

13<sup>th</sup> South Australian Exploration & Mining Conference

2<sup>nd</sup> December 2016



## - Central Eyre Iron Project - Building Partnerships to our Future



- Good afternoon Ladies & Gentlemen, it is a pleasure to present here today at the SA Exploration & Mining Conference... and I thank the organisers for the invitation to do so, as well as the generous support of the event sponsors.
- Today I will discuss three of several partnerships that Iron Road has established as we build a consortium of like-minded companies and progress the Central Eyre Iron Project towards a final investment decision.

# Disclaimer

## Forward Looking Statements

This announcement contains certain statements with respect to future matters which may constitute "forward-looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or outcomes to differ materially from those expressed, implied or projected. Investors are cautioned that such statements are not guarantees of future performance and accordingly not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

## Competent Persons' Statements

The information in this report that relates to the Inferred Mineral Resources (Oxide and Transitional) estimated for the Murphy South - Boo-Loo/Dolphin prospect is based on and fairly represents information and supporting documentation compiled by Mr Iain MacFarlane, who was a Fellow of the Australasian Institute of Mining and Metallurgy. Mr MacFarlane at the time of release was a full time employee of Coffey Mining Limited. There has been no material change and as such this resource is reported as it was released in 2011. Mr MacFarlane had sufficient experience relevant to the style of mineralisation and the type of deposits under consideration and to the activity which he was 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 MacFarlane has consented to the inclusion in reports of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Resources estimated in 2013 for the Murphy South/Rob Roy (Fresh) prospect is based on and fairly represents information and supporting documentation compiled by Ms Heather Pearce, who is a member of the Australasian Institute of Mining and Metallurgy, and was a full-time employee of Iron Road Limited. This estimation was peer reviewed by Dr Isobel Clark, who is a member of the Australasian Institute of Mining and Metallurgy and who at the time of release was employed by Xstract Mining Consultants. Dr Clark has sufficient experience relevant to the style of mineralisation and the type of deposits under consideration and to the activity which she 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". Dr Clark consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

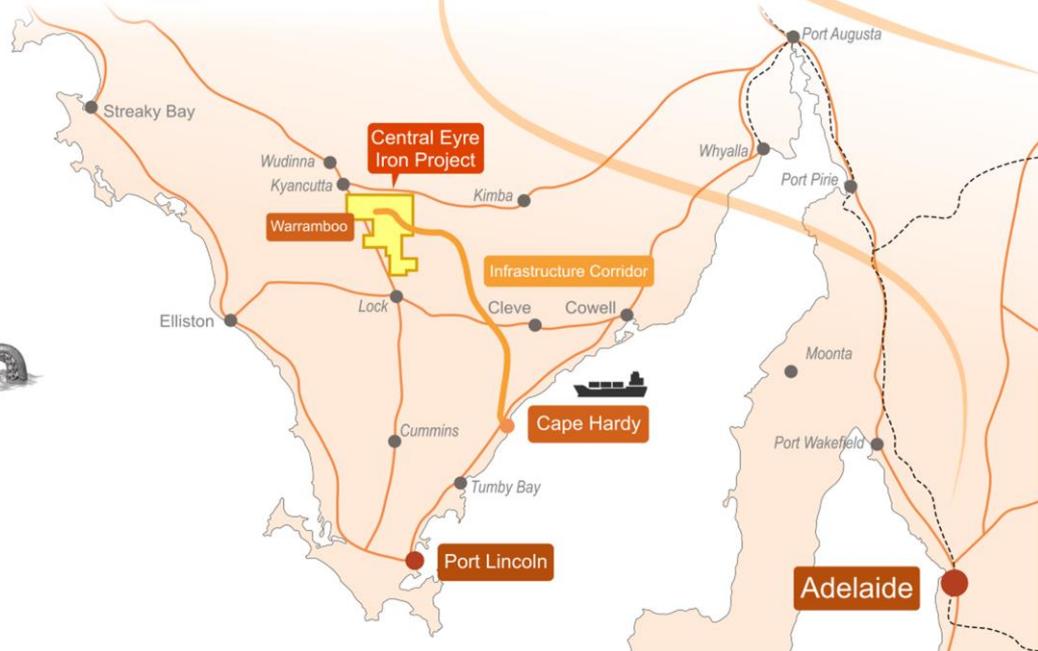
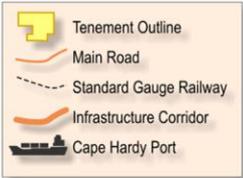
The information in this report that relates to Mineral Resources (Fresh) estimated for the Boo-Loo/Dolphin prospect is based on and fairly represents information and supporting documentation compiled by Ms Heather Pearce, who is a member of the Australasian Institute of Mining and Metallurgy, and was a full-time employee of Iron Road Limited at the time of release. This estimation was peer reviewed by Mr Alex Virisheff, who is a member of the Australasian Institute of Mining and Metallurgy and employed by AMC Consultants. Mr Virisheff 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Virisheff consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The Ore Reserves estimated for CEIP involving mine planning is based on and fairly represents information and supporting documentation compiled by Mr Bob McCarthy, a Member of the Association of Professional Engineers and Geoscientists of British Columbia (Canada) and a full time employee of SRK Consulting (North America). Mr McCarthy 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr McCarthy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The Ore Reserves estimated for the CEIP involving aspects other than mine planning is based on and fairly represents information and supporting documentation compiled by Mr Larry Ingle, a Member of the Australian Institute of Mining and Metallurgy and a full time employee of Iron Road Limited. 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 2012 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.



