CENTRAL EYRE IRON PROJECT

STUDY CONFIRMS COMPELLING COMMERCIAL CASE

The **Iron Road Limited** (Iron Road, ASX:IRD) Board of Directors is pleased to announce the results of the Definitive Feasibility Study (DFS) for the 100% owned Central Eyre Iron Project (CEIP) in South Australia. The $100 million study confirms the project's viability to deliver high-grade and low impurity iron ore concentrate, providing a competitive and clean blending solution for the Asian market.

KEY OUTCOMES

- DFS validates a technically robust and highly profitable project supplying 21.5 million tonnes per annum of premium, high quality 67% iron concentrate;
- Base case development model delivers nameplate EBITDA of US$1.36B per annum, a post-tax project $NPV_{12.5}$ of US$2.69B and post-tax ungeared IRR of 21.0% (IRR of 25.6% with assumed gearing of 60%);
- High quality, low impurity concentrate will assist steel mills improve operating efficiencies and meet tightening environmental requirements;
- Capital cost estimate of US$3.98B, including port (US$0.49B) and rail (US$0.79B) equates to a highly competitive capital intensity of US$185 per annual tonne of iron concentrate production;
- US$0.48B pre-strip and preparatory mining works prior to first ore production in 2018;
- FOB operating costs (ex-State royalty) of US$44.33 per dry metric tonne expected to result in strong operating margins, placing the CEIP within the second quartile of the 2018 price adjusted CFR China cost curve;
- Modelling based upon 25 year mine life, consisting of:
  - Initial 17 years using Proven and Probable Mining Reserve of 2,071Mt @ 15.5% iron (200x100m, 100x50m diamond drill spacing);
  - Further eight years using 28% Measured, 24% Indicated and 48% Inferred Resources of 1,303Mt @ 15.0% iron (200x100m diamond drill spacing). Cautionary statement – There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised;
  - Planning underway for a further drilling campaign to extend mine life beyond 30 years;
- Assessed quality differential of US$18 per dry metric tonne (dmt) above a long term iron ore price of US$112/dmt (CFR China-62% Fe fines) in line with independent market advice;
- Considerable resource growth expected over conservatively modelled 25 year mine life, based on significant additional Exploration Target already identified;
- 100% owned infrastructure business includes surplus capacity for potential third party access:
  - Additional low volatility economic returns may be realised by fully utilising port capacity of 70 million tonnes per annum and import/export of other general cargoes – longer term opportunity exists to link the CEIP rail system into the Australian rail network;
  - Memorandum of Understanding signed with a globally significant grain handler to explore opportunities for grain exports;
- Financing and partnership discussions advancing, underpinned by bipartisan government support at both State and Federal levels.

Scenario (post ramp-up)	Annual CFR Revenue (US$B)	Annual CFR Expenditure (US$B)	EBITDA (US$B)	$NPV_{12.5\%}$ (US$B)	Ungeared IRR	Geared IRR
Base Case Development Model	2.80	1.44	1.36	2.69	21.0%	25.6%
Base Case + Production Growth	3.12	1.61	1.51	3.57	22.5%	27.3%

NPV and IRR figures all post-tax

Base Case Development Model: Encompasses a 25 year mine life, based on existing Ore Reserves and Mineral Resources, producing 21.5 million tonnes of concentrate per annum following a staged ramp up over 2½ years. Modelling does not include revenues from potential third party users of the infrastructure.

Base Case + Production Growth Assumes initial base case production as above until the end of the fifth year of operations, when production is increased to 24 million tonnes per annum from additional resources and continues at that rate until the middle of year 28. Modelling does not include revenues from potential third party users of the infrastructure. This scenario is based upon future production being sourced from Inferred Resources and the Exploration Target detailed in the appendices of this report.

The Reserves, Resources and Exploration Target underpinning the above production targets have been prepared by a competent person in accordance with the JORC Codes 2012 and 2004 (there being no material changes since the Resources were last reported under the JORC Code 2004) and are as follows:

Location	Classification	Base Case Development Model	Base Case + Production Growth
		Proportion (%)	Proportion (%)
MSRR	Proven Ore Reserves	62%	50%
MSRR	Probable Ore Reserves	6%	5%
MSRR	Measured Resources	9%	7%
MSRR	Indicated Resources	8%	6%
MSRR / BLD	Inferred Resources [1]	15%	13%
CEIP, refer Appendix	Exploration Target [2]	0%	19%

Cautionary Statements

1 There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

2 The potential quantity and grade of an Exploration Target is conceptual in nature. There has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in a determination of further Mineral Resources or that the production target itself will be realised.

Exploration work conducted by Iron Road, including extensive resource drilling and geophysical investigations, has proven to be reliable indicators of mineralisation. Moreover, large amounts of the drilled orebody have reported to the high confidence Proven category of the Mining Reserve. This has demonstrated strong understanding of the mineralisation, leading Iron Road to believe that it has a reasonable basis for reporting the production target based in part on an Exploration Target.

COMMENTARY

Iron Road Managing Director, Mr Andrew Stocks, welcomed the compelling commercial case delivered by the feasibility study.

"This study is the culmination of nearly six years of active development for Iron Road, and over $100 million invested to date. To receive such an outcome demonstrates that the Central Eyre Iron Project is a genuine, fundable project and the result is a real thrill and a testament to the skill of the team," said Mr Stocks.

"This result was built on the hard work and dedication of hundreds of people, and I would like to thank everyone who contributed to the study.

"We have demonstrated that our premium product will be highly sought by customers, and can be expected to capture a quality differential in line with the commensurate efficiency and value-in-use, steel mill customers will derive. This value is expected to increase over time, as steel industries worldwide move to more energy efficient and less polluting production methods.

"Importantly we've also shown we can build this project including all associated infrastructure for a very competitive capital cost, with an attractive operating cost profile. When comparing on a 'like for like' price adjusted cost curve basis, our project will be more competitive than a number already under construction today, falling within the second quartile of the 2018 price adjusted cost curve, as set out in our release today.

"We are able to deliver this outcome thanks to the smart design principles adopted, with an effective modularised construction method and the adoption of proven, reliable, processing methods and technology that suit our project. We have tailored our approach and not simply copied and implemented what other projects have done.

"In particular, outcomes from our approach have resulted in a straightforward process flow, adoption of in pit crushing and the elimination of a traditional tailings storage facility from the design.

"I'm also very pleased we have demonstrated a long term project with a permanent rail and port business, combined with an initial mine life of some 25 years, and 30 years or more readily in our reach. The sheer scale of our resource, competitive capital build and permanently embedded low operating costs all combine to make the Central Eyre Iron Project an eminently fundable project.

"We anticipate that the Central Eyre Iron Project will provide Iron Road with stable cash flows and a strong underlying port and infrastructure business, built upon a premium product with a rich demand profile. I believe that the amalgamation of these attributes points to our company becoming a significant business with a bright future. Iron Road has evolved significantly from its beginnings seven years ago and now possesses significant in-house expertise covering all aspects from pit to customer.

"Financing and partnership discussions are advancing well as we progress towards construction and ultimately production."

PROJECT SNAPSHOT

Key Operating Parameters (Base Case)	
Mining	
Ore Mined	3.57 billion tonnes (life of mine)
Mine Stripping ratio (waste:ore)	1.22
Processing	
Product size	Greater than -130 microns (p80)
Power demand	260 megawatts
Water demand	14 gigalitres per annum
Indicative concentrate specifications	
Iron grade (Fe)	67%
Silica (SiO_2)	<4.0%
Alumina (Al_2O_3)	<2.0%
Phosphorous (P)	0.005%
Sulphur (S)	0.002%
Steady state annual production	21.5 million tonnes per annum
Mine Life	25 years

Key Financial Assumptions (real 2013 terms)	
Capital cost estimate (incl. contingencies)	US$3.98 billion
Pre-stripping and preparatory mining works	US$0.48 billion
Capital intensity	US$185 per annual tonne
FOB operating cost (ex state royalty)	US$44.33/dmt (dry metric tonne)
62% Fe CFR China Index price	US$112.00/dmt
+ standard grade differential / premium	US$3.00/dmt per 1% Fe above 62%
+ additional CEIP high quality premium	US$3.00/dmt
Received 67% CEIP CFR China price	US$130.00/dmt
Capesize freight rate – Cape Hardy to North Asia	US$17.73/dmt
Long term AUD/USD	0.85
Nominal discount rate	12.5%
CPI	2.5% p.a.
Corporate tax rate	30%

COMPARATIVE ADVANTAGES

Premium Product

- Consistent high quality iron concentrate providing a competitive and clean blending solution for steel mills
- Bulk testing has confirmed value in use benefits for steel mills
- Increasing desirability over time expected due to declining average iron ore grades alongside tightening energy and environmental requirements
- Coarse product has improved transport and handling characteristics over finer concentrates

Market

- Meets requirements for wider sinter market, not only smaller pellet feed market
- Readily substitutes for Pilbara fines, Brazilian fines and high grade Chinese domestic concentrates, with lower solid fuel requirements lifting operating efficiencies
- Expected quality differential of US$18 per tonne forecast over the long term iron ore price

Capital Build

- Competitive US$185 per annual tonne of capacity
- Effective modularisation design mitigates cost and schedule risk
- Established long mine life underpins infrastructure investment
- Potential for additional returns through third party access and mine life extensions

Operational Metrics

- 21.5 million tonnes of concentrate production per annum
- 500+ direct employees
- Forecast second quartile positioning on 2018 price adjusted CFR China cost curve - competitive with recent large-scale Pilbara developments such as FMG Solomon
- Annual gross revenues of US$2.80 billion post ramp up
- EBITDA of US$1.36 billion per annum post ramp up

DESIGN HIGHLIGHTS

Smart Modular Design

- Processing plant design utilises high density modules
- Wet commissioning of process trains at fabrication site prior to delivery - minimises schedule and cost risk
- Based on size envelope established by laser survey of transport route
- Designed for long term outcomes, permanently embedding lower operating costs

In Pit Crushing and Conveying (IPCC)

- Mine to be designed for IPCC from day one, not retrofitted
- Orebody characteristics ideally suited to IPCC
- Realises significantly improved safety outcomes
- Savings in trucking fleet, diesel use and manning
- Benefits sustained over life of mine

Processing Plant

- Three discrete recovery trains provides high levels of plant availability and minimises operational downtime
- Gravity circuit reduces power demand
- Cost effective semi-autogenous (SAG) and ball milling circuit

Tailings Handling

- Filtered tailings and waste handling method reduces both water use and tailings footprint
- Reduced environmental impacts - no tailings dam
- Coarse nature of tailings mitigates handling issues or plant downtime

Rail and Port Design

- Standard gauge, heavy haulage rail system
- Covered wagons, with secure bottom dump system
- Shiploader capacity of 70Mtpa (at 80% utilisation) - rapid turnaround of Capesize vessels
- Provision for potential third parties in port footprint and loading capacity

COMPETITIVE CAPITAL INTENSITY

In a highly concentrated seaborne supply industry, it is acknowledged that the iron ore majors deliver brownfield production growth on the most efficient unit capital basis. However, limited opportunities exist for greenfield and even brownfield developments below US$150 per annual tonne of capacity.

Benchmarking global projects via capital intensity measures is complicated by differences in the stage of study reached (scoping through pre-feasibility and finally to DFS). Typically, early stage cost estimation and capital expenditure tends to increase, as projects pass through more detailed study and development phases. Therefore, capital intensity comparisons are only relevant where similar levels of confidence in the project estimates have been attained.

CEIP's projected capital intensity of US$185/t (excluding US$22/t for pre-strip and mining preparation works) is expected to be highly industry competitive, comparing favourably with projects that are broadly representative. This includes Rio Tinto's brownfield IOC expansion (US$213/t), Essar Steel's Minnesota project (US$243/t), Chile's CAP projects ($183/t weighted average) and various Russian and Chinese projects.

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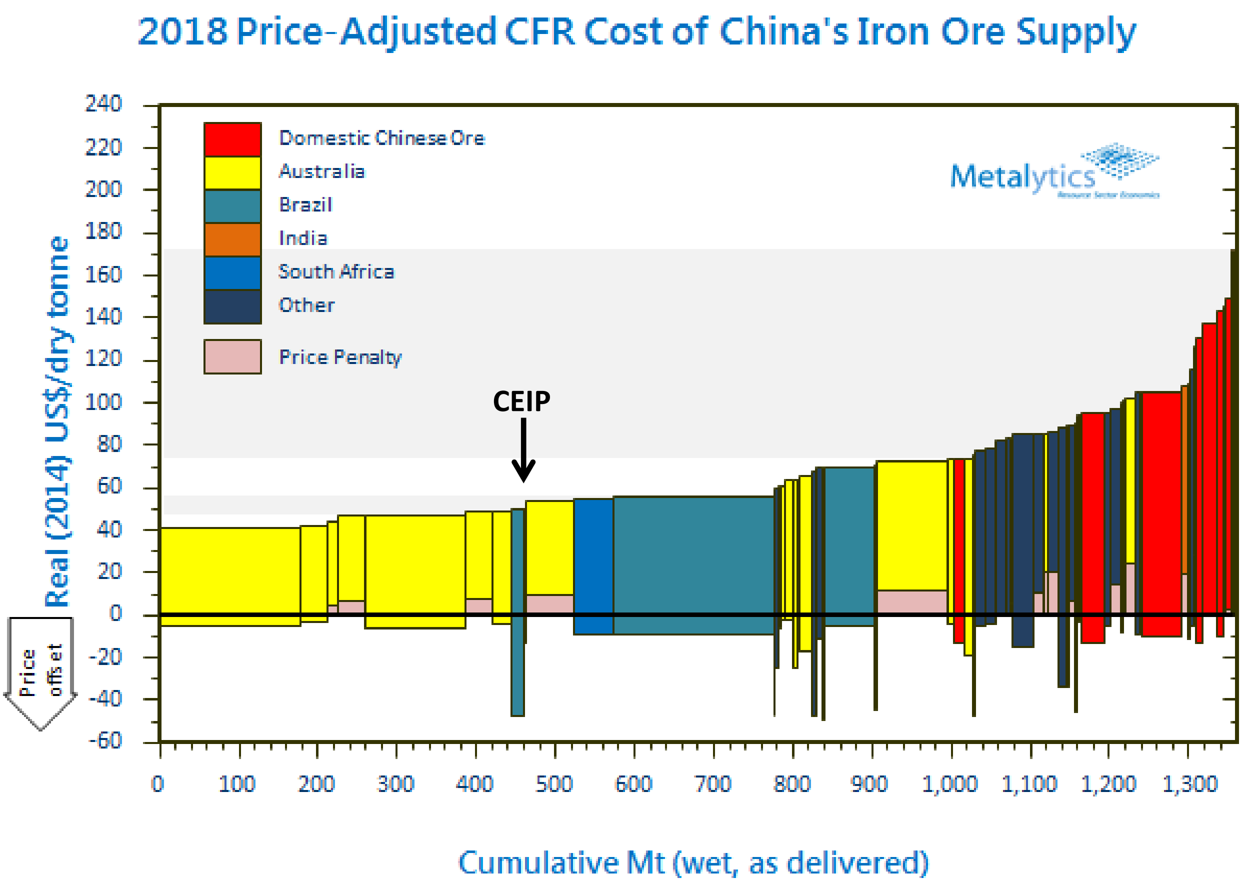
INDUSTRY COST CURVE POSITIONING – SECOND QUARTILE STRENGTH

The iron ore industry cost curve increasingly needs to factor in price differentials (positive premiums or negative penalties) compared with the “benchmark” price to reflect an accurate industry margin position. This trend has accelerated in recent years as world iron ore production has expanded, with miners having widened the range of grades and ore qualities supplied to the market. Lower-grade ores, in particular, have found acceptance with commensurate pricing discounts and adjustments due to strong growth in seaborne tonnages demanded by the market. With environmental regulations now tightening significantly, particularly in China, the deficiencies of lower grade products are becoming more apparent and a growing need is expected for these to be counterbalanced by high-quality ores blended into sinter feed mixes.

