

27 November, 2013

# **ASX Announcement**

# Resource Upgrade Yalyirimbi Iron Project

- ♦ Majority of Mineral Resource upgraded from Inferred to Indicated
- ♦ Important Earn-in Milestone Completed
- ♦ Ferrowest to secure 51% ownership of Yalyirimbi Iron Project

Ferrowest Limited ("Ferrowest" or "the Company") is pleased to announce that a Resource upgrade for the Yalyirimbi Iron Project ("the Project") has been completed following the results of the recent successful diamond drilling programme.

The new Mineral Resource estimate has been reported by CSA Global in accordance with the JORC Code 2004 edition.

The new Resource Estimate is as follows:

Yalyirimbi Inferred and Indicated Mineral Resource Estimate (JORC 2004 - G Louw)

Ferrowest Limited Yalyirimbi Haematite deposits - Mineral Resource estimate as at November 2013								
Deposit	Category	Tonnes	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Р%	S %	LOI %
А	Indicated	3.2	33.4	42.4	5.6	0.02	0.03	3.4
	Inferred	1.3	29.4	45.8	7.2	0.02	0.02	3.7
М	Indicated	4.1	25.1	58.8	3	0.02	0.14	1.6
	Inferred	4.8	24.1	59.4	3.8	0.02	0.07	1.8
Combined	Indicated	7.2	28.7	51.6	4.2	0.02	0.09	2.4
	Inferred	6.1	25.2	56.5	4.5	0.02	0.06	2.2
	Indicated + Inferred	13.3	27.1	53.9	4.3	0.02	0.08	2.3

Note: The CSA Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 15%Fe. The Mineral Resource is quoted from blocks above a 15%Fe cut-off grade. Differences may occur due to rounding

Based on the information and studies completed to date by both the previous operator of the Project and Ferrowest's own investigations, combined with the successful upgrade of much of the Resource to an Indicated Resource category, the Company believes that the Yalyirimbi Iron Project has reasonable prospects for eventual economic extraction of the iron ore and justifies the ongoing exploration and feasibility studies leading to a Bankable Feasibility, subject only to continued successful results.



The establishment of an Indicated Mineral Resource reported according to the JORC Code at the Yalyirimbi Iron Project represents the achievement and satisfaction of the earn-in benchmark by Ferrowest.

Under the terms of the Farm-in Agreement between Ferrowest and Arafura Resources Limited (the owner of the tenement on which the Yalyirimbi Iron Project is located), upon satisfaction of the earn-in benchmark Ferrowest will secure a 51% interest in the shares of Arafura Iron Pty Ltd (a subsidiary of Arafura Resources Limited). Arafura Iron Pty Ltd holds the iron rights to the mineral tenement on which the Project is based.

Upon completion of a share transfer and or an allotment of the relevant shares, Ferrowest will hold 51% of the Yalyirimbi Iron Project and Arafura Resources will hold 49%.

Ferrowest then has the right to earn a further 9% (i.e. Ferrowest 60% and Arafura Resources Limited 40%) by completing a Bankable Feasibility Study on the Project at its own expense.

The operation of the subsidiary Arafura Iron Pty Ltd is governed by existing agreements and Ferrowest will appoint 2 directors to the Board of Arafura Iron Pty Ltd. Arafura Resources Limited will continue to have two directors on the Arafura Iron Pty Ltd Board.

"Cooperation between Arafura Resources Limited and Ferrowest has been excellent and we look forward to presenting them with this Resource upgrade and taking the next important steps in moving the Yalyirimbi Iron Project forward for the benefit of both companies," said Managing Director of Ferrowest, Mr. Brett Manning

For further information please contact: Brett Manning – Managing Director +61 8 9277 2600



# ABOUT FERROWEST

Ferrowest is an Australian public company established in 2005 and listed on the Australian Securities Exchange in 2006. Set up to value add to iron ore through the production of merchant pig iron, Ferrowest now boasts exploration and project development activities in magnetite, haematite, gold and nickel.

#### **IRON**

Ferrowest is actively pursuing three major iron related projects:

- Yogi Iron Project 4.5Mtpa magnetite concentrate at 67%Fe\*;
- Eradu MPI Project 1.0Mtpa merchant pig iron (MPI) at 96%Fe<sup>\*</sup>; and
- Yalyirimbi Iron Project 2.0Mtpa haematite concentrate at 63.5%Fe\*.

