



ACN 097 422 529

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## **NOTICE OF GENERAL MEETING & EXPLANATORY MEMORANDUM**

**The General Meeting of the Company will be held at 10:30am (EST) on Monday, 29 August 2011, at the Marriott Sydney Harbour Circular Quay, 30 Pitt Street, Circular Quay, Sydney, New South Wales.**

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*This Notice of General Meeting should be read in its entirety. If Shareholders are in doubt as to how they should vote, they should seek advice from their accountant, solicitor or other professional adviser prior to voting.*

***Should you wish to discuss any matter please do not hesitate to contact the Company Secretary by telephone on 08 9265 8300.***

## Overview

Shareholders should read this Notice of Meeting, the Explanatory Memorandum and the Schedules and Annexures attached to the Explanatory Memorandum in its entirety, including for further information in relation to any of the below key considerations.

## Summary of Resolutions

**Resolution 1:** Approval to allot and issue to Atlas Iron Limited (**Atlas**) 37,439,785 Company Shares at \$0.65 per Company Share to raise approximately \$24.3m.

**Resolution 2:** Approval to allot and issue to Atlas 121,846,154 Company Shares with a deemed issue price of \$0.65 per Company Share as consideration for the acquisition of certain iron ore assets in the South East Pilbara (**Tenements**).

(Resolution 1 and Resolution 2 together, the **Resolutions**)

## Directors' Recommendation

Each FerrAus Director recommends that the shareholders of the Company (**Shareholders**) **VOTE IN FAVOUR** of both Resolutions 1 and 2 and intends to **VOTE IN FAVOUR** of the Resolutions for any Company Shares that they hold or have a Relevant Interest in.

## Independent Expert's Report

The Independent Expert has concluded that together, Resolutions 1 and 2 are **FAIR AND REASONABLE** to Shareholders.

Although the Subscription Agreement and the Asset Sale Agreement are separate transactions, they are both conditional upon Shareholders approving both Resolutions. As a result, the Independent Expert has considered them together as one transaction.

The Independent Expert notes that if the Subscription and Iron Ore Assets Acquisition were to be considered on an individual basis, Resolution 1 would not be fair but would be reasonable, while Resolution 2 would be fair and reasonable.

## Inter-conditionality

Both transactions to which the Resolutions pertain are conditional upon Shareholders approving both Resolutions. If one Resolution is approved and the other is not, then these conditions will not be satisfied, and neither transaction will complete, unless the relevant condition is waived by Atlas.

## Atlas Takeover Bid for FerrAus

On 27 June 2011, the Company announced that it had entered into the Bid Implementation Agreement with Atlas pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of the Company's Shares on issue on the basis of 1 Atlas ordinary share for every 4 Company Shares.

The Takeover Bid is not conditional on completion of the transactions contemplated by the Resolutions. Please refer to the Company's announcements of 27 June 2011 and 25 July 2011 for further details of the Takeover Bid.

Information relating to the Atlas Takeover Offer, including the Directors' recommendations, will be contained in the Target's Statement, to be dispatched to Shareholders separately.

## How to Vote

You may vote by attending the meeting in person or by proxy or a body corporate can appoint a corporate representative.

(a) Voting in Person

To vote in person, attend the meeting on Monday, 29 August 2011 at the specified venue. The meeting will commence at 10:30am EST.

(b) Voting by Proxy

You may register your vote online by logging on to [www.investorvote.com.au](http://www.investorvote.com.au). Instructions on how to vote online are included on the proxy form enclosed with this Notice of Meeting.

Alternatively you may complete and sign the relevant proxy form enclosed with this Notice of Meeting as soon as possible and either:

- return the proxy form by post in the reply paid envelope to the Company's Share Registry, Computershare Investor Services Pty Limited GPO Box 242 Melbourne Victoria 3001 Australia; or
- send the proxy form by facsimile to (within Australia) 1800 783 447 or (outside Australia) +61 3 9473 2555,

so that it is received not later than 10:30am EST on Saturday, 27 August 2011.

If the appointment is signed by an attorney, the power of attorney or a certified copy of it must be sent with the proxy form.

*Your proxy form is enclosed*

## Shareholder Information Line

If you have any queries concerning this Notice of meeting and Explanatory Memorandum, please contact the FerrAus Shareholder information line on 1300 761 372 (toll free) within Australia or +61 2 8280 7920 from outside Australia.

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# FERRAUS LIMITED

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## NOTICE OF GENERAL MEETING

Notice is hereby given that a general meeting of Shareholders will be held at the Marriott Sydney Harbour Circular Quay, 30 Pitt Street, Circular Quay, Sydney, New South Wales on Monday, 29 August 2011 at 10:30am(EST) (**General Meeting**).

The Explanatory Memorandum to this Notice provides additional information on matters to be considered at the General Meeting. The Explanatory Memorandum, all Schedules and Annexures to the Explanatory Memorandum and the Proxy Form form part of this Notice.

The Directors have determined pursuant to regulation 7.11.37 of the *Corporations Regulations 2001* (Cth) that the persons eligible to vote at the Meeting are those who are registered as Shareholders on Friday, 26 August 2011 at 7:00pm(EST).

Terms and abbreviations used in this Notice and the Explanatory Memorandum are defined in Schedule 1.

## AGENDA

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### 1. Resolution 1– Approval to Issue Subscription Shares

To consider, and if thought fit, to pass, with or without amendment, as an ordinary resolution, the following:

*“That, for the purposes of item 7 of section 611 of the Corporations Act, Listing Rule 7.1 and all other purposes, approval and authority is given for the Company to allot and issue to Atlas (or its nominee) up to 37,439,785 Company Shares at \$0.65 per Company Share on the terms and conditions in the Explanatory Statement accompanying this Notice.”*

#### Voting Exclusion

The Company will disregard any votes cast on this resolution by Atlas (or its nominee) and anyone who might obtain a benefit (except a benefit solely in their capacity as holder of ordinary securities) if the resolution is passed and any associates of such persons.

However, the Company will not disregard a vote if:

- (a) it is cast by the person as proxy for a person who is entitled to vote, in accordance with directions on the Proxy Form; or
- (b) it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

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## 2. Resolution 2 – Approval to Issue Consideration Shares

To consider, and if thought fit, to pass, with or without amendment, as an ordinary resolution, the following:

*“That, for the purposes of item 7 of section 611 of the Corporations Act, Listing Rule 7.1 and all other purposes, approval and authority is given for the Company to allot and issue to Atlas (or its nominee) up to 121,846,154 Company Shares with a deemed issue price of \$0.65 per Company Share on the terms and conditions in the Explanatory Statement accompanying this Notice.”*

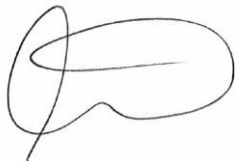
### **Voting Exclusion**

The Company will disregard any votes cast on this resolution by Atlas (or its nominee) and anyone who might obtain a benefit (except a benefit solely in their capacity as holder of ordinary securities) if the resolution is passed and any associates of such persons.

However, the Company will not disregard a vote if:

- (a) it is cast by the person as proxy for a person who is entitled to vote, in accordance with directions on the Proxy Form; or
- (b) it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

### **BY ORDER OF THE BOARD**



**Christopher Hunt**  
Company Secretary

Date: 25 July 2011

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# FERRAUS LIMITED

ACN 097 422 529

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## EXPLANATORY MEMORANDUM

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### 1. Introduction

Notice is hereby given that a General Meeting of Shareholders will be held at 10:30am (EST) on Monday, 29 August 2011 at Marriott Sydney Harbour Circular Quay, 30 Pitt Street, Circular Quay, Sydney, New South Wales.

The Explanatory Memorandum to this Notice of General Meeting provides additional information on matters to be considered at the General Meeting. The Explanatory Memorandum, all Schedules and Annexures to the Explanatory Memorandum and the Proxy Form are part of this Notice.

The Directors have determined pursuant to regulation 7.11.37 of the *Corporations Regulations 2001* (Cth) that the persons eligible to vote at the General Meeting are those who are registered as Shareholders at 7:00pm (EST) on Friday, 26 August 2011.

Terms and abbreviations used in this Notice and the Explanatory Memorandum are defined in Schedule 1.

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### 2. Action to be taken by Shareholders

Shareholders should read this Explanatory Memorandum carefully before deciding how to vote on the Resolutions.

A Proxy Form is attached to the Notice. This is to be used by Shareholders if they wish to appoint a representative (a "proxy") to vote in their place. All Shareholders are invited and encouraged to attend the Meeting or, if they are unable to attend in person, sign and return the Proxy Form to the Company in accordance with the instructions provided. Lodgement of a Proxy Form will not preclude a Shareholder from attending and voting at the General Meeting in person.

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### 3. Purpose of General Meeting

On 27 June 2011, the Company announced that it had entered into the following agreements with Atlas:

- (a) a subscription agreement pursuant to which Atlas has agreed to subscribe for 37,439,785 Company Shares at an issue price of \$0.65 per Company Share (**Subscription Agreement**);
- (b) an asset sale agreement pursuant to which the Company has agreed to buy the Tenements from Warwick Resources Pty Ltd (**Warwick**) and Giralia Resources Pty Ltd (**Giralia**), both of which are wholly owned subsidiaries of Atlas, in consideration for the issue of 121,846,154 Company Shares with a deemed issue price of \$0.65 per Company Share to Atlas (**Asset Sale Agreement**); and

- (c) a bid implementation agreement pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of the Company Shares on issue on the basis of 1 Atlas ordinary share for every 4 Company Shares (**Bid Implementation Agreement**).

Both the Subscription Agreement and Asset Sale Agreement are conditional upon the Company's Shareholders approving the issue to Atlas of:

- (a) 37,439,785 Company Shares at an issue price of \$0.65 per Company Share under the Subscription Agreement (**Subscription Shares**); and
- (b) 121,846,154 Company Shares with a deemed issue price of \$0.65 per Company Share under the Asset Sale Agreement (**Consideration Shares**).

The purpose of this General Meeting is to obtain the approval of the Shareholders to enable the Subscription Agreement and Asset Sale Agreement to complete.

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## **4. Summary of Subscription and Iron Ore Assets Acquisition**

### **4.1 Atlas Subscription**

Pursuant to the Subscription Agreement, Atlas has agreed to subscribe for the Subscription Shares which would enable the Company to raise approximately A\$24.3 million.

The Subscription Agreement is conditional upon the Shareholders approving, in accordance with the Listing Rules, the Corporations Act and for all other purposes, the issue to Atlas of the:

- (a) Subscription Shares; and
- (b) Consideration Shares in accordance with the Asset Sale Agreement.

A summary of the material terms of the Subscription Agreement is set out in section 9.1 of this Explanatory Memorandum.

## 4.2 Iron Ore Assets Acquisition

Pursuant to the Asset Sale Agreement, the Company has agreed to buy and Atlas, Warwick and Giralia have agreed to sell, the Tenements located in the South East Pilbara region in exchange for the Consideration Shares.

The key Tenements to be acquired by the Company include the following projects:

<b>Project</b>	<b>Resource (Mt)</b>	<b>Fe %</b>
McCameys North	38.9	58.0
Jimblebar Range	12.6	57.5
Caramulla South	13.8	53.9
Western Creek	19.1	55.1
Warrawanda	20.8	57.1
Giralia Western Creek	52.4	56.7
Jigalong	-	-
<b>Total/average</b>	<b>158</b>	<b>56.7</b>

*The information in this table that relates to mineral resource results is based on information compiled by Mr. Andrew Paterson who is a member of the Australasian Institute of Mining and Metallurgy and a full time employee of Atlas. Mr. Andrew Paterson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken 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. Andrew Paterson consents to the inclusion in the Notice of the matters based on his information in the form and context in which it appears.*

The Asset Sale Agreement is conditional upon the Shareholders approving, in accordance with the Listing Rules, the Corporations Act and for all other purposes, the issue to Atlas of the:

- (a) Consideration Shares; and
- (b) Subscription Shares in accordance with the Subscription Agreement.

A summary of the material terms of the Asset Sale Agreement is contained in section 9.2 of this Explanatory Memorandum.

## 4.3 Inter-conditionality of the transactions

The purpose of Resolution 1 is to obtain Shareholder approval for the issue of the Subscription Shares in accordance with the Subscription Agreement. The purpose of Resolution 2 is to obtain Shareholder approval for the issue of the Consideration Shares in accordance with the Asset Sale Agreement.

Resolutions 1 and 2 are separate resolutions and each resolution is not conditional upon the passing of the other. Shareholders may decide to vote in favour of, against or abstain from, either or both Resolutions.

However, the transactions to which the Resolutions pertain (being the Subscription under the Subscription Agreement and the Iron Ore Assets Acquisition under the Asset Sale Agreement) are both conditional upon the Shareholders approving **BOTH** the



issue of the Subscription Shares and the Consideration Shares to Atlas. Therefore, if one of the Resolutions is approved and the other is not approved by Shareholders, **BOTH** the Subscription and the Iron Ore Assets Acquisition will not complete, unless Atlas waives the relevant condition.

See section 7 for the advantages, disadvantages and risks related to voting for or against the Resolutions.

#### **4.4 Atlas' Takeover Bid**

On 27 June 2011, the Company announced that it had entered into the Bid Implementation Agreement with Atlas pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of the Company's Shares on issue on the basis of 1 Atlas ordinary share for every 4 Company Shares (**Takeover Bid**).

When the Takeover Bid was first announced on 27 June 2011, it was conditional upon the Company obtaining Shareholder approval and completion of both the Subscription Agreement and the Asset Sale Agreement. However, Atlas announced on 25 July 2011 that it has removed these conditions of the Takeover Bid.

The Takeover Bid is conditional on customary terms and conditions, including the following:

- (a) A minimum acceptance condition of 50.1%;
- (b) No material adverse change in relation to the Company; and
- (c) No prescribed occurrence in relation to the Company.

In addition, Atlas has agreed to declare the Takeover Bid to be free of all defeating conditions if the number of Company Shares in which Atlas and its associates together have Relevant Interests (disregarding any Relevant Interest that Atlas has merely because of the operation of section 608(3) of the Corporations Act) is at least 50.1% of all the Company Shares (even if that number later becomes less than 50.1% as a result of the issue of further Company Shares).

Under the Bid Implementation Agreement, it is possible for the Offer Period to commence prior to the completion of either or both of the Subscription Agreement or the Asset Sale Agreement. However, as contemplated by the current indicative timetable set out in section 4.6 of this Notice, Atlas does not intend to open the Offer Period prior to the completion of the Subscription and Iron Ore Assets Acquisition to which this Explanatory Memorandum pertains. The commencement date of the Offer Period (as indicated in the timetable contained in section 4.6) is subject to ASIC providing Atlas with the necessary relief under section 631 of the Corporations Act. If ASIC does not grant the relief, the Offer Period will commence on or before 27 August 2011. If Resolutions 1 and 2 are approved by Shareholders, the Company and Atlas will complete the Subscription and Iron Ore Assets Acquisition within 3 Business Days after the General Meeting.

If the Offer Period commences prior to the completion of either the Subscription Agreement or Asset Sale Agreement and acceptances of the Takeover Bid are received from at least 50.1% of the Shareholders, the Takeover Bid will become unconditional, irrespective of whether the Subscription Agreement or the Asset Sale Agreement or neither, have completed.

Shareholders should be aware that:

- (a) If the Offer Period commences prior to the completion of either the Subscription or the Iron Ore Assets Acquisition, it is possible to accept the Takeover Bid without voting in favour of or against, either Resolution 1 or Resolution 2; and
- (b) If either the Subscription Agreement or Asset Sale Agreement completes during the Offer Period, the Subscription Shares and/or Consideration Shares as the case may be, may be included in the calculation for determining if Atlas has reached the threshold of having a Relevant Interest in at least 50.1% of the Shares required for the Takeover Bid to become unconditional.

Please refer to the Bid Implementation Agreement which was attached to the announcement dated 27 June 2011 for further details on the conditions of the Takeover Bid.

#### 4.5 Effect of Resolutions 1 and 2 on the Company's Share Capital and Atlas' Voting Power

The following table shows the effect of shareholders approving either Resolution 1, Resolution 2 or both resolutions on the capital structure of the Company and Atlas' voting power:

	<b>As at the date of this Notice</b>	<b>Resolution 1 Only*</b>	<b>Resolution 2 Only*</b>	<b>Resolutions 1 &amp; 2</b>
<b>Company Shares on Issue</b>	249,398,565	286,838,350	371,244,719	408,684,504
<b>Atlas' holding in the Company</b>				
<b>Company Shares Held</b>	0	37,439,785	121,846,154	159,285,939
<b>% of Company Shares</b>	0%	13.1%	32.8%	39.0%

\*Please note that this is subject to Atlas waiving the inter-conditionality of the Subscription and the Iron Ore Assets Acquisition.

At the date of this Notice, Atlas and its associates (outlined in Schedule 4) do not currently have any voting power in the Company.

As discussed in section 4.4, it is possible that the Takeover Bid may be launched and Atlas may receive acceptances, prior to the completion of either or both of the Subscription or the Iron Ore Assets Acquisition. In these circumstances, Atlas' Relevant Interest (and the Relevant Interests of Atlas' associates) in the Company would be greater than the values shown in the table above, as is demonstrated in the table below:

Level of Acceptances in Takeover Bid	Resolution 1 Only*	Resolution 2 Only*	Resolutions 1 & 2
<b>10% Acceptances</b>	21.7%	39.5%	45.1%
<b>20% Acceptances</b>	30.4%	46.3%	51.2%
<b>30% Acceptances</b>	39.1%	53.0%	57.3%
<b>40% Acceptances</b>	47.8%	59.7%	63.4%
<b>50% Acceptances</b>	56.5%	66.4%	69.5%

\***Please note** that this is subject to Atlas waiving the inter-conditionality of the Subscription and the Iron Ore Assets Acquisition.

A summary of the capital structure of the Company as at the date of this Notice is contained in Schedule 3.

#### 4.6 Indicative Timetable

The indicative timetable for the implementation of the Subscription, Iron Ore Assets Acquisition and the Takeover Bid:

Action	Timeframe
General Meeting of Shareholders	29 August 2011
Allotment of Subscription Shares and Consideration Shares	30 August 2011
Atlas to lodge its Bidder's Statement with ASIC and ASX and serve it on the Company	5 September 2011*
The Company to lodge its Target's Statement with ASIC and ASX and serve it on Atlas	5 September 2011*
Atlas to dispatch its Bidder's Statement to the Company	5 September 2011*
The Company to dispatch its Target's Statement to Atlas	5 September 2011*
Offer Period commences	5 September 2011*
Offer Period ends unless extended or varied	4 October 2011

\***Please note** that the commencement date of the Offer Period is subject to ASIC providing Atlas with the necessary relief under section 631 of the Corporations Act. If ASIC does not grant the relief, the Offer Period will commence on or before 27 August 2011.

#### 4.7 Wah Nam Bid

On 10 November 2010, Wah Nam International Australia Pty Ltd (**Wah Nam**) lodged a bidder's statement with ASIC for the proposed takeover of the Company pursuant to which the Shareholders would receive 6 Wah Nam shares for every 1 Company Share held (**Wah Nam Bid**).

On 28 June 2011, Wah Nam International Holdings announced that the Wah Nam Bid lapsed at 4:00pm (WST) on 15 July 2011.

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## 5. Directors' Recommendation

Based on the information available, including that contained in this Explanatory Memorandum and the Independent Expert's Report, the advantages and disadvantages, the prospects and alternatives available to the Company, and having consulted with the Company's nominated corporate and legal advisors, the Directors consider that completion of both transactions which are the subject of Resolutions 1 and 2 is fair and reasonable insofar as Shareholders are concerned and is in the best interests of the Company and recommend that Shareholders **VOTE IN FAVOUR** of both Resolutions 1 and 2.

In addition, each Director intends to vote in favour of both Resolutions 1 and 2 for any Company Shares they hold or have a Relevant Interest in.

The reasons for the Directors' recommendation include:

- (a) The Independent Expert has concluded that the proposed transactions are together, fair and reasonable (see section 6 below). The Independent Expert's preferred value of the cash and assets to be provided to the Company pursuant to the Subscription and Iron Ore Assets Sale is **\$138,595,860** which is much higher than the Independent Expert's preferred valuation of the Company Shares to be issued to Atlas, which is **\$127,457,954**. Using the Independent Expert's preferred valuation of the cash and iron ore assets, the effective value of the 159,285,939 Company Shares being issued to Atlas is **\$0.87** per Company Share, which is an excellent result for the Company.
- (b) Shareholders will benefit from a combined 505Mt of DSO resources in the South East Pilbara, and additional exploration targets in a large and highly prospective landholding in the region.
- (c) The Tenements to be acquired have significant geographical synergies with the Company's existing projects, with several of the Tenements being contiguous, including along strike, to the Company's advanced projects.
- (d) The increased project scale and resource base will bring valuable economies of scale and will provide the Company with much greater leverage to pursue the development of an infrastructure solution in the South East Pilbara. Having Atlas as a cornerstone shareholder will also improve the Company's leverage in negotiations relating to infrastructure access and solutions.
- (e) The transactions will create an enlarged Company with increased access to funding, enabling the Company to more readily fund the business in a cost effective manner.
- (f) Completion of the Subscription and Iron Ore Assets Acquisition will provide the Company with significant funds to further advance its projects, including feasibility studies at the Company's Pilbara Project, development of the North West Infrastructure port and further exploration.
- (g) The transactions will result in Atlas, the Company's partner in the North West Infrastructure having a significant shareholding in the Company which will provide for further alignment of interests in relation to the development of the South West Creek Port and also allows the Company to benefit from the support of a major shareholder with substantial financial strength and

significant experience in the development and operation of iron ore projects in the Pilbara region.

In addition, the key considerations in relation to the prospects and alternatives available to the Company are as follows:

(a) Urgent need for funding

The Company has both near term and longer term funding requirements. Without the funding provided by the Subscription, the Company would need to raise significant funds (by September 2011) in order to progress feasibility studies and the continued development of the South West Creek port.

The Company has undertaken significant efforts in relation to funding, but has not been able to secure a feasible funding alternative other than the Subscription. Without the Subscription, the Company would likely have had to raise significant capital via an issue of equity at a substantial discount to the market price at the time of announcing the Subscription and Iron Ore Assets Acquisition (\$0.64), or otherwise halt the Company's project which would have negatively impacted the value of the project and potentially jeopardised the Company's position in the North West Infrastructure.

(b) Requirement for rail infrastructure solution

The Company has a need to secure a rail infrastructure solution in a timely manner in order to ensure that its project timetable can be achieved. The Company has been actively exploring alternatives to assist in this regard but, other than the Subscription and Iron Ore Assets Acquisition, has not been successful.

The Company considers that the Subscription and Iron Ore Assets Acquisition provide it with the financial strength, increased resource base and a further alignment of interests with Atlas (a partner in the North West Infrastructure) to greatly assist the Company in securing a viable rail infrastructure solution.

(c) Corporate alternatives

The Company has not been able to negotiate any other acceptable corporate alternatives to the Subscription and Iron Ore Assets Acquisition. The Company has explored a number of possible alternative transactions to realise value for Shareholders, however, no opportunity has arisen which the Board has been able to recommend to the Shareholders.

Shareholders should note that one of the Directors, Mr Robert Greenslade, holds an equity interest in Gryphon Partners Advisory Pty Ltd (**Gryphon**), the financial advisor to the Company. Gryphon will receive fees from the Company for professional services related to the Takeover Bid. Notwithstanding this interest, Mr Greenslade believes he is able to make the above recommendation.

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## 6. Independent Expert's Report

### 6.1 Independent Expert's Report

The Directors have resolved to appoint BDO Corporate Finance (WA) Pty Ltd (**BDO**) as an independent expert (**Independent Expert**) and commissioned it to prepare a report and provide an opinion as to whether or not the Subscription and Iron Ore Assets Acquisition are fair and reasonable to Shareholders.

This report was prepared to satisfy the requirements of section 611 of the Corporations Act which expressly prohibits a party (and its associates) acquiring a Relevant Interest in more than 20% of the issued share capital of a public company without the approval of that company's shareholders unless a full takeover is made to all shareholders. Atlas will acquire a Relevant Interest in more than 20% of the issued share capital of the Company if the Subscription and Iron Ore Assets Acquisition is approved.

What is fair and reasonable must be judged by the Independent Expert in all the circumstances of the proposal. This requires taking into account the likely advantages to Shareholders if the proposal is approved and comparing them with the disadvantages to Shareholders if the proposal is not approved.

The Independent Expert has concluded that together, Resolutions 1 and 2 are fair and reasonable to Shareholders.

Although the Subscription Agreement and the Asset Sale Agreement are separate transactions, they are both conditional upon Shareholders approving both Resolutions. As a result, the Independent Expert has considered them together as one transaction.

The Independent Expert notes that if the Subscription and Iron Ore Assets Sale were to be considered on an individual basis, Resolution 1 would not be fair but would be reasonable, while Resolution 2 would be fair and reasonable.

The Company strongly recommends that you read the Independent Expert's Report in full, a copy of which is in Annexure A to this Explanatory Memorandum. A second independent expert's report will be prepared for the Takeover Bid and will be included in the Company's Target Statement.

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## **7. Advantages, Disadvantages and Risks**

### **7.1 Risks of voting against the Resolutions**

- (a) Both the Subscription and the Iron Ore Assets Acquisition are conditional on the approval of Shareholders of both the Subscription and Iron Ore Assets Acquisition. If only one Resolution is approved and the other is not, then these conditions will not be satisfied and neither transaction will complete unless the relevant condition is waived by Atlas, which it may not do.
- (b) If the Subscription and the Iron Ore Assets Acquisition do not complete, the Company will not stand to realise the benefits of the transactions as outlined below, including as highlighted in the reasons for the Directors' recommendation (contained in section 5 above).
- (c) If the Subscription does not complete, the Company will need to raise significant capital via an issue of equity, potentially at a significant discount to the Company Share price immediately prior to the announcement of the proposed transactions (being \$0.64) or otherwise cease work at the Company's projects which could have potentially severe consequences with respect to the value and prospects of the Company.

### **7.2 Advantages of the Subscription**

The Directors are of the view that the following non-exhaustive list of advantages may be relevant to a Shareholder's decision on how to vote on Resolution 1:

(a) Increased funding

The Subscription will provide additional funds to further advance the Company's projects, including feasibility studies at the Company's Pilbara Project, development of the South West Creek port and exploration. Without this funding, the Company would need to raise significant funds, potentially through the issue of Company Shares at a significant discount to the then market price, in order to progress feasibility studies and the continued development of the South West Creek port.

(b) Atlas as a substantial shareholder of the Company

The Subscription will result in Atlas having a significant shareholding in the Company that provides for a further alignment of interests in relation to the South West Creek port and also allows the Company to benefit from the support of a major shareholder with substantial financial strength and significant experience in the development and operation of iron ore projects in the Pilbara region.

### **7.3 Disadvantages of the Subscription**

The Directors are of the view that the following non-exhaustive list of disadvantages may be relevant to a Shareholder's decision on how to vote on Resolution 1:

(a) Reduction in voting power

Upon completion of the Subscription, Shareholders will have their voting power reduced as a result of the dilution of their holding due to the issue of additional Company Shares. As such, the ability of the Shareholders to influence decisions, including the composition of the Board or the acquisition or disposal of assets will be reduced accordingly.

(b) Influence of Atlas as a major shareholder

As a major shareholder, Atlas will have significant ability to influence decisions including the composition of the Board. In addition, if both Resolutions are passed, Atlas, due to its significant shareholding, will have the ability to block any special resolution at a meeting of Shareholders and prevent compulsory acquisition in the event of a takeover offer from any third party. This may deter the making of a takeover bid for the Company by a third party bidder.

### **7.4 Advantages of the Iron Ore Assets Acquisition**

In addition to the advantages of the Subscription set out in section 7.1 of this Explanatory Memorandum, the Directors are of the view that the following non-exhaustive list of advantages may be relevant to a Shareholder's decision on how to vote on Resolution 2:

(a) Size of DSO resource

Shareholders will benefit from a combined 505Mt of DSO resources in the South East Pilbara, and additional exploration targets in a large and highly prospective landholding in the region.

(b) Synergies with existing assets

The Tenements to be acquired have significant geographical synergies with the Company's existing projects, with several of the Atlas Tenements being contiguous, including along strike, to the Company's advanced projects.

(c) Economies of scale

The increased project scale and resource base will bring valuable economies of scale and will provide the Company with much greater leverage to pursue the development of an infrastructure solution in the South East Pilbara.

(d) Increased access to funding

Completion of the Subscription and the Iron Ore Assets Acquisition will create an enlarged entity with increased access to funding, enabling the Company to more readily fund the business in a cost effective manner.

## 7.5 Disadvantages of the Iron Ore Assets Acquisition

In addition to the disadvantages of the Subscription set out in section 7.3 of this Explanatory Memorandum, the Directors are of the view that the following non-exhaustive list of disadvantages may be relevant to a Shareholder's decision on how to vote on Resolution 2:

(a) Increased statutory obligations

As a result of the Iron Ore Assets Acquisition there will be increased obligations on the Company under the *Mining Act 1978* (WA) in respect of the acquired assets (such as minimum expenditure obligations).

(b) Reduction in voting power

Upon completion of the Iron Ore Assets Acquisition, Shareholders will have their voting power reduced as a result of the dilution of their holding due to the issue of additional Company Shares. As such, the ability of the Shareholders to influence decisions, including the composition of the Board or the acquisition or disposal of assets will be reduced accordingly.

(c) Influence of Atlas as a major shareholder

As a major shareholder, Atlas will have significant ability to influence decisions including the composition of the Board. In addition, if both Resolutions are passed, Atlas, due to its significant shareholding, will have the ability to block any special resolution at a meeting of Shareholders and prevent compulsory acquisition in the event of a takeover offer from any third party. This may deter the making of a takeover bid for the Company by a third party bidder.

## 7.6 Risks of the Iron Ore Assets Acquisition

A summary of the risk factors of the Iron Ore Assets Acquisition which may influence the way Shareholders vote on Resolution 2 include:

(a) Exploration risks

The risks associated with speculative nature of exploration and development of iron ore assets generally.



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## **8. Background of Atlas**

### **8.1 Background**

Atlas is an independent Australian iron ore company, mining and exporting Direct Shipping Ore (**DSO**) from its operations in the Northern Pilbara region of Western Australia.

Atlas is currently mining and exporting at an annualised rate of 6Mtpa from its 100% owned Pardoo and Wodgina Iron Ore Projects, located 75 and 100 kilometres by road from Port Hedland in the Pilbara region of Western Australia.

In addition, Atlas is progressing development at its Mt Webber and Abydos DSO Projects. When combined with additional export tonnages from its existing Pardoo and Wodgina DSO mines, Atlas is targeting DSO exports at an annualised rate of 12Mt by 2012.

### **8.2 Atlas' Directors**

Atlas' board of directors consists of the following directors:

- (a) Geoff Clifford – Non-executive Director<sup>1</sup>;
- (b) David Flanagan – Managing Director;
- (c) Dr David Smith – Non-executive Director;
- (d) David Hannon – Non-executive Director; and
- (e) Tai Sook Yee – Non-executive Director.

### **8.3 Major Shareholders**

Atlas' largest shareholders are:

- (a) IMC Resource Investment Pty Ltd which hold 8.1% of Atlas' issued share capital; and
- (b) BlackRock Investment Management (Australia) Limited which hold 5.2% of Atlas' issued share capital.

Atlas' top 20 shareholders hold a combined total of 64.5% of Atlas' issued ordinary share capital.

### **8.4 Atlas' Capital Structure**

The following table summarises Atlas' capital structure as at the close of market two Business Days prior to the date of this Notice:

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<sup>1</sup> Mr Clifford will step down as non-executive director of the Atlas board from 31 July 2011.

Ordinary Shares	826,466,142
Market Capitalisation at \$4.22 per share	A\$3,488 million
Cash as at 31 March 2011	A\$293 million
Debt	A\$0
Enterprise Value	A\$3,195 million
Options	24.9 million

## **9. Summary of Material Terms of Subscription and Asset Sale Agreements**

### **9.1 Material Terms of Subscription Agreement**

Pursuant to the Subscription Agreement, Atlas has agreed to subscribe for the Subscription Shares to raise approximately \$24.3 million for the Company.

The Subscription Agreement is conditional upon the Shareholders approving, in accordance with the Listing Rules and the Corporations Act and for all other purposes, the issue to Atlas of the:

- (a) Subscription Shares; and
- (b) Consideration Shares in accordance with the Asset Sale Agreement.

The condition that Shareholder approval is obtained for the issue of the Consideration Shares to Atlas is capable of being waived by Atlas. Completion of the Subscription will be at a time and place to be agreed by the parties and will not be later than 3 Business Days after the fulfilment or waiver, as the case may be, of the last of the conditions.

The Subscription Agreement can be terminated by either party if:

- (a) either party fails to comply with any of its obligations under the Subscription Agreement and such breach is not remedied within 10 Business Days;
- (b) any representation, warranty, undertaking or statement made by either party is untrue or misleading in any respect which the other party considers material; or
- (c) a material adverse change (as such term is defined in the Subscription Agreement) occurs in respect of the Company.

The Company and Atlas have provided certain warranties to each other which are customary for this type of agreement.

### **9.2 Material Terms of Asset Sale Agreement**

The following is a summary of the material terms of the Asset Sale Agreement.

- (a) Iron Ore Assets Acquisition

Pursuant to the Asset Sale Agreement, the Company has agreed to buy the Tenements from Warwick and Giralia, wholly owned subsidiaries of Atlas, in consideration for the issue of the Consideration Shares to Atlas.

(b) Conditions

The following table summarises the conditions of the Asset Sale Agreement and the status of each condition as at the date of this Notice.

Condition	Status of condition
<p>The Shareholders approving, in accordance with the Listing Rules and the Corporations Act and for all other purposes, the issue to Atlas of:</p> <ul style="list-style-type: none"><li>• The Consideration Shares; and</li><li>• The Subscription Shares in accordance with the Subscription Agreement.</li></ul>	<p>Approval for the Subscription and Iron Ore Assets Acquisition is the subject of this Notice.</p>
<p>To the extent required, Warwick and Giralia obtaining Ministerial consent under the <i>Mining Act 1978</i> (WA) (<b>Mining Act</b>) for the transfer of the Tenements.</p>	<p>The Tenements are such that Ministerial consent will not be required under the Mining Act. This condition accordingly falls away.</p>

(c) Completion

Completion of the Iron Ore Assets Acquisition will be at a time and place to be agreed by the parties and will not be later than 3 Business Days after the fulfilment or waiver, as the case may be, of the last of the conditions.

(d) Perfection of Title

If, for whatever reason, the rights of Warwick and Giralia as legal and beneficial owners of the Assets, can not be transferred to the Company, these rights will be exercisable by the Company in the name of either Warwick or Giralia (as applicable) who will hold these rights on trust for the Company.

(e) Warranties and Indemnity

The parties have provided certain warranties to each other which are customary in this type of agreement.

Warwick and Giralia have agreed to indemnify the Company against any loss or damage arising from a breach by either Warwick or Giralia of any of the warranties given by either of them under the Asset Sale Agreement.

(f) Termination

The Asset Sale Agreement can be terminated by either party if:

- any party fails to comply with any of its obligations under the Asset Sale Agreement and such breach is not remedied within 10 Business Days;
- any representation, warranty, undertaking or statement made by a party is untrue or misleading in any material respect; or

- a material adverse change (as such term is defined in the Asset Sale Agreement) occurs in respect of the Company, Warwick or Giralia.

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## **10. Resolution 1 – Corporations Act, Listing Rules and Regulatory Information**

### **10.1 Listing Rule 7.1 – Shareholder approval to issue Subscription Shares**

Listing Rule 7.1 requires Shareholder approval for the proposed issue of the Subscription Shares. Listing Rule 7.1 provides, subject to certain exceptions, that Shareholder approval is required for any issue of securities by a listed company, where the securities proposed to be issued represent more than 15% of the Company's securities then on issue.

Resolution 1 is an ordinary resolution.

### **10.2 Specific Information Required by ASX Listing Rule 7.3**

For the purposes of Shareholder approval of the issue of the Subscription Shares and the requirements of Listing Rule 7.3, information is provided as follows:

- (a) the maximum number of securities the Company can issue under Resolution 1 is 37,439,785 Shares;
- (b) the Company will allot and issue the Subscription Shares to Atlas on completion of the Subscription Agreement and in any event before 29 September 2011. Completion is expected to take place on or about 30 August 2011;
- (c) the Subscription Shares will be allotted at an issue price of \$0.65 each;
- (d) the Subscription Shares will be issued to Atlas;
- (e) the Subscription Shares to be issued are ordinary shares and will rank equally with the Company Shares;
- (f) a voting exclusion statement is included in the Notice in respect of Resolution 1;
- (g) Shareholder approval has been sought to raise \$24,335,860.25 from the issue of the Subscription Shares; and
- (h) proceeds from the issue of the Subscription Shares will predominantly be used to fund feasibility studies, exploration activities and to provide general working capital.

### **10.3 Section 611 Corporations Act**

A summary of the legal principles in respect of section 611 of the Corporations Act is contained in Schedule 2.

### **10.4 Information required by item 7 of section 611 of the Corporations Act and ASIC Regulatory Guide 74**

The information that Shareholders require under item 7 of section 611 of the Corporations Act and ASIC Regulatory Guide 74 is provided as follows:

(a) **The identities of any person who will have a relevant interest in the Subscription Shares**

The Subscription Shares will be issued to Atlas.

(b) **Full particulars (including the number and percentage) of the Shares to which Atlas will be entitled immediately before and after the Subscription**

Refer to section 4.5 of this Explanatory Memorandum for full particulars of the Company Shares to which Atlas will be entitled immediately before and after the Subscription. As at the date of this Notice, Atlas and its associates do not have a Relevant Interests in any Company Shares.

(c) **The identity, associations (with Atlas or any of its associates) and qualifications of any person who is intended to become a director if Shareholders agree to the Subscription**

On completion of the Subscription (and the Iron Ore Assets Acquisition) Atlas will not have control of the Board or the Company. Atlas may seek to appoint representatives to the Board, however, potential representatives have not been identified at this time.

(d) **Atlas' intentions regarding the future of the Company if Shareholders agree to the allotment of the Subscription Shares to Atlas**

As explained above, if Shareholders agree to the allotment and issue of the Subscription Shares and Consideration Shares, Atlas will not have control of the Board or the Company. As such, Atlas does not have any specific intentions regarding the future of the Company if Shareholders agree to the allotment.

Atlas has informed the Company that:

- it has no current intention to change the business of the Company;
- it has no current intention to inject further capital into the Company, although if the Company undertook a rights issue, Atlas may seek to participate depending on the terms of the rights issue;
- if Atlas obtains board representation (see below), Atlas intends to evaluate current employment levels and propose appropriate restructuring in order to increase efficiencies and ensure an optimal allocation of Company resources;
- other than as described in this Notice, it does not contemplate any proposal whereby any assets will be transferred between the Company and Atlas (or any company in the Atlas Group) or any person associated with any of them; and
- it has no current intention to otherwise redeploy the fixed assets of the Company.

Atlas is required by the Bid Implementation Agreement and the Corporations Act to make the Takeover Bid. Atlas intends to make the Takeover Bid (in accordance with its obligations) following the completion of the Subscription Shares and Iron Ore Assets Acquisition. Atlas is still required to make the Takeover Bid if the issue of the Subscription Shares and Consideration Shares is not approved by Shareholders.

If the issue of the Subscription Shares and Consideration Shares is approved and the Takeover Bid is unsuccessful, Atlas will own approximately 39% of the Company Shares which does not place Atlas in a position of control. If this occurs, Atlas may seek to appoint representatives to the Board and gain a more detailed understanding of all of the businesses, assets and operations of the Company to evaluate the performance, profitability and prospects of the Company.

- (e) **Particulars of the terms of the proposed issue of the Subscription Shares, any contract or proposed contract between Atlas and the Company or any of their associates which is conditional upon, or directly or indirectly dependent on, Shareholders agreement to the issue of the Subscription Shares to Atlas.**

Refer to section 9 of this Explanatory Memorandum for a summary of the material terms of the Subscription Agreement. Refer to section 4.3 of this Explanatory Memorandum for a summary of the inter-conditionality between the Subscription Agreement and Asset Sale Agreement.

- (f) **When the allotment of Shares to Atlas as consideration under the Share Purchase Agreement is to be made**

The Subscription Shares will be issued to Atlas on completion of the Subscription Agreement. Subject to Shareholders approving both Resolutions, the Company anticipates that completion of these agreements will take place on 30 August 2011.

- (g) **An explanation of the reasons for the proposed allotment of the Subscription Shares to Atlas**

The Subscription Shares will be issued to Atlas in consideration for payment of \$24,335,860 to the Company pursuant to the Subscription Agreement. Refer to section 7 of this Explanatory Memorandum for the advantages, disadvantages and risks of approving the issue of the Subscription Shares.

- (h) **The interests of the Directors in Resolution 1.**

None of the Directors have an interest in Resolution 1.

- (i) **Identity of the Directors who approved or voted against the proposal to put Resolution 1 to Shareholders and the Explanatory Memorandum**

All of the Directors approved the proposal to put Resolution 1 to Shareholders.

- (j) **Any intention of Atlas to change significantly the financial or dividend policies of the Company**

As explained above, if Shareholders agree to the allotment of the Subscription Shares and Consideration Shares, Atlas will not have control of the Board or the Company.

Atlas does not intend to change significantly the financial or dividend policies of the Company at this time.

- (k) **Recommendation or otherwise of each Director as to whether Shareholders should agree to the proposed allotment of Shares to Atlas in consideration of the acquisition and the reasons for the recommendation.**

Refer to section 5 of this Explanatory Memorandum.

- (l) **An analysis of whether the proposed allotment of Shares to Atlas in consideration of the acquisition the subject of Resolution 1 is fair and reasonable when considered in the context of the interests of the Shareholders other than Atlas.**

Refer to section 6 and the Independent Expert's Report at annexure A of this Explanatory Memorandum.

**The Directors are not aware of any other information that may be relevant to Shareholders' decision whether or not to vote in favour of the Resolution 1.**

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## **11. Resolution 2 – Corporations Act, Listing Rules and Regulatory Information**

### **11.1 Listing Rule 7.1 – Shareholder approval to issue Consideration Shares**

Listing Rule 7.1 requires Shareholder approval for the proposed issue of the Consideration Shares. Listing Rule 7.1 provides, subject to certain exceptions, that Shareholder approval is required for any issue of securities by a listed company, where the securities proposed to be issued represent more than 15% of the Company's securities then on issue.

Resolution 2 is an ordinary resolution.

### **11.2 Specific Information Required by ASX Listing Rule 7.3**

For the purposes of Shareholder approval of the issue of the Consideration Shares and the requirements of Listing Rule 7.3, information is provided as follows:

- (a) the maximum number of securities the Company can issue under Resolution 2 is 121,846,154;
- (b) the Company will issue and allot the Consideration Shares to Atlas on completion of the Asset Sale Agreement and in any event before 29 September 2011. Completion is expected to take place on or about 30 August 2011;
- (c) the Consideration Shares will be allotted at a deemed issue price of \$0.65 each and therefore no funds will be raised by the issue;
- (d) the Consideration Shares will be issued to Atlas;
- (e) the Consideration Shares to be issued are ordinary shares and rank equally with the Company Shares;
- (f) a voting exclusion statement is included in the Notice in respect of Resolution 2; and

- (g) shareholder approval has been sought to acquire certain iron ore assets held by Warwick and Giralia pursuant to Resolution 2.

### **11.3 Section 611 Corporations Act**

A summary of the legal principles in respect of section 611 of the Corporations Act is contained in Schedule 2.

### **11.4 Information required by item 7 of section 611 of the Corporations Act and ASIC Regulatory Guide 74**

The information that Shareholders require under item 7 of section 611 of the Corporations Act and ASIC Regulatory Guide 74 is provided as follows:

- (a) **The identities of any person who will have a relevant interest in the Consideration Shares**

The Consideration Shares will be issued to Atlas.

- (b) **Full particulars (including the number and percentage) of the Shares to which Atlas will be entitled immediately before and after the Iron Ore Assets Acquisition**

Refer to section 4.5 of this Explanatory Memorandum for full particulars of the Company Shares to which Atlas will be entitled immediately before and after the Iron Ore Assets Acquisition. As at the date of this Notice, Atlas and its associates do not have a Relevant Interest in any Company Shares.

- (c) **The identity, associations (with Atlas or any of its associates) and qualifications of any person who is intended to become a director if Shareholders agree to the Iron Ore Assets Acquisition**

On completion of the Iron Ore Assets Acquisition (and the Subscription) Atlas will not have control of the Board or the Company. Atlas may seek to appoint representatives to the Board, however, potential representatives have not been identified at this time.

- (d) **Atlas's intentions regarding the future of the Company if Shareholders agree to the allotment of the Consideration Shares to Atlas**

As explained above, if Shareholders agree to the allotment of the Subscription Shares and Consideration Shares, Atlas will not have control of the Board or the Company. As such, Atlas does not have any specific intentions regarding the future of the Company if Shareholders agree to the allotment.

Atlas has informed the Company that:

- it has no current intention to change the business of the Company;
- it has no current intention to inject further capital into the Company, although if the Company undertook a rights issue, Atlas may seek to participate depending on the terms of the rights issue;
- if Atlas obtains board representation (see below) Atlas intends to evaluate current employment levels and propose appropriate restructuring in order to increase efficiencies and ensure an optimal allocation of Company resources;



- other than as described in this Notice, it does not contemplate any proposal whereby any assets will be transferred between the Company and Atlas (or any company in the Atlas Group) or any person associated with any of them;
- it has no current intention to otherwise redeploy the fixed assets of the Company.

Atlas is required by the Bid Implementation Agreement and the Corporations Act to make the Takeover Bid. Atlas intends to make the Takeover Bid (in accordance with its obligations) following the completion of the Subscription Shares and Iron Ore Assets Acquisition. Atlas is still required to make the Takeover Bid if the issue of the Subscription Shares and Consideration Shares is not approved by Shareholders.

If the issue of the Subscription Shares and Consideration Shares is approved and the Takeover Bid is unsuccessful, Atlas will own approximately 39% of the Company Shares which does not place Atlas in a position of control. If this occurs, Atlas may seek to appoint representatives to the Board and gain a more detailed understanding of all of the businesses, assets and operations of the Company to evaluate the performance, profitability and prospects of the Company.

- (e) **Particulars of the terms of the proposed issue of the Consideration Shares, any contract or proposed contract between Atlas and the Company or any of their associates which is conditional upon, or directly or indirectly dependent on, Shareholders agreement to the issue of the Consideration Shares to Atlas.**

Refer to section 9 of this Explanatory Memorandum for a summary of the material terms of the Asset Sale Agreement. Refer to section 4.3 of this Explanatory Memorandum for a summary of the inter-conditionality between the Subscription Agreement and Asset Sale Agreement.

- (f) **When the allotment of Shares to Atlas as consideration under the Share Purchase Agreement is to be made**

The Consideration Shares will be issued to Atlas on completion of the Asset Sale Agreement. Subject to Shareholders approving both Resolutions, the Company anticipates that completion of these agreements will take place on 30 August 2011.

- (g) **An explanation of the reasons for the proposed allotment of the Consideration Shares to Atlas**

The Consideration Shares will be issued to Atlas as consideration for the purchase of certain iron ore assets pursuant to the Asset Sale Agreement. Refer to section 7 of this Explanatory Memorandum for the advantages, disadvantages and risks of approving the issue of the Consideration Shares.

- (h) **The interests of the Directors in Resolution 2.**

None of the Directors have an interest in Resolution 2.

- (i) **Identity of the Directors who approved or voted against the proposal to put Resolution 1 to Shareholders and the Explanatory Memorandum**

All of the Directors approved the proposal to put Resolution 2 to Shareholders.

(j) **Any intention of Atlas to change significantly the financial or dividend policies of the Company**

On completion of the Iron Ore Assets Acquisition (and the Subscription) Atlas will not have control of the Board or the Company. Atlas does not intend to change significantly the financial or dividend policies of the Company at this time.

(k) **Recommendation or otherwise of each Director as to whether Shareholders should agree to the proposed allotment of Shares to Atlas in consideration of the acquisition and the reasons for the recommendation.**

Refer to section 5 of this Explanatory Memorandum.

(l) **An analysis of whether the proposed allotment of Shares to Atlas in consideration of the acquisition the subject of Resolution 2 is fair and reasonable when considered in the context of the interests of the Shareholders other than Atlas.**

Refer to section 6 and the Independent Expert's Report at annexure A of this Explanatory Memorandum.

**The Directors are not aware of any other information that may be relevant to Shareholders' decision whether or not to vote in favour of the Resolution 2.**

## Schedule 1 - Definitions

In this Explanatory Memorandum and Notice:

**ASIC** means the Australian Securities and Investments Commission.

**Asset Sale Agreement** has the meaning given to that term in section 3 of the Explanatory Memorandum.

**ASX** means ASX Limited ABN 98 008 624 691 and, where the context permits, the Australian Securities Exchange.

**Atlas** means Atlas Iron Limited ACN 110 396 168.

**BDO** means BDO Corporate Finance (WA) Pty Ltd.

**Bid Implementation Agreement** means the bid implementation agreement between the Company and Atlas dated 26 June 2011.

**Board** means the board of Directors.

**Business Day** means a day on which all banks are open for business in Perth, Western Australia, excluding a Saturday, Sunday or public holiday.

**Capital Structure** means the capital structure of the Company as set out in Schedule 3 of this Notice.

**Company** means FerrAus Limited ACN 097 422 529.

**Company Share** means a fully paid ordinary share in the capital of the Company.

**Consideration Shares** has the meaning given to that term in section 3 of this Explanatory Memorandum.

**Corporations Act** means the *Corporations Act 2001* (Cth).

**Director** means a director of the Company and **Directors** means the directors of the Company.

**EST** means Eastern Standard Time means the time in Sydney, New South Wales.

**Explanatory Memorandum** means the explanatory memorandum to this Notice.

**FerrAus** means FerrAus Limited ACN 097 422 529.

**Giralia** means Giralia Resources Pty Limited ACN 009 218 204, being a wholly owned subsidiary of Atlas.

**Independent Expert's Report** means the independent experts report prepared by BDO pursuant to Section 611 of the Corporations Act.

**Iron Ore Assets Acquisition** means the acquisition of the Tenements by the Company from Warwick and Giralia in consideration for the issue of the Consideration Shares to Atlas pursuant to the Asset Sale Agreement.

**Listing Rules** means the listing rules of ASX.

**Meeting or General Meeting** has the meaning given in the introductory paragraph of the Notice.

**Mineral Rights Acquisition Agreement** means the agreement between Warwick Resources Pty Ltd, Hannans Reward Limited and Errawarra Pty Ltd dated on or about 17 June 2009.

**Notice** means this notice of meeting and the Explanatory Memorandum and including all Schedules and Annexures attached to the Explanatory Memorandum.

**Offer Period** has the meaning given to that term in Schedule 1 of the Bid Implementation Agreement.

**Proxy Form** means the proxy form attached to the Notice.

**Relevant Interest** has the same meaning as given in sections 608 and 609 of the Corporations Act.

**Resolution** means a resolution contained in this Notice.

**Schedule** means a schedule to this Notice.

**Shareholder** means a holder of Company Shares.

**Subscription** means the subscription by Atlas for the Subscription Shares pursuant to the Subscription Agreement.

**Subscription Shares** has the meaning given to that term in section 3 of the Explanatory Memorandum.

**Subscription Agreement** has the meaning given to that term in section 3 of the Explanatory Memorandum.

**Takeover Bid** has the meaning given to that term in clause 4.4 of this Notice.

**Tenements** means the tenements to be transferred under the Asset Sale Agreement.

**Warwick** means Warwick Resources Pty Ltd ACN 063 506 963, being a wholly owned subsidiary of Atlas.

**WST** means Western Standard Time means being the time in Perth, Western Australia.

## Schedule 2 – Legal principles in relation to section 611 Corporations Act

- (a) Section 606 of the Corporations Act prohibits a person acquiring a relevant interest in the issued voting shares of the Company if, because of the acquisition, that person's or another person's voting power in the Company increases from:
  - (i) 20% or below to more than 20%; or
  - (ii) a starting point that is above 20% and below 90%.
- (b) The voting power of a person in the Company is determined by reference to section 610 Corporations Act. A person's voting power in the Company is the total of the votes attaching to the Shares in the Company in which that person and that person's associates (within the meaning of the Corporations Act) have a relevant interest.
- (c) Under section 608 Corporations Act a person will have a relevant interest in Shares if:
  - (i) the person is the registered holder of the Shares;
  - (ii) the person has the power to exercise or control the exercise of votes or disposal of the Shares; or
  - (iii) the person has over 20% of the voting power in a company that has a relevant interest in Shares, then the person has a relevant interest in said Shares.
- (d) For the purpose of determining who is an associate you need to consider section 12 of the Corporations Act. Any reference in chapters 6 to 6C of the Corporations Act to an associate is as that term is defined in section 12. The definition of 'associate' in section 12 is exclusive. If a person is an associate under section 11, 13 or 15 of the Corporations Act then it does not apply to chapters 6 to 6C. A person is only an associate for the purpose of chapter 6 to 6C if he is an associate under section 12.
- (e) A person (**second person**) will be an associate of the other person (**first person**) if:
  - (i) the first person is a body corporate and the second person is:
    - (A) A body corporate the first person controls;
    - (B) A body corporate that controls the first person: or
    - (C) A body corporate that is controlled by an entity that controls the first person;
  - (ii) the second person has entered or proposes to enter into a relevant agreement with the first person for the purpose of controlling or influencing the composition of the board of a body corporate or the conduct of the affairs of a body corporate; and
  - (iii) the second person is a person with whom the first person is acting or proposes to act, in concert in relation to the affairs of a body corporate.

- (f) The Corporations Act defines 'control' and 'relevant agreement' very broadly as follows:
- (i) Under section 50AA of the Corporations Act control means the capacity to determine the outcome of decisions about the financial and operating policies of the Company. In determining the capacity you need to take into account the practical influence a person can exert and any practice or pattern of behaviour affecting the financial or operating policies of the Company.
  - (ii) Under section 9 of the Corporations Act relevant agreement means an agreement, arrangement or understanding:
    - (A) whether formal or informal or partly informal and partly informal;
    - (B) whether written or oral or partly written and partly oral; and
    - (C) whether or not having legal or equitable force and whether or not based on legal or equitable rights.
- (g) Associates are determined as a matter of fact. For example where a person controls or influences the Board or the conduct of the Company's business affairs, or acts in concert with a person in relation to the entity's business affairs.
- (h) Section 611 of the Corporations Act has exceptions to the prohibition in section 606 of the Corporations Act. Item 7 of section 611 of the Corporations Act provides a mechanism by which Shareholders may approve an issue of Shares to a person which results in that person's or another person's voting power in the Company increasing from:
- (i) 20% or below to more than 20%; or
  - (ii) a starting point that is above 20% and below 90%.

### Schedule 3 - Capital Structure of the Company

Type of Securities	Number	Exercise Price
Ordinary Shares	249,598,565	
Unlisted Class B Performance Shares	7,500,000	
Unlisted Options	50,000	\$0.75
	3,410,000	\$1.00
	1,200,000	\$1.15
	75,000	\$1.25
	400,000	\$1.35
	1,000,000	\$1.40
	1,000,000	\$1.80
	1,000,000	\$2.20
	1,000,000	\$2.40

#### Schedule 4 – Atlas' Associates

Name	ACN	Address
Atlas Operations Pty Ltd	122 835 947	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
St George Magnetite Pty Ltd	122 999 044	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Mt Gould Minerals Pty Ltd	118 341 147	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Weld Range Iron Ore Pty Ltd	118 340 686	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Tiziflower Investment Inc	N/A	8th Floor, Capital Plaza Building, Roberto Motta Ave & Costa del Este Ave, Panama City, Panama
Jakkitower Enterprises SA	N/A	8th Floor, Capital Plaza Building, Roberto Motta Ave & Costa del Este Ave, Panama City, Panama
Warwick Resources Pty Ltd	063 506 963	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Aurox Resources Pty Ltd	106 793 560	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Ferro Minerals Australia Pty Ltd	113 996 106	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Giralia Resources Pty Ltd	009 218 204	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Tallering Resources Pty Ltd	077 183 165	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
MineraAtacamena Limited	N/A	Avenida Andrés Bello 2711, oficina 1701, comuna de Las Condes, Santiago, Chile
Wheelbarrow Prospecting Pty Ltd	118 926 613	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
PM Gold Asia Pty Ltd	137 335 383	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000
Carlinga Mining Pty Ltd	077 264 487	'Alluvion', Level 9, 54-58 Mounts Bay Road, Perth WA 6000



**Annexure A - Independent Expert's Report**



FERRAUS LIMITED  
Independent Expert's Report

22 July 2011



## Financial Services Guide

22 July 2011

BDO Corporate Finance (WA) Pty Ltd ABN 27 124 031 045 ("BDO" or "we" or "us" or "ours" as appropriate) has been engaged by FerrAus Limited ("FerrAus") to provide an independent expert's report on the Subscription Agreement for Atlas Iron Limited ("Atlas") to subscribe for approximately 37,439,785 FerrAus shares at an issue price of \$0.65 per share and a binding Asset Sale Agreement pursuant to which Atlas has agreed to sell iron ore assets owned by Atlas in consideration for 121,846,154 FerrAus shares ("Subscription and Asset Acquisition"). You will be provided with a copy of our report as a retail client because you are a shareholder of FerrAus Limited.

### Financial Services Guide

In the above circumstances we are required to issue to you, as a retail client, a Financial Services Guide ("FSG"). This FSG is designed to help retail clients make a decision as to their use of the general financial product advice and to ensure that we comply with our obligations as financial services licensees.

This FSG includes information about:

- Who we are and how we can be contacted;
- The services we are authorised to provide under our Australian Financial Services Licence, Licence No. 316158;
- Remuneration that we and/or our staff and any associates receive in connection with the general financial product advice;
- Any relevant associations or relationships we have; and
- Our internal and external complaints handling procedures and how you may access them.

### Information about us

BDO Corporate Finance (WA) Pty Ltd is a member firm of the BDO network in Australia, a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International). The financial product advice in our report is provided by BDO Corporate Finance (WA) Pty Ltd and not by BDO or its related entities. BDO and its related entities provide services primarily in the areas of audit, tax, consulting and financial advisory services.

We do not have any formal associations or relationships with any entities that are issuers of financial products. However, you should note that we and BDO (and its related entities) might from time to time provide professional services to financial product issuers in the ordinary course of business.

### Financial services we are licensed to provide

We hold an Australian Financial Services Licence that authorises us to provide general financial product advice for securities to retail and wholesale clients.

When we provide the authorised financial services we are engaged to provide expert reports in connection with the financial product of another person. Our reports indicate who has engaged us and the nature of the report we have been engaged to provide. When we provide the authorised services we are not acting for you.

### General Financial Product Advice

We only provide general financial product advice, not personal financial product advice. Our report does not take into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice.

#### Fees, Commissions and Other Benefits that we may receive

We charge fees for providing reports, including this report. These fees are negotiated and agreed with the person who engages us to provide the report. Fees are agreed on an hourly basis or as a fixed amount depending on the terms of the agreement. The fee for this engagement is approximately \$40,000.

Except for the fees referred to above, neither BDO, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report.

#### Remuneration or other benefits received by our employees

All our employees receive a salary. Our employees are eligible for bonuses based on overall productivity but not directly in connection with any engagement for the provision of a report.

We have received a fee from FerrAus for our professional services in providing this report. That fee is not linked in any way with our opinion as expressed in this report.

#### Referrals

We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

#### Complaints resolution

##### *Internal complaints resolution process*

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing addressed to The Complaints Officer, BDO Corporate Finance (WA) Pty Ltd, PO Box 700 Subiaco WA 6872.

When we receive a written complaint we will record the complaint, acknowledge receipt of the complaint within 15 days and investigate the issues raised. As soon as practical, and not more than 45 days after receiving the written complaint, we will advise the complainant in writing of our determination.

#### Referral to External Dispute Resolution Scheme

A complainant not satisfied with the outcome of the above process, or our determination, has the right to refer the matter to the Financial Ombudsman Service ("FOS"). FOS is an independent organisation that has been established to provide free advice and assistance to consumers to help in resolving complaints relating to the financial service industry. FOS will be able to advise you as to whether or not they can be of assistance in this matter. Our FOS Membership Number is 12561.

Further details about FOS are available at the FOS website [www.fos.org.au](http://www.fos.org.au) or by contacting them directly via the details set out below.