- Our standard disclaimer.

# Locality



Before I talk about partnerships, allow me to give a very brief overview of the Central Eyre Iron Project

- The Project is located on the Eyre Peninsula and provides for a complete mine to customer solution.

... and consists of three major components, namely:

- The mine and beneficiation plant at Warramboo
- The deep water port at Cape Hardy
- And the Infrastructure Corridor that joins the two

# Project Components



## Mine

- Open pit, 7.0km long, 3.0km wide, In-Pit Crushing and Conveying (IPCC)
- Beneficiation plant, integrated waste landform and rail loadout
- Low reliance on trucks and therefore diesel fuel use



## Infrastructure Corridor & Bore Field

- 148km heavy rail, service road, power line, bore field & water pipeline
- Multi-user rail, potential to connect to national railway network



## Port

- Twin capesize berths, 70Mtpa capacity at ship loader
- Module Offloading Facility (MOF), multi-user import & export facilities



- The Mine comprises a large open pit, beneficiation plant, integrated waste landform and rail loadout facility
- The Infrastructure Corridor comprises ~148km of standard gauge heavy rail and associated services such as power and water.
- The deep sea port at Cape Hardy comprises two capesize berths, a ship loader, Module Offloading Facility and other facilities.

Both the railway and port are designed to be multi-user and the rail has potential to connect to the national rail network.

# Value Proposition

~1Mt material  
movement per day

SAG-RMS  
60% rejection @ 3mm

24Mtpa Fe concentrate  
(dry)

Ore Reserve  
3.7Bt @ 15% Fe  
magnetite gneiss

32% Fe

66.7% Fe  
~100 $\mu$ m



IRON  
ROAD

What makes this magnetite deposit so different to any other?

- Firstly it is a Magnetite Gneiss, not a Banded Iron Formation as is the case for most magnetite deposits in Western Australia... and there is a lot of it- 3.7Bt in Ore Reserves (or a 4.5Bt Mineral Resource)
- Being very coarse-grained it upgrades easily – at the first stage of processing there is a 60% rejection at 3mm (ie. at the SAG mill and rougher magnetic separation stage – with negligible loss magnetic Fe)
- ...and the product is a high quality, low impurity iron concentrate, coarse enough to be used as sinter feed for blast furnaces (ie. no need to pelletise)

All of this gives us optionality.

# Federal & State Recognition



Australian Government  
Department of Infrastructure  
and Regional Development



Australian Government  
**Infrastructure  
Australia**



Government  
of South Australia  
Department of Planning,  
Transport and Infrastructure

## Major Project Facilitation



## Infrastructure Priority List

Priority Project (full business  
case) with Opportunity for  
Growth

## Major Development Status



## The Central Eyre Iron Project:

- Enjoys Major Project Facilitation from the Federal Government and is the only project of any kind in SA to do so (reaffirmed last month);
- Is listed as a Priority Project for the nation by Infrastructure Australia – the only “*Opportunity for growth*” Project; and
- The infrastructure component has Major Development Status with SA Government

We anticipate receiving draft conditions for the Project from the South Australian government later this month.