Each of these projects is detailed below and each plays a strategic role in an innovative business plan that sets Ferrowest apart from other iron ore juniors in the resources sector. The proposed Eradu MPI plant is the centre piece of this plan with the aim to produce high quality merchant pig iron ("MPI") at a grade of 96%Fe as a dedicated MPI producer to the Asian region. This will differentiate Ferrowest from other producers of iron ore in Western Australia and make it a unique supplier into Asia. MPI is a high value, low volume and high margin product. Most competition in the market for MPI comes from Brazil at double the shipping cost of the big Asian markets of Korea, China and Japan.

The Yogi Mine Project will provide the long term, consistent supply of high quality magnetite needed to support the MPI manufacturing operations at Eradu for more than 25 years. These two projects, linked by key existing infrastructure will combine to make a very long term strategic business.

The Yalyirimbi Iron Project will also play a key role in the development of the Company's iron plans by providing a low capital cost, cash generating business that can be brought into operation relatively quickly. Yalyirimbi will play a critical role in transforming the Company from explorer to producer ahead of the construction of the Yogi Iron Project and the Eradu MPI Project, whilst also meeting some of the ongoing costs of operations across the Company.

Ferrowest also holds early stage exploration projects for iron south east of Cue and adjacent to the Jack Hills mine, which will continue to be explored.

#### **GOLD & BASE METALS**

Under a commodity diversity strategy implemented by the Company in late 2012, Ferrowest secured a 100% owned subsidiary called Urban Minerals Pty Ltd ("Urban") with a portfolio of tenements near Marvel Loch on the Southern Cross Greenstone belt that are prospective for gold, nickel and other base metals. Other projects are being added to Urban's portfolio, such as Lake Halbert East (on the Albany Fraser Orogen) and at Camel Back, 50Km south east of Leonora.

<sup>\*</sup> Proposed production rates are based on the Inferred Mineral Resources classified and reported under the JORC Code 2004 and calculations and evaluations made by Ferrowest. Ferrowest believes the proposed production rates are reasonable estimates given the commodity and the technical information currently available to it, however, they are provided for guidance only until further work is completed. This further work may or may not support the proposed production rates.



# PROJECT OUTLINES

#### **The Yogi Mine Project – Outline**

The Yogi Mine Project proposes the development of a magnetite mining and concentration operation at the Yogi iron deposit near Yalgoo in the mid west region of Western Australia. Proposed production of magnetite concentrate will target 4.5M tonnes per annum ("tpa") at 67%Fe<sup>\*</sup>. 3Mtpa would be exported through the new proposed Port of Oakajee with the other 1.5Mtpa planned to supply the Eradu MPI Project (detailed below). If Oakajee Port is delayed, Ferrowest can stage the Yogi Mine Project to match the demand from the Eradu MPI Project, which is not dependent on Oakajee Port for export.

The current magnetite Inferred Mineral Resource estimate at Yogi, classified and reported in accordance with the JORC Code (2004), is 572.5 million tonnes at 27.5%Fe.

The Exploration Target<sup>#</sup> at Yogi is estimated at between 0.8 and 1.2 billion tonnes at an average grade of between 25.5%Fe to 29.5%Fe.

<sup>#</sup> An Exploration Target is conceptual in nature as insufficient data exists to define a Mineral Resource and it is uncertain if further exploration will result in further Mineral Resource. The Exploration Target is based upon calculations prepared by Ferrowest Limited with reference to current experience and available data.

#### **The Eradu MPI Project - Outline**

The Eradu MPI Project envisages the production of seaborne traded merchant pig iron ("MPI") at 96%Fe using magnetite concentrate from the Yogi Mine Project. Proposed initial production is 1Mtpa. The plan is to process the magnetite concentrate into pig iron at Eradu, 60Km east of Geraldton using ITmk3® technology and the excellent existing infrastructure servicing the project.

MPI sells for around 4 times the value of iron ore fines, with a higher margin than bulk iron ore. The MPI also sells into a niche market that has seen less investment on dedicated production capacity than the iron ore industry. Unlike iron ore, MPI can be stored outside, won't create dust and with preferred shipment sizes ranging up to 55,000 tonnes, MPI is perfect for export through the existing Port of Geraldton.