Financial Ombudsman Service

GPO Box 3

Melbourne VIC 3001

Toll free: 1300 78 08 08

Facsimile: (03) 9613 6399

Email: [info@fos.org.au](mailto:info@fos.org.au)

#### Contact details

You may contact us using the details set out at the top of our letterhead on page 1 of this FSG.



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22 July 2011

The Directors  
FerrAus Limited  
Level 10, 233 Adelaide Terrace  
PERTH WA 6000

Dear Sirs

## Independent Expert's Report

### 1. Introduction

On 27 June 2011 Atlas Iron Limited ("Atlas") and FerrAus Limited ("FerrAus" or "the Company") announced that they had executed a Subscription Agreement for Atlas to subscribe for 37,439,785 FerrAus shares at an issue price of \$0.65 per share to raise approximately \$24.3 million ("Subscription cash"), and a binding Asset Sale Agreement pursuant to which Atlas has agreed to sell, and FerrAus has agreed to buy, iron ore assets owned by Atlas ("South East Pilbara iron ore assets") in consideration for 121,846,154 FerrAus shares ("Subscription and Asset Acquisition").

In total FerrAus will issue 159,285,939 shares to Atlas ("Consideration Shares") if the Subscription and Asset Acquisition is approved.

On the same day, Atlas and FerrAus also announced that they have executed a Bid Implementation Agreement pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of FerrAus' ordinary shares on the basis of 1 Atlas share for every 4 FerrAus shares ("Atlas Takeover Offer"). This will occur immediately upon completion of the Subscription and Asset Acquisition but is not conditional on the Subscription and Asset Acquisition being approved.

### 2. Summary and Opinion

#### 2.1 Purpose of the report

The Directors of FerrAus have requested that BDO Corporate Finance (WA) Pty Ltd ("BDO") prepare an Independent Expert's Report ("our Report") to express an opinion as to whether or not the Subscription and Asset Acquisition is fair and reasonable to the non associated shareholders of FerrAus ("Shareholders").

Our Report is prepared pursuant to section 611 of the Corporations Act and is to be included in the Notice of Meeting to be prepared by the Directors of FerrAus to be sent to all Shareholders to assist them in deciding whether to approve the Subscription and Asset Acquisition.

## 2.2 Opinion

We have considered the terms of the Subscription and Asset Acquisition as outlined in the body of this report and have concluded that the Subscription and Asset Acquisition is fair and reasonable to Shareholders.

In arriving at our opinion, we have assessed the terms of the Subscription and Asset Acquisition as outlined in the body of this report. We have considered:

- How the value of the 159,285,939 Consideration Shares (37,439,785 issued as part of Subscription Agreement and 121,846,154 issued as part of Asset Sale Agreement) compares to the total of the value of the South East Pilbara iron ore assets owned by Atlas and the cash payable by Atlas under the Subscription Agreement;
- Other factors which we consider to be relevant to Shareholders in their assessment of the Subscription and Asset Acquisition; and
- The position of Shareholders should the Subscription and Asset Acquisition not be approved.

## 2.3 Fairness

In Section 12 we determined that the value of the Consideration Shares compares to the value of the South East Pilbara iron ore assets and the Subscription cash, as detailed hereunder.

Value of Consideration shares	Low value	Preferred value	High value
Value per FerrAus share	0.6025	0.8002	1.2440
Number of shares offered as consideration	159,285,939	159,285,939	159,285,939
Value of Consideration shares	95,977,103	127,457,954	198,154,260

Value of Iron Ore Assets and Subscription cash	Low value	Preferred value	High value
Value of South East Pilbara iron ore assets	85,570,000	114,260,000	198,910,000
Subscription cash	24,335,860	24,335,860	24,335,860
Value of Iron Ore Assets and Subscription cash	109,905,860	138,595,860	223,245,860

Although the Subscription Agreement and the Asset Sale Agreement are both separate agreements, for the purposes of this Report we have considered them together as one transaction. Based on the tables above, the value of the South East Pilbara iron ore assets and the Subscription cash is higher than the Consideration Shares. On this basis, we consider the Subscription and Asset Acquisition to be fair.

However, we note that if the Subscription Agreement and the Asset Sale Agreement were to be considered on an individual basis the Subscription Agreement, which allowed Atlas to subscribe for 37,439,785 FerrAus shares at an issue price of \$0.65 per share to raise approximately \$24.3 million, would not be fair while the Asset Sale Agreement would be fair.

## 2.4 Reasonableness

We have considered the analysis in Section 14 of this report, in terms of both

- Advantages and disadvantages of approving the Subscription and Asset Acquisition; and
- Alternatives, including the position of Shareholders if the Subscription and Asset Acquisition is not approved.



In our opinion, the position of Shareholders if the Subscription and Asset Acquisition is approved is more advantageous than the position if the Subscription and Asset Acquisition is not approved. Accordingly, in the absence of any other relevant information and/or a superior proposal we believe that the Subscription and Asset Acquisition is reasonable for Shareholders.

However, we note that if the Subscription Agreement and the Asset Sale Agreement were to be considered on an individual basis the Asset Sale Agreement would be considered reasonable on the basis that it is considered fair. In our opinion, we consider the Subscription Agreement to be reasonable even though individually it is not considered fair as a result of the following:

- Our quoted market price analysis, in Section 10.2, indicates that the value of a FerrAus share, without a premium for control, is in the range of \$0.68 and \$0.72. Although this range is higher than the \$0.65 issue price per the Subscription Agreement we believe that if FerrAus were to raise funds via a placement in the market it is likely that this would be done at a discount to the quoted market price of a FerrAus share. We also note that the closing share price on 24 June 2011, the day before the announcement of the Subscription and Asset Acquisition, was \$0.64. If a placement was to be performed on this date it would be performed at a discount to this price;
- FerrAus has both near term and long term funding requirements. Without the immediate funding provided by the Subscription Agreement, the Company would need to raise funds in the near future in order to progress feasibility studies and the continued development of the South West Creek port;
- FerrAus has a need to secure a rail infrastructure solution in a timely manner in order to ensure that its project timetable can be achieved. FerrAus has been actively exploring alternatives to assist in this regard but, other than the Subscription and Asset Acquisition, has not been successful. FerrAus considers that the Subscription and Asset Acquisition provide FerrAus with the financial strength, increased resource base and a further alignment of interests with Atlas (a partner in the North West Infrastructure) to greatly assist FerrAus in securing a viable rail infrastructure solution; and
- FerrAus has not been able to negotiate any other acceptable corporate alternatives to the Subscription and Asset Acquisition. FerrAus has explored a number of possible alternative transactions to realise value for Shareholders, however, no opportunity has arisen which the FerrAus Board has been able to recommend to its shareholders.

For the reasons above we consider that on an individual basis the Subscription Agreement is reasonable.



The respective advantages and disadvantages of the Subscription and Asset Acquisition considered are summarised below:

ADVANTAGES AND DISADVANTAGES			
Section	Advantages	Section	Disadvantages
12	The Subscription and Asset Acquisition is fair	14.2	Dilution of existing Shareholders' interests
14.1	Increased project scale	14.2	Atlas will gain a significant level of control of FerrAus
14.1	Immediate cashflow	14.2	FerrAus will have to share the benefits of its assets with Atlas shareholders
14.1	Increased DSO resource inventory		

Other key matters we have considered include:

Section	Description
13.1	Alternative proposals
13.2	The practical level of control
13.3	Consequences of not approving the Subscription and Asset Acquisition

### 3. Scope of the Report

#### 3.1 Purpose of the Report

Section 606 of the Corporations Act Regulations ("the Act") expressly prohibits the acquisition of further shares by a party who already holds (with associates) more than 20% of the issued shares of a public company, unless a full takeover offer is made to all shareholders. In the case of the Subscription and Asset Acquisition, if this is approved, Atlas will obtain a shareholding of 38.96% in FerrAus.

Section 611 permits such an acquisition if the shareholders of that entity have agreed to the issue of such shares. This agreement must be by resolution passed at a general meeting at which no votes are cast in favour of the resolution by any party who is associated with the party acquiring the shares, or by the party acquiring the shares. Section 611 states that shareholders of the company must be given all information that is material to the decision on how to vote at the meeting.

As a result of the Subscription and Asset Acquisition, Atlas will acquire a relevant interest of greater than 20% of the Company's shares as shown in the table below:

	Current shareholding		Post Subscription	
	Number	%	Number	%
FerrAus shareholders	249,598,565	100.00%	249,598,565	61.04%
Atlas shareholders	-	0.00%	159,285,939	38.96%
	249,598,565	100.00%	408,884,504	100.00%

Regulatory Guide 74 issued by ASIC deals with "Acquisitions Agreed to by Shareholders". It states that the obligation to supply shareholders with all information that is material can be satisfied by the non-associated directors of FerrAus, by either:

- Undertaking a detailed examination of the Subscription and Asset Acquisition themselves, if they consider that they have sufficient expertise; or
- By commissioning an Independent Expert's Report.

The directors of FerrAus have commissioned this Independent Expert's Report to satisfy this obligation.

#### 3.2 Regulatory guidance

Neither the ASX Listing Rules nor the Corporations Act define the meaning of "fair and reasonable". In determining whether the Subscription and Asset Acquisition is fair and reasonable, we have had regard to the views expressed by the Australian Securities and Investments Commission ("ASIC") in Regulatory Guide 111 - Contents of Expert Reports ("RG 111"). This regulatory guide provides guidance as to what matters an independent expert should consider to assist security holders to make informed decisions about transactions.

This Regulatory Guide suggests that an opinion as to whether transactions are fair and reasonable should focus on the purpose and outcome of the transaction that is, the substance of the transaction rather than the legal mechanism to effect the transaction. RG 111 suggests that where a transaction is a control transaction it should be analysed on a basis consistent with a takeover bid.

If the Subscription and Asset Acquisition is approved, Atlas will obtain a shareholding interest in FerrAus of 38.96%. As Atlas will become the largest shareholder of the Company, the Subscription and Asset Acquisition does represent an increase in control and therefore must be assessed as a control transaction.

In our opinion, the Subscription and Asset Acquisition is a control transaction as defined by RG 111 and we have therefore assessed the Subscription and Asset Acquisition to consider whether in our opinion it is fair and reasonable to Shareholders.

### 3.3 Adopted basis of evaluation

RG 111 states that a transaction is fair if the value of the offer price or consideration is greater than the value of the securities subject of the offer.

In the case of FerrAus, the Company's ordinary shares offered to Atlas as part of the Subscription and Asset Acquisition are the subject of the offer and the consideration offered by Atlas is the value of the South East Pilbara iron ore assets and the Subscription cash. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length. RG 111 states that when considering the value of the securities which is the subject of the offer in a control transaction, the expert should consider this value inclusive of a control premium.

Further to this, RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being 'not fair', the expert believes that there are sufficient reasons for security holders to accept the offer in the absence of any higher bid.

Having regard to the above, BDO has completed this comparison in two parts:

- A comparison between the value of the Consideration Shares before the Subscription and Asset Acquisition and the value of the consideration offered (the South East Pilbara iron ore assets and the Subscription cash) (fairness - see Section 12 "Is the Proposal Fair?"); and
- An investigation into other significant factors to which Shareholders might give consideration, prior to approving the resolution, after reference to the value derived above (reasonableness - see Section 14 "Is the Proposal Reasonable?").

This assignment is a Valuation Engagement as defined by APES 225 Valuation Services. A Valuation Engagement means an engagement or assignment to perform a valuation and provide a valuation report where we determine an estimate of value of the Company by performing appropriate valuation procedures and where we apply the valuation approaches and methods that we consider to be appropriate in the circumstances.

## 4. Outline of the Subscription and Iron Ore Asset Acquisition

On 27 June 2011 Atlas Iron Limited ("Atlas") and FerrAus Limited ("FerrAus" or "the Company") announced that they had executed a Subscription Agreement and an Asset Sale Agreement.

Subscription Agreement:

Pursuant to the Subscription Agreement Atlas will subscribe for 37,439,785 FerrAus shares at an issue price of \$0.65 per share to raise \$24,335,860 ("Subscription cash").

The completion of the issue of the Subscription Shares is subject to and conditional upon the Shareholders of FerrAus approving, in accordance with the Listing Rules and the Corporations Act and for all other purposes:

- (i) The issue of the Consideration Shares to Atlas in accordance with the Subscription Agreement; and
- (ii) The issue of the Consideration Shares to Atlas in accordance with the Asset Sale Agreement.

Asset Sale Agreement:

Pursuant to the Asset Sale Agreement Atlas has agreed to sell, and FerrAus has agreed to buy, iron ore assets ("South East Pilbara iron ore assets") from Warwick Resources Pty Ltd ("Warwick") and Giralia Resources N.L. ("Giralia"), both 100% owned subsidiaries of Atlas. The consideration to be paid by FerrAus to Warwick and Giralia will be the issue by FerrAus of 121,846,154 new fully paid ordinary shares in the share capital of FerrAus, with a deemed issue price of \$0.65 per share, to the nominee of Warwick and Giralia, being Atlas.

The respective obligations under the terms of the Asset Sale Agreement will be subject to and conditional upon the satisfaction or waiver of the following conditions on or before 30 September 2011, or such later date as the parties may agree:

- (a) The approval of the Shareholders of FerrAus at the next general meeting of FerrAus:
  - (i) To the placement of the Consideration Shares to Atlas under the Subscription Agreement; and
  - (ii) The issue of the Consideration Shares to Atlas as the nominee of Warwick and Giralia;
- (b) Warwick obtaining the written consent of Hannans Reward Ltd and Errawarra Pty Ltd under the Mineral Rights Acquisition Agreement between those parties for the transfer and assignment by Warwick of its iron ore rights in the Jigalong Project Tenements to FerrAus or a wholly owned subsidiary of FerrAus. We are advised that this has been obtained;
- (c) Warwick obtaining ministerial consent under the Mining Act 1978 (WA) to the terms and the assignment of the Warwick Tenements to FerrAus either unconditional or subject only to conditions which are reasonably acceptable to FerrAus; and
- (d) Giralia obtaining ministerial consent under the Mining Act 1978 (WA) to the terms and the assignment of the Giralia Tenements to FerrAus either unconditional or subject only to conditions which are reasonably acceptable to FerrAus.

The outcome of both the Subscription Agreement and the Asset Sale Agreement ("Subscription and Asset Acquisition") is that FerrAus will receive \$24,335,860 cash, acquire the South East Pilbara iron ore assets from Atlas and in return will issue a total of 159,285,939 FerrAus shares.

On 27 June 2011, Atlas and FerrAus also announced that they have executed a Bid Implementation Agreement ("BIA") pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of FerrAus' ordinary shares on the basis of 1 Atlas share for every 4 FerrAus shares ("Atlas Takeover Offer").

The Atlas Takeover Offer is subject to a number of conditions, including the following:

- The number of FerrAus shares in which Atlas and its associates together have relevant interests is at least 50.1% of all the FerrAus Shares;
- No Prescribed Occurrences in relation to FerrAus; and
- No Material Adverse Change in relation to FerrAus.

The Atlas Takeover Offer will take effect immediately upon completion of the Subscription and Asset Acquisition but is not conditional on the Subscription and Asset Acquisition being approved.

## 5. Profile of FerrAus Limited

### 5.1 Overview

FerrAus Limited is a Perth based iron ore exploration company which listed on the Australian Securities Exchange ("ASX") in December 2003. It is also a member of North West Infrastructure.

The current Directors of the Company are Mr John Nyvit, Mr Cliff Lawrenson, Mr Robert Greenslade, Mr Guoping Liu, Mr Bryan Oliver, Mr Joe Singer, Mr Jim Wall and Mr James Li (as alternate Director for Guoping Liu).

The Company's main focus is a prospective iron ore location in the East Pilbara region of Western Australia, encompassing more than 540 square kilometres. The Company continues to develop the FerrAus Pilbara Project, consisting of the Robertson Range Area and the Davidson Creek Area.

The Company also holds a manganese exploration project, the Enachedong Project, located in the East Pilbara area.

On 10 November 2011 FerrAus announced that it had received a conditional off-market takeover bid from a wholly owned subsidiary of Wah Nam International Holdings Limited to acquire all of the ordinary shares of FerrAus not currently held by Wah Nam. The all script Offer was based on 6 Wah Nam ordinary fully paid shares for every 1 FerrAus share. On 28 June 2011 Wah Nam announced that it intended to rely on the conditions set out in its Replacement Bidder's Statement dated 6 December 2010 to defeat its takeover offer for FerrAus and accordingly the Wah Nam takeover offer lapsed on 15 July 2011.

FerrAus also recently completed a \$35 million placement. This placement was announced to the market as completed on 18 February 2011.

#### 5.1.1 FerrAus Pilbara Project

The FerrAus Pilbara Project consists of two areas within the East Pilbara region of Western Australia. The first is the Robertson Range Area which is located approximately 100 kilometres south east of Newman and the second is the Davidson Creek Area located northwest of the Robertson Range.

The Robertson Range Area is located approximately 50 kilometres southeast of BHP Billiton's mining operations at Jumblebar. FerrAus has maintained a continuous and systematic drilling and exploration program over the Robertson range Area since October 2005.

The Davidson Creek Area is located approximately 30 kilometres east of Jumblebar.

#### 5.1.2 Enachedong Project

The Enachedong Project is located approximately 60 kilometres south of Consolidated Minerals Limited's Woodie Woodie manganese operations in the Barfour Downs area. The tenement is approximately 205 square kilometres and is prospective for manganese mineralisation.

## 5.2 Historical Balance Sheets

FerrAus Limited	Unaudited as at	Reviewed as at	Audited as at
Balance Sheet	30-Jun-11	31-Dec-10	30-Jun-10
	\$	\$	\$
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	29,326,733	16,451,264	29,612,090
Trade and other receivables	805,706	872,894	1,411,256
Other current assets	25,962	69	16,954
<b>TOTAL CURRENT ASSETS</b>	<b>30,158,401</b>	<b>17,324,227</b>	<b>31,040,300</b>
<b>NON CURRENT ASSETS</b>			
Available-for-sale investments	-	375,000	-
Property, plant & equipment	1,973,483	1,881,726	1,967,775
Exploration and evaluation assets	85,624,474	65,416,818	55,239,513
Investments	1,321,409	2,638,643	-
<b>TOTAL NON CURRENT ASSETS</b>	<b>88,919,366</b>	<b>70,312,187</b>	<b>57,207,288</b>
<b>TOTAL ASSETS</b>	<b>119,077,767</b>	<b>87,636,414</b>	<b>88,247,588</b>
<b>CURRENT LIABILITIES</b>			
Trade and other payables	2,700,617	1,667,182	3,217,925
Accruals	6,936,000	-	-
Short-term provisions	620,890	89,218	132,699
<b>TOTAL CURRENT LIABILITIES</b>	<b>10,257,507</b>	<b>1,756,400</b>	<b>3,350,624</b>
<b>NON CURRENT LIABILITIES</b>			
Long-term provisions	11,173	11,173	11,173
<b>TOTAL NON CURRENT LIABILITIES</b>	<b>11,173</b>	<b>11,173</b>	<b>11,173</b>
<b>TOTAL LIABILITIES</b>	<b>10,268,680</b>	<b>1,767,573</b>	<b>3,361,797</b>
<b>NET ASSETS</b>	<b>108,809,087</b>	<b>85,868,841</b>	<b>84,885,791</b>
<b>EQUITY</b>			
Issued capital	135,382,016	101,183,779	98,595,731
Reserves	2,889,079	2,889,079	2,976,392
Accumulated losses	(29,462,008)	(18,204,017)	(16,686,332)
<b>TOTAL EQUITY</b>	<b>108,809,087</b>	<b>85,868,841</b>	<b>84,885,791</b>

Source: Unaudited consolidated management accounts as at 30 June 2011, audited consolidated financial statements as at 30 June 2010 and reviewed financial statements for the six months ended 31 December 2010.

### 5.3 Historical Income Statements

FerrAus Limited Income Statement	Reviewed for the half- year ended 31-Dec-10	Audited for the year ended 30-Jun-10
	\$	\$
Revenue	690,322	905,957
Impairment of exploration assets	-	(2,715,116)
Employee benefits expense	(681,841)	(1,601,526)
Depreciation expense	(110,416)	(180,806)
Consultancy costs	(650,591)	(1,022,015)
Share of loss of joint venture	(4,133)	(1,730,750)
Other expenses	(1,165,389)	(1,980,276)
Loss before income tax expense	(1,922,048)	(8,324,532)
Income tax benefit/(expense)	1,329	34,611
Loss for the period	(1,920,719)	(8,289,921)
Other comprehensive income, net of tax		
Available for sale investments gains	75,000	-
Total comprehensive profit/(loss) for the period	(1,845,719)	(8,289,921)

Source: Audited financial statements as at 30 June 2010 and reviewed financial statement for the six months ended 31 December 2010.

#### Commentary on Historical Financial Statements

On 18 February 2011 FerrAus announced it had completed the settlement of its \$35 million placement, strengthening the cash position of the company as at 30 June 2011. Exploration and evaluation expenditure increased approximately \$20 million over the six month period between 31 December 2010 and 30 June 2011. As at 30 June 2011 FerrAus has accrued approximately \$6.9 million in relation to transaction costs including stamp duty relating to the acquisition of the South East Pilbara iron ore assets from Atlas. This cost has been capitalised under exploration and evaluation expenditure as at 30 June 2011.

Revenue relates primarily to interest revenue earned on cash balances. The Income Statement for the year ended 30 June 2010 was impacted by impairment of exploration assets (the Lawson Gold assets) of \$2.7 million, accounting for approximately 30% of total expenses for the year. FerrAus' 2010 financial performance was also impacted by FerrAus' share of the operating loss from the North West Infrastructure joint venture of \$1.73 million, a project in which FerrAus has a 33.33% interest.



## 5.4 Capital Structure

The share structure of FerrAus as at 24 June 2011 is outlined below:

	Number
Total ordinary shares on issue	249,598,565
Top 20 shareholders	176,180,399
Top 20 shareholders - % of shares on issue	70.59%

Source: Sharetrak as at 24 June 2011

The ordinary shares held by the most significant shareholders as at 24 June 2011 are detailed below:

Name	Number of Ordinary	Percentage of Issued Shares (%)
Wah Nam International Australia	40,934,400	16.40%
China Railway Materials Commercial	25,946,417	10.40%
Mr Joe Singer	16,404,093	6.57%
China West Mining	15,145,892	6.07%
Subtotal	98,430,802	39.44%
Others	151,167,763	60.56%
Total ordinary shares on Issue	249,598,565	100.00%

Source: Sharetrak as at 24 June 2011

FerrAus has the following Unlisted Options and Performance Shares on issue as at 14 June 2011 as detailed below:

Details	Number
Class B Performance shares	7,500,000
Unlisted options exercisable at \$0.75	50,000
Unlisted options exercisable at \$1.00	3,410,000
Unlisted options exercisable at \$1.15	1,200,000
Unlisted options exercisable at \$1.25	75,000
Unlisted options exercisable at \$1.35	400,000
Unlisted options exercisable at \$1.40	1,000,000
Unlisted options exercisable at \$1.80	1,000,000
Unlisted options exercisable at \$2.20	1,000,000
Unlisted options exercisable at \$2.40	1,000,000

Source: Management of FerrAus

## 6. Profile of Atlas Iron Ltd

### 6.1 Overview

Atlas Iron Limited is an independent Australian iron ore company, mining and exporting Direct Shipping Ore (DSO) from its operations in the Northern Pilbara region of Western Australia. Atlas listed on the ASX in December 2004 and is now a member of the ASX100 index.

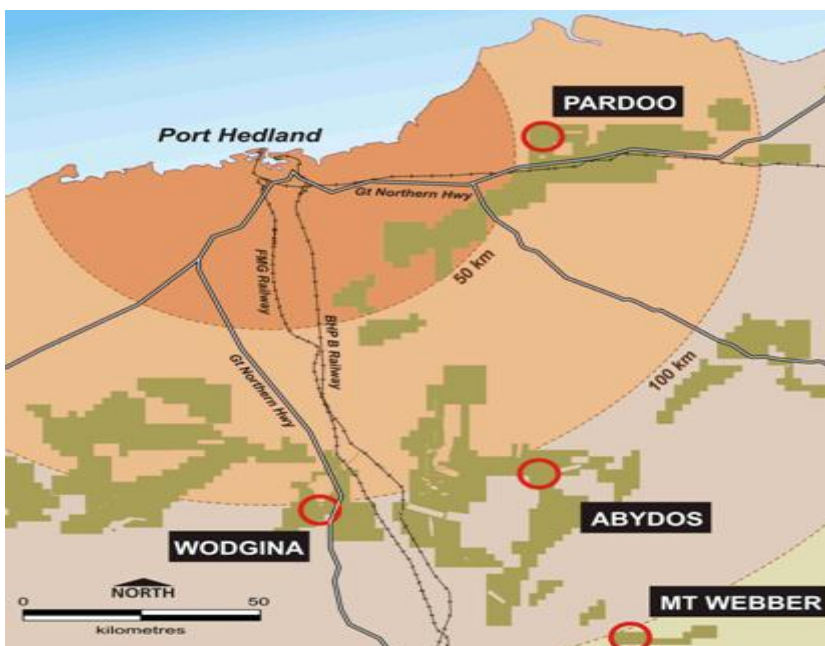
The Company's main focus is the discovery and development of DSO deposits in locations within proximity of existing infrastructure. Atlas' portfolio of existing projects covers an area in excess of 25,000 square kilometres located in the northeast Pilbara, the Newman area and the Midwest of Western Australia.

The current Directors of the company are David Flanagan, David Hannon, Geoff Clifford, David Smith and Tai Sook Yee.

Atlas has completed a number of acquisitions including the acquisition of Giralia Resources N.L which was completed in March 2011, the Scheme of Arrangement with Aurox Resources Limited which was completed in August 2010 and the Scheme of Arrangement with Warwick Resources Limited which was completed in December 2009.

#### 6.1.1 North Pilbara DSO Projects

This area has resulted in the discovery of four key DSO iron ore projects which are all within a 150 kilometre radius of Port Hedland. The Pardoo Project is Atlas' first producing iron ore mine having commenced operations in October 2008. A number of open pit mines are in operation that produce a quality low-alumina product. The Wodgina DSO Project was commissioned as a mine in July 2010 and produces a quality low-alumina fines-only product. The Abydos Project is expected to be the third mining operation for Atlas and remains a key to the Company's expansion plans. The fourth key DSO project is located at Mount Webber. Atlas has acquired 70% of the iron ore rights from Altura Mining Ltd and believes that Mt Webber has potential to be developed either as a stand-alone operation, or as a satellite mine delivering run-of-mine ore to a central processing facility.



### 6.1.2 Southeast Pilbara DSO Projects

The merger with Warwick Resources in November 2009 added approximately 6,000 square kilometres of exploration tenements and provided Atlas with a number of options around the Newman area. The projects range from those recently granted, such as McCamey's North, through to partially explored projects such as Jigalong, and advanced projects which have already received a significant amount of drilling or have resources already estimated, including Warrawanda, Jimblebar Range and Western Creek.



### 6.1.3 Midwest DSO Projects

The Midwest DSO Projects consist of two main projects, Mount Gould and Weld Range, along with a number of recent tenement applications yet to be explored.

Although the Midwest projects are lower on the order of development priorities than those in the Pilbara, Atlas is keen to maintain a presence in the area and progress its exploration activities over the next two to three years, in a timeframe which complements the development of the Oakajee Port and Rail infrastructure.

### 6.1.4 Ridley Magnetite Project

The Ridley Magnetite Project, which is 100% owned by Atlas, is located within the Pardoo project area. The Ridley resource consists of banded iron formation ("BIF") which forms part of the Ridley Range. The results of a pre-feasibility study on the Project were released to the market in April 2009. These results indicated that the project will require a workforce of over 700 people, a power station with a dedicated gas pipeline. It also approximated the capital requirement to establish the Ridley Magnetite Project would be approximately \$2,972 million (including contingencies) and the average annual real operating cost has been estimated at \$36.22/tonne of concentrate.

### 6.1.5 Balla Balla Project

The Balla Balla Titano Magnetite Project is situated on the Pilbara Coast, midway between Karratha and Port Hedland. The project's resources consist of iron and titanium also well as a significant new source of vanadium. The mining of the Balla Balla deposits will commence at the Central and Western Pit areas using open cut techniques. Balla Balla is somewhat of an anomaly in that it is a single-layered ore body rather than a multiple-layered BIF with intercalated bands of waste rock. All necessary approvals are substantially in place and the project is ready to commence construction.

## 6.2 Historical Balance Sheets

Atlas Iron Limited	Reviewed as at	Audited as at
Balance Sheet	31-Dec-10	30-Jun-10
	\$'000	\$'000
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	142,818	154,933
Trade and other receivables	59,295	24,423
Inventories	15,618	14,862
<b>TOTAL CURRENT ASSETS</b>	<b>217,731</b>	<b>194,218</b>
<b>NON CURRENT ASSETS</b>		
Other receivables	39,374	18,083
Investment in equity accounted investee	7,195	2,312
Property, plant & equipment	17,793	15,164
Intangibles	79,545	3,197
Mine development costs	145,034	64,921
Exploration and evaluation expenditure	100,750	90,746
<b>TOTAL NON CURRENT ASSETS</b>	<b>389,691</b>	<b>194,423</b>
<b>TOTAL ASSETS</b>	<b>607,422</b>	<b>388,641</b>
<b>CURRENT LIABILITIES</b>		
Trade and other payables	47,307	20,862
Provisions	1,956	1,768
<b>TOTAL CURRENT LIABILITIES</b>	<b>49,263</b>	<b>22,630</b>
<b>NON CURRENT LIABILITIES</b>		
Trade and other payables	4,015	-
Provisions	9,529	7,011
<b>TOTAL NON CURRENT LIABILITIES</b>	<b>13,544</b>	<b>7,011</b>
<b>TOTAL LIABILITIES</b>	<b>62,807</b>	<b>29,641</b>
<b>NET ASSETS</b>	<b>544,615</b>	<b>359,000</b>
<b>EQUITY</b>		
Share capital	654,413	508,677
Reserves	26,809	17,036
Accumulated losses	(136,607)	(166,713)
<b>TOTAL EQUITY</b>	<b>544,615</b>	<b>359,000</b>

Source: Audited financial statements as at 30 June 2010 and reviewed financial statement for the six months ended 31 December 2010.

### 6.3 Historical Income Statements

Atlas Iron Limited Income Statement	Reviewed for the half- year ended 31-Dec-10	Audited for the year ended 30-Jun-10
	\$'000	\$'000
Revenue	201,785	84,769
Operating costs	(132,101)	(90,584)
Gross profit/(loss)	69,684	(5,815)
Gain on sale of mining properties	-	8,037
Recognised gain/(loss) on investment transferred from reserves	-	10,659
Gain/(loss) on disposal of property, plant and equipment	4	(41)
Government grants	-	83
Depreciation and amortisation expense	(542)	(702)
Exploration and evaluation expense	(13,239)	(24,174)
Goodwill attributable to exploration assets written off	-	(18,330)
Share based payments expense	(9,773)	(2,436)
Share of loss of associate	(2,027)	(2,241)
Share of loss of joint venture	(143)	(1,703)
Business combination expense	(4,941)	(5,066)
Other expenses from ordinary activities	(11,103)	(4,870)
Finance revenue/(expense)	2,186	5,753
Profit/(loss) before income tax expense	30,106	(40,846)
Income tax benefit/(expense)	-	-
Loss for the period	30,106	(40,846)
Other comprehensive income/(loss)		
Gain on revaluation of investments	-	9,372
Realised gain on investments transferred out of reserves	-	(10,659)
Total comprehensive profit/(loss) for the period	30,106	(42,133)

Source: Audited financial statements as at 30 June 2010 and reviewed financial statement for the six months ended 31 December 2010.

#### Commentary on Historical Financial Statements

The intangibles balance and mine development costs as at 31 December 2010 increased significantly on their respective balances at 30 June 2010 as a result of additions through the acquisition of Aurox Resources Limited. This acquisition was completed during the six month period ended 30 December 2010 and the consideration was approximately \$143 million of Atlas' issued capital.

A net profit of \$30.1 million was achieved for the six months ended 31 December 2010, attributable mainly to the development of the Pardoo and Wodgina mines. Sales revenue increased from approximately \$84.8 million for the year ended 30 June 2010 to approximately \$201.8 million for the six months ended 31 December 2010. In line with Atlas' accounting policies, exploration expenditure of approximately \$13.2



and \$24.2 million was written off over the six months ended 31 December 2010 and the year ended 30 June 2010 respectively.

On 21 December 2010 Atlas announced the friendly off-market takeover of Giralia Resources N.L. Atlas offered either 1.5 Atlas shares or 1.33 Atlas shares and \$0.50 as consideration for the transaction which was declared unconditional by Atlas on 14 February 2011 and closed on 1 March 2011.

## 7. Economic Analysis

The global economy is continuing its expansion, but the pace of growth slowed in the June 2011 quarter. The supply-chain disruptions from the Japanese earthquake and the dampening effects of high commodity prices on income and spending in major countries have both contributed to the slowing. The banking and sovereign debt problems in Europe have also added to uncertainty and volatility in financial markets over recent months.

A key question is whether this more moderate pace of growth will continue. Commodity prices have generally softened of late, though they remain at very high levels. Despite the challenging international environment, the central scenario for the world economy envisaged by most forecasters remains one of growth at, or above, average over the next couple of years. A number of countries have tightened monetary policy but, overall, global financial conditions remain accommodative and underlying rates of inflation have tended to move higher.

Australia's terms of trade are now at very high levels and national income has been growing strongly, though conditions vary significantly across industries. Investment in the resources sector is picking up strongly in response to high levels of commodity prices and the outlook remains very positive.

A gradual recovery from the floods and cyclones over the summer is taking place, though the resumption of coal production in flooded mines continues to proceed more slowly than initially expected. The recovery will boost output over the months ahead, and there will also be a mild boost to demand from the broader rebuilding efforts as they get under way, but growth through 2011 is now unlikely to be as strong as earlier forecast. Over the medium term, overall growth is still likely to be at trend or higher, if the world economy grows as expected.

Growth in employment has moderated over recent months and the unemployment rate has been little changed, near 5 per cent. Most leading indicators suggest that this slower pace of employment growth is likely to continue in the near term. Reports of skills shortages remain confined, at this point, to the resources and related sectors. After the significant decline in 2009, growth in wages has returned to rates seen prior to the downturn.

Credit growth remains modest. Signs have continued to emerge of some greater willingness to lend and business credit has expanded this year after a period of contraction. Growth in credit to households, on the other hand, has slowed. Most asset prices, including housing prices, have also softened over recent months.

Year-ended CPI inflation is likely to remain elevated in the near term due to the extreme weather events earlier in the year. However, as the temporary price shocks dissipate, CPI inflation is expected to be close to target over the next 12 months. In underlying terms, inflation has been in the bottom half of the target range, though a gradual increase is expected over time.

Source: [www.rba.gov.au](http://www.rba.gov.au) *Statement by Glenn Stevens, Governor: Monetary Policy Decision 5 July 2011*



## 8. Industry Analysis

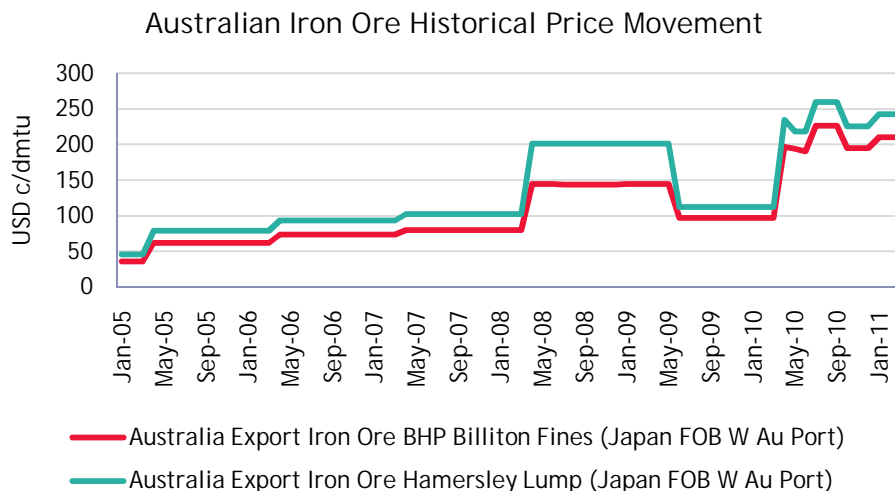
Iron ores are rocks from which metallic iron can be economically extracted. Iron is the world's most used metal with approximately 98% of world iron ore production being used to make steel. It is primarily used in structural engineering, automobiles and other general industrial applications. Commercial development of iron ore deposits are largely constrained by the position of the iron ore relative to its market and the cost of establishing proper transportation infrastructure such as ports and railways.

There are three main categories of iron ore exports. They are:

- Fines: particles that are less than 9.50mm. They are the most heavily traded category of iron ore;
- Lump Ore: particles larger than 4.75mm. They typically have higher iron content than fines; and
- Pellets: particle sizes range from 9.55 to 16mm. Pellets are made by agglomeration of finely ground and concentrated ore.

In 2010, an estimated 2.4 billion metric tonnes of iron ore was produced. The world's largest producers are Vale, Rio Tinto and BHP Billiton.

The following graph shows historical iron ore prices since 2005:



Source: Bloomberg

The sharp increase in iron ore price movements over the period from March 2008 to March 2009 was marked by a surge in Chinese, Japanese and Korean steel mill demand. During that period, annual iron ore price contracts increased by 65% to 97% compared to the previous year. Iron ore prices subsequently fell during the global financial crisis with a reduction in world market sentiment and hence demand for iron ore.

April 2010 saw an increase in price as miners moved to quarterly pricing and global economies began to recover. Additionally, iron ore experienced a sharp rise in price in mid 2010 when Indian state Karnataka banned all iron ore exports. India is currently the world's third largest iron ore supplier with approximately a quarter of its 100+ million tonnes of exports originating from Karnataka. Prices dipped slightly in late 2010 but are expected to rise due to China's increasing demand.

## 9. Valuation Approach Adopted

There are a number of methodologies which can be used to value a business or the shares in a company. The principal methodologies which can be used are as follows:

- Net Asset Value on a going concern basis (“NAV”)
- Quoted Market Price Basis (“QMP”)
- Capitalisation of future maintainable earnings (“FME”)
- Discounted Cash Flow (“DCF”)

Different methodologies are appropriate in valuing particular companies, based on the individual circumstances of that company and available information. A summary of each of these methodologies is outlined in Appendix 2.

In assessing whether the Subscription and Asset Acquisition is fair for the Shareholders of FerrAus we have assessed this transaction as follows:

- A comparison between the value of FerrAus shares before the Subscription and Asset Acquisition, to obtain a value of the Consideration Shares, and the value of the South East Pilbara iron ore assets and the Subscription cash.

### 9.1 Valuation of FerrAus shares prior to the Subscription and Asset Acquisition

In our assessment of the value of FerrAus shares prior to the Subscription and Asset Acquisition, we have chosen to employ the following methodologies:

- Net Asset Value

We have chosen to use a Net Asset Value methodology in assessing a value for each FerrAus share. This methodology is considered appropriate as FerrAus is an exploration company and therefore its core value is the exploration assets that it holds in its balance sheet. An independent technical report was prepared by Ravensgate Minerals Industry Consultants (“Ravensgate”) on 12 July 2011 to provide an independent specialist valuation of FerrAus’ exploration assets. This has been carried out in accordance with the Code of Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (“the Valmin Code”) and the Australasian Code for Reporting and Exploration Results, Mineral Resources and Ore Reserves (“JORC Code”). We are satisfied that the valuation methodologies adopted by Ravensgate are in accordance with industry practices. A copy of the Ravensgate Report is attached at Appendix 3.

- Quoted Market Price Basis

FerrAus is an ASX listed company and therefore the QMP method is an appropriate secondary valuation method.

- Recent genuine offers received by FerrAus

We note that FerrAus announced that it had received a conditional off-market takeover bid from a wholly owned subsidiary of Wah Nam International Holdings Limited (“Wah Nam”) to acquire all of the ordinary shares of FerrAus not currently held by Wah Nam on 11 November 2010. The all script Offer was based on 6 Wah Nam ordinary fully paid shares for every 1 FerrAus share (“Wah Nam Offer”). On 28 June 2011 Wah Nam announced that it intended to rely on the conditions set out in its Replacement Bidder’s Statement dated 6 December 2010 to defeat its takeover offer for FerrAus and accordingly the Wah Nam takeover offer will lapse on 15 July 2011. Although this Offer has lapsed we have considered the pricing in our analysis of the value of a FerrAus share.

- Implied value from Atlas Takeover Offer

We also note that Atlas and FerrAus have executed a Bid Implementation Agreement, pursuant to which Atlas has agreed to offer FerrAus shareholders 1 Atlas share for every 4 FerrAus shares. We have therefore considered the pricing in this alternative.

## 9.2 Valuation of South East Pilbara Assets as at the Date of this Report

An independent technical report was prepared by Ravensgate on 11 July 2011 to provide a valuation of the South East Pilbara iron ore assets owned by Atlas. This has been carried out in accordance with the Valmin Code. We are satisfied that the valuation methodologies adopted by Ravensgate are in accordance with industry practices. A copy of the Ravensgate Report is attached at Appendix 4.

## 10. Valuation of FerrAus prior to the Subscription and Asset Acquisition

### 10.1 Net Asset Valuation on FerrAus

The value of FerrAus' assets on a going concern basis is reflected in our valuation below:

FerrAus Limited	30-Jun-11	Low	Preferred	High
Balance Sheet	\$	\$	\$	\$
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	29,326,733	29,326,733	29,326,733	29,326,733
Trade and other receivables	805,706	805,706	805,706	805,706
Other current assets	25,962	25,962	25,962	25,962
<b>TOTAL CURRENT ASSETS</b>	<b>30,158,401</b>	<b>30,158,401</b>	<b>30,158,401</b>	<b>30,158,401</b>
<b>NON CURRENT ASSETS</b>				
Property, plant & equipment	1,973,483	1,973,483	1,973,483	1,973,483
Exploration and evaluation assets	85,624,474	127,210,000	176,540,000	287,320,000
Investments	1,321,409	1,321,409	1,321,409	1,321,409
<b>TOTAL NON CURRENT ASSETS</b>	<b>88,919,366</b>	<b>130,504,892</b>	<b>179,834,892</b>	<b>290,614,892</b>
<b>TOTAL ASSETS</b>	<b>119,077,767</b>	<b>160,663,293</b>	<b>209,993,293</b>	<b>320,773,293</b>
<b>CURRENT LIABILITIES</b>				
Trade and other payables	2,700,617	2,700,617	2,700,617	2,700,617
Accruals	6,936,000	6,936,000	6,936,000	6,936,000
Short-term provisions	620,890	620,890	620,890	620,890
<b>TOTAL CURRENT LIABILITIES</b>	<b>10,257,507</b>	<b>10,257,507</b>	<b>10,257,507</b>	<b>10,257,507</b>
<b>NON CURRENT LIABILITIES</b>				
Long-term provisions	11,173	11,173	11,173	11,173
<b>TOTAL NON CURRENT LIABILITIES</b>	<b>11,173</b>	<b>11,173</b>	<b>11,173</b>	<b>11,173</b>
<b>TOTAL LIABILITIES</b>	<b>10,268,680</b>	<b>10,268,680</b>	<b>10,268,680</b>	<b>10,268,680</b>
<b>NET ASSETS</b>	<b>108,809,087</b>	<b>150,394,613</b>	<b>199,724,613</b>	<b>310,504,613</b>
Shares on issue (number)	249,598,565	249,598,565	249,598,565	249,598,565
Value per share (\$)	\$0.4359	\$0.6025	\$0.8002	\$1.2440

We have been advised that there has not been a significant change in the net assets of FerrAus since 30 June 2011. The table above indicates that the net asset value of a FerrAus share is between \$0.6025 and \$1.2440 with a preferred value of \$0.8002.

### 10.1.1 Valuation of FerrAus' exploration assets

We instructed Ravensgate to provide an independent technical report on FerrAus' exploration assets. A copy of the Ravensgate Report is attached at Appendix 3. The table below provides a summary of this valuation:

	Low value	Preferred value	High value
FerrAus Ltd exploration assets	\$M	\$M	\$M
Davidson Creek Iron M52/1043 & E52/1658	94.10	130.10	212.20
E52/2542	0.17	0.21	0.49
Robertson Range Iron M52/1034	30.20	41.70	68.10
E52/1630	2.10	3.15	3.78
E52/1901	0.43	1.03	1.23
Enachedong Manganese E46/614	0.21	0.35	1.52
	127.21	176.54	287.32

The independent technical report prepared by Ravensgate indicates that the value of FerrAus' exploration assets is between \$127.21 million and \$287.32 million, with a preferred value of \$176.54 million.

### 10.2 Quoted Market Price for FerrAus

To provide a comparison to the valuation of FerrAus in section 10.1, we have also assessed the quoted market price for a FerrAus share.

The quoted market value of a company's shares is reflective of a minority interest. A minority interest is an interest in a company that is not significant enough for the holder to have an individual influence in the operations and value of that company.

RG 111.24 suggests that when considering the value of a company's shares for the purposes of approval under Item 7 of s611 the expert should consider a premium for control. An acquirer could be expected to pay a premium for control due to the advantages they will receive should they obtain 100% control of another company. These advantages include the following:

- Control over decision making and strategic direction;
- Access to underlying cash flows;
- Control over dividend policies; and
- Access to potential tax losses.

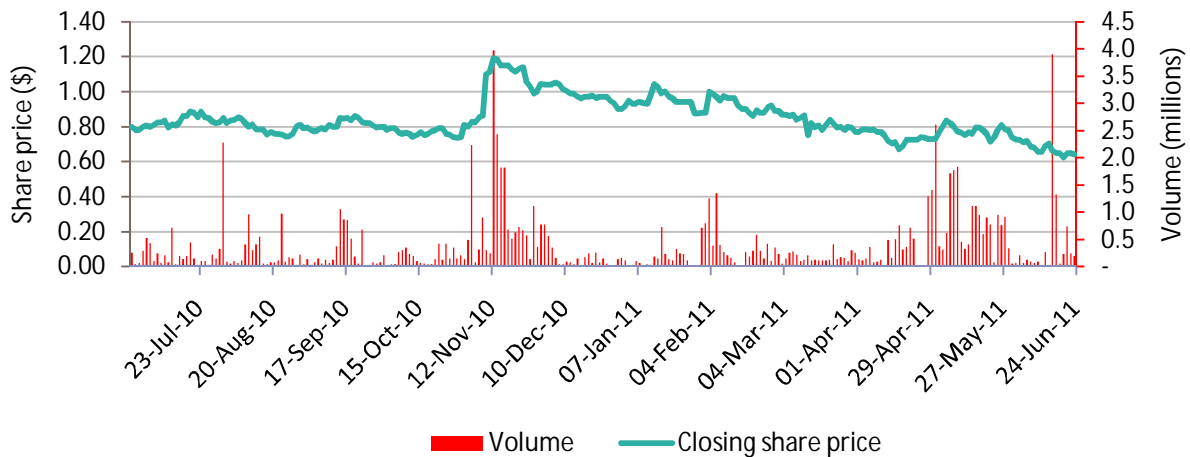
Whilst Atlas will not be obtaining 100% of FerrAus as a result of the Subscription and Asset Acquisition, RG 111 states that the expert should calculate the value of a target's shares as if 100% control were being obtained. RG 111.13 states that the expert can then consider an acquirer's practical level of control when considering reasonableness. Reasonableness has been considered in Section 14.

Therefore, our calculation of the quoted market price of a FerrAus share including a premium for control has been prepared in two parts. The first part is to calculate the quoted market price on a minority interest basis. The second part is to add a premium for control to the minority interest value to arrive at a quoted market price value that includes a premium for control.

## Minority interest value

Our analysis of the quoted market price of a FerrAus share is based on the pricing prior to the announcement of the Subscription and Asset Acquisition. This is because the value of a FerrAus share after the announcement may include the affects of any change in the value as a result of the Subscription and Asset Acquisition. However, we have considered the value of a FerrAus share following the announcement when we have considered reasonableness in Section 14.

The following chart provides a summary of the share price movement over the year to the last trading day prior to the announcement of the Subscription and Asset Acquisition, 24 June 2011.



Source: Bloomberg

The daily price of FerrAus shares over one year to 24 June 2011 has ranged from a high of \$1.195 on 15 November 2010 to a low of \$0.615 on 14 June 2011.

During this period a number of announcements were made by FerrAus. The key announcements can be found below:

Date	Announcement	Closing Share Price Following Announcement \$ (movement)	Closing Share Price Three Days After Announcement \$ (movement)
20/6/2011	WNI: Supplementary Bidder's Statement	0.650 (-)	0.650 (-)
7/4/2011	Extension of takeover offer from Wah Nam	0.780 (▼1%)	0.770 (▲1%)
4/3/2011	Extension of takeover offer from Wah Nam	0.870 (▼2%)	0.870 (-)
21/12/2010	Proposed capital raising of up to \$35 million	0.970 (-)	0.970 (-)
20/12/2010	Target's Statement	0.970 (▲1%)	0.965 (▼1%)
13/12/2010	Notice of fulfilment of condition re Wah Nam	1.005 (▼1%)	0.970 (▼3%)
25/11/2010	Letter to Shareholders - Offer from Wah Nam	1.140 (▲1%)	0.990 (▼13%)

11/11/2010	Takeover Offer received from Wah Nam	1.100 (▲ 28%)	1.185 (▲ 8%)
29/10/2010	Quarterly Cashflow Report	0.740 (▼ 2%)	0.740 (▼ 2%)
27/10/2010	East Pilbara High Grade Manganese Results	0.760 (▼ 4%)	0.740 (▼ 6%)
23/09/2010	Additional Mirrin Mirrin Drilling Results	0.850 (▼ 1%)	0.820 (▼ 5%)
05/08/2010	Mirrin Mirrin Resource Increase to 316 Million Tonnes	0.835 (▲ 2%)	0.855 (▲ 4%)
30/07/2010	Quarterly Cashflow Report	0.820 (▼ 1%)	0.850 (▲ 2%)
19/07/2010	CRM Corporation To Exercise Subscription Right	0.860 (▲ 4%)	0.885 (▲ 7%)
23/06/2010	Subscription Agreement with Wah Nam International Holdings	0.825 (▲ 3%)	0.830 (▲ 4%)
16/06/2010	Major Upgrade Underpins PFS at FerrAus Pilbara Project	0.750 (▲ 1%)	0.780 (▲ 5%)
04/06/2010	Mirrin Mirrin Drilling Results	0.840 (▲ 5%)	0.805 (▲ 1%)
25/05/2010	Lawson Gold Limited Prospectus	0.750 (▲ 1%)	0.780 (▲ 5%)
24/05/2010	Infill Drilling Results	0.745 (▼ 1%)	0.750 (▼ 1%)
30/04/2010	Quarterly Activities Report	0.915 (▲ 1%)	0.795 (▼ 13%)
17/03/2010	Intention to Spin Out Gold Assets	1.060 (▲ 1%)	1.055 (▲ 0.5%)
05/03/2010	SandP Announces March SP/ASX Index Rebalance	0.970 (▲ 5%)	1.040 (▲ 12%)
04/03/2010	66% Increase in Resources	0.925 (▼ 3%)	1.050 (▲ 11%)
24/02/2010	Pre-Feasibility Study Commences	0.760 (▲ 2%)	0.775 (▲ 4%)
29/01/2010	Quarterly Cashflow Report	0.725 (▼ 5%)	0.735 (▼ 4%)
18/01/2010	Response to ASX Price Query	0.945 (▲ 3%)	0.855 (▼ 7%)
14/01/2010	Mirrin Mirrin Confirmed as a New Discovery	0.910 (▲ 12%)	0.945 (▲ 17%)
12/01/2010	Response to ASX Query	0.840 (▲ 6%)	0.910 (▲ 15%)
09/12/2009	Chinese Regulatory Approval - CRM Share Placement	0.630 (▼ 9%)	0.635 (▼ 9%)
27/11/2009	FIRB Approval - China Railway Materials Share Placement	0.725 (▼ 1%)	0.730 (▼ 1%)

To provide further analysis of the market price for an FerrAus share, we have also considered the weighted average market price for 10, 30, 60 and 90 day periods to 24 June 2011.

	24 June 2011	10 Days	30 Days	60 Days	90 Days
Closing Price	\$ 0.6400				
Volume Weighted Average Price		\$ 0.6659	\$ 0.7165	\$ 0.7398	\$ 0.7558

Source: Bloomberg

An analysis of the volume of trading in FerrAus shares for the six months to 24 June 2011 is set out below:

	Share price Low (\$)	Share price High (\$)	Cumulative Volume traded	As a % of Issued capital
1 Trading Day	\$0.6400	\$0.6800	217,900	0.09%
10 Trading Days	\$0.6150	\$0.7150	7,082,684	2.83%
30 Trading Days	\$0.6150	\$0.8100	15,531,050	6.21%
60 Trading Days	\$0.6150	\$0.8550	34,445,465	13.78%
90 Trading Days	\$0.6150	\$0.9400	40,490,843	16.20%
180 Trading Days	\$0.6150	\$1.1950	96,420,323	30.55%

Source: Bloomberg

This table indicates that FerrAus' shares display a low level of liquidity, with 16.20% of the Company's current issued capital being traded over 90 trading days. For the quoted market price methodology to be reliable there needs to be a 'deep' market in the shares. RG 111.69 indicates that a 'deep' market should reflect a liquid and active market. We consider the following characteristics to be representative of a deep market:

- Regular trading in a company's securities;
- Approximately 1% of a company's securities are traded on a weekly basis;
- The spread of a company's shares must not be so great that a single minority trade can significantly affect the market capitalisation of a company; and
- There are no significant but unexplained movements in share price.

A company's shares should meet all of the above criteria to be considered 'deep', however, failure of a company's securities to exhibit all of the above characteristics does not necessarily mean that the value of its shares cannot be considered relevant.

FerrAus' Quoted Market Price results in the following valuation range:

	Low (\$)	Preferred (\$)	High (\$)
Quoted Market Price value	0.68	0.70	0.72

Our assessment is that a range of values for FerrAus shares based on market pricing is between \$0.68 and \$0.72 with a preferred value of \$0.70.

## Control Premium

The concept of a premium for control reflects the additional value that attaches to a controlling interest. In determining whether including a control premium is appropriate in this instance, we believe there are two key considerations. Firstly, we believe it is appropriate to consider the level of control currently held by Atlas and what additional level of control/ability to influence the Company Atlas would gain if the Subscription and Asset Acquisition is approved and whether a premium for control is appropriate given the current position of the company.

We have reviewed the announced control premiums paid by acquirers for target iron ore companies listed on the ASX since 2005. A summary of the control premiums is noted in the table below:



Announce Date	Target Name	Acquirer Name	Deal Value (A\$ million)	Shareholding		
				Interest Post Transaction	Announced Premium	Implied Premium
<u>Effective Control Acquisitions</u>						
23/05/2011	Territory Resources Ltd	Exxaro Resources Ltd	122.06	100.0%	75.4%	N/A
21/12/2010	Giralia Resources NL	Atlas Iron Ltd	983.83	100.0%	52.5%	30.0%
10/03/2010	Aurox Resources Ltd	Atlas Iron Ltd	131.49	100.0%	128.6%	26.5%
16/10/2009	United Minerals Corp NL	BHP Billiton Ltd	191.82	100.0%	38.6%	N/A
7/09/2009	Warwick Resources Ltd	Atlas Iron Ltd	48.59	100.0%	60.1%	26.5%
20/08/2009	Polaris Metals NL	Mineral Resources Ltd	138.63	100.0%	109.2%	20.0%
14/03/2008	Midwest Corp Ltd	Sinosteel Corp	1,068.62	100.0%	36.0%	N/A
10/01/2008	Cliffs Asia Pacific Iron Ore Holdings Pty Ltd	Cliffs Natural Resources Inc	559.42	100.0%	16.8%	N/A
24/07/2006	Aztec Resources Ltd/Australia	Mount Gibson Iron Ltd	207.24	100.0%	36.5%	N/A
11/01/2005	Cliffs Asia Pacific Iron Ore Holdings Pty Ltd	Cliffs Natural Resources Inc	508.28	80.4%	36.5%	N/A
				Average	63.7%	25.8%
				Median	52.5%	26.5%

Source: Bloomberg

Note:

(1) We have excluded the acquisition premium paid for the compulsory acquisition by Cliffs Natural Resources Inc of the remaining 14.8% shareholding interest in Cliffs Asia Pacific Iron Ore Holdings Pty Ltd as Cliffs Natural Resources Inc held an effective controlling interest in Cliffs Asia Pacific Iron Ore Holdings Pty Ltd prior to the transaction.

We have also included an analysis of the control premia paid for effective control acquisition transactions in the general mining industry of Australia since 2004 to date.

	Number of Transactions	Announced Total Value (US\$ Mil)	Announced Control Premium
2010-2011	9	7,001.26	40.7%
2009-2010	24	2,241.91	45.9%
2008-2009	10	172.47	43.2%
2007-2008	23	2,158.94	30.2%
2006-2007	21	1,092.89	25.3%
2005-2006	17	14,297.78	38.3%
2004-2005	7	25,836.97	29.0%
Average			35.9%

Source: Bloomberg

In arriving at an appropriate control premium to apply we note that observed control premiums can vary due to the:

- Nature and magnitude of non-operating assets;
- Nature and magnitude of discretionary expenses;
- Perceived quality of existing management;
- Nature and magnitude of business opportunities not currently being exploited;
- Level of controlling interest acquired;
- Ability to integrate the acquiree into the acquirer's business;
- Level of pre-announcement speculation of the transaction; and

- Level of liquidity in the trade of the acquiree’s securities.

Based on the table above, we observe that significant control premiums on a company’s share price are paid for Australian iron ore companies. These significant premiums, in part reflect the strategic value of the target to the acquirer above the conventional level of control premium paid. We also observed that a higher control premium is paid for iron ore transactions resulting in an effective control with a range of 36.5% to 109.2% with an average of 55.6% and median of 45.6%. We have also analysed the implied premiums. These premiums have been obtained from the targets Independent Expert Report and represent the control premium used when analysing the targets share price. From our analysis an average premium of 25.8% and a median of 26.5% has been used.

Across the general Australian mining industry, the average annual control premium paid for effective control transactions over 2005 to 2011 ranged between 25.3% and 45.9% with an average of 35.9%.

Atlas currently has no shareholding in FerrAus. If the Subscription and Asset Acquisition is approved, Atlas would be able to obtain an interest in FerrAus of 38.96%, which represents significant influence but not necessarily an effective control over the Company. However, we note that if the Subscription and Asset Acquisition is successful, Atlas will be making an off-market takeover bid for 100% of the issued capital of FerrAus which may ultimately give Atlas 100% control of FerrAus and this should be taken into account when applying a control premium.

In our opinion, if the Subscription and Asset Acquisition is approved Atlas will have the ability to obtain effective control over FerrAus through the Atlas Takeover Offer which will follow. Taking the factors above into consideration in applying a control premium to FerrAus’ quoted market share price we believe an appropriate range to be 20% - 30 which is consistent with our analysis of the implied premiums within the market. We have chosen this range as these premiums are calculated based on an independent experts opinion on a specific transaction and are not influenced by the level of share trading of an entity’s securities. The announced market premiums are calculated on a Company’s share price and can be potentially higher if a security has a low level of liquidity which could lead to its share price not being reflective of the underlying value. As FerrAus shares do not have a deep level of liquidity we believe this range is the most appropriate to use.

### Quoted market price including control premium

Applying the control premium to FerrAus’ quoted market price results in the following quoted market price value including a premium for control.

	Low	Preferred	High
Quoted Market Price value	\$ 0.68	\$ 0.70	\$ 0.72
Control premium	20%	25%	30%
Quoted Market Price valuation including a premium for control	\$0.816	\$0.875	\$0.936

Therefore, our valuation of a FerrAus share based on the quoted market price method and including a premium for control is between \$0.816 and \$0.936, with a preferred value of \$0.875.

### 10.3 Alternative Offer - Lapsed Wah Nam Offer

On 11 November 2010, Wah Nam announced a conditional off-market takeover bid to acquire all of the ordinary shares of FerrAus not currently held by Wah Nam. The all script Offer was based on 6 Wah Nam ordinary fully paid shares for every 1 FerrAus share.

The key conditions of the Wah Nam Offer are stated below:

- Wah Nam acquiring a relevant interest in at least 90% of all FerrAus shares;
- The ASX granting Wah Nam permission to list the Wah Nam shares, to be issued under the Offer, on the ASX within 7 days after the end of the Offer Period;
- The exchange rate of Australian dollars to Hong Kong dollars not appreciating more than 10% from the closing level of that rate on the date before announcement of the Offer; and
- Between the announcement date of the Offer and the end of the Offer Period, the S&P/ASX300 index not falling more than 15%.

