



**HISTORY OF THE  
CENTRAL EYRE IRON PROJECT  
(CEIP)**

# BEN HAVELBERG PROPHECY—“WARRAMBOO SAGA”

*“Also to cause him much ridicule was his ability of prophesying the weather by the moon and the stars. The Poldo water could be used by a link-up to the Tod, the River Murray water was to come to the Eyre Peninsula and there were vast riches under the earth far more important than wheat growing (iron ore).”*

Ben Havelberg was one of Warramboos first pioneers in 1916.

# THE BEGINNING OF THE CEIP

1953

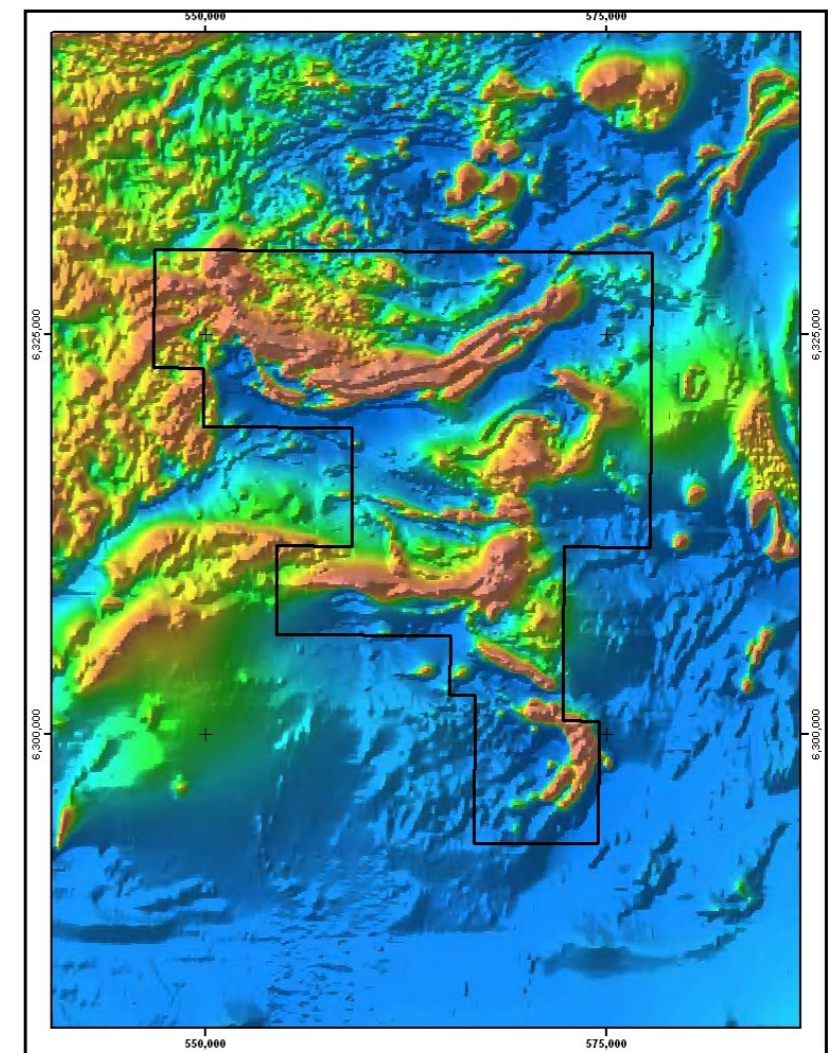
1955

RECONNAISSANCE AEROMAGNETIC SURVEY CARRIED OUT ACROSS THE EYRE PENINSULA BY THE COMMONWEALTH GOVERNMENT, REVEALING THE WARRAMBOO AREA AS A SIGNIFICANT AREA OF INTEREST.