Independent iron ore industry consultants, Metalytics, generate assessments of price-adjusted cost curves for iron ore supply into China. The chart below illustrates the forecast supply mix into the Chinese market in 2018 from both import and domestic sources. A positive or negative price adjustment is added to each estimated source of supply, effectively normalising all costs back to a standard 62% iron Reference fines basis.

The price-adjusted CFR China cost curve is well accepted industry-wide as the most relevant to consider as it is the overwhelming driver of seaborne iron ore prices.



The previous chart (on page 7) depicts the 2018 price-adjusted cost curve in line with the expected timeframe of CEIP being brought into production. CEIP is expected to be positioned very competitively in the second quartile of the curve. This assessment is based upon:

- CEIP FOB operating cost estimates determined by the DFS findings, inclusive of state royalty;
- Metalytics 2018 iron ore price forecasts, including industry standard penalties and premiums; and
- Metalytics 2018 forecast freight rates and AUD-USD exchange rate.

It should be noted that the 2018 assessment takes into account an estimated 200Mtpa+ of growth in new supply (primarily from the majors) anticipated to enter the Chinese market compared with the corresponding 2013 curve.

MARKETING

The market for high-quality iron ore, such as CEIP concentrate, has a very promising future as performance requirements for blast furnace-based steel mills become more demanding. Environmental regulations have tightened significantly, particularly in China, largely in response to airborne pollution issues and efficiency and energy consumption imperatives. This is expected to drive the ongoing use of higher quality raw materials. In addition to the high iron grade, low phosphorus, sulphur, silica and alumina content, the CEIP concentrate will prove beneficial to steel mills in meeting stricter environmental requirements and is expected to attract a quality based pricing differential as a result. The recent trend towards the usage of high-quality iron ore feedstock is particularly relevant to the ongoing market opportunities for CEIP concentrate given the general declining grades of direct shipment iron ores during the last decade.

Unlike most Australian magnetite deposits, which typically result in the production of very fine grained products more suitable for the pellet feed market, Iron Road has chosen the larger north Asian sinter feed market as the main target for the relatively coarse CEIP concentrate. Extensive commercial scale sintering test work undertaken by China's prestigious *China Iron and Steel Research Institute Group* (CISRI) indicates that for typical Chinese sinter blends CEIP concentrate could be successfully substituted for up to 30% Pilbara or Brazilian fines, resulting in similar productivity and decreased solid fuel requirements. Moreover, this test work confirmed the ability to substitute CEIP concentrate for high grade domestic Chinese concentrate in the *sintering and pelletising* processes.

The positive market outlook for high-quality concentrates is supported by independent market research which identified significant opportunities to position CEIP concentrate into the expanding north Asian steel sector.

FINANCIAL ANALYSIS

Financial modelling of the CEIP demonstrates an attractive IRR of 21.0% over a 25 year operating period and an NPV of US$2.69 billion. The project has strong economic resilience as demonstrated in the sensitivity analysis for all key parameters, set on page 10.

Returns from the project may be enhanced by expanding production at an appropriate time, once the construction and commissioning phase has been successfully completed and operating systems and processes are well established and stable.

A leverage analysis based upon recent transactions in the Australian resources sector was conducted using a gearing ratio of 60% with parameters reflecting current market conditions. This exercise demonstrated the positive impact of gearing, lifting the IRR from 21.0% to 25.6%.

Iron Ore Pricing

Iron ore prices for the study were established through the advice of the independent consulting firm, Metalytics Pty Ltd with long term prices for 62% iron fines CFR China being set at US$112/dmt in real terms (2013). An additional quality premium of US$18/dmt was established for Iron Road's 67% iron concentrate. Real terms Capesize freight was assessed by Metalytics at US$17.73/dmt ex Cape Hardy – north Asia.

Capital Costs

Capital costs for the CEIP plant, facilities and infrastructure have been established at US$3.98 billion (real $2013), including a 9.4% contingency as per the table below. Pre-operating mining development costs which will be incurred through the mining contractor are estimated to add a further US$0.48 billion (real $2013) before production commences. Ongoing sustaining capital expenditure and ultimately closure costs have also been included in the financial modelling.

Area	US$B (2013)
Ore Treatment Facilities	1.07
Mine Site Facilities	0.25
Rail System	0.79
Port & Marine	0.49
Transport Infrastructure & Other Off Site Facilities	0.21
Indirects (including 9.4% contingency)	1.17
TOTAL	**3.98**
Pre-Operating Mine Development	0.48

Operating Costs

Total average FOB operating costs over the life of the project are expected to be US$44.33/tonne (real $2013), excluding state royalties. South Australian State Government royalties are set at 5% of the value of the minerals ex-mine gate. Upon application to the Minister, a reduced rate of 2% of the value of the minerals ex-mine gate may be levied for the first five years.

Following improvements to the processing layout and the adoption of the IPCC approach, energy costs across the operations have declined to now represent 30% of total costs. Other consumables used in operations comprise a further 27% of total costs.

Wages and salaries (including the mining contractor's employees) have been based on similar mining operations in South Australia and represent 15% of the total costs. Operations will continue 24 hours per day, 7 days per week. Maintenance is to be carried out principally on a day work basis with 24 hour coverage for critical breakdowns. Reduced maintenance workloads in the plant area following the layout improvements have delivered reductions in both labour costs and replacement spares.

Other Key Assumptions

Item	Assumption
AUD / USD FX rate	0.85
Corporate tax rate	30%
Nominal discount rate	12.5%
CPI	2.5% p.a.
Minerals Resource Rent Tax (MRRT)	Nil
Carbon tax	Nil

Sensitivity Analysis

The financial impacts to changes of ±10% in key parameters are shown in the table below, clearly demonstrating the economic resilience of the project. As expected, the iron ore price exhibits greatest financial leverage. Notwithstanding, the IRR remains above 18% even if average FOB prices were to fall 10% below that anticipated in the study. A 20% negative change to key parameters sees IRR persist above 15%.

Sensitivity Scenario (post tax, ungeared)	IRR (%)	NPV (US$B)
Base Case	21.0	2.69
10% increase in average iron ore prices	23.6	3.65
10% decrease in average iron ore prices	18.2	1.73
10% increase in average US$:A$ exchange rate	19.3	2.24
10% decrease in average US$:A$ exchange rate	22.8	3.14
10% increase in capital expenditure	19.6	2.41
10% decrease in capital expenditure	22.7	2.97
Six month delay in construction	19.9	2.46
10% increase in average annual production	22.7	3.33
10% decrease in average annual production	19.2	2.05
10% increase in average annual operating costs	19.8	2.27
10% decrease in average annual operating costs	22.2	3.11

Additional value may be realised by extending or increasing production levels. Further drilling programmes are being planned to convert a portion of the significant Exploration Target to Mineral Resources. This is expected to increase mine life beyond 30 years, or alternatively, lift production rates to approximately 24 million tonnes per annum. Increasing the production rate alongside a 2.5 year mine life extension, using existing plant capacity is considered viable. Project IRR increases to 22.5% and NPV to US$3.57 billion under this scenario.

Further upside may be generated through third party access to Iron Road's infrastructure with significant excess capacity available. Timing, volume and commercial arrangements for any such initiatives are not quantified at this stage as there is a wide range of potential outcomes. Nevertheless over time, significant additions to the project's revenue streams are possible with consequent positive impacts on IRR, NPV and other financial metrics.

For modest incremental capital expenditure, the Iron Road rail system can also be opened up to a wider catchment in southern Australia by linking to the national rail network.

Debt and Project Financing

Project debt scenarios have been assessed using a gearing ratio of 60%. Financing assumptions used were based on recent transactions in the resources sector in Australia and therefore reflect current market conditions. Given that the project meets typical bank debt service cover ratios and reserve tail requirements under those assumptions, our view is that the project will be able to secure the necessary debt funding on suitable terms to enable successful financial closure in due course. As is to be expected, gearing to 60% increases the project IRR, lifting it from 21.0% to 25.6% for the base case with a similar uplift for other alternate scenarios.

PROJECT OVERVIEW

The CEIP is located on the Eyre Peninsula, South Australia. The proposed mine site at Warramboo is located 28 kilometres southeast of the regional centre of Wudinna, and the proposed port is seven kilometres south of Port Neill at Cape Hardy (Figure 1). The mine and the port will be linked by a utilities corridor containing rail, water and power.

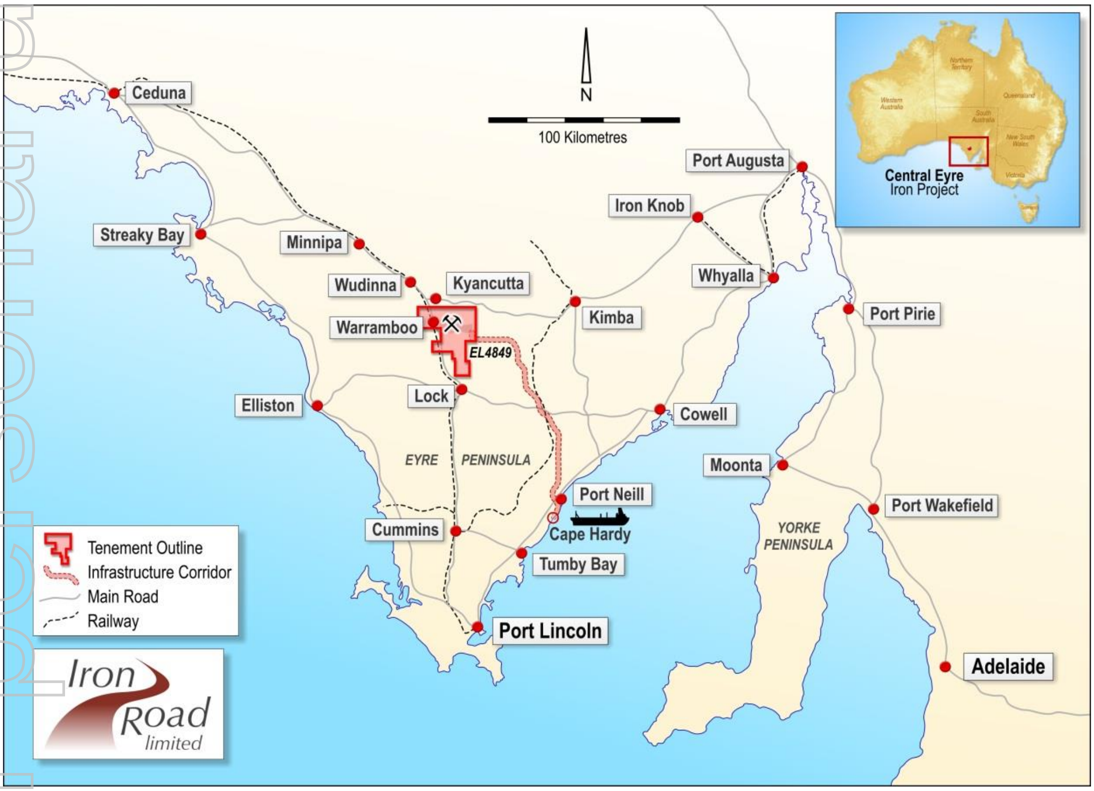


Figure 1

Location of the CEIP, showing mine, utilities corridor and port.

Project studies incorporate mining and ore processing, as well as rail and concentrate export facilities. The CEIP offers a potential operating life in excess of 25 years. The defined resource at Warramboo contains continuous and consistent mineralisation over more than six kilometres of strike and is amenable to large scale, open pit extraction methods.

Ore treatment by conventional crushing, milling and magnetic/gravity separation is planned to deliver high-grade concentrates containing 67% iron at a relatively coarse size distribution of greater than -130µm (80% passing; P80). Concentrate is being marketed primarily as a high quality iron blending feedstock for sinter, which feeds the majority of blast furnaces internationally.

Iron Road has acquired 1,100 hectares of land at Cape Hardy for a Capesize-capable port facility as part of its integrated export solution for the CEIP iron concentrates. The port is planned to have an initial capacity of at least 70 million tonnes per annum (Mtpa), with 50Mtpa capacity potentially available to third parties. The DFS encompasses construction of a heavy haul, standard gauge rail line between the mine and port. The rail system may be expanded to connect with the existing national rail network, extending port access to the greater southern Australia. The proposed port is expected to experience relatively benign weather with no seasonal cyclonic activity to hinder operations.

Geology and Mineral Resources

Iron Road holds Exploration Licence 4849 (EL 4849) which contains the Warramboo, Kopi and Hambidge Project areas.

The magnetite mineralisation is characterised by coarse-grained magnetite gneiss, overlain by unconsolidated aeolian sands and calcrete. The sub-surface magnetite units are distinguished as anomalous magnetic highs in airborne magnetic surveys as per the image shown in Figure 2 below.