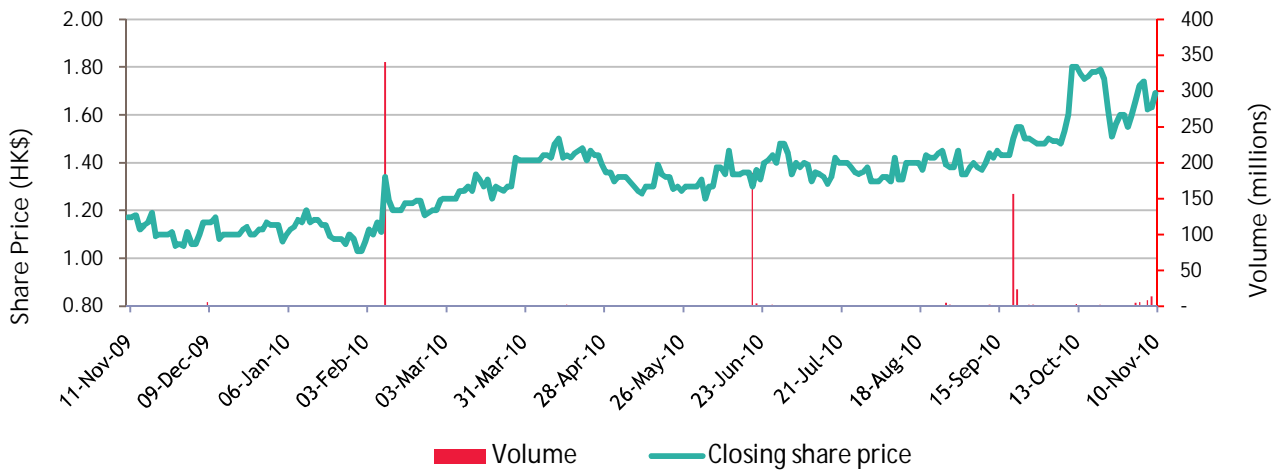
For more details, refer Wah Nam’s Replacement Bidder’s Statement released to the market on 6 December 2010.

We note that on 28 June 2011 Wah Nam announced that it intended to rely on the conditions set out in its Replacement Bidder’s Statement dated 6 December 2010 to defeat its takeover offer for FerrAus and accordingly the Wah Nam takeover offer lapsed on 15 July 2011.

Although this offer is no longer available to Shareholders we have used the pricing of a Wah Nam share to determine an implied value of a FerrAus share that was subject to the Wah Nam Offer.

Our analysis of the quoted market price of a Wah Nam share is based on the most recent trading price over the last 12 months prior to the date of announcement of the Wah Nam Offer on 11 November 2010.

The following chart provides a summary of the share price movement over the year to the last trading day prior to the announcement of the Wah Nam Offer, 10 November 2010.



Source: Bloomberg

The daily price of Wah Nam shares over one year to 10 November 2010 has ranged from a high of HK\$2.20 on 3 November 2010 to a low of HK\$1.00 on 1 February 2010.

During this period a number of announcements were made by Wah Nam. The key announcements can be found below:

Date	Announcement	Closing Share Price Following Announcement HK\$ (movement)	Closing Share Price Three Days After Announcement HK\$ (movement)
3/11/2010	Price sensitive information - considering buying mining assets overseas	1.66 (▲ 3.8%)	1.62 (▲ 1.3%)
17/09/2010	Placing of existing shares and subscription of new shares, raising net proceeds of approximately HK\$200 million.	1.43 (-)	1.55 (▲ 8.4%)
16/09/2010	Disclosure of acquisitions of shares in FerrAus, 19.24% shareholding acquired for AUD\$33.3 million	1.43 (▼ 1.4%)	1.50 (▲ 3.4%)
19/08/2010	Release of Interim Report for the half year ended 30 June 2010	1.37 (▼ 2.1%)	1.42 (▲ 1.4%)
23/06/2010	Subscription for shares in FerrAus	1.33 (▼ 2.9%)	1.43 (▲ 4.4%)
20/06/2010	Placing of existing shares and subscription of new shares, raising net proceeds of approximately HK\$199 million, and considering acquiring shares of mineral resources related companies overseas.	1.36 (-)	1.33 (▼ 2.2%)
30/03/2010	Annual Results Announcement for the year ended 31 December 2009	1.41 (▼ 5%)	1.41 (▼ 0.7%)
1/03/2010	Disclosure of acquisitions of shares in Brockman, 19.90% shareholding acquired for AUD\$49.2 million	1.20 (-)	1.25 (▲ 4.2%)
18/02/2010	Purchases of shares in Brockman	1.23 (-)	1.24 (▲ 0.8%)
9/02/2010	Placing of existing shares and subscription of new shares, raising net proceeds of approximately HK\$199 million.	1.11 (▼ 3.5%)	1.20 (▲ 4.3%)

To provide further analysis of the market price for a Wah Nam share, we have also considered the weighted average market price for 10, 30, 60 and 90 day periods to 10 November 2010.

	10 November 2010	10 Days	30 Days	60 Days	90 Days
Closing Price	HK\$ 1.69				
Volume Weighted Average Price		HK\$ 1.71	HK\$ 1.70	HK\$ 1.52	HK\$ 1.52

Source: Bloomberg

An analysis of the volume of trading in Wah Nam shares for the year to 10 November 2010 is set out below:

	Share price Low (HK\$)	Share price High (HK\$)	Cumulative Volume traded	As a % of Issued capital
1 Trading Day	HK\$1.63	HK\$1.70	952,000	0.02%
10 Trading Days	HK\$1.55	HK\$2.20	34,827,056	0.89%
30 Trading Days	HK\$1.47	HK\$2.20	49,046,532	1.26%
60 Trading Days	HK\$1.35	HK\$2.20	246,986,612	6.48%
90 Trading Days	HK\$1.30	HK\$2.20	251,605,330	6.65%
180 Trading Days	HK\$1.18	HK\$2.20	466,807,655	13.06%

Source: Bloomberg

This table indicates that Wah Nam's shares display a low level of liquidity, with only 13.06% of the Company's weighted average capital being traded over the previous 180 trading days. For the quoted market price methodology to be reliable there needs to be a 'deep' market in the shares. RG 111.69 indicates that a 'deep' market should reflect a liquid and active market. We consider the following characteristics to be representative of a deep market:

- Regular trading in a company's securities;
- Approximately 1% of a company's securities are traded on a weekly basis;
- The spread of a company's shares must not be so great that a single minority trade can significantly affect the market capitalisation of a company; and
- There are no significant but unexplained movements in share price.

A company's shares should meet all of the above criteria to be considered 'deep', however, failure of a company's securities to exhibit all of the above characteristics does not necessarily mean that the value of its shares cannot be considered relevant.

Wah Nam's Quoted Market Price results in the following valuation range:

	Low	Preferred	High
Quoted Market Price value (HK\$)	1.52	1.52	1.71
Exchange rate on 11 November 2010	7.78	7.78	7.78
Quoted Market Price value (\$AUD)	0.195	0.195	0.220

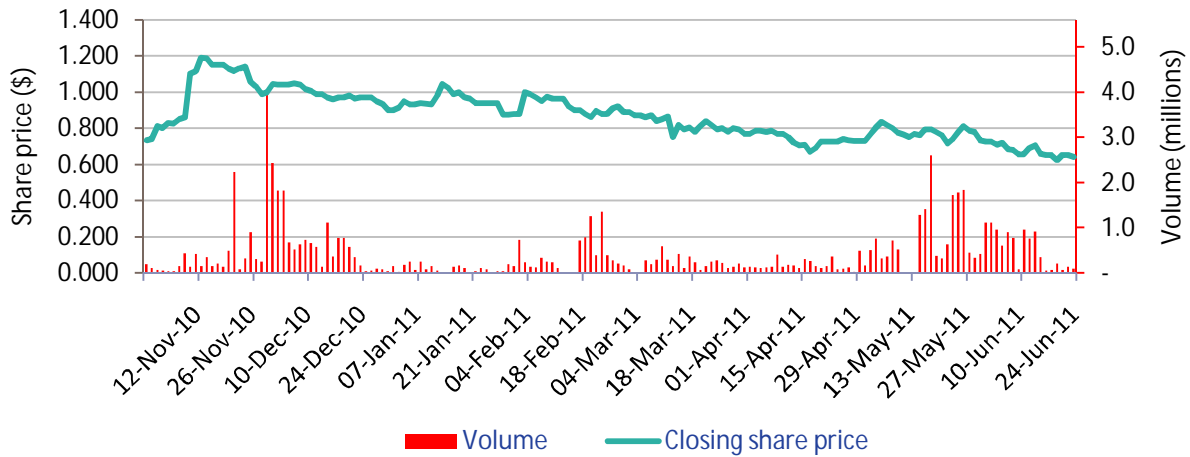
Our assessment is that a range of values for Wah Nam's shares based on market pricing is between \$0.195 and \$0.220, with a preferred value of \$0.195. We have determined that the preferred value is at the low end of the range as this value is more consistent with the 60 and 90 day VWAP values.

The Wah Nam Offer was based on 6 Wah Nam ordinary fully paid shares for every 1 FerrAus share. Therefore, the implied value of a FerrAus share based on the Wah Nam Offer is in the following range:

	Low (\$)	Preferred (\$)	High (\$)
Quoted Market Price value	1.17	1.17	1.32

Our assessment is that a range of values for FerrAus shares based on the lapsed Wah Nam Offer was between \$1.17 and \$1.32 with a preferred value of \$1.17.

We have analysed movements in FerrAus' share price since the Wah Nam Offer was announced to the market. A graph of FerrAus' share price prior to the Wah Nam Offer until the day prior to the announcement of the Atlas Takeover Offer is set out below.



On 12 November 2010, the day after the announcement of the Wah Nam Offer, FerrAus' share price increased from an average of \$0.79 over the previous month to \$1.12 (42% increase). The volume traded on 12 November 2010 totalled 2,429,968. The share price opened at \$1.06 and closed at \$1.12. From that point the share price gradually declined until 24 June 2011, the day prior to the Atlas Takeover Offer.

We note that the low level of acceptance for the Wah Nam Offer indicates that the Offer was considered to be unacceptable by Shareholders. There were a number of issues that contributed to the low level of acceptance of the Wah Nam Offer. The Directors' of FerrAus indicated that the Wah Nam Offer was highly conditional and that a number of the key benefits that Wah Nam claimed flowed from its Offer only arose if Wah Nam acquired Brockman Resources Ltd. The Directors' were also concerned that the price of Wah Nam's shares was not supported by an underlying value and there was also uncertainty as to whether Wah Nam had the ability to advance FerrAus' current projects. FerrAus shareholders interest in the Pilbara Project was also deemed to be significantly diluted from the Wah Nam Offer.

Due to the low liquidity and the low acceptances we have considered the Wah Nam Offer in our analysis but do not consider it to be an accurate reflection of the value of a FerrAus share.

#### 10.4 Atlas Takeover Offer

On 27 June 2011 Atlas and FerrAus announced that they have executed a Bid Implementation Agreement, pursuant to which Atlas has agreed to offer FerrAus shareholders 1 Atlas share for every 4 FerrAus shares.

The key conditions of the Atlas Takeover Offer are stated below:

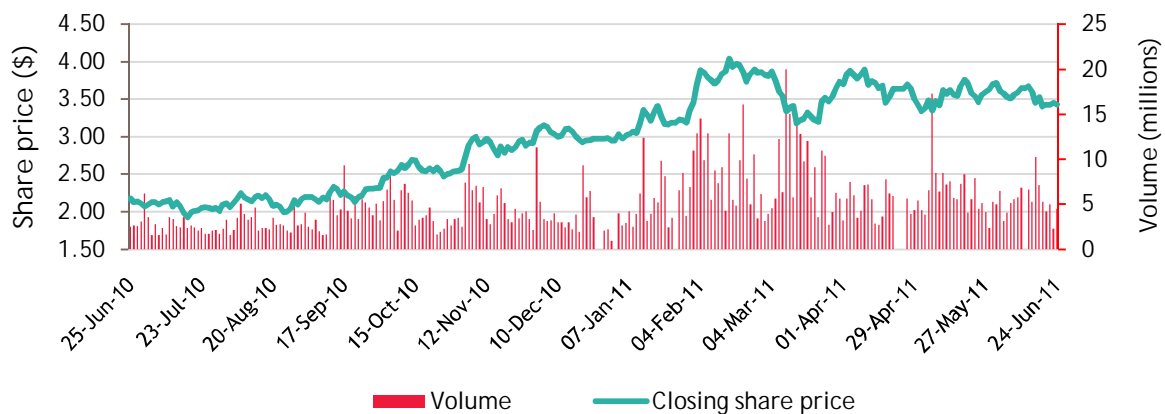
- Minimum acceptance of 50.1%;
- No prescribed occurrences in relation to FerrAus; and
- No material adverse change in relation to FerrAus.

For more details, refer to FerrAus' announcement to the market on 27 June 2011.

To provide a comparison to the valuation of FerrAus in 10.1, we have also assessed the quoted market price for an Atlas share. From this value we can determine a value of a FerrAus share that is subject to the Atlas Takeover Offer.

Our analysis of the quoted market price of an Atlas share is based on the most recent trading price over the last 12 months prior to the date of announcement of the Atlas Takeover Offer on 27 June 2011.

The following chart provides a summary of the share price movement over the year to the last trading day prior to the announcement of the Atlas Takeover Offer, 24 June 2011.



Source: Bloomberg

The daily price of Atlas shares over one year to 24 June 2011 has ranged from a high of \$4.09 on 17 February 2011 to a low of \$1.91 on 19 July 2010.

During this period a number of announcements were made by Atlas. The key announcements can be found below:

Date	Announcement	Closing Share Price Following Announcement \$ (movement)	Closing Share Price Three Days After Announcement \$ (movement)
14/06/2011	SRR: Shaw River Exploration Update	3.67 (▲0.5%)	3.53 (▼3.3%)
9/05/2011	Atlas increases Wodgina production capacity by 75% to 7Mtpa	3.48 (▲3.9%)	3.57 (▲6.6%)
27/04/2011	AJM: Option extends Pilgangoora Lithium target area	3.70 (▲1.6%)	3.42 (▼6.0%)
21/04/2011	Atlas Iron Quarterly Activities Report March 2011	3.64 (▲3.1%)	3.64 (▲3.1%)
4/04/2011	Atlas posts shipping record in March 2011	3.83 (▲3.5%)	3.78 (▲2.2%)
4/03/2011	SandP Announces March SP/ASX Rebalance	3.87 (▲1.6%)	3.55 (▼6.8%)
1/03/2011	Atlas reaches 97.09% interest in Giralia	3.86 (▲0.3%)	3.87 (▲0.5%)
24/02/2011	\$30 million Maiden Half Year Profit	3.84 (▲2.9%)	3.86 (▲3.5%)
14/02/2011	Atlas declares takeover offer for Giralia unconditional and Second Supplementary Bidder`s Statement	3.84 (▲2.1%)	3.93 (▲4.5%)
4/02/2011	Extension Notice - Variation of Takeover Bid Supplementary Bidder`s Statement	3.89 (▲5.4%)	3.75 (▲5.6%)

3/02/2011	24% increase in Atlas` DSO Resources	3.69 (▲ 6.6%)	3.79 (▲ 9.5%)
27/01/2011	Atlas Iron December 2010 Quarterly Cashflow Report	3.23 (▲ 1.3%)	3.35 (▲ 5.0%)
20/01/2011	Giralia -Takeover Bid by Atlas Iron Ltd - Target`s Statement	3.26 (▼ 4.4%)	3.19 (▼ 6.5%)
6/01/2011	Pilbara Operations Update	3.01 (▲ 1.3%)	3.05 (▲ 2.7%)
21/12/2010	Atlas announce takeover offer for 100% of Giralia Resources Limited	2.92 (▼ 1.4%)	2.97 (▼ 0.3%)
18/11/2010	Atlas enters into infrastructure MOU with BHP Billiton concerning an integrated transport solution.	2.87 (▲ 4.4%)	2.82 (▲ 2.5%)
1/11/2010	Atlas hits 6Mtpa export rate 2 months ahead of schedule	2.54 (▲ 1.2%)	2.74 (▲ 9.2%)
28/10/2010	SRR: Shaw River to raise up to \$5 million	2.50 (▲ 1.2%)	2.55 (▲ 13.2%)
27/10/2010	Atlas Iron September 2010 Quarterly Activities Report	2.47 (▼ 2.8%)	2.54 (-)
20/10/2010	Two DSO Discoveries in the South East Pilbara	2.54 (▼ 0.4%)	2.59 (▼ 1.6%)
17/09/2010	First Ore on Ship at Utah Point	2.27 (▲ 2.3%)	2.13 (▲ 4.1%)
2/09/2010	Turner River Hub to play key role in growth to 12Mtpa	2.20 (▲ 1.4%)	2.16 (▲ 0.5%)
1/09/2010	50% increase in North Pilbara Reserves	2.17 (▲ 3.8%)	2.20 (▲ 5.3%)
28/07/2010	Atlas June 2010 Quarterly Activities Report	2.03 (▼ 1.0%)	2.09 (▼ 2.0%)
6/07/2010	More positive drilling results at Hercules	2.13 (-)	2.14 (▲ 0.5%)
5/07/2010	Report maiden resource at Warrawanda	2.13 (▲ 1.9%)	2.13 (▲ 1.9%)
2/07/2010	Atlas welcomes key decision on Goldsworthy Railway	2.09 (▲ 1.0%)	2.09 (▲ 1.0%)

To provide further analysis of the market price for an Atlas share, we have also considered the weighted average market price for 10, 30, 60 and 90 day periods to 24 June 2011.

	24 June 2011	10 Days	30 Days	60 Days	90 Days
Closing Price	\$ 3.43				
Volume Weighted Average Price		\$ 3.51	\$ 3.57	\$ 3.58	\$ 3.56

Source: Bloomberg

An analysis of the volume of trading in Atlas shares for the year to 24 June 2011 is set out below:

	Share price Low (\$)	Share price High (\$)	Cumulative Volume traded	As a % of Issued capital
1 Trading Day	\$3.39	\$3.45	4,501,930	0.72%
10 Trading Days	\$3.37	\$3.70	50,433,966	8.06%
30 Trading Days	\$3.37	\$3.78	158,188,216	25.28%
60 Trading Days	\$3.29	\$3.91	323,308,532	51.67%
90 Trading Days	\$3.05	\$4.00	568,903,350	90.91%
180 Trading Days	\$2.43	\$4.00	1,012,340,919	161.78%

Source: Bloomberg



This table indicates that Atlas' shares display a high level of liquidity, with 161.78% of the Company's weighted average capital being traded over previous 180 trading days. For the quoted market price methodology to be reliable there needs to be a 'deep' market in the shares. RG 111.69 indicates that a 'deep' market should reflect a liquid and active market. We consider the following characteristics to be representative of a deep market:

- Regular trading in a company's securities;
- Approximately 1% of a company's securities are traded on a weekly basis;
- The spread of a company's shares must not be so great that a single minority trade can significantly affect the market capitalisation of a company; and
- There are no significant but unexplained movements in share price.

A company's shares should meet all of the above criteria to be considered 'deep', however, failure of a company's securities to exhibit all of the above characteristics does not necessarily mean that the value of its shares cannot be considered relevant.

Atlas' Quoted Market Price results in the following valuation range:

	Low (\$)	Preferred (\$)	High (\$)
Quoted Market Price value	3.43	3.51	3.58

Our assessment is that a range of values for Atlas shares based on market pricing is between \$3.43 and \$3.58, with a preferred value of \$3.51.

Per the Atlas Takeover Offer, Atlas has offered 1 Atlas share for every 4 FerrAus shares. Therefore, the implied value of a FerrAus share based on the Atlas Takeover Offer is in the following range:

	Low (\$)	Preferred (\$)	High (\$)
Quoted Market Price value	0.8575	0.8775	0.8950

Our assessment is that a range of values for FerrAus shares based on the Atlas Takeover Offer is between \$0.8575 and \$0.8950 with a preferred value of \$0.8775.

## 10.5 Assessment of FerrAus prior to Subscription and Asset Acquisition

The results of the valuations performed are summarised in the table below:

	Low	Preferred	High
Net Asset Value (Section 10.1)	\$ 0.6025	\$ 0.8002	\$ 1.2440
Quoted Market Price (Section 10.2)	\$ 0.8160	\$ 0.8750	\$ 0.9360
Atlas Takeover Offer (Section 10.4)	\$ 0.8575	\$ 0.8775	\$ 0.8950

We have based our valuation of a FerrAus share on the Net Asset Value methodology as this methodology has been deemed the most reliable for this purpose. Based on the results above we consider the value of a FerrAus share to be between \$0.6025 and \$1.2440 with a preferred value of \$0.8002.

## 11. Valuation of South East Pilbara Assets

We instructed Ravensgate to provide an independent technical report on Atlas' South East Pilbara iron ore assets. A copy of the Ravensgate Report is attached at Appendix 4. The table below provides a summary of this valuation:

	Low value	Preferred value	High value
South East Pilbara iron ore assets	\$M	\$M	\$M
Western Creek	39.36	50.22	88.19
Jimblebar	29.31	40.61	61.58
Warrawanda	10.69	14.25	21.38
Jigalong	4.34	6.29	9.44
Weelaranna	2.60	3.25	7.81
Upper Ashburton	4.92	4.92	14.77
Watershed	1.25	1.62	2.64
	92.47	121.16	205.81

The independent technical report prepared by Ravensgate indicates that the value of the South East Pilbara iron ore assets is between \$92.47 million and \$205.81 million, with a preferred value of \$121.16 million.

We note that as at 30 June 2011 FerrAus has accrued approximately \$6.9 million in relation to transaction costs including stamp duty relating to the acquisition of the South East Pilbara iron ore assets from Atlas. As such we have reduced the Ravensgate valuation of these assets above by this amount. Therefore, the value of the South East Pilbara iron ore assets is between \$85.57 million and \$198.91 million, with a preferred value of \$114.26 million.

## 12. Is the Subscription and Asset Acquisition Fair?

In considering the Subscription and Asset Acquisition, we have performed an analysis to determine how the value of the Consideration Shares compares to the value of the South East Pilbara iron ore assets and the Subscription cash.

The tables below show a comparison between the value of the Consideration Shares and the South East Pilbara iron ore assets and Subscription cash.

Value of Consideration shares	Low value	Preferred value	High value
Value per FerrAus share	0.6025	0.8002	1.2440
Number of shares offered as consideration	159,285,939	159,285,939	159,285,939
Value of Consideration shares	95,977,103	127,457,954	198,154,260

Value of Iron Ore Assets and Subscription cash	Low value	Preferred value	High value
Value of South East Pilbara iron ore assets	85,570,000	114,260,000	198,910,000
Subscription cash	24,335,860	24,335,860	24,335,860
Value of Iron Ore Assets and Subscription cash	109,905,860	138,595,860	223,245,860

Although the Subscription Agreement and the Asset Sale Agreement are both separate agreements, for the purposes of this Report we have considered them together as one transaction, as they are both conditional upon Shareholders approving both the issue of Shares under the Subscription Agreement and the Asset Sale Agreement. Based on the tables above, the value of the South East Pilbara iron ore assets and the Subscription cash is higher than the Consideration Shares. On this basis, we consider the Subscription and Asset Acquisition to be fair.

However, we note that if the Subscription Agreement and the Asset Sale Agreement were to be considered on an individual basis the Subscription Agreement, which allowed Atlas to subscribe for 37,439,785 FerrAus shares at an issue price of \$0.65 per share to raise approximately \$24.3 million, would not be fair while the Asset Acquisition Agreement would be fair.

## 13. Other Considerations

### 13.1 Alternative Proposal

There is currently no active alternative offer available to Shareholders.

On 28 June 2011 Wah Nam announced that it intended to rely on the conditions set out in its Replacement Bidder's Statement dated 6 December 2010 to defeat its takeover offer for FerrAus and accordingly the Wah Nam takeover offer lapsed on 15 July 2011.

### 13.2 Practical Level of Control

If the Subscription and Asset Acquisition is approved, Atlas will hold an interest of 38.96% in FerrAus. We also note that FerrAus and Atlas have signed a Bid Implementation Agreement to take effect after the Subscription and Asset Acquisition and therefore Atlas will have the ability to obtain 100% of the share capital of FerrAus.

When shareholders are required to approve an issue of shares in relation to a company there are two levels of shareholder approval to be considered - ordinary resolutions and special resolutions.

Ordinary resolutions are not specifically defined in the Corporations Act and require only a simple majority to pass (more than 50% of the members present at the meeting, either in person, or by proxies, if allowed by the constitution).

Some of the matters on which an ordinary resolution is sufficient are:

- election/re-election of directors
- appointment of an auditor
- acceptance of reports at the annual general meeting
- strategic, commercial decisions
- increase or reduction in the number of directors.

Special resolutions require that at least 75% of the votes cast by members entitled to vote on that resolution must be in favour of the resolution for it to be passed.

There are a number of matters which specifically require special resolutions including, but not limited to, the following:

- Giving different dividend rights or shares in the same asset class; and
- Selective reduction of share capital.

While Atlas, following approval of the Subscription and Asset Acquisition, will not have sufficient shares to pass ordinary resolutions, it will have significant influence in the passing of resolutions and the ability to block special resolutions.

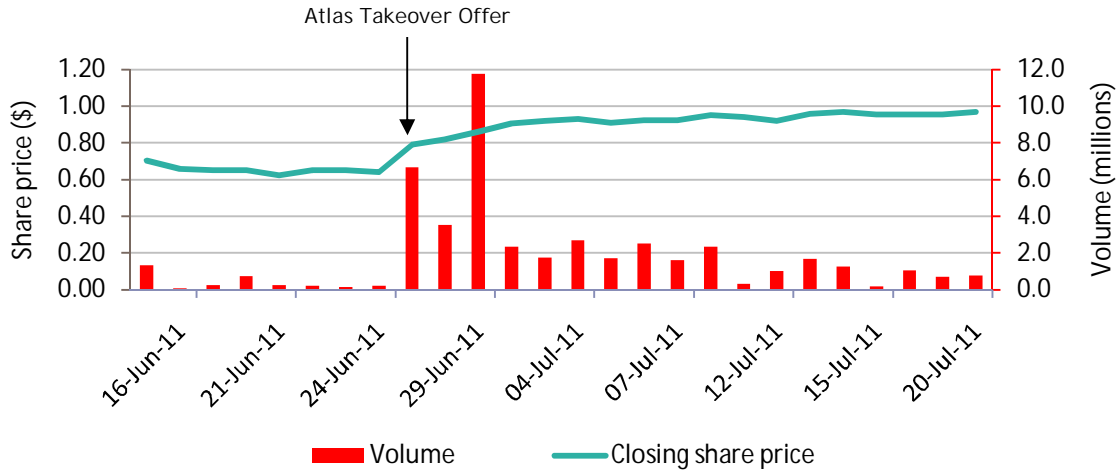
Further Atlas may obtain a much greater level of control as a result of the Atlas Takeover Offer, which is to follow the Subscription and Asset Acquisition.

As a result of the above, in our opinion, as Atlas is expected to be able to exercise control over FerrAus it should pay a control premium.

### 13.3 Consequences of not Approving the Subscription and Asset Acquisition

#### Potential decline in share price

We have analysed movements in FerrAus' share price since the Subscription and Asset Acquisition was announced. A graph of FerrAus' share price post the announcement of the Subscription and Asset Acquisition is set out below.



Source: Bloomberg

On 28 June 2011, the day after the announcement of the Subscription and Asset Acquisition, FerrAus' share price increased from an average of \$0.70 over the previous month to \$0.82 (17% increase). The volume of shares traded on 28 June 2011 totalled 3,544,471. The share price opened at \$0.80 and closed at \$0.82.

Given the above analysis it is possible that if the Subscription and Asset Acquisition is not approved FerrAus' share price may potentially decline. However we do note that the Atlas Takeover Offer has been announced to the market and therefore FerrAus' share price might still be supported if the Subscription and Asset Acquisition is not approved.

## 14. Is the Subscription and Asset Acquisition Reasonable?

### 14.1 Advantages of Approving the Subscription and Asset Acquisition

We have assessed whether the Subscription and Asset Acquisition is reasonable by considering the advantages and disadvantages to shareholders of approving the Subscription and Asset Acquisition.

If the Subscription and Asset Acquisition is approved, in our opinion, the potential advantages to Shareholders include those listed in the table below:

Advantage	Description
The Subscription and Asset Acquisition is fair	As set out in Section 12, the Subscription and Asset Acquisition is fair. RG 111 states that a transaction is reasonable if it is fair.
Increased project scale	The increased project scale of combining the South-East Pilbara iron ore assets of Atlas and FerrAus will provide the opportunity and greater leverage for the combined entity to pursue the development of an independent infrastructure solution in the South-East Pilbara.
Immediate cashflow	If the Subscription and Asset Acquisition is approved FerrAus will receive the Subscription cash of approximately \$24.3 million. This will allow FerrAus to meet expenditure commitments. If the Subscription and Asset Acquisition is not approved It is likely that a Placement would have to be undertaken which may be at a discount to the Subscription Agreement.
Increased DSO resource inventory	Via the addition of Atlas' South east Pilbara iron ore assets FerrAus shareholders will benefit from a greater DSO resources, and additional prospective exploration targets in the South East Pilbara landholding.

### 14.2 Disadvantages of Approving the Subscription and Asset Acquisition

If the Subscription and Asset Acquisition is approved, in our opinion, the potential disadvantages to Shareholders include those listed in the table below:

Disadvantage	Description
Dilution of existing Shareholders' interest	The Subscription and Asset Acquisition will result in a dilution of existing FerrAus shareholders interest from 100% to 61.04%. The capacity of shareholders to influence the operations of FerrAus will be reduced.
Atlas will gain a significant level of control of FerrAus	If the Subscription and Asset Acquisition is approved, Atlas will acquire a shareholding interest of 38.96% meaning Atlas will be able to influence any voting required on the activities of FerrAus. This will also mean that Atlas will only require a further 11.14% shareholding interest to obtain control of FerrAus. If control of FerrAus is obtained Atlas will have the ability to pass ordinary resolutions and the liquidity of FerrAus shares may decline.
FerrAus will have to share	FerrAus shareholders will hold a diluted interest in FerrAus' assets and will have to share

benefits of its assets with Atlas shareholders      any upside potential with Atlas.

We note that if the Subscription Agreement and the Asset Sale Agreement were to be considered on an individual basis the Asset Sale Agreement would be considered reasonable on the basis that it is considered fair. In our opinion, we consider the Subscription Agreement to be reasonable even though individually it is not considered fair as a result of the following:

- Our quoted market price analysis, in Section 10.2, indicates that the value of a FerrAus share, without a premium for control, is in the range of \$0.68 and \$0.72. Although this range is higher than the \$0.65 issue price per the Subscription Agreement we believe that if FerrAus were to raise funds via a placement in the market it is likely that this would be done at a discount to the quoted market price of a FerrAus share. We also note that the closing share price on 24 June 2011, the day before the announcement of the Subscription and Asset Acquisition, was \$0.64. If a placement was to be performed on this date it would be performed at a discount to this price;
- FerrAus has both near term and long term funding requirements. Without the immediate funding provided by the Subscription Agreement, the Company would need to raise funds in the near future in order to progress feasibility studies and the continued development of the South West Creek port;
- FerrAus has a need to secure a rail infrastructure solution in a timely manner in order to ensure that its project timetable can be achieved. FerrAus has been actively exploring alternatives to assist in this regard but, other than the Subscription and Asset Acquisition, has not been successful. FerrAus considers that the Subscription and Asset Acquisition provide FerrAus with the financial strength, increased resource base and a further alignment of interests with Atlas (a partner in the North West Infrastructure) to greatly assist FerrAus in securing a viable rail infrastructure solution; and
- FerrAus has not been able to negotiate any other acceptable corporate alternatives to the Subscription and Asset Acquisition. FerrAus has explored a number of possible alternative transactions to realise value for Shareholders, however, no opportunity has arisen which the FerrAus Board has been able to recommend to its shareholders.

For the reasons above we consider that on an individual basis the Subscription Agreement is reasonable.

## 15. Conclusion

We have considered the terms of the Subscription and Asset Acquisition as outlined in the body of this report and have concluded that the Subscription and Asset Acquisition is fair and reasonable to the Shareholders of FerrAus.

## 16. Sources of Information

This report has been based on the following information:

- Draft Notice of General Meeting and Explanatory Statement on or about the date of this report;
- Management Accounts for FerrAus as at 30 June 2011;
- Audited financial statements of FerrAus for the year ended 30 June 2010;
- Reviewed financial statement of FerrAus for the period ended 31 December 2010;
- Audited financial statements for Atlas Iron Ltd for the year ended 30 June 2010;
- Reviewed financial statement of Atlas Iron Ltd for the period ended 31 December 2010;
- Subscription Agreement between FerrAus Ltd and Atlas Iron Ltd dated 26 June 2011;
- Sale Agreement between Atlas Iron Ltd, Warwick Resources Ltd, Giralia Resources N.L. and FerrAus Ltd dated 26 June 2011;
- Bid Implementation Agreement between FerrAus Ltd and Atlas Iron Ltd dated 26 June 2011;
- Independent Valuation Report prepared by Ravensgate Minerals Industry Consultants on Atlas Iron South East Pilbara Iron Project dated 11 July 2011;
- Independent Valuation Report prepared by Ravensgate Minerals Industry Consultants on FerrAus Ltd Pilbara Iron Project and Atlas Iron South East Pilbara Iron Ore Assets dated 12 July 2011;
- Replacement Bidder's Statement for Wah Nam International Holdings Ltd dated 6 December 2010;
- Company ASX announcements;
- Share registry information as at 24 June 2011;
- Information in the public domain; and
- Discussions with FerrAus management.

## 17. Independence

BDO Corporate Finance (WA) Pty Ltd is entitled to receive a fee of \$40,000 (excluding GST and reimbursement of out of pocket expenses). Except for this fee, BDO Corporate Finance (WA) Pty Ltd has not received and will not receive any pecuniary or other benefit whether direct or indirect in connection with the preparation of this report.

BDO Corporate Finance (WA) Pty Ltd has been indemnified by FerrAus in respect of any claim arising from BDO Corporate Finance (WA) Pty Ltd's reliance on information provided by FerrAus, including the non provision of material information, in relation to the preparation of this report.

Prior to accepting this engagement BDO Corporate Finance (WA) Pty Ltd has considered its independence with respect to FerrAus and Atlas and any of their respective associates with reference to ASIC Regulatory Guide 112 "Independence of Experts". In BDO Corporate Finance (WA) Pty Ltd's opinion it is independent of FerrAus and Atlas and their respective associates.

Neither the two signatories to this report nor BDO Corporate Finance (WA) Pty Ltd, have had within the past two years any professional relationship with FerrAus, or their associates, other than in connection with the preparation of this report.

A draft of this report was provided to FerrAus and its advisors for confirmation of the factual accuracy of its contents. No significant changes were made to this report as a result of this review.

BDO is the brand name for the BDO International network and for each of the BDO Member firms.





BDO (Australia) Ltd, an Australian company limited by guarantee, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of Independent Member Firms. BDO in Australia, is a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International).

## 18. Qualifications

BDO Corporate Finance (WA) Pty Ltd has extensive experience in the provision of corporate finance advice, particularly in respect of takeovers, mergers and acquisitions.

BDO Corporate Finance (WA) Pty Ltd holds an Australian Financial Services Licence issued by the Australian Securities and Investment Commission for giving expert reports pursuant to the Listing rules of the ASX and the Corporations Act.

The persons specifically involved in preparing and reviewing this report were Sherif Andrawes and Adam Myers of BDO Corporate Finance (WA) Pty Ltd. They have significant experience in the preparation of independent expert reports, valuations and mergers and acquisitions advice across a wide range of industries in Australia and were supported by other BDO staff.

Sherif Andrawes is a Fellow of the Institute of Chartered Accountants in England & Wales and a Member of the Institute of Chartered Accountants in Australia. He has over twenty years experience working in the audit and corporate finance fields with BDO and its predecessor firms in London and Perth. He has been responsible for over 150 public company independent expert's reports under the Corporations Act or ASX Listing Rules. These experts' reports cover a wide range of industries in Australia.

Adam Myers is a member of the Australian Institute of Chartered Accountants. Adam's career spans 13 years in the Audit and Assurance and Corporate Finance areas. Adam has considerable experience in the preparation of independent expert reports and valuations in general for companies in a wide number of industry sectors.

## 19. Disclaimers and Consents

This report has been prepared at the request of FerrAus for inclusion in the Notice of Meeting which will be sent to all FerrAus Shareholders. FerrAus engaged BDO Corporate Finance (WA) Pty Ltd to prepare an independent expert's report to consider whether the Subscription and Asset Acquisition with Atlas is fair and reasonable.

BDO Corporate Finance (WA) Pty Ltd hereby consents to this report accompanying the above Notice of Meeting. Apart from such use, neither the whole nor any part of this report, nor any reference thereto may be included in or with, or attached to any document, circular resolution, statement or letter without the prior written consent of BDO Corporate Finance (WA) Pty Ltd.

BDO Corporate Finance (WA) Pty Ltd takes no responsibility for the contents of the Notice of Meeting other than this report.

BDO Corporate Finance (WA) Pty Ltd has not independently verified the information and explanations did not supply to us, nor has it conducted anything in the nature of an audit or review of FerrAus or Atlas in accordance with standards issued by the Auditing and Assurance Standards Board. However, we have no reason to believe that any of the information or explanations so supplied are false or that material information has been withheld. It is not the role of BDO Corporate Finance (WA) Pty Ltd acting as an independent expert to perform any due diligence procedures on behalf of the Company. The Directors of



the Company are responsible for conducting appropriate due diligence in relation to FerrAus. BDO Corporate Finance (WA) Pty Ltd provides no warranty as to the adequacy, effectiveness or completeness of the due diligence process.

The opinion of BDO Corporate Finance (WA) Pty Ltd is based on the market, economic and other conditions prevailing at the date of this report. Such conditions can change significantly over short periods of time.

With respect to taxation implications it is recommended that individual Shareholders obtain their own taxation advice, in respect of the Subscription and Asset Acquisition, tailored to their own particular circumstances. Furthermore, the advice provided in this report does not constitute legal or taxation advice to the Shareholders of FerrAus, or any other party.

The statements and opinions included in this report are given in good faith and in the belief that they are not false, misleading or incomplete.

The terms of this engagement are such that BDO Corporate Finance (WA) Pty Ltd has no obligation to update this report for events occurring subsequent to the date of this report.

Yours faithfully

BDO CORPORATE FINANCE (WA) PTY LTD

A handwritten signature in black ink, appearing to read 'Sherif Andrawes'.

Sherif Andrawes  
Director

A handwritten signature in black ink, appearing to read 'Adam Myers'.

Adam Myers  
Director  
Authorised Representative

## Appendix 1 - Glossary of Terms

Reference	Definition
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
Atlas	Atlas Iron Limited
Atlas Takeover Offer	The Bid Implementation Agreement pursuant to which Atlas has agreed to make an off-market takeover bid for 100% of FerrAus' ordinary shares on the basis of 1 Atlas share for every 4 FerrAus shares
BDO	BDO Corporate Finance (WA) Pty Ltd
BIA	Bid Implementation Agreement
BIF	Banded Iron Formation
Consideration Shares	A total of 159,285,939 FerrAus shares made up of 37,439,785 subject to the Subscription Agreement and 121,846,154 subject to the Asset Sale Agreement
DCF	Discounted Future Cash Flows
EBIT	Earnings before interest and tax
FerrAus	FerrAus Limited
FME	Future Maintainable Earnings
FOS	Financial Ombudsman Service
FSG	Financial Services Guide
Giralia	Giralia Resources N.L.
JORC	Joint Ore Resources Committee
NAV	Net Asset Value
NPV	Net Present Value
Our Report	This Independent Expert's Report prepared by BDO
QMP	Quoted Market Price
Ravensgate	Ravensgate Minerals Industry Consultants
RG 111	Regulatory Guide 111 - Contents of Expert Reports
Shareholders	Shareholders of FerrAus not associated with Atlas
South East Pilbara iron ore assets	Iron ore assets owned by Atlas subject to the Asset Sale Agreement
Subscription and Asset Acquisition	the Subscription Agreement for Atlas to subscribe for approximately 37,439,785 FerrAus shares at an issue price of \$0.65 per share and a binding Asset Sale Agreement pursuant to which Atlas has agreed to sell iron ore assets owned by Atlas in consideration for 121,846,154 FerrAus shares
Subscription cash	The total cash raised of \$24,335,860 via the issue of 37,439,785 FerrAus shares at \$0.65 through the Subscription Agreement
the Act	The Corporations Act
the Company	FerrAus Limited
the Valmin Code	the Code of Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Report
VWAP	Volume Weighted Average Price
Warwick	Warwick Resources Pty Ltd
Wah Nam	Wah Nam International Holdings Limited
Wah Nam Offer	The conditional off-market takeover bid from Wah Nam to acquire all of the ordinary shares of FerrAus not currently held by Wah Nam announced to the market on 11 November 2010. The Offer was based on 6 Wah Nam ordinary shares for every 1 FerrAus share.

## Appendix 2 – Valuation Methodologies

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Methodologies commonly used for valuing assets and businesses are as follows:

### 1 *Net asset value on a going concern basis (“NAV”)*

Asset based methods estimate the market value of an entity’s securities based on the realisable value of its identifiable net assets. Asset based methods include:

- Orderly realisation of assets method
- Liquidation of assets method
- Net assets on a going concern method

The orderly realisation of assets method estimates fair market value by determining the amount that would be distributed to entity holders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the entity is wound up in an orderly manner.

The liquidation method is similar to the orderly realisation of assets method except the liquidation method assumes the assets are sold in a shorter time frame. Since wind up or liquidation of the entity may not be contemplated, these methods in their strictest form may not be appropriate. The net assets on a going concern method estimate the market values of the net assets of an entity but does not take into account any realisation costs.

Net assets on a going concern basis are usually appropriate where the majority of assets consist of cash, passive investments or projects with a limited life. All assets and liabilities of the entity are valued at market value under this alternative and this combined market value forms the basis for the entity’s valuation.

Often the FME and DCF methodologies are used in valuing assets forming part of the overall Net assets on a going concern basis. This is particularly so for exploration and mining companies where investments are in finite life producing assets or prospective exploration areas.

These asset based methods ignore the possibility that the entity’s value could exceed the realisable value of its assets as they do not recognise the value of intangible assets such as management, intellectual property and goodwill. Asset based methods are appropriate when entities are not profitable, a significant proportion of the entity’s assets are liquid or for asset holding companies.

### 2 *Quoted Market Price Basis*

A valuation approach that can be used in conjunction with (or as a replacement for) other valuation methods is the quoted market price of listed securities. Where there is a ready market for securities such as the ASX, through which shares are traded, recent prices at which shares are bought and sold can be taken as the market value per share. Such market value includes all factors and influences that impact upon the ASX. The use of ASX pricing is more relevant where a security displays regular high volume trading, creating a “deep” market in that security.

### 3 *Capitalisation of future maintainable earnings (“FME”)*

This method places a value on the business by estimating the likely FME, capitalised at an appropriate rate which reflects business outlook, business risk, investor expectations, future growth prospects and other entity specific factors. This approach relies on the availability and analysis of comparable market data.

## Appendix 2 - Valuation Methodologies

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The FME approach is the most commonly applied valuation technique and is particularly applicable to profitable businesses with relatively steady growth histories and forecasts, regular capital expenditure requirements and non-finite lives.

The FME used in the valuation can be based on net profit after tax or alternatives to this such as earnings before interest and tax ("EBIT") or earnings before interest, tax, depreciation and amortisation ("EBITDA"). The capitalisation rate or "earnings multiple" is adjusted to reflect which base is being used for FME.

### *4 Discounted future cash flows ("DCF")*

The DCF methodology is based on the generally accepted theory that the value of an asset or business depends on its future net cash flows, discounted to their present value at an appropriate discount rate (often called the weighted average cost of capital). This discount rate represents an opportunity cost of capital reflecting the expected rate of return which investors can obtain from investments having equivalent risks.

A terminal value for the asset or business is calculated at the end of the future cash flow period and this is also discounted to its present value using the appropriate discount rate.

DCF valuations are particularly applicable to businesses with limited lives, experiencing growth, that are in a start up phase, or experience irregular cash flows.



## Appendix 3 & 4 - Independent Valuation Reports

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Ravensgate



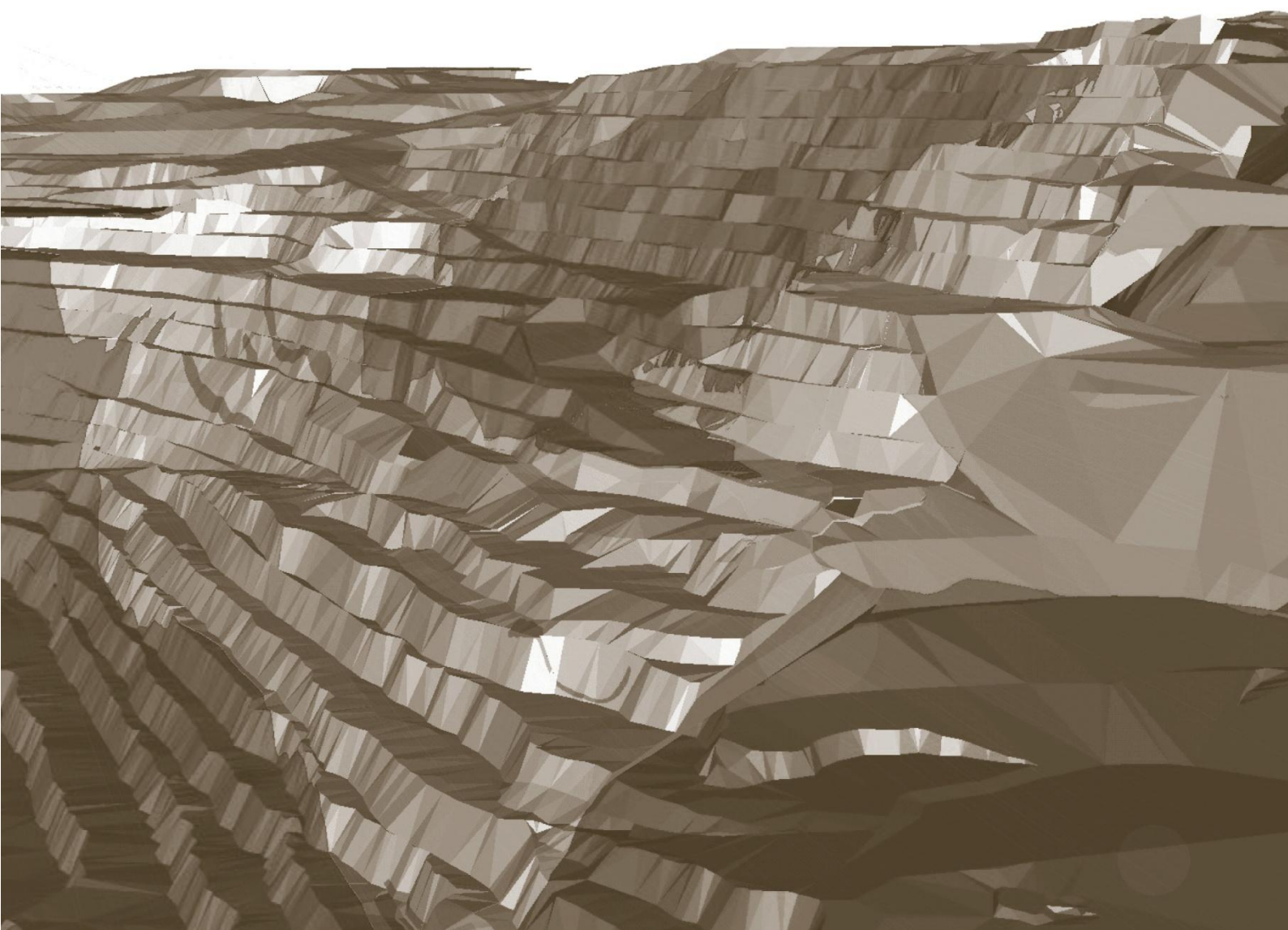
**TECHNICAL PROJECT REVIEW**

**AND**

**INDEPENDENT VALUATION REPORT**

**FERRAUS LIMITED PILBARA IRON PROJECT  
ATLAS IRON SOUTH EAST PILBARA IRON ORE ASSETS  
for**

**FERRAUS LTD/BDO CORPORATE FINANCE LTD**







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## **TECHNICAL PROJECT REVIEW**

**AND**

## **INDEPENDENT VALUATION REPORT**

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ATLAS IRON SOUTH EAST PILBARA IRON ORE ASSETS**

for

**FERRAUS LTD/BDO CORPORATE FINANCE (WA) PTY LTD**

**Ravensgate**

12 July 2011





## TECHNICAL PROJECT REVIEW and INDEPENDENT TECHNICAL VALUATION

Prepared by RAVENSGATE on behalf of:

**FerrAus Ltd and BDO Corporate Finance (WA) Pty Ltd**

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## 1. EXECUTIVE SUMMARY

Corvidae Pty Ltd ATF Ravensgate Unit Trust T/As Ravensgate (Ravensgate) has been commissioned by FerrAus Limited (FerrAus) and BDO Corporate Finance (WA) Pty Ltd (BDO) to provide a Technical Project Review on FerrAus' Pilbara Iron Ore Project (Davidson Creek and Robertson Range Iron Projects) and the Enacheddong Manganese Project and Atlas Iron Ltd's (Atlas) South East Pilbara Iron Ore Assets and an Independent Technical Valuation over these Projects. This Technical Project Review and Independent Valuation Report was prepared by Ravensgate for inclusion in the Independent Expert's Report (IER) prepared by BDO Corporate Finance (WA) Pty Ltd. The IER will be included in FerrAus target statement. FerrAus' Western Australian Projects are currently owned 100% by FerrAus and Atlas' South East Pilbara Iron Ore Assets are currently owned 100% by Atlas apart from the Jigalong project which they have 100% of the iron ore rights. The Western Australian tenement applications in progress by FerrAus and Atlas have not been included in this valuation of Mineral Assets owned by FerrAus Limited and Atlas' South East Pilbara Iron Ore Assets. The projects included in this report are listed below with the first three projects forming the majority of the Technical Project Review.

<u>Mineral Asset</u>	<u>FerrAus Ownership %</u>
• Davidson Creek Project (Iron), WA.	100%.
• Robertson Range (Iron), WA.	100%.
• Enacheddong (Manganese), WA.	100%.
<u>Mineral Asset</u>	<u>Atlas Ownership %</u>
• McCameys North (Iron), WA.	100%
• Jimblebar Range (Iron), WA.	100%
• Carmulla South (Iron), WA.	100%
• Western Creek (Iron), WA.	100%
• Warrawanda (Iron), WA.	100%
• Giralia Western Creek (Iron), WA.	100%
• Jigalong (Iron), WA.	100% (Iron Ore Rights Only)

FerrAus's Iron Projects are located in the Pilbara region of Western Australia (approximately 100km E-SE from Newman). Davidson Creek and Robertson Range are the most advanced of the companies' projects with previous Mineral Resource Estimates and a Prefeasibility Study having been successfully completed. FerrAus also holds another tenement at the Enacheddong project located approximately ~400km SE of Port Hedland, which is currently being actively explored for manganese. Tenement details have been compiled for detailed review and are appended at the end of this report. Further exploration work remains to be carried out in order to help improve geological understanding, to generate or investigate exploration targets and to update Mineral Resources and associated ongoing economic studies (where defined and as further work progresses) within the various projects. Ravensgate's considered opinion is that the projects are of merit and worthy of further exploration.

Atlas' South East Pilbara Iron Ore Assets are located in the Pilbara region of Western Australia. The Technical Project Review and Independent Valuation of Atlas' South East Pilbara Iron Ore Assets is available in a separate report commissioned by FerrAus and BDO. Only the summary valuation from that report is included in this report. Further exploration work on these Pilbara Iron Projects remains to improve geological understanding, to generate or investigate exploration targets and to update Mineral Resources and Studies (where defined and as further work progresses) within the various projects. Ravensgate's considered opinion is that the projects are of merit and worthy of further exploration.



The valuation presented in this report was completed on behalf of FerrAus Limited and BDO Corporate Finance (WA) Pty Ltd. The valuation has been completed with information provided by and with the full support of FerrAus and Atlas. The applicable valuation date is 12 July 2011. The Mineral Assets within FerrAus' projects vary from Exploration Areas through to Pre-Development Projects. The Mineral Assets within Atlas' projects vary from Exploration Areas to Advanced Exploration Area projects. A reported Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has been defined for a number of the projects. The Mineral Resource Estimates at a 55% Fe lower cut-off carried out by Snowden Mining Industry Consultants (Snowden) for the Pre-Development Projects Davidson Creek and Robertson Range are reproduced below (Table 1). Further discussion and other project details are described within the main body of the report. Competent Person statements are listed in Section 2.5.



<b>Table 1 Mineral Resource Estimate for Davidson Creek and Robertson Range Iron Projects</b>								
<b>Davidson Creek Iron Project</b>								
<b>Python-Gwardar-Taipan Iron Mineral Resource Estimates - May 2010, Snowden</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Python-Gwardar-Taipan	Measured	9.5	58.1	4.31	2.83	0.078	9.12	63.9
	Indicated	91.4	58.7	4.44	2.43	0.082	8.63	64.2
	Inferred	1.7	57.8	4.76	3.29	0.070	8.42	63.1
	<b>Total</b>	<b>102.7</b>	<b>58.6</b>	<b>4.43</b>	<b>2.48</b>	<b>0.082</b>	<b>8.67</b>	<b>64.1</b>
<b>Dugite-Tiger Iron Mineral Resource Estimates - June 2011, Snowden</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Dugite-Tiger	Indicated	28.7	56.9	5.92	3.11	0.105	8.50	62.2
	Inferred	1.7	57.0	5.41	2.97	0.113	9.41	62.9
	<b>Total</b>	<b>30.5</b>	<b>56.9</b>	<b>5.89</b>	<b>3.10</b>	<b>0.105</b>	<b>8.55</b>	<b>62.2</b>
<b>Mirrin Mirrin Iron Mineral Resource Estimate - January 2011, Snowden</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Mirrin Mirrin	Indicated	33.90	58.94	4.16	2.26	0.101	8.75	64.59
	Inferred	4.80	56.67	6.81	3.42	0.109	8.04	61.64
	<b>Total</b>	<b>38.70</b>	<b>58.66</b>	<b>4.49</b>	<b>2.41</b>	<b>0.102</b>	<b>8.66</b>	<b>64.22</b>
<b>Davidson Creek Project Area Combined Mineral Resource Estimate</b>								
Davidson Creek Project	Measured	9.5	58.1	4.31	2.83	0.078	9.12	63.9
	Indicated	154.0	58.4	4.65	2.52	0.090	8.63	63.91
	Inferred	8.2	57.0	6.09	3.30	0.102	8.40	62.20
	<b>Total</b>	<b>171.7</b>	<b>58.3</b>	<b>4.70</b>	<b>2.57</b>	<b>0.090</b>	<b>8.65</b>	<b>63.83</b>
<b>Robertson Range Iron Project</b>								
<b>King Brown Iron Mineral Resource Estimate - February 2010, Snowden</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
King Brown	Measured	23.40	58.93	4.54	2.71	0.109	7.69	63.84
	Indicated	20.70	58.98	5.40	2.99	0.104	6.48	63.07
	Inferred	10.60	58.11	6.56	3.37	0.097	6.15	61.93
	<b>Total</b>	<b>54.60</b>	<b>58.79</b>	<b>5.26</b>	<b>2.94</b>	<b>0.105</b>	<b>6.93</b>	<b>63.18</b>

\* The summary resource statement has been compiled to an appropriate level of precision and minor rounding errors may occur.





Ravensgate did not carry out a site visit due to the time constraints on producing this report. Ravensgate is satisfied that there is sufficient information currently available to allow an informed appraisal to be made without including a site inspection of the projects and is of the opinion that no significant additional benefit would have been gained through a site visit to these areas at this stage. Ravensgate has concluded that Western Australian Iron Projects owned by FerrAus are of technical merit (although at varying stages of exploration and subsequent Mineral Asset classification), and are therefore worthy of conducting further exploration and development where possible.

A summary of the Australian project valuation in 100% terms is provided in Table 2 below. The applicable valuation report date is 12 July 2011 and is derived from an analysis of the resource bases in conjunction with the Insitu Yardstick, Multiples of Exploration Expenditure (MEE) and Comparable Transactions valuation methods. The value of FerrAus' listed Projects is considered to lie in a range from \$127M to \$287M, within which Ravensgate has selected a preferred value of \$177M.

Project	Mineral Asset	Ownership 100%	Valuation		
			Low \$M	High \$M	Preferred \$M
Davidson Creek Iron M52/1043 & E52/1658	Pre-Development	100%	94.1	212.2	130.1
E52/2542	Exploration Area	100%	0.17	0.49	0.21
Robertson Range Iron M52/1034	Pre Development	100%	30.2	68.1	41.7
E52/1630	Advanced Exploration Area	100%	2.10	3.78	3.15
E52/1901	Exploration Area	100%	0.43	1.23	1.03
Enacheddong Manganese E46/614	Exploration Area	100%	0.21	1.52	0.35
<b>Combined Projects</b>	<b>All listed projects</b>	<b>100%</b>	<b>127.2</b>	<b>287.3</b>	<b>176.6</b>

\* The combined valuation has been compiled to an appropriate level of precision and minor rounding errors may occur.

Ravensgate has concluded the Atlas' South East Pilbara Iron Ore Assets are of merit (although at varying stages of exploration and subsequent Mineral Asset classification), and worthy of further exploration. A summary of Atlas' project valuation in 100% terms is provided in Table 3. The applicable valuation date is 12 July 2011 and is derived from the Insitu Yardstick, Multiples of Exploration Expenditure (MEE) and Comparable Transactions valuation methods. The value of Atlas' listed Projects is considered to lie in a range from \$92M to \$206M, within which Ravensgate has selected a preferred value of \$121M.



Project	Mineral Asset	Atlas Ownership	Valuation		
			Low \$M	High \$M	Preferred \$M
Western Creek	Advanced Exploration Area	100%	39.36	88.19	50.22
Jimblebar	Advanced Exploration Area	100% (Fe rights only)	29.31	61.58	40.61
Warrawanda	Advanced Exploration Area	100%	10.69	21.38	14.25
Jigalong	Advanced Exploration Area	100%	4.34	9.44	6.29
Weelaranna	Exploration Area	100%	2.60	7.81	3.25
Upper Ashburton	Exploration Area	100%	4.92	14.77	4.92
Watershed	Exploration Area	100%	1.25	2.64	1.62
Combined Projects	All listed projects	100%	92.48	205.81	121.16

\* The combined valuation has been compiled to an appropriate level of precision and minor rounding errors may occur.

Ravensgate concludes that the FerrAus and Atlas projects are of merit (although at varying stages of exploration and subsequent Mineral Asset classification), and worthy of further exploration. Based on the above valuations of FerrAus' and Atlas' assets, the value of the combined projects is considered to lie in a range from \$220M to \$493M, within which Ravensgate has selected a preferred value of \$298M.



## 2. INTRODUCTION

### 2.1 Terms of Reference

Corvidae Pty Ltd ATF Ravensgate Unit Trust T/As Ravensgate (Ravensgate) has been commissioned by FerrAus Limited (FerrAus) and BDO Corporate Finance Ltd (BDO) to provide a Technical Project Review and an Independent Technical Valuation over FerrAus' exploration assets consisting of the FerrAus Pilbara Iron Ore Projects (Davidson Creek and Robertson Range Iron Ore Projects) and the Enacheddong Manganese Project and also the Atlas' South East Pilbara Iron Ore Assets consisting of the following projects:

- McCameys North;
- Jimblebar Range;
- Carmulla South;
- Western Creek;
- Warrawanda;
- Giralia Western Creek; and
- Jigalong.

(together known as "Atlas' South East Pilbara Iron Ore Assets")

The Technical Project Review and Independent Valuation Report was prepared by Ravensgate for inclusion in the Independent Expert's Report (IER) prepared by BDO Corporate Finance (WA) Pty Ltd. The IER will be included in FerrAus's target statement. The Western Australian Projects are currently owned by FerrAus. The Western Australian mining tenement applications currently in progress (i.e. pending) by FerrAus have not been included in this valuation of Mineral Assets owned by FerrAus Limited. Atlas Iron Ltd (Atlas) is considering an acquisition offer for FerrAus' projects which is comprised of the Pilbara Iron Ore Project (Davidson Creek and Robertson Range Iron Ore Projects), a manganese project and Atlas' South East Pilbara Iron Ore Assets. Ravensgate understands that all the project tenements in Western Australia are held in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so.