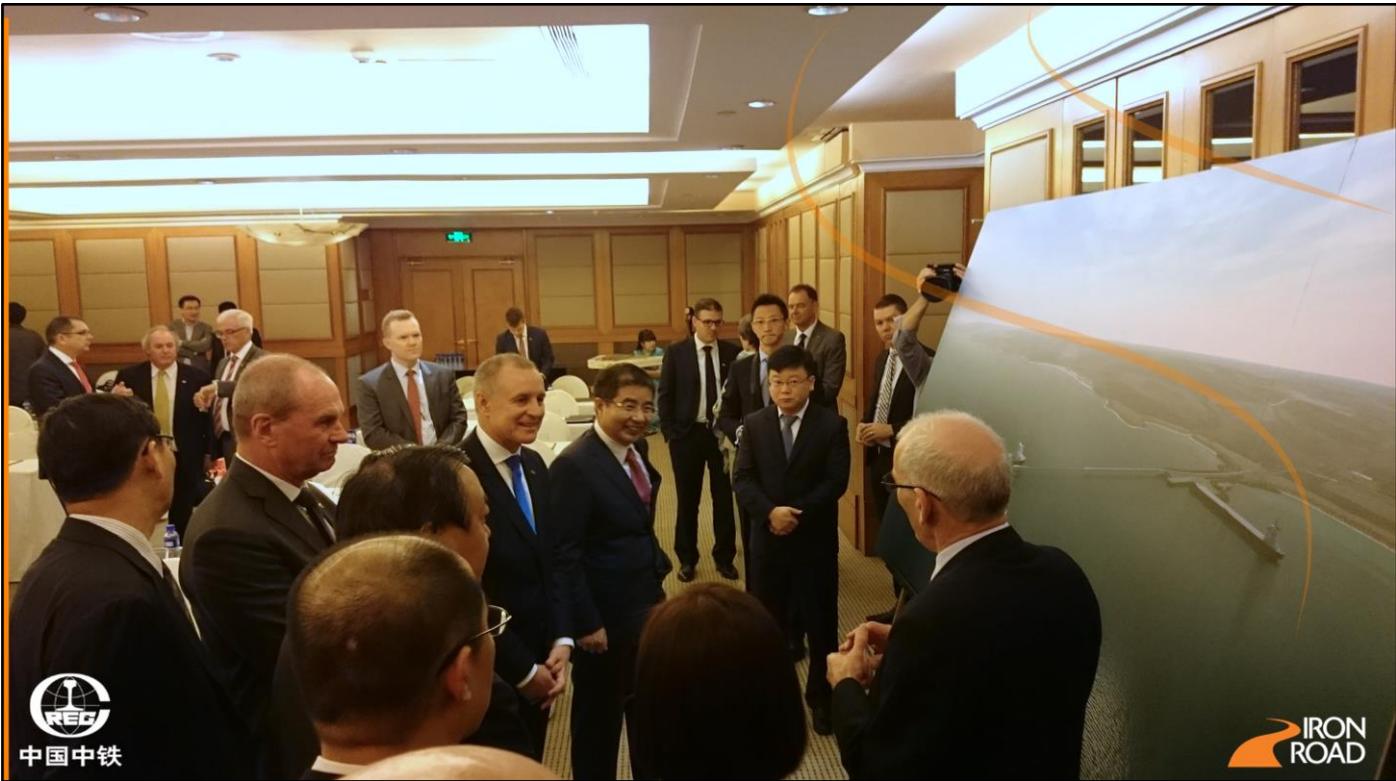


Onto partnerships.

- Iron Road has studied the CEIP over the past eight years. During this time, we have looked to who might be good partners to assist in the funding, building and operating tasks.
- The first project partner I will introduce today is China Railway Group Limited (or CREC).