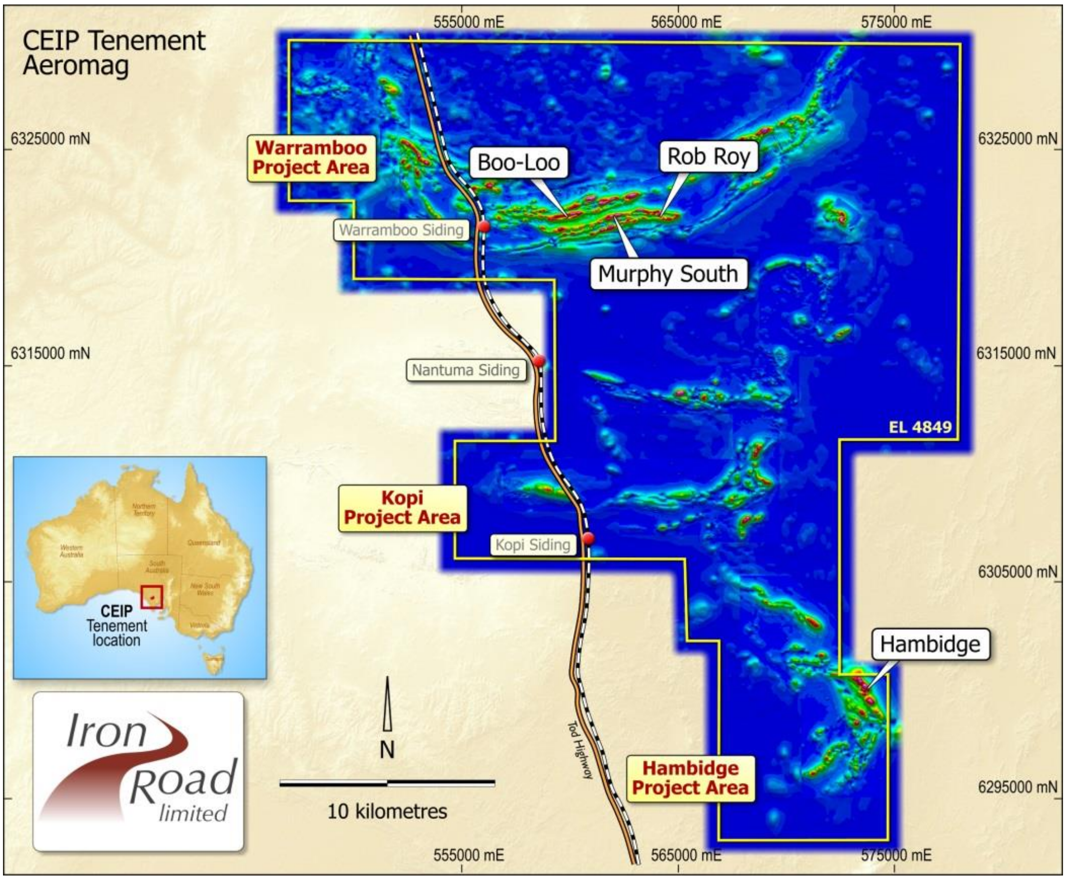


Figure 2 **Exploration Licence 4849 showing aeromagnetic response. Murphy South / Rob Roy and Boo Loo / Dolphin prospects occur within the Warramboo Project Area.**

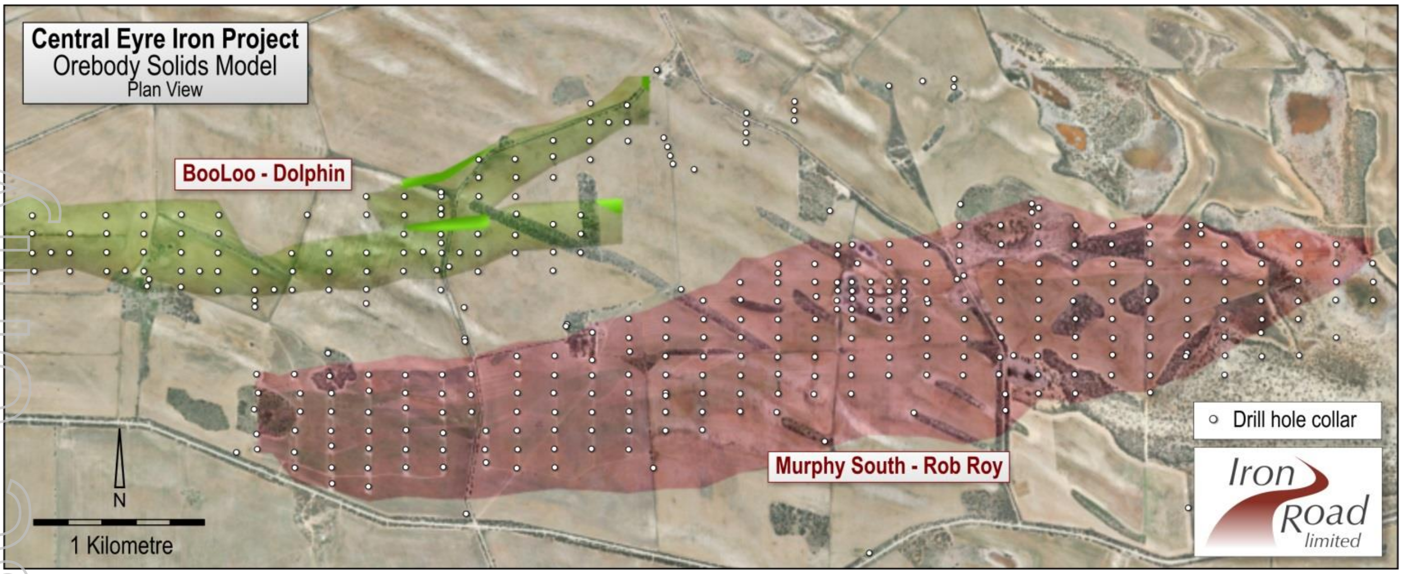


Figure 3 **Drill hole collar locations at Murphy South / Rob Roy (MSRR) and Boo Loo / Dolphin (BLD)**

The CEIP has been the subject of various exploration programmes since the 1960s. However, the majority of exploration work has been conducted by Iron Road from late 2008 with over 155,000 metres of drilling completed to date. The completion of the Stage VII, VIII and the Infill drilling programmes provided the data required for the June 2013 re-estimation and upgrade that produced a Global Mineral Resource of 3.7 billion tonnes. Global Resource estimate data was used for the mining reserve and pit optimisation in the DFS. All mineral resource drilling has been collared on systematic 200m x 100m grid spacing and the vast majority of holes are diamond cored.

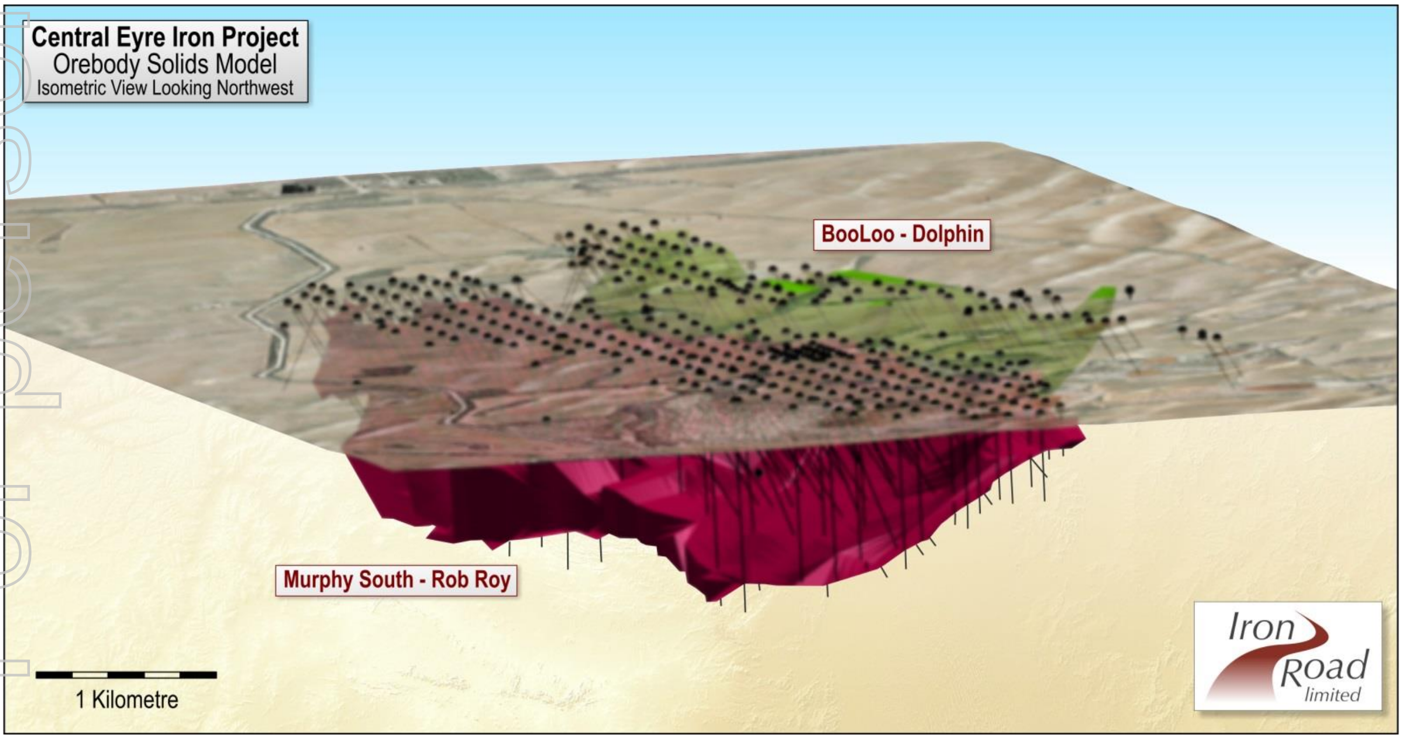


Figure 4 **Oblique section through Murphy South / Rob Roy (MSRR) and Boo Loo / Dolphin (BLD)**

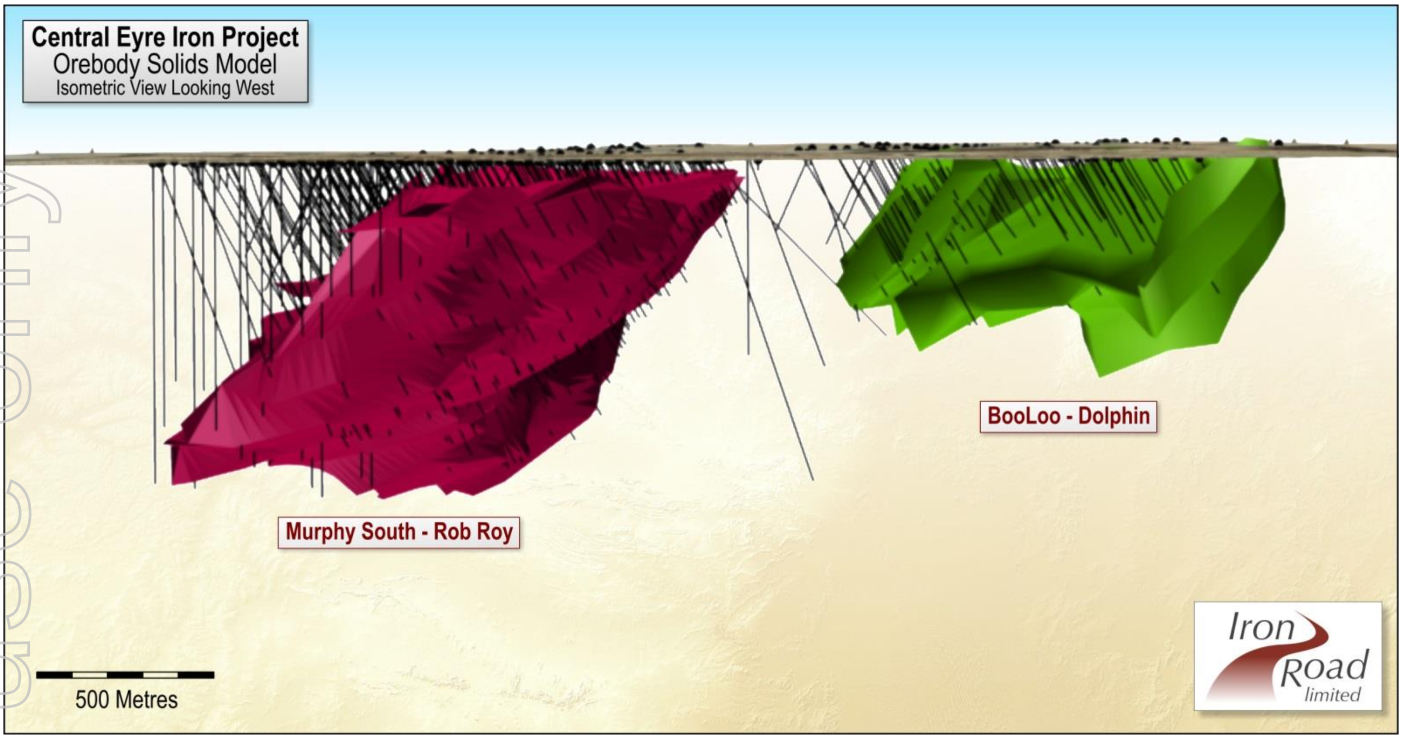


Figure 5 Cross section through Murphy South / Rob Roy (MSRR) and Boo Loo / Dolphin (BLD). The deeper parts of the MSRR orebody and the entire BLD orebody are reported in the inferred category.

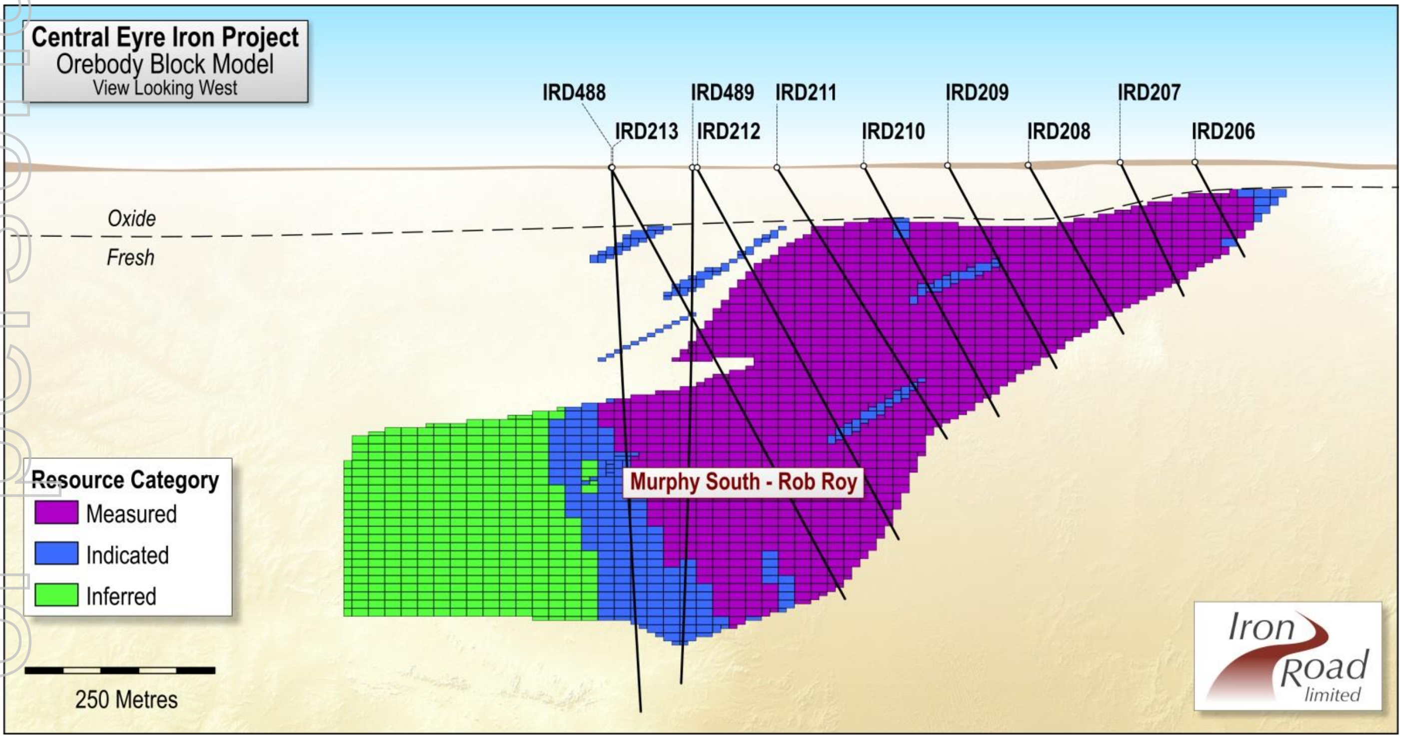


Figure 6 Cross section through Murphy South / Rob Roy (MSRR). The deeper part of the orebody is reported in the inferred category.