The objective of this report is to firstly provide a Technical Project Review of the Mineral Resource Estimates for FerrAus' Pilbara Iron Ore Project (Davidson Creek and Robertson Range Iron Projects) and the Enacheddong Manganese Project and Atlas' South East Pilbara Iron Ore Assets. The second objective of this report is to provide a Valmin compliant valuation and technical assessment of the projects. The work has been commissioned by FerrAus Limited (FerrAus) and BDO Corporate Finance (WA) Ltd (BDO). The Report will be included in the IER and Target's Statement and may be distributed to shareholders or investors in the form and context in which it appears within that report.

Ravensgate did not carry out a site visit due to the time constraints on producing this report. Ravensgate is satisfied that there is sufficient current information available to allow an informed appraisal to be made without including a site inspection of the projects and is of the opinion that no significant additional benefit would have been gained through a site visit to these areas at this stage. Ravensgate has concluded the Western Australian Iron Projects are of technical merit and are worthy of conducting further review and exploration.

FerrAus Limited will rely upon this report to separately assist in forming an opinion about the value of the mineral rights in relation to consideration of project status or acquisition. This report does not provide a valuation of FerrAus as a whole, nor does it make any comment on the fairness and reasonableness of any proposed transaction between any two companies. The conclusions expressed in this Technical Project Review and Independent Technical Valuation are valid as at the Valuation Date (12 July 2011). The review and valuation is therefore only valid for this date and may change with time in response to changes in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values included in this report are expressed in Australian dollars (A\$) unless otherwise stated.



This report has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (The ValMin Code) as adopted by the Australasian Institute of Mining and Metallurgy (AusIMM) in April 2005. The report has also been prepared in accordance with ASIC Regulatory Guides 111 (Contents of Expert Reports) and 112 (Independence of Experts). The Technical Project Review and Independent Technical Valuation report has been compiled based on information available up to and including the date of this report.

## 2.2 Qualifications, Experience and Independence

Ravensgate was established in 1997 and specialises in resource modelling and resource estimation services. The company has worked for major clients globally, including Freeport at Grasberg Mine, Ok Tedi Gold Mine in Papua New Guinea, Goldfields in Ghana, BHP in Western Australia and many junior resource companies which are ASX (Australian Stock Exchange), TSX (Toronto Stock Exchange) or AIM (London Stock Exchange) listed companies. Ravensgate has focused upon providing resource estimations, valuations, and independent technical documentation and has been involved in the preparation of Independent Reports for Canadian, Australian, United States and United Kingdom listed companies.

**Author: Stephen Hyland, Principal Consultant and Director. BSc Geology, MAusIMM, CIMM, GAA, MAICD.**

**Stephen Hyland** has had extensive experience of over 20 years in exploration geology and resource modelling and has worked extensively within Australia as well as offshore in Africa, Eastern and Western Europe, Central and South East Asia, modelling base metals, gold, precious metals and industrial minerals. Stephen's extensive resource modelling experience commenced whilst working with Eagle Mining Corporation NL in the diverse and complex Yandal Gold Province where for three and half years he was their Principal Resource Geologist. The majority of his time there was spent developing the historically successful Nimary Mine. He also assisted the regional exploration group with preliminary resource assessment of Eagle's numerous exploration and mining leases. Since 1997, Stephen has been a full time consultant with the minerals industry consulting firm Ravensgate where he is responsible for all geological modelling and reviews, mineral deposit evaluation, computational modelling, resource estimation, resource reporting for ASX / JORC and other regulatory compliance areas. Primarily, Stephen specialises in Geological and Resource Block Modelling generally with the widely used MEDSystem / MineSight® 3D mine-evaluation and design software. Stephen Hyland holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia. He is a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI43-101.

**Co Author: Don Maclean, Principal Consultant - MSc (Hons) Geology, MAIG, MSEG**

**Don Maclean** is a geologist with more than 15 years experience in the minerals industry. Don has worked in a number of different geological environments in Australasia and Europe. He has a broad skill base, having worked in regional and near mine exploration, resource development, open pit and underground geology as well as in senior company management roles. Don Maclean holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia. He is a Qualified Person under the rules of the CIMM and NI43-101.

**Co-author: Sam Ulrich, Principal Consultant. BSc (Hons) Geology, GDAppFin, MAusIMM, FFin.**

**Sam Ulrich** is a geologist with over 14 years experience in near mine and regional mineral exploration, resource development and the management of exploration programs. He has worked in a variety of geological environments in Australia, Indonesia, Laos and China primarily in gold, base metals and uranium. Prior to joining Ravensgate Sam worked for Manhattan Corporation Ltd a uranium exploration and resource development company in a senior management position. Mr Ulrich holds the relevant qualifications and professional associations required by the ASX, JORC and VALMIN Codes in Australia.



**Co-author: H. Kate Holdsworth, Senior GIS Geologist. BSc (Hons) Geology, MAusIMM**

Mrs H. Kate Holdsworth is a senior GIS geologist with over 17 years GIS experience who joined the Ravensgate team in September 2006. During her tenure at Ravensgate, she has contributed to the compilation of numerous Independent Geologists Reports, Valuation Reports, GIS projects as well as having assisted clients with their exploration reporting requirements and QA/QC investigations into client's data quality. Prior to joining Ravensgate, she worked for Giscoe Pty Ltd, a GIS company in Johannesburg, for ten years, where she was involved in diverse GIS projects, including database creation, database population and data validation. Kate has four years experience in GIS with the Geological Survey of South Africa, where she was a member of their GIS database design team.

**Peer Reviewer: Jason McNamara, Principal Consultant - Resources. BSc Geology, MAusIMM.**

Jason McNamara is an Associate of Ravensgate. As a Principal Consultant he carries out work for Mineral Resource estimations, Independent Technical Valuations, Independent Geologist Report's and Formal Technical Project reviews over a range of commodities. He has over 18 years international mining industry experience in operational project exploration, grade control and resource estimation. Jason has worked for both junior and larger ASX listed companies, encompassing open-cut operations and evaluations. Competent Person sign-off was undertaken for MMG's Sepon Gold and Copper Resources in Laos. Jason McNamara holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia.

### 2.3 Disclaimer

The Authors of this report, are not, nor intend to be, a director, officer or other direct employee of FerrAus Limited or Atlas Iron Limited, and have no material interest in the projects of FerrAus Limited or Atlas Iron Limited. Ravensgate holds nil interest or shareholdings in the target (FerrAus) or bidder (Atlas Iron Limited). The relationship with FerrAus Limited and BDO Corporate Finance Pty Ltd is solely one of professional association between client and independent consultant. Ravensgate's professional fees are based on time charges for work actually carried out, and are not contingent on any prior understanding concerning the conclusions to be reached. Fees arising from the preparation of this report are charged at Ravensgate's standard rates and are in the order of \$40,000 to \$50,000. Neither Ravensgate nor any of its employees or associates is an insider, associate or affiliate of FerrAus Limited or any associated company. The report has been prepared in compliance with the Corporations Act and ASIC Regulatory Guides 111 and 112 with respect to Ravensgate's independence as experts. Ravensgate regards RG112.31 to be in compliance whereby there are no business or professional relationships or interests which would affect the expert's ability to present an unbiased opinion within this report. This Report has been compiled based on information available up to and including the date of this Report.

### 2.4 Principal Sources of Information

The principal sources of information used to compile this report comprise technical reports and data variously compiled by FerrAus Limited (FerrAus) and their partners or consultants, publically available information such as ASX releases, government reports and discussions with FerrAus technical and corporate management personnel. With the consent of FerrAus, other general report content describing the regional geology, historical exploration and current exploration has been reproduced verbatim from a number of FerrAus internal and publically available reports. A listing of the principal sources of information is included in the references attached to this report. All reasonable enquiries have been made to confirm the authenticity and completeness of the technical data upon which this report is based. A final draft of this report was also provided to FerrAus, along with a request to identify any material errors or omissions prior to final submission.



## 2.5 Competent Person Statements

The information in this Report that relates to in-situ Mineral Resources at Python-Gwardar-Taipan and Dugite-Tiger is based on information compiled by John Graindorge of Snowden Mining Industry Consultants Pty Ltd Section 3.6.1.1 and Section 3.6.1.2. John Graindorge takes overall responsibility for the Mineral Resource. He is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralization 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). John Graindorge consents to the inclusion of such information in this Report in the form and context in which it appears. Mr Graindorge is a full time employee of Snowden Mining Industry Consultants Pty Ltd.

The information in this Report that relates to in-situ Mineral Resources at Mirrin Mirrin and King Brown is based on information compiled by Richard Sulway of Snowden Mining Industry Consultants Pty Ltd Section 3.6.2 and Section 4.6.1. Richard Sulway takes overall responsibility for the Mineral Resource. He is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralization 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). Richard Sulway consents to the inclusion of such information in this Report in the form and context in which it appears. Mr Sulway is a full time employee of Snowden Mining Industry Consultants Pty Ltd.

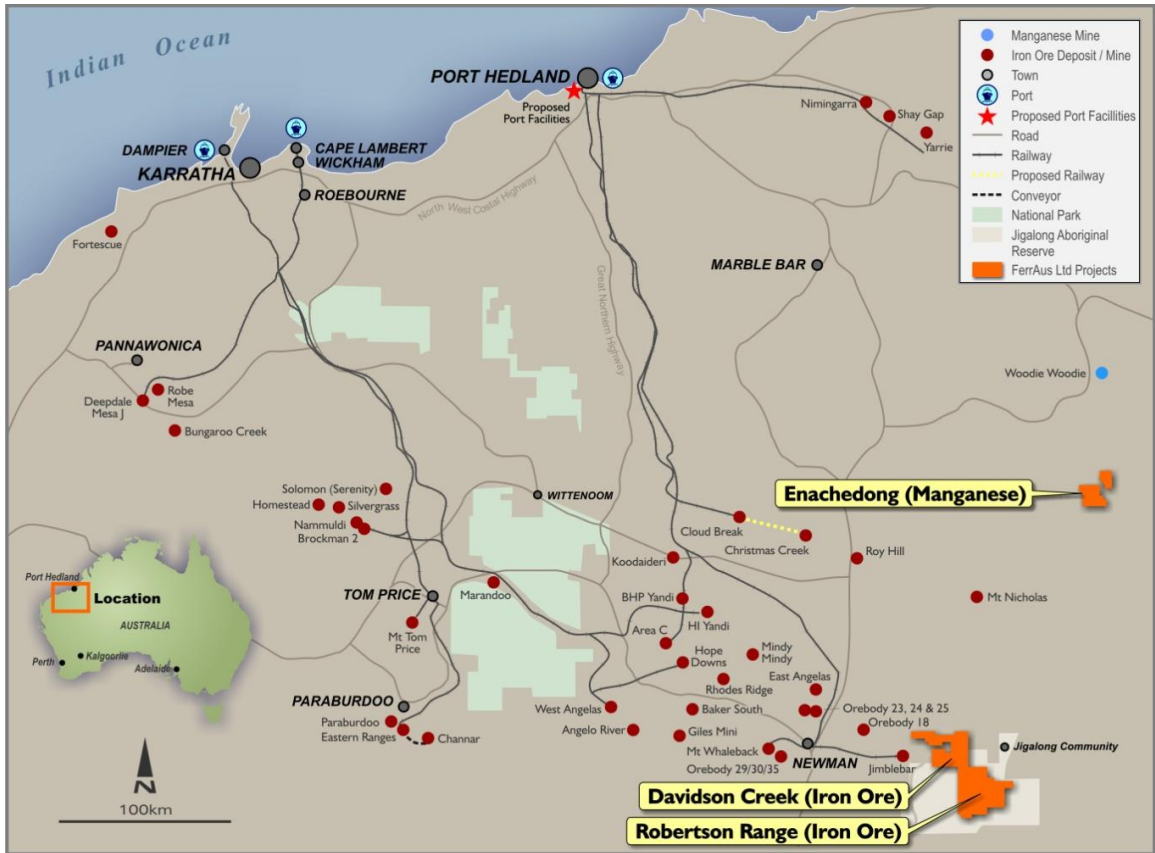
## 2.6 Background Information

The projects discussed in this report are located in Western Australia. A locality map of the projects is presented in Figure 1 below. A summary of the tenement details is listed in Table 15 at the end of this report. Report file references and a glossary are also included at the end of this report. Ravensgate understands that all the project tenements in Western Australia are held in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so. Geological understanding, exploration history and mineralisation potential are further discussed for each project in subsequent sections. The Technical Project Review is outlined in Sections 3, 4 and 5 for Davidson Creek Iron Project, Robertson Range and Enacheddong Manganese Project respectively. The Independent Valuation of the FerrAus projects is outlined in Section 6 onwards.





Figure 1 Locality Map of the Western Australian Projects





### 3. DAVIDSON CREEK IRON ORE PROJECT, WESTERN AUSTRALIA

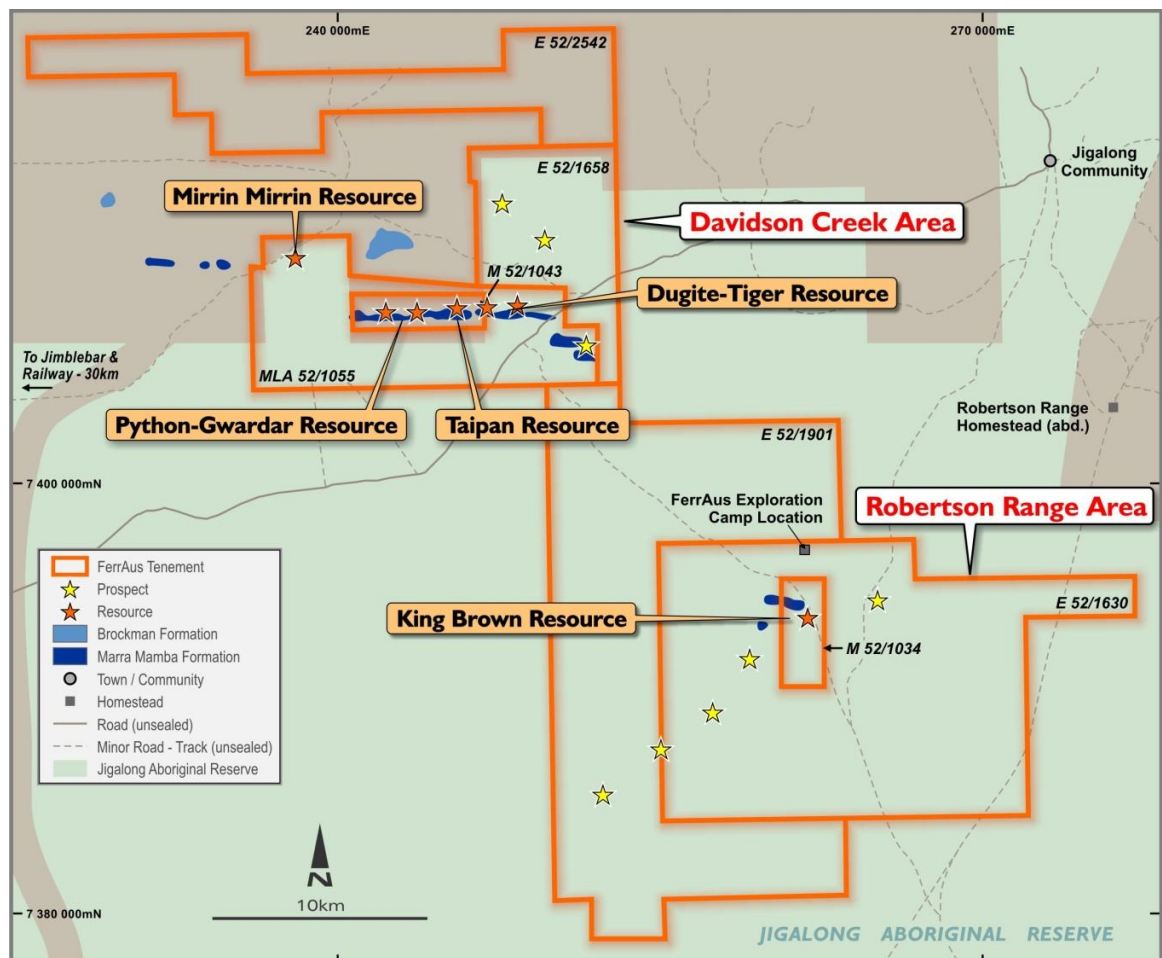
#### 3.1 Introduction and Location

The Davidson Creek Project is located approximately 100 kilometres east southeast of the town of Newman in the Pilbara Region of Western Australia - Centred at : Latitude of 23° 25'N and Longitude 120° 30'E. In mid 2010 the Davidson Creek and Robertson Range project areas were combined into the FerrAus Pilbara Project, the projects have been treated separately within this report.

#### 3.2 Tenure and Physiography

The Davidson Creek Project is comprised of two granted exploration licenses, one granted mining licence and one pending mining licence fully within one of the granted exploration licences with a total area of 223.8km<sup>2</sup>. Australian Manganese Pty Ltd a wholly owned subsidiary of FerrAus Limited owns and manages 100% of the project. The tenements are also partly covered by the Jigalong Aboriginal Reserve. A tenement schedule is presented in Table 15 below with a locality map of the tenements presented in Figure 2.

Figure 2 FerrAus Limited Tenement Location Plan - Davidson Creek Iron Project







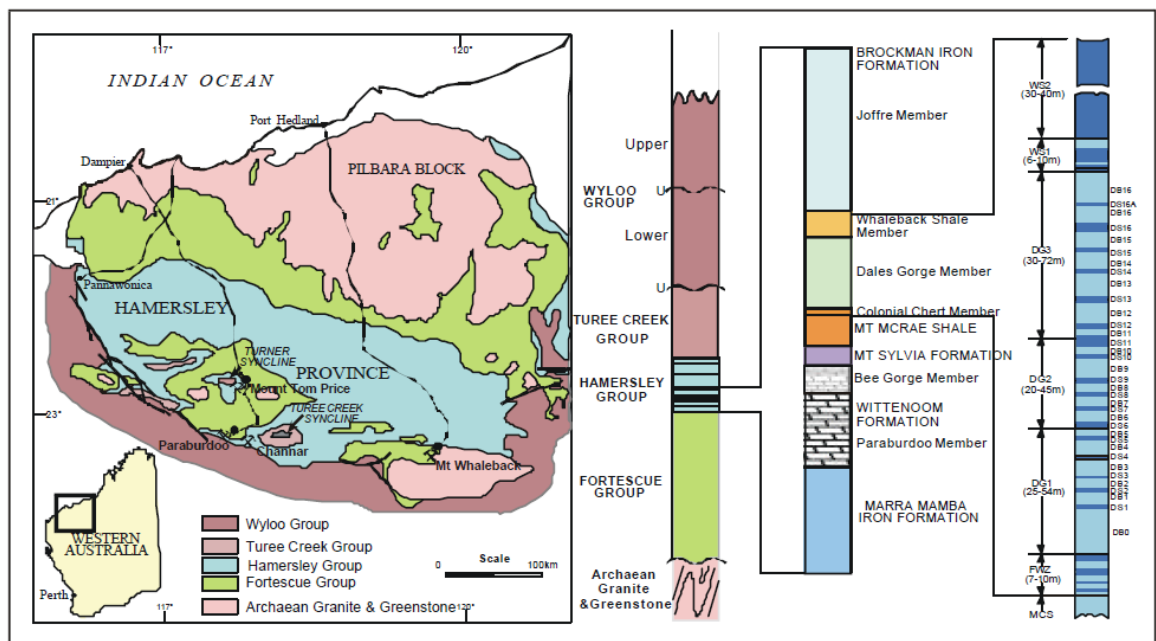
### 3.3 Geology and Mineralisation

#### 3.3.1 Regional Geology

The Davidson Creek Project is located on the eastern margin of the east-west trending Hamersley Province, which covers an area of about 150,000km<sup>2</sup> of the Pilbara Craton in Western Australia. The Hamersley Province consists predominantly of late-Archaeon and Lower Proterozoic (2,800-2,300Ma) sedimentary rocks situated between the large Archaeon Yilgarn and Pilbara Cratons. The rocks have undergone a complex structural evolution, with the dominant event resulting in the development of major folds and thrusts associated with north directed thrusting (Ophthalmia Orogeny).

The geology of the Hamersley Province is broadly composed of a basement sequence of poorly exposed Archaeon granitoid/greenstone rocks of the Sylvania Inlier, which represents the oldest stratigraphy in the project area. This sequence forms the core of an east dipping regional scale anticline. Overlying the granite/greenstone basement unconformably are the shales, sandstones, minor cherts and volcanic sequences of the Archaeon Fortescue Group. Conformably sitting on the Fortescue Group is an Archaeon and early Proterozoic sequence known as the Hamersley Group Figure 3.

Figure 3 Regional Geology of the Hamersley Basin (after Taylor et al., 2001).



The Fortescue Group, Hamersley Group and younger units envelop a core of Sylvania Inlier basement rocks. These units consistently dip at 35-45° towards the north at the Davidson Creek area, and mostly at 25-35° to the east and southeast at the Robertson Range area, representing the northern and south-eastern limbs respectively of a regional scale anticline that dominates both areas.

The Hamersley Group consists of Banded Iron Formation (BIF), dolomite, shale and felsic volcanic rocks, all of which have been frequently intruded by dolerite sills and dykes. The group is divided into seven Formations; Marra Mamba Iron Formation, Wittenoorn Formation, Mt Sylvia Formation, Brockman Formation, Weeli Wollie Formation, Woongarra Formation and Boolgeeda Iron Formation.

The Marra Mamba Iron Formation is the lowermost Formation in the Hamersley Group and is the host of the most significant supergene derived iron ore deposits in the Province, such as Newman, Area C, Marandoo and West Angeles. The Formation is divided into the Nammuldi,



McLeod and Mount Newman Members. The Mount Newman Member is the host to the major deposits, and consists of a thick succession of BIF, shale and carbonate rocks.

The Brockman Iron Formation consists of BIF, shale and chert and is divided into the Dales Gorge, Mt Whaleback, Joffre and Yandicoogina Shale Members. The Dales Gorge Member is the host to the majority of iron ore mineralisation, with Tom Price, Paraburdoo, Whaleback and Rhodes Ridge being typical examples.

In the Tertiary, a series of erosion-deposition-hardpanisation (ferricrete) cycles resulted in three regionally extensive Hamersley surfaces forming, which can contain economic Detrital Iron Mineralisation. These surfaces have subsequently been eroded, often preserving remnants of the Hamersley surface features in mesas.

The Hamersley Province has undergone a complex deformation history, comprising of at least five recognised deformation events ( $D_1$ - $D_5$ ) described below:

$D_1$  is indicated by layer parallel isoclinal folds and boudinage of chert and BIF horizons. The event is widespread, but does not appear to significantly disrupt stratigraphy. The structures are interpreted to have developed as a result of extension and compaction within the early basin.

$D_2$  (Ophthalmia Orogeny) was the most significant event to affect the Hamersley Province. It was the most intense along the southern margin of the Province and resulted in the development of thrusts and local tight folds with axial planes that dip shallowly to moderately to the south. These features resulted from south-over-north closure movement of the Hamersley Basin.

$D_3$  (Ashburton Orogeny) was responsible for producing the regional scale east-west to northwest-southwest trending folds that dominate the structural pattern of the northern and central parts of the Hamersley Province. These folds and their associated thrusts accommodate north-south shortening across the province.

$D_4$  and  $D_5$  produced upright, open folds that combined with the  $D_3$  folds to produce local dome and basin fold patterns.

Iron enrichment Mineralisation in the Hamersley Province is divided into three types of iron deposits being Bedded (BID), Channel (CID) and Detrital (DID) Iron Deposits.

Bedded Iron Deposits are predominantly developed within the Mt Newman Member of the Marra Mamba Iron Formation and the Dales Gorge Member of the Brockman Iron Formation. Supergene enrichment is generally accepted as the genesis of these deposits. Supergene alteration resulted in the development of goethite-martite ores. Another style of deposit occurs where supergene mineralisation is metamorphosed by burial metamorphism, with the goethite-martite mineralisation being converted to micro-platy hematite.

Channel Iron Deposits represent alluvial deposits rich in ferruginous fragments, which were eroded from the country rock and deposited in river channels incised into the Hamersley Ranges. CID's are characteristically comprised of pelletoids (<2mm ferruginous spheroids), peloids (massive, goethite-rich fragments) and ferruginous wood fragments. The deposits are often upgraded within the channel deposits by precipitation of goethitic cement.

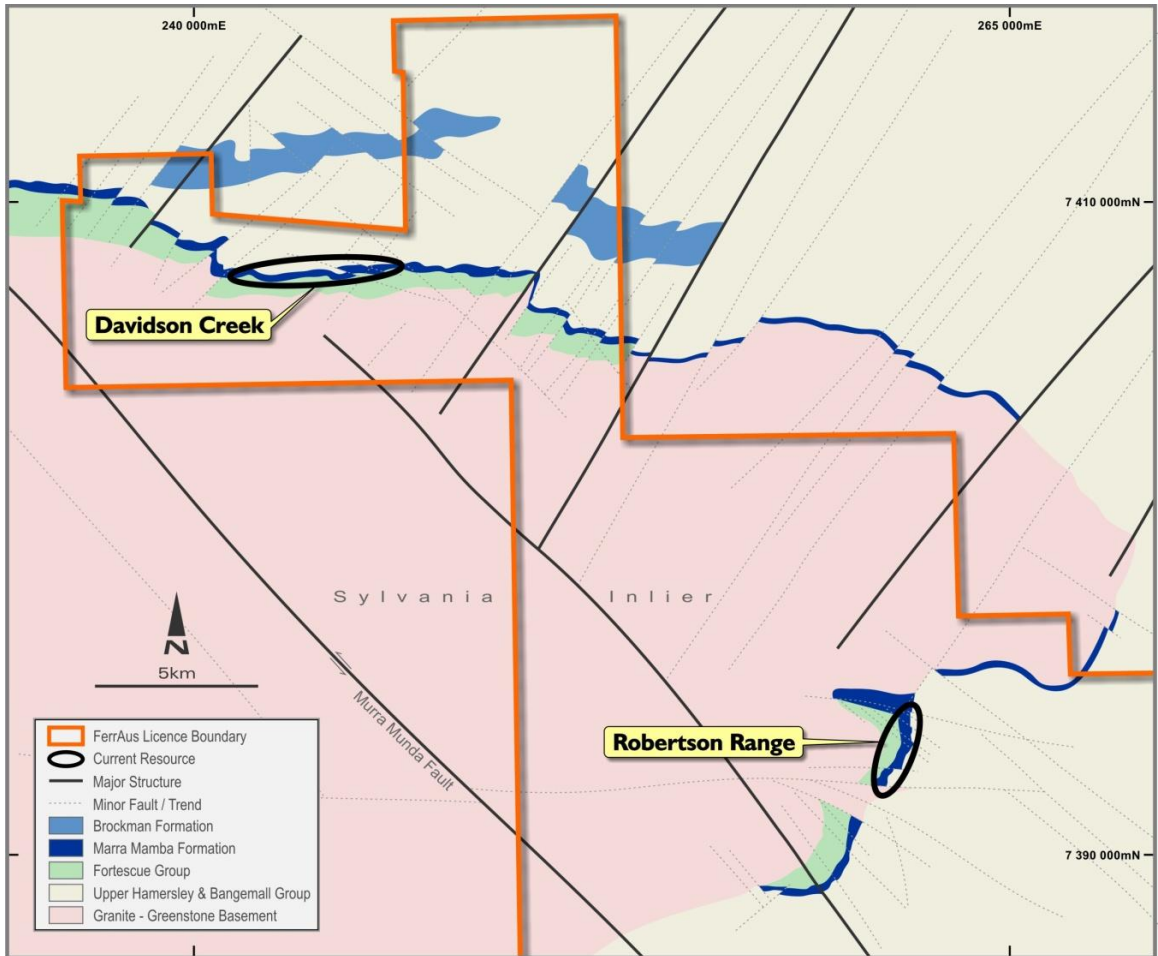
Detrital Iron Deposits develop as the result of the deposition of eroded BID, and mostly from the upper portions of the three Hamersley Surfaces. They may contain a range of clast types, sometimes with later goethitic cementation. Economic deposits of DID mineralisation is usually restricted to the upper most Hamersley Surface.

### 3.3.2 Local Geology

The Davidson Creek (Python-Tiger and Mirrin Mirrin Deposits) mineralisation is hosted predominantly within the Mount Newman Member of the Marra Mamba Iron Formation (Figure 4). Lesser amounts of iron mineralisation occur in the overlying West Angela Member of the Wittenoom Formation. The Marra Mamba Iron Formation is the basal member of the Hamersley Group and is divided into three members, Mount Newman, McLeod and Nammuldi (Figure 5).



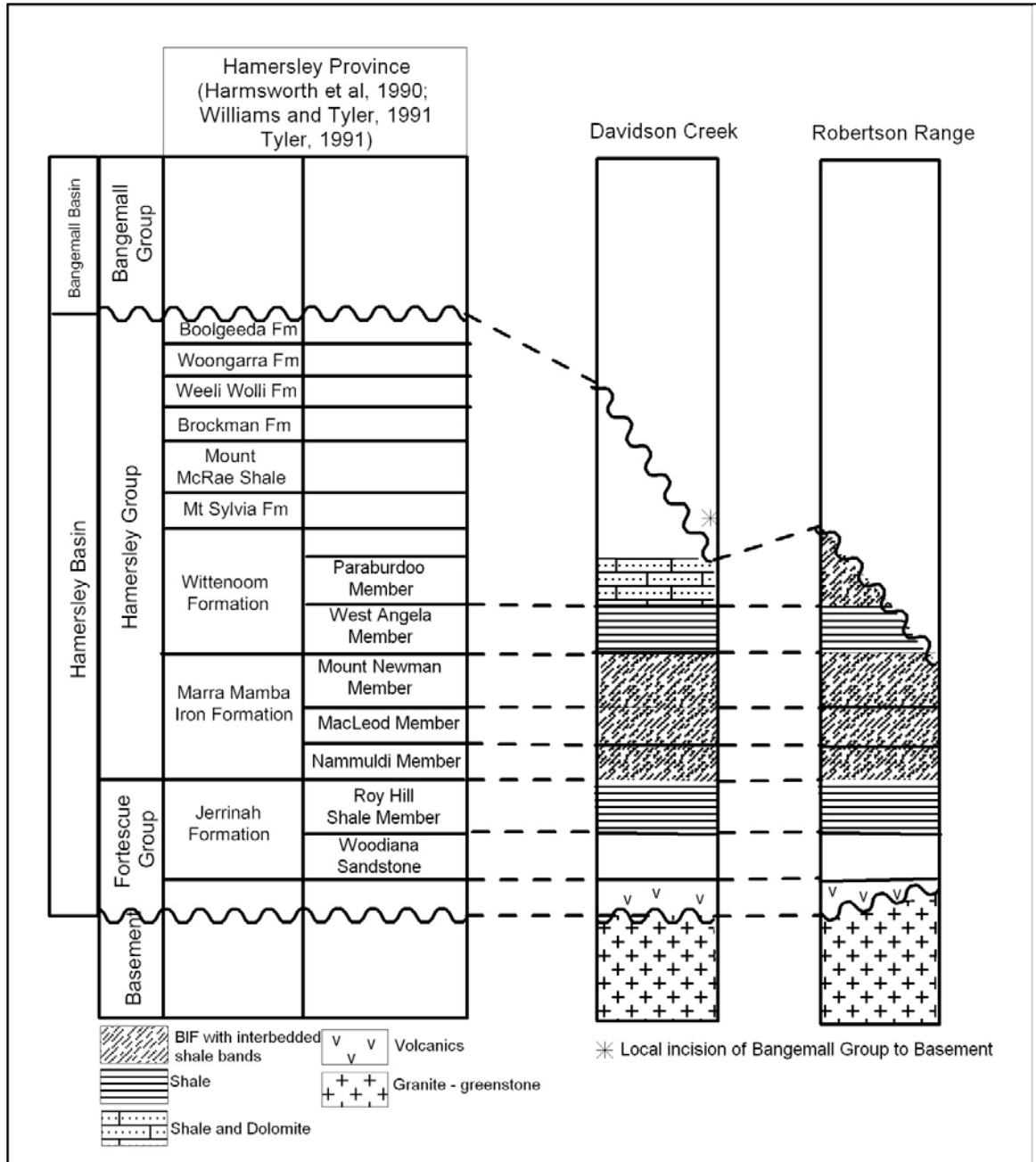
Figure 4 Davidson Creek Iron Project Local Geology



The Mount Newman Member is about 40m to 50m thick in the Davidson Creek area. The Davidson Creek mineralisation does not outcrop at the surface; however, shale bands from within the Mt Newman Member and Lower West Angela Member do outcrop, although poorly, in some areas. The main stratigraphic marker horizons outcropping in the Davidson Creek area are the chert bands of the Nammuldi Member, which occur stratigraphically below (south of) the mineralised layers. The thicker chert horizons tend to form low lying hills.



**Figure 5 Stratigraphy of the Davidson Creek and Robertson Range Iron Projects Area and Comparison with Main Hamersley Province (Note thicknesses are schematic only - not to scale)**



The Davidson Creek deposit is located on the northern limb of a regional scale anticline. The mineralisation parallels the stratigraphy, trends approximately east-west and dips to the north at about 25°, with a strike length of about 9.2km. Apart from the regional scale anticlinal folding, the main structural features present in the Davidson Creek deposit area are:

- Northeast-southwest dextral faulting that forms the western limit of the Python deposit.
- Northwest-southeast sinistral faulting that offsets the Taipan deposit from the Gwardar deposit by approximately 200m.



- Localised south dipping (approximately 25°) thrust faulting which offsets the mineralized layers by up to 25m. In some areas these thrust faults appear to thicken the stratigraphic sequence.

The iron mineralisation in the Davidson Creek deposit primarily consists of:

- Continuous hematite (martite)-goethite tabular lenses, which are up to 30m thick hosted within the Mouth Newman Member.
- Scattered discrete lenses of hematite (martite)-goethite hosted within the shale dominated West Angela Member.
- Detrital mineralisation made up of angular hematite-goethite clasts hosted within a hematite clay matrix in the transported cover.
- A scree like gravel mineralisation that tends to form tabular bodies following the geometry of the base of transported cover.

This observed mineralisation is hosted by the West Angela and Mount Newman Members and has been further locally classified as “hardcap” or where identified as the deeper “primary” mineralisation. Hardcap mineralisation represents primary mineralisation, which has been subjected to surface weathering processes and as a consequence has a typically vuggy texture. This weathered mineralisation contains varying amounts of siliceous and vitreous goethite and clays and as a consequence often contains elevated alumina levels (>2.5% Al<sub>2</sub>O<sub>3</sub>).

Strataform lenses of manganiferous shale (>1% Mn) sit largely within the hangingwall of the iron mineralisation within the West Angela Member.

### 3.4 Exploration History

The project area has been previously explored for iron ore. CRA Exploration Pty Ltd on behalf of Hamersley Iron Pty Ltd originally applied for tenements in 1988, which were granted in 1993. Exploration work was delayed by negotiations over access to the project until 1996. Details of exploration are summarised in Table 4.

Date	Company	Findings
1996-1999	Hamersley Iron Pty Ltd	Explored the area for Iron ore completing a high resolution aeromagnetic survey, airphoto geological mapping and other geological studies.
1999-2000	Hamersley Iron Pty Ltd	Completed Aboriginal ethnographic and archaeological clearance surveys, an environmental survey, reconnaissance rock chip sampling, and ground gravity survey, geophysical modelling. Reverse circulation (RC) drilling was undertaken at geophysical targets, Marra Mamba anomaly and down dip extensions of Marra Mamba mineralisation.

### 3.5 Current Exploration 2005 - 2011

FerrAus applied for and was granted on the 25 August 2005 exploration licence E52/1658 at Davidson Creek.

#### 2005 & 2006

Compilation and evaluation of historical data.





## 2007

A ground gravity survey was carried out in the Davidson Creek Project area. The survey was completed by Haines Surveys between July and October 2007. The completed survey comprised of 9,729 gravity stations on 173 lines.

Within the Davidson Creek project area two RC drilling programs were completed. Firstly, 23 reconnaissance drillholes were completed for 1,734m to test mineralised outcropping Marra Mamba stratigraphy. The drilling was completed on 400m spaced lines with a drillhole spacing of 100m. The second program of 14 holes for 1,032m was completed at the Mirrin Mirrin prospect, with drilling aimed to test interpreted faulted extensions of Marra Mamba stratigraphy along strike to the west of the main mineralisation within the project area. The drilling was completed on 400m and 800m line spacings.

## 2008

Between July and August 2008 Haines Surveys completed a second round of ground gravity at the Robertson Range project complementing the 2007 survey. The survey component consisted of 776 detail gravity stations on 14 lines. The gravity surveys were responsible for identifying buried mineralisation at Davidson Creek which resulted in the discovery of iron mineralisation.

A significant push in exploration and resource definition drilling in the Davidson Creek project saw extensive RC drilling and some diamond drilling completed. A total of 459 RC holes were completed for 52,882m, with the drilling aimed to test depth and strike extensions to the existing iron mineralisation with infill drilling used to better define the existing mineralisation. The main mineralisation at Davidson Creek was subdivided into five prospect areas, from west to east: Python, Gwardar, Taipan, Dugite and Tiger, based on previously identified gravity targets. Drilling at the Gwardar and Python prospects tested gravity targets where no previous exploration had been completed. A total of 140 RC holes for 17,338m were completed at the Python prospect and 133 RC holes for 15,113m at the Gwardar prospect. A total of 59 infill RC holes for 6,108m were completed at the Taipan prospect in order to better define existing mineralisation in the prospect area. Drilling at the Dugite and Tiger prospects also tested gravity targets where no previous exploration had been completed. A total of 40 RC holes for 4,311m were completed at the Dugite prospect and 87 RC holes for 10,012m were completed at the Tiger prospect.

The diamond drilling conducted at Davidson Creek comprised six surface diamond holes for 545m and 14 diamond tails for 1,512.5m. The surface diamond core holes were twin drillholes of existing RC drillholes to confirm and validate RC assays beneath the water table. The aim of the diamond core tails was to complete mineralised intersections where previous RC drilling had been ineffective and to test extensions to existing mineralisation.

The RC and Diamond drilling conducted in the Davidson Creek project in 2008 were incorporated into resource estimates compiled by Coffey Mining Pty Ltd. The inferred resource estimated in accordance with the guidelines of the JORC Code (2004) at a 55% Fe lower cut-off for the Python and Gwardar prospects was 85.4Mt @ 58.7% Fe, 4.4% SiO<sub>2</sub>, 2.5% Al<sub>2</sub>O<sub>3</sub>, 0.09% P and 8.6% LOI. The inferred resource estimated in accordance with the guidelines of the JORC Code (2004) at a 55% Fe lower cut-off for Taipan was 14.6Mt @ 57.7% Fe, 4.5% SiO<sub>2</sub>, 3.0% Al<sub>2</sub>O<sub>3</sub>, 0.08% P and 9.1% LOI.

## 2009

Exploration completed included rock chip sampling in conjunction with geological mapping. The majority of rock chip samples (86 from E52/1658) were taken from outcrop of the Boolgeeda Iron Formation to the north of the main iron mineralisation early in 2009. Fe assays up to 62.7% were returned. Other samples were taken from outcropping BIF of the Joffre Member of the Brockman Iron Formation north of known Davidson Creek mineralisation, and from outcropping hardcap/surficial Fe mineralised material in the Davidson Creek area.

During October 2009, an airborne magnetic and radiometric survey was completed over almost the entire project area. The survey was completed by Thomson Aviation of Griffith, NSW. The



survey aimed at identifying previously unidentified occurrences of Marra Mamba and Brockman Formation stratigraphy under recent transported cover, and to better understand the local structural framework. Data was collected on 100m spaced north-south lines, with east-west tie lines run at 1,000m spacing. The data identified several targets for follow up drilling.

Aircore was trialled during 2009 with 16 holes completed for 1,109m within the project area. One line was drilled immediately to the east of Mirrin Mirrin and one at Bandy Bandy, targeting Marra Mamba stratigraphy buried under deep transported cover.

A total of 153 RC drillholes for 19,721m were completed in the project area. The drilling was focussed on several different targets, both greenfields and near existing resources. The western offset extensions of the Marra Mamba mineralisation were drilled at the Mirrin Mirrin prospect. Targets were generated primarily from the gravity surveys conducted in 2008. Drilling was completed in three phases and bedded iron mineralisation was identified over 3km of strike. Infill drilling subsequently outlined substantial thicknesses of 'ore grade' Fe mineralisation over approximately 800m of strike length. Other drilling included:

- Infill and step out drilling at Tiger/Dugite testing both the existing mineralisation and searching for eastern extensions along strike.
- Broad spaced RC holes to the northeast of the main mineralisation trend, targeting Brockman Formation stratigraphy under transported cover.
- Step out drilling to the west of Python looking for Marra Mamba hosted mineralisation under transported cover.
- Broad spaced drilling at Bandy Bandy (southeast of Tiger-Dugite) looking for offset portions of Marra Mamba stratigraphy.

A prefeasibility study (PFS) was initiated in late 2009 looking at both the resources in the Davidson Creek and Robertson Range projects.

## 2010

A ground magnetic survey was completed at the Mirrin Mirrin prospect, with the aim to better define cross structures and dolerite dykes that crosscut the iron mineralisation. It was moderately successful in helping further define these features.

Hawke Geophysics Pty Ltd completed an overview interpretation of all the geophysical surveys completed in both the Davidson Creek and Robertson Range project areas since 2005. This provided a revised solid geology and structural interpretation of the entire FerrAus Pilbara Project area and identified several potential new iron targets.

Surface geochemical sampling comprising of 354 soil samples were collected from an area south of the main mineralized zone at Davidson Creek, where future infrastructure has been proposed.

A total of 498 RC drillholes for 64,667m was completed within the Davidson Creek project area. This comprised mainly of resource definition drilling at Python-Gwardar, Taipan, Dugite-Tiger and at the Mirrin Mirrin prospect areas, and some greenfields exploration drilling at the Bandy Bandy and Viper prospects. The resource definition drilling at Mirrin Mirrin comprised of 214 RC holes for 29,603m was used in a resource estimate in January 2011. A total of 264 resource definition holes were completed on the main Davidson Creek mineralisation (Python to Tiger) for 28,344m. The balance of the RC drilling included:

- Broad spaced drilling at Bandy Bandy following up on previously defined partially mineralised Marra Mamba Formation. No significant results were returned.
- Broad spaced drilling at the Viper prospect, which defined weakly mineralised Brockman Iron Formation. A best result of 24m @ 54.75% Fe from 44m in DCRC0897 was returned.

A total of 50 diamond drillholes for 6,099.3m were completed in the Davidson Creek area. Of this 26 holes were completed for metallurgical test work at Mirrin Mirrin, Python, Gwardar, Taipan, Tiger and Dugite prospects as part of the PFS study. Eleven (11) holes were completed for geotechnical studies at Python-Gwardar, ten of which twinned RC drillholes to validate RC assays and geology. A single stratigraphic hole was completed at the Viper prospect to



determine that it was indeed the Brockman Iron Formation that was intersected within the RC drilling and that it is most likely the Joffre Member.

An updated resource estimate was carried out in May 2010 by Snowden Mining Industry Consultants (Snowden) for the Davidson Creek resources (Python-Gwardar-Taipan and Dugite-Tiger). Snowden also completed a maiden resource estimate for Mirrin Mirrin in February 2010. With two further resource updates in July and November 2010.

FerrAus Ltd engaged Sinclair Knight Merz Pty Ltd (SKM) in the role of Lead Engineers to provide engineering services and co-ordinate the preparation of a comprehensive PFS on its FerrAus Pilbara Project (Davidson Creek and Robertson Range projects). The finding of the PFS generally confirmed the viability of the FerrAus Pilbara Project based on the current information and assumptions, and based on an ore reserve estimate of 126Mt (measured & Indicated resources) reported in accordance with the guidelines of the JORC Code (2004). The PFS supported a case to proceed with a definitive feasibility study, aimed at further optimizing the technical aspects of the project and confirming its economic viability (SKM, 2010).

### **2011 (to 31 March 2011)**

A program of 12 metallurgical PQ3 diamond drillholes for 1,065.0m was completed at the Davidson Creek deposit, comprising of; Tiger Prospect - 3 drillholes for 197.5m, Dugite Prospect - 1 drillholes for 60m and the Python-Gwardar-Taipan Prospects - 8 drillholes for 807.5m.

A total of 69 RC drillholes were completed for 8,578m with the aim to provide additional resource tonnage verification and associated upgrades in resource confidence levels, through the addition of some along strike exploration within the main Mirrin Mirrin prospect area. The RC drilling comprised of 25 drillholes for 2,748m at the Tiger prospect, 9 RC drillholes for 928 at the Dugite Prospect and 35 RC drillholes for 4,902m at the Mirrin Mirrin prospect.

## **3.6 Project Potential and Mineral Resource Estimate**

The Davidson Creek Iron Project can be classified as a 'Pre-Development' mineral asset where a Mineral Resource has been previously estimated. The commodity item of interest for exploration is primarily goethite-hematite iron mineralisation of the Marra Mamba Formation identified in the Pilbara region. A Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has been reported for Davidson Creek and in section 3.6.1 below. Ravensgate considers the project is of merit and worthy of further exploration and development studies. Ravensgate has reviewed information relating to construction of the block model estimate and the Mineral Resource classification carried out to-date by Snowden. Ravensgate is satisfied that on limited review the tabled tonnes and grade by resource category are reasonable for use for the purposes of this report.

Note Competent Person statements are listed in Section 2.5.

### **3.6.1 Davidson Creek Resource Estimates**

Snowden's have completed a series of resource estimates on the Davidson Creek iron ore deposit. The Mineral Resources were classified in accordance with the 2004 JORC Code. The Davidson Creek iron ore deposit consists of five prospects known as Python, Gwardar, Taipan, Dugite and Tiger. These prospects make up two separate resources, the first includes the Python-Gwardar-Taipan prospects and the second the Dugite-Tiger prospects.

#### **3.6.1.1 Python-Gwardar-Taipan Resource Estimate**

In May 2010 Snowden's completed an updated resource estimate of the Python-Gwardar-Taipan deposit of the Davidson Creek iron ore deposit. The Mineral Resource was classified in accordance with the guidelines of the JORC Code (2004).

FerrAus provided the geological interpretation of the iron mineralisation and host rock units used by Snowden to compile the Davidson Creek resource estimate. The iron mineralisation





consists of two types, primary and hardcap mineralisation (primary mineralisation that has been subject to surface weathering). Snowden estimated Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI CaO, K<sub>2</sub>O, MgO, Mn, S and TiO<sub>2</sub> block grade items using the Ordinary Kriging technique. In-situ bulk density values were assigned to the model blocks by assigning fixed (mean) values based on rock and mineralisation type.

The classified Mineral Resource has been reported either as Measured, Indicated or Inferred using the following two Fe grade ranges provided by FerrAus Limited:

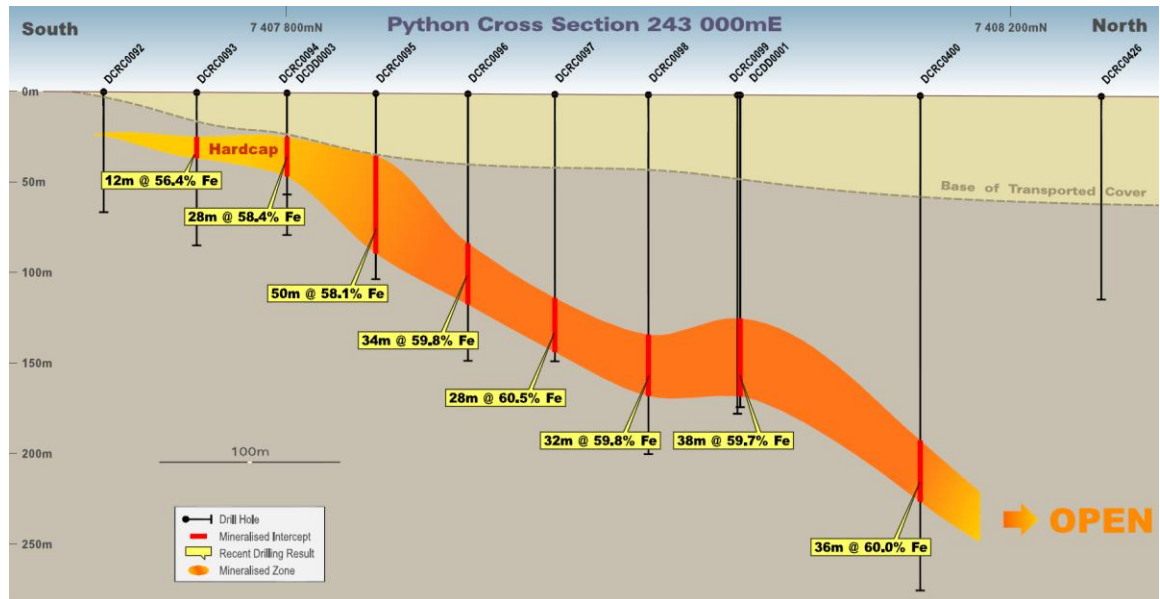
1. Above a 55% Fe lower cut-off grade (Measured, Indicated and Inferred) - “High Grade”.
2. “Medium Grade” - Defined as material grading between 52% Fe and 55% Fe (Indicated and Inferred only). The medium grade material requires beneficiation to upgrade the Fe content and reduce the deleterious elements (primarily Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>) prior to shipping. Metallurgical test work has shown that this material can potentially be upgraded through beneficiation and that ongoing work is being completed to assess the processing options for this material.
3. “Low Grade” - Defined as material grading between 50% Fe and 52% Fe (Inferred Only). This material will be stockpiled with a view to using this material for blending and or beneficiation at a later date.

A classified Python-Gwardar-Taipan Summary Mineral Resource estimate is presented in Table 5 for review and a representative cross section is shown in Figure 6.

<b>Table 5 May 2010 Python-Gwardar-Taipan Iron Mineral Resource Estimates (Graindorge, 2010)</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Python-Gwardar-Taipan	Measured	9.5	58.1	4.31	2.83	0.078	9.12	63.9
	Indicated	91.4	58.7	4.44	2.43	0.082	8.63	64.2
	Inferred	1.7	57.8	4.76	3.29	0.070	8.42	63.1
	<b>Total</b>	<b>102.7</b>	<b>58.6</b>	<b>4.43</b>	<b>2.48</b>	<b>0.082</b>	<b>8.67</b>	<b>64.1</b>
Deposit	Category	Tonnes (Mt)	Medium Grade between Fe 52 % and 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Python-Gwardar-Taipan	Indicated	32.9	53.6	7.99	4.94	0.063	9.29	59.2
	Inferred	1.0	54.1	6.88	5.10	0.072	9.63	59.8
	<b>Total</b>	<b>33.9</b>	<b>53.6</b>	<b>7.96</b>	<b>4.94</b>	<b>0.063</b>	<b>9.30</b>	<b>59.2</b>
Deposit	Category	Tonnes (Mt)	Low Grade between Fe 50 % and 52 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Python-Gwardar-Taipan	Inferred	8.6	51.2	9.46	6.27	0.065	9.91	56.8



Figure 6 Python-Gwardar-Taipan Resource Representative Cross Section 243,000mE



### 3.6.1.2 Dugite-Tiger Resource Estimate

In June 2011 Snowden completed an updated resource estimate of the Dugite-Tiger deposit of the Davidson Creek iron ore deposit. The Mineral Resource was classified in accordance with the guidelines of the JORC Code (2004).

FerrAus provided the geological interpretation of the iron mineralisation and host rock units used by Snowden to compile the Davidson Creek resource estimate. The iron mineralisation consists of two types, primary and hardcap mineralisation (primary mineralisation that has been subjected to surface weathering). Snowden estimated Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI CaO, K<sub>2</sub>O, MgO, Mn, S and TiO<sub>2</sub> block grade items using Ordinary Kriging. In situ bulk density values were assigned to the model blocks by assigning fixed (mean) values based on rock and mineralisation type.

The classified Mineral Resource has been reported either as Indicated or Inferred using the following three Fe grade ranges provided by FerrAus Limited:

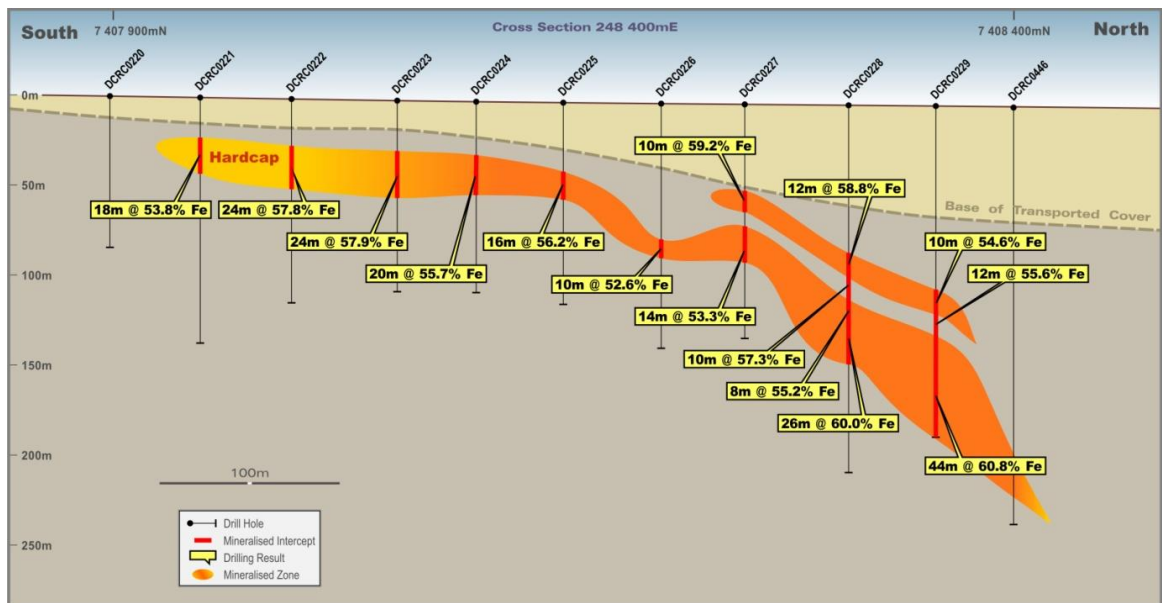
1. Above a 55% Fe lower cut-off grade (Indicated and Inferred) - "High Grade"
2. "Medium Grade" - Defined as material grading between 52% Fe and 55% Fe (Indicated and Inferred). The medium grade material requires beneficiation to upgrade the Fe content and reduce the deleterious elements (primarily Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>) prior to shipping. Metallurgical test work has shown that this material can be upgraded through beneficiation and that ongoing work is being completed to assess the processing options for this material.
3. "Low Grade" - Defined as material grading between 50% Fe and 52% Fe (Inferred Only). This material will be stockpiled with a view to using this material for blending and or beneficiation at a later date.

A classified Dugite-Tiger Summary Mineral Resource estimate is presented in Table 6 for review and a representative cross section is shown in Figure 7.



Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Dugite-Tiger	Indicated	28.7	56.9	5.92	3.11	0.105	8.50	62.2
	Inferred	1.7	57.0	5.41	2.97	0.113	9.41	62.9
	<b>Total</b>	<b>30.5</b>	<b>56.9</b>	<b>5.89</b>	<b>3.10</b>	<b>0.105</b>	<b>8.55</b>	<b>62.2</b>
Deposit	Category	Tonnes (Mt)	Medium Grade between Fe 52 % and 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Dugite-Tiger	Indicated	21.9	53.6	8.26	4.80	0.092	9.00	58.9
	Inferred	2.4	53.3	8.76	4.44	0.119	9.34	58.9
	<b>Total</b>	<b>24.3</b>	<b>53.5</b>	<b>8.31</b>	<b>4.76</b>	<b>0.094</b>	<b>9.04</b>	<b>58.9</b>
Deposit	Category	Tonnes (Mt)	Low Grade between Fe 50 % and 52 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Dugite-Tiger	Inferred	12.8	51.1	9.23	6.54	0.072	9.53	56.5

**Figure 7 Dugite-Tiger Resource Representative Cross Section 248,400mE**



### 3.6.2 Mirrin Mirrin Resource Estimate

In January 2011, Snowden completed a resource update on the Mirrin Mirrin iron ore deposit. The Mineral Resource was classified and finalised during February 2011 in accordance with the 2004 JORC Code.

FerrAus provided the geological interpretation of the iron mineralisation and host rock units used by Snowden to compile the Mirrin Mirrin resource estimate. The iron mineralisation consists of three types, detrital, primary and hardcap mineralisation (primary mineralisation that has been subjected to surface weathering). Snowden estimated Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI CaO,



K<sub>2</sub>O, MgO, Mn, S and TiO<sub>2</sub> block grade items using ordinary kriging. In situ bulk density values were assigned to the model blocks by assigning fixed (mean) values based on rock and mineralisation type.

The classified Mineral Resource has been reported either as Indicated or Inferred using the following three Fe grade ranges provided by FerrAus Limited:

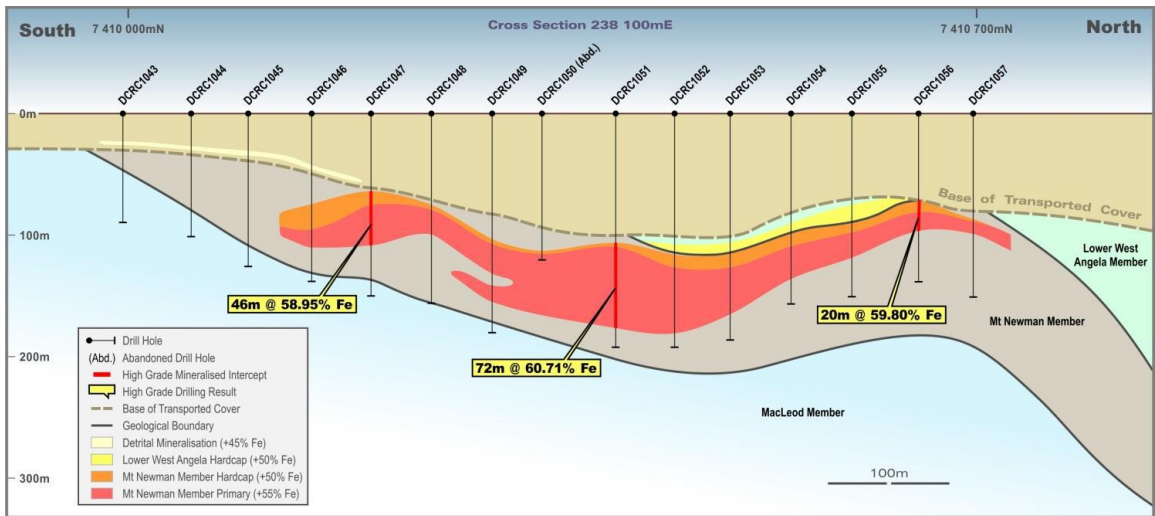
1. Above a 55% Fe lower cut-off grade (Indicated and Inferred) - “High Grade”
2. “Medium Grade” - Defined as material grading between 52% Fe and 55% Fe (Indicated and Inferred). The medium grade material requires beneficiation to upgrade the Fe content and reduce the deleterious elements (primarily Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>) prior to shipping. Metallurgical test work has shown that this material can be upgraded through beneficiation and that ongoing work is being completed to assess the processing options for this material.
3. “Low Grade” - Defined as material grading between 50% Fe and 52% Fe (Inferred Only). This material will be stockpiled with a view to using this material for blending and or beneficiation at a later date.

A summary classified Mirrin Mirrin Mineral Resource estimate is presented in Table 7 for review and a representative cross section is shown in Figure 8.