- An agreement with CREC was signed in April this year in Beijing that includes a 12 month Project Commercialisation Programme –to enable a Financial Close for CEIP to ultimately be achieved. This programme is progressing very well.
- Importantly, pending a positive investment decision, CREC anticipates making a direct investment of up to 15% of the project equity in its own right and will provide a whole of project guarantee back to the debt providers.

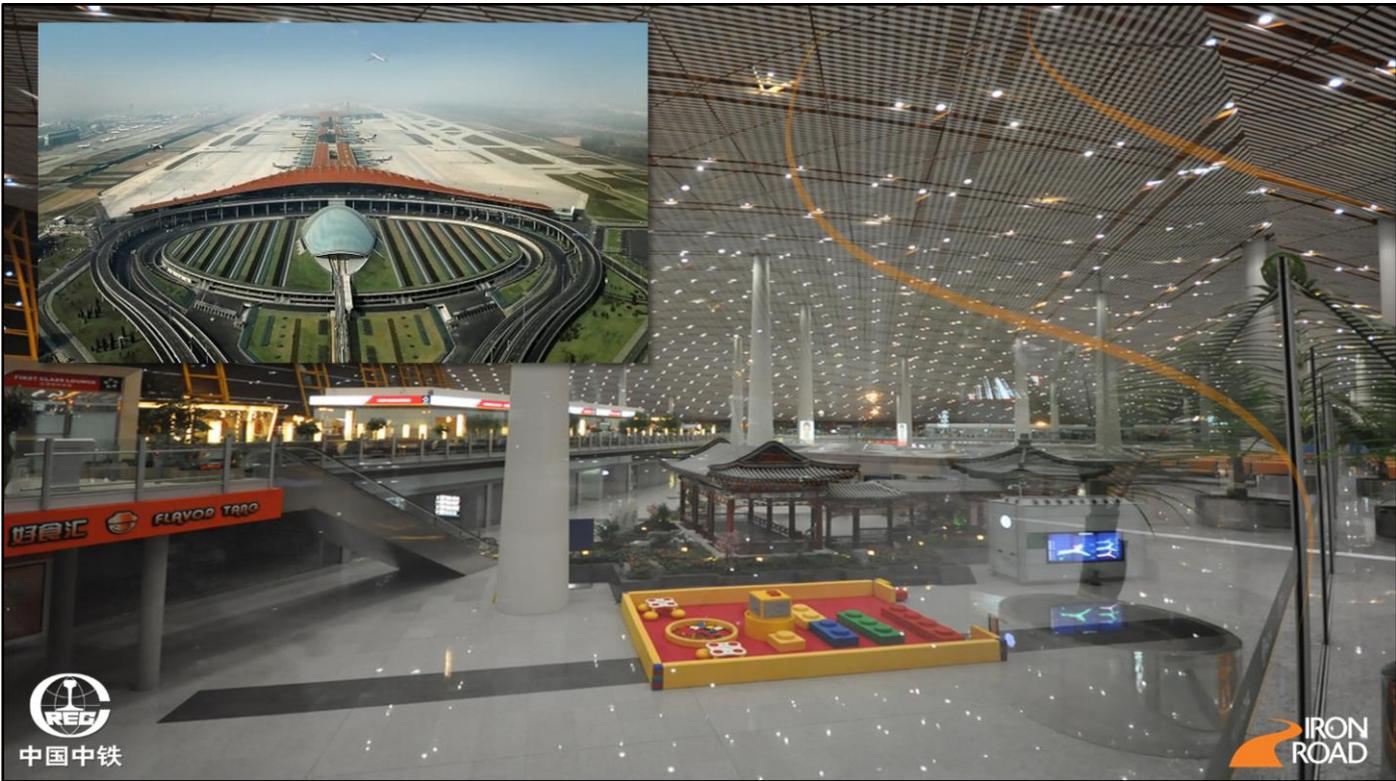


- The occasion allowed the Iron Road chairman Dr Peter Cassidy the opportunity to explain Iron Road's vision to various dignitaries.



## Why CREC?

- CREC is the 7<sup>th</sup> largest SOE in China;
- the largest infrastructure construction group in Asia; and
- the second largest infrastructure construction contractor in the world based on total revenue... equivalent to about 1% of China's GDP.



