing plant through simple primary grinding (autogenous) and Rougher Magnetic Separation (RMS). For example a head grade of 20.1% Fe is upgraded to 45.8% Fe prior to secondary (fine) grinding.
- **High Rejection Rate of Waste** – The effective doubling of the iron content (head grade) occurs since up to 63% of the ore feed tonnage is rejected (as waste) during the primary grinding and RMS stage. This is prior to further processing within the secondary grinding circuit.
- **Minimisation of Operating Costs** – Due to a high rejection rate of ore feed prior to fine grinding (the most power intensive part of the plant circuit), operating costs are significantly reduced. Furthermore, low abrasion indices for the ore indicates relatively lower wear rates within the processing plant and therefore reduced maintenance costs.
- **Ore Physical Properties** – A relatively high Bond Work Index (BWI) is offset by coarse grinds to attain high iron concentrate grades. Crushing Work Indices (CWI), UCS and abrasion indices are regarded as favourable.
- **Scope for Further Efficiencies** – Additional test work on ore characteristics and advanced media competency work may allow for refining of processing options leading to further significant reductions in operating cost.

The study included detailed metallurgical test work that was specifically used to investigate and design various processing plant options. Diamond core samples from various drill holes and a dedicated metallurgical drill hole from the Boo-Loo prospect were used for the metallurgical test work and all testing was conducted under ProMet Engineers supervision by AMMTEC.

From the test work it is evident that the coarse grained magnetite at the Boo-Loo prospect upgrades readily and attains blast furnace grade from a grind size of 80% passing minus 65µm (P80 at -65µm). This compares favourably with other magnetite deposits where the grind size to attain similar concentrate grades may be as low as 28µm. This characteristic also has significant implications for operating costs during beneficiation of the ore.

Test work indicates potentially high rejection rates during primary grinding and RMS resulting in a substantial increase in iron grade early in the process, with the added benefit of reduced operating costs. A reduction in costs is possible because of the significant

reduction in feed to the secondary or fine grinding stage that is typically the power intensive element of the overall beneficiation process. Favourable Crushing Work Indices (CWI), UCS and abrasion indices may lead to further operating cost reductions.

ProMet Engineers proposed two possible plant designs based on the physical characteristics of the Boo-Loo ore. Both alternatives incorporate simple and proven technology in operation in the United States and Australia. Further work will firm up confidence on other processing options and assess further opportunities for reducing operating costs.

Iron Road will continue preliminary engagement with potential development partners, with a view to introducing a substantial partner to the project at the appropriate stage. With the interest received to date and the backing of cornerstone investor *The Sentient Group*, Iron Road is confident a range of partnership opportunities are available.

The 'Warramboos cluster' currently under investigation forms only part of the Central Eyre Iron Project. Further magnetic anomalies occur to the south at the 'Kopi' and 'Hambidge' clusters.

-ENDS-

**For further information, please contact:**

Andrew Stocks  
 Managing Director  
 Iron Road Limited  
 Tel: +61 8 9200 6020  
 Mob: +61 (0)403 226 748  
 Email: [astocks@ironroadlimited.com.au](mailto:astocks@ironroadlimited.com.au)

Shane Murphy or Sarah Browne  
 FD Third Person  
 Tel: +61 8 9386 1233  
 Mob: +61 (0)420 945 291 / +61(0)439 841 395  
 Email [shane.murphy@fdthirdperson.com.au](mailto:shane.murphy@fdthirdperson.com.au)  
[sarah.browne@fdthirdperson.com.au](mailto:sarah.browne@fdthirdperson.com.au)

Or visit [www.ironroadlimited.com.au](http://www.ironroadlimited.com.au)

**Competent Person's Statement**

The information in this report that relates to Exploration Results is based on and accurately reflects information compiled by Mr Larry Ingle, who is a fulltime employee of Iron Road Limited and a Member of the Australasian Institute of Mining and Metallurgy. Mr Ingle has sufficient experience relevant to the style of mineralisation and the type of deposits 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. Mr Ingle consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

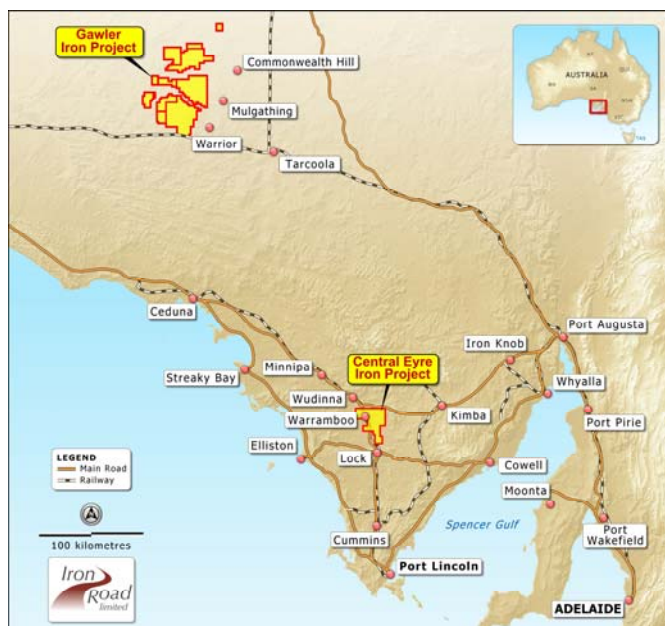


Figure 2 - Locations of South Australian projects