<b>Table 7 January 2011 Mirrin Mirrin Iron Mineral Resource Estimates (Sulway, 2011)</b>								
Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Mirrin Mirrin	Indicated	33.90	58.94	4.16	2.26	0.101	8.75	64.59
	Inferred	4.80	56.67	6.81	3.42	0.109	8.04	61.64
	<b>Total</b>	<b>38.70</b>	<b>58.66</b>	<b>4.49</b>	<b>2.41</b>	<b>0.102</b>	<b>8.66</b>	<b>64.22</b>
Deposit	Category	Tonnes (Mt)	Medium Grade between Fe 52 % and 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Mirrin Mirrin	Indicated	12.00	53.52	8.43	4.97	0.086	9.23	58.98
	Inferred	8.10	53.62	9.26	4.27	0.123	8.50	58.61
	<b>Total</b>	<b>20.10</b>	<b>53.56</b>	<b>8.76</b>	<b>4.69</b>	<b>0.101</b>	<b>8.94</b>	<b>58.83</b>
Deposit	Category	Tonnes (Mt)	Low Grade between Fe 50 % and 52 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
Mirrin Mirrin	Inferred	4.80	51.25	10.39	6.01	0.080	8.98	56.32



Figure 8 Mirrin Mirrin Resource - Representative Cross Section 238,100mE



### 3.6.3 Davidson Creek Project Potential

Ravensgate considers the Davidson Creek project of merit and worthy of further exploration and studies. The work done to date has identified a number of resources in accordance with the guidelines of the JORC code (2004) at the Python-Gwardar-Taipan, Dugite-Tiger and Mirrin Mirrin prospects. Exploration has been concentrated on these prospects, with only a small amount of reconnaissance drilling having been completed on regionally identified targets. Most targets have been identified through geophysics as they exist under a variable thickness of Tertiary cover. Potential exists for further Marra Mamba Iron Formation hosted iron mineralisation at the Mirrin Mirrin prospect down dip and along strike of the present mineralisation. The Python to Tiger prospect trend has been well explored; potential exists to the east of the Tiger prospect at the Bandy Bandy prospect. At the Viper prospect north of the Tiger prospect the Brockman Iron Formation has been intersected in reconnaissance drilling under +10m of Tertiary cover. At the Monk Prospect the Boolgeeda Iron Formation has been interpreted from geophysics and rock chip samples >60% Fe have been collected.



## 4. ROBERTSON RANGE IRON ORE PROJECT, WESTERN AUSTRALIA

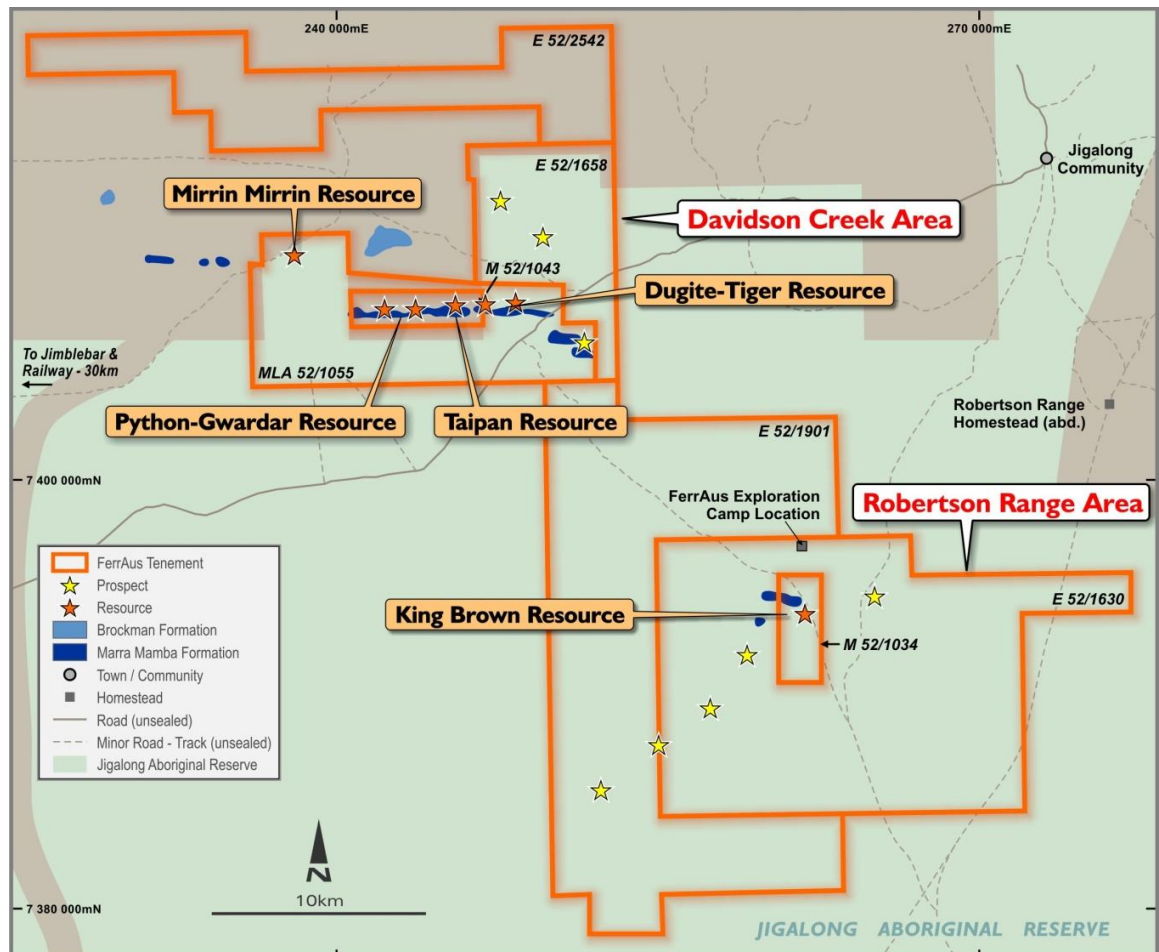
### 4.1 Introduction

The Robertson Range Project is located approximately 100 kilometres east southeast of the town of Newman in the Pilbara Region of Western Australia - Centred at : Latitude of 23° 34'N and Longitude 120° 40'E. In mid 2010 the Robertson Range and Davidson Creek project areas were combined into the FerrAus Pilbara Project, the projects have been treated separately within this report.

### 4.2 Tenure and Physiography

The Robertson Range Project is comprised of two granted exploration licenses and one granted mining licence with a total area of 424.91km<sup>2</sup>. Australian Manganese Pty Ltd a wholly owned subsidiary of FerrAus Limited owns and manages 100% of the project. The tenements are part covered by the Jigalong Aboriginal Reserve. A tenement schedule is presented in Table 15 with a locality map of the tenements presented in Figure 9.

Figure 9 FerrAus Limited Tenement Location Plan - Robertson Range Iron Project







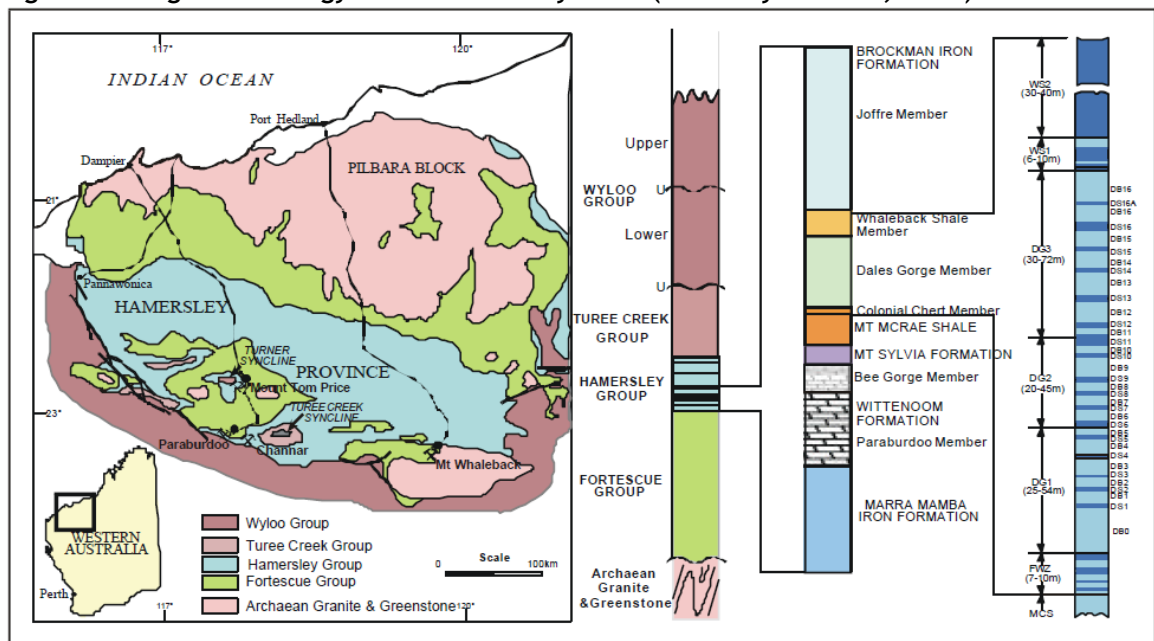
### 4.3 Geology and Mineralisation

#### 4.3.1 Regional Geology

The Robertson Range Project is located on the eastern margin of the east-west trending Hamersley Province, which covers an area of about 150,000km<sup>2</sup> of the Pilbara Craton in Western Australia. The Hamersley Province consists predominantly of late-Archaean and Lower Proterozoic (2,800-2,300Ma) sedimentary rocks situated between the large Archaean Yilgarn and Pilbara Cratons. The rocks have undergone a complex structural evolution, with the dominant event resulting in the development of major folds and thrusts associated with north directed thrusting (Ophthalmia Orogeny).

The geology of the Hamersley Province is broadly composed of a basement sequence of poorly exposed Archaean granitoid/greenstone rocks of the Sylvania Inlier, which represents the oldest stratigraphy in the project area. This sequence forms the core of an east dipping regional scale anticline. Overlying the granite/greenstone basement unconformably are the shales, sandstones, minor cherts and volcanic sequences of the Archaean Fortescue Group. Conformably overlying on the Fortescue Group is an Archaean and early Proterozoic sequence known as the Hamersley Group (Figure 10).

Figure 10 Regional Geology of the Hamersley Basin (after Taylor et al., 2001)



The Fortescue Group, Hamersley Group and younger units envelop a core of Sylvania Inlier basement rocks. These units consistently dip at 35-45° towards the north at the Davidson Creek area, and mostly at 25-35° to the east and southeast at the Robertson Range area, representing the northern and south-eastern limbs respectively of a regional scale anticline that dominates both areas.

The Hamersley Group consists of Banded Iron Formation (BIF), dolomite, shale and felsic volcanic rocks, all of which have been variously intruded by dolerite sills and dykes. The group is divided into seven Formations; Marra Mamba Iron Formation, Wittenoom Formation, Mt Sylvania Formation, Brockman Formation, Weeli Wollie Formation, Woongarra Formation and Boolgeeda Iron Formation.

The Marra Mamba Iron Formation is the lower most Formation in the Hamersley Group and is the host of the most significant supergene derived iron ore deposits in the Province, such as



Newman, Area C, Marandoo and West Angeles. The Formation is divided into the Nammuldi, McLeod and Mount Newman Members. The Mount Newman Member is the host to the major deposits, and consists of a thick succession of BIF, shale and carbonate rocks.

The Brockman Iron Formation consists of BIF, shale and chert and is sub-divided into the Dales Gorge, Mt Whaleback, Joffre and Yandicoogina Shale Members. The Dales Gorge Member is the host to the majority of iron ore mineralisation, with Tom Price, Paraburdoo, Whaleback and Rhodes Ridge being typical examples.

In the Tertiary, a series of erosion-deposition-hardpanisation (ferricrete) cycles resulted in three regionally extensive Hamersley surfaces, which can contain economic Detrital Iron Mineralisation. These surfaces have subsequently been eroded, often preserving remnants of the Hamersley surfaces in mesas.

The Hamersley Province has undergone a complex deformation history, comprising of at least five recognised deformation events ( $D_1$ - $D_5$ ) described below:

$D_1$  is indicated by layer parallel isoclinal folds and boudinage of chert and BIF horizons. The event is widespread, but does not appear to significantly disrupt stratigraphy. The structures are interpreted to have developed as a result of extension and compaction within the early basin.

$D_2$  (Ophthalmia Orogeny) was the most significant event to affect the Hamersley Province. It was the most intense along the southern margin of the Province and resulted in the development of thrusts and local tight folds with axial planes that dip shallowly to moderately to the south. These features resulted from south-over-north closure of the Hamersley Basin structures.

$D_3$  (Ashburton Orogeny) was responsible for producing the regional scale east-west to northwest-southwest trending folds that dominate the structural pattern of the northern and central parts of the Hamersley Province. These folds and their associated thrusts accommodate north-south shortening across the province.

The following  $D_4$  and  $D_5$  events produced upright, open folds that combined with the  $D_3$  folds to produce local dome and basin fold patterns.

Iron Ore Mineralisation in the Hamersley Province is divided into three types of iron deposits being Bedded (BID), Channel (CID) and Detrital (DID) Iron Deposits.

Bedded Iron Deposits are predominantly developed within the Mt Newman Member of the Marra Mamba Formation and the Dales Gorge Member of the Brockman Iron Formation. Supergene enrichment is generally accepted as the genesis of these deposits. Supergene alteration resulted in the development of goethite-martite ores. Another style of deposit may develop where supergene mineralisation is metamorphosed by burial metamorphism, with the goethite-martite mineralisation being converted to microplaty hematite.

Channel Iron Deposits represent alluvial deposits rich in ferruginous fragments, which were eroded from the country rock and deposited in river channels incised into the Hamersley Ranges. CID's are characteristically comprised of pelletoids (<2mm ferruginous spheroids), peloids (massive, goethite-rich fragments) and ferruginous wood fragments. The deposits are often upgraded within the channel deposits by goethitic cement.

Detrital Iron Deposits develop as the result of deposition of eroded BID, typically from the upper portions of the three Hamersley Surfaces. They may contain a range of clast types, sometimes with later goethitic cementation. Economic deposits DID mineralisation are usually restricted to the upper most Hamersley Surface.

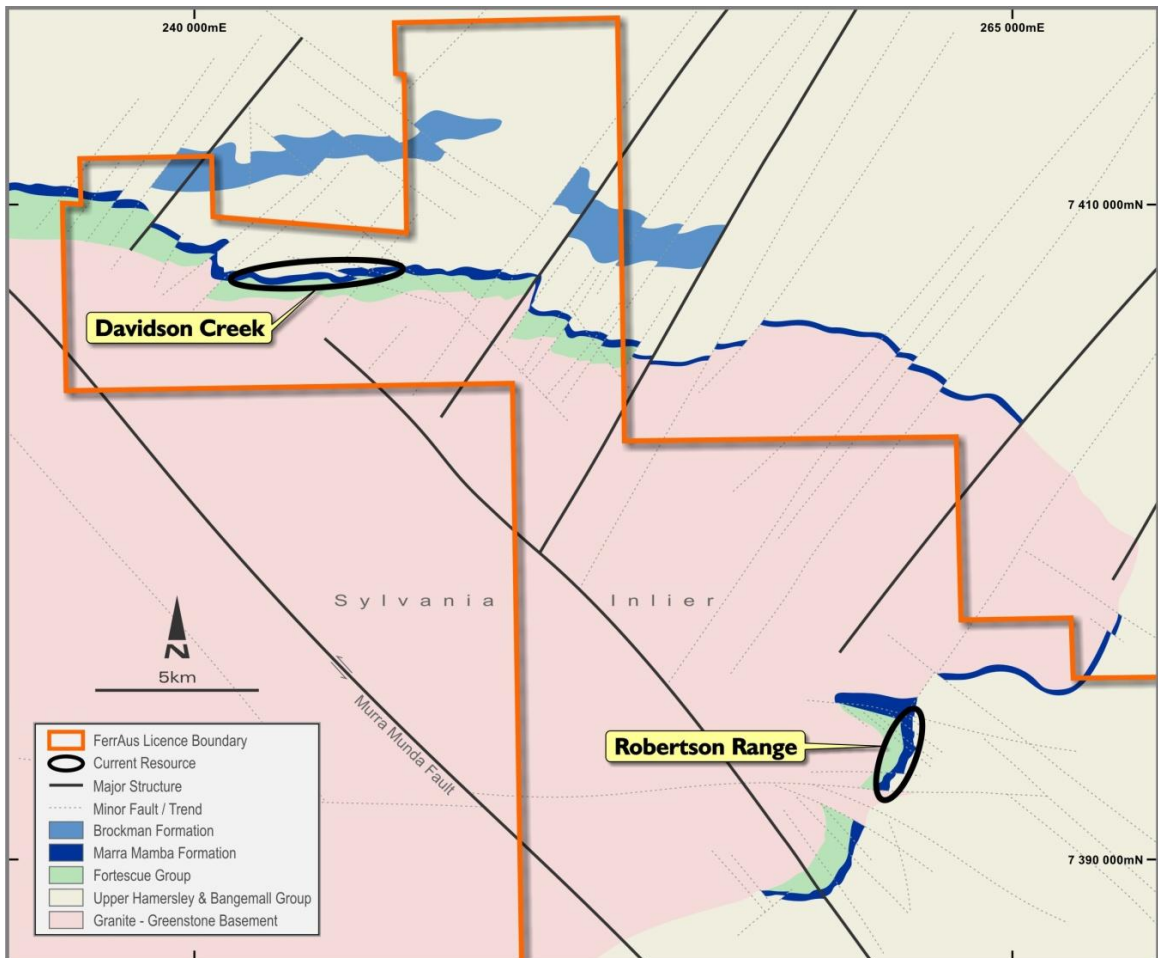
#### 4.3.2 Local Geology

The Robertson Range (King Brown Deposit) mineralisation is hosted predominantly within the Mount Newman Member of the Marra Mamba Iron Formation (Figure 11). Lesser amounts of iron mineralisation have also been identified in the overlying West Angela Member of the Wittenoorn Formation. The Marra Mamba Iron Formation is the basal member of the Hamersley Group and is divided into three members, Mount Newman, McLeod and Nammuldi (Figure 12).





Figure 11 Robertson Range Iron Project Local Geology



The Mount Newman Member is about 50m thick, surface outcrop is restricted to the northern end of the King Brown deposit where the mineralisation is exposed at the surface. Aside from this area, the mineralisation and immediate host rocks are all covered by a veneer of sand at the surface. This layer of sand progressively becomes thicker to the east where it is up to 80m thick.

The King Brown deposit is located on the eastern limb of a regional scale anticline. The mineralisation parallels the stratigraphy, trends approximately north-south and dips to the east at about 25°, with a total strike length of about 2.3km. Apart from the regional scale anticlinal folding, the two main structural features present in the King Brown deposit area are:

- An east-west trending dextral fault which has offset the southern quarter portion of the mineralisation by about 400m to the west (SW Zone).
- A second east-west dextral fault which effectively forms a southern limit to the mineralisation. To the south of this second fault the stratigraphy is made up of Archaean granite and greenstone rocks of the Sylvania Inlier. The extent of the strike slip offset or the location of the Marra Mamba Iron Formation stratigraphy has not yet been determined.

The iron mineralisation in the King Brown deposit principally consists of:

- Scattered discrete lenses of hematite (martite)-goethite hosted within the shale dominated West Angela Member.
- Continuous hematite (martite)-goethite tabular lenses which are up to 30m thick hosted within the Mount Newman Member.



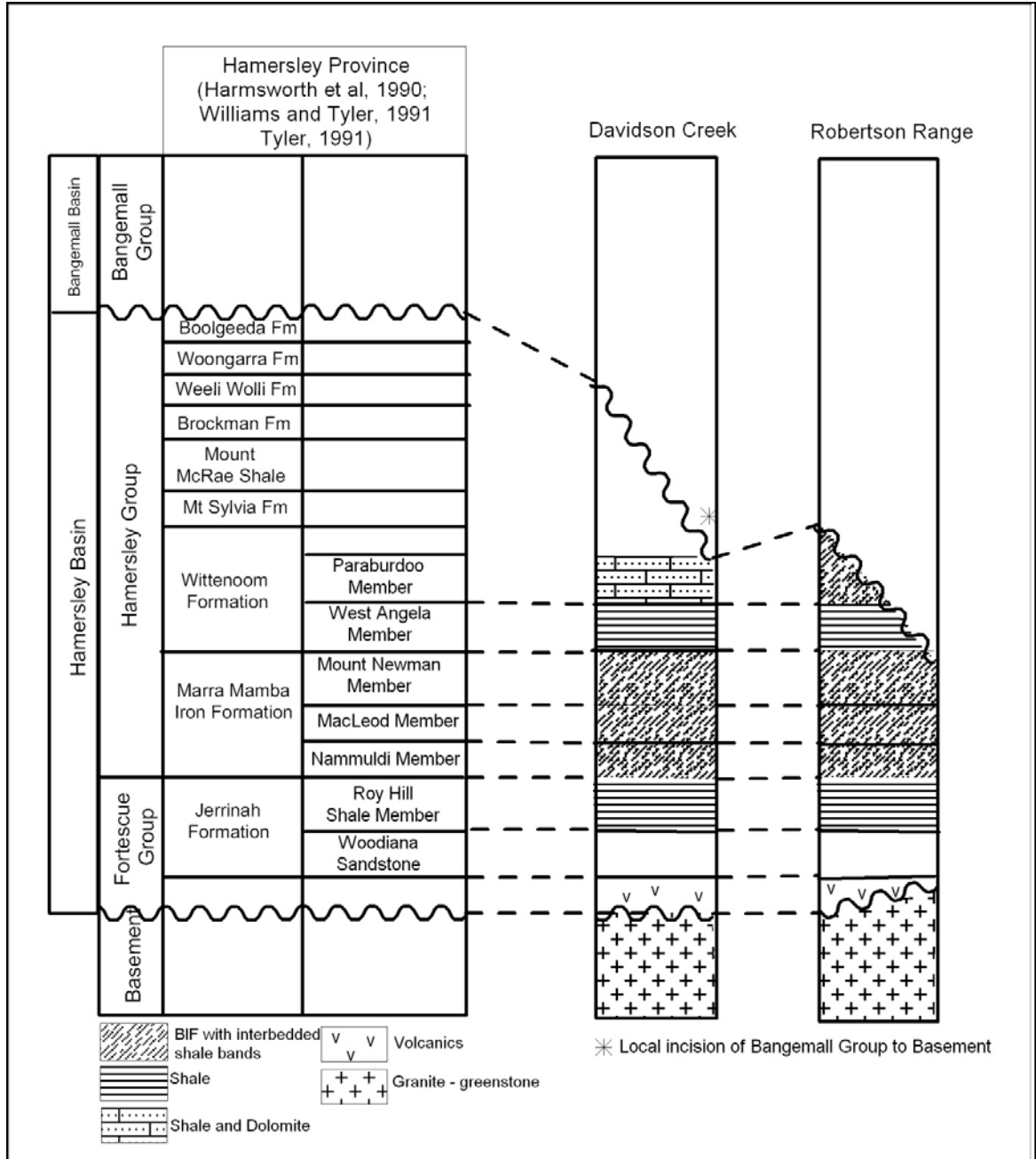
- Detrital mineralisation made up of angular hematite-goethite clasts hosted within hematite clay matrix.

This mineralisation hosted by the West Angela and Mount Newman Members has been further locally classified as “hardcap” or the deeper “primary” mineralisation. Hardcap mineralisation represents primary mineralisation, which has been subject to surface weathering processes and as a consequence has a typically vuggy texture. This weathered mineralisation contains varying amounts of siliceous and vitreous goethite and clays and as a consequence often contains elevated alumina levels ( $>2.5\% \text{Al}_2\text{O}_3$ ).

Strataform lenses of manganiferous shale ( $>1.5\% \text{Mn}$ ) sit largely within the hangingwall of the iron mineralisation within the West Angela Member.



**Figure 12 Stratigraphy of the Davidson Creek and Robertson Range Iron Projects and Comparison with Main Hamersley Province (Note thicknesses are schematic only - not to scale)**



#### 4.4 Exploration History

The project area has been previously explored for iron ore. CRA Exploration Pty Ltd on behalf of Hamersley Iron Pty Ltd originally applied for tenements in 1988, which were granted in 1993. Exploration work was delayed by negotiations over access to the project until 1996. Details of exploration are summarised in Table 8 below.



**Table 8 Exploration History - Hamersley Area - Robertson Range Iron Project**

Date	Company	Findings
1996-1999	Hamersley Iron Pty Ltd	Explored the area for Iron ore completing a high resolution aeromagnetic survey, airphoto geological mapping and other geological studies.
1999-2000	Hamersley Iron Pty Ltd	Completed Aboriginal ethnographic and archaeological clearance surveys, an environmental survey, reconnaissance rock chip sampling, and ground gravity survey, geophysical modelling. Reverse circulation (RC) drilling was undertaken at geophysical targets, Marra Mamba anomaly and down dip extensions of Marra Mamba mineralisation.  Hamersley estimated a resource.

#### 4.5 Current Exploration 2005 - 2011

FerrAus applied for and was granted on the 25 August 2005 exploration licence E52/1630 at Robertson Range.

##### 2005

Compilation and evaluation of historical data.

From late October to early December, a total of 96 RC holes (RRRC0001-RRRC0096) were drilled for 3,606m.

Following the drilling completed in late 2005, RSG Global was commissioned to prepare a resource estimation, which was completed in March 2006, resulting in reporting a maiden inferred resource in accordance with the JORC Code (2004) of 16.26Mt at 56.8% Fe, 6.31% SiO<sub>2</sub>, 3.55% Al<sub>2</sub>O<sub>3</sub> and 0.090% P at a cut off of 54% Fe.

Infill drilling was undertaken during May and June with a total of 51 vertical RC holes (RRRC0097-RRRC0147) drilled for 3,504m.

##### 2007

A total of 12 diamond core holes were completed for 775.3m, Firstly a program of seven PQ core holes (RRDD001-RRDD007) was completed for 406.5m to obtain samples for preliminary metallurgical testing over the main mineralised zone at the Robertson Range resource. A second program of five HQ hole (RRDD008-RRDD012) was completed for 368.8m. The drillholes twinned existing RC drillholes to confirm assay results received from these holes.

Two programs of RC drilling were completed for a total of 107 holes for 8,572m. Drilling was completed on 100m spaced lines with a drillhole spacing of 50m and 100m.

A ground gravity survey was carried out in the Robertson Range Project area. The survey was completed by Haines Surveys between July and October 2007. The completed survey comprised of 5,320 gravity stations on 89 lines.

##### 2008

Between July and August 2008 Haines Surveys completed a second round of ground gravity surveys at the Robertson Range project complementing the 2007 survey. The survey component consisted of 1,841 detailed gravity stations on 61 lines. The gravity surveys were responsible for identifying buried mineralisation at Robertson Range which resulted in the discovery of iron ore mineralisation.

A significant push in exploration and resource definition drilling in the Robertson Range project saw extensive RC drilling and some diamond drilling completed. A total of 273 RC holes were



completed for 28,324m of which a total of 173 RC holes for 18,205m were aimed at drill testing depth and strike extensions to existing iron mineralisation specifically at the Robertson Range resource area. Some additional infill drilling was used to better define existing mineralisation. A total of 95 reconnaissance RC drillholes for 10,119m were completed over a number of gravity anomalies defined by the gravity geophysical survey in 2007 (Feather Boa prospect).

At the Robertson Range deposit, 19 diamond core holes from surface for 2,199.5m were completed in conjunction with 19 diamond tails for 1,435.2m designed as extensions of existing RC drillholes. The diamond drilling aimed to test extensions to iron mineralisation both along strike and down dip. The drilling was also aimed to test mineralisation where previous RC drilling had been ineffective. A set of 7 of the diamond holes were used for geotechnical purposes, 3 were twin drillholes of existing RC drillholes and 2 were completed for the purpose of metallurgical test work. The geotechnical drillholes were drilled near proposed pit boundaries for use in pit planning. The twin drillholes of existing RC drillholes was used to validate and confirm RC results below the water table. Much of the mineralisation at the Robertson Range resource is situated beneath the water table.

RC and Diamond drilling conducted in the Robertson Range project in 2008 were incorporated into resource estimates compiled by Coffey Mining Pty Ltd. Several resource estimate updates were completed in accordance with the guidelines of the JORC Code (2004) resulting in an indicated and inferred resource at a 55% Fe lower cut-off for the Robertson Range Main Zone of approximately 39.9Mt @ 58.8% Fe, 4.83% SiO<sub>2</sub>, 2.79% Al<sub>2</sub>O<sub>3</sub>, 0.111% P and 7.59% LOI. An inferred resource at a 55% Fe lower cut-off for the Robertson Range South West Zone was estimated at 10.1Mt @ 59.1% Fe, 6.0% SiO<sub>2</sub>, 3.4% Al<sub>2</sub>O<sub>3</sub>, 0.09% P and 5.5% LOI.

## 2009

Exploration completed included rock chip sampling in conjunction with geological mapping. Samples were taken from mineralised outcrop in the Robertson Range area of M52/1034.

During October 2009, an airborne magnetic and radiometric survey was completed over almost the entire project area. The survey was completed by Thomson Aviation of Griffith, NSW. The survey aimed at identifying previously unidentified occurrences of Marra Mamba and Brockman Formation stratigraphy under recent transported cover, and to better understand the local structural framework. Data was collected on 100m spaced north-south lines, with east-west tie lines run at 1,000m spacing. The data identified several targets for follow up drilling.

Aircore drilling was trialled during 2009 with 72 aircore drillholes for 3,322m completed in the project area. The drilling targeted anomalies generated from aeromagnetic imagery and from existing drillhole and geological information. The aeromagnetic targets were interpreted to be the Marra Mamba stratigraphy buried under transported cover. A deep channel at the Southern end of the Robertson Range resource containing detrital mineralisation was tested to the south.

RC drilling comprised 26 holes for 3,438m, where 14 holes further tested the extent of the detrital iron mineralisation shed from the southern portion of the Robertson Range deposit (SW Zone). Twelve (12) RC drillholes were also completed in the SW Offset Zone to the southwest of the Robertson Range deposit, following successful aircore drilling of aeromagnetic anomalies thought to be offset portions of Marra Mamba Formation buried under recent transported cover.

A prefeasibility study (PFS) was initiated in late 2009 looking at both the resources in the Robertson Range and Davidson Creek projects.

## 2010

Hawke Geophysics Pty Ltd completed an overview interpretation of all the geophysical surveys completed in both the Robertson Range and Davidson Creek project areas since 2005. This provided a revised solid geology and structural interpretation of the entire FerrAus Pilbara Project area and identified several potential new iron targets.

A total of 38 RC drillholes for 4,214m were completed within the Robertson Range area. At the Mulga prospect 15 holes were drilled to test an aeromagnetic anomaly thought to be Marra Mamba Formation. Partially mineralized iron formation BIFs were identified, best results were



8m @ 55.25% Fe from 48m in RRRC0697 and 6m @ 56.9% Fe from 30m in RRRC0698. At the Keelback prospect 20 drillholes were completed to test an aeromagnetic anomaly thought to be Marra Mamba or Brockman Formations. The drilling intersected Proterozoic siltstones, mudstones and magnetic dolerite sills of the Manganese Sub-Group. No in-situ Fe mineralisation was evident. The three remaining holes were for geotechnical holes located along strike of the ore body of the King Brown prospect.

Within the Robertson Range area a total of 25 diamond drillholes were completed for 1,999.0m for metallurgical (20 holes) and geotechnical (5 holes) studies at the King Brown prospect.

An updated resource estimate was calculated in February by Snowden for the Robertson Range resource (King Brown and SW Zone deposits).

FerrAus Ltd engaged Sinclair Knight Merz Pty Ltd (SKM) in the role of Lead Engineers to provide engineering services and co-ordinate the preparation of a comprehensive PFS on its FerrAus Pilbara Project (Davidson Creek and Robertson Range projects). The finding of the PFS generally confirmed the viability of the FerrAus Pilbara Project based on the current information and assumptions, and based on an ore reserve estimate of 126Mt (measured & Indicated resources) reported in accordance with the guidelines of the JORC Code (2004). The PFS supported a case to proceed with a definitive feasibility study, aimed at further optimizing the technical aspects of the project and confirming its economic viability (SKM, 2010).

#### **2011 (to 31 March 2011)**

Reverse Circulation drilling was completed at the King Brown prospect where 39 drillholes were completed for 5,276m targeting additional tonnes through extensional infill drilling, along strike and down dip. At Bardick, an area adjacent to the King Brown Deposit, where there are untested surficial iron ore occurrences, 26 RC drillholes were completed for 2,880m.

### **4.6 Project Potential and Mineral Resource Estimate**

The Robertson Range Iron Project can be classified as a 'Pre-Development Area' mineral asset where a Mineral Resource has been estimated. The commodity item of interest for exploration is primarily goethite-hematite iron mineralisation of the Marra Mamba Iron Formation in the Pilbara region. A Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has been reported as below in Table 9. Ravensgate considers the project is of merit and worthy of further exploration and study. Ravensgate has reviewed information relating to construction of the block model estimate and the Mineral Resource classification methods used by Snowden. Ravensgate is satisfied that on limited review the tabled tonnes and grade by resource category are reasonable for use for the purposes of this report.

#### **4.6.1 King Brown Resource Estimate**

In February 2010, Snowden completed a resource update on the King Brown iron ore deposit (also known as the Robertson Range deposit). The Mineral Resource was classified and finalised during February 2010 in accordance with the JORC Code (2004).

FerrAus provided the geological interpretation of the iron mineralisation and host rock units used by Snowden to compile the King Brown resource estimate. Snowden also interpreted a Mn mineralisation envelope based on a 1.5% Mn delineation threshold.

During the modelling process it was observed that the iron mineralisation consists of three types, detrital, primary and hardcap mineralisation (primary mineralisation that has been subject to surface weathering). Snowden estimated Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI CaO, K<sub>2</sub>O, MgO, Mn, S and TiO<sub>2</sub> block grades using ordinary block kriging. In situ bulk density values were assigned to the model blocks by assigning fixed (mean) values based on rock and mineralisation type.

The classified Mineral Resource has been reported either as Measured, Indicated or Inferred using a 55% Fe cut-off.

A summary classified King Brown Mineral Resource estimate is presented in Table 9 and a representative cross section can be seen in Figure 13.

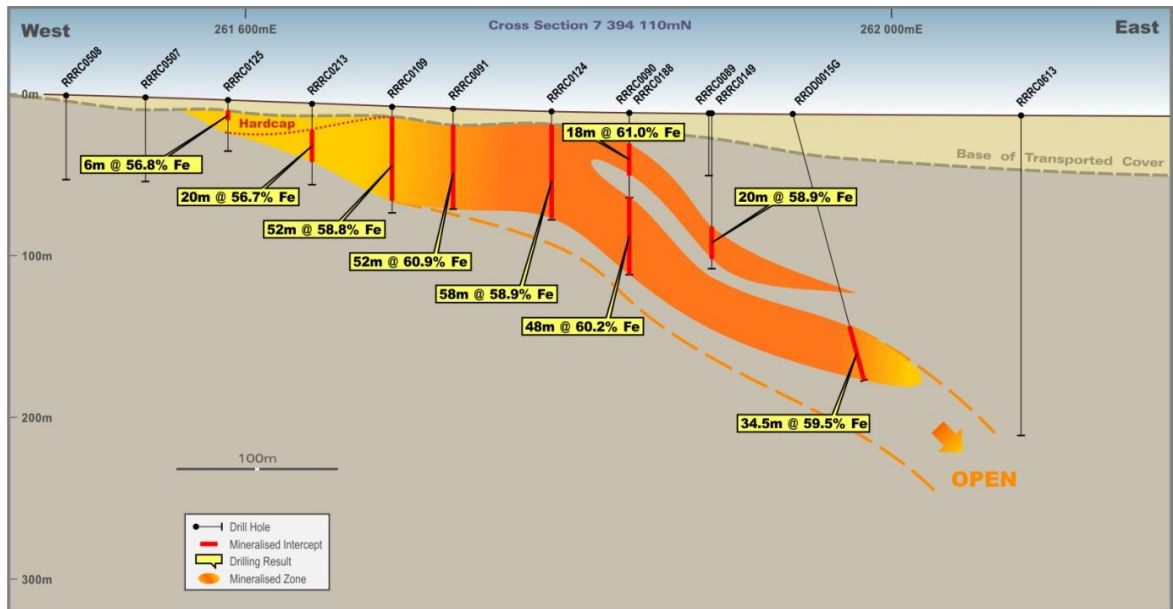




**Table 9 February 2010 King Brown Iron Mineral Resource Estimate (Sulway, 2010)**

Deposit	Category	Tonnes (Mt)	High Grade at Fe > 55 %					
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %	CaFe %
King Brown	Measured	23.40	58.93	4.54	2.71	0.109	7.69	63.84
	Indicated	20.70	58.98	5.40	2.99	0.104	6.48	63.07
	Inferred	10.60	58.11	6.56	3.37	0.097	6.15	61.93
	<b>Total</b>	<b>54.60</b>	<b>58.79</b>	<b>5.26</b>	<b>2.94</b>	<b>0.105</b>	<b>6.93</b>	<b>63.18</b>

**Figure 13 King Brown Resource - Representative Cross Section 7,394,110mN**



**4.6.2 Robertson Range Project Potential**

Ravensgate considers the Robertson Range project of merit and worthy of further exploration and studies. The work done to date has identified a resource in accordance with the guidelines of the JORC code (2004) at the King Brown prospect. Exploration has been concentrated on this prospect, with only a small amount of reconnaissance drilling having been completed on regionally identified targets. Most targets have been identified through geophysics as they exist under a variable thickness of Tertiary cover. Potential exists for further Marra Mamba Iron Formation hosted iron mineralisation at the Mulga, Bandick, Feather Boa, Adder and Keelback prospects. There are also opportunities for Brockman Iron Formation targets at the Keelback prospect and generally east of the King Brown prospect. A large portion of the Robertson Range tenure in the west is not prospective being underlain by the Archaean basement rocks of the Sylvania Inlier.



## **5. ENACHEDDONG MANGANESE PROJECT, WESTERN AUSTRALIA**

### **5.1 Introduction**

The project is located in Western Australia approximately 400km south east of Port Hedland and 65km south of the Woodie Woodie Manganese mine - Centred at: Latitude of 22° 11'N and Longitude 121° 14'E. The project can be accessed from Newman via the unsealed old Great Northern Highway to Marble Bar followed by the Ripon Hills sealed road to Telfer to Woodie Woodie and from Woodie Woodie south for 65km on unsealed station tracks.

### **5.2 Tenure and Physiography**

The project consists of one granted exploration licence E46/614 with an area of 104.68km<sup>2</sup>. FerrAus Manganese Pty Ltd a wholly owned subsidiary of FerrAus Limited owns and manages 100% of the project. A tenement schedule is presented in Table 15.

### **5.3 Geology and Mineralisation**

#### **5.3.1 Regional Geology**

Regionally, the area falls within the mid-Proterozoic Bangemall Basin, which comprises a thick metasedimentary sequence of mainly clastic rocks, present along the southeastern margin of the Pilbara Craton. The southeastern part of the Bangemall Basin is occupied by a northerly trending rock sequence called the Manganese Sub-group.

The Manganese Sub-group comprises the basal Coondoon Formation, Woblegun Formation, Stag Arrow Formation, Enacheddong Dolomite, Jigalong Formation, Balfour Formation and Whitewood Formation. These seven members comprise shales, sandstones, cherts, conglomerate and dolomites.

Within the Balfour Formation, distinctive green shale is manganese enriched, whilst other members are prospective for manganese.

#### **5.3.2 Local Geology**

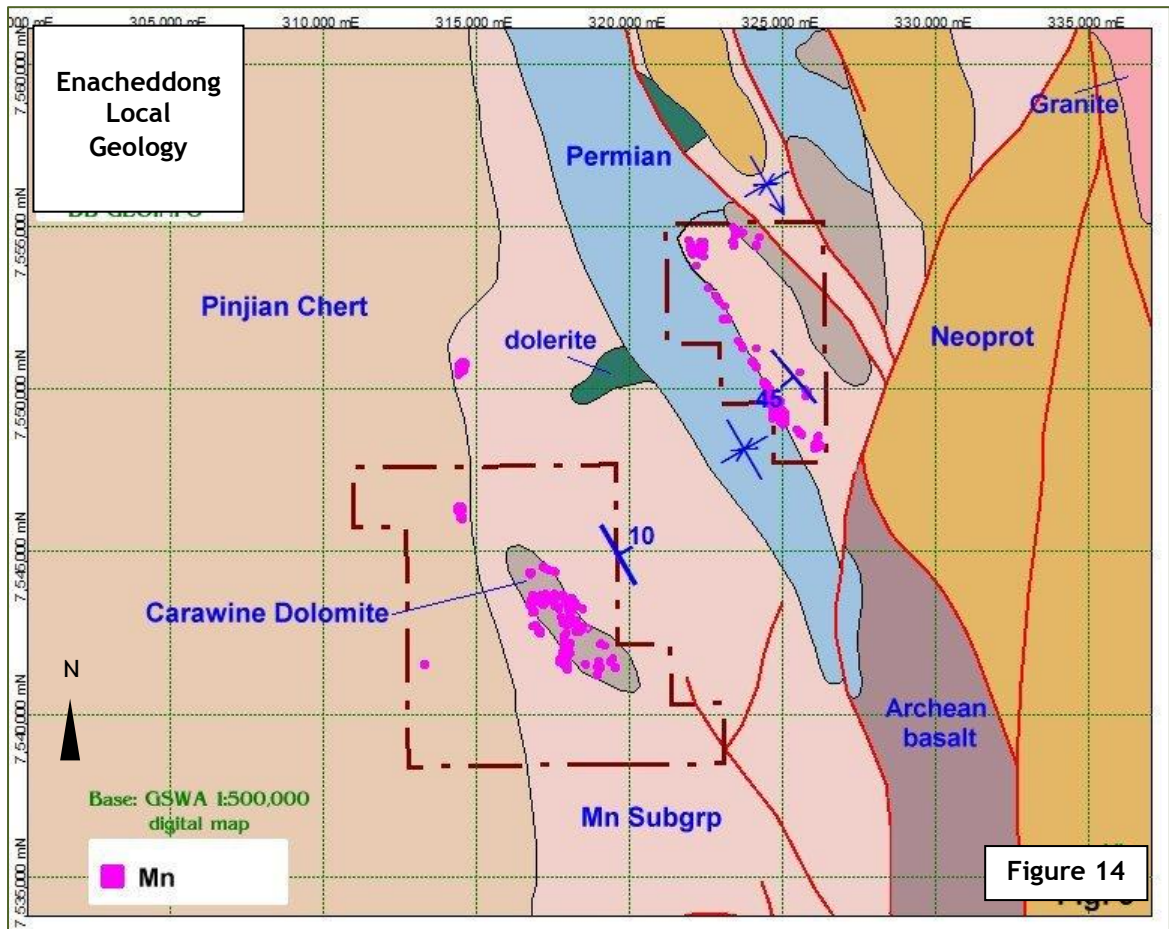
The geology of the project area comprises conglomerates, sandstones, shales and siltstones of the Manganese Sub-group which is overlain by Carawine Dolomite, with outcrops of Pinjian Chert Breccia (Figure 14).

These Pre-Cambrian sequences are overlain by an extensive cover of Tertiary deposits. The project area covers an interpreted synformal structure.





Figure 14 Enacheddong Manganese Project Area - Local Geology



### 5.3.3 Mineralisation

Manganese concentrations in this area appear to have been formed by supergene enrichment of manganese sediments. These include the Carawine Dolomite and Marra Mamba Iron Formation of the Hamersley Group, the Roy Hill Shale Member of the Jeerinah Formation (Fortescue Group) and the Balfour Formation of the Manganese Subgroup, within the Bangemall Group.

There may have been two phases of enrichment. The first of these possibly occurred during a period of deep weathering after the initial uplift of the Hamersley Basin. Deposits which may be related to this event are Ripon Hills, Skull Springs, Ant Hill, Mount Cooke, and Sunday Hill. At these localities surface sheets and lens-shaped mounds have formed over the Pinjian Chert Breccia, a Proterozoic residual deposit formed over the Carrawine Dolomite. At Mount Cooke the mineralisation outcrops continuously for over 150m with a maximum thickness of 30m. Some of these deposits dip beneath sediments of the Manganese Group, attesting to their Proterozoic age.

Cavity-fill manganese deposits are another style of mineralisation that may have developed at this time. These deposits were formed when pre-existing caverns in the Carawine Dolomite were filled with manganese ore deposited from solution; they have constituted important metallurgical-grade orebodies. At Mount Sydney, cavities and planes of weakness along fault zones have been filled with manganese ore. By 1971 these deposits had yielded almost 565,000 tonnes of ore at an average grade of 49% Manganese.

The Woodie Woodie deposits are also cavity-filling. In the main open cut, a large pipe-like cave filling has been mined to a depth of 30 m. Other deposits occur as fissure fillings or as cappings



on the overlying Pinjian Chert Breccia. These deposits have produced 55,560 tonnes of ore, averaging 46% Manganese.

The second enrichment phase took place during the Tertiary, probably at the time that iron enrichments were being produced elsewhere in the Pilbara region. Numerous residual manganese deposits were incorporated in siliceous or ferruginous duricrusts which formed cappings over various manganese shales, in particular those of the Balfour Formation. The shales of this unit contain pellets of braunite dispersed along bedding planes.

At the Mount Cooke mining centre on the Davis River the Balfour Formation has undergone supergene enrichment forming mound and sheet-like orebodies which overlie the Pinjian Chert Breccia.

Residual manganese and ferromanganese deposits at Mount Nicholas have formed mainly in ferruginous duricrust developed over the Marra Mamba Iron Formation. Mining was last recorded in 1966. A total of 3,642 tonnes at an average grade of 45% Manganese was extracted.

The Nimingarra deposit on the lower De Grey River is composed of massive colloform and pisolitic pyrolusite. The ore is incorporated in Tertiary duricrust overlying Archaean banded iron-formation. Almost 19,700 tonnes at an average grade of 46% Manganese were mined before 1963.

**5.4 Exploration History**

The previous exploration history in the Enacheddong project area is summarised in Table 10.

<i>Table 10 Exploration History - Enacheddong Manganese Project Area</i>		
Date	Company	Findings
1977	Australia New Zealand Exploration Company (ANZECO)	Carried out aerial exploration for manganese and identified several promising manganese occurrences just outside the tenement area and at Enacheddong Creek some 50km south of the Woodie Woodie deposits. This work was followed up by reconnaissance mapping and sampling. Drilling was recommended, but due to low manganese prices no drilling was conducted.

**5.5 Current Exploration History for 2006-2011**

**2006**

A desktop review was completed as well as some geological mapping and rock chip sampling.

**2007**

A high resolution Digital Elevation Model (DEM) and Versatile Time Domain Electromagnetic (VTEM) survey was completed over the tenement and followed up by DDIP lines over prospective areas. Based on the results of this survey an RC drilling program was planned.

**2008**

Exploration was comprised of surface geological mapping, interpretation of VTEM and DDIP geophysical surveys. An RC drilling program was completed comprising of 22 drillholes, no significant results were returned.

**2009**

The analysis from the five rock chip samples collected in 2007- 2008 were received, the results ranged from 2.12 to 32.10% Mn. A data review was also undertaken during this period.



## 2010

Surface geological mapping of the tenement area was undertaken as well as the collection of 76 rock chip samples. Assay results from 69 of the rock chip samples returned Mn results in a range from 4.1 to 57.5% Mn with 23 of these samples returning results over 40% Mn. Seven samples were assayed for copper and gold.

## 2011

RC drilling commenced in mid June and is still in progress and is due for completion mid July. The drilling is a first pass over newly identified reconnaissance targets. To date approximately 2,700m over 5 areas with drillholes displaying weak-strong alteration associated with Woodie Woodie style manganese.

### 5.6 Project Potential

The Enacheddong Manganese Project can be classified as an 'Exploration Area' mineral asset where a Mineral Resource has not been estimated. The project is at an early stage of exploration, with a number of targets identified by geological mapping and rock chip sampling. The commodity item of interest for exploration is primarily psilomelane and pyrolusite manganese mineralisation. The project geologically has stratigraphic similarities to the Woodie Woodie deposits held by Consolidated Minerals. Ravensgate considers the project is of merit and worthy of further exploration and studies.



## 6. VALUATION

### 6.1 Introduction

There are a number of recognised methods used in valuing “mineral assets”. The most appropriate application of these various methods depends on several factors, including the level of maturity of the mineral asset, and the quantity and type of information available in relation to the asset. All monetary values included in this report are expressed in Australian dollars (A\$) unless otherwise stated.

The Valmin Code, which is binding upon “Experts” and “Specialists” involved in the valuation of mineral assets and mineral securities, classifies mineral assets in the following categories:

- Exploration Areas refer to properties where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified.
- Advanced Exploration Areas refer to properties where considerable exploration has been undertaken and specific targets have been identified that warrant further detailed evaluation, usually by some form of detailed geological sampling. A JORC compliant mineral resource may or may not have been estimated but sufficient work will have been undertaken that provides a good understanding of mineralisation and that further work will elevate a prospect to the resource category. Ravensgate considers any identified Mineral Resources in this category would tend to be of relatively lower geological confidence.
- Pre-Development Projects are those where Mineral Resources have been identified and their extent estimated, but where a positive development decision has not been made. This includes projects at an early assessment stage, on care and maintenance or where a decision has been made not to proceed with immediate development.
- Development Projects refers to properties which have been committed to production, but which have not been commissioned or are not operating at design levels.
- Operating Mines are those mineral properties, which have been fully commissioned and are in production.

Various recognised valuation methods are designed to provide the most accurate estimate of the asset value in each of these categories of project maturity. In some instances, a particular mineral property or project may include assets that comprise one or more of these categories. When valuing Exploration Areas, and therefore by default where the potential is inherently more speculative than more advanced projects, the valuation is largely dependent on the informed, professional opinion of the valuer. There are a number of methods available to the valuer when appraising Exploration Areas.

The Multiple of Exploration Expenditure (“MEE”) method can be used to derive project value, when recent exploration expenditure is known or can be reasonably estimated. This method involves applying a premium or discount to the exploration expenditure or Expenditure Base (“EB”) through application of a Prospectivity Enhancement Multiplier (“PEM”). This factor directly relates to the success or failure of exploration completed to date, and to an assessment of the future potential of the asset. The method is based on the premise that a “grass roots” project commences with a nominal value that increases with positive exploration results from increasing exploration expenditure. Conversely, where exploration results are consistently negative, exploration expenditure will decrease along with the value. The following guidelines are presented on selection of the PEM:

- PEM = 1. Exploration activities and evaluation of mineralisation potential justifies continuing exploration.
- PEM = 2. Exploration activities and evaluation of mineralisation potential has identified encouraging drill intersections or anomalies, with targets of noteworthy interest generated.



- PEM = 3. Exploration activities and evaluation of mineralisation potential has identified significant grade intersections and mineralisation continuity.

Where transactions including sales and joint ventures relating to mineral assets that are comparable in terms of location, timing, mineralisation style and commodity, and where the terms of the sale are suitably “arms length” in accordance with the Valmin Code, such transactions may be used as a guide to, or a means of, valuation. This method is considered highly appropriate in a volatile financial environment where other “cost based” methods may tend to overstate value.

The Joint Venture Terms valuation method may be used to determine value where a Joint Venture Agreement has been negotiated at “arms length” between two parties. When calculating the value of an agreement that includes future expenditure, cash and/or shares payments, it is considered appropriate to discount expenditure or future payments by applying a discount rate to the mid-point of the term of the earn-in phase. Discount factors are also applied to each earn-in stage to reflect the degree of confidence that the full expenditure specified to completion of any stage will occur. The value assigned to the second and any subsequent earn-in stages always involves increased risk that each subsequent stage of the agreement will not be completed, from technical, economic and market factors. Therefore, when deriving a technical value using the Joint Venture Terms method, Ravensgate considers it appropriate to only value the first stage of an earn-in Joint Venture Agreement.

The total project value of the initial earn-in period can be estimated by assigning a 100% value, based on the deemed equity of the farminor, as follows:

$$V_{100} = \frac{100}{D} \left[ CP + \left( CE * \frac{1}{(1+I)^{\frac{t}{2}}} \right) + \left( EE * \frac{1}{(1+I)^{\frac{t}{2}}} * P \right) \right]$$

where:

- $V_{100}$  = Value of 100% equity in the project (\$)
- $D$  = Deemed equity of the farminor (%)
- $CP$  = Cash equivalent of initial payments of cash and/or stock (\$)
- $CE$  = Cash equivalent of committed, but future, exploration expenditure and payments of cash and/or stock (\$)
- $EE$  = Uncommitted, notional exploration expenditure proposed in the agreement and/or uncommitted future cash payments (\$)
- $I$  = Discount rate (% per annum)
- $t$  = Term of the Stage (years)
- $P$  = Probability factor between 0 and 1, assigned by the valuer, and reflecting the likelihood that the Stage will proceed to completion.

Where mineral resources remain in the Inferred category, reflecting a lower level of technical confidence, the application of mining parameters using the more conventional DCF/NPV approach may be problematic or inappropriate and technical development studies may be at scoping study level. In these instances it is considered appropriate to use the ‘in-situ’ Resource method of valuation for these assets. This technique involves application of a heavily discounted valuation of the total in-situ metal or commodity contained within the resource. The level of discount applied will vary based on a range of factors including physiography and proximity to infrastructure or processing facilities. Typically and as a guideline, the discounted value is between 1% and 5% of the in-ground value of the metal in the Mineral Resource.

In the case of Pre-development, Development and Mining Projects, where Measured and Indicated Resources have been estimated and mining and processing considerations are known or can be reasonably determined, valuations can be derived with a reasonable degree of confidence by compiling a discounted cash flow (DCF) and determining the net present value (NPV).



The Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC code, 2004) sets out minimum standards, recommendations and guidelines. A Mineral Resource defines a mineral deposit with reasonable prospects of economic extraction. Mineral Resources are sub-divided into Inferred, Indicated and Measured to represent increasing geological confidence from known, estimated or interpreted specific geological evidence and knowledge. An Ore Reserve is the economically minable part of a Measured or Indicated Resource after appropriate studies. An Inferred Resource reflecting insufficient geological knowledge, cannot translate into an Ore Reserve. Measured Resources may become Proved (highest confidence) or Probable Reserves. Indicated Resources may only become Probable Reserves.

## 6.2 Previous Mineral Asset Valuations

Ravensgate is not aware, nor have we been made aware, of any valuations over the Western Australian Iron or Manganese projects. Exploration tenements have not been included in the valuation where tenure or permits have not been granted to the relevant company and the company does not therefore have any ownership over tenement mineral assets or any exploration value within the tenements.

## 6.3 Material Agreements

Ravensgate has been commissioned by FerrAus Limited (ASX code: FRS) and BDO Corporate Finance (WA) Pty Ltd (BDO) to provide an Independent Technical Project Review and Valuation Report. The Technical Project Review and Valuation report encompasses the Davidson Creek Iron Ore Pre-Development Project, the Robertson Range Iron Ore Pre-Development Project and the Enacheddong Manganese Exploration Area Project. The Technical Valuation report provides an assessment of the Western Australian (WA) “Exploration Area”, “Advanced Exploration Area” and “Pre-development” minerals assets listed below which are owned 100% by FerrAus.

<u>Mineral Asset</u>	<u>FerrAus Ownership %</u>
• Davidson Creek Project (Iron), WA.	100%.
• Robertson Range Project (Iron), WA.	100%.
• Enacheddong Project (Manganese), WA.	100%.

Ravensgate understands all active exploration tenements are granted at this point in time and are in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so.

Ravensgate is not aware, nor have we been made aware, of any other agreements that have a material effect on the provisional valuations of the mineral assets, and on this basis have made no adjustments on this account.





## 6.4 Comparable Transactions

Ravensgate has completed a search for publicly available market transactions involving iron and manganese projects within the Western Australian. Transactions reflect comparable tenement holdings in geological provinces that are considered prospective for similar commodities, and that are of similar prospectivity to the minerals assets being acquired. In Ravensgate's experience and opinion, individual market transactions are rarely completely identical to the relevant project area or may not contain all the required information for compilation. In practice a range of implied values on a dollar per metal unit or dollar per square kilometre of tenement holding will be defined for further use. The transactions identified along with the implied cash-equivalent values are summarised in Section 6.4.1 to Section 6.4.2 by commodity and region.

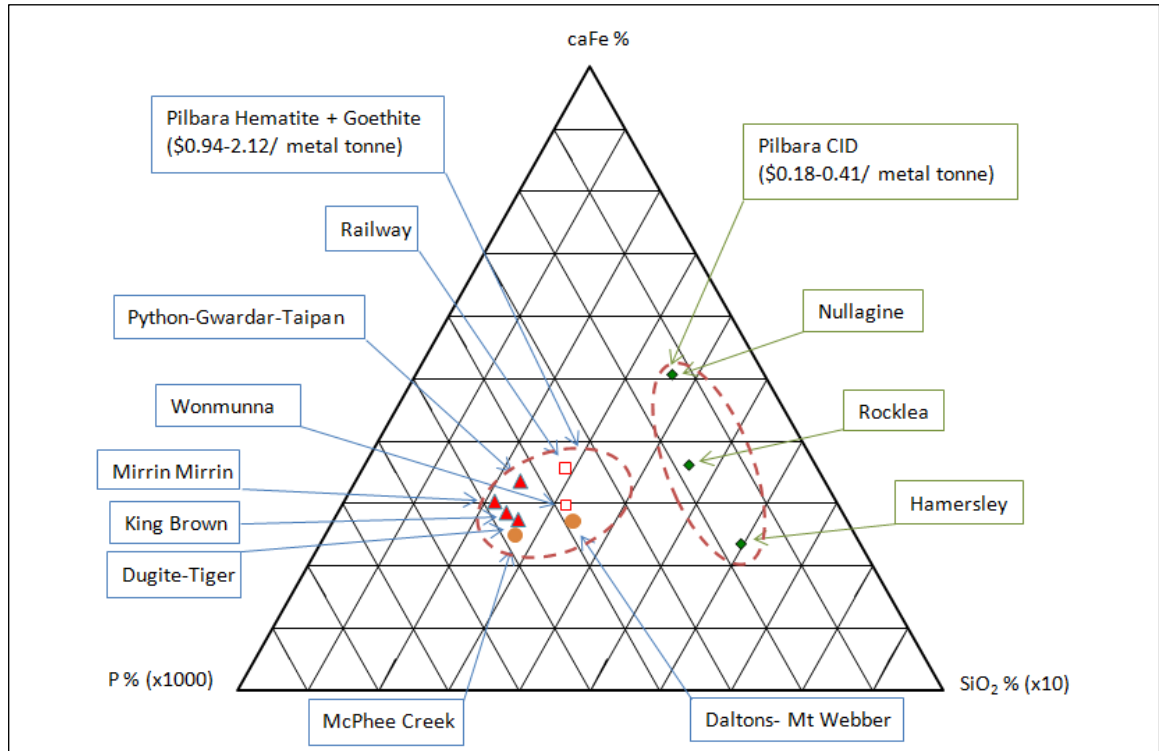
Publically available market transactions have been separated to reflect transactions on a dollar per square kilometre of tenement holding or on a dollar per metal unit for a more advanced Exploration Target or Mineral Resource. This was undertaken to reflect the varying levels of geological exploration carried out within the various project tenements. In general terms, exploration projects may start with a relatively large tenement holding where a lack of detailed geological sampling and knowledge renders the use of the "in-situ" yardstick valuation method inappropriate (i.e. an "Exploration Area Mineral Asset"). For these particularly early-stage exploration areas comparable transactions on a dollar per square kilometre basis are more relevant. As the project advances and as geological sampling and knowledge increase, tenement areas tend to decrease to match a narrowing focus on more prospective areas. For these areas where specific, drill sample supported Exploration Targets have been identified that warrant further detailed evaluation or Mineral Resources estimated, comparable transactions on a dollar per metal unit basis may be more appropriate (i.e. an "Advanced Exploration Area Mineral Asset or Pre-Development Project at early assessment").

### 6.4.1 Reported Market Transactions involving Iron Projects within the Western Australian Region

Ravensgate's analysis of West Australian market transactions for Iron projects indicates an implied value between \$0.18 to \$2.12 per tonne of contained iron metal for more advanced or strategic Exploration Targets or moderate confidence Mineral Resources (Table 11). The Wonmunna / Uaroo and Railway market transaction listed in Table 11 is considered to feature similar geology to FerrAus' Western Creek Marra Mamba (Hematite-Goethite) iron deposit in the Pilbara region. Ravensgate's analysis of Western Australian market transactions for early-stage, conceptual Iron projects, indicates an implied value between \$2,100 to \$6,000 per square kilometre, rising to between \$28,000 to \$50,000 per square kilometre (Table 12). Ravensgate considers the lower range between \$2,100 to \$6,000 per square kilometre to be more appropriate for valuing Exploration Area Mineral Assets while the higher range between \$28,000 to \$50,000 per square kilometre is considered to be more appropriate for valuing Advanced Exploration Area Mineral Assets where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. This reflects the greater value inherent in Advanced Exploration Area Mineral Assets where considerable exploration has been undertaken and specific mineralisation targets identified while Exploration Area Mineral Assets may or may not have any mineralisation identified. In Figure 15 a ternary diagram of the Pilbara Resource Grade Estimates for Python-Gwardar-Taipan, Dugite-Tiger, Mirrin Mirrin and King Brown are plotted, along with available market transactions for Pilbara hematitic mineralisation. Also plotted are McPhee Creek and Daltons-Webber for geological comparison purposes only. Magnetite type deposits were not included as the FerrAus projects in the Pilbara relate to hematite mineralisation. All of FerrAus' resources plot towards the centre of the diagram.