The MSRR orebody flattens at depth and further drilling, planned for later in 2014, is expected to result in an upgrade of the inferred category. Similarly infill drilling of the BLD orebody is expected to allow for mineral resource conversion to higher categories.

Mineral Resource information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported, refer table below.

CEIP Global Mineral Resource							
Location	**Classification**	**Tonnes (Mt)**	**Fe (%)**	**SiO_2 (%)**	**Al_2O_3 (%)**	**P (%)**	**LOI (%)**
MSRR	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
BLD	Inferred	328	17	52	12	0.09	2.1
Total		**3,691**	**16**	**53**	**12**	**0.08**	**4.3**

The competent persons' statements appear in the appendix to this announcement.

Exploration Target

Based on regional exploration work completed to date and increased orebody knowledge, there is an estimated to be a further 10 to 21 billion tonnes at 14% to 20% iron of resource potential within EL4849 (see Appendix).

The term "resource potential" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2012), and therefore the terms have not been used in this context. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve. A competent person's statement appears in the schedule to this announcement.

Open Pit Mine and Mine Reserves

Open pit optimisation and mine design has been completed, following the close-out of the upgraded Mineral Resource estimate in 2013. The Murphy South and Boo Loo mineral resources and life of mine (LOM) production schedules have been prepared with designs based on geotechnical analysis and assessment of both exploration and purpose drilled geotechnical drill holes.

A reserve has been calculated for Murphy South – Rob Roy by Coffey Mining and is presented in the Appendix and table below:

Location	Classification	Tonnes (Mt)	Fe (%)
MSRR	Proved	1,871	15.6
	Probable	200	15.1
Total		**2,071**	**15.5**

A brief summary of information in the relevant sections of Table 1 of the JORC Code 2012 and a competent person's statement appears in the schedule to this announcement.

Summary of material information relating to the Ore Reserve

The Ore Reserves were determined as part of the mine planning work that Coffey undertook for the Study.

A staged approach was adopted for both open pit designs with Murphy South - Rob Roy being designed with four stages and Boo Loo designed with two stages. The Boo Loo pit under this scenario was not expected to commence until well into the mine life and was scheduled to supplement total ore requirements as production from Murphy South declined.

The Ore Reserves were predicated on the outcomes of initial DFS investigations and were based on the Measured and Indicated Resources contained within the Murphy South / Rob Roy pit design.

The Ordinary Kriging (OK) grade estimation technique was used to estimate the iron grade with the Inverse Distance Squared (ID2) grade estimation technique used for all other constituents. The Ore Reserves that were determined for the CEIP were based on an 8% iron cutoff, and for comparison reasons the Murphy South resources at an 8% iron cutoff.

The mine schedule was based upon a production rate of 20 million tonnes of concentrate production per annum. This necessitated an ore mining rate of 122 to 140 million tonnes per annum, depending upon iron recovery. The life of mine iron recovery has been determined to be 64.5%.

A mining dilution factor of 2% and mining recovery of 99% was included in the Reserve calculations.

Subsequent to the Reserve determination, in-pit crushing and conveying (IPCC) was selected in preference to a conventional truck and shovel, load and haul mining method. IPCC is ideally suited to the MSRR orebody as it offers significant advantages and efficiencies, such as a significantly reduced mining fleet (trucking), simplified in-pit traffic flows, lower diesel requirements, optimised waste rock disposal (using existing tailings stackers) and environmental benefits.

The proposed mine at Warramboo will be subject to both a Mining Lease and a Program for Environmental Protection and Rehabilitation pursuant to the *Mining Act, 1971*. Lodgement of the Mining Lease application to the State Government for assessment is anticipated during Q3, 2014.

Hydrogeology and Hydrology

The orebody is contained within gneissic bedrock. Hypersaline groundwater is contained in fractures within the bedrock and the volume of water that seeps into the open pits is controlled by the degree of fracturing and the interconnection between fractures. Bedrock is overlain by 10 to 40 metres of sediments (silts, sand and clays) that yield small volumes of saline water.

Calculated groundwater seepage rates to the open pit and dewatering bores range from 12 to 23 megalitres/day, dependent on the depth and size of the open pits at each stage of operation. Some of this water will be lost to evaporation within the open pits; the remainder will be recycled for use in dust suppression and the process plant.

Metallurgical Processing

The flowsheet for the CEIP incorporates SAG / ball milling in preference to secondary/tertiary crushing/screening and includes gravity beneficiation. These changes to the initial configuration have significant benefits in terms of reduced capital and operating costs.

By taking advantage of the amenability of this type of facility to a modular style of construction, the layout has been updated to significantly reduce civil costs, particularly in the area of cut and fill, resulting in a much smaller footprint.

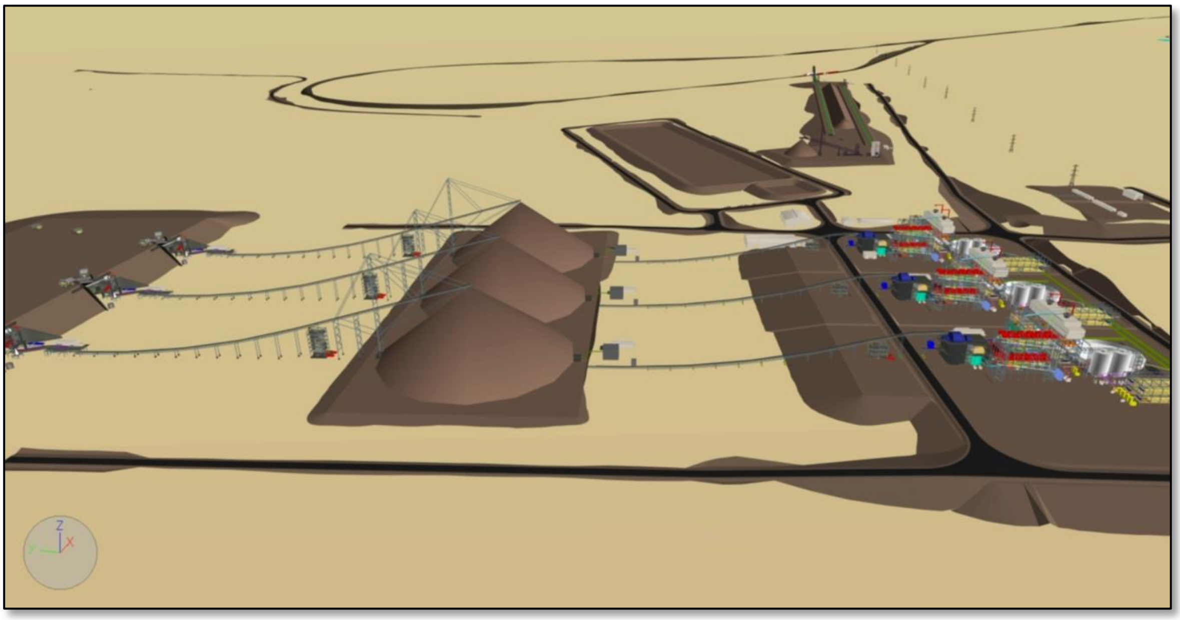


Figure 7

Oblique rendered view of processing facility showing three discrete crushing, grinding and recovery trains incorporating SAG milling and gravity circuit.

Co-Located Filtered Tailings and Waste Rock Storage

The selected option for tailings management is filtered tailings stacking. Belt filters receive coarse and fine tailings from the process facility and reduces the retained moisture content to approximately 10%. The filtered tailings, with a consistency of wet sand, is delivered together with waste rock to the designated storage area by conveyor and dispersed from mobile stackers. Some significant advantages over conventional wet paddock tailings disposal techniques are a smaller footprint, recycling of filtered water, elimination of evaporation and seepage, reduced dust emissions, progressive rehabilitation of completed stacks and lower capital cost.

Utilities Corridor

The utilities corridor will consist of a path between the mine site at Warramboo and the port site at Cape Hardy. Significant services will be located inside the corridor, including rail, water supply, power transmission and communications infrastructure.

Rail: The approximately 148 kilometre railway will comprise continuous welded standard gauge ballasted track with a 25 tonne axle loading designed to carry a train consist of two locomotives (Downer GT46C Ace 134 tonne) and 128, 78 tonne payload wagons. Each train shall transport approximately 9,984 tonnes of iron concentrate from the mine to the port at Cape Hardy. The rail alignment has been designed using 12D, three-dimensional modelling to provide the required level of accuracy necessary for the feasibility study estimate.

Power: Power transmission for the mine site is likely to be via a connection point at Yadnarie sub-station utilising an unregulated HV transmission line. The port site will be connected via the existing regulated HV power transmission line. An alternative is a gas fired power station at the mine site, with gas piped from the Moomba to Adelaide Pipeline System (MAPS).

Water: During the course of the study, there has been significant reduction in the volume of water required for the mine operations (from 45 gigalitres per annum to 14 gigalitres per annum). Water supply investigations along the utilities corridor identified a high yielding saline aquifer located west of Kielpa, 56 kilometres from the mine site. Studies are continuing to verify the capacity of this aquifer with a view to meeting the entire CEIP water demand with saline groundwater, supplemented by water recovered from open pit dewatering.

Port Facilities

The Cape Hardy bulk commodities port is planned to have an initial capacity of 70 million tonnes per annum with the main export wharf capable of handling Panamax and Capesize vessels. Two shipping berths for bulk iron ore carriers will be serviced by a travelling/slewing ship loader. Heavy-lift ships and geared Handymax vessels will be accommodated in the inner harbour. The port precinct includes 1,100 hectares of land to enable future expansion and to offer export solutions to third parties for a range of commodities. The inner harbour may be used for the import and export of low-volume high-value cargoes, including the import of machinery, cement and fertiliser and the export of copper concentrates, grain and other containerised cargoes.

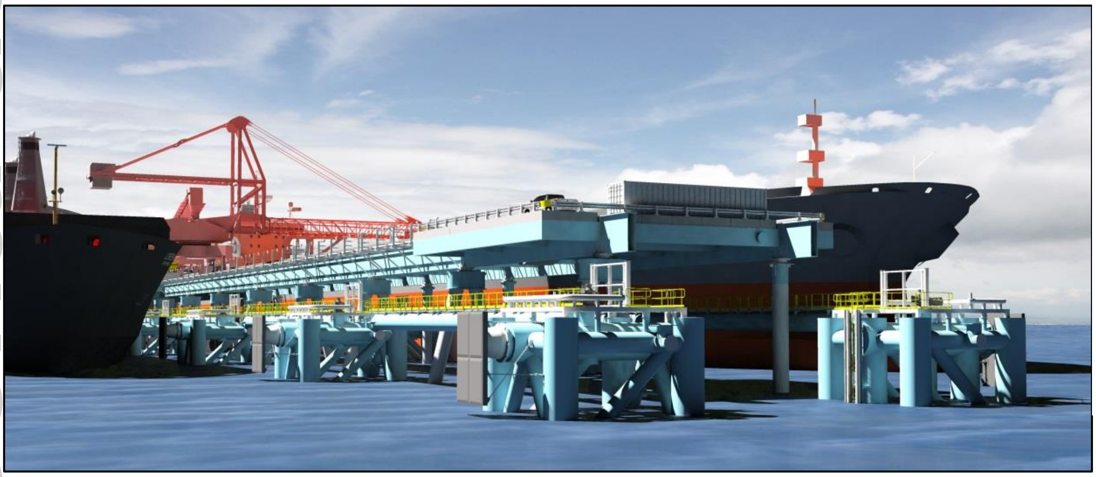


Figure 8

Rendering showing Cape Hardy wharf, dolphins and ship loader.

The port site concentrate handling system consists of a receivals (inloading) circuit and an outloading circuit. The inloading circuit is designed to receive concentrate from the rail system via a bottom discharge dumper, and then transports the concentrate to a stockyard via conveyors and a stacker. The capacity of the stockpile is 660,000 tonnes or approximately three to four shiploads of material. The outloading circuit reclaims concentrate from the stockpile via a reclaimer and transports it to a shiploader on the wharf using conveyors. The outloading circuit also contains a sampling circuit for concentrate being loaded for shipment, so that certification may be provided for product quality and compliance with the International Maritime Organisation.

Iron Road has recently signed a memorandum of understanding (MOU) with a global grain handling organisation. This MOU provides for both parties to jointly investigate the export of grain via the Cape Hardy facility.

Shipping Strategy

Iron Road's aim is the timely and safe delivery of cargoes to its customers, ensuring maximum efficiency at the most competitive price. Iron Road will provide an integrated supply chain solution that achieves this aim. Most annual production of iron concentrate will be under freight cover with the balance fixed in the spot market. This will provide Iron Road with the required freight level to sell iron concentrate at competitive cost and freight (CFR) levels as required in the target markets, in line with global competition.

Three models will be used:

- Voyage Charter – dedicated vessels operating between South Australia (Cape Hardy) and the destination ports.
- Contract of Affreightment (COA) – contracted shipments with selected first class owners/operators, for a select number of cargoes per month/per annum.
- Time Charter – period vessels on long term period charters; operated on a time charter basis.

Modularisation

The CEIP's facilities have been laid out and designed to maximise opportunities for modularisation. A full 3D laser survey of the proposed route and dialogue with heavy lift/transport consultants determined the maximum 'module window', with the process buildings subsequently designed to take advantage of this envelope. The modularisation programme planned for the CEIP works will realise significant benefits in the following areas:

- Reduced schedule risk
- Reduction of 'high risk' site works
- Reduced impact on the surrounding communities such as road congestion, particularly during harvest.

A significant feature of the CEIP modules is the high equipment densities included in the designs along with the strategy of wet commissioning at point of fabrication as a complete facility.

The concepts and philosophy of modular construction will be employed throughout the Project and include buildings, workshops, the jetty/wharf structures and stockyard fixed plant.

Workforce

Construction: During construction the CEIP is expected to have a nominal peak workforce of approximately 1,950 people.

Operations: CEIP operations are expected to directly employ approximately 700 people. The mine, rail and port will run on a continuous 24/7 basis. Most employees will be engaged on continuous shift rosters, although there will be a smaller number employed on a day shift only basis or a normal five day working week.

Iron Road will seek to employ a large portion of its operational labour force locally and from regional centres near the mine and port. Additional personnel will be sourced from Adelaide. As a result, the workforce is expected to be a mixture of residential, drive-in, drive-out (DIDO) and fly-in, fly-out (FIFO).

Construction Camps

The CEIP will utilise two construction camps to house the construction workforce over the Project's duration. A camp of approximately 1,300 rooms will be located within the mine site footprint east of Warramboo and a camp facility containing approximately 650 rooms will be located within the Port precinct at Cape Hardy. Both construction camps will be modular constructions and provide serviced facilities including kitchen/dining facilities, wet messes, administration buildings and recreational facilities.

Accommodation Village

The CEIP long-term operations village, to be situated in Wudinna, will house approximately 250 to 300 employees. The village will feature a modular built central hub with single and double room housing, reception and dining facilities. The village will be landscaped with native plants and winding pathways, creating a modern yet welcoming 'home-away-from-home' facility for the CEIP workforce.