Above: Light aircraft conducting aeromagnetic surveying

Right: Magnetic map of the Warramboo area generated from aeromagnetic surveying



Warramboo  
TMI Magnetics - 100m 2007 Survey

# FIRST INVESTIGATIONS—ECONOMIC APPRAISAL COMPLETED BY THE DEPARTMENT OF MINES SOUTH AUSTRALIA.

1960

1964

Geological Mapping → Aeromagnetic Geophysical Surveys → Ground Magnetic and Gravimetric work

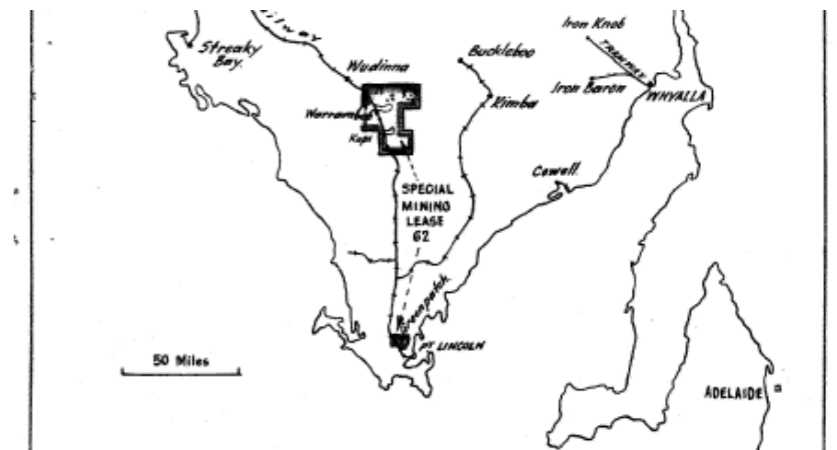
Excerpts from economic appraisal report carried out by the Department of Mines South Australia.

24th February 1964.

*“The work to date is encouraging in that there are indications of the existence of ore deposits in excess of 20 million tons”*

*“The overall plan would be to establish a beneficiation plant at the mine and rail concentrates to a pelletising plant situated at a suitable wharf which will have to be provided near Port Lincoln.”*

Right: Map supplied in the Economic Appraisal Report by the Department of Mines SA.



Below: Newspaper article from 1960's

## IRON ORE ON E.P.

### FEASIBILITY EXAMINED

**Large deposits of iron ore were discovered near Warramboo on Eyre Peninsula.**

This was confirmed last week by the Premier, Mr. Don Dunstan, who is also the Minister of Development and Mines.

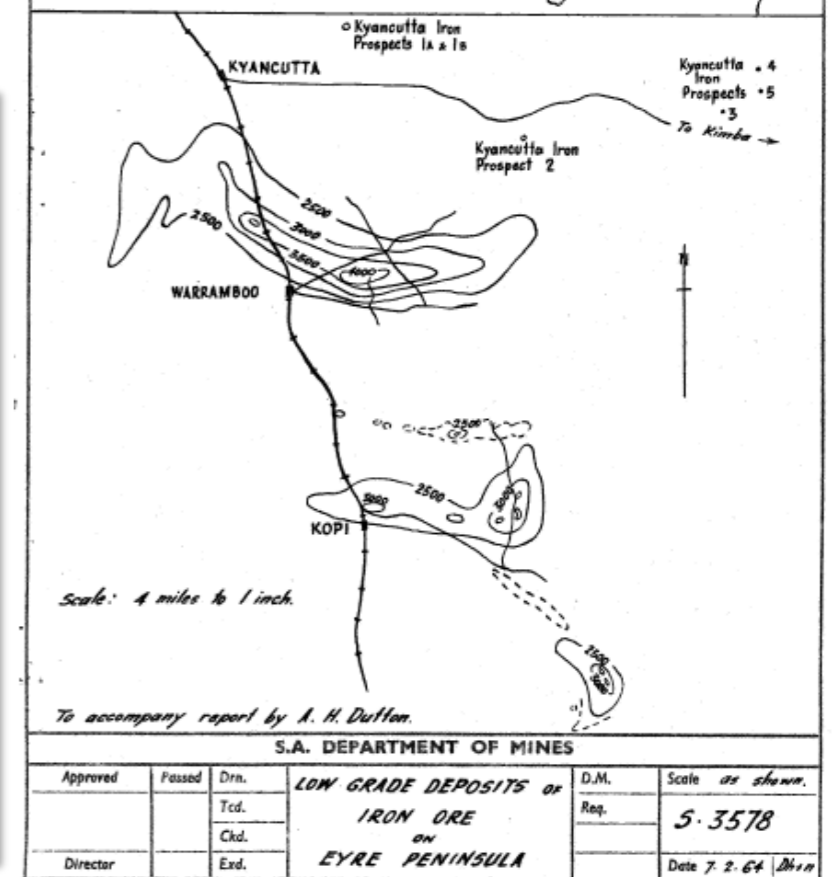
In a letter replying to an enquiry by Mr. Graham Gunn, M.P., Mr. Dunstan stated that the deposits were large but of very low grade.