**Figure 15 Ternary Mineral Resource Estimate - Grade Diagram of FerrAus Pilbara Hematite Resources (red triangles) and Pilbara Hematite Market Transactions (red open square).**



Note caFe% refers to Calcined Iron Grade (a measure of iron content on removal of volatiles e.g. LOI). Silica (SiO<sub>2</sub>) and Phosphorus (P) have been multiplied by 10 and 1000 respectively to display the data sets more effectively. Note Ravensgate have included the McPhee Creek and Daltons-Mt Webber Iron Projects for geological comparison purposes only.

Project	Transaction Details & Type	Contained Fe Metal Tonnes (t)	Purchase Price 100% Basis (A\$)	Implied Value / Metal Tonne (A\$)
Wonmunna and Uaroo, Pilbara, Western Australia.	October, 2010: E-Com Multi Limited entered into an acquisition agreement with Talisman Mining Limited to earn 100% with a \$41.35M cash and shares buy-in. The project area is prospective for Marra Mamba Iron Formation plus BIF-hosted magnetite deposits. The Wonmunna Project contains an Inferred Resource of 78.3Mt @ <b>56.0% Fe</b> (Marra Mamba Formation). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$41.35M (notional 0.94 A\$/metal tonne on 100% terms).	43.85Mt	\$41.35M	\$0.94 / metal tonne
Rocklea, Pilbara, Western Australia.	October, 2010: Dragon Energy Ltd entered into an acquisition agreement with AusQuest Limited & Fortescue Resources Pty Ltd to earn 100% with a \$7.0M cash buy-in. The tenement area totals 35km <sup>2</sup> for prospective Channel Iron Deposit (CID) material.	33.70Mt	\$7.0M	\$0.21 / metal tonne





Project	Transaction Details & Type	Contained Fe Metal Tonnes (t)	Purchase Price 100% Basis (A\$)	Implied Value / Metal Tonne (A\$)
	The Rocklea CID Project contains an Inferred Resource of 63.1Mt @ 53.4% Fe (60.4% caFe). A higher grade component of 28.2Mt @ 55.58 (62.68% caFe) is contained within this resource. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$7.0M (notional 0.21 A\$/metal t on 100% terms).			
Hamersley, Pilbara, Western Australia.	<p>October, 2010: Saint Istvan Gold Limited (SVG) entered into a farm-in/JV agreement with Cazaly Resources Limited (CAZ) to earn 51% with a \$4M cash buy-in and feasibility study funding of up to \$6M within 3 years. The project area is prospective for Channel Iron Deposit (CID) with an Inferred Resource of 143Mt @ <b>52.6% Fe</b> (55.6% caFe) defined. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$13.6M (notional 0.18 A\$/metal tonne on 100% terms).</p> <p>SVG may acquire 100% of the project by paying CAZ \$0.5/tonne for the relevant interest in the Mineral Resource within 18 months, or by paying \$1.00/tonne for the relevant interest in the Mineral Resource between 18 to 36 months from the agreement date.</p>	75.22Mt	\$13.6M	\$0.18 / metal tonne
Railway, Pilbara, Western Australia.	October 2009: BHP Billiton Ltd entered into an acquisition agreement of United Minerals Corporation (UMC) to earn 100% with a \$204M cash buy-in. The main project deposit (Railway) contains a Marra Mamba + Detrital Iron Mineral Resource of 100.7Mt @ <b>60.34% Fe</b> (Indicated), 57.4Mt @ <b>53.98% Fe</b> (Inferred). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis for the project is \$194.1M (\$204M cash deal minus UMC held cash) which is a notional 2.12 A\$/metal tonne on 100% terms.	91.7Mt	\$194.1M	\$2.12 / metal tonne
Nullagine, Pilbara, Western Australia.	June 2009: Fortescue Metals Group Ltd entered into a farm-in/JV agreement with BC Iron Ltd to earn 50% with an initial \$10M cash buy-in. Remaining development costs were expected to be funded through project finance. The project contains a Channel Iron Deposit (CID) of 2.2Mt @ <b>54.5% Fe</b> (Measured), 68.8Mt @ <b>54.0% Fe</b> (Indicated), 18.1Mt @ <b>54.7% Fe</b> (Inferred). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$20M (notional 0.41 A\$/metal tonne on 100% terms).	48.20Mt	\$20M	\$0.41 / metal tonne
Mt Richardson & Windarling East, Mid West, Western Australia.	August 2008: Portman Mining Ltd entered into a farm-in/JV agreement with Iron Mountain Mining Ltd to earn 100% with a \$10M cash buy-in plus royalty and a one-off \$0.5/tonne payment for any Measured or Indicated Resources defined (above 10Mt). The project area was considered prospective	11.5Mt	\$10M	\$0.87 / metal tonne



Project	Transaction Details & Type	Contained Fe Metal Tonnes (t)	Purchase Price 100% Basis (A\$)	Implied Value / Metal Tonne (A\$)
	for an iron Exploration Target with a grade range of <b>56-59% Fe</b> for 18-22Mt. Assuming the terms of the agreement were met and excluding the royalty/one-off payment, the implied cash equivalent on a 100% equity basis is \$10M (notional 0.87 A\$/metal t on 100% terms at the mid-point of the exploration target).			
Koolan Island (Kimberly), Talling Peak & Extension Hill (Mid-West), WA.	April 2008: Gazmetall Holding Cyprus Ltd entered into a farm-out shares-based agreement. The projects are prospective for hematite iron mineralisation and contain a Mineral Resource of 15.5Mt @ <b>63.42% Fe</b> (Measured), 61.9Mt @ <b>62.46% Fe</b> (Indicated) and an Inferred Resource of 25.9Mt @ <b>60.94% Fe</b> . Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis would be \$21.3M (notional 0.33 A\$/metal t on 100% terms).	64.3Mt	\$21.3M	\$0.33 / metal tonne
Mt Gould & Wilgie Mia, Mid West, Western Australia.	August, 2007: Atlas Iron Limited entered into an acquisition agreement with private overseas investors to earn 100% with a \$13.25 cash and shares buy-in. The project contains an Exploration Target of 30-40Mt @ <b>60-66% Fe</b> . Assuming the terms of the agreement were met and using the mid-point of the Exploration Target, the implied cash equivalent on a 100% equity basis would be \$13.25M (notional 0.60 A\$/metal t on 100% terms).	22Mt	\$13.25M	\$0.60 / metal tonne

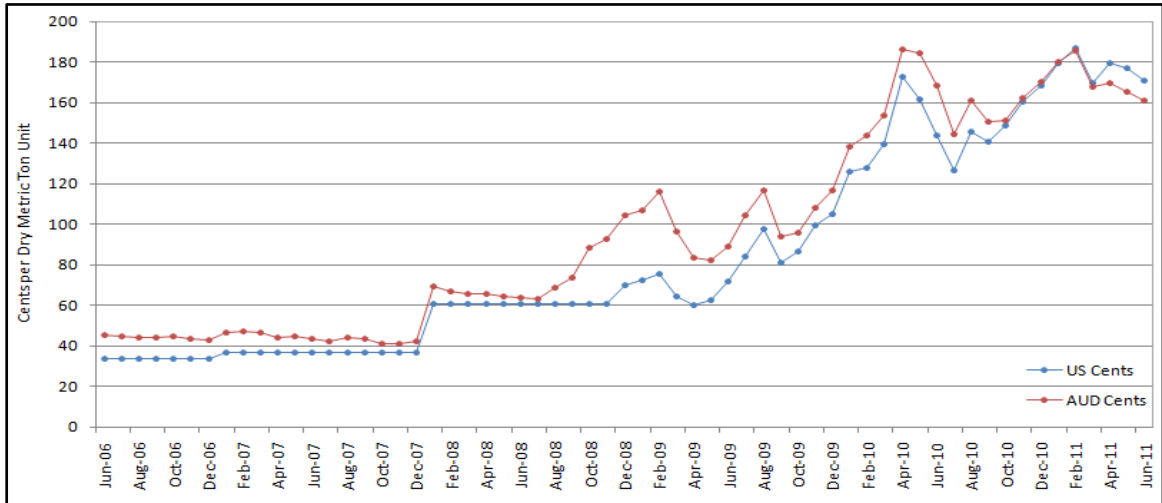


<b>Table 12 Market Transactions Involving Iron Exploration Projects at a particularly early and conceptual stage within Western Australia</b>				
<b>Project</b>	<b>Transaction Details &amp; Type</b>	<b>Area (km<sup>2</sup>)</b>	<b>Purchase Price 100% Basis (A\$)</b>	<b>Implied Value/km<sup>2</sup> (A\$)</b>
Mt Alexander, Pilbara, Western Australia.	October 2009: Zinc Co Australia Ltd entered into a purchase agreement with Mt Alexander Resources Pty Ltd to earn 100% with a \$0.06M cash and shares buy-in. The project area is prospective for BIF. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.06M.	28.4	\$0.06M	\$2,100
Mt Oscar, Pilbara, Western Australia.	September 2008: Apollo Minerals Ltd entered into a farm-in/JV agreement to earn 20% with a \$2.2M cash and shares buy-in. The project area is considered prospective for magnetite BIF. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$11.0M	218	\$11.0M	\$50,000
Mt Padbury, Mid West, Western Australia.	September, 2008: Midwest Corporation Ltd entered into a farm-in/JV agreement with Montezuma Mining Corp to earn 100% with a \$6M cash buy-in under conditions. The project area is considered prospective for hematite iron. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$6.0M.	214	\$6.0M	\$28,000
Yalgoo-Singleton, Mid West, Western Australia.	June 2008: Venus Resources Ltd entered into a farm-in/JV agreement to earn 100% with a \$1.05M cash and shares buy-in. The project area is considered prospective for magnetite and hematite iron plus VMS base and precious metal mineralisation. Assuming the terms of the agreement were met and excluding royalty payments, the implied cash equivalent on a 100% equity basis is \$1.05M.	308	\$1.05M	\$3,400
Beyondie, Mid West, Western Australia.	May 2008: Emergent Resources Ltd entered into a farm-in/JV agreement with De Grey Mining Ltd to earn 80% with a \$1.75M exploration spend over 3 years. The project area is considered prospective for magnetite BIF. Assuming the terms of the agreement were met and excluding royalty payments, the implied cash equivalent on a 100% equity basis is \$2.19M.	841	\$2.19M	\$2,600
Mt Padbury, Mid West, Western Australia.	April 2008: Montezuma Mining Company Ltd entered into a farm-in/JV agreement to earn 10% with a \$0.05M buy-in (in shares). The project area is considered prospective for hematite (60 to 65% Fe). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.5M.	214	\$0.5M	\$2,300
Kiaby Well, Mid West, Western Australia.	January 2008: Silver Swan Group entered into a farm-in/JV agreement with Mawson West Ltd to earn 60% with a \$0.3M exploration spend over 3 years. The project area is considered prospective for iron, base metal and gold. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.5M.	84	\$0.5M	\$6,000

Ravensgate has examined the five year historical commodity charts for general trends over time. A general analysis of the five year price chart for iron ore in Figure 16 indicates a steady price increase and recovery since October 2009 in \$US cents terms, though with the increasing strength of the \$AUD prices have come down in recent months in Australian dollar terms. Ravensgate has taken into consideration the general commodity trend as an influence on deriving a final project valuation.



**Figure 16 Five year price chart for Iron Ore Monthly Price**



Note: Iron Ore, 67.55% iron content, fine, contract price to Europe, FOB Ponta da Madeira, US cents per dry metric tonne unit (source website: <http://www.indexmundi.com/commodities/?commodity=iron-ore&months=60>). Note a there are 100 dry metric tonne units (dmu) in a dry metric tonne.

**6.4.2 Reported Market Transactions involving Manganese Projects within Australia**

Ravensgate’s analysis of Australian market transactions for early-stage, conceptual Manganese projects, indicates an implied value between \$381 to \$14,434 per square kilometre (Table 13). The manganese market is relatively liquid with few comparable transactions available. Ravensgate considers a range of \$2,000 to \$14,500 to be most appropriate for Exploration Area Mineral Assets while the high end of the range \$14,500 per square kilometre is considered to be more appropriate for valuing Advanced Exploration Area Mineral Assets where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. This reflects the greater value inherent in Advanced Exploration Area Mineral Assets where considerable exploration has been undertaken and specific mineralisation targets are identified while Exploration Area Mineral Assets may or may not have any mineralisation identified.



**Table 13 Market Transactions Involving Manganese Exploration Projects at a relatively early and conceptual stage within Australia**

Project	Transaction Details & Type	Area (km <sup>2</sup> )	Purchase Price 100% Basis (A\$)	Implied Value/km <sup>2</sup> (A\$)
Skull Springs, Pilbara, Western Australia	October 2009: Shaw River Resources entered into a farm-in/JV agreement with Tailsman Mining to earn 70% with a 1,000,000 shares (\$0.18M) and \$0.05M cash buy in and with a \$0.3M exploration spend over 2 years. The project is considered prospective for Woodie Woodie style manganese. Assuming the terms of the agreement were met and excluding royalty payments the implied cash equivalent on a 100% equity basis is \$0.757M	223	\$0.757M	\$3,395
Waddikee Project, South Australia	August 2009: OM Holdings Limited entered into a farm-in/JV agreement with Monax Mining Limited to earn 60% with an exploration spend of \$2.0M over 4 years. The project is considered prospective with over 80km strike length of manganese prospective host sequence. Assuming the terms of the agreement were met and excluding royalty payments the implied cash equivalent on a 100% equity basis is \$3.33M	1,004	\$3.33M	\$3,320
Oakover Project, Pilbara, Western Australia	November 2008: Jupiter Mines Limited entered into a purchase agreement with Pallinghurst Resources and Red Rock Resources to acquire 100% for 81,000,596 shares (\$9.3M). The project is considered prospective for Woodie Woodie style manganese. Assuming the terms of the agreement are met and excluding royalty payments the implied cash equivalent on a 100% equity basis is \$9.3M.	696	\$9.3M	\$13,362
Minnie Minne, Pilbara, Western Australia	October 2008: Shaw River Resources entered into a farm-in/JV agreement with Contact Uranium Ltd to earn 85% for 2,000,000 shares (\$0.12M) and 1,000,000 20 cent 5 year options. The project is considered prospective for manganese and iron ore. Assuming the terms of the agreement were met and excluding royalty payments the implied cash equivalent cash basis on a 100% equity basis is \$0.141M.	370	\$0.141M	\$381
Woodie Woodie South, Pilbara, Western Australia	December 2007: Spitfire Resources Ltd entered into a farm-in/JV agreement with Planet Mining Pty Ltd to purchase 80% for 25M shares (\$5M) with the option to purchase the remaining 20% with an exploration spend of \$1.5M and purchase price of \$3M in 2 years. The project is considered prospective for Woodie Woodie style manganese. Assuming the terms of the agreement were met and excluding royalty payments the implied cash equivalent on a 100% equity basis is \$9.5M.	433	\$6.25M	\$14,434
Barramine, Pilbara, Western Australia	August 2007: Shaw River Resources entered into a farm-in/JV agreement with Pandell Pty Ltd to earn 70% in the manganese and iron ore rights for \$0.2M in shares and cash. The project is considered prospective for Woodie Woodie style manganese. Assuming the terms of the agreement were met and excluding royalty payments the implied cash equivalent on a 100% equity basis is \$0.286M	640	\$0.286M	\$446



The Woodie Woodie South project farm-in/JV by Spitfire Resources Ltd was valued at \$6.5M on a 100% purchase price basis, as at the time there is no guarantee that they would spend the \$1.5M on exploration and exercise their option to purchase the remaining 20% of the project for \$3.0M.

The Oakover project acquisition by Jupiter Mines Limited was valued using the volume weighted share price for the previous 5 trading days before the announcement of the transaction on the 6 November 2008, which was \$0.115 and not on the day that the transfer of shares took place being 1 September 2009.

The Shaw River Resources (Shaw) farm-in/JV agreement with Pandell Pty Ltd (Pandell) a private company could potentially be considered a non arms length transaction as a non-executive director of Shaw contained an interest in Pandell.

The Shaw farm-in/JV agreement with Contact Uranium Ltd was in geographically and geologically a different setting within the Pilbara compared to the other comparable transactions and in Ravensgate's opinion is not appropriate for this valuation.

Snowden (2008 & 2010) completed two separate valuations of the Oakover Manganese project. The first valuation in 2008 was related to the Jupiter Mines Limited (Jupiter) purchase agreement with Pallinghurst Resources and Red Rock Resources. Snowden completed their valuation using the Kilburn method. In Snowden's opinion, the value of the Oakover project tenements lies in the range of \$1.4M to \$4.21M with a preferred value of \$2.1M and implied values on a preferred basis of \$3,020 per square kilometre in the range of \$2,010 to \$6,060 per square kilometre. The second valuation in 2010 was related to Jupiter making a proposed acquisition. Snowden completed their valuation using the Kilburn method. In Snowden's opinion, the value of the Oakover project tenements lies in the range of \$1.5M to \$4.66M with a preferred value of \$3.06M and implied values on a preferred basis of \$3,444 per square kilometre in the range of \$1,690 to \$5,244 per square kilometre.

Ravensgate is of the opinion that both of these valuations are valid, falling within the range of comparable transactions listed in Table 13.

## **6.5 Mineral Asset Valuations**

### **6.5.1 Davidson Creek Iron Project, West Australia**

#### **6.5.1.1 Selection of Valuation Method**

The Davidson Creek Iron Project can be divided up into the tenement containing the Python-Gwardar-Taipan and Dugite-Tiger Deposits (M52/1043) and the Mirrin Mirrin deposit in Exploration Licence E52/1658 and one surrounding Exploration licence E52/2542. The mining licence and exploration licence containing the deposits can be classified as a "Pre-Development Project" mineral asset where Mineral Resources have been identified and their extent estimated, but where a positive development decision has not been made. The surrounding exploration licence was designated as an "Exploration Area" mineral asset where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified. The commodity item of interest for exploration is primarily goethite-hematite iron mineralisation of the Marra Mamba Formation in the Pilbara region. A Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has been reported as listed in Section 3.6. In valuing the mineral asset of the Davidson Creek Iron Project, Ravensgate considers the 'DCF/NPV' method inappropriate.

Ravensgate were instructed by BDO Corporate Finance (WA) Pty Ltd (BDO) to value FerrAus Limited's mineral assets on the reported mineral resources and not the reported mineral reserves. They consider that for the purposes of this valuation that it is not appropriate to value the mineral reserves estimated in the Pre-feasibility Study (PFS) in accordance with the guidelines of the JORC Code (2004), as not all the infrastructure requirements, mining and processing considerations are known. These requirements and considerations are being determined in a Definitive Feasibility Study (DFS) that FerrAus Limited is currently undertaking.





BDO have confirmed that they are satisfied this approach is appropriate for the purposes of this report.

For the valuation of FerrAus Limited's reported mineral resources, Ravensgate has valued only the reported mineral resources with a 55% Fe cut-off, which it considers to be hematite-goethite Direct Shipping Ore (DSO), as the reported middle and lower grade resources between 50% and 55% Fe would require beneficiation to upgrade the Fe content and reduce the deleterious elements (primarily  $Al_2O_3$  and  $SiO_2$ ) prior to shipping. Metallurgical test work is ongoing to determine the extent of this possibility.

Ravensgate has elected to apply the Comparable Transaction Method to value the project after consideration of the various valuation methods outlined in Section 6.1 and the geological / exploration information outlined in Section 3.

#### **6.5.1.2 Project Analysis - Comparable Transactions Method**

Ravensgate's analysis of the hematite-related iron market transactions indicates that the implied value of more advanced or strategic exploration projects with iron Mineral Resources generally lies around \$0.18 to \$2.12 per contained resource metal tonne. Within this range Ravensgate has selected an applicable range of \$0.94 to \$2.12 per contained resource metal tonne to apply to the total Mineral Resource listed in Section 3.6, which relates to approximately \$94.1M to \$212.2M for the contained metal within the current Mineral Resource Estimate (100.1Mt metal). The Wonmunna / Uaroo and Railway market transaction listed in Table 11 is considered to feature similar geology to FerrAus' Davidson Creek Marra Mamba (Hematite-Goethite) iron deposit in the Pilbara region. The lower and upper limit of the range is taken from these project market transactions which feature a similar geological position on the ternary grade diagram (Figure 15). From this range a preferred value of \$130.1M has been selected which reflects a value of \$1.30 per contained resource metal tonne and is towards the lower end of the range and reflects the outcome of successful exploration to date and the quality of the resources, with most metal being contained in indicated and measured categories. (In 'compliance' of the JORC Code (2004)). Ravensgate considers the project is of merit and worthy of further exploration and study.

Ravensgate's analysis of hematite-related iron market transactions for early-stage, conceptual Iron projects, indicates an implied value between \$2,100 to \$6,000 per square kilometre, rising to between \$28,000 to \$50,000 per square kilometre. Ravensgate considers the lower range between \$2,100 to \$6,000 per square kilometre to be more appropriate for valuing Exploration Area Mineral Assets while the higher range between \$28,000 to \$50,000 per square kilometre is considered to be more appropriate for valuing Advanced Exploration Area Mineral Assets where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. This reflects the greater value inherent in Advanced Exploration Area Mineral Assets where considerable exploration has been undertaken and specific mineralisation targets are identified while Exploration Area Mineral Assets may or may not have any mineralisation identified.

Ravensgate is of the opinion that the most recently granted exploration licence E52/2542 is an "Exploration Area" mineral asset at an early stage and conceptual in nature and that an implied value between \$2,100 to \$6,000 per square kilometre based on the comparable transactions in Table 12 is appropriate in assisting in the valuing this tenement. FerrAus has not completed any 'on the ground' exploration as yet within this tenement. Based on the range of \$2,100 to \$6,000 per square kilometre this relates to \$0.17M to \$0.49M. From this range a preferred value of \$0.21M has been selected, which relates back to a value of \$2,500 per square kilometre and is towards the low end of the range which reflects the exploration to date. Ravensgate considers the project is of merit and worthy of further exploration and study.



## 6.5.2 Robertson Range Iron Project, Western Australia

### 6.5.2.1 Selection of Valuation Method

The Robertson Range Iron Project can be divided up into the tenement containing the King Brown Deposit (M52/1034) and the surrounding Exploration licences (E52/1630 and E52/1901). The mining licence containing the King Brown deposit can be classified as a “Pre-Development Project” mineral asset where Mineral Resources have been identified and their extent estimated, but where a positive development decision has not yet been made. The Exploration licence (E52/1630) can be classified in Ravensgate’s opinion as an “Advanced Exploration Area” mineral asset where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. The surrounding exploration licence (E52/1901) is an “Exploration Area” mineral asset where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified. The commodity item of interest for exploration is primarily goethite-hematite iron mineralisation of the Marra Mamba Formation in the Pilbara region. A Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has been reported as listed in Section 3.6. In valuing the mineral asset of the Davidson Creek Iron Project, Ravensgate considers the ‘DCF/NPV’ method inappropriate.

Ravensgate were instructed by BDO Corporate Finance (WA) Pty Ltd (BDO) to value FerrAus Limited’s mineral assets on the reported mineral resources and not the reported mineral reserves. They consider that for the purposes of this valuation that it is not appropriate to value the mineral reserves estimated in the Pre-feasibility Study (PFS) in accordance with the guidelines of the JORC Code (2004), as not all the infrastructure requirements, mining and processing considerations are known. These requirements and considerations are being determined in a Definitive Feasibility Study (DFS) that FerrAus Limited is currently undertaking. BDO have confirmed that they are satisfied this approach is appropriate for the purposes of this report.

For the valuation of FerrAus Limited’s reported mineral resources, Ravensgate has valued only the reported mineral resources with a 55% Fe cut-off, which it considers to be hematite-goethite Direct Shipping Ore (DSO), as the reported middle and lower grade resources between 50% and 55% Fe would require beneficiation to upgrade the Fe content and reduce the deleterious elements (primarily  $Al_2O_3$  and  $SiO_2$ ) prior to shipping. Metallurgical test work is on going to determine the extent of this possibility.

Ravensgate has elected to apply the Comparable Transaction Method to value the project after consideration of the various valuation methods outlined in Section 6.1 and the geological / exploration information outlined in Section 4.

### 6.5.2.2 Project Analysis - Comparable Transactions Method

Ravensgate’s analysis of the hematite-related iron market transactions indicates that the implied value of more advanced or strategic exploration projects with iron Mineral Resources generally lies around \$0.18 to \$2.12 per contained resource metal tonne. Within this range Ravensgate has selected an applicable range of \$0.94 to \$2.12 per contained resource metal tonne to apply to the total Mineral Resource listed in Section 4.6, which relates to approximately \$30.2M to \$68.1M for the contained metal within the current Mineral Resource Estimate (32.1Mt metal). The Wonmunna / Uaroo and Railway market transaction listed in Table 11 is considered to feature similar geology to FerrAus’ Robertson Range Marra Mamba (Hematite-Goethite) iron deposit in the Pilbara region. The lower and upper limit of the range is taken from these project market transactions which feature a similar geological position on the ternary grade diagram (Figure 15). From this range a preferred value of \$41.7M has been selected which reflects a value of \$1.30 per contained resource metal tonne and is towards the lower end of the range and reflects the outcome of successful exploration to date and the quality of the resources, with most metal being contained in indicated and measured categories of the JORC Code (2004). Ravensgate considers the project is of merit and worthy of further exploration and study.





Ravensgate's analysis of hematite-related iron market transactions for early-stage, conceptual Iron projects, indicates an implied value between \$2,100 to \$6,000 per square kilometre, rising to between \$28,000 to \$50,000 per square kilometre. Ravensgate considers the lower range between \$2,100 to \$6,000 per square kilometre to be more appropriate for valuing Exploration Area Mineral Assets while the higher range between \$28,000 to \$50,000 per square kilometre is considered to be more appropriate for valuing Advanced Exploration Area Mineral Assets where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. This reflects the greater value inherent in Advanced Exploration Area Mineral Assets where considerable exploration has been undertaken and specific mineralisation targets are identified while Exploration Area Mineral Assets may or may not have any mineralisation identified.

Ravensgate is of the opinion that the exploration licence E52/1630 is an "Advanced Exploration Area" mineral asset where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. The tenement is quite strategic in nature surrounding the King Brown deposit and has a number of identified targets based on geophysics, of which some have been drilled. Ravensgate is of the opinion that using the implied value range of \$28,000 to \$50,000 per square kilometre based on the transactions in Table 12 for this tenement is not valid as a large proportion of the tenement has not been explored and therefore considers a range of \$10,000 to \$18,000 per square kilometre to be more appropriate. Based on the range of \$10,000 to \$18,000 per square kilometre this relates to \$2.1M to \$3.78M. From this range a preferred value of \$3.15M has been selected, which relates back to a figure of \$15,000 per square kilometre and is towards the higher end of the mid range which reflects the exploration to date. Ravensgate considers the project is of merit and worthy of further exploration and study.

Ravensgate is of the opinion that the exploration licence E52/1901 is an "Exploration Area" mineral asset at an early stage and conceptual in nature and that an implied value between \$2,100 to \$6,000 per square kilometre based on the comparable transactions in Table 12, is appropriate in valuing this tenement. FerrAus has completed limited exploration to-date within this tenement and large portion is underlain by unprospective geology of the Archaean Sylvania Inlier. Based on the range of \$2,100 to \$6,000 per square kilometre this relates to \$0.43M to \$1.23M. From this range a preferred value of \$1.03M has been selected, which relates back to a figure of \$5,000 per square kilometre and is towards the middle of the range which reflects mainly the strategic location of the tenement between the Davidson Creek and Robertson Range Resources and the exploration success to date. Ravensgate considers the tenement is of merit and worthy of further exploration and study.

### **6.5.3 Enacheddong Manganese Project, Western Australia**

#### **6.5.3.1 Selection of Valuation Method**

The Enacheddong Manganese Project is considered to be an "Exploration Area" mineral asset, where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified. A Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has not been reported for the Enacheddong project. The commodity item of interest for exploration is primarily psilomelane and pyrolusite manganese mineralisation in the style of the Woodie Woodie deposits.

Ravensgate has elected to apply the Comparable Transaction Method to value the project after consideration of the various valuation methods outlined in Section 6.1 and the geological / exploration information outlined in Section 5.

#### **6.5.3.2 Project Analysis - Comparable Transactions Method**

Ravensgate's analysis of the manganese market transactions for early-stage, conceptual manganese projects, indicates an implied value between \$381 to \$14,434 per square kilometre. Ravensgate considers that the lower end of the range to be more appropriate for valuing Exploration Area Mineral Assets while the higher end of the range be more appropriate for



valuing Advanced Exploration Area Mineral Assets where a resource estimate may not yet have been undertaken but the project is of a more advanced and/or strategic nature. This reflects the greater value inherent in Advanced Exploration Area Mineral Assets where considerable exploration has been undertaken and specific mineralisation targets identified while Exploration Area Mineral Assets may or may not have any mineralisation identified

Ravensgate considers the two lower manganese transactions of \$381 and \$446 per square kilometre to not be appropriate for valuing the Enacheddong manganese project. In Ravensgate's opinion the Shaw River Resources (Shaw) farm-in/JV agreement with Pandell Pty Ltd (Pandell) a private company could potentially be a non arms length transaction as a non-executive director of Shaw contained an interest in Pandell. The Shaw farm-in/JV agreement with Contact Uranium Ltd was in a geographically and geologically different setting within the Pilbara compared to the other comparable transactions identified. In Ravensgate's opinion therefore it is not an appropriate comparable transaction for the purpose of this valuation. Ravensgate considers a range from \$2,000 to \$14,500 to be appropriate for early stage, conceptual manganese projects, this relates to \$0.21M to \$1.52M. Ravensgate has a preferred value at the lower end of the range of \$0.35M reflecting the early stage that exploration is at, and given that no significant results have been returned from drilling to date and that no mineral resource in accordance with the JORC Code (2004) has been defined. The value of \$0.35M relates back to an implied value of \$3,330 per square kilometre, which is comparable with the Skull Springs project transaction between Shaw River Resources and Talisman Mining, which was in an analogous geological setting and at a similar exploration stage.

## 6.6 Valuation Summary

Ravensgate has concluded the Western Australian Projects are of merit (although at varying stages of exploration and subsequent Mineral Asset classification), and worthy of further exploration. A summary of the Western Australian project valuations is provided in Table 14. The applicable valuation date is 12 July 2011 and is derived from comparisons where possible using the Insitu Yardstick, Multiples of Exploration Expenditure (MEE) and Comparable Transactions valuation methods. The value of the listed Projects is considered to lie in a range from \$127M to \$287M, within which range Ravensgate has selected a preferred value of \$176.6M.

Project	Mineral Asset	Ownership 100%	Valuation		
			Low \$M	High \$M	Preferred \$M
Davidson Creek Iron M52/1043 & E52/1658	Pre-Development	100%	94.1	212.2	130.1
E52/2542	Exploration Area	100%	0.17	0.49	0.21
Robertson Range Iron M52/1034	Pre Development	100%	30.2	68.1	41.7
E52/1630	Advanced Exploration Area	100%	2.10	3.78	3.15
E52/1901	Exploration Area	100%	0.43	1.23	1.03
Enacheddong Manganese E46/614	Exploration Area	100%	0.21	1.52	0.35
<b>Combined Australian Projects</b>	<b>All listed projects</b>	<b>100%</b>	<b>127.2</b>	<b>287.3</b>	<b>176.6</b>

\* The combined valuation has been compiled to an appropriate level of precision and minor rounding errors may occur



7. TENEMENT DETAILS

<i>Table 15 Project Tenement Details for Western Australia</i>								
PROJECT	TENEMENT ID	% FERRAUS	MANAGER	EXPIRY DATE	Area (km <sup>2</sup> )	RENT	EXPENDITURE COMMITMENT	TARGET COMMODITY
	<b><u>GRANTED</u></b>	<b><u>100%</u></b>			<b><u>754</u></b>			<b><u>Iron</u></b>
Davidson Creek,	E52/1658	100%	FerrAus	24-Aug-12	132	\$11,508.75	\$90,000.00	Iron
	E52/2542	100%	FerrAus	19-May-16	82	\$3,148.86	\$26,000.00	Iron
	M52/1043	100%	FerrAus	21-Sep-31	10	\$15,934.05	\$99,900.00	Iron
Robertson Range	E52/1630	100%	FerrAus	24-Aug-12	210	\$17,902.50	\$140,000.00	Iron
	E52/1901	100%	FerrAus	22-Apr-14	205	\$7,872.15	\$65,000.00	Iron
	M52/1034	100%	FerrAus	22-Apr-30	10	\$15,934.05	\$99,900.00	Iron
Enacheddong	E46/614	100%	FerrAus	13-Sep-12	105	\$8,439.75	\$66,000.00	Manganese



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## 9. GLOSSARY

A\$	Australian dollars.
Acid mine drainage	Mine water which contains sulphuric acid, primarily due to weathering of materials.
Ad valorem	In proportion to the value of.
Aeolian	Formed or deposited by wind.
Aerial photography	Photographs of the Earth's surface taken from an aircraft.
Aeromagnetic	A survey undertaken by helicopter or fixed-wing aircraft for the purpose of recording magnetic characteristics of rocks by measuring deviations of the Earth's magnetic field.
Airborne geophysical data	Data pertaining to the physical properties of the Earth's crust at or near surface and collected from an aircraft.
Aircore (AC)	Drilling method employing a drill bit that yields sample material which is delivered to the surface inside the rod string by compressed air.
Alluvium	Clay silt, sand, gravel, or other rock materials transported by flowing water and deposited in comparatively recent geologic time as sorted or semi-sorted sediments in riverbeds, estuaries, and flood plains, on lakes, shores and in fans at the base of mountain slopes and estuaries.
Alteration	The change in the mineral composition of a rock, commonly due to hydrothermal activity.
Ancillary equipment	Mining equipment which does not perform primary loading or hauling functions.
Andesite	An intermediate volcanic rock composed of andesine and one or more mafic minerals.
Anomalous	A departure from the expected norm, generally geochemical or geophysical values higher or lower than the norm.
Anticline	An area of rocks that have been arched upwards in the form of a fold.
Archaean	The oldest rocks of the Precambrian era, older than about 2,500 million years.
Argillaceous	Describing rocks or sediments containing particles that are silt- or clay-sized, less than 0.625 mm in size.
Arsenopyrite	A mineral of iron, sulphur, and arsenic commonly associated with metamorphism around igneous intrusions.
Assay	A procedure where the element composition of a rock soil or mineral sample is determined.
Auger drilling	A rotary drilling technique which uses a blade drill bit and screw auger shaft to return sample to the surface.
Auriferous	Containing gold.
B	Billions.
Bank cubic metre (BCM)	A cubic metre of material in-situ.
Basalt	A volcanic rock of low silica (<55%) and high iron and magnesium composition, composed primarily of plagioclase and pyroxene.
Base metals	A non-precious metal, usually referring to copper, lead and zinc.



Basement	Crust of the earth, igneous or metamorphic rocks overlain by sedimentary deposits.
Basin	A large depression within which sediments are sequentially deposited and lithified.
Bench	A vertical segment which is mined as a whole.
Beneficiable ore (BFO)	Material that can be processed and upgraded to produce a saleable concentrate.
BIF	A rock consisting essentially of iron oxides and cherty silica and possessing a marked banded appearance.
Blasted stockpiles	When ore is blasted but not mined, it is considered to be a blasted stockpile.
BLEG	Bulk leach extractable gold, a method for detection of fine-grained gold in soils.
Boudins	Typical features of sheared veins and shear zones where, due to stretching along the shear foliation and compression perpendicular to this, rigid bodies break up.
Breccia	Rock consisting of angular fragments enclosed in a matrix, usually the result of persistent fracturing by tectonic or hydraulic means.
Brittle	Rock deformation characterised by brittle fracturing and brecciation.
Cainozoic	An era of geological time spanning the period from 65 million years ago to the present.
Calcite	A mineral of composition $\text{CaCO}_3$ (calcium carbonate) it is an essential component of limestones and marbles.
Calcrete	Superficial residual deposits cemented by or precipitated from groundwater as secondary calcium carbonate as a result of evaporation.
Canga	A recemented detrital iron ore mineralised deposit.
Carbonate	Rock of sedimentary or hydrothermal origin, composed primarily of calcium, magnesium or iron and $\text{CO}_3$ . Essential component of limestones and marbles.
Carnotite	Yellow, strongly radioactive, potassium, uranium vanadate $\text{K}_2(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 3\text{H}_2\text{O}$ , usually occurring as a secondary uranium mineral deposited or precipitated from meteoric waters.
CAPEX	Capital expenditure.
Caprock	An impervious rock layer generally close to surface which may act as a seal.
Chalcopyrite	$\text{CuFeS}_2$ , a copper ore.
Chert	Fine grained sedimentary rock composed of cryptocrystalline silica.
Chlorite	A green coloured hydrated aluminium-iron-magnesium silicate mineral (mica) common in metamorphic rocks.
Clastic	Pertaining to sedimentary rocks composed primarily from fragments of pre-existing rocks or fossils.
Clays	A fine-grained, natural, earthy material composed primarily of hydrous aluminium silicates.
CMS	Magnetic separation circuit.
Concentrate	A product containing valuable metal from which most of the waste material has been eliminated (in this case high grade magnetite or





	hematite).
Contract-miner	An operating scenario in which the mine owner contracts a third party. The third party owns the mining fleet and directly employs personnel to conduct mining operations.
Colluvium	A loose, heterogeneous and incoherent mass of soil material deposited by slope processes.
Conglomerate	A rock type composed predominantly of rounded pebbles, cobbles or boulders deposited by the action of water.
Costean	Exploration trench.
Craton	Large, usually ancient, stable mass of the earth's crust.
Marginal Cutoff grade	The lowest grade of mineralised material. Considered to be economic for a particular project.
Density	Mass of material per unit volume.
Depletion	The lack of a mineral in the near-surface environment due to leaching processes during weathering.
Deposit	A mineralised body which has been physically delineated by sufficient drilling and found to contain sufficient average grade of metal or metals to warrant further exploration and development expenditure.
Dewater	The process of decreasing the water table below the current mining surface.
Diagenesis	Any chemical, physical, or biological change undergone by a sediment during and after its lithification, not including weathering and metamorphism.
Diamond drilling	A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.
Dilational	Open space within a rock mass commonly produced in response to folding or faulting.
Dilution	The lowering of the grade of ore being mined due to the inclusion of waste rock or low-grade ore.
Dip	The angle at which a rock stratum or structure is inclined from the horizontal.
Direct ship ore (DSO)	Material of sufficient grade and quality that little processing is required to produce a saleable product.
Disseminated	Widely and evenly spread.
Dmt	Dry metric tonne.
Dolerite	A medium grained mafic intrusive rock composed mostly of pyroxenes and sodium-calcium feldspar.
DTR	Davis Tube Recovery, a test to measure the weight recovery of magnetite from iron ore.
Ductile	Deformation of rocks or rock structures involving stretching or bending in a plastic manner without breaking.
Dunite	A dense igneous rock that consists mainly of olivine and is commonly a source of magnesium mineralisation.
Duricrust	Hard-pan, cemented material.
Dykes	A tabular body of intrusive igneous rock, crosscutting the host strata at a high angle.





Electromagnetic survey	A geophysical technique whereby transmitted electromagnetic fields are used to energise and detect conductive material beneath the earth's surface.
Eluvial	Weathered material which is still at or near its point of formation.
En echelon	Parallel or sub-parallel, closely-spaced, overlapping or step-like minor structural features in rock, such as faults and tension fractures, that are oblique to the overall structural trend.
Epiclastic	Rocks formed from fragments of pre-existing volcanic rock.
Epithermal	Mineralisation style of gold or silver formed deep within the Earth's crust from ascending hot solutions.
Erosional	The group of physical and chemical processes by which earth or rock material is loosened or dissolved and removed from any part of the Earth's surface.
Excavator	A mining unit which excavates material in an open pit and loads it into a truck or other materials handling unit.
Facies	Characteristic features of rocks such as sedimentary rock type, mineral content, metamorphic grade, fossil content and bedding characteristics.
Fault zone	A wide zone of structural dislocation and faulting.
Feldspar	A group of rock forming minerals.
Felsic	An adjective indicating that a rock contains abundant feldspar and silica.
Ferricrete	A mineral conglomerate consisting of surficial sand and gravel cemented into a hard mass by iron oxide derived from the oxidation of percolating solutions of iron salts.
Ferruginous	Iron-rich.
Fluvial deposits	Applied to sand and gravel deposits laid down by streams or rivers.
Foliated	Banded rocks, usually due to crystal differentiation as a result of metamorphic processes.
Footwall	Surface of rock along the fault plane having rock below it.
g/t	Grams per tonne.
Gabbro	A fine to coarse grained, dark coloured, igneous rock composed mainly of calcic plagioclase, clinopyroxene and sometimes olivine.
Gangue	That part of an ore deposit from which a metal or metals is not extracted.
Geochemical	Pertains to the concentration of an element.
Geophysical	Pertains to the physical properties of a rock mass.
GIS database	A system devised to present partial data in a series of compatible and interactive layers.
Gneiss	Coarse-grained, banded metamorphic rock.
Gossan	Leached, oxidised near surface part of a vein containing sulphides, especially iron-bearing sulphides.
Grader	A mining unit which uses a long blade to create or maintain a flat and smooth road surface.
Granite	A common type of intrusive, felsic, igneous rock.
Gravity separation	The recovery of minerals utilising variances in specific gravity to separate the minerals (in this case non-magnetic hematite).



Greenschist facies	A low grade, low temperature regional metamorphism that results in a mineral assemblage typically containing chlorite, epidote and/or actinolite.
Greenstone belt	A broad term used to describe an elongate belt of rocks that have undergone regional metamorphism to greenschist facies.
Greywackes	A sandstone like rock, with grains derived from a dominantly volcanic origin.
Hangingwall	The mass of rock above a fault, vein or zone of mineralisation.
Hematite	A common iron ore, natural iron oxide that is reddish or brown in colour.
Hinge zone	A zone along a fold where the curvature is at a maximum.
Hydrothermal	A term applied to hot aqueous solution having temperatures up to 400° C which may transport metals and minerals in solution.
Igneous	A rock that has solidified from molten rock or magma.
Infill	Refers to sampling or drilling undertaken between pre-existing sample points.
In-situ	In the natural or original position.
Interflow	Refers to the occurrence of other rock types between individual lava flows within a stratigraphic sequence.
Integrated waste landform (IWL)	A combined waste/tailings storage facility which encapsulates the tailings in a hard rock cell.
Intermediate	A rock unit which contains a mix of felsic and mafic minerals.
Intra-cratonic	Situated between or within cratons.
Intrusion/Intrusive	A body of igneous rock that invades older rock.
Ironstone	A rock formed by cemented iron oxides.
Jig feed (Jig)	Material contaminated with dilutants which may be economically recoverable through gravity separation.
Joint venture	A business agreement between two or more commercial entities.
JORC	Joint Ore Reserves Committee (of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia).
JORC Code	A code developed by the Australian Joint Ore Reserves Committee which sets minimum standards for public reporting of exploration results, mineral resources and ore reserves.
kg/m <sup>3</sup>	Kilogram per cubic metre.
kg/t	Kilograms per tonne, a standard mass unit for demonstrating the concentration of uranium in a rock.
Kinematic	produced by motion.
Komatiite	Magnesium-rich mafic to ultramafic extrusive rock.
Lacustrine	Lake environment.
Lag	Concentration of ferruginous material left after removal of soil fines by wind and water.
Laterite	A cemented residuum of weathering, generally leached in silica with a high alumina and/or iron content.
Leaching	Removal of elements from soil by their dissolution in water and moving downward in the ground.
Limonite	General term for mixtures of hydrated iron oxides and iron hydroxides.



Lineament	A significant linear feature of the Earth's crust, usually equating a major fault or shear structure.
Lithology	A term pertaining to the general characteristics of rocks.
Lode	A vein or other tabular mineral deposit with distinct boundaries.
M	Millions.
Mafic	A dark igneous rock composed dominantly of iron and magnesium minerals (such as basalt).magnetite A mineral comprising iron and oxygen which commonly exhibits magnetic properties.
Magnetic anomaly	Zone where the magnitude and orientation of the earth's magnetic field differs from adjacent areas.
Magnetite	A ferromagnetic mineral form of iron oxide (Fe <sub>2</sub> O <sub>3</sub> ).
Magnetometer	An instrument which measures the earth's magnetic field intensity.
Mass recovery	The percentage of mass recovered after processing.
Mesothermal	Hydrothermal deposit formed at intermediate temperatures (200-300° C).
Metabasalt	Metamorphosed basalt.
Metal recovery	The percentage of metal recovered after processing.
Metamorphism	Process by which changes are brought about to rock in the earth's crust by the agencies of heat, pressure and chemically active fluids.
Mineralisation	A geological concentration minerals or elements of prospective economic interest.
Mining recovery	The percentage of ore recovered during mining.
Mineral	A substance occurring naturally in the earth which may or not be of economic value.
Mineralised zone	Any mass of rock in which minerals of potential commercial value may occur.
Mineral Resource	A mineral inventory that has been classified to meet the JORC code standard.
Moisture content	Percentage of moisture in a rock mass.
Mottled zone	A layer that is marked with spots or blotches of different colour or shades of colour. The pattern of mottling and the size, abundance, and colour contrast of the mottles may vary considerably and should be specified in soil description.
Moz	Millions of ounces.
mRL	Metres reduced level, refers to the height of a point relative to a datum surface.
Mt	Million Tonnes.
Mullock	A rock which contains no gold or waste rock from which the gold has been extracted.
Mylonite	A hard compact rock with a streaky or banded structure produced by extreme granulation of the original rock mass in a fault or thrust zone.
OEM	Original equipment manufacturer.
Open pit	A mine working or excavation open to the surface.
OPEX	Operating expenditure.
Ore	Material that contains one or more minerals which can be recovered economically.
Ore Reserve	An ore reserve that has been classified to meet the JOR code standard.



Orogen	A belt of deformed rocks, usually comprising metamorphic and intrusive igneous rocks, mostly occurring along the collision zone between cratons.
Outcrops	Surface expression of underlying rocks.
Outlier	A limited area of younger rocks completely surrounded by older rocks.
Owner-Operator	An operating scenario in which the mine owner also owns the mining fleet and directly employs personnel to conduct mining operations.
Oxidized ore	Metalliferous minerals by which have been altered by weathering and partially or completely converted into oxides.
Palaeochannels	An ancient preserved stream or river.
Pallid clays	A relatively pale coloured clay-rich weathering horizon in a lateritic profile which is depleted in iron, usually by leaching.
Pedogenic	A product of soil processes.
Pegmatite	A very coarse grained intrusive igneous rock which commonly occurs in dyke-like bodies containing lithium-boron-fluorine-rare earth bearing minerals.
Pelites	Sedimentary rock composed of very fine clay or mud particles.
Percussion drilling	Drilling method of where rock is broken by the hammering action of a drill bit.
Pisolitic	Describes the prevalence of rounded manganese, iron or alumina-rich chemical concretions, frequently comprising the upper portions of a laterite profile.
Playa	Very flat, dry lake bed of hard, mud-cracked clay.
Pluton	A large body of intrusive igneous rock.
Polymictic	Referring to coarse sedimentary rocks, typically conglomerate, containing clasts of many different rock types.
Porphyries	Felsic intrusive or sub-volcanic rock with larger crystals set in a fine groundmass.
ppb	Parts per billion; a measure of low level concentration.
Production Drill Rig	A drill rig designed to drill production blastholes.
Pre-split Drill Rig	A drill rig designed to drill the holes around the edge of an open pit, in order to create a smoothly contoured wall profile.
Primary Loading	The excavation and loading of material from its insitu location in the open pit.
Proterozoic	Geological eon that extended from 2.5 billion to 542 million years ago.
Pyrite, pyrrhotite	A common, pale bronze iron sulphide mineral.
Quartz	Mineral species composed of crystalline silica (SiO <sub>2</sub> ).
RAB drilling	A relatively inexpensive and less accurate drilling technique (compared to RC drilling) involving the collection of sample returned by compressed air from outside the drill rods.
Radiometric	Geophysical technique measuring emission from radioactive isotopes.
Rafts	A relatively large block of foreign rock incorporated into an intrusive magma.
RC drilling	Reverse Circulation drilling, whereby rock chips are recovered by airflow returning inside the drill rods, rather than outside, thereby returning more reliable samples.
Reclamation	The process in which land disturbed by mining activities is reclaimed back to a beneficial land use.



Reconnaissance	An examination or survey of a region in reference to its general geological character.
Redox	The boundary between a reducing environment and an oxidising environment.
Regolith	General term for gravels, soils, alluvials, clays and other materials which cover the bedrock.
Rehandle	Material which is loaded more than once between the location in which it is first mined and the location in which it is finally dumped.
Reserves	The portion of a mineral deposit which could be economically extracted or produced at the time of the reserve determination. These are classified as either proven, probable or possible ore reserves based on the JORC code.
Resource	An occurrence of material of intrinsic economic interest in a form that provides reasonable prospects for eventual economic extraction. These are classified as Measured, Indicated or Inferred ore resources based on the JORC code.
Rock chip sampling	The collection of rock specimens for mineral analysis.
Roll front	A uranium deposit that forms where groundwater in permeable sandstone or conglomerate encounters the interface between oxidizing and reducing conditions.
ROM Pad	The transfer area for ore from the mine to the processing plant.
Run of mine ore (ROM)	Ore in its state as extracted from the mine.
SMU	Service metre unit.
Saline	Salty.
Sandstone	Sedimentary rock comprising predominantly of sand.
Saprock	Zone of weathered rock preserved within the weathered profile.
Satellite imagery	The images produced by photography of the Earth's surface from satellites.
Schistose	Containing schistose (strongly foliated metamorphic rock).
Scree	The rubble composed of rocks that have formed down the slope of a hill or mountain by physical erosion.
Secondary Loading	Refers to the loading of rehandled material, or the loading of small amounts of insitu material during clean-up operations.
Sedimentary	Rocks formed by the deposition of particles carried by air, water or ice.
Sericite	A white or pale apple green potassium mica, very common as an alteration product in metamorphic and hydrothermally altered rocks.
Serpentine	The main alteration product of olivines and pyroxenes.
Shale	Fine grained sedimentary rock with well-defined bedding planes.
Sheared	A zone in which rocks have been deformed primarily in a ductile manner in response to applied stress.
Shovel	A mining unit which excavates material in an open pit and loads it into a truck or other materials handling unit.
Silcrete	Superficial deposit formed by low temperature chemical processes associated with ground waters, and composed of fine grained, water-bearing minerals of silica.
Silicified	Rock into which silica has been introduced.



Sills	Sheets of igneous rock which is flat lying or has intruded parallel to stratigraphy.
Silts	Fine-grained sediments, with a grain size between those of sand and clay.
Soil sampling	The collection of soil specimens for mineral analysis.
Spot price	Current delivery price of a commodity traded in the spot market.
Strike	The bearing of a rock formation.
Stripping ratio	The ratio of waste material mined to ore mined.
Stratiform	The arrangement of mineral deposit in strata or layers.
Strike	Horizontal direction or trend of a geological structure.
Sulphide	A general term to cover minerals containing sulphur and commonly associated with mineralisation.
Supergene	Process of mineral enrichment produced by the chemical remobilisation of metals in an oxidised or transitional environment.
t	Tonne.
Tpa	Tonnes per annum.
Tailings	Material rejected from the plant after valuable minerals have been Recovered.
Tenements	Large tracts of land granted under lease to mining companies and prospectors by the government.
Track Dozer	A mining unit designed to push materials, which has tracks rather than wheels.
Trammel	Screened cylinder used to separate materials by size.
Truck	A mining unit which transports material from the location where it is mined to the location where it is dumped.
Ultramafic	Dark to very dark coloured igneous rocks composed mainly of mafic minerals.
Unconformably	Having the relation of uniformity to the underlying rocks; not succeeding the underlying strata in immediate order of age or parallel position.
Unconformity	Description of rock strata where the layers are interrupted, discontinuous.
Uranyl	A common uranium mineral occurring in the oxidised portion of uranium deposits.
Veins	A thin infill of a fissure or crack, commonly bearing quartz.
Vibracoring	Obtains sediment samples by vibrating a core barrel into the sediment.
Volcanogenic	Rocks having volcanic origin.
Wmt	Wet metric tonne.
Waste	Material which does not contain minerals of economic merit.
Wheel Dozer	A mining unit designed to push materials, which has wheels rather than tracks.
Wheel Loader	An excavating unit which has wheels rather than tracks.
Whittle	A mining software package which optimises the size of an open pit based on a set of physical and financial input parameters.
Zone of oxidisation	The upper region of a mineral deposit which has undergone oxidisation.



Ravensgate



**TECHNICAL PROJECT REVIEW**  
**AND**  
**INDEPENDENT VALUATION REPORT**  
**ATLAS IRON LTD SOUTH EAST PILBARA IRON PROJECT**  
for

**FERRAUS LTD/BDO CORPORATE FINANCE LTD**



**TECHNICAL PROJECT REVIEW  
AND  
INDEPENDENT VALUATION REPORT**

**ATLAS IRON LTD SOUTH EAST PILBARA IRON PROJECT**

for

**FERRAUS LTD/BDO CORPORATE FINANCE LTD**

11 JULY 2011

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# TECHNICAL PROJECT REVIEW and INDEPENDENT TECHNICAL VALUATION

Prepared by RAVENSGATE on behalf of:

**FerrAus Ltd and BDO Corporate Finance Ltd**

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## 1. EXECUTIVE SUMMARY

### 1.1 BACKGROUND

Corvidae Pty Ltd ATF Ravensgate Unit Trust T/As Ravensgate (Ravensgate) has been commissioned by FerrAus Limited (FerrAus) and BDO Corporate Finance (BDO) to provide a Technical Project Review and an Independent Technical Valuation over seven Western Australian Iron Exploration Projects in the Southeast Pilbara region. FerrAus proposes to purchase these projects from Atlas Iron Limited (Atlas). These Projects are primarily prospective for Iron (Fe) mineralisation and several of the projects have JORC (2004) Inferred Fe Resources previously reported (Table 1).

The Projects are currently either owned by Atlas directly or by other parties in which Atlas has acquired the Fe rights. Ravensgate understands that all of the project tenements are held in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so.

The projects are located in the South-eastern Pilbara region of Western Australia within 130km of Mount Newman and were acquired as part of Atlas's takeover of Warwick Resources in late 2009 and of Giralia Resources in early 2011. Atlas Iron's Southeast Pilbara projects are comprised of seven main project areas which are primarily prospective for Fe, although some have potential for gold, base metals, chromite and manganese mineralisation:

- Western Creek (Fe) - includes JORC (2004) Fe Resources at the Western Creek and Western Ridge Prospects
- Jumblebar (Fe, Au, Cu, Cr, Mn) - includes the JORC (2004) Fe Resources at the McCamey's North, Caramulla and Jumblebar Range Prospects
- Warrawanda (Fe) - includes the JORC (2004) Fe Resources at the Wishbone Prospect
- Jigalong Project (Fe only)
- Weelarranna Project (Fe only)
- Upper Ashburton Project (Fe, Mn)
- Watershed Project (Fe, Mn)

### 1.2 PROJECT SUMMARIES

The Western Creek Iron Project can be classified as an 'Advanced Exploration Area' mineral asset as per the Valmin Code (2005) where a Mineral Resource has been estimated. The commodity item of interest for exploration is primarily DSO (Direct Shipping Ore) goethite-hematite iron mineralisation within Marra Mamba Formation rocks and Channel Iron Deposits (CID). A substantial JORC (2004) Inferred Fe Resource has been identified to date at both the Western Ridge and Western Creek Prospects (Table 1). With additional drilling and associated development work there is potential to upgrade portions of these resource to higher confidence resource classification categories. There may also be some potential to increase the reported resource base with additional extensional drilling. Outside of the known resource prospect areas an additional prospective Marra Mamba formation mineralization occurrence has been mapped and several other advanced exploration prospects have also been identified.



The Jimblebar Project is also an “Advanced Exploration Area” mineral asset. Some significant DSO Fe Inferred Resources have been identified within the project area to date at Jimblebar Range, Caramulla South and McCamey’s North areas (Table1). With additional drilling and associated development work there is potential to upgrade portions of these resources to a higher confidence resource classification category. There is also potential to increase these resource sizes moderately with additional extensional drilling. As well as having potential for DSO and CID Fe mineralisation, there is potential for discovery and development of other commodities within the projects area. Within the Jimblebar Greenstone Belt lies the Copper Knob Cu-Au prospect where further work is warranted to evaluate its potential for remobilised VHMS (Volcanic Hosted Massive Sulphide) style base-metals mineralisation and possible orogenic style gold mineralisation. Chromite mineralisation has also been identified within the project area, which also warrants further work to assess economic potential.

The Warawanda Project is as an ‘Advanced Exploration Area’ mineral asset. The majority of work within the license area has been focussed on the Wishbone Prospect where a DSO Fe Resource has been estimated (Table 10). There is potential to upgrade portions of this resource with additional data from infill drilling to improve geological confidence, and there may also be potential to expand the overall resource base. Of note is that geological mapping has identified several other areas of surface Fe enrichment outside of the Wishbone Resource area. These have not been drill tested to date and there may be potential to outline additional Fe mineralisation within these areas.

At the Jigalong Project, Atlas hold the rights for Fe mineralization only. The project can be classified as an ‘Advanced Exploration Area’ mineral asset where no resource has been defined, but historic drilling has identified mineralisation with potentially economic grades. Geophysical targeting work and reconnaissance drilling has identified several DSO Fe mineralisation targets within the Marra Mamba formation below the cover sequence. Further drilling and testing of these targets is warranted.

At the Weelarrana Project, Atlas hold the rights for Fe mineralization over most of the licenses. The project can be classified as an ‘Exploration Area’ mineral asset which reflects that it at an earlier and more ‘grass roots’ stage of exploration for the area. Geophysical and remote sensing targeting work, reconnaissance mapping and sampling has identified several CID iron mineralisation targets worthy of further follow up. Further drilling and testing of these targets is therefore warranted. In addition reconnaissance mapping has identified several manganese-bearing outcrops within the project area that warrant further follow up to assess the extents of Mn mineralization (on a license which Atlas holds all metal exploration rights).

The Upper Ashburton and Watershed projects are very much “grass roots’ type ‘Exploration Area’ projects. Very little historic work has been done on these licenses. Work completed to date has largely been remote sensing, geophysics and reconnaissance mapping. Several areas prospective for CID Fe mineralisation have been identified that still require further work. There may also be some potential for discovery of manganese mineralisation. Further exploration is necessary to determine if economically viable iron ore and manganese targets may identified.



**Table 1 Summary of Atlas SE Pilbara Iron Projects JORC (2004) Mineral Resources**

Deposit	Category	Tonnes (Mt)							
			Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	CaFe%*
Western Ridge DSO <sup>1</sup>	Inferred	49.2	56.9	5.3	3.0	0.07	0.08	8.7	62.3
Western Ridge CID <sup>2</sup>	Inferred	3.2	54.1	8.9	6.5	0.04	3.8	9.3	59.6
Western Creek DSO <sup>3</sup>	Inferred	19.0	55.1	6.6	4.1	0.06	0.03	9.3	60.7
Jimblebar Range DSO <sup>4</sup>	Inferred	12.6	57.5	7.0	2.0	0.06	0.04	7.9	62.4
McCameys North DSO <sup>5</sup>	Inferred	39.0	58.0	4.9	4.8	0.17	0.01	9.3	60.7
Warrawanda DSO <sup>6</sup>	Inferred	20.8	57.1	6.6	2.6	0.07	0.03	8.5	62.4
Caramulla South DSO <sup>7</sup>	Inferred	13.8	53.9	8.6	5.4	0.04	0.03	8.1	58.7
<b>TOTAL</b>		<b>157.6</b>	<b>56.7</b>	<b>6.2</b>	<b>3.9</b>	<b>0.09</b>	<b>0.04</b>	<b>8.8</b>	<b>61.4</b>

<sup>1</sup> Western Ridge DSO Resource (Giralia, 2009) - lower cut-off 50%

<sup>2</sup> Western Ridge Channel Fe Resource (Giralia, 2009), - lower cut-off 50%

<sup>3</sup> Western Creek (after Warwick and De-Vitry 2009c) - lower cut-off Fe 50%

<sup>4</sup> McCameys North DSO (Atlas, 2010) - Lower Cut-off 53%

<sup>5</sup> Jimblebar DSO (Warwick and De-Vitry, 2009b) - lower cut-off Fe 50%

<sup>6</sup> Warrawanda - Wishbone DSO (Atlas, 2010) Fe Lower Cut-off 53%

<sup>7</sup> Caramulla DSO after (Warwick and De-Vitry, 2009a) - Fe Lower Cut-off 50%

\* CaFe% is calcined Fe calculated by using the following formula  $(Fe\% / (100 - LOI\%)) * 100$

### 1.3 VALUATION

Based upon Ravensgate's review of the Atlas's South-East Pilbara Iron project exploration areas and in consideration of the various methods that are available in valuing exploration assets Ravensgate has elected to use the following valuation methodology to value the various projects:

- For "Advanced Exploration Project" leases on which JORC (2004) Resources have been defined, the Comparative Transaction method has been used to assign a value based on value per contained metal tonne of the Resource. The value used per tonne has been assigned based on careful consideration of various geological and technical aspects of the project to rank the project in comparison to other transactions and arrive at an appropriate valuation.
- For "Advanced Exploration Projects" leases on which no JORC (2004) resources have been defined and which are considered more 'grass roots' exploration area project leases Ravensgate has used the Comparative Transactions Method to arrive at appropriate valuations which have been based on careful consideration of the various geological and technical aspects each project.