Local Roads

The District Councils of Cleve, Tumby Bay and Wudinna are being consulted on possible road modifications required in their respective areas and some have submitted estimates for proposed upgrades and alterations. At the port and the mine site, community input will first be sought prior to Iron Road submitting final requests for proposals to the relevant Councils. Design improvements to the processing plant and tailings facility at the mine, with an associated smaller footprint, has allowed for realignment of the utilities corridor and better placement of the rail loop. This in turn is likely to change road modifications currently proposed.

Airport Upgrade

Iron Road has worked with the Wudinna District Council to look at redeveloping the existing facilities to cope with the extra traffic that will be generated by the CEIP during construction and operations. It is planned to upgrade the airport to an upper limit of 29,999 kilogram aircraft, enabling the use of Bombardier Q400 aircraft which currently service Port Lincoln. The scope of the upgrade includes increasing the runway pavement width and improving the taxiway, apron, airfield lighting and parking facilities. The design of a new terminal building is based on the recently constructed Coober Pedy terminal.

Figure 9 **Artists conceptual impression of proposed Wudinna Airport Terminal**

Operational Readiness, Project Commissioning and Implementation

Various consultants were engaged to develop strategies in these areas and respective schedules, plans and costings are included in the DFS report. Work continues on the development of the overarching Safety Management Plan.

Regulatory Approvals

The proposed mine at Warramboo will be subject to both a Mining Lease and a Program for Environmental Protection and Rehabilitation pursuant to the *Mining Act, 1971*. Lodgement of the Mining Lease application to the State Government for assessment is anticipated during Q3, 2014.

The infrastructure components of the CEIP such as the port, rail, power and a long term accommodation village at Wudinna will be subject to a Development Approval under the *Development Act 1993*. The expected assessment level for the Development Approval is an Environmental Impact Statement, the highest level of assessment for developments in South Australia. The initial Development Application is scheduled for submission to the State Government during Q1, 2014.

Referrals under the Federal Government's *Environmental Protection and Biodiversity Conservation Act 1999* will be submitted during Q1, 2014 to determine if further assessment is required. A range of other State and Federal Government approvals will be sought during 2014.

Environment and Community

Environmental and social impact studies, including baseline technical surveys and meetings with community groups and government agencies have ensured that Iron Road understands the potential benefits and impacts of the CEIP. The project layout and design has been optimised through this process.

Iron Road continues to engage with communities and other stakeholders to provide information and understanding about the project. Engagement activities planned for 2014 include public meetings, information sessions, project updates, one-on-one discussions and regular meetings with Community Consultative Committees, Reference Groups, local Councils and Government agencies.

Iron Road is appreciative of the time, input and encouragement stakeholders have provided.

-ENDS-

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Forward Looking Statements

This announcement contains certain statements with respect to future matters and 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 Exploration Target within the EL4849 is based on and fairly represents information and supporting documentation compiled by Mr Milo Res, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Res is a full time employee of the Company. Mr Res has sufficient experience that is relevant to the style of mineralisation and the type of deposits under consideration and to the activity being 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 Res consents to the inclusion in the report 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 for the Boo-Loo prospect is based on and fairly represents information and supporting documentation compiled by Mr Ian MacFarlane, who is a Fellow of the Australasian Institute of Mining and Metallurgy and an employee of Coffey Mining. Mr MacFarlane 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 MacFarlane consents to the inclusion in the report 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 for the Murphy South / Rob Roy (MSRR) 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 a full time employee of Iron Road Limited. This estimation was peer review by Dr Isobel Clark, who is a member of the Australasian Institute of Mining and Metallurgy and 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 Reserves estimated for Murphy South / Rob Roy (MSRR) is based on and fairly represents information and supporting documentation compiled by Mr Harry Warries, a Fellow of the Australasian Institute of Mining and Metallurgy, and an employee of Coffey Mining. Mr Warries 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 Warries consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDICES

Attachment 1

Iron Road Limited – Central Eyre Iron Project EDS Providers, Owners Team and Others used in DFS	
Item	**Source**
Market research and commodity price	Metalytics
Mining operating and capital cost	Coffey
Mine planning	Coffey
Metallurgical and processing	Bureau-Veritas, Mineral Technologies, Bateman-Tenova, Iron Road
Processing operating and capital costs	SKM, AECOM, Bateman-Tenova, Iron Road
General site operating costs	SKM, Iron Road
General site infrastructure	SKM, AECOM, Iron Road
Port	SKM, Iron Road
Rail	SKM, Iron Road
Geotechnical investigation	Coffey
Hydro(geo)logical investigation	SKM, Groundwater Science, Iron Road
Tailings storage facility	ATC Williams, Iron Road
Mining dilution and recovery	Coffey
Social and Environmental	SKM, Iron Road
Legal tenure	Iron Road
Government	Iron Road

Table A1 **EDS Providers, Owners Team and Others used in DFS**

Attachment 2 – Exploration Target EL4849

Exploration Target for EL4849 was released by Iron Road Limited (IRD) during late 2013 (ASX Release dated 11 September 2013). This target potential was determined to be 8 to 17 Billion tonnes in the range 14% to 20% iron* and included Priority 1, 2 and 3 ranked targets.

This estimate has resulted in an Exploration Target of 10 to 21 Billion tonnes in the range 14% to 20% iron*.

* The term "exploration resource potential" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2012), and therefore the terms have not been used in this context. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve.

Ranked targets are based on the results of 56 reverse circulation and diamond core holes drilled at various regional targets (see Table 1). The results of the drilling are detailed in an IRD ASX release dated 31 May 2011. The completion of eight stages of drilling, predominately at the Warramboo Project Area has increased the understanding of the magnetite distribution within gneiss units and produced a Global Mineral Resource of 3.7Bt at 16% Iron.

Target	No. Holes	Drilled metres
Collins	8	1,436
Boo Loo East	15	2,246
Ben's Hill	9	2,336
Joshua	3	799
Fairview East	6	1,220
Hambidge	12	5,574
Hambidge North	3	883
TOTAL	56	14,494

Table A2 EL4849 regional exploratory drilling

The potential of the Hambidge Project Area has been further enhanced by the recent completion of inversion modelling of the detailed geophysical survey over Hambidge and immediate surrounds (Hawke, 2014).

A reassessment of the Exploration Target for the Hambidge Prospect has indicated that the mineralisation is wide and deep, increasing the potential depth of the mineralisation to at least 600m. This is consistent with projections from drilling, geophysical inversion modelling and actual depth of mineralisation at the Murphy South prospect.

It is envisaged that, subject to project funding, exploratory and resource definition drilling will be undertaken at the highest priority targets, notably Boo Loo East, Boo Loo Gap, South Deeps and Hambidge, within the next 24 months. Lower priority targets will be assessed in the future.

The assumptions used to estimate the conceptual tonnages are:

- The Murphy South - Rob Roy Measured and Indicated Resource yielded 400Mt/km; assuming 50% conversion for geophysical anomalies then an expectation of 200Mt/km was used for ranked targets.
- The mineralisation is projected to between -200m and -600m below the surface.
- An average depth to the fresh rock is 50m.
- The dip of the mineralisation is in a range of -40^{o} to -70^{o}.
- Thicknesses with a true width of 40 – 200m.
- An average density of the fresh rock of 3.1g/cm^{2}.
- Head Grades range from 14%-20% Fe.

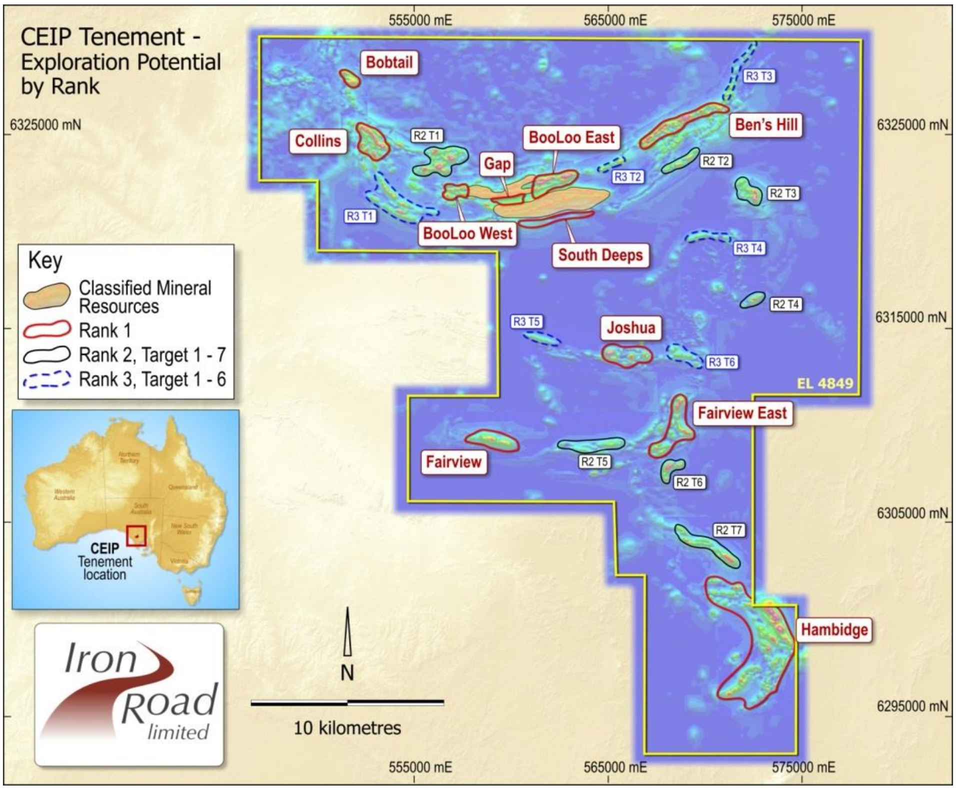

Figure A1 **Exploration Target on EL4849- classified by rank**

Target Rank	Target ID	Strike (km)	Depth (m)
1	Boo Loo East	3.0	400
1	Gap	1.5	400
1	Hambidge	13.0	600
1	Boo Loo West	1.5	400
1	South Deeps	4.0	600
1	Collins	2.0	300
1	Bobtail	1.5	300
1	Ben's Hill	5.0	300
1	Joshua	2.5	300
1	Fairview	3.0	250
1	Fairview East	3.5	250
Total		40.5	
2	R2T1	3	300
2	R2T2	2	300
2	R2T3	2	300
2	R2T4	2	300
2	R2T5	3	250
2	R2T6	1	250
2	R2T7	4	250
Total		17	
3	R3T1	4	300
3	R3T2	2	300
3	R3T3	3	300
3	R3T4	3	250
3	R3T5	2	250
3	R3T6	2	250
Total		15	

Table A3 **EL4849-Aeromagnetic Targets and strike length**

Based on the above assumptions, the interpreted exploration tonnage for the Ranked 1 & 2 targets is 9Bt to 17Bt. These targets account for 57.5km in strike length.

The lower magnetic intensity targets were ranked 3 with a strike length of 15km and suggest a possible tonnage potential of 1Bt to 4Bt.

Table A4

JORC TABLE 1
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

<table>
<tr><th>Criteria</th><th>Explanation</th><th></th></tr>
<tr><td>Sampling techniques</td><td>• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</td><td>• The regional projects were investigated using a combination of Reverse Circulation (RC) and Diamond Drilling (DD) on section lines across seven prospects. Table 1 lists the 56 holes that were drilled for a total of 14,494 m.

Table 1

<table>
<tr><th>Target</th><th>No. Holes</th><th>Drilled Metres</th></tr>
<tr><td>Collins</td><td>8</td><td>1,436</td></tr>
<tr><td>Boo Loo East</td><td>15</td><td>2,246</td></tr>
<tr><td>Ben’s Hill</td><td>9</td><td>2,336</td></tr>
<tr><td>Joshua</td><td>3</td><td>799</td></tr>
<tr><td>Fairview East</td><td>6</td><td>1,220</td></tr>
<tr><td>Hambidge</td><td>12</td><td>5,574</td></tr>
<tr><td>Hambidge North</td><td>3</td><td>883</td></tr>
<tr><td>TOTAL</td><td>56</td><td>14,494</td></tr>
</table>
</td></tr>
<tr><td></td><td>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</td><td>• The drill holes and collars were surveyed by a contract surveying company. All drillhole collar positions (Easting, Northing and Elevation) were picked up by DGPS. The equipment used for the Surveying was a Leica GPS1200 RTK (Real time Kinetic) system which has a reported operational range of 40 km providing positional accuracy for the surface positions to +/- 0.03 m. The primary base stations used were South Australian Government stations. All drillholes were downhole surveyed using a north seeking DS-HA Gyroscope where entry was possible. The operations were performed according to the contractor’s internal procedures. These procedures include calibrations for density, gamma and magnetic susceptibility tools. Onsite calibration for the gyroscope tool is undertaken using a designated hole. The depth encoder is calibrated at the Adelaide Calibration Pits prior to departure to site. All DD core for angled holes was orientated at the time of drilling using the Reflex ACT ll orientation tool. All core was metre marked and recovery data obtained before being logged for lithology, geotechnical attributes, structures and other attributes. All core was photographed wet and dry before being cut to obtain half core samples for geochemical analysis.</td></tr>
</table>

Criteria	Explanation	
	• Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'Reverse Circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	• The NQ diamond core was sampled on nominal 4 m intervals and cut to provide half core samples. However, shorter intervals were taken to maintain lithological boundaries. These samples were submitted for XRF analysis. Samples were crushed, dried and pulverised to produce XRF fusion discs that were prepared by casting in robotic fusion cells at 1050°C using 0.66 g of sample and 7.20 g of 12:22 flux. The analysis undertaken was the Fe Ore Suite which includes the following elements (lower limit of detection in brackets): Fe% (0.01), SiO_2% (0.01), Al_2O_3% (0.01), TiO_2% (0.01), MnO% (0.001), CaO% (0.01), P% (0.001), S% (0.001), MgO% (0.01), K_2O% (0.01), Na_2O% (0.001). LOI was analysed by thermogravimetric methods at 1000°C. Samples were also analysed for As, Sn, Ba, Sr, Cl, Ni, V, Co, Zn, Cr, Pb, Zr and Cu. RC samples were collected every metre and combined to form a 4 m composite. This composite was riffle split to form a 2 kg split. This sample was then crushed, dried and pulverised to produce XRF fusion discs that were prepared by casting in robotic fusion cells at 1050°C using 0.66 g of sample and 7.20 g of 12:22 flux. The analysis undertaken was the Fe Ore Suite which includes the following elements (lower limit of detection in brackets): Fe% (0.01), SiO_2% (0.01), Al_2O_3% (0.01), TiO_2% (0.01), MnO% (0.001), CaO% (0.01), P% (0.001), S% (0.001), MgO% (0.01), K_2O% (0.01), Na_2O% (0.001). LOI was analysed by thermogravimetric methods at 1000°C. Samples were also analysed for As, Sn, Ba, Sr, Cl, Ni, V, Co, Zn, Cr, Pb, Zr and Cu.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• All diamond drilling was NQ2 size. Pre collars drilled using RC drilling methods these ranged from 100 m to 190 m in depth. Holes were drilled at -60^0 to the North on section lines that were orientated perpendicular to the strike of the mineralisation.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	• Recoveries are all recorded and entered into the Geological database. Overall recovery for NQ2 core in the fresh rock was greater than 98%. There were no significant issues with recovery.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	• The core is laid out on a cradle for the placing of orientation marks and metre marking. The core is checked against the drillers' blocks and the run sheets are regularly checked.
	• Whether a relationship exists	• The coarse grained nature of the mineralisation is