He said that the deposits were discovered by the Department of Mines which had undertaken extensive geophysical, geological and drilling investigations which established the presence of magnetic iron ore.

Mr. Dunstan stressed that because of the low grade and the resultant need for beneficiation, the deposits were discovered by the Department of Mines which had undertaken extensive geophysical, geological and drilling investigations which established the presence of magnetic iron ore.

“However, it is being re-examined under a special mining lease by a company which specialises in transmission of solids by pipeline.”

The Premier stressed that the study was in its early stages and the out-comes would not be known for some time.



# WMC OBTAIN EXPLORATION LICENCES

1988

1995



WESTERN MINING CORPORATION (WMC) OBTAINED EXPLORATION LICENCES 1516 & 1986 TO UNDERTAKE SIGNIFICANT NEW WORK ON THE WARRAMBOO OCCURRENCE IN SEARCH OF OLYMPIC DAM AND MIDDLEBACK RANGES STYLE DEPOSITS.

WMC'S FINDINGS DID NOT SATISFY THEIR INTERESTS AND NO FURTHER WORK WAS UNDERTAKEN.



# ADELAIDE RESOURCES ACQUIRE EXPLORATION

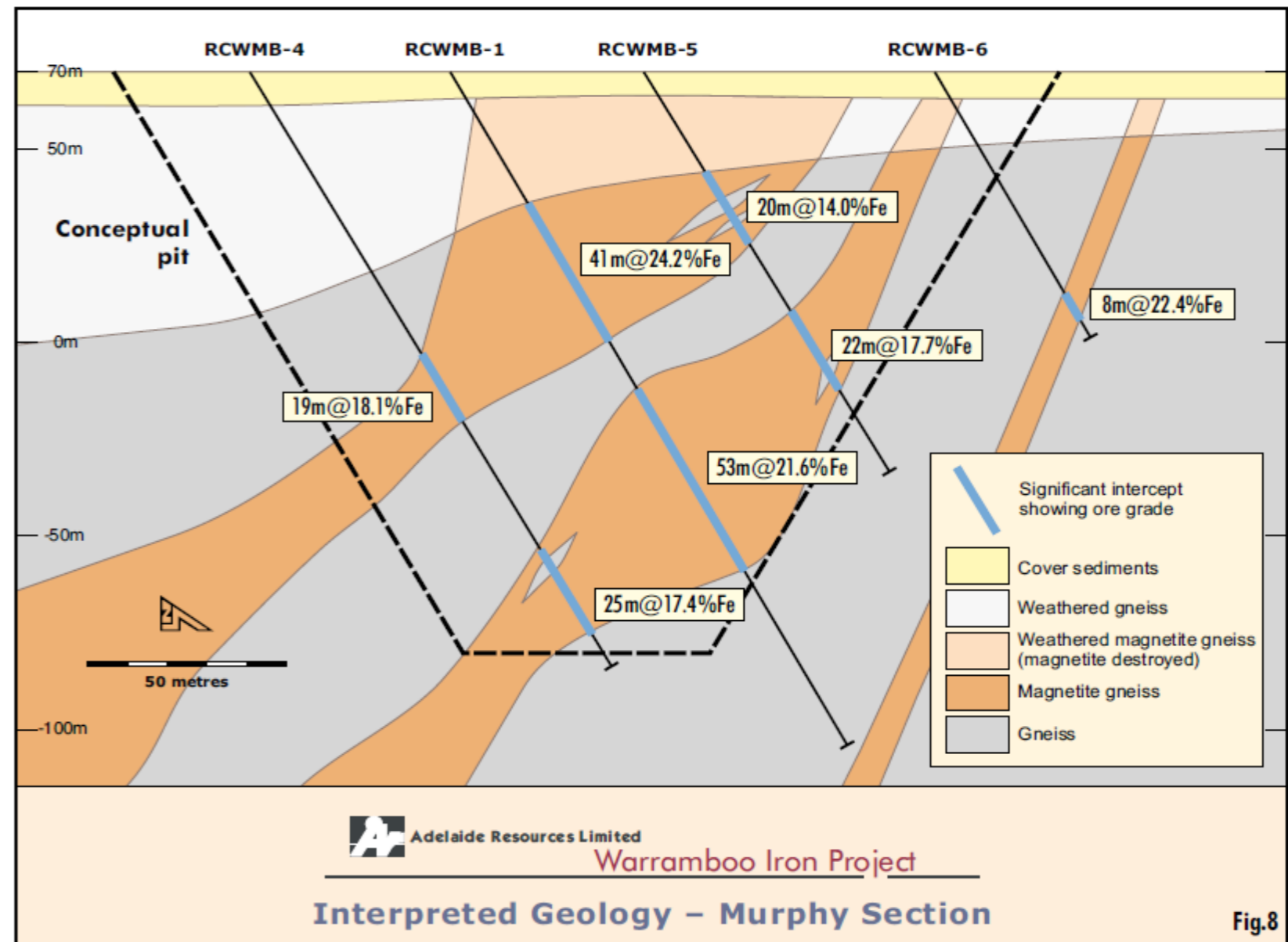
1995

2007



Adelaide Resources' Warramboe Iron Project Summary Report concludes:

*"... potential exists to develop the Warramboe Iron Project into a substantial magnetite mining and pelletising operation producing premium quality iron ore products."*



Above: The initial four drill holes through the magnetite occurrence carried out by Adelaide Resources during 1999/2000.

# IRON ROAD LIMITED ACQUIRES LICENCE & UNDERTAKES INTENSE DRILLING PROGRAMS

2007	2008	2009	2010			2011