Almost all of the licenses have been subject to Valmin technical valuations in the past two years, either by Agricola in late 2009 (Castle, 2009) and by Ravensgate in early 2011 (Alison, 2011). Ravensgate has used these valuations as a baseline cross-check of its new valuations in conjunction with current understood market conditions.





Ravensgate has concluded that Atlas Iron's Southeast Pilbara Fe Projects are of considerable technical merit and warrant further exploration and evaluation. The applicable valuation date is 11<sup>th</sup> July 2011. The value of Atlas's 100% ownership interest in the listed Projects is considered to lie in a range from \$92.5M to \$205.8M. Within this range Ravensgate has selected a preferred valuation of \$121.2M (Table 2).

<b>Table 2 Atlas Iron Southeast Pilbara Iron Projects - Project Technical Valuation Summary.</b>					
<b>Project</b>	<b>Mineral Asset</b>	<b>Atlas Ownership</b>	<b>Valuation</b>		
			<b>Low \$M</b>	<b>High \$M</b>	<b>Preferred \$M</b>
Western Creek	Advanced Exploration Area.	100%	39.36	88.19	50.22
Jimblebar	Advanced Exploration Area.	100% (Fe rights only)	29.31	61.58	40.61
Warrawanda	Advanced Exploration Area.	100%	10.69	21.38	14.25
Jigalong	Advanced Exploration Area.	100%	4.34	9.44	6.29
Weelaranna	Exploration Area	100%	2.60	7.81	3.25
Upper Ashburton	Exploration Area	100%	4.92	14.77	4.92
Watershed	Exploration Area	100%	1.25	2.64	1.62
<b>Combined Projects</b>	<b>All listed projects</b>	<b>100%</b>	<b>92.48</b>	<b>205.81</b>	<b>121.16</b>

\* The combined valuation has been compiled to an appropriate level of precision and minor rounding errors may occur. Ravensgate has not valued licenses under application.



## 2. INTRODUCTION

### 2.1 Terms of Reference

Corvidae Pty Ltd ATF Ravensgate Unit Trust T/As Ravensgate (Ravensgate) has been commissioned by FerrAus Limited (FerrAus) and BDO Corporate Finance (BDO) to provide a Technical Project Review and an Independent Technical Valuation over seven Western Australian Exploration Projects in the Southeast Pilbara region that FerrAus proposes to purchase from Atlas Iron Limited (Atlas). These Projects are primarily prospective for Fe mineralisation and several of the projects have JORC (2004) Inferred Fe Resources previously reported.

The Projects are currently either owned by Atlas directly or by other parties in which Atlas has acquired the Fe rights. Ravensgate understands that all the project tenements in Western Australia are held in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so.

The objective of this report is to firstly provide a Technical Project Review of the Seven Exploration Projects which comprise Atlas's Southeast Pilbara Projects. The second objective of this report is to provide a Valmin 'compliant' technical valuation assessment of these projects. Ravensgate did not complete site visits to the various projects reviewed and values derived are based upon comprehensive documentation supplied by Atlas for the projects reviewed. Ravensgate is satisfied that there is sufficient current information available to allow informed appraisals to be made without including a site inspection of the project areas and is of the opinion that no significant additional benefit would have been gained through a site visit to these areas.

This report does not provide a valuation of Atlas Iron as a whole, nor does it make any comment on the fairness and reasonableness of any proposed transaction between any two companies. The conclusions expressed in this Technical Project Review and Independent Technical Valuation are valid as at the Valuation Date (11 July 2011). The review and valuation is therefore only valid for this date and may change with time in response to changes in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values included in this report are expressed in Australian dollars (A\$) unless otherwise stated.

This report has been prepared in accordance with the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (The ValMin Code) as adopted by the Australasian Institute of Mining and Metallurgy (AusIMM) in April 2005. The report has also been prepared in accordance with ASIC Regulatory Guides 111 (Contents of Expert Reports) and 112 (Independence of Experts). The Technical Project Review and Independent Technical Valuation report has been compiled based on information available up to and including the date of this report.



## 2.2 Qualifications, Experience and Independence

Ravensgate was established in 1997 and specialises in resource modelling and resource estimation services. The company has worked for major clients globally, including Freeport at Grasberg Mine, Ok Tedi Gold Mine in Papua New Guinea, Goldfields in Ghana, BHP in Western Australia and many junior resource companies which are ASX (Australian Stock Exchange), TSX (Toronto Stock Exchange) or AIM (London Stock Exchange) listed companies. Ravensgate has focused upon providing resource estimations, valuations, and independent technical documentation and has been involved in the preparation of Independent Reports for Canadian, Australian, United States and United Kingdom listed companies.

**Principal Author: Stephen Hyland, Principal Consultant and Director. BSc Geology, MAusIMM, CIMM, GAA, MAICD.**

**Stephen Hyland** has had extensive experience of over 20 years in exploration geology and resource modelling and has worked extensively within Australia as well as offshore in Africa, Eastern and Western Europe, Central and South East Asia, modelling base metals, gold, precious metals and industrial minerals. Stephen's extensive resource modelling experience commenced whilst working with Eagle Mining Corporation NL in the diverse and complex Yandal Gold Province where for three and half years he was their Principal Resource Geologist. The majority of his time there was spent developing the historically successful Nimary Mine. He also assisted the regional exploration group with preliminary resource assessment of Eagle's numerous exploration and mining leases. Since 1997, Stephen has been a full time consultant with the minerals industry consulting firm Ravensgate where he is responsible for all geological modelling and reviews, mineral deposit evaluation, computational modelling, resource estimation, resource reporting for ASX / JORC and other regulatory compliance areas. Primarily, Stephen specialises in Geological and Resource Block Modelling generally with the widely used MEDSystem / MineSight® 3D mine-evaluation and design software. Stephen Hyland holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia. He is a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI43-101.

**Co Author: Don Maclean, Principal Consultant - Geology. MSc Geology, Grade Certificate Mineral Economics, MAIG, MSEG.**

**Don Maclean** is a geologist with over sixteen years experience in exploration geology, mine geology, resource modelling and project management throughout Australasia, Greenland, Africa, Central and SE Asia and Europe. He has worked in a variety of commodities, including gold, precious and base metals. Prior to joining Ravensgate, Don was the Chief Geologist for Ironbark Zinc where he was responsible for managing exploration and resource development work at the Citronen Fjord Zinc project in Greenland. Prior to this, Don worked for Newmont and Normandy throughout Australasia in a variety of senior exploration and mine based roles. Don was instrumental in the discovery and development of the 1.5 Million ounce Westside Gold Deposit at Nimary-Jundee in Western Australia. Don has a broad skill base, having worked in regional and near mine exploration, resource development, open pit and underground geology as well as senior company management roles. He has extensive experience in planning and managing large exploration projects, working on feasibility teams, technical audits, due diligence, resource generation, and exploration target generation. He has worked in a variety of geological terranes ranging from the high Arctic to the arid deserts of Australia. Mr. Maclean holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia.

**Co Author: H. Kate Holdsworth, Senior GIS Geologist. BSc (Hons) Geology, MAusIMM.**

**H. Kate Holdsworth** is a senior GIS geologist with over 17 years GIS experience who joined the Ravensgate team in September 2006. During her tenure at Ravensgate, she has contributed to



the compilation of numerous Independent Geologists Reports, Valuation Reports, GIS projects as well as having assisted clients with their exploration reporting requirements and QA/QC investigations into client's data quality. Prior to joining Ravensgate, she worked for Giscoe Pty Ltd, a GIS company in Johannesburg, for ten years, where she was involved in diverse GIS projects, including database creation, database population and data validation. Kate has four years' experience in GIS with the Geological Survey of South Africa, where she was a member of their GIS database design team.

**Peer Reviewer: Jason McNamara, Principal Consultant - Resources. BSc Geology, MAusIMM.**

Jason McNamara is an Associate of Ravensgate. As a Principal Consultant he carries out work for Mineral Resource estimations, Independent Technical Valuations, Independent Geologist Report's and Formal Technical Project reviews over a range of commodities. He has over 18 years international mining industry experience in operational project exploration, grade control and resource estimation. Jason has worked for both junior and larger ASX listed companies, encompassing open-cut operations and evaluations. Competent Person sign-off was undertaken for MMG's Sepon Gold and Copper Resources in Laos. Jason McNamara holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia.

### 2.3 Disclaimer

The Authors of this report, are not, nor intend to be, a director, officer or other direct employee of FerrAus Ltd or Atlas Iron Limited, and have no material interest in the projects of FerrAus or Atlas Iron Limited. Neither Ravensgate nor any of its employees or associates is an insider, associate or affiliate of FerrAus Ltd or any associated company.

The relationship with FerrAus Ltd, Atlas Iron Ltd and BDO Corporate Finance Ltd is solely one of professional association between client and independent consultant. Ravensgate's professional fees are based on time charges for work actually carried out, and are not contingent on any prior understanding concerning the conclusions to be reached. Fees arising from the preparation of this report are charged at Ravensgate's standard rates.

The report has been prepared in compliance with the Corporations Act and ASIC Regulatory Guides 111 and 112 with respect to Ravensgate's independence as experts. Ravensgate regards RG112.31 to be in compliance whereby there are no business or professional relationships or interests which would affect the expert's ability to present an unbiased opinion within this report. This Report has been compiled based on information available up to and including the date of this Report.

### 2.4 Principal Sources of Information

The principal sources of information used to compile this report comprise technical reports and data variously compiled by Atlas Iron and their partners or consultants, publically available information such as ASX releases, discussions with Atlas Iron technical and corporate management personnel and government reports. A listing of the principal sources of information is included in the references attached to this report. All reasonable enquiries have been made to confirm the authenticity and completeness of the technical data upon which this report is based. A final draft of this report was also provided to FerrAus and Atlas Iron, along with a request to identify any material errors or omissions prior to final submission.

### 2.5 Consent Statements

Consent has been given by Ravensgate for the inclusion of the short form version of this report in the Independent Experts Report (IER) prepared by BDO Corporate Finance Ltd. Consent has been given by Ravensgate for the distribution of this report in the form and context in which they appear.

#### ***Background Information and Tenure***

The projects discussed in this report are located in the South-Eastern Pilbara region of Western Australia. The projects were acquired as part of Atlas's takeover of Warwick Resources in late



2009 and of Giralia Resources in early 2011. A locality map of the project area is presented in Figure 1 below. A summary of the tenement details is listed in Table 3.

Atlas Iron's Southeast Pilbara projects are comprised of seven main project areas which are primarily prospective for Fe, although some have potential for discovery of gold, base metals, chromite and manganese mineralisation:

- Western Creek (Fe) - includes JORC (2004) Fe Resources at the Western Creek and Western Ridge Prospects
- Jimblebar (Fe, Au, Cu, Cr, Mn) - includes the JORC (2004) Fe Resources at the McCamey's North, Caramulla and Jimblebar Range Prospects
- Warrawanda (Fe) - includes the JORC (2004) Fe Resources at the Wishbone Prospect
- Jigalong Project (Fe only)
- Weelarranna Project (Fe only)
- Upper Ashburton Project (Fe, Mn)
- Watershed Project (Fe, Mn)

A review of the geology and prospectivity of these projects is included in the following section.

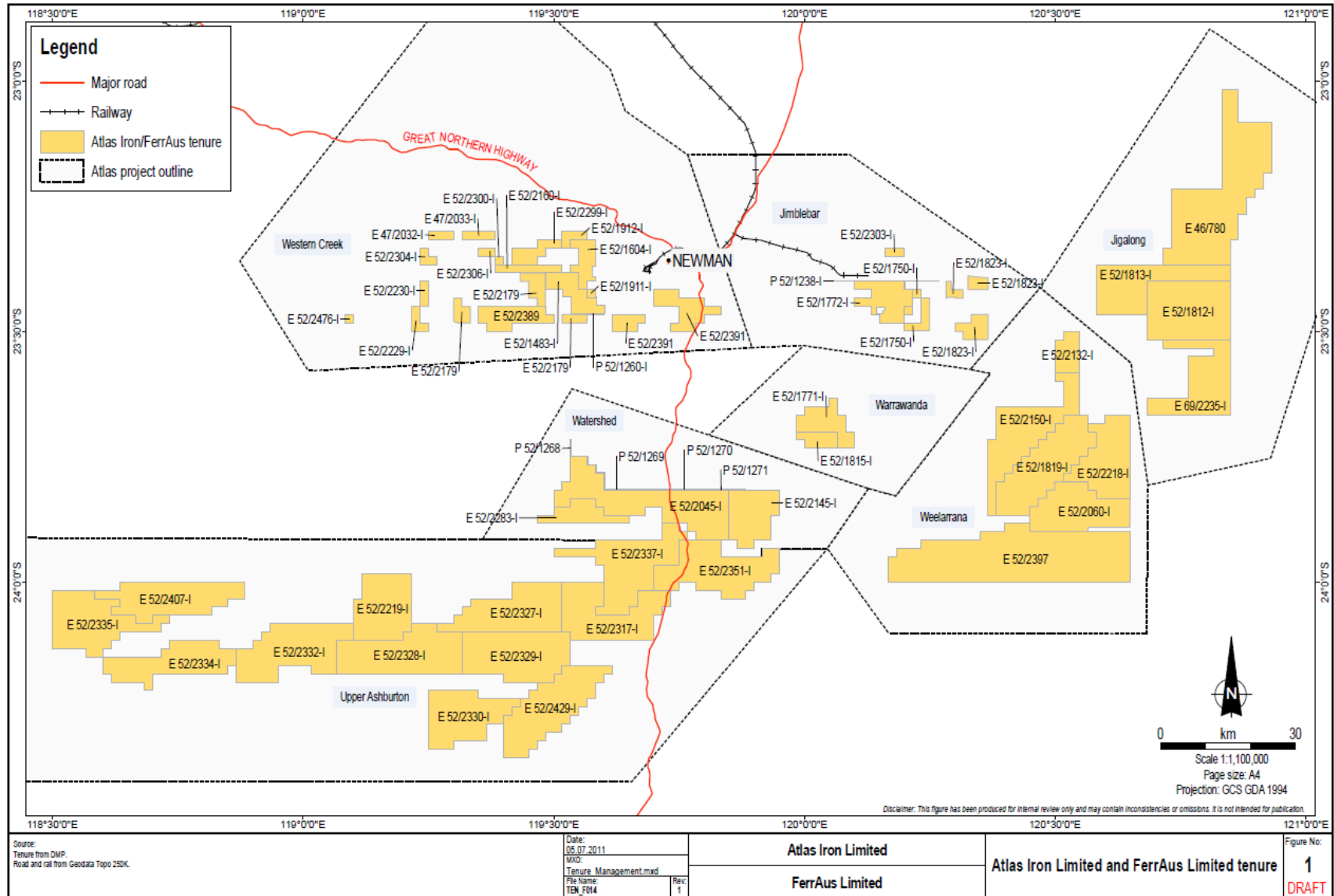


**Table 3 Atlas Iron Southeast Pilbara Iron Projects - Tenement Schedule**

Project Name	Lease	Status	Grant Date	Expiry Date	Notes
Jigalong	E46/780	Granted			Atlas has Fe rights only
Jigalong	E52/1812	Granted			Atlas has Fe rights only
Jigalong	E52/1813	Granted			Atlas has Fe rights only
Jigalong	E69/2235	Granted			Atlas has Fe rights only
Jimblebar	E52/1595	Granted	18-Sep-03	17-Sep-12	
Jimblebar	E52/1750	Granted	7-Sep-05	6-Sep-12	
Jimblebar	E52/1772	Granted	29-Sep-05	28-Sep-12	Contains Jimblebar DSO resource
Jimblebar	E52/1823	Granted	17-Nov-05	16-Nov-12	Contains DSO resource (Caramulla South)
Jimblebar	E52/2303	Granted	2-Nov-09	1-Nov-14	Contains McCameys North DSO Resource
Jimblebar	P52/1098	Expired	6-Jun-06	5-Jun-12	Expired - not valued
Jimblebar	P52/1238	Granted	13-Oct-08	12-Oct-12	
Jimblebar	P52/1258				Amalgamated into E52/1750.
Jimblebar	P52/1326	Granted	14-May-10	13-May-14	
Mt Cooke South	E46/856	Application			Application - not valued
Upper Ashburton	E52/2219	Granted	30-Jan-09	29-Jan-14	
Upper Ashburton	E52/2317	Granted	22-Jul-10	20-Jul-15	
Upper Ashburton	E52/2327	Granted	18-Jan-10	17-Jan-15	
Upper Ashburton	E52/2328	Granted	18-Jan-10	17-Jan-15	
Upper Ashburton	E52/2329	Granted	18-Jan-10	17-Jan-15	
Upper Ashburton	E52/2330	Granted	18-Jan-10	17-Jan-15	
Upper Ashburton	E52/2332	Granted	18-Jan-10	17-Jan-15	
Upper Ashburton	E52/2334	Granted	21-Jul-09	20-Jul-14	
Upper Ashburton	E52/2335	Granted	21-Jul-09	20-Jul-14	
Upper Ashburton	E52/2337	Granted	22-Jul-10	21-Jul-15	
Upper Ashburton	E52/2351	Granted	22-Jul-10	21-Jul-15	
Upper Ashburton	E52/2407	Granted	20-Aug-09	19-Aug-14	
Upper Ashburton	E52/2429	Granted	5-May-10	4-May-15	
Warrawanda	E52/1771	Granted	6-Apr-05	5-Apr-12	Contains Wishbone DSO resource
Warrawanda	E52/1815	Granted	25-Jul-05	24-Jul-12	Contains Wishbone DSO resource
Watershed	E52/2045	Granted	8-Apr-08	7-Apr-13	
Watershed	E52/2145	Granted	6-Jul-08	5-Jul-13	
Watershed	E52/2283	Granted	25-Aug-09	24-Aug-14	
Watershed	P52/1268	Granted	20-Jan-10	19-Jan-14	
Watershed	P52/1269	Granted	20-Jan-10	19-Jan-14	
Watershed	P52/1270	Granted	20-Jan-10	19-Jan-14	
Watershed	P52/1271	Granted	20-May-09	19-May-13	
Weelarrana	E52/1819	Granted			Atlas has Fe rights only
Weelarrana	E52/2060	Granted			Atlas has Fe rights only
Weelarrana	E52/2132	Granted	4-May-08	3-May-13	
Weelarrana	E52/2150	Granted			Atlas has Fe rights only
Weelarrana	E52/2218	Granted			Atlas has Fe rights only
Weelarrana	E52/2397	Granted			Atlas has Fe rights only
Western Creek	E47/2032	Granted	15-Mar-10	14-Mar-15	
Western Creek	E47/2033	Granted	15-Mar-10	14-Mar-15	
Western Creek	E52/1483			9-Feb-13	Contains Western Ridge DSO resource
Western Creek	E52/1604			8-Aug-12	
Western Creek	E52/1911			6-Jul-11	
Western Creek	E52/1912			6-Jul-11	
Western Creek	E52/2160	Granted	13-Oct-08	12-Oct-13	Contains Western Crk DSO resource
Western Creek	E52/2179			23-Apr-14	
Western Creek	E52/2229	Granted	12-Feb-09	11-Feb-14	
Western Creek	E52/2230	Granted	12-Feb-09	11-Feb-14	
Western Creek	E52/2299	Granted			
Western Creek	E52/2300	Granted	0-Jan-00		
Western Creek	E52/2304	Granted	2-Nov-09	1-Nov-14	
Western Creek	E52/2305	Surrendered			Surrendered - not valued
Western Creek	E52/2306	Granted	2-Nov-09	1-Nov-14	
Western Creek	E52/2389			1-Jun-15	
Western Creek	E52/2391			1-Jun-15	
Western Creek	E52/2476	Granted	21-May-10	20-May-15	
Western Creek	P52/1260	Granted	25-Mar-09	24-Mar-13	



Figure 1 Locality Map of the Atlas Irons' Southeast Pilbara Iron Projects





### **3. PROJECT REVIEW**

#### **3.1 Western Creek**

##### **3.1.1 *Introduction and Location***

The Western Creek Project is located approximately 10 kilometres west of the town of Newman in the Pilbara Region of Western Australia.

##### **3.1.2 *Tenure***

The Western Creek Project is comprised 18 exploration and prospect licenses with a total area of 435.35km<sup>2</sup>. The tenement details are listed in Table 3. These project encompass's licenses that were acquired by Atlas through their takeover of Warwick Resources in late 2009 and Giralia Resources in early 2011.

##### **3.1.3 *Geology and Mineralisation***

The project covers the north-western margin of the Archaean Sylvania Dome and near its contacts with the unconformably overlying Fortescue Group rocks. Two 'greenstone belts', namely the western and central belts lie within the Archaean Sylvania Dome and are also present within the project area. The western belt is comprised of folded quartzite and chert / BIF, and the central greenstone group is comprised of gabbro and quartzite. The bulk of the Archaean Dome sequence is comprised of granitic rocks. Parts of the project area are underlain by sediments and volcanics of the Fortescue Group, comprised mostly of the basal Hardey Sandstone, some overlying basalts, and the Jeerinah Shale (with its voluminous dolerite/gabbro sills). Small areas of Hamersley Formation Marra Mamba iron formation outcrop in the project area, particularly on the Western Ridge and at the Homestead prospect. Large areas of Quaternary alluvium and Cenozoic cover obscure basement rocks along the current Western Creek drainage. The major structure present is the Whaleback Fault, which disrupts stratigraphy and juxtaposes Fortescue Group basalts with Hamersley Group iron formations.







**Table 4 Western Creek Iron Project - Resource Summary**

Deposit	Category	Tonnes (Mt)	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	café %*
Western Ridge <sup>1</sup>	Inferred	49.2	56.9	6	3.5	0.06	0.08	9.1	62.6
Western Ridge <sup>2</sup>	Inferred	3.2	54.1	8.9	6.5	0.04	0.05	5.6	57.3
Western Creek <sup>3</sup>	Inferred	19.9	55.1	6.6	4.1	0.06	0.03	9.3	60.7
GRAND TOTAL	Inferred	71.4	56.3	6.3	3.8	0.06	0.07	9.0	61.9

<sup>1</sup> Western Ridge Marra Mamba DSO Resource lower cut-off 50% (Giralia, 2009)

<sup>2</sup> Western Ridge Channel Fe Resource lower cut-off 50% (Giralia, 2009)

<sup>3</sup> Western Creek Marra Mamba Resource lower cut-off 50% (Warwick and De-Vitry, 2009a)

\* CaFe% is calcined Fe calculated by using the following formula  $(Fe\% / (100 - LOI\%)) * 100$

### 3.1.5 Project Potential

The Western Creek Iron Project can be classified as an 'Advanced Exploration Area' mineral asset where a Mineral Resource has been estimated. The commodity item of interest for exploration is primarily goethite-hematite iron mineralisation of the Marra Mamba Formation in the Pilbara region.

Substantial Inferred Fe Resources have been identified to date at Western Ridge and Western Creek. With additional drilling and associated development work there is potential to upgrade portions of this resource to higher confidence resource classification category. There may also be potential to increase the reported Resources with additional exploration drilling.

Outside of the known Resource areas the prospective Marra Mamba formation has been mapped and several advanced prospects have been identified including the Homestead Creek Prospect. It is Ravensgate opinion that the project is of merit and further systematic exploration programs are warranted.



## 3.2 Jimblebar Project

### 3.2.1 *Introduction and Location*

The Jimblebar Project area is located approximately 50 kilometres east of the town of Newman in the Pilbara Region of Western Australia. The project area lies several kilometers from BHP Billitons Jimblebar mine .

### 3.2.2 *Tenure*

The Jimblebar Project is comprised of seven exploration and prospecting licenses (E52/2303) with a total area of over 157.2km<sup>2</sup>. The tenement details are listed in Table 3 for reference. The project was acquired by Atlas through its take-over of Warwick Resources in late 2009.

### 3.2.3 *Geology and Mineralisation*

The Jimblebar project is underlain predominantly by the Archaean Jimblebar Greenstone belt, a belt of various felsic, mafic and ultramafic volcanic units intercalated with cherts and banded iron formations. The greenstones have been interpreted to have been deposited onto a granitoid basement and have been deformed, metamorphosed and intruded by later granitoid intrusions.

Within the central part of the Jimblebar Greenstone belt is an arcuate ridge of deformed and metamorphosed felsic volcanics known as the “Copper Range” unit, which hosts several sheared zones of oxide and sulphide copper mineralisation.

To the east of Copper Range lies a series of BIF and quartzite ridges of the Jimblebar range within which a number of small gold mineralised systems occur that were mined historically. At West Coobina in the south of the project area, multiple chromite-bearing bands up to 2m thick occur within an arcuate serpentinised peridotite sill that strikes for 1,400m and is locally disrupted by cross-faulting and thin pegmatite intrusives.

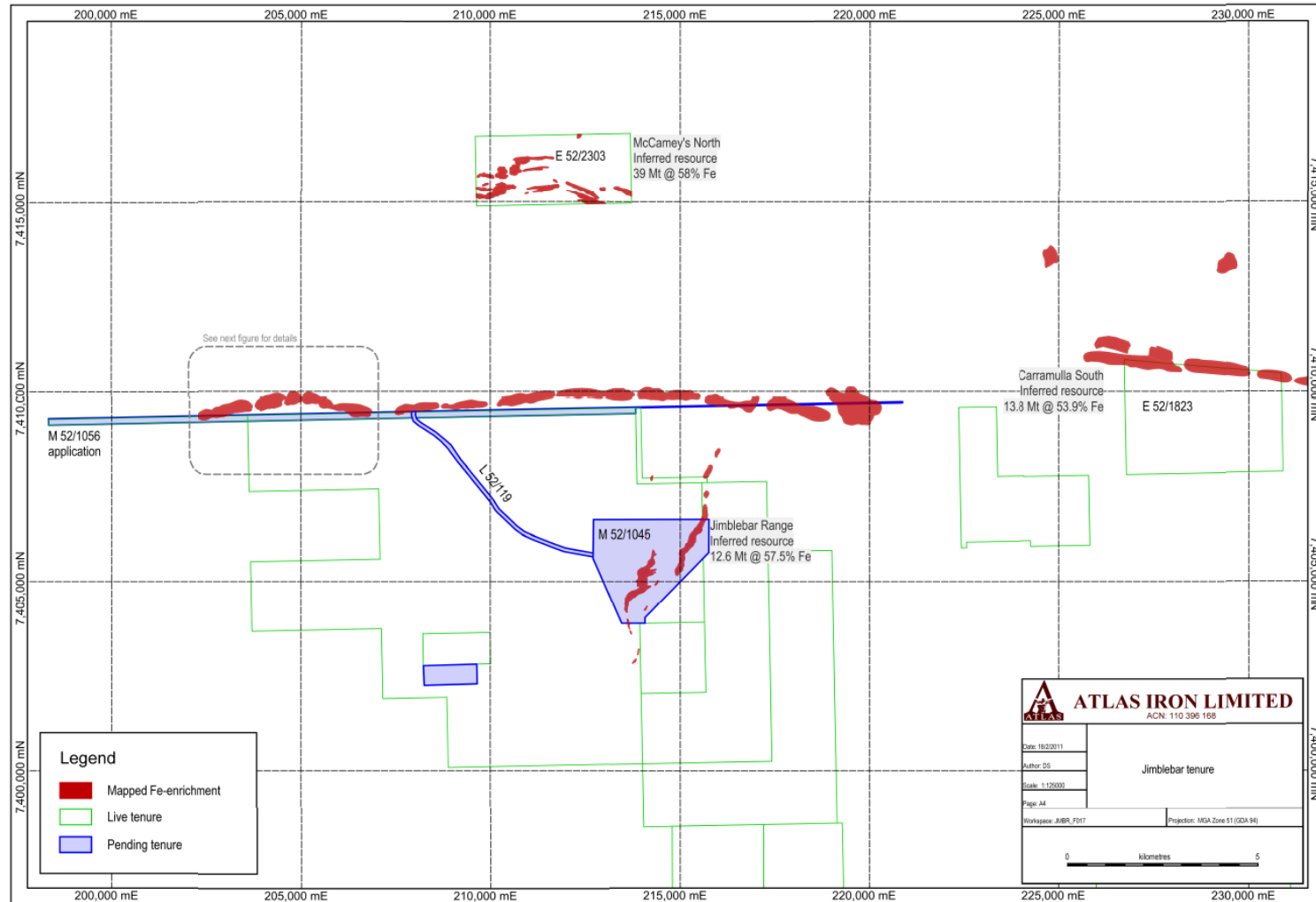
There are also several mesas of iron mineralisation which are remnants of the Tertiary Hammersley Surface (Jimblebar Ridge Iron prospect).

To the north, the Jimblebar Greenstone belt is unconformably overlain by the east-west striking Archaean to Proterozoic Fortescue and Hammersley Groups which includes the Marra Mamba Formation. Iron mineralisation has been identified at the Caramulla South Prospect, where outcropping goethite-hematite mineralisation occurs within BIF's of the Marra Mamba Formation.

Further to the north in McCameys North Prospect area is the Archaean-Proterozoic Woongarra Volcanics and the Boolgeeda Formation which dip northwards and are interpreted to extend some distance northwards under the recent cover material. The Woongarra Volcanics form the lowest part of the stratigraphic sequence in this area and is comprised of rhyolite and rhyodacites with narrow BIF/chert horizons intruded by discontinuous dolerite sills. This is stratigraphically overlain by folded and brecciated banded iron formations and dolomitic / calcareous shales of the Boolgeeda Iron Formation.



Figure 3 Jimblebar Iron Project Tenement locations and Resource Development Prospects





### 3.2.4 Exploration History and Resources

The project area has historically been explored by many companies with most of the work having been focussed on assessing the gold and base metal potential of the Copper Range prospect area within the Jimblebar Greenstone belt. Work was also carried out to assess chromite mineralisation at Coobina in the east of the project area. This project lies several kilometres along strike from the Coobina Chromite Mine - the only currently operating chromite mine in Australia.

In more recent years work has been largely focussed on assessing the iron mineralisation potential of the project area. In 2007 Warwick discovered the Jimblebar Range Fe-deposit which comprises two zones of hematite-goethite mineralisation. By mid 2009 a JORC (2004) Resource of 12.6 Mt at 57.5% Fe (Warwick and De-Vitry, 2009) had been estimated (Table 5) by the QG Group on behalf of Warwick Resources.

**Table 5 Jimblebar Range 2009 Resource (Warwick and De-Vitry, 2009).**

Deposit	Category	Tonnes (Mt)	Fe %	P %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	CaFe %
Jimblebar Range	Inferred	12.6	57.5	7.0	2.0	0.06	0.04	7.9	62.4

\* Reported using a 50% Fe lower cut-off, CaFe% is calcined Fe calculated by using the following formula  $(Fe\% / (100 - LOI\%)) * 100$

Exploration by Warwick Resources within Marra Mamba Formation rocks in the east of the project area identified a low-grade Fe resource at the Caramulla South prospect. In September 2009 an Inferred Resource of 13.8Mt at 53.9% Fe was estimated by the QG Group (Warwick and De-Vitry, 2009) on behalf of Warwick Resources (Table 6). This resource estimate was based data collected from RC (59 holes- 2,397m) and diamond drilling (3 holes - 136m) as well as surface mapping. Three dimensional wireframe solid interpretations of mineralised domains with a nominal 50% Fe were defined for resource modelling. A block model was created and resource estimation was carried out using ordinary kriging interpolation. Bulk density measurements used were based on measurements from drill core.

**Table 6 Caramulla South 2009 Resource (Warwick and De-Vitry, 2009)**

Deposit	Category	Tonnes (Mt)	Fe %	P %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	CaFe %
Caramulla South	Inferred	13.8	53.9	8.6	5.4	0.04	0.03	8.1	58.7

\* Reported using a 50% Fe lower cut-off, CaFe% is calcined Fe calculated by using the following formula  $(Fe\% / (100 - LOI\%)) * 100$

In the north of the project area Warwick Resources completed mapping and rock chip sampling programs in the McCameys North area. Results were very encouraging with several areas of high grade bedded iron enrichment identified which is interpreted to be associated with the Boolgeeda Iron Formation - the uppermost unit of the Hamersley Group. A total of 27 rock chip samples taken by Warwick returned an average grade of 62.7% Fe, with a maximum grade of 65.4% Fe (Warwick, 2009). Four sample traverses identified mineralised widths of up to 188m. Mapping also identified detrital and CID potential within the project area. Based on these results Atlas Iron completed further mapping and carried out a substantial RC drilling program over the license area.

Atlas completed a JORC (2004) resource in early 2011 for McCameys North estimating an Inferred Resource of 39.0 Mt at 58% Fe (Table 7) (Atlas, 2011). The estimate was based on 184 RC holes on 200m by 50m spaced centres using inverse distance squared estimation within



geologically constrained boundaries. A 'global' assumed bulk density of 2.7 was used for tonnage estimations.

**Table 7 McCameys North 2011 Resource (Atlas 2011)**

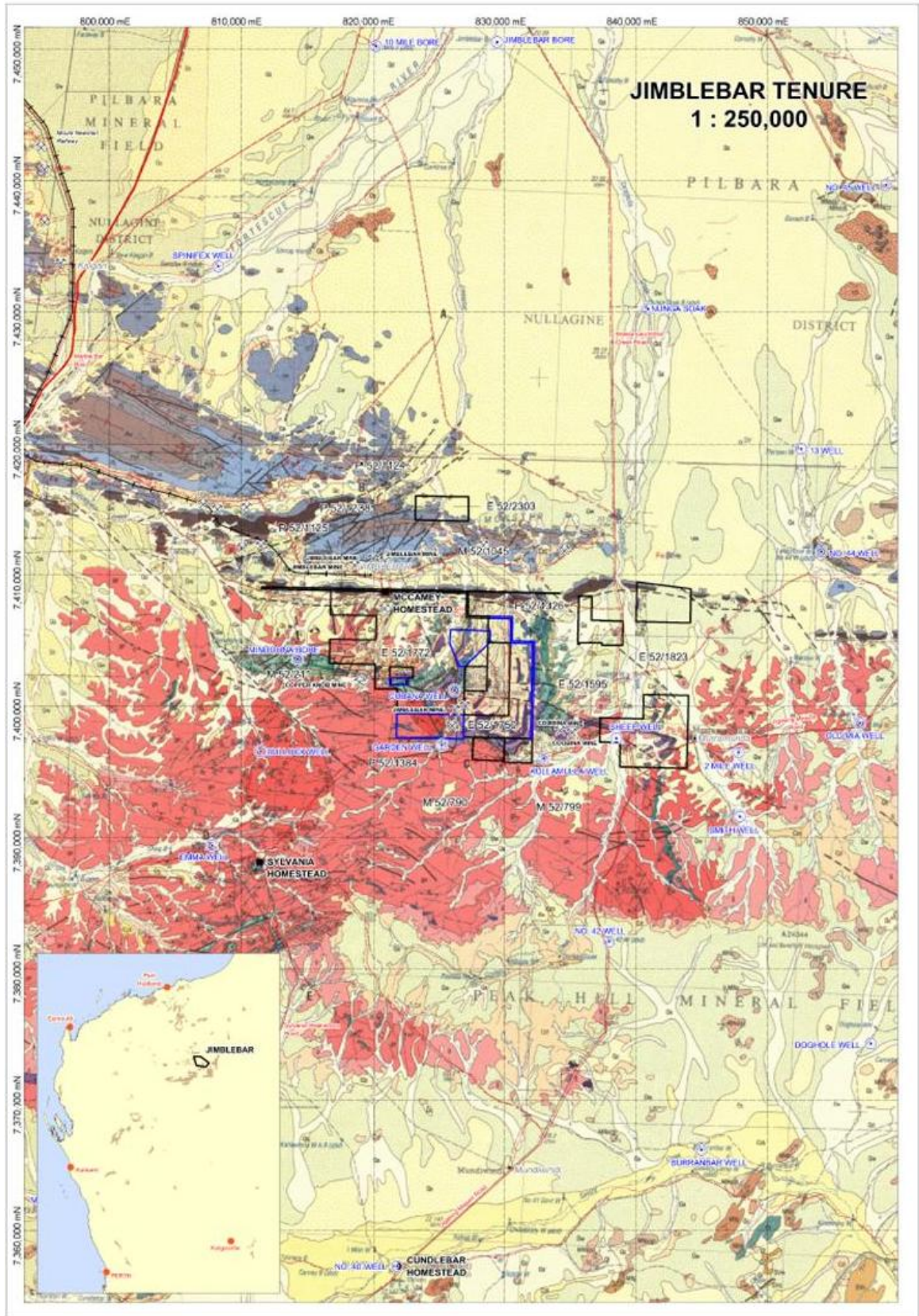
Deposit	Category	Tonnes (Mt)	Fe %	P %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	CaFe %
McCameys North	Inferred	39.0	58.0	4.9	4.8	0.17	0.01	9.3	60.7

*\*Reported using a 53% Fe lower cut-off, CaFe% is calcined Fe calculated by using the following formula (Fe%/(100-LOI%))\*100*





Figure 4 Jimblebar Iron Project Tenement locations and Resource Prospects





### 3.2.5 *Exploration Potential*

Significant Fe Inferred Resources have been identified within the project area to date at Jimblebar Range, Caramulla South and McCameys North. With additional drilling and work there is potential to upgrade portions of these resources to higher confidence resource classification category there still remains potential to increase the Resources moderately through continued exploration.

At McCameys North the license area is relatively small (9km<sup>2</sup>) and the potential to expand the Resource is spatially limited, although there may be some potential for iron mineralisation to be located below the shallow cover on the northern part of the license area.

Within the Jimblebar Greenstone belts, the Copper Range prospects warrants further work to fully evaluate its potential for containing remobilised VHMS style base-metals mineralisation. There is also potential locally for orogenic style gold mineralisation. The Coobina West project area also warrants further work to assess the extent of anomalous chromite mineralisation.





### **3.3 Warrawanda Iron Ore Project, Newman, Western Australia**

#### **3.3.1 *Introduction and Location***

The Warrawanda Project is located approximately 55 kilometres south-east of the town of Newman in the Pilbara Region of Western Australia.

#### **3.3.2 *Tenure***

The Warrawanda Project is comprised of two exploration licenses (E52/1815 and E52/1771) with a total area of 94.3km<sup>2</sup> (Table 3). The project was acquired by Atlas through its takeover of Warwick Resources in late 2009.

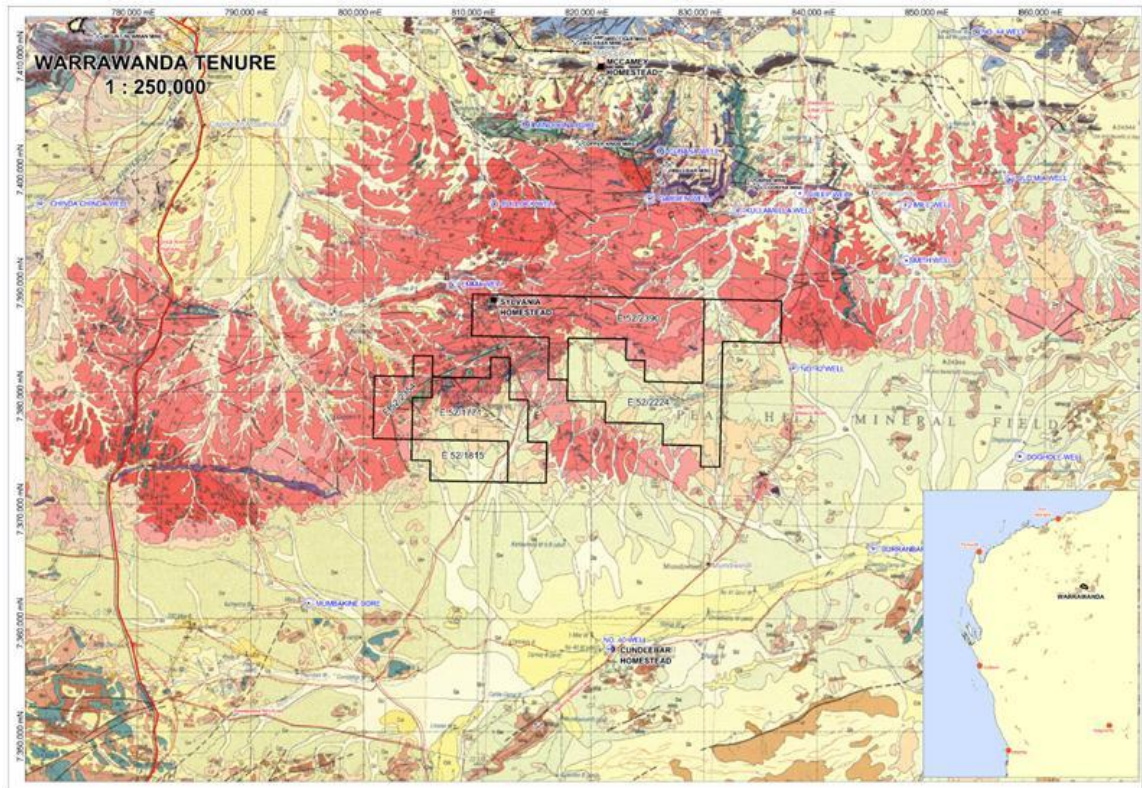
#### **3.3.3 *Geology and Mineralisation***

The Warrawanda Project lies within the Woggaginna Greenstone Belt of the Sylvania Inlier. The Sylvania Inlier is comprised of a sequence of Archaean granitoids which have intruded a into a series of greenstones belts. The greenstone belts comprise layered sequences of low to medium metamorphic-grade metavolcanics, mafic intrusions, and metasedimentary rocks. To the North-West, the Sylvania Inlier is unconformably overlain by late Archean to Proterozoic rocks of the Hammersley Basin which comprise a sequence of mafic volcanics, felsic volcanics and intrusive rocks, carbonates, clastic metasedimentary rocks, and banded iron-formations units. Several phases of deformation and folding are recognised in the project area comprising early foliation development related to greenschist-facies metamorphism which is overprinted by two folding events.

The Woggaginna Greenstone Belt contains several steeply dipping BIF units which are interbedded with metavolcanics, metasediments and ultramafics, and which are intruded by dolerite sills and granitoids. The BIF's are noted to be up to 60m thick, with varying degrees of hematite-goethite iron enrichment which extends down to depths of approximately 80 metres from surface (ref). The largest zone of Fe-enrichment is known as the Wishbone Prospect, so named as the distribution of mineralisation resembles fish 'rib bones' extending from a central source.



Figure 5 Warrawanda Iron Project Regional Geology



### 3.3.4 Exploration History and Resource Estimate

The project area has had limited exploration for nickel, gold and base-metals, with work consisting mostly of reconnaissance work, mapping, geochemical surveys and a small amount of drilling. The projects potential for containing iron mineralisation was recognised more recently when Warwick Resources completed geological mapping and identified the Wishbone Prospect. They drilled 129 RC holes (10,068m) at Wishbone, which was followed up an additional 68 RC holes (5,136m) by Atlas Iron.

In July 2010 Atlas announced a JORC (2004) Mineral Resource estimate for the Wishbone Prospect. They reported an Inferred Resource estimate of 20.8 Mt at 57.1 % Fe (Table 8) using a reporting lower cut-off of 53% Fe. This resource estimate was based on data collected from RC drilling on 40 by 80m centres by Atlas and Warwick ( 197 holes - 15,204m) and surface mapping. Three dimensional wireframe solid interpretations of mineralised zones were created using Surpac Software with a nominal 50% Fe cut-off grade (Atlas, 2011). A block model was created and resource estimation was carried out using ordinary kriging interpolation. The bulk density assignment used was based on similar average values from other known deposits in the region.

Table 8 Warrawanda - July 2010 Resource (Atlas, 2010)

Deposit	Category	Tonnes (Mt)							
			Fe %	P %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %	CaFe%
Warrawanda (Wishbone)	Inferred	20.8	57.1	6.6	2.6	0.07	0.03	8.5	62.4

\*Reported using a 53% Fe lower cut-off, CaFe% is calcined Fe calculated by using the following formula (Fe%/(100-LOI%))\*100



### **3.3.5 Exploration Potential**

The Warawanda Project can be classified as an 'Advanced Exploration Area' mineral asset where a Mineral Resource has been estimated. The majority of work within the license area has been focussed on the Wishbone Prospect where a DSO resource of 20.8 MT at 57 %Fe has been defined (Atlas , 2011). There is potential to upgrade portions of this resource with additional data from infill drilling to improve geological confidence, and there may also be potential to expand the overall resource base.

Of note is that geological mapping has identified several other areas of surface Fe enrichment outside of the Wishbone Resource area that have not yet been drill tested. There may also be potential to outline additional Fe mineralisation within these areas. Ravensgate considers the project is of merit and worthy of further exploration and studies.

## **3.4 Jigalong Iron Ore Project, Newman, Western Australia**

### **3.4.1 Introduction and Location**

The Jigalong Project is located approximately 100km to the east of the town of Newman.

### **3.4.2 Tenure**

The Jigalong Project is comprised of four exploration licenses with a total area of 977.8km<sup>2</sup> (Table 3). Atlas acquired its interest in the project through its takeover of Warwick Resources in late 2009. The licences are held by Hannans Reward with Atlas holding the Fe rights.

### **3.4.3 Geology and Mineralisation**

The Jigalong project is located on the eastern margin of the Achaean Sylvania Inlier which is unconformably overlain by Archean to Proterozoic sediments, banded iron formations and volcanics of the Fortescue and Hammersley Group rocks. Part of the project area covers the strike extent of FerrAus' Davidson Creek iron deposits, with the primary target area being the Marra Mamba hosted bedded hematite-goethite mineralisation.

Unconformably overlying the Hammersley Basin sequence are the rocks of the Bangemall Basin, which comprises conglomerates, shales, sandstones and siltstones of the Manganese Subgroup. The Bangemall Basin and Hammersley Basin rocks have been variably metamorphosed and deformed. There is widespread Cenozoic superficial cover over the much of the area.

### **3.4.4 Exploration History**

There has been relatively little exploration in the project area as much of it lies within an Aboriginal Reserve which has restricted exploration access, and much of the area also has extensive cover. Rio Tinto Exploration completed exploration targeting for the buried Brockman Formation in 2000, completing mapping and the drilling Nine RC holes. Errawarra Pty Ltd have completed a number of aircore drilling programs targeting base metals and manganese mineralisation in recent years.

In 2008 Hannans Reward completed additional RC drilling testing of the Marra Mamba Formation beneath cover which returned a number of encouraging results including 18m at 59.2% Fe from 68m, 28m at 58.1% Fe from 69m and 20m at 62.8% Fe from 50m. Warwick Resources NL (now Atlas) acquired the iron rights in mid 2009. Since then Atlas have completed an extensive geophysics program (gravity and magnetic) to aid in targeting Fe-mineralisation below the cover sequence.



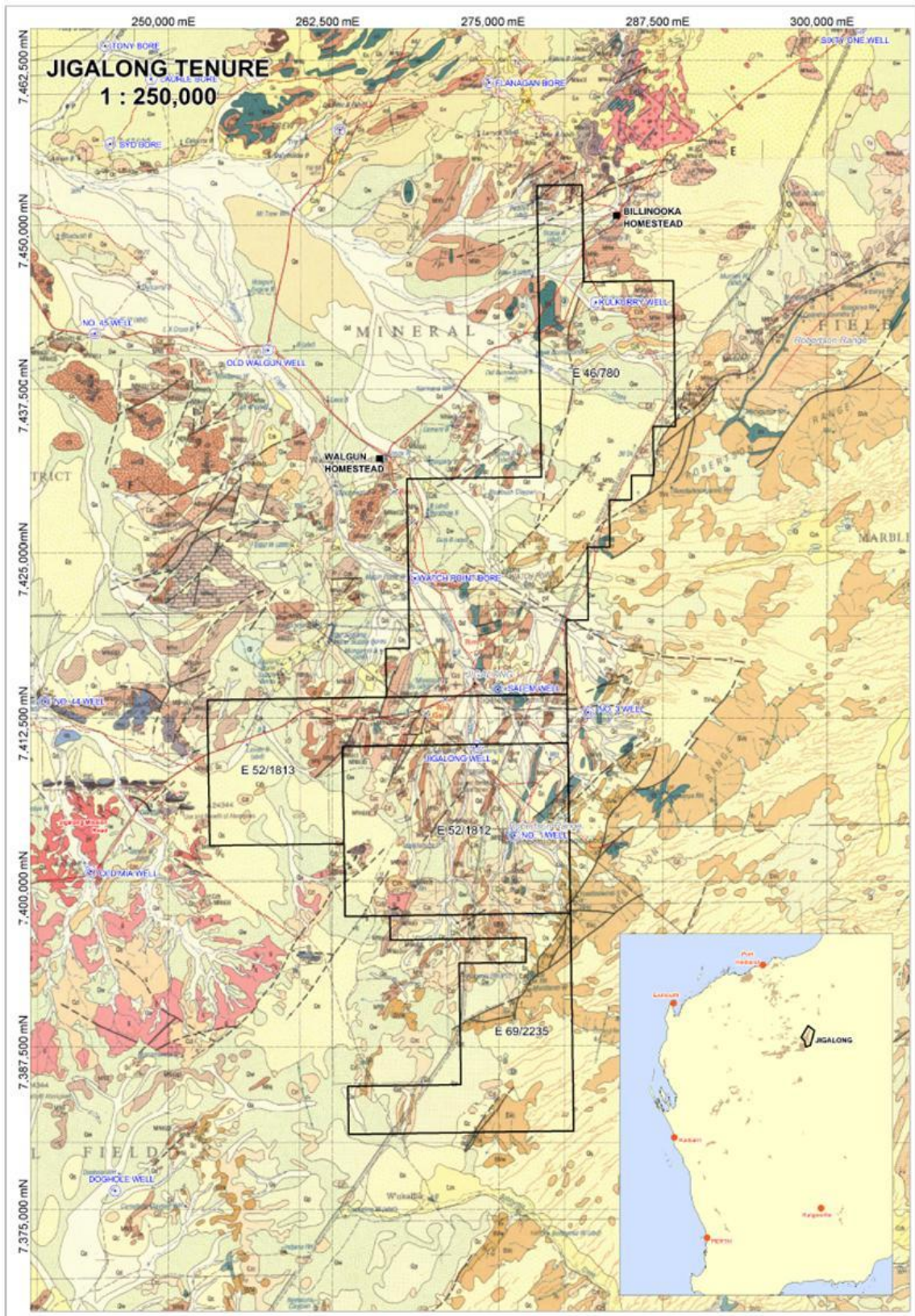
#### **3.4.5 Exploration Potential**

The Jigalong Project can be classified as an ‘Advanced Exploration Area’ mineral asset where a Mineral Resource has not yet been estimated. Drilling has identified mineralisation with potentially economic grades. Geophysical targeting work and reconnaissance drilling has identified several iron mineralisation targets within the Marra Mamba formation below the cover sequence. Further drilling and testing of these targets is warranted. Ravensgate considers the project is of merit and worthy of further exploration and studies.





Figure 6 Jigalong Iron Project Geology





### **3.5 Welarrana Project, Newman, Western Australia**

#### **3.5.1 *Introduction and Location***

The Weelarrana Project is located approximately 70km to the southeast of the town of Newman.

#### **3.5.2 *Tenure***

The Weelarrana Project is comprised of four exploration licenses with a total area of 1,301.6km<sup>2</sup> (Table 3). Atlas acquired its interest in the project through its takeover of Warwick Resources in late 2009. The licences are held by Hannans Reward with Atlas holding the Fe rights.

#### **3.5.3 *Geology and Mineralisation***

The Weelarrana project has similar geology to the parts of the Jigalong Project to the North. It is located on the south-eastern margin of the Achaean Sylvania Inlier which is unconformably overlain by Archean to Proterozoic sediments, banded iron formations and volcanics of the Fortescue and Hammersley Group rocks.

Unconformably overlying the Hammersley Basin sequence are the rocks of the Bangemall Basin group, which comprises conglomerates, shales, sandstones and siltstones of the Manganese Subgroup. The Bangemall Basin and Hammersley Basin rocks have been variably metamorphosed and deformed. There is widespread Cenezoic superficial cover.

#### **3.5.4 *Exploration History***

There has been relatively little exploration in the project area as much of it lies within an Aboriginal Reserve which has restricted exploration access. In addition much of the area has extensive cover.

Geological survey mapping in the late 1960's noted a pisolitic iron oxide mesa in the north of the project area. In 2008 Atlas have completed geological reconnaissance over this area and identified two sub-parallel iron-mineralised anomalies interpreted to be CID mineralisation targets. These zones were later rock chip sampled in 2010, with 5 of the 10 samples taken returning Fe grades greater than 50%. Other work completed on the project includes compilation and interpretation of geophysical data sets and remote sensing data.

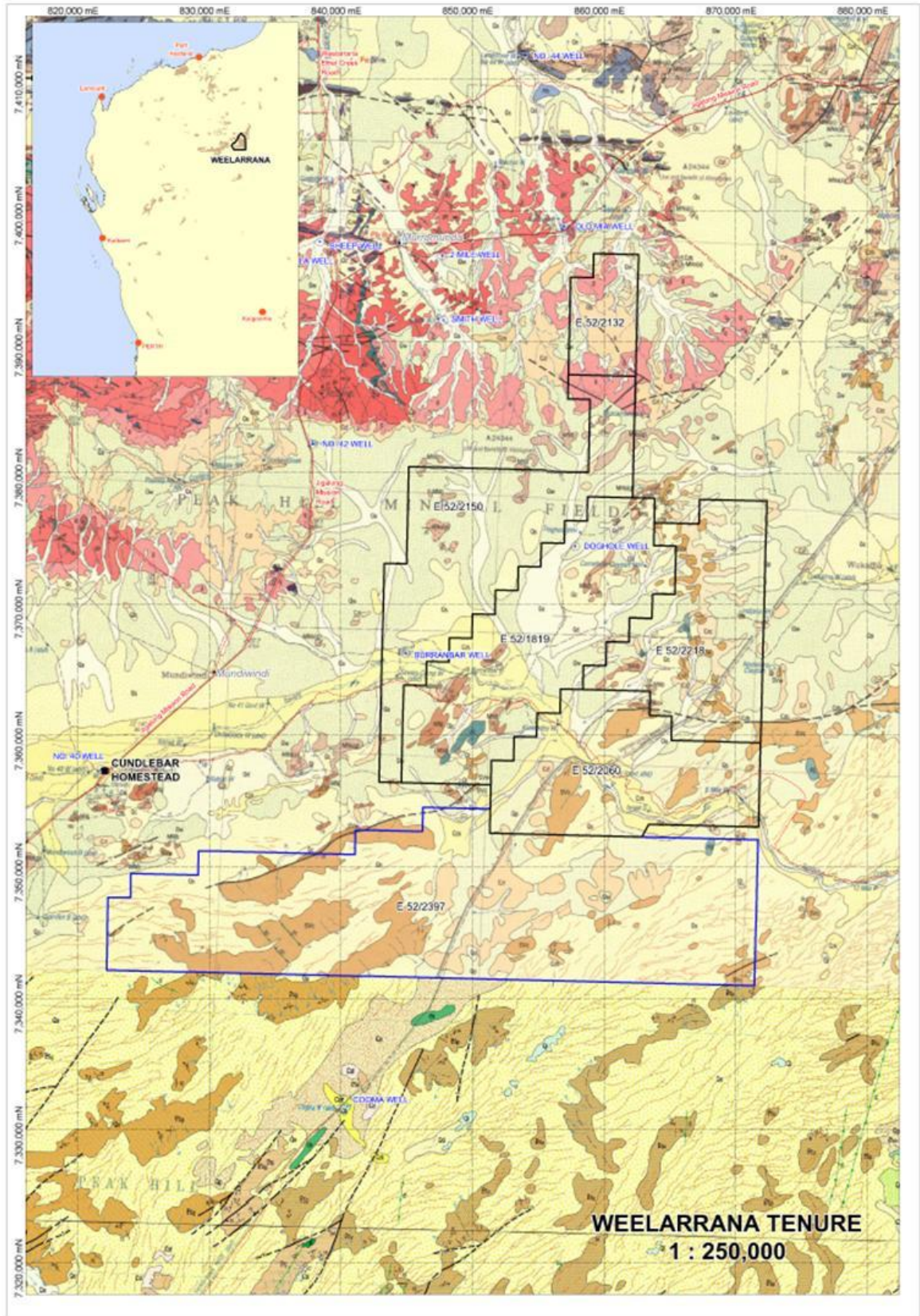
#### **3.5.5 *Exploration Potential***

The Weelarrana Project can be classified as an 'Exploration Area' mineral asset. Geophysical and remote sensing targeting work and reconnaissance mapping and sampling has identified several CID iron mineralisation targets worthy of further follow up exploration. Further drilling and testing of these targets is warranted. In addition, reconnaissance mapping identified several manganese-bearing outcrops within the project area that also warrant further follow up. Ravensgate considers the project is of merit and worthy of further exploration and studies.





Figure 7 Weelarrana Iron Project Geology







### 3.6 Upper Ashburton Project, Western Australia

#### 3.6.1 Introduction

The Project area is located in the Peak Hill Mineral Field of Western Australia approximately 100 kilometres south southwest of Newman. The Project is approximately 520 kilometres by road (the Great Northern Highway) from Port Hedland. From Newman the property is accessed via the Great Northern Highway where it passes through the eastern portions of the project area. From here access is via unsealed roads and station tracks which during fair weather can be travelled by four wheel drive vehicle.

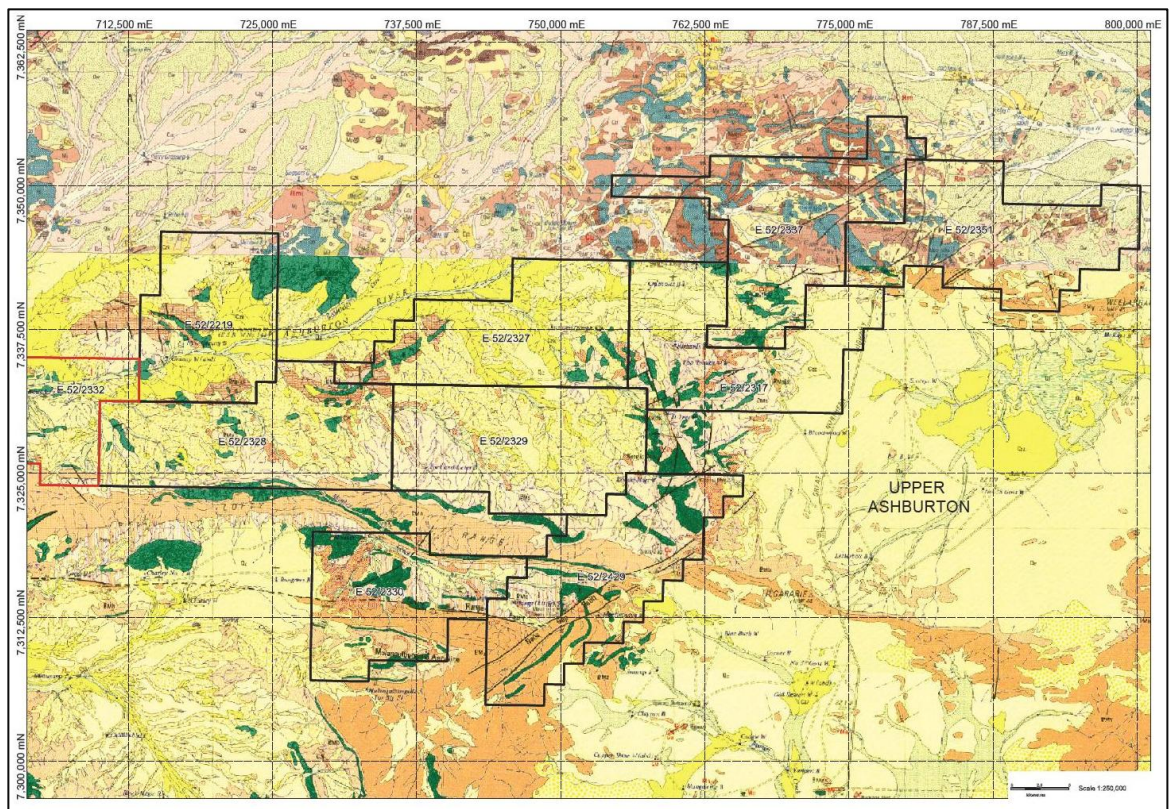
#### 3.6.2 Tenure and Physiography

The project consists of thirteen granted exploration licenses with an area of 2,460.9km<sup>2</sup> (Table 3). E52/2330, E52/2332, E52/2327, E52/2328, E52/2329 overlies the Native Title Determined Area WC99/013 by the Nharluwanga Wajarri People and is subject to Native Title Claim (NTC) WC05/003 by the Ngarlawangga Claimants.