Some of you would have seen CREC's work first hand

- CREC designed and built the Beijing International Terminal 3, with a contract value of around USD\$4B



CREC recently completed construction of the Qinghai-Tibet Railway Line

- Almost 2,000km total length, more than half of which is over 4,000m above mean sea level
- Contract value about USD\$5B



And CREC designed and constructed the Hangzhou Bay Bridge

- At 36km, it is the longest Sea Bridge in the world
- Contract value of US\$1.3B



As well as having a permanent presence in Iron Road's Adelaide Office, CREC has sent three specialist teams to South Australia relating specifically to the three major components of the CEIP.

- These teams and the Joint Iron Road-CREC development team have acquainted themselves with local businesses... for example, ARTC...



- ... and SCT Logistics, being a couple of them.



- Various teams have conducted in-depth field visits to the proposed mine...



... infrastructure corridor...



... and port site.



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...and when interest starts waning, particularly after lunch, we revert to the ever popular '*sleepy lizard trick*'. Always a sure winner!



The second partnership is with Shandong Iron & Steel, or ShanSteel...

铁之路公司、中国中铁和山钢集团三方合作意向书  
Iron Road Limited, China Railway Group and Shandong Iron and Steel Group -  
Tripartite Co-operation Agreement

IRON  
ROAD

山钢集团  
SHAN STEEL



签约仪式



A tripartite agreement was signed in Jinan between Iron Road, ShanSteel and CREC in April of this year.

- The agreement commits the parties to co-operate and collaborate to enhance the long-term value of the CEIP; and
- To evaluate a joint development strategy to advance the Project.



The signing coincided with the 30<sup>th</sup> anniversary of the co-operative relationship between South Australia and its sister province Shandong.

- Investment Attraction SA plays an important role in fostering this relationship and does an excellent job.



ShanSteel is...

- China's seventh largest steel producer and a producer of iron ore in China and Africa,

Shansteel brings both iron ore production and steel making technical expertise to both Iron Road and CREC.



The third partnership is with Emerald Grain, one of the largest grain marketing and supply chain businesses in Australia.

- Emerald is a wholly owned subsidiary of Sumitomo, one of Japan’s most respected companies;
- Emerald has an agreement with us to assess opportunities to utilise planned CEIP rail and port infrastructure to develop a modern and efficient grain export hub.

# Building Value for Communities



- Currently >80% total EP grain crop exported via Port Lincoln
- Cape Hardy has significantly greater natural draw than Port Lincoln
  - Total EP crop production of 2.0-2.5Mtpa
  - 1.1-1.5Mtpa natural draw within 100km radius of Cape Hardy



Iron Road operates in an established agricultural region. We have no doubt that the proposed port and rail infrastructure is capable of facilitating a modern, efficient and internationally competitive grain distribution and supply chain network – something the EP sorely needs.

- More than 80% of grain production from the EP is currently exported through Port Lincoln;
- Cape Hardy has a significantly larger natural grain draw (shown in yellow) than Port Lincoln (shown in blue);
- The white line is the CEIP railway line, it penetrates well into the grain growing areas of the EP;

It is sometimes claimed that Whyalla is suitable as a potential grain export port, however the satellite image of the EP suggests that this is unlikely to be the case.

# Building Value for Growers



- Iron Road’s objectives include broad and tangible benefits
- Cape Hardy export facility will deliver significant value upside for EP growers
- Historically, EP grain growers have received lower prices than other export ports in Australia
- Iron Road supports South Australia’s Multiple Land Use Framework



One of Iron Road’s objectives is to bring broad and tangible benefits to the region’s communities and businesses.

- Grain Producers SA annual surveys show that the highest priority for the past three years has been ‘**Competition in storage and handling**’ ...
- ... and the number 2 issue this year was ‘**Grain transport and supply chain infrastructure**’. We can help.
- The illustration highlights estimated delivery costs growers situated at locality A and B would enjoy by utilising a grain export facility at Cape Hardy (and this prior to construction of the CEIP railway line);
- The above illustration excludes any other benefits which may come from a new and efficient terminal. Ultimately this project also gives local growers choice.