IRON ROAD LIMITED FOUNDED	STAGE 1 DRILLING COMPLETE 27 HOLES	STAGE 2 DRILLING COMPLETE 35 HOLES	STAGE 3 DRILLING COMPLETE 57 HOLES	STAGE 4 DRILLING COMPLETE 42 HOLES	STAGE 5 DRILLING COMPLETE 65 HOLES	PROJECT PRE-FEASIBILITY STUDY COMMENCED



# PROJECT FEASIBILITY STUDIES COMPLETED & FURTHER DRILLING CONTINUES

2011		2012	2013	2014	2015
STAGE 6 DRILLING COMPLETE 73 HOLES <b>2.10BT MINERAL RESOURCE</b>	PROJECT PRE- FEASIBILITY COMPLETED	STAGE 7 DRILLING COMPLETE 93 HOLES	STAGE 8 DRILLING COMPLETE 10 HOLES	STAGE 9 DRILLING COMPLETE 14 HOLES	<b>4.5BT MINERAL RESOURCE</b>
			DEFINITIVE FEASIBILITY STUDY UNDERTAKEN AND COMPLETED		



Right: Four drill rigs at Warrambo during Stage 8 drilling campaign in 2013.



# CEIP—PRIMARY APPROVALS

## 2012 – 2016



- Iron Road announces proposal for SA's first deep sea port at Cape Hardy.
- Experts employed to undertake environmental, social and economic impact assessments.
- Major Development declaration announced by SA Planning Minister in relation to port, rail and other infrastructure.
- Definitive Feasibility Study completed.
- Major Project Facilitation Status granted by the former Deputy Prime Minister, the only SA project to receive such status.
- Establishment of CEIP Community Consultative Committee.
- Community involvement in development of Mining Lease Proposal and Environmental Impact Statement.
- Optimisation studies completed; initial engineering designs completed.
- Indigenous Land Use Agreement with the Barngarla Aboriginal Corporation completed.
- Mining Lease Proposal and Environment Impact Statement submitted to SA Government for assessment.