#### **Yalyirimbi Iron Project**

The Yalyirimbi Iron Project is located in the Northern Territory on a 787Km<sup>2</sup> exploration licence and has a combined Indicated and Inferred Mineral Resource of 13.3 million tonnes of haematite at 27.1%Fe.

The Exploration Target at Yalyirimbi is estimated at between 50 to 70 million tonnes at between 25% and 29%Fe. #

<sup>#</sup> An Exploration Target is conceptual in nature as insufficient data exists to define a Mineral Resource and it is uncertain if further exploration will result in further Mineral Resource. The Exploration Target is based upon calculations prepared by Ferrowest Limited with reference to current experience and available data.

The current Resource is located in two zones totalling 1.5Km in length, out of a 30 to 40Km long formation that is yet to be explored. Test work carried out at Yalyirimbi demonstrated that with a crush to 100% passing 1mm and gravity upgrading, a haematite fines concentrate of 63.5%Fe with 7.1% SiO2, 0.84% Al2O3 and negligible P can be produced.

The Project envisages open cut mining of the specular haematite, before crushing and gravity based upgrading to produce a haematite fines concentrate at a nominal rate of 2.0 million tonnes per annum. The haematite will be transported via the existing railway to Darwin Port for export.

### **The Marvel Loch Project**

The Marvel Loch Project consists of 12 granted tenements, considered to be highly prospective for gold and base metals. The project has a combined area of 156Km<sup>2</sup> and is located close to the historic Marvel Loch mining area, 31Km south of Southern Cross in Western Australia. The Southern Cross greenstone belt has been the source of extensive gold and nickel exploration and production, hosting approximately 150 known significant gold occurrences.

\* Proposed production rates are based on the Inferred Mineral Resources classified and reported under the JORC Code 2004 and calculations and evaluations made by Ferrowest. Ferrowest believes the proposed production rates are reasonable estimates given the commodity and the technical information currently available to it, however, they are provided for guidance only until further work is completed. This further work may or may not support the proposed production rates.



# **Exploration Results**

Exploration results are based on standard industry practices including sampling, assay methods and appropriate quality control systems. Drillhole density for specific JORC reporting categories are based on a statistical analysis of the distribution of the iron mineralisation. The sampling of Reverse Circulation (RC) samples are collected as either single splits or 2 metre composite samples depending on the uniformity of mineralisation encountered. Core samples are sampled to geological boundaries with cored holes being twinned next to RC holes to check geological interpretation and also to provide sample material for Specific Gravity testwork. The quality of RC samples is optimised by the use of riffle and or cone splitters, dust collectors, logging of various criteria designed to record sample size, recovery and contamination and the use of field duplicates, blank samples and certified reference materials to measure sample representivity and reproducibility. In the case of ferrous metals and deleterious elements, the assays are prepared with a lithium borate fusion digest and X-ray fluorescence (XRF) finish. Sample preparation is undertaken at ALS in Alice Springs with the analyses being completed by ALS in Perth. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision.

# **Competent Persons Statement**

The information in this report that relates to Exploration Results and general geological commentary, including any Exploration Target estimates, is compiled by Graeme Johnston (please refer to details below).

The information in this report that relates to Mineral Resources or Ore Reserves at Yogi is based on information compiled by Graeme Johnston and Malcolm Titley (please refer to details below).

The Information in this report that relates to Mineral Resources or Ore Reserves at Yalyirimbi is based on information compiled by Grant Louw (please refer to details below).

**Graeme Johnston** is a Director of the Company, a geological consultant to it through Corad Pty Ltd and a Fellow of the Geological Society of London. Graeme Johnston has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a RPO and a Competent Person in terms of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). Graeme Johnston consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

**Malcolm Titley (MAusIMM)** is a Director and Principal Consultant of CSA Global and a Member of the Australasian Institute of Mining & Metallurgy. Malcolm Titley has sufficient experience, which is 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 in terms of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). Malcolm Titley consents to the inclusion of such information in this report in the form and context in which it appears.

**Grant Louw** is a Consultant for CSA Global and a Member of the Australian Institute of Geoscientists. Grant Louw has sufficient experience, which is 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 in terms of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). Grant Louw consents to the inclusion of such information in this report in the form and context in which it appears. Grant Louw takes responsibility for the mineral resource estimate only.