Criteria	Explanation	
	between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	considered to preclude any sample bias due to material loss or gain.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core photography. • The total length and percentage of the relevant intersections logged.	• The geotechnical logging process was designed by the consultant engaged to interpret the data. This consultant audited the process with several site visits. All geotechnical data is stored in the Geological database. • All core was photographed wet and dry. The lithological logs include rock type, oxidation, mineralisation, colour and other distinguishing features. • All core recovered was logged both lithologically and geotechnically.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance, results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• NQ2 core was half cut using the orientation line with the left side selected for assay. Duplicate samples were quarter cored from this side. • RC samples were collected from the rig using a 50:50 riffle splitter. Wet samples were air dried and then split. • All samples were oven dried and coarsely crushed to <10 mm. A 150 g sample was then pulverised for 90 seconds in a (150 ml bowl) ring mill pulveriser. The sample was wet screened at 75 µm and oversize weights recorded. If less than 15 g of oversize was produced then the client was contacted. The oversize was dried and reground for 4 seconds for every 5 g of sample oversize. The screening was repeated until less than 5 g was above 75 µm. The total sample was filter pressed, dried and homogenised. • A range of certified field standards were used in conjunction with duplicates and inserted every 20 samples. • Duplicates were quarter cored. The sample sizes are considered to be appropriate to the disseminated style of the mineralisation, the thickness and consistency of the intersections yield predictable grade ranges for the

Criteria	Explanation	
		primary element.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis, including instrument make and model, reading times, calibration factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• The assaying regime of XRF Fusion is the standard for the determination of Fe. • No geophysical tools were used to determine any elemental concentrations in this resource estimation. • Field duplicates and external standards were submitted every 20 samples for analysis by ALS. Results show equivalent means and acceptable levels of precision for all elements which were above 90% precision level for the assay pairs.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative Company personnel. • The use of twinned holes • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Significant intersections were viewed by senior Iron Road staff on regular site visits. • No twinned holes were drilled. • Lithological, geotechnical and sample information is logged onto a laptop using Excel spreadsheets. This data is sent to RoreData for validation and compilation into a SQL database. Raw assay files are also sent to RoreData. • No calibrations were undertaken. However, early data had Mn converted to MnO.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• All drill hole collar positions (Easting, Northing and Elevation) were picked up by DGPS. The equipment used for the surveying was a Leica GPS1200 RTK (Real time Kinetic) system which has a reported operational range of 40 km providing positional accuracy for the surface positions to +/-0.03 m. The primary base stations used were South Australian Government stations. All drillholes were downhole surveyed using a north seeking DS-HA Gyroscope where entry was possible. The operations were performed according to the contractor's internal procedures. Onsite calibration for the gyroscope tool is undertaken using a designated calibration hole. The depth encoder is

Criteria	Explanation	
		calibrated at the Adelaide Calibration Pits prior to departure to site.
	• Specification of the grid system used.	• The grid system used is MGA_GDA94, Zone 53.
	• Quality and adequacy of topographic control.	• Topographic surface uses 2011 LiDar 50 cm spacing.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• The nominal drill spacing was confined to a single section line perpendicular to the strike of the magnetic anomaly with holes collared at 100 m intervals. The drilling at the Hambidge project comprised four section lines at a 400 m spacing with three holes per line collared 100 m apart.
	• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	• The data spacing is too great to establish the continuity required for the estimation of a Mineral resource.
	• Whether sample compositing has been applied.	• No DD samples were composited. RC samples were composited in the field to 2 m intervals.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• The initial drilling was based on the geophysical interpretations and drilled -60^{o} to the north. Further interpretation suggested that vertical holes would provide sufficient angles of intercept with the mineralisation as the orebody flattens.
	• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• No orientation based sampling bias has been identified.
Sample security	• The measures taken to ensure sample security.	• The samples are prepared and dispatched to the laboratory from the site core processing facility. The remnant half core is stored at the core processing facility and the course rejects and pulps are stored in a secure industrial shed in Adelaide.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• A review of the sampling and data collection techniques was undertaken in 2011 by Coffey. The processes are continually reviewed internally with regular site visits from senior Iron Road staff.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties, such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	• Iron Road Limited controls 100% of Tenement EL4849. The targets that make up the Exploration Target all sit within this license area. The license area borders the Hambidge Conservation Area in the East. The majority of the lease is freehold land with the main activity conducted being dry land cropping. • Iron Road Limited has renewed the Tenement EL4849 for a further three years.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The Project area has been the subject of various exploration programmes since the 1960s. However, the majority of exploration has been conducted by Iron Road from 2008 onwards, with over 155,000 metres of drilling completed before February 2013.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Warramboo mineralisation is considered to be part of the Coulta Subdomain, which is a prominent and complex east-west aeromagnetic anomaly comprising a sequence of intensely folded, high grade metamorphic gneissic rocks. The magnetite mineralisation is characterised by two main rock types. One is a disseminated magnetite-gneiss and the other is a banded magnetite gneiss comprising layers of both disseminated and coarse-grained magnetite. In the oxidation profile, the magnetite has been altered to martite (hematite), maghemite (hematite and magnetite) and goethite. The iron mineralisation is considered to be a remnant iron-rich pelite. Petrological examination of drill chips and core shows the magnetite gneiss to be an irregularly layered, granulose metamorphic rock which may be called a microgneiss with an incipiently hornfelsic texture.

Drill hole Information	• A summary of all information material to the understanding of the exploration results, including a tabulation of the following information for all Material drill holes:
	  • Easting and Northing of the drill hole collar
	  • Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
		• All regional drilling undertaken by IRD has been reported previously in IRD ASX releases dated 31st May 2011 and 29th November 2011.

Criteria	Explanation	
	• Dip and azimuth of the hole • Down hole length and interception depth • Hole length	
	• If the exclusion of this information is justified on the basis that the information is not Material, and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• All regional drilling undertaken by IRD has been reported previously in IRD ASX releases dated 31st May 2011 and 29th November 2011. No completed holes have been omitted.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.
	• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No metal equivalent calculations were undertaken.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.
	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.

Criteria	Explanation	
	reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported, including (but not limited to): • Geological observations • Geophysical survey results • Geochemical survey results • Bulk samples – size and method of treatment • Metallurgical test results • Bulk density, groundwater, geotechnical and rock characteristics • Potential deleterious or contaminating substances	• All regional drilling undertaken by Iron Road has been reported previously in Iron Road ASX releases dated 31st May 2011 and 29th November 2011. • Inversion modelling conducted for the Hambidge prospect in February 2014 has resulted in an increase in the depth potential.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions, or large-scale step-out drilling).	• Exploration and Resource Definition, subject to corporate funding, is ongoing in EL4849. The priority targets to be drilled will be Boo Loo East, Gap, South Deeps and Hambidge with significant results released at regular intervals.

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Memorandum

Date:	25 February 2014
Company:	Iron Road Limited
Attention:	Larry Ingle
Copy:	
From:	Harry Warries
Subject:	**Ore Reserve Statement - Central Eyre Iron Project**

Larry

Please find below the Ore Reserve Statement for the Central Eyre Iron Project, located in South Australia.

Coffey Mining Pty Ltd (Coffey) has compiled this statement in accordance with the guidelines provided by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code), effective December 2012.

1 INTRODUCTION

Iron Road Limited (Iron Road) has undertaken a Definitive Feasibility Study (DFS) to assess the viability of exploiting the Central Eyre Iron Project (the CEIP). The CEIP comprises two deposits, namely Murphy South /Rob Roy (MSRR) and Boo-Loo / Dolphin (BLD). The DFS was predicated on a concentrate production rate of 20Mtpa.

The Project is located on the Eyre Peninsula of South Australia, which is approximately 200km north of Port Lincoln and 240km southwest of Port Augusta.

2 MINERAL RESOURCES

Iron Road, in conjunction with Xstract Mining Consultants Pty Ltd (Xstract), developed the Mineral Resources for MSRR. The Resource statement, declared as of 28 May 2013, at a 12% Fe cutoff, is presented in Table 1. Dr Isobel Clark of Xstract, who is a Fellow of the Australasian Institute of Mining and Metallurgy, signed off on the Mineral Resources as the Competent Person as defined in the December 2012 edition of the Australasian Code for Reporting of Mineral Resources and Reserves.

The Murphy South Resources were estimated in accordance with the guidelines in the 2004 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004).

Coffey developed the resources for BLD, which were estimated in accordance with the guidelines in the 2004 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004).

Table 1
Iron Road Limited – Central Eyre Iron Project
Mineral Resource Summary
12% Fe lower cutoff is applied

Classification	Tonnes (Mt)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)
Murphy South / Rob Roy (As of 28 May 2013)					
Measured	2,222	15.7	53.7	12.8	0.08
Indicated	474	15.6	53.7	12.8	0.08
Total Measured + Indicated	**2,696**	**15.7**	**53.7**	**12.8**	**0.08**
Inferred	667	16.0	53.0	12.0	0.08
Boo-Loo / Dolphin (As of 28 June 2010)					
Inferred	328	17.0	52.0	12.0	0.09

The Ordinary Kriging (OK) grade estimation technique was used to estimate the Fe grade with the Inverse Distance Squared (ID^2) grade estimation technique used for all other constituents.

The Ore Reserves that were determined for the CEIP were based on an 8% Fe cutoff and for comparison reasons the Murphy South resources at an 8% Fe cutoff are summarised below in Table 2.

Table 2
Iron Road Limited – Central Eyre Iron Project
Murphy South / Rob Roy Resource Summary
8% Fe lower cutoff is applied

Classification	Tonnes (Mt)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)
Murphy South / Rob Roy					
Measured	2,293	15.5	53.8	12.9	0.08
Indicated	522	15.2	53.8	12.8	0.08
Total Measured + Indicated	**2,815**	**15.5**	**53.8**	**12.9**	**0.08**
Inferred	548	15.6	53.5	12.4	0.09

The Mineral Resources shown in Table 2 are inclusive of the Ore Reserves that are subsequently stated in this document.

3 ORE RESERVE DETERMINATION

This section describes the methodology used and the economic criteria applied to derive at the Ore Reserves as stated in this document.

3.1 Introduction

The Ore Reserves were determined as part of the mine planning work that Coffey undertook for the Study.

The DFS was based on mine planning work that was undertaken utilising the Measured and Indicated Mineral Resources declared for MSRR and the Inferred Resources for BLD. Mill feed from BLD comprises approximately 8.5% of the total mill feed upon which the mine plan and economic analysis were based. Mill feed from BLD is not processed until after Year 15 in the mine production schedule.

The Ore Reserves were predicated on the outcomes of the DFS and were based on the Measured and Indicated Resources contained within the Murphy South / Rob Roy pit design.

3.2 Modifying Factors

The term 'Modifying Factors' is defined to include mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations.

The sources for the Modifying Factors are summarised in Table 3.

Table 3
Iron Road Limited – Central Eyre Iron Project
Source Modifying Factors used for Ore Reserve Determination

Item	Source
Market research and commodity price	Metalytics
Mining operating and capital cost	Coffey
Mine planning	Coffey
Metallurgical and processing	Bureau-Veritas, Mineral Technologies, Bateman-Tenova, Iron Road
Processing operating and capital costs	SKM, AECOM, Bateman-Tenova, Iron Road
General site operating costs	SKM, Iron Road
General site infrastructure	Kerman Contracting Pty Ltd, SKM, AECOM, Iron Road
Port	SKM, Iron Road
Rail	SKM, Iron Road
Geotechnical investigation	Coffey
Hydro(geo)logical investigation	SKM, Groundwater Science, Iron Road
Tailings storage facility	ATC Williams, Iron ROad
Mining dilution and recovery	Coffey
Social and Environmental	SKM, Iron Road
Legal tenure	Iron Road
Government	Iron Road

The Ore Reserves as determined for the Project were based on the Modifying Factors as summarised in Table 4.

All currencies are denominated in United States of America dollars, unless specifically stated otherwise.

Table 4
Iron Road – Central Eyre Iron Project
Summary Modifying Factors used for Ore Reserve Determination

Item	Unit	Value
Crusher feed (Variable, depending on Fe recovery)	Mtpa	122 - 140
Fe recovery (Variable with life of mine average shown)	%	64.5
Product rate	Mtpa	20
Product price (Variable, ranging from $126/dmt to $182/dmt, with average LOM shown)	$/dmt	158
Royalty Year 1 – 5 Year 6 – 20	%	1.5 3.5
Initial capital expenditure	$M	5,217
Sustaining capital	$M	1,815
Asset closure and monitoring	$M	470
Operating cost	$/dmt concentrate	71.60
Mining dilution	%	2
Mining recovery	%	99
Overall pit wall slope angle (Dependent on lithology and pit wall orientation)	degrees	21.5 – 51.0

A detailed summary of the supporting data and modifying factors is provided in Appendix A (Table 1 of the JORC Code 2012).

3.3 Mineral Ore Reserve Summary

Table 4 provides a summary of the Ore Reserves as of 24 February 2014 that were determined for the Central Eyre Iron Project. All stated reserves are completely included within the quoted resources.

Table 4
Iron Road – Central Eyre Iron Project
Ore Reserve Summary
As of 24 February 2014

Classification	Ore Reserves	
	Tonnes(1) [Mt]	Fe [%]
Proved	1,871	15.6
Probable	200	15.1
Total	2,071	15.5

Note 1. Tonnes are expressed in dry metric tonnes

The reported Ore Reserves have been compiled by Mr Harry Warries. Mr Warries is a Fellow of the Australasian Institute of Mining and Metallurgy and an employee of Coffey Mining Pty Ltd. He has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' of December 2012 ("JORC Code") as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia. Mr Warries gives Iron Road Limited consent to use this reserve estimate in reports.

For and on behalf of Coffey

This is a scanned signature held on file by Coffey. The person or signatory consents to its use only for the purpose of this document.