# IRON ROAD & EMERALD GRAIN PARTNERSHIP



2014



2016



MEMORANDUM OF UNDERSTANDING (MOU)  
SIGNED BETWEEN IRON ROAD AND EMERALD  
GRAIN. MOU SETS OUT AGREEMENT TO  
EXPLORE ALL AND ANY OPPORTUNITIES TO  
ACCESS RAIL AND PORT FOR GRAIN EXPORTS.

AFTER TWO YEARS OF WORKING TOGETHER, IRON  
ROAD AND EMERALD GRAIN PUBLICLY ANNOUNCE  
THEIR PARTNERSHIP.



Andrew Stocks, Iron Road and John Murray, Emerald Grain.



# AGREEMENTS SIGNED BETWEEN CHINA RAILWAY GROUP, SHAN STEEL AND IRON ROAD



2016



5 April 2016—Iron Road and China Railway Group Limited partnership signing ceremony in Beijing, China.



6 April 2016—Iron Road, Shan Steel and China Railway Group Limited Tripartite Co-operation Agreement signing ceremony in Jinan, China.



# ABOUT SHANSTEEL AND CHINA RAILWAY GROUP



Shandong Iron and Steel Group Co Ltd (ShanSteel) is a Chinese steel company based in Jinan, China. ShanSteel was formed in March 2008 through the restructuring of three steel companies by the provincial government of Shandong.

During 2014, ShanSteel produced 23.3 million tonnes of steel, 23.4 millions of tonnes of iron ore and 22.6 millions of tonnes of steel products, making it the seventh largest producer of steel in China.

China Railway Group Limited (CREC) is Asia's largest integrated construction group and the second largest construction contractor globally. In 2015, CREC reported annual sales of over US\$85 billion. CREC has over 280,000 employees and has constructed many high-quality projects throughout Asia, Africa, Europe, South America and Oceania. CREC has assumed the primary role of new construction, reconstruction and extension of over two thirds of the total mileage of Chinese railways. The Company's domestic businesses in China are estimated to account for a 1% share of China's national GDP.





# WHATS HAPPENING NOW?

## PROJECT ASSESSMENT PROCESS

### November 2015

Mining Lease and Development Applications lodged with Government.

### November 2015—February 2016

Government's public consultation on both applications undertaken.

### Mid-March 2016

All submissions received published online and provided to Iron Road for appropriate responses.

### June—August 2016

Response Documents submitted to SA Government for review. Further information provided.

### September 2016 (anticipated)

Response Documents will be published online by Government.

## STRATEGIC PARTNERSHIPS

### Chin Railway Group Limited (CREC)

Iron Road and CREC have established a Project Steering Committee to oversee the work the companies will carry out together. This includes a review of Iron Road's studies (PFS, DFS and Optimisation) and exploring opportunities for improvement that could be offered through the diverse skills and capabilities that CREC possess.

### Emerald Grain

Iron Road and Emerald Grain continue to work together to explore and build on all opportunities that could deliver a grain handling and export facility at Iron Road's proposed port at Cape Hardy.

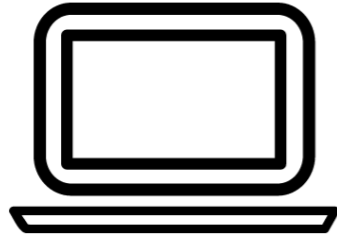
## LOOKING AHEAD

### & NEXT STEPS

- SA Government makes decision on Mining Lease and Development Applications
- Final Investment Decision made
- Funding secured
- Secondary Approvals
- Employment, training, business opportunities, procurement
- Construction
- Operation

Ongoing community and stakeholder engagement and involvement will continue through every phase of the CEIP.

# HOW TO FIND OUT MORE...



**[WWW.IRONROADLIMITED.COM.AU](http://WWW.IRONROADLIMITED.COM.AU)**



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Iron Road's dedicated Stakeholder Engagement Team—Tilly Oborn (left)  
and Tim Scholz (right)