Unfortunately, Grain Producers SA (GPSA) openly emphasises their belief that mining and agriculture cannot co-exist and does not support mining on agricultural land. We obviously disagree and believe the EP will become an example of the industries leveraging each other’s strengths.

## Early Beginnings

### DEEP SEA PORT COMMITTEE

From 1936 to 1940 I was secretary of the Committee, as it was named at that time "The Carrow Railway and Deep Sea Port Committee" due to the war which was raging at that time the Committee went into recess. A public meeting was held in Bert Neill Hall, April 10, 1963, when a Committee was formed under a revised name to seek further investigations into a Deep Sea Port. Eric Beinke chairman and W.R. Pfitzner secretary. Comment by 1963 the name Carrow was to be scrubbed and the township known as Port Neill. A new name or title for the new Committee was the "Port Neill Deep Sea Terminal Committee".

October 7, 1969 the Government announced its decision that a "Super Port" would be built at Port Lincoln. The Committee was disbanded that year.

In partnership with my parents and sister we purchased the Lewis Street property in Port Lincoln known as Bayview Chambers, after my father's death in 1957 I took over the management of renting the property until selling it in 1977.

**However**, the attractiveness of Cape Hardy as a deep sea port for the export of grain from the EP is not new and has been a favoured locality for some time.

- A 'Deep Sea Port Committee' existed from at least 1936 and was disbanded in 1969 when the state government announced that a 'Super Port' would be built at Port Lincoln.

**“A new deep water port on the Eyre Peninsula will strengthen and sustain our valued community. How much, will depend on our creativity and boldness in making partnerships and looking beyond the obvious”**

*Dion Dorward, CEO*

*Regional Development Australia Whyalla and Eyre Peninsula*

*December 2016*



A registration of ‘initial interest’ process for Cape Hardy commences later this month, led by Regional Development Australia (RDAWEP).

We want to hear from any individuals or businesses interested in utilising the proposed port for import or export purposes, so that we may engage with all potential users early in the port’s development.

I hope that you now have an insight into three key Iron Road partnerships and how each contributes towards the advancement of the Central Eyre Iron Project.

Thank-you.

# Appendix

**Table 1 – CEIP Ore Reserve Summary**

Resource Classification	Metric Tonnes (Mt)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)
Proved	2,131	15.55	53.78	12.85
Probable	1,550	14.40	58.58	12.64
Total	3,681	15.07	53.70	12.76

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# Appendix

**Table 2 – CEIP Global Mineral Resource**

Location	Classification	Tonnes (Mt)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	LOI (%)
Murphy South/Rob Roy	Measured	2,222	15.69	53.70	12.84	0.08	4.5
	Indicated	474	15.6	53.7	12.8	0.08	4.5
	Inferred	667	16	53	12	0.08	4.3
Boo-Loo/Dolphin	Indicated	796	16.0	53.3	12.2	0.07	0.6
	Inferred	351	17	53	12	0.09	0.7
<b>Total</b>		<b>4,510</b>	<b>16</b>	<b>53</b>	<b>13</b>	<b>0.08</b>	<b>3.5</b>

The Murphy South/Rob Roy Mineral Resource estimate was carried out following the guidelines of the JORC Code (2004) by Iron Road Limited and peer reviewed by Xstract Mining Consultants. The Murphy South - Boo-Loo/Dolphin oxide and transition Resource estimate was carried out following the guidelines of the JORC Code (2004) by Coffey Mining Limited. The Boo-Loo/Dolphin fresh Mineral Resource estimate was carried out following the guidelines of the JORC Code (2012) by Iron Road Limited and peer reviewed by AMC Consultants.

**Table 3 – CEIP Indicative Concentrate Specification – 100 micron (p80)\***

Iron (Fe)	Silica (SiO <sub>2</sub> )	Alumina (Al <sub>2</sub> O <sub>3</sub> )	Phosphorous (P)
66.7%	3.36%	1.90%	0.009%

\* The concentrate specifications given here are based on current data from metallurgical test work, bulk samples and simulation modelling designed specifically to emulate the proposed beneficiation plant.