Harry Warries
Mining Manager

Appendix A

'JORC Code 2012 Table 1' Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code Explanation	Commentary	Competent Person
Sampling techniques	▪ Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	▪ The Murphy South/Rob Roy deposit was delineated with a combination of Reverse Circulation (RC) and Rotary Mud/Diamond Drilling (DD) on a nominal 200 m x 100 m drilling pattern. A total of 9 RC and 282 DD holes were drilled for a total of 1,191 m and 105,510 m respectively. The initial holes were angled -60^{o} to the north with later holes drilled vertically.	
	▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	▪ The drill holes and collars were surveyed by a contract surveying company. All drillhole collar positions (Easting, Northing and Elevation) were picked up by DGPS. The equipment used for the Surveying was a Leica GPS1200 RTK (Real time Kinetic) system which has a reported operational range of 40 km providing positional accuracy for the surface positions to +/-0.03 m. The primary base stations used were South Australian Government stations. All drillholes were downhole surveyed using a north seeking DS-HA Gyroscope where entry was possible. The operations were performed according to the contractor's internal procedures. These procedures include calibrations for density, gamma and magnetic susceptibility tools. Onsite calibration for the gyroscope tool is undertaken using a designated hole. The depth encoder is calibrated at the Adelaide Calibration Pits prior to departure to site. All DD core for angled holes was orientated at the time of drilling using the Reflex ACT II orientation tool. All core was metre marked and recovery data obtained before being logged for lithology, geotechnical attributes, structures and other attributes. All core was photographed wet and dry before being cut to obtain half core samples for geochemical analysis.	
	▪ Aspects of the determination of mineralisation that are Material to the Public Report.	▪ The NQ diamond core was sampled on nominal 4 m intervals and cut to provide half core samples. However, shorter intervals were taken to maintain lithological boundaries. These samples were submitted for XRF analysis. Samples were crushed, dried and pulverised to produce XRF fusion discs that were prepared by casting in robotic fusion cells at 1050°C using 0.66 g of sample and 7.20 g of 12:22 flux. The analysis undertaken was the Fe Ore Suite which includes the following elements (lower limit of detection in brackets): Fe% (0.01), SiO2% (0.01), Al2O3% (0.01), TiO2% (0.01), MnO% (0.001), CaO% (0.01), P% (0.001), S% (0.001), MgO% (0.01), K2O% (0.01), Na2O% (0.001). LOI was analysed by thermogravimetric methods at 1000°C. Samples were also analysed for As, Sn, Ba, Sr, Cl, Ni, V, Co, Zn, Cr, Pb, Zr and Cu. RC samples were collected every metre and combined to form a 4 m composite. This composite was riffle split to form a 2 kg split. This sample was then crushed, dried and pulverised to produce XRF fusion discs that were prepared by casting in robotic fusion cells at 1050°C using 0.66 g of sample and 7.20 g of 12:22 flux. The analysis undertaken was the Fe Ore Suite which includes the following elements (lower limit of detection in brackets): Fe% (0.01), SiO2% (0.01), Al2O3% (0.01), TiO2% (0.01), MnO% (0.001), CaO% (0.01), P% (0.001), S% (0.001), MgO% (0.01), K2O% (0.01), Na2O% (0.001). LOI was analysed by thermogravimetric methods at 1000°C. Samples were also analysed for As, Sn, Ba, Sr, Cl, Ni, V, Co, Zn, Cr, Pb, Zr and Cu.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Drilling techniques	▪ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	▪ Diamond drilling accounts for 99% of the drilling in the resource area. All diamond holes used for the estimation were NQ2 size. Pre collars were a combination of RC or Rotary Mud drilling and on average 40 m but up to 70 m in depth to reach the fresh rock. RC holes in the project area were from 100 m to 190 m in depth.	
Drill sample recovery	▪ Method of recording and assessing core and chip sample recoveries and results assessed. ▪ Measures taken to maximise sample recovery and ensure representative nature of the samples. ▪ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	▪ Recoveries are all recorded and entered into the Geological database. Overall recovery for NQ2 core in the fresh rock was greater than 98%. There were no significant issues with recovery. ▪ The core is laid out on a cradle for the placing of orientation marks and metre marking. The core is checked against the drillers' blocks and the run sheets are regularly checked. ▪ The coarse grained nature of the mineralisation is considered to preclude any sample bias due to material loss or gain.	
Logging	▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. ▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. ▪ The total length and percentage of the relevant intersections logged.	▪ The geotechnical logging process was designed by the consultant engaged to interpret the data. This consultant audited the process with several site visits. All geotechnical data is stored in the Geological database. ▪ All core was photographed wet and dry. The lithological logs include rock type, oxidation, mineralisation, colour and other distinguishing features. ▪ All core recovered was logged both lithologically and geotechnically.	
Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. ▪ Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	▪ NQ2 core was half cut using the orientation line with the left side selected for assay. Duplicate samples were quarter cored from this side. ▪ RC samples were collected from the rig using a 50:50 riffle splitter. Wet samples were air dried and then split. ▪ All samples were oven dried and coarsely crushed to <10 mm. A 150 g sample was then pulverised for 90 seconds in a (150 ml bowl) ring mill pulveriser. The sample was wet screened at 75 µm and oversize weights recorded. If less than 15 g of oversize was produced then the client was contacted. The oversize was dried and reground for 4 seconds for every 5 g of sample oversize. The screening is repeated until less than 5 g is above 75 µm. The total sample is filter pressed, dried and homogenised. ▪ A range of certified field standards were used in conjunction with duplicates and inserted every 20 samples. ▪ Duplicates were quarter cored. The sample sizes are considered to be appropriate to the disseminated style of the mineralisation, the thickness and consistency of the intersections yield predictable grade ranges for the primary element.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. ▪ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	▪ The assaying regime of XRF Fusion is the standard for the determination of Fe. ▪ No Geophysical tools were used to determine any elemental concentrations in this resource estimation ▪ A total of 695 field duplicate samples from Murphy South/Rob Roy were analysed by ALS. Results show equivalent means and acceptable levels of precision for all elements which were above 90% precision level for the assay pairs. A total 1,280 of certified field duplicates were analysed. The average of the standards fell within 1 standard deviation of the certified mean for Fe.	
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ Significant intersections were viewed by senior Iron Road staff on regular site visits. ▪ No twinned holes were drilled. ▪ Lithological, geotechnical and sample information is logged onto a laptop using excel spreadsheets. This data is sent to RoreData for validation and compilation into a SQL database. Raw assay files are also sent to RoreData. ▪ No calibrations were undertaken. However, early data had Mn converted to MnO.	
Location of data points	▪ Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	▪ All drill hole collar positions (Easting, Northing and Elevation) were picked up by DGPS. The equipment used for the Surveying was a Leica GPS1200 RTK (Real time Kinetic) system which has a reported operational range of 40 km providing positional accuracy for the surface positions to +/-0.03 m. The primary base stations used were South Australian Government stations. All drillholes were downhole surveyed using a north seeking DS-HA Gyroscope where entry was possible. The operations were performed according to the contractor's internal procedures. Onsite calibration for the gyroscope tool is undertaken using a designated calibration hole. The depth encoder is calibrated at the Adelaide Calibration Pits prior to departure to site. ▪ The grid system used is MGA_GDA94, Zone 53. ▪ Topographic surface uses 2011 LiDar 50 cm spacing.	
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	▪ The nominal drill spacing is 200 m (Northing) x 100 m (Easting). ▪ The mineralisation has demonstrated sufficient geological and grade continuity to support the definition of a Mineral Resource under the 2012 JORC Code. ▪ No DD samples were composited. RC samples were composited in the field to 2 m intervals.	
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	▪ The initial drilling was based on the geophysical interpretations and drilled -60? to the north. Further interpretation suggested that vertical holes would provide sufficient angles of intercept with the mineralisation as the orebody flattens. ▪ No orientation based sampling bias has been identified.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Sample security	▪ The measures taken to ensure sample security.	▪ The samples are prepared and dispatched to the laboratory from the site core processing facility. The remnant half core is stored at the core processing facility and the course rejects and pulps are stored in a secure industrial shed in Adelaide.	
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ A review of the sampling and data collection techniques was undertaken in 2011 by Coffey. The processes are continually reviewed internally with regular site visits from senior Iron Road staff.	

'JORC Code 2012 Table 1' Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code Explanation	Commentary	Competent Person
Mineral tenement and land tenure status	▪ Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. ▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	▪ Iron Road Limited controls 100% of EL4849. Iron Road's Global Mineral Resource is contained solely within this tenement. The licence area boarders the Hambidge Conservation Area in the East. The majority of the licence area is freehold land with the main activity conducted being dry land cropping. Iron Road has secured the tenement for another three year term.	
Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ The Project area has been the subject of various exploration programmes since the 1960s. However, the majority of exploration has been conducted by Iron Road Limited from 2008 onwards, with over 155,000 meters of drilling completed by February 2014.	
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ The Warramboo mineralisation is considered to be part of the Coulta Subdomain, which is a prominent and complex east-west aeromagnetic anomaly comprising a sequence of intensely folded, high grade metamorphic rocks. The Kopi and Hambidge prospects are interpreted to be the southern extension of the Warramboo anomaly and part of the same geological domain. The magnetite mineralisation is characterised by two main rock types. One is a disseminated magnetite gneiss and the other is a banded magnetite gneiss comprising layers of both disseminated and coarse-grained magnetite. In the oxidation profile, the magnetite has been altered to martite (hematite), maghemite (hematite and magnetite) and goethite. The iron mineralisation is considered to be a remnant iron-rich pelite. Petrological examination of drill chips and core shows the magnetite gneiss to be an irregularly layered, granulose metamorphic rock which may be called a microgneiss with an incipiently hornfelsic texture.	
Criteria	**JORC Code Explanation**	**Commentary**	**Competent Person**
Drillhole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: ◦ easting and northing of the drillhole collar ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar ◦ dip and azimuth of the hole ◦ downhole length and interception depth ◦ hole length ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	▪ All drilling undertaken by Iron Road has been extensively reported to the ASX in Iron Road's ASX releases between 2008 and 2013. Visit website http://www.asx.com.au/; company code: IRD. Drill hole information is provided in the resource estimation Section 3.	

Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. ▪ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ Exploration Results are not being reported for the Mineral Resource area.
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. ▪ If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	▪ Exploration Results are not being reported for the Mineral Resource area.
Diagrams	▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	▪ Exploration Results are not being reported for the Mineral Resource area.
Balanced reporting	▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	▪ Exploration Results are not being reported for the Mineral Resource area.
Other substantive exploration data	▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	▪ Exploration Results are not being reported for the Mineral Resource area.
Further work	▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ Further work will be undertaken prior to mining.

'JORC Code 2012 Table 1' Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section).

Criteria	JORC Code Explanation	Commentary	Competent Person
Database integrity	▪ Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. ▪ Data validation procedures used.	▪ Data templates with lookup tables and fixed formatting were used for the lithological and geotechnical logging and sample data. The completed files are transferred electronically. The sample numbers are unique and flagged if duplicate numbering is attempted. The digital raw assay data obtained from the laboratory is sent directly for uploading into the database, thereby negating transcription errors. ▪ Data validation is undertaken on many levels, from database queries, to checks for missing data, to visual comparisons of original and output data. The mining software also has several auto validation routines that check imported data.	
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case.	▪ No visit to the site by the Competent Person was undertaken. Senior Iron Road staff closely supervise all work and ensure compliance with QA/QC procedures and practices. ▪ At the time of the preparation of the resource estimation all work on site had been completed. Core photos were available for review. Substantial time was spent in meetings and collaborative analysis between the Iron Road geologist and the Competent Person.	
Geological interpretation	▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ▪ Nature of the data used and of any assumptions made. ▪ The effect, if any, of alternative interpretations on Mineral Resource estimation. ▪ The use of geology in guiding and controlling Mineral Resource estimation. ▪ The factors affecting continuity both of grade and geology.	▪ The geology of the Murphy South/Rob Roy deposit is only known from the drilling data. There is no surface expression of the mineralisation. The mineralisation within the drilled area has a high degree of predictability both geologically and with respect to grade continuity, and conforms to the geophysical interpretations. ▪ Petrology has been used to assist in the development of logging codes. ▪ The magnetite occurrences provide clear delineations for the mineralisation. ▪ The occurrence of magnetite distinguishes the non-magnetic gneiss from the magnetite gneiss. ▪ The distribution of the Fe is relatively homogenous with an increase in grade near country rock margins. Only 15% of the Fe assays have a grade >20%.	
Dimensions	▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	▪ The Murphy South/Rob Roy mineralisation has an approximate strike length of 7km and is 1.5km wide with the upper limit of fresh rock mineralisation 40m to 70m below the surface. The fresh rock extends to at least 600m below the surface.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Estimation and modelling techniques	▪ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. ▪ The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. ▪ The assumptions made regarding recovery of by-products. ▪ Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). ▪ In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. ▪ Any assumptions behind modelling of selective mining units. ▪ Any assumptions about correlation between variables. ▪ Description of how the geological interpretation was used to control the resource estimates. ▪ Discussion of basis for using or not using grade cutting or capping. ▪ ▪ The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	▪ All estimation and interpretation work was undertaken using the Micromine software package. The grade estimation using Ordinary Kriging (OK) was completed for Fe only. The remaining elements were estimated using an inverse distance squared method. The drill spacings were predominately 200m x 100m with the exception of a concentrated area of infill drilling drilled out at 100m x 50m. The infill drilling was undertaken to provide short range information to construct variograms. The assay data was composited on several intervals. The 1m interval was found to most faithfully represent the raw data and was used for the estimation. There was no top or bottom cut applied to the data as the occurrence of extreme outliers was negligible. The mineralised domains were encapsulated in three dimensional wireframes. All wireframes were snapped to the drillholes and the oxidation surface. These wireframes were flagged into the composited assay file. No material above the oxidation surface was considered. A semi-variogram model was produced for the Fe values. 70% of the range distances were used to designate the search ellipse. This search ellipse was run at 1x, 1. 5x and 4x. ▪ No previous extraction of this mineralisation has been undertaken. This estimation correlates well with the global tonnages produced from the initial wireframe. • No economic by-products have been identified. • Variables other than Fe that were estimated were AL_2O_3, SiO_2, P, LOI_1000, CaO, MgO, MnO, S and TiO_2. • The block model was constructed using a 40m x 20m x 10m parent block size. This correlates with a fifth of the sample spacing in the northerly and easterly direction, with the vertical dimension capturing at least two of the 4m sample intervals. • No assumptions have been made on selective mining units. • All variables other than Fe were considered to be correlated and estimated using the same parameters. • The presence or absence of magnetite was use to distinguish the wireframe boundaries. • The statistical analysis of the grade distribution indicated that grade cutting was unwarranted. • Validation of the model was undertaken both visually and statistically. A cross validation analysis was performed for the resulting block model and produced an error statistic of -0.001 and a standard deviation of 0.7 indicating that the variograms used are a good representation of the raw data. A visual inspection was made slicing through the model and comparing the drillhole data with the blocks colour coded for Fe.	
Moisture	▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	▪ The tonnages are estimated on a dry basis.	
Cut-off parameters	▪ The basis of the adopted cut-off grade(s) or quality parameters applied.	▪ The natural cutoff was used for the construction of the wireframes and identified as 8% Fe	

Criteria	JORC Code Explanation	Commentary	Competent Person
Mining factors or assumptions	▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	▪ It is envisaged that Murphy South/Rob Roy will be developed as an open cut mine.	
Metallurgical factors or assumptions	▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	▪ Extensive Davis tube recovery tests have been conducted on diamond drill core intervals across the entire orebody to establish baseline magnetite recoveries. Metallurgical testwork has been undertaken in four major phases with work undertaken on both small and large composites at both laboratory and pilot scales. A metallurgical adjustment factor based on the metallurgical testwork results, including the gravity testwork, has been applied to the Davis tube recovery data to determine the overall iron recovery from the ore. An average magnetite recovery of 64.5% could be achieved with an average magnetite concentrate grade of 67% Fe.	
Environmental factors or assumptions	▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	▪ No environmental assumptions have been considered in the estimation.	
Bulk density	▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. ▪ The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. ▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	▪ Bulk density (BD) measurements were taken routinely from the drill core. This was done by weighing the sampling in air and in water. The results were then flagged for the wireframe in which they occurred. The results for the 6,743 samples indicated that the BD for the main wireframe was 3.10t/m3. This was then used when reporting from the block model. ▪ The high grade metamorphism event that is pervasive throughout the region has resulted in a very competent rock mass with a very low porosity. This reduces the influence of void spaces that could affect the BD determinations. ▪ The bulk density data was investigated by an independent consultant and found to have the rigor required for use in the estimation process. Results were compared against downhole BD determinations.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Classification	▪ The basis for the classification of the Mineral Resources into varying confidence categories. ▪ Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). ▪ Whether the result appropriately reflects the Competent Person's view of the deposit.	▪ The Mineral Resource classification was based on the number of supporting holes and the kriging variances. Each category had minimum criteria that had to be met. ▪ The data set used for the estimation had comprehensive coverage over the project area and does not favour or misrepresent the in-situ mineralisation. The continuity has been confirmed by infill drilling that supported the original interpretation. The validation of the block model shows a good correlation of raw data. ▪ The Mineral Resource estimate appropriately reflects the view of the Competent Person.	
Audits or reviews	▪ The results of any audits or reviews of Mineral Resource estimates.	▪ No independent third party review has been undertaken. Internal peer review was made by Xstract Mining Consultants.	
Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	▪ The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. ▪ The statement relates to a global estimate for the Murphy South/Rob Roy project. ▪ No production data is available.	

'JORC Code 2012 Table 1' Section 4 Estimation and Reporting of Mineral Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section).

Criteria	JORC Code Explanation	Commentary	Competent Person
Mineral Resource estimate for conversion to Ore Reserves	▪ Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. ▪ Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	▪ The Murphy South Mineral Resource as described in Section 3 formed the basis for the conversion to Ore Reserves. The Mineral Resource was compiled by Ms Heather Pearce, who is a full time employee of Iron Road Limited. This estimation was peer reviewed by Dr Isobel Clark of Xstract Mining Consultants. Dr Clark has sufficient experience relevant to the style of mineralisation and the type of deposit 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". ▪ The Mineral Resources are inclusive of the Ore Reserves.	
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case.	▪ The Competent Person for the Ore Reserves, Mr Harry Warries, has not visited the site. ▪ No site visit was deemed necessary as the site is a 'greenfields' site with no existing mine workings and or site specific mine infrastructure being present.	
Study status	▪ The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. ▪ The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	▪ A Definitive Feasibility Study (DFS) was completed by Iron Road Limited in February 2014. The DFS was undertaken by a team of industry professionals as listed below. ▪ Market research and commodity price — Metalytics ▪ Mining operating and capital cost — Coffey ▪ Mine planning — Coffey ▪ Metallurgical and processing — Bureau-Veritas, Mineral Technologies, Bateman-Tenova, Iron Road ▪ Processing operating and capital costs — SKM, AECOM, Bateman-Tenova ▪ Iron Road ▪ General site operating costs — SKM, Iron Road ▪ General site infrastructure — Kerman Contracting Pty Ltd, SKM, AECOM, Iron Road ▪ Port — SKM, Iron Road ▪ Rail — SKM, Iron Road ▪ Geotechnical investigation — Coffey ▪ Hydro(geo)logical investigation — SKM, Groundwater Science, Iron Road ▪ Tailings storage facility — ATC Williams, Iron ROad ▪ Mining dilution and recovery — Coffey ▪ Social and Environmental — SKM, Iron Road ▪ Legal tenure — Iron Road ▪ Government — Iron Road	
Cut-off parameters	▪ The basis of the cut-off grade(s) or quality parameters applied.	▪ An 8% Fe cutoff was adopted for Ore Reserve determination. In broad terms the geology at Murphy South is uncomplicated and at an 8% Fe cutoff the magnetite mineralisation exhibits contiguous zones suitable for mining by bulk mining methods.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Mining factors or assumptions	▪ The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). ▪ The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. ▪ The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. ▪ The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). ▪ The mining dilution factors used. ▪ The mining recovery factors used. ▪ Any minimum mining widths used. ▪ The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. ▪ The infrastructure requirements of the selected mining methods.	▪ The basis of design for the CEIP is predicated on producing 20 Mtpa of concentrate, which equates to between 125 Mtpa and 140 Mtpa of crusher feed, depending on the Fe head grade and metallurgical recovery. The average waste to ore strip ratio is approximately 1.2 : 1, indicating a total material movement of up to 300 Mtpa will be required. ▪ Mining by conventional open pit methods of drill and blast followed by load and haul has been adopted as the basis of the DFS, utilising large mining equipment comprising 1,000t diesel hydraulic shovels and 360t off-highway dump trucks. ▪ Detailed pit design work was completed based on pit optimisations using Whittle Four-X optimisation software. Only Measured and Indicated Resources were used in the pit optimisation for Murphy South. ▪ A total of 362 diamond drillholes from both the geotechnical and resource drilling programmes were drilled in the Murphy South and Boo-Loo deposits and were logged for geological, rock quality and structural data. Overall pit wall slopes ranged from 21.5^0 to 51^0, depending on wall orientation and lithology. ▪ Grade control will consist of selected blast hole sampling on ore waste boundaries and the routine testing with hand held magnetic susceptibility meter. ▪ Mining dilution and mining recovery for Murphy South was modelled by regularising the sub-blocked resource model using a selective mining unit (SMU) of 25mE x 20mN x 12mRL. The SMU resulted in a 1% ore loss and a 2% dilution in Fe grade. Mining dilution and mining recovery for Boo-Loo was modelled by regularising the sub-blocked resource model using a selective mining unit (SMU) of 25mE x 12.5mN x 12mRL. The SMU resulted in a 6.6% ore loss and a 5.1% dilution in Fe grade. ▪ A minimum cutback mining width of 80m was adopted. ▪ The mine plan was based on Measured and Indicated Resources for Murphy South and Inferred Resources for Boo-Loo. The economic analysis was based on a mine production schedule that included Boo-Loo, which is classified as an Inferred Resource. Boo-Loo comprises approximately 8.5% of the total mill feed and the mill feed from Boo-Loo is not scheduled to be processed until Year 15 of the mine life. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised for the years that Boo-Loo is scheduled to be mined. ▪ The primary infrastructure required for the development of the Project are listed below: o Site and local area road construction and upgrades o General administration and services infrastructure. o General mining facilities. o Power station o Process plant o Water supply o Rail o Port stockyards and materials handling	

Criteria	JORC Code Explanation	Commentary	Competent Person
Metallurgical factors or assumptions	▪ The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. ▪ Whether the metallurgical process is well-tested technology or novel in nature. ▪ The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. ▪ Any assumptions or allowances made for deleterious elements. ▪ The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. ▪ For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	▪ The proposed metallurgical process is conventional primary crushing and milling, followed by coarse rougher magnetic separation, ball milling of the rougher concentrate, and fine magnetic separation of the ball mill circuit product to produce a high grade magnetite concentrate. A gravity circuit is employed within the ball milling circuit to recover coarse liberated iron oxides (including hematite) directly to concentrate. The proposed metallurgical process is well tested and uses established, proven technologies. ▪ Extensive Davis Tube Recovery (DTR) tests have been conducted on diamond drill core intervals across the entire orebody to establish baseline magnetite recoveries. Metallurgical test work has been undertaken in four major phases with work undertaken on both small and large composites at both laboratory and pilot scales. A metallurgical adjustment factor based on the metallurgical test work results, including the gravity test work, has been applied to the DTR data to determine the overall iron recovery from the ore. The metallurgical recoveries are variable with the average, life of mine metallurgical recoveries being 63.5% and 74.3% for Murphy South and Boo-Loo respectively for an overall 64.5% Fe recovery. ▪ No allowance has been made for deleterious elements as levels of these are either very low in the ore or significantly below levels of concern in the final concentrate. Three bulk samples from the CEIP orebody have been tested. The first was comprised of both drill chips and drill core taken from the Murphy South and Boo-Loo/Dolphin sections of the deposit. The second sample comprised three PQ diamond drill core holes sourced from the proposed area of commencement of mining. The third sample was sourced from NQ diamond drillcores across the entire strike length of the Murphy South / Rob Roy sections of the orebody. Both small scale and pilot scale test work were conducted on the second and third samples to prove the proposed processing route and to provide samples for detailed design vendor test work and prospective customers.	
Environmental	▪ The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	▪ Iron Road will require approval under the Mining Act (1971) which includes the approval of a Mining Lease Proposal (MLP) and a comprehensive Program for Environment Protection and Rehabilitation (PEPR). ▪ All baseline environmental surveys have been completed. The preliminary impact assessment did not categorise any potential Project impacts as 'High'. Detailed impact assessments are on-going in areas including air quality, groundwater, surface water, flora, fauna, noise, social, visual, and heritage. ▪ It is expected that all predicted impacts may be adequately mitigated and/or managed and that the MLP and PEPR will be subsequently approved by the State Government.	
Infrastructure	▪ The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	▪ The Project's supporting infrastructure has been developed through studies by engineering service providers as listed under the Study Status criterion. Works have included 'modelling' of plant availability, plant throughput, rail efficiencies, water consumption and port facilities with subsequent production of sufficient drawings to enable development of detail estimates including forecasts of consumable consumptions such as grinding media, fuel, reagents and power. First principle estimates have derived labour levels for project construction and on-going operation.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Costs	▪ The derivation of, or assumptions made, regarding projected capital costs in the study. ▪ The methodology used to estimate operating costs. ▪ Allowances made for the content of deleterious elements. ▪ The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. ▪ The source of exchange rates used in the study. ▪ Derivation of transportation charges. ▪ The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. ▪ The allowances made for royalties payable, both Government and private.	▪ The capital cost and operating costs estimates are commensurate with a DFS level study and were estimated by the DFS contributors as listed under the Study Status criterion discussed above. The capital cost estimate has been developed through the collation of a number of first principle estimates completed by the various DFS contributors on completion of sufficient design works to provide bills of materials to the estimators, quotations from equipment providers and contracting companies and estimates carried out directly by the owner's team. The operational cost estimate was developed on a 'first principle basis', derived from base data provided by Iron Road and the DFS contributors such as: o Forecast operational manning levels o Proposed organisation charts o Reagent usage forecast by system modelling o Fuel utilisation estimates o Calculated power consumption o Operational readiness costs o Estimated mining costs ▪ No allowance has been made for deleterious elements as levels of these are either very low in the ore or significantly below levels of concern in the final concentrate. ▪ Commodity pricing for the project was established by Metalytics Pty Ltd in a confidential independent market report dated December 2013. The study also considered physical characteristics and quality premiums/penalties as well as long term freight rates from Cape Hardy to China. An average LOM concentrate price of $158/dmt was used for the DFS. ▪ Exchange rates for the construction period were taken from Bloomberg (as at 31/01/2014) and longer term (life of project rates) were based on a range of external inputs, including RBA guidance. A long term USD : AUD foreign exchange rate of 0.85 was adopted for the DFS. ▪ The estimated LOM capital costs for the Project are $7,502M and are summarised below. o Initial capital $5,217M o Sustaining capital $1,815M o Mine closure $ 470M ▪ The estimated operating costs for the Project are US$71.60/dmt of concentrate. ▪ There are no treatment and refining charges or penalties associated with iron concentrates. Failure to meet specification is considered low risk. ▪ Government royalties have been estimated based on the provision of the Mining Act (South Australia) 1971. No other royalties are payable.	
Revenue factors	▪ The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. ▪ The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	▪ The derivation of, or assumptions made regarding revenue factors including head grade, commodity price, exchange rates, transportation and treatment charges have all been derived from the Metalytics report - see above. ▪ The derivation of assumptions made of commodity price, for the principal mineral magnetite has been derived from the Metalytics report - see above.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Market assessment	▪ The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. ▪ A customer and competitor analysis along with the identification of likely market windows for the product. ▪ Price and volume forecasts and the basis for these forecasts. ▪ For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	▪ Independent marketing consultants Metalytics have completed a detailed analysis on behalf of Iron Road Limited covering the forward supply and demand outlook and longer term pricing forecasts. ▪ A bulk sample of iron concentrate was tested for its sintering and pelletising suitability by the China Iron and Steel Research Institute Group who determined it very suitable as both a sinter feed blend and as pellet feed.	
Economic	▪ The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. ▪ NPV ranges and sensitivity to variations in the significant assumptions and inputs.	▪ The financial evaluation undertaken as part of the DFS indicated a post-tax net present value (NPV) at a 12.5% discount rate of $444M and an internal rate of return (IRR) of 13.9%. ▪ The key financial parameters were:- ○ Discount rate 12.5% ○ Tax rate 30.0% ○ Royalties (Year 1 - 5) 1.5% (Year 5 - 20) 3.5% ○ Start of construction Oct 2014 ○ Construction period 4 years ○ Life of mine 20 years ○ Initial capital expenditure $5,217M ○ Sustaining capital (LOM) $1,815M ○ Mine closure $ 470M ○ Operating cost $71.60/dmt ○ Product price (LOM average) $158dmt ▪ Sensitivity analysis indicated that a 10% change in product price, operating cost and capital cost resulted in the following impact on the pre-tax NPV:- ○ Product price ±180% ○ Operating expenditure ± 92% ○ Capital expenditure ± 79%	
Social	▪ The status of agreements with key stakeholders and matters leading to social licence to operate.	▪ A baseline social impacts and benefits study has been completed and results discussed with stakeholders. ▪ Various Community Consultative Committees have been formed for the purpose of consultation, information and feedback. ▪ Community engagement events and public meetings are regularly held to keep communities informed.	

Criteria	JORC Code Explanation	Commentary	Competent Person
Other	▪ To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: ▪ Any identified material naturally occurring risks. ▪ The status of material legal agreements and marketing arrangements. ▪ The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	▪ No significant (high) naturally occurring risks were identified during a whole of project risk assessment. ▪ Iron Road Limited has not yet entered into any formal marketing arrangement for the sale of iron concentrates and is currently progressing this area. ▪ The Exploration Licence is in good standing with all legal obligations met. Regular meetings with state and federal Government agencies occur for the purposes of discussing required approvals and facilitating meetings with other stakeholders. ▪ A Mining Lease and Program for Environmental Protection and Rehabilitation (PEPR) must be approved before the reserve can be extracted and are dependent on the approval of the Minister for Mineral Resources. ▪ Iron Road has no reason to believe that the necessary Government approvals will be received within the timeframes anticipated in the DFS.	
Classification	▪ The basis for the classification of the Ore Reserves into varying confidence categories. ▪ Whether the result appropriately reflects the Competent Person's view of the deposit. ▪ The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	▪ Proved and Probable Ore Reserves were declared based on the Measured and Indicated Mineral Resources contained within the pit design that was developed for Murphy South. The financial analysis showed that the economics of the Project were positive and the risk analysis did not identify any insurmountable risks. ▪ All Measured Resources that were contained within the Murphy South pit design were converted to Proved Ore Reserves.	
Audits or reviews	▪ The results of any audits or reviews of Ore Reserve estimates.	▪ No external audits or reviews of the Ore Reserve estimates have been undertaken.	
Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. ▪ The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. ▪ Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. ▪ It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	▪ The relative accuracy and confidence of the Ore Reserve estimate is inherent in the Ore Reserve Classification. ▪ No mine production data is available at this stage for reconciliation and/or comparative purposes. ▪ Factors that may affect the global tonnages and the associated grades include:- ○ Mining dilution ○ Mining recovery ○ Process plant performance	