#### 3.6.3 Geology and Mineralisation

The geology of the Project area is bedrock comprised of clastic sediments of the Bangemall Basin. The bedrock is mostly overlain by Cenozoic sediments with some outcrop of the Jillawarra Formation of the Bangemall Group. The Jillawarra Formation has been extensively intruded by younger dolerite sills and dykes. Widespread Cenozoic laterite in places contains Tertiary (pisolitic) channel iron deposits followed by Quaternary detrital sediments. In the western part of the project area, erosion has exposed the Tertiary channel iron deposits. The regional geology is indicated in Figure 8.

**Figure 8 The Regional Geology for the Upper Ashburton Iron Project Area.**







#### **3.6.4 Exploration History**

From a Department of Mines and Petroleum Tenograph Online search, most of the project area appears to have undergone no significant previous exploration. During 1996-1997 part of E52/2330 was explored by BHP Minerals Pty Ltd for base metals. Their exploration program consisted of stream sediment sampling and rock chip/grab sampling. Mithril Resources Ltd during 2007 implemented an exploration program targeting Ni/Cu magmatic sulphides. Their program included airborne magnetic and radiometric surveys and ground follow up of geophysics anomaly targets.

#### **3.6.5 Current Exploration 2009-2010**

Due to negotiations being undertaken with the representative body for the Nharnuwangga Wajarri for the Native Title Determined Area WC99/013, exploration for parts of the project area has been limited to desktop studies of regional air photography and magnetic data. The aim was to identify areas of potential for channel iron deposits as future exploration targets.

Exploration undertaken on E52/2219 consisted of iron enrichment mapping, and the collection of 31 grab samples. The rock chip sampling program returned results for 30 of the samples ranging from 42.8-57.6% Fe and one sample with a low result of 3.9% Fe. From the mapping program it was concluded that units previously reported as 'ferruginous laterite' were channel iron deposits which are approximately 1-2 m in thickness and up to 100m wide. These were either partly or possibly completely covered by Tertiary or Quaternary sediments in palaeochannels (Darvall, 2010).

#### **3.6.6 Project Potential**

The project area has undergone limited exploration but the existing geological information and exploration undertaken, namely the reconnaissance mapping and rock chip sampling program have indicated that there is potential for iron mineralisation as channel iron deposits to be discovered. Further exploration is necessary to determine if viable iron ore targets may be located. Ravensgate considers that the project has merit and worthy of further exploration and studies.



### 3.7 Watershed Project, Western Australia

#### 3.7.1 Introduction

The Watershed Project is located approximately 50km south of Newman, Western Australia. The Great Northern Highway transects the project area from which the project can be accessed via station tracks.

#### 3.7.2 Tenure and Physiography

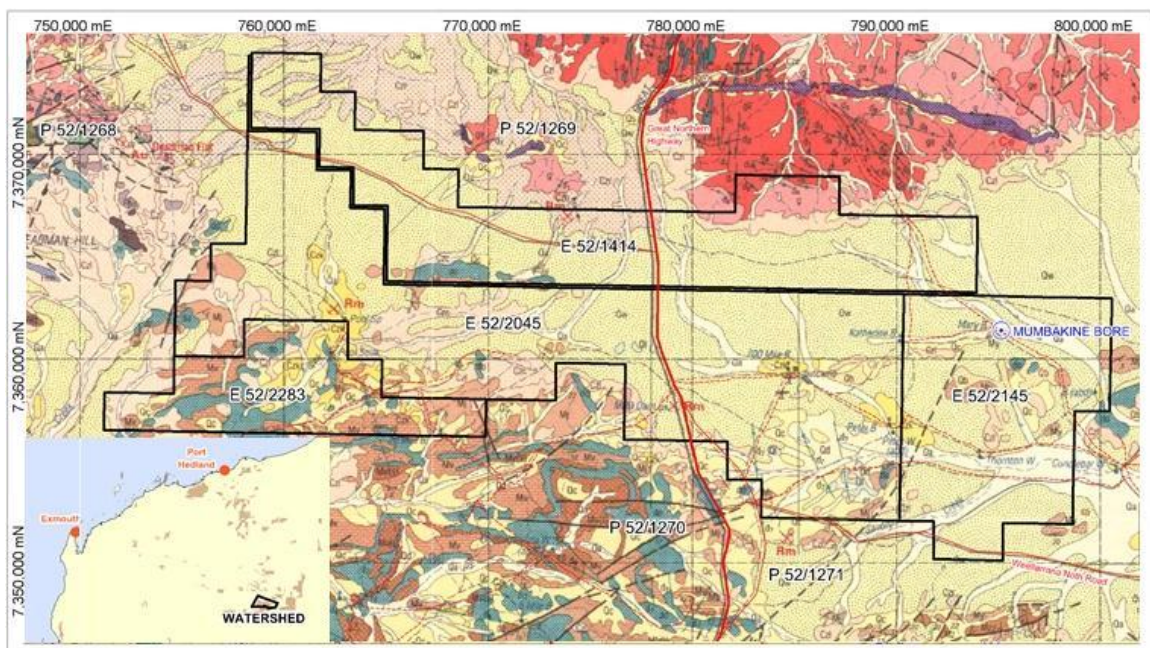
The project consists of three granted exploration licenses and four granted prospecting licenses with an area of 439.8km<sup>2</sup> (Table 3). The project overlies the Native Title Determined Area WC99/013 by the Nharnuwangga Wajarri People and is subject to Native Title Claim (NTC) WC05/003 by the Ngarlawangga Claimants. A heritage survey was carried out on E52/2045 between the 21st and 23rd October 2010.

#### 3.7.3 Geology and Mineralisation

The project area is located on the southern margin of the Sylvania Dome, an Archaean granitoid-greenstone terrain inlier located on the southern edge of the Hamersley Basin. An interpreted Fortescue Group sequence of meta-basaltic and meta-sedimentary rocks has been faulted against the granitoids. To the south-east, Proterozoic rocks of the Bangemall Basin unconformably overly this sequence and to the south west it is overlain by laterite and transported cover (Hannaway et al, 2011).

Clastic sediments of the Bangemall Basin are mostly overlain by Cenozoic sediments with some outcrop of the Jillawarra Formation of the Bangemall Group. The Jillawarra Formation has been extensively intruded by younger dolerite sills and dykes. Widespread Cenozoic laterite in places contains Tertiary (pisolitic) channel iron deposits followed by Quaternary detrital sediments. In the western part of the project area erosion has exposed the Tertiary channel iron deposits. The regional geology is indicated in Figure 9.

**Figure 9 The Regional Geology and License Locations for the Watershed Iron Project**





#### **3.7.4 Exploration History**

The Watershed project has been explored by several companies for various commodities since 1991. Western Mining Corporation explored the area for stratiform Pb-Zn-Cu deposits in 1991. Giralia Resources explored for gold associated with quartz veining. Their program included stream sediment sampling, soil sampling, rock chip sampling, geological and photo-geological mapping and interpretation of aeromagnetic data. Geochemex (1995) also explored for gold. Anaconda Nickel Limited (1996) explored for lateritic nickel and cobalt and their program included reviews of aerial photography, magnetic data and geological mapping. Hamersley Iron Pty Ltd (1997) explored for iron ore targeting the Brockman Formation. From gravity, aeromagnetic and radiometric data interpretation they concluded that the Brockman Formation occurrences would be too deep for continued development studies. Rio Tinto (1999) undertook diamond exploration and their program also included geochemical sampling.

#### **3.7.5 Current Exploration, 2008-2010**

Warwick Resources undertook an exploration program targeting gold mineralisation. This program included the collection of 16 rock chip samples from the Ten Mile and Savory prospects from channel iron deposits, quartz veins and metasediments. The rock chip sample results from the Ten Mile prospect returned values ranging from 51.63% to 57.89% Fe. Geological mapping of the Ten Mile channel iron deposit was carried out. A detailed mapping program at a selected area of 4km by 100-500m was also undertaken as well as at the Savory prospect. Aster and Landsat imagery were acquired as part of these programs.

Atlas Iron and Warwick Resources (2009-2010) embarked on an exploration program which included a gravity survey over the Ten Mile Creek and Katherine Bore Prospects with the aim of demarcating the channel and any potential iron accumulations. A palaeochannel infilled with Cainozoic sediments was identified from the survey.

##### **2010-2011**

For the licences P52/1268, P52/1269, P52/1270, P52/1271 exploration consisted of desktop studies of regional air photography and magnetic data with the aim of identifying potential channel iron deposit targets. A ground gravity survey was undertaken within E52/2045 at the Limestone Creek prospect resulting in the identification of the buried Brockman Formation, considered a possible host for iron mineralisation.

#### **3.7.6 Project Potential**

The Watershed project area has undergone limited exploration for iron ore but the existing geological information and exploration undertaken, namely the reconnaissance mapping and rock chip sampling program at the Ten Mile prospect have indicated that there is potential for iron mineralisation as channel iron deposits. Further exploration is necessary to determine if viable iron ore targets may be located there. Ravensgate considers that the project has merit and worthy of further exploration and studies.



## 4. VALUATION

### 4.1 Introduction

There are a number of recognised methods used in valuing “mineral assets”. The most appropriate application of these various methods depends on several factors, including the level of maturity of the mineral asset, and the quantity and type of information available in relation to the asset. All monetary values included in this report are expressed in Australian dollars (A\$) unless otherwise stated.

The Valmin Code, which is binding upon “Experts” and “Specialists” involved in the valuation of mineral assets and mineral securities, classifies mineral assets in the following categories:

- Exploration Areas refer to properties where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified.
- Advanced Exploration Areas refer to properties where considerable exploration has been undertaken and specific targets have been identified that warrant further detailed evaluation, usually by some form of detailed geological sampling. A JORC compliant mineral resource may or may not have been estimated but sufficient work will have been undertaken that provides a good understanding of mineralisation and that further work will elevate a prospect to the resource category. Ravensgate considers any identified Mineral Resources in this category would tend to be of relatively lower geological confidence.
- Pre-Development Projects are those where Mineral Resources have been identified and their extent estimated, but where a positive development decision has not been made. This includes projects at an early assessment stage, on care and maintenance or where a decision has been made not to proceed with immediate development.
- Development Projects refers to properties which have been committed to production, but which have not been commissioned or are not operating at design levels.
- Operating Mines are those mineral properties, which have been fully commissioned and are in production.

Various recognised valuation methods are designed to provide the most accurate estimate of the asset value in each of these categories of project maturity. In some instances, a particular mineral property or project may include assets that comprise one or more of these categories. When valuing Exploration Areas, and therefore by default where the potential is inherently more speculative than more advanced projects, the valuation is largely dependent on the informed, professional opinion of the valuer. There are a number of methods available to the valuer when appraising Exploration Areas.

The Multiple of Exploration Expenditure (“MEE”) method can be used to derive project value, when recent exploration expenditure is known or can be reasonably estimated. This method involves applying a premium or discount to the exploration expenditure or Expenditure Base (“EB”) through application of a Prospectivity Enhancement Multiplier (“PEM”). This factor directly relates to the success or failure of exploration completed to date, and to an assessment of the future potential of the asset. The method is based on the premise that a “grass roots” project commences with a nominal value that increases with positive exploration results from increasing exploration expenditure. Conversely, where exploration results are consistently negative, exploration expenditure will decrease along with the value. The following guidelines are presented on selection of the PEM:

- PEM = 1. Exploration activities and evaluation of mineralisation potential justifies continuing exploration.
- PEM = 2. Exploration activities and evaluation of mineralisation potential has identified encouraging drill intersections or anomalies, with targets of noteworthy interest generated.



- PEM = 3. Exploration activities and evaluation of mineralisation potential has identified significant grade intersections and mineralisation continuity.

The Kilburn Geoscience Method (Kilburn, 1990) is a technique to estimate the value of an exploration project based on geological prospectivity. The method involves systematically assessing four key technical attributes of a project and using these as multipliers against the acquisition cost of a license to arrive at a final valuation. These four factors are; (1) off property factors, (2) on property factors, (3) anomaly factors and (4) Geological factors. Each of these factors is assigned values from 0.1 to 4 depending on how unfavourable or favourable they are, and are multiplied serially against the base acquisition cost (BAC). The BAC is the cost to acquire a particularly license per square kilometre (for Western Australia BAC typically ranges from \$500 per square kilometre up to \$15,000 per square kilometre depending on the license status).

Where transactions including sales and joint ventures relating to mineral assets that are comparable in terms of location, timing, mineralisation style and commodity, and where the terms of the sale are suitably “arms length” in accordance with the Valmin Code, such transactions may be used as a guide to, or a means of, valuation. This method is considered highly appropriate in a volatile financial environment where other “cost based” methods may tend to overstate value.

The Joint Venture Terms valuation method may be used to determine value where a Joint Venture Agreement has been negotiated at “arms length” between two parties. When calculating the value of an agreement that includes future expenditure, cash and/or shares payments, it is considered appropriate to discount expenditure or future payments by applying a discount rate to the mid-point of the term of the earn-in phase. Discount factors are also applied to each earn-in stage to reflect the degree of confidence that the full expenditure specified to completion of any stage will occur. The value assigned to the second and any subsequent earn-in stages always involves increased risk that each subsequent stage of the agreement will not be completed, from technical, economic and market factors. Therefore, when deriving a technical value using the Joint Venture Terms method, Ravensgate considers it appropriate to only value the first stage of an earn-in Joint Venture Agreement.

The total project value of the initial earn-in period can be estimated by assigning a 100% value, based on the deemed equity of the farminor, as follows:

$$V_{100} = \frac{100}{D} \left[ CP + \left( CE * \frac{1}{(1+I)^{\frac{t}{2}}} \right) + \left( EE * \frac{1}{(1+I)^{\frac{t}{2}}} * P \right) \right]$$

where:

- $V_{100}$  = Value of 100% equity in the project (\$)
- $D$  = Deemed equity of the farminor (%)
- $CP$  = Cash equivalent of initial payments of cash and/or stock (\$)
- $CE$  = Cash equivalent of committed, but future, exploration expenditure and payments of cash and/or stock (\$)
- $EE$  = Uncommitted, notional exploration expenditure proposed in the agreement and/or uncommitted future cash payments (\$)
- $I$  = Discount rate (% per annum)
- $t$  = Term of the Stage (years)
- $P$  = Probability factor between 0 and 1, assigned by the valuer, and reflecting the likelihood that the Stage will proceed to completion.

Where mineral resources remain in the Inferred category, reflecting a lower level of technical confidence, the application of mining parameters using the more conventional DCF/NPV approach may be problematic or inappropriate and technical development studies may be at scoping study level. In these instances it is considered appropriate to use the ‘in-situ’ Resource





method of valuation for these assets. This technique involves application of a heavily discounted valuation of the total in-situ metal or commodity contained within the resource. The level of discount applied will vary based on a range of factors including physiography and proximity to infrastructure or processing facilities. Typically and as a guideline, the discounted value is between 1% and 5% of the in-ground value of the metal in the Mineral Resource.

In the case of Pre-development, Development and Mining Projects, where Measured and Indicated Resources have been estimated and mining and processing considerations are known or can be reasonably determined, valuations can be derived with a reasonable degree of confidence by compiling a discounted cash flow (DCF) and determining the net present value (NPV).

The Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC code, 2004) sets out minimum standards, recommendations and guidelines. A Mineral Resource defines a mineral deposit with reasonable prospects of economic extraction. Mineral Resources are sub-divided into Inferred, Indicated and Measured to represent increasing geological confidence from known, estimated or interpreted specific geological evidence and knowledge. An Ore Reserve is the economically minable part of a Measured or Indicated Resource after appropriate studies. An Inferred Resource reflecting insufficient geological knowledge, cannot translate into an Ore Reserve. Measured Resources may become Proved (highest confidence) or Probable Reserves. Indicated Resources may only become Probable Reserves.

#### **4.2 Previous Mineral Asset Valuations**

Almost all of the licenses apart from several recent applications have been subjected to Valmin (2004) technical valuations in the past two years, either by Agricola (Castle 2009) which was completed on licenses that were acquired through Atlas's take over Warwick Resources Ltd in late 2009 and by Ravensgate in early 2011 as part of Atlas's takeover of Giralia Resources NL (Allison 2011). A summary of these valuations is presented in Table 9.



<b>Table 9 Atlas Pilbara South-east Project Historic Technical Valuation Summary.</b> <b><sup>1</sup>Agricola September 2009 (Warwick Resources Ltd Valuation), and <sup>2</sup>Ravensgate January 2011 (Giralia Resources NL Valuation)</b>					
Company	Projects	Equity Interest	Valuation		
			Low A\$M	High A\$M	Preferred A\$M
Warwick Resources Ltd <sup>1</sup>	Warwick Exploration tenements: (Warwick Western Creek, Jimblebar, Warrawanda, Jigalong, Weelarrana, Upper Ashburton & Watershed Projects)	100%	42.5	59.6	50.8
Warwick Resources Ltd <sup>1</sup>	Warwick JORC (2004) Resources: Caramulla South (Western Creek Project) and Jimblebar Range (Jimblebar Project)	100%	7.4	10.4	8.9
Giralia Resources NL <sup>2</sup>	Giralia Western Creek Project (including Western Ridge JORC (2004) Resources)	100%	27.9	62.1	45.4

#### 4.3 Material Agreements

Ravensgate has been commissioned by Ferraus Limited (ASX code: FRS) and BDO Corporate Finance (BDO) to provide an Independent Technical Project Review and Valuation Report which encompasses Atlas Iron Ltd's (AGO) South-East Pilbara Exploration assets. Brief details of the Ownership and Joint Venture agreements can be listed as follows.

<u>Mineral Asset</u>	<u>Atlas Iron ownership %</u>
• Western Creek (Iron), WA.	100%.
• Jimblebar (Iron, Gold, Basemetals), WA.	100%.
• Warrawanda (Iron), WA.	100%.
• Jigalong (Iron) WA	100%.
• Weelarrana (Iron, Manganese)	
• Upper Ashburton (Iron)	
• Watershed (Iron) WA	100%.

Ravensgate understands all active exploration tenements are granted at this point in time and are in good standing. Ravensgate makes no other assessment or assertion as to the legal title of tenements and is not qualified to do so. Ravensgate is not aware, nor have we been made aware, of any other agreements that have a material effect on the provisional valuations of the mineral assets, and on this basis have made no adjustments on this account.





#### 4.4 Comparable Transactions

Ravensgate has completed a search for publicly available market transactions involving iron, gold, base metals projects within Australia and the Pilbara regions. Transactions reflect comparable tenement holdings in geological provinces that are considered prospective for similar commodities, and that are of similar prospectivity to the minerals assets being acquired.

In Ravensgate's experience and opinion, individual market transactions are rarely completely identical to the relevant project area or may not contain all the required information for compilation. In practice a range of implied values on a dollar per metal unit or dollar per square kilometre of tenement holding will be defined for further use. The transactions identified along with the implied cash-equivalent values are summarised in Table 10 and Table 11 by commodity and region.

Publicly available market transactions have been separated to reflect transactions on a dollar per square kilometre of tenement holding or on a dollar per metal unit for a more advanced Exploration Target or Mineral Resource. This was undertaken to reflect the varying levels of geological exploration carried out within the various project tenements.

In general terms, exploration projects may start with a relatively large tenement holding where a lack of detailed geological sampling and knowledge renders the use of the "in-situ" yardstick valuation method inappropriate (i.e. an "Exploration Area Mineral Asset). For these particularly early-stage exploration areas comparable transactions on a dollar per square kilometre basis are more relevant. As the project advances and as geological sampling and knowledge increase, tenement areas tend to decrease to match a narrowing focus on more prospective areas. For these areas where specific, drill sample supported Exploration Targets have been identified that warrant further detailed evaluation or Mineral Resources estimated, the comparable transactions on a dollar per metal unit basis may be more appropriate (i.e. an "Advanced Exploration Area Mineral Asset or Pre-Development Project at early assessment").

##### 4.4.1 *Reported Market Transactions involving Iron Projects within the Western Australian Region*

Ravensgate's analysis of West Australian market transactions for Iron projects indicates implied values between \$0.18 to \$3.00 per tonne of contained iron metal for advanced exploration projects where JORC (2004) Mineral Resources has been reported or Exploration Targets of moderate to high levels of confidence have been defined (Table 10 - 10).

Ravensgate's analysis of Western Australian market transactions for early-stage, conceptual Iron projects, indicates an implied value between \$2,100 to \$6,000 per square kilometre, rising to between \$28,000 to \$50,000 per square kilometre (Table 11 ).

Ravensgate considers the lower range of between \$2,100 to \$6,000 per square kilometre to be more appropriate for valuing Exploration Area Mineral Assets. These types of projects are generally of a more 'grass roots' early stage exploration stage, where work is of a more regional nature focussing on identifying target areas for further follow up.

The higher range of between \$28,000 to \$50,000 per square kilometre is more appropriate for valuing Advanced Exploration Area Mineral Assets. These types of projects have had considerable exploration which has identified specific mineralisation targets, which is reflected in their higher value per square kilometre.



**Table 10 Market Transactions Involving Iron Exploration Projects at Advanced Exploration Target or Moderate-Confidence Mineral Resource Stage within Western Australia**

Project	Transaction Details & Type	Contained Fe Metal Tonnes (t)	Purchase Price 100% Basis (A\$)	Implied Value / Metal Tonne (A\$)
Atlas Takeover of Giralia Resources, Pilbara WA	In December 2010 Atlas Iron made a script and combination script/cash offer to acquire all the shares of Giralia. The price at the time of the offer valued Giralia at \$4.57 per share, which assuming the conditions of the deal were met valued Giralia at \$835 Million. Giralia's key assets were a Fe resource base DSO and Magnetite ore of 575.6 Mt and 48% Fe. Note : Giralia also held a number of advanced exploration projects and interests in other commodity projects of some value - so the implied Fe metal value is high.	276.39Mt	835	\$3.00/ metal tonne
Wonmunna and Uaroo, Pilbara, Western Australia.	October, 2010: E-Com Multi Limited entered into an acquisition agreement with Talisman Mining Limited to earn 100% with a \$41.35M cash and shares buy-in. The project area is prospective for Marra Mamba Iron Formation plus BIF-hosted magnetite deposits. The Wonmunna Project contains an Inferred Resource of 78.3Mt @ <b>56.0% Fe</b> (Marra Mamba Formation). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$41.35M (A notional 0.94 A\$/metal tonne on 100% terms).	43.85Mt	\$41.35M	\$0.94 / metal tonne
Rocklea, Pilbara, Western Australia.	October, 2010: Dragon Energy Ltd entered into an acquisition agreement with AusQuest Limited & Fortescue Resources Pty Ltd to earn 100% with a \$7.0M cash buy-in. The tenement area totals 35km <sup>2</sup> for prospective Channel Iron Deposit (CID) material. The Rocklea CID Project contains an Inferred Resource of 63.1Mt @ 53.4% Fe (60.4% caFe). A higher grade component of 28.2Mt @ 55.58 (62.68% caFe) is contained within this resource. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$7.0M (A notional 0.21 A\$/metal t on 100% terms).	33.70Mt	\$7.0M	\$0.21 / metal tonne
Hamersley, Pilbara, Western Australia.	October, 2010: Saint Istvan Gold Limited (SVG) entered into a farm-in/JV agreement with Cazaly Resources Limited (CAZ) to earn 51% with a \$4M cash buy-in and feasibility study funding of up to \$6M within 3 years. The project area is prospective for Channel Iron Deposit (CID) with an Inferred Resource of 143Mt @ <b>52.6% Fe</b> (55.6% caFe) defined. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$13.6M (A notional 0.18 A\$/metal tonne on 100% terms).  SVG may acquire 100% of the project by paying CAZ \$0.5/tonne for the relevant interest in the Mineral Resource within 18 months, or by paying \$1.00/tonne for the relevant interest in the Mineral	75.22Mt	\$13.6M	\$0.18 / metal tonne



	Resource between 18 to 36 months from the agreement date.			
Railway, Pilbara, Western Australia.	October 2009: BHP Billiton Ltd entered into an acquisition agreement of United Minerals Corporation (UMC) to earn 100% with a \$204M cash buy-in. The main project deposit (Railway) contains a Marra Mamba + Detrital Iron Mineral Resource of 100.7Mt @ <b>60.34% Fe</b> (Indicated), 57.4Mt @ <b>53.98% Fe</b> (Inferred). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis for the project is \$194.1M (\$204M cash deal minus UMC held cash) which is a notional 2.12 A\$/metal t on 100% terms.	91.7Mt	\$194.1M	\$2.12 / metal tonne
Nullagine, Pilbara, Western Australia.	June 2009: Fortescue Metals Group Ltd entered into a farm-in/JV agreement with BC Iron Ltd to earn 50% with an initial \$10M cash buy-in. Remaining development costs were expected to be funded through project finance. The project contains a Channel Iron Deposit (CID) of 2.2Mt @ <b>54.5% Fe</b> (Measured), 68.8Mt @ <b>54.0% Fe</b> (Indicated), 18.1Mt @ <b>54.7% Fe</b> (Inferred). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$20M (A notional 0.41 A\$/metal tonne on 100% terms).	48.20Mt	\$20M	\$0.41 / metal tonne
Mt Richardson & Windarling East, Mid West, Western Australia.	August 2008: Portman Mining Ltd entered into a farm-in/JV agreement with Iron Mountain Mining Ltd to earn 100% with a \$10M cash buy-in plus royalty and a one-off \$0.5/tonne payment for any Measured or Indicated Resources defined (above 10Mt). The project area was considered prospective for an iron Exploration Target with a grade range of <b>56-59% Fe</b> for 18-22Mt. Assuming the terms of the agreement were met and excluding the royalty/one-off payment, the implied cash equivalent on a 100% equity basis is \$10M (notional 0.87 A\$/metal t on 100% terms at the mid-point of the exploration target).	11.5Mt	\$10M	\$0.87 / metal tonne
Koolan Island (Kimberly), Talling Peak & Extension Hill (Mid-West), WA.	April 2008: Gazmetall Holding Cyprus Ltd entered into a farm-out shares-based agreement. The projects are prospective for hematite iron mineralisation and contain a Mineral Resource of 15.5Mt @ <b>63.42% Fe</b> (Measured), 61.9Mt @ <b>62.46% Fe</b> (Indicated) and an Inferred Resource of 25.9Mt @ <b>60.94% Fe</b> . Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis would be \$21.3M (A notional 0.33 A\$/metal t on 100% terms).	64.3Mt	\$21.3M	\$0.33 / metal tonne
Mt Gould & Wilgie Mia, Mid West, Western Australia.	August, 2007: Atlas Iron Limited entered into an acquisition agreement with private overseas investors to earn 100% with a \$13.25 cash and shares buy-in. The project contains an Exploration Target of 30-40Mt @ <b>60-66% Fe</b> . Assuming the terms of the agreement were met and using the mid-point of the Exploration Target, the implied cash equivalent on a 100% equity basis would be \$13.25M (A notional 0.60 A\$/metal t on 100% terms).	22Mt	\$13.25M	\$0.60 / metal tonne

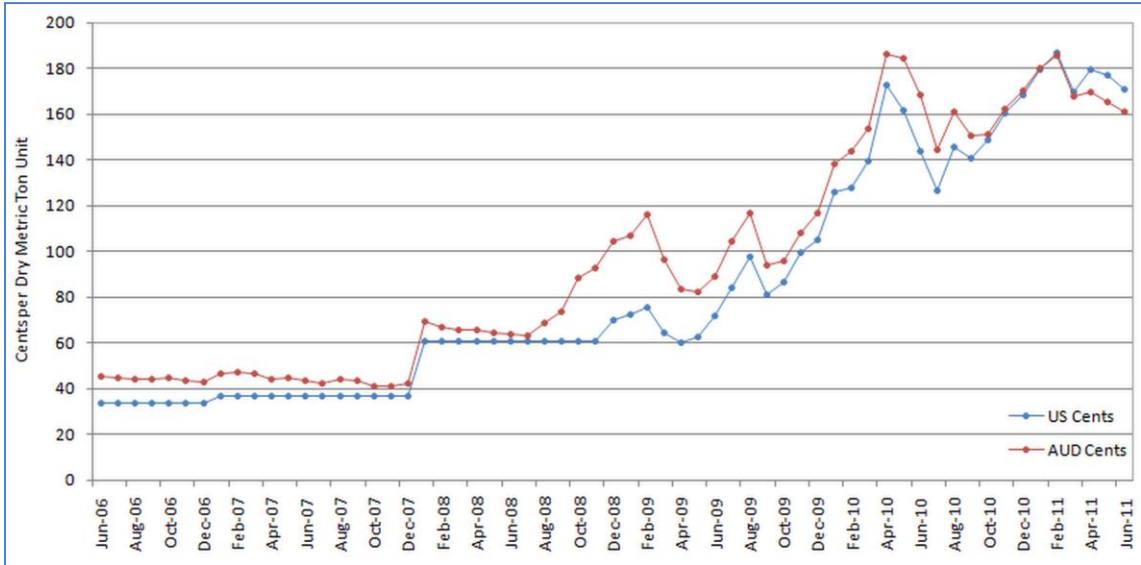


<b>Table 11 Market Transactions Involving Iron Exploration Projects at a particularly early and conceptual stage within Western Australia</b>				
<b>Project</b>	<b>Transaction Details &amp; Type</b>	<b>Area (km<sup>2</sup>)</b>	<b>Purchase Price 100% Basis (A\$)</b>	<b>Implied Value/km<sup>2</sup> (A\$)</b>
Mt Alexander, Pilbara, Western Australia.	October 2009: Zinc Co Australia Ltd entered into a purchase agreement with Mt Alexander Resources Pty Ltd to earn 100% with a \$0.06M cash and shares buy-in. The project area is prospective for BIF. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.06M.	28.4	\$0.06M	\$2,100
Mt Oscar, Pilbara, Western Australia.	September 2008: Apollo Minerals Ltd entered into a farm-in/JV agreement to earn 20% with a \$2.2M cash and shares buy-in. The project area is considered prospective for magnetite BIF. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$11.0M	218	\$11.0M	\$50,000
Mt Padbury, Mid West, Western Australia.	September, 2008: Midwest Corporation Ltd entered into a farm-in/JV agreement with Montezuma Mining Corp to earn 100% with a \$6M cash buy-in under conditions. The project area is considered prospective for hematite iron. Assuming the full terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$6.0M.	214	\$6.0M	\$28,000
Yalgoo-Singleton, Mid West, Western Australia.	June 2008: Venus Resources Ltd entered into a farm-in/JV agreement to earn 100% with a \$1.05M cash and shares buy-in. The project area is considered prospective for magnetite and hematite iron plus VMS base and precious metal mineralisation. Assuming the terms of the agreement were met and excluding royalty payments, the implied cash equivalent on a 100% equity basis is \$1.05M.	308	\$1.05M	\$3,400
Beyondie, Mid West, Western Australia.	May 2008: Emergent Resources Ltd entered into a farm-in/JV agreement with De Grey Mining Ltd to earn 80% with a \$1.75M exploration spend over 3 years. The project area is considered prospective for magnetite BIF. Assuming the terms of the agreement were met and excluding royalty payments, the implied cash equivalent on a 100% equity basis is \$2.19M.	841	\$2.19M	\$2,600
Mt Padbury, Mid West, Western Australia.	April 2008: Montezuma Mining Company Ltd entered into a farm-in/JV agreement to earn 10% with a \$0.05M buy-in (in shares). The project area is considered prospective for hematite (60 to 65% Fe). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.5M.	214	\$0.5M	\$2,300
Kiaby Well, Mid West, Western Australia.	January 2008 : Silver Swan Group entered into a farm-in/JV agreement with Mawson West Ltd to earn 60% with a \$0.3M exploration spend over 3 years. The project area is considered prospective for iron, base metal and gold. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is \$0.5M.	84	\$0.5M	\$6,000

Ravensgate has examined the 5 year historical commodity charts for general trends over time. A general analysis of the five year price chart for iron ore in Figure 10 indicates steadily rising prices in recent years, peaking in early 2011. The spot price has waned in recent months in \$USD terms and more so in \$AUD terms due to the strength of the Australian Dollar. Ravensgate has taken into consideration the general commodity trend as an influence on deriving a final project valuation.



**Figure 10 Five year price chart for Iron Ore - Contract Price to Europe- Iron Ore Fines \$USD/dry metric tonne unit (in \$USD and \$AUD) (nb 100 dry metric tonne units equates to one tonne)**





## 4.5 Mineral Asset Valuations

### 4.6 Selection of Valuation method

Based upon Ravensgate's review of the Atlas South-east Pilbara Iron exploration project areas and reviews of the various methods that are available in valuing exploration assets, Ravensgate has elected to use the following methodology:

- For advanced exploration project leases on which JORC (2004) Resources have been defined the Comparative Transaction method has been used to assign a value based on value per contained metal of the Resource. The value used per tonne has been assigned based on careful consideration of various geological and technical aspects of the project to rank the project in comparison to other transactions and arrive at an appropriate valuation.
- For advanced exploration projects leases on which no JORC (2004) resources have been defined and which are considered more 'grass roots' exploration area project leases Ravensgate has used the Comparative Transactions Method arrive at appropriate valuations which have been based on careful consideration of the various geological and technical aspects each project.

As was earlier noted, it is the case that almost all of the licenses have been subject to Valmin technical valuations in the past two years, either by Agricola in late 2009 (Castle, 2009) and by Ravensgate in early 2011 (Alison, 2011). Ravensgate has used these valuations as a baseline, and wishes to acknowledge the diligent work of these previous authors.

#### 4.6.1 Valuation - Advanced Exploration Projects with JORC 2004 Resources

Atlas has several advanced exploration projects on which in which JORC (2004) Resources have been defined (within the Western Creek, & Jimblebar Areas). Ravensgate has elected to use these resources as a means for valuing the exploration licenses on which these resources lie.

Analysis of recent market transaction for DSO iron mineralisation projects with reported JORC (2004) Resources indicates implied values of between \$0.18 per contained metal tonne up to \$3.00 per contained metal tonne. Ravensgate has used this range on which to base its valuation of the various resources taking into consideration factors such as:

- Fe grade
- Resource confidence level
- Geological prospectivity
- Location and proximity to infrastructure
- Deleterious elements
- Market factors

For advanced exploration project leases on which JORC (2004) Resources have been defined the Comparative Transaction method has been used to assign a value based on value per contained metal of the Resource. The value used per tonne has been assigned based on the careful consideration of the various geological and technical aspects of the project. This enables the project to be ranked in comparison to other transactions and arrive at an appropriate valuation.





#### **4.6.2 Valuation - Advanced Exploration Projects and Exploration Areas**

Atlas's South-East Pilbara Project encompasses a number of Advanced Exploration licences (on which no JORC resources have been defined) as well as many licenses that can be classified as tending towards the 'grass-roots' exploration area end of the project value spectrum. The licences are mostly prospective for Fe, but there are also several licenses prospective for Cu-Au and Manganese.

Almost all of these licenses have had recent Valmin Valuations completed either by Agricola (Castle, 2009) who used the Kilburn Method and by Ravensgate in early 2011 (Allison) who used Comparative transactions. Ravensgate's approach has been to use these valuations as a baseline to help 'validate' the Kilburn Methods Valuations using the Comparative Transactions Method, and update where appropriate the values based on new work, current market conditions and project specific technical information.

A Ravensgate's analysis of Western Australian market transactions for early-stage, conceptual Iron projects, indicates an implied value between \$2,000 to \$6,000 per square kilometre are typical, rising to between \$28,000 to \$50,000 per square kilometre for specific cases (Table 11).

Ravensgate considers the lower range of between \$2,000 to \$6,000 per square kilometre to be more appropriate for valuing Exploration Area Mineral Assets. These types of projects are generally of a more 'grass roots' early stage exploration stage, where work is of a more regional nature focussing on identifying target areas for further follow up work at a later stage.

The higher range of up to \$28,000 to \$50,000 per square kilometre is more appropriate for valuing Advanced Exploration Area Mineral Assets. These types of projects have had considerable exploration which has identified specific mineralisation targets, which are reflected in their higher value per square kilometre.

Ravensgate has reviewed the work that has been completed on each project, the geology and prospectivity, examined the potential target styles and potential deposit sizes, and compared these against recent transactions to arrive at an appropriate range of values for each license and a preferred value.

#### **4.6.3 Western Creek Project, West Australia**

##### **4.6.3.1 Project Analysis - Comparable Transactions Method**

Ravensgate has valued the Western Creek Project by using comparable market transactions to place a value on the contained resource metal tonnages on licenses which have reported resources. Exploration licenses that have no reported resources have been valued on a square kilometre basis using exploration prospectivity factors to rate against comparable market transactions.

There are three reported resources within the Western Creek project area (Table 1) with total contained Fe metal of 40.2 Mt. Ravensgate's analysis of similar hematite-related iron market transactions indicates that the implied value generally lies around \$0.18 to \$3.00 per contained resource metal tonne. Within this range Ravensgate has selected an applicable range of \$0.94 to \$2.12 per contained resource metal tonne which gives a range of \$ 37.8M to \$84.0M for the contained metal within the current Mineral Resource Estimates. The preferred value is \$47.2M which equates to \$1.17 per metal tonne which reflects the moderate grade of the deposit, the resource status (inferred) and other geological and location factors.





For the Exploration licenses with no reported resources Ravensgate has reviewed the geology and prospectivity of each license and compared it with similar market transactions to arrive at an appropriate valuation range. Analysis of market transaction indicates that transactions for “grass roots” exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects which have high prospectivity and may have had considerable work carried out on them previously which may allow values to be put forward up to \$28,000 to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$3,000 up to \$12,000 per square kilometre, with these ranges reflecting the relative prospectivity when compared to recent market transaction (Table 11). Where available these values were compared against a previous valuation (2009) to further cross-validate them. The preferred values selected by Ravensgate range from \$7,000 up to \$9,000 per square kilometre, with these ranges reflecting the geological prospectivity of the each license, the stage of exploration and location. Using this methodology Ravensgate values the exploration licences (without reported JORC (2004) Resources) of \$ 1.6M to \$4.4M with a preferred value of \$3.0M.

Based on the above Ravensgate has derived a valuation for the Western Creek Project of between \$ 39.4M and \$88.2M with a preferred value of \$50.2M (Table 12).

#### **4.6.4 Jimblebar Iron Project, West Australia**

Ravensgate has valued the Jimbelbar Project by using comparable market transactions to place a value on the contained resource metal tonnages on licenses which have reported resources. Exploration licenses that have no reported resources have been valued on a square kilometre basis using exploration prospectivity factors to rate against comparable market transactions.

There are three reported resources within the project area at McCameys North, Caramulla South and Jimblebar Range (Table 1) with total contained Fe metal of 37.2 Mt. Ravensgate’s analysis of similar hematite-related iron market transactions indicates that the implied value generally lies around \$0.18 to \$3.00 per contained resource metal tonne. Within which Ravensgate has selected an applicable range of \$0.9 to \$1.8 per contained resource metal tonne for McCameys North (preferred value \$1.2/tonne), \$0.3 to \$1.0 per contained resource metal tonne for Caramulla South (preferred value \$0.6/tonne) and \$0.9 to \$1.8 per contained resource metal tonne for Jimblebar Range (preferred value \$1.2/tonne). Based on this assessment, the value ranges from \$29.1 M to \$61.2 M are proposed with a preferred value of \$40.3 M selected which reflects the grade of deposits, the resource status (inferred) and other geological and location factors.

For the Exploration licenses with no reported resources, Ravensgate has reviewed them in conjunctions with the geology and prospectivity parameters of each license and compared them with similar market transactions to arrive at an appropriate valuation range. Analysis of market transaction indicates that transactions for “grass roots” type exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects that have high prospectivity and have also had considerable work carried out on them may be valued in the range of up to \$28,000 through to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$8,000 up to \$15,000 per square kilometre, with these ranges reflecting the relatively higher prospectivity when compared to recent market transaction (Table 11). Where available these values were compared against previous a valuation (2009) to further cross-validate them. The preferred values selected by Ravensgate is \$12,000 per square kilometre, reflecting the geological prospectivity of the each license, the stage of exploration and location. Using this methodology Ravensgate values the exploration licences (without reported JORC (2004) Resources) of between \$ 0.2M to \$0.4M with a preferred value of \$0.3M.

Based on the above Ravensgate has derived a valuation for the Jimblebar Project of between \$ 29.3M and \$61.6M with a preferred value of \$40.6M (Table 13).



**Table 12 Western Creek Project- Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Western Creek	E47/2032	9.45	0.01	0.02	0.01	\$7,000	\$12,000	\$9,000	0.07	0.11	0.09	Advanced Exploration
Western Creek	E47/2033	12.59	0.01	0.02	0.02	\$7,000	\$12,000	\$9,000	0.09	0.15	0.11	Advanced Exploration
Western Creek	E52/1483	57.00							27.94	63.02	35.67	Resource - Western Ridge
Western Creek	E52/1604	41.00				\$7,000	\$12,000	\$9,000	0.29	0.49	0.37	Advanced Exploration
Western Creek	E52/1911	3.00				\$7,000	\$12,000	\$9,000	0.02	0.04	0.03	Advanced Exploration
Western Creek	E52/1912	13.00				\$7,000	\$12,000	\$9,000	0.09	0.16	0.12	Advanced Exploration
Western Creek	E52/2160	25.18	0.05	0.07	0.06				9.84	20.94	11.52	Resource - Western Ridge
Western Creek	E52/2179	50.00				\$7,000	\$12,000	\$9,000	0.35	0.60	0.45	Advanced Exploration
Western Creek	E52/2229	12.58	0.06	0.09	0.07	\$3,000	\$12,000	\$7,000	0.04	0.15	0.09	Exploration Area
Western Creek	E52/2230	9.44	0.02	0.03	0.02	\$3,000	\$12,000	\$7,000	0.03	0.11	0.07	Exploration Area
Western Creek	E52/2299	31.48	0.06	0.09	0.07	\$3,000	\$12,000	\$7,000	0.09	0.38	0.22	Exploration Area
Western Creek	E52/2300	3.15	0.01	0.01	0.02	\$3,000	\$12,000	\$7,000	0.01	0.04	0.02	Exploration Area
Western Creek	E52/2304	9.44	0.01	0.02	0.02	\$3,000	\$12,000	\$7,000	0.03	0.11	0.07	Exploration Area
Western Creek	E52/2306	6.30	0.01	0.01	0.01	\$3,000	\$12,000	\$7,000	0.02	0.08	0.04	Exploration Area
Western Creek	E52/2389	63.00				\$3,000	\$12,000	\$9,000	0.19	0.76	0.57	Advanced Exploration
Western Creek	E52/2391	85.00				\$3,000	\$12,000	\$9,000	0.26	1.02	0.77	Advanced Exploration
Western Creek	E52/2476	3.14	0.39	0.52	0.44	\$3,000	\$12,000	\$9,000	0.01	0.04	0.03	Advanced Exploration
Western Creek	P52/1260	0.50	0.02	0.03	0.03	\$7,000	\$12,000	\$9,000	0.00	0.01	0.00	Advanced Exploration
		<b>435.25</b>							<b>39.36</b>	<b>88.19</b>	<b>50.22</b>	

**Table 13 Jimblebar Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Jimblebar	E52/1595	3.15	0.01	0.02	0.01	\$8,000	\$15,000	\$12,000	0.03	0.05	0.04	Jimblebar
Jimblebar	E52/1750	21.28	0.25	0.36	0.30	\$8,000	\$15,000	\$12,000	0.17	0.32	0.26	Jimblebar
Jimblebar	E52/1772	76.66							6.52	13.04	8.69	Jimblebar
Jimblebar	E52/1823	47.53							2.23	7.44	4.46	Jimblebar
Jimblebar	E52/2303	7.45	0.11	0.15	0.13				20.36	40.72	27.14	Jimblebar
Jimblebar	P52/1238	0.57	0.11	0.14	0.12	\$8,000	\$15,000	\$12,000	0.00	0.01	0.01	Jimblebar
Jimblebar	P52/1326	0.57				\$8,000	\$15,000	\$12,000	0.00	0.01	0.01	Jimblebar
		<b>56.11</b>							<b>29.31</b>	<b>61.58</b>	<b>40.61</b>	



#### **4.6.5 Warrawanda Iron Project, West Australia**

Ravensgate has valued the Warrawanda Project by using comparable market transactions to place a value on the contained resource metal tonnages on licenses which have reported resources. Exploration licenses that have no reported resources have been valued on a square kilometre basis using exploration prospectivity factors to rate against comparable market transactions.

There is a reported resource within the project area at Wishbone which straddles the two licenses (Table 1) with total contained Fe metal of 11.9 Mt. Ravensgate's analysis of similar hematite-related iron market transactions indicates that the implied value generally lies around \$0.18 to \$3.00 per contained resource metal tonne. Within this range Ravensgate has selected an applicable range of \$0.9 to \$1.8 per contained resource metal for Wishbone (preferred value \$1.2/tonne) which reflects the moderate grade of deposit, the resource status (inferred) and other geological and location factors. Based on this the value ranges for Warrawanda are from \$10.7 M to \$21.4 M with a preferred value of \$14.3 M (Table 14).

#### **4.6.6 Jigalong Iron Project, West Australia**

There are no reported resources within the Jigalong Project. For these Exploration licenses Ravensgate has reviewed the geology and prospectivity of each license and compared it with similar market transactions to arrive at an appropriate valuation range. Analysis of available information indicates that transactions for "grass roots" exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects which have high prospectivity and may have had considerable work carried out on them may be up to \$28,000 to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$2,000 up to \$6,000 per square kilometre for the more 'grass roots' exploration licenses and from \$8,000 up to \$15,000 per square kilometre for the advance exploration licenses. These ranges reflecting the relative prospectivity when compared to recent market transactions (Table 11). Where available these values were compared against previous valuations (2009) to further cross-validate them. The preferred values selected by Ravensgate are \$10,000 per square kilometre for the Advanced Exploration Areas and \$4,000 per square kilometre for the Exploration Areas, reflecting the geological prospectivity of the each license, the stage of exploration and location.

Based on the above Ravensgate has derived a valuation for the Jigalong Project of between \$ 4.3M and \$9.4M with a preferred value of \$6.3M (Table 15).



**Table 14 Warrawanda Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Warrawanda	E52/1771	66.00	1.98	2.73	2.35				5.34	10.69	7.13	Resource - Wishbone
Warrawanda	E52/1815	28.28	0.76	1.04	0.89				5.34	10.69	7.13	Resource - Wishbone
		<b>94.28</b>							<b>10.69</b>	<b>21.38</b>	<b>14.25</b>	

**Table 15 Jigalong Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Jigalong	E46/780	407.40	3.20	4.44	3.80	\$2,000	\$6,000	\$4,000	0.81	2.44	1.63	Exploration Area
Jigalong	E52/1812	220.66	2.89	4.01	3.44	\$8,000	\$15,000	\$10,000	1.77	3.31	2.21	Advanced Exploration
Jigalong	E52/1813	176.57	2.32	3.21	2.75	\$8,000	\$15,000	\$10,000	1.41	2.65	1.77	Advanced Exploration
Jigalong	E69/2235	173.20	1.36	1.00	1.60	\$2,000	\$6,000	\$4,000	0.35	1.04	0.69	Exploration Area
		<b>977.82</b>							<b>4.34</b>	<b>9.44</b>	<b>6.29</b>	

**Table 16 Weelarrana Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Weelarrana	E52/1819	220.03	2.89	4.01	3.44	\$2,000	\$6,000	\$2,500	0.44	1.32	0.55	Exploration Area
Weelarrana	E52/2060	170.63	2.36	3.27	2.80	\$2,000	\$6,000	\$2,000	0.34	1.02	0.34	Exploration Area
Weelarrana	E52/2132	44.08	0.50	0.69	0.59	\$2,000	\$6,000	\$5,000	0.09	0.26	0.22	Exploration Area
Weelarrana	E52/2150	201.25	1.59	2.20	1.88	\$2,000	\$6,000	\$4,000	0.40	1.21	0.81	Exploration Area
Weelarrana	E52/2218	160.36	1.27	1.75	1.50	\$2,000	\$6,000	\$2,000	0.32	0.96	0.32	Exploration Area
Weelarrana	E52/2397	505.31	3.99	5.54	4.74	\$2,000	\$6,000	\$2,000	1.01	3.03	1.01	Exploration Area
		<b>1301.66</b>							<b>2.60</b>	<b>7.81</b>	<b>3.25</b>	



#### **4.6.7 Weelaranna Iron Project, West Australia**

There are no reported resources within the Weelaranna Project. For these Exploration licenses Ravensgate has reviewed the geology and prospectivity of each license and compared it with similar market transactions to arrive at an appropriate valuation range. Analysis of market transaction indicates that transactions for “grass roots” type exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects having higher prospectivity and have had considerable work may be up to \$28,000 to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$2,000 up to \$6,000 per square kilometre, with these ranges reflecting the relatively lower prospectivity when compared to recent market transactions (Table 11) for similar projects. Ravensgate has selected a preferred value of between \$2,000 per square kilometre and \$4,000 per square kilometre. These lower values reflect that this project is very much a grass roots exploration project, with the higher values reflecting areas where exploration has outlined targets worthy of follow up. Where available these values were compared against on a previous valuation (2009) to further validate them.

Based on the above Ravensgate has derived a valuation for the Watershed Project of between \$2.6 and \$7.8M with a preferred value of \$3.3M (Table 16).

#### **4.6.8 Upper Ashburton Iron Project, West Australia**

There are no reported resources within the Upper Ashburton project. For these Exploration licenses Ravensgate has reviewed the geology and prospectivity of each license and compared it with similar market transactions to arrive at an appropriate valuation range. Analysis of market transactions indicate that transactions for “grass roots” type exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects which have high prospectivity and may have had considerable work done on them being valued up to \$28,000 to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$2,000 up to \$6,000 per square kilometre, with these ranges reflecting the relatively lower prospectivity when compared to recent market transactions (Table 11) for similar projects. Ravensgate has selected a preferred value of \$2,000 per square kilometre. These lower values reflect the assessment that this project is very much a ‘grass roots’ exploration project. Where available these values were compared against previous valuations (2009) to further validate them.

Based on the above Ravensgate has derived a valuation for the Upper Ashburton Project of between \$ 4.9M and \$14.8M with a preferred value of \$4.9M (Table 17).

#### **4.6.9 Watershed Iron Project, West Australia**

There are no reported resources within the Watershed project. For these Exploration licenses Ravensgate has reviewed the geology and prospectivity of each license and compared it with similar market transactions to arrive at an appropriate valuation range. Analysis of similar market transactions indicates that transactions for “grass roots” exploration area licenses range from \$2,000 to \$6,000 per square kilometre with advanced exploration projects having high prospectivity and have had considerable work may be up to \$28,000 to \$50,000 per square kilometre. Based on its review of the various licenses Ravensgate has selected values per square kilometre ranging from \$3,000 up to \$10,000 per square kilometre, with these ranges reflecting the relatively lower prospectivity when compared to recent market transactions (Table 11) for similar projects. Ravensgate has selected a preferred value of between \$2,000 per square kilometre and \$4,000 per square kilometre. These lower values reflect that this project is very much a grass roots exploration project, with the higher values reflecting areas where exploration has outlined targets worthy of follow up. Where available these values were compared against previous valuations (2009) to further validate them.

Based on the above Ravensgate has derived a valuation for the Watershed Project of between \$ 1.3M and \$2.6M with a preferred value of \$1.6M (Table 18).



**Table 17 Upper Ashburton Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Upper Ashburton	E52/2219	162.79	1.10	1.59	1.34	\$2,000	\$6,000	\$3,000	0.33	0.98	0.49	Exploration Area
Upper Ashburton	E52/2317	197.31	0.26	0.41	0.33	\$2,000	\$6,000	\$3,000	0.39	1.18	0.59	Exploration Area
Upper Ashburton	E52/2327	197.27	0.26	0.41	0.33	\$2,000	\$6,000	\$3,000	0.39	1.18	0.59	Exploration Area
Upper Ashburton	E52/2328	218.99	0.26	0.45	0.37	\$2,000	\$6,000	\$3,000	0.44	1.31	0.66	Exploration Area
Upper Ashburton	E52/2329	219.05	0.29	0.45	0.37	\$2,000	\$6,000	\$3,000	0.44	1.31	0.66	Exploration Area
Upper Ashburton	E52/2330	165.67	0.22	0.34	0.28	\$2,000	\$6,000	\$3,000	0.33	0.99	0.50	Exploration Area
Upper Ashburton	E52/2332	110.26	0.28	0.44	0.36	\$2,000	\$6,000	\$3,000	0.22	0.66	0.33	Exploration Area
Upper Ashburton	E52/2334	162.58	0.29	0.45	0.37	\$2,000	\$6,000	\$3,000	0.33	0.98	0.49	Exploration Area
Upper Ashburton	E52/2335	193.94	0.29	0.45	0.37	\$2,000	\$6,000	\$3,000	0.39	1.16	0.58	Exploration Area
Upper Ashburton	E52/2337	219.41	0.29	0.45	0.37	\$2,000	\$6,000	\$3,000	0.44	1.32	0.66	Exploration Area
Upper Ashburton	E52/2351	206.91	0.29	0.43	0.35	\$2,000	\$6,000	\$3,000	0.41	1.24	0.62	Exploration Area
Upper Ashburton	E52/2407	187.78	0.25	0.39	0.32	\$2,000	\$6,000	\$3,000	0.38	1.13	0.56	Exploration Area
Upper Ashburton	E52/2429	218.89	0.27	0.90	0.73	\$2,000	\$6,000	\$3,000	0.44	1.31	0.66	Exploration Area
		<b>2460.85</b>							<b>4.92</b>	<b>14.77</b>	<b>7.38</b>	

**Table 18 Watershed Iron Project - Valuation 100% Equity**

			Agricola, 2009 Valuation			Comparative Transactions Inputs			Ravensgate July 2011 Valuation			
Project	License Number	Area sq km	Min Value \$M	Max value \$M	Pref Value \$M	min \$ /km <sup>2</sup>	max\$ /km <sup>2</sup>	pref\$ /km <sup>2</sup>	Min Value \$M	MaxValue \$M	Pref Value \$M	Comments
Watershed	E52/2045	260.42	2.94	4.12	3.51	\$4,000	\$10,000	\$8,000	1.04	2.60	2.08	Advanced Exploration
Watershed	E52/2145	109.83	1.24	1.74	1.48	\$4,000	\$10,000	\$8,000	0.44	1.10	0.88	Advanced Exploration
Watershed	E52/2283	62.73	0.43	0.60	0.51	\$3,000	\$6,000	\$3,000	0.19	0.38	0.19	Exploration Area
Watershed	P52/1268	1.76	0.03	0.04	0.04	\$3,000	\$6,000	\$3,000	0.01	0.01	0.01	Exploration Area
Watershed	P52/1269	1.79	0.03	0.05	0.04	\$3,000	\$6,000	\$3,000	0.01	0.01	0.01	Exploration Area
Watershed	P52/1270	1.79	0.10	0.03	0.04	\$3,000	\$6,000	\$3,000	0.01	0.01	0.01	Exploration Area
Watershed	P52/1271	1.49	0.05	0.06	0.05	\$3,000	\$6,000	\$3,000	0.00	0.01	0.00	Exploration Area
		<b>439.80</b>							<b>1.69</b>	<b>4.12</b>	<b>3.17</b>	



#### 4.7 Valuation Summary

Ravensgate has concluded that Atlas Iron's Southeast Pilbara Fe Projects are of considerable technical merit and warrant further exploration and evaluation. The applicable valuation date for the valuations as outlined below in Table 19 is 11<sup>th</sup> July 2011 and has been derived using Comparable Transaction methodology.

The value of a 100% ownership interest in the listed Projects is considered to lie in a range from \$92.5M to \$205.8M, within which range Ravensgate has selected a preferred value of \$121.2M.

Project	Mineral Asset	Atlas Ownership	Valuation		
			Low \$M	High \$M	Preferred \$M
Western Creek	Advanced Exploration Area.	100%	39.36	88.19	50.22
Jimblebar	Advanced Exploration Area.	100% (Fe rights only)	29.31	61.58	40.61
Warrawanda	Advanced Exploration Area.	100%	10.69	21.38	14.25
Jigalong	Advanced Exploration Area.	100%	4.34	9.44	6.29
Weelaranna	Exploration Area	100%	2.60	7.81	3.25
Upper Ashburton	Exploration Area	100%	4.92	14.77	4.92
Watershed	Exploration Area	100%	1.25	2.64	1.62
<b>Combined Projects</b>	<b>All listed projects</b>	<b>100%</b>	<b>92.48</b>	<b>205.81</b>	<b>121.16</b>

*\*The combined valuation has been compiled to an appropriate level of precision and minor rounding errors may occur. Ravensgate has not valued licenses under application.*





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## 6. GLOSSARY

A\$	Australian dollars.
Acid mine drainage	Mine water which contains sulphuric acid, primarily due to weathering of materials.
Ad valorem	In proportion to the value of.
Aeolian	Formed or deposited by wind.
Aerial photography	Photographs of the Earth's surface taken from an aircraft.
Aeromagnetic	A survey undertaken by helicopter or fixed-wing aircraft for the purpose of recording magnetic characteristics of rocks by measuring deviations of the Earth's magnetic field.
Airborne geophysical data	Data pertaining to the physical properties of the Earth's crust at or near surface and collected from an aircraft.
Aircore (AC)	Drilling method employing a drill bit that yields sample material which is delivered to the surface inside the rod string by compressed air.
Alluvium	Clay silt, sand, gravel, or other rock materials transported by flowing water and deposited in comparatively recent geologic time as sorted or semi-sorted sediments in riverbeds, estuaries, and flood plains, on lakes, shores and in fans at the base of mountain slopes and estuaries.
Alteration	The change in the mineral composition of a rock, commonly due to hydrothermal activity.
Ancillary equipment	Mining equipment which does not perform primary loading or hauling functions.
Andesite	An intermediate volcanic rock composed of andesine and one or more mafic minerals.
Anomalous	A departure from the expected norm, generally geochemical or geophysical values higher or lower than the norm.
Anticline	An area of rocks that have been arched upwards in the form of a fold.
Archaean	The oldest rocks of the Precambrian era, older than about 2,500 million years.
Argillaceous	Describing rocks or sediments containing particles that are silt- or clay-sized, less than 0.625 mm in size.
Arsenopyrite	A mineral of iron, sulphur, and arsenic commonly associated with metamorphism around igneous intrusions.
Assay	A procedure where the element composition of a rock soil or mineral sample is determined.
Auger drilling	A rotary drilling technique which uses a blade drill bit and screw auger shaft to return sample to the surface.
Auriferous	Containing gold.
B	Billions.
Bank cubic metre (BCM)	A cubic metre of material in-situ.
Basalt	A volcanic rock of low silica (<55%) and high iron and magnesium composition, composed primarily of plagioclase and pyroxene.
Base metals	A non-precious metal, usually referring to copper, lead and zinc.



Basement	Crust of the earth, igneous or metamorphic rocks overlain by sedimentary deposits.
Basin	A large depression within which sediments are sequentially deposited and lithified.
Bench	A vertical segment which is mined as a whole.
Beneficiable ore (BFO)	Material that can be processed and upgraded to produce a saleable concentrate.
BIF	A rock consisting essentially of iron oxides and cherty silica and possessing a marked banded appearance.
Blasted stockpiles	When ore is blasted but not mined, it is considered to be a blasted stockpile.
BLEG	Bulk leach extractable gold, a method for detection of fine-grained gold in soils.
Boudins	Typical features of sheared veins and shear zones where, due to stretching along the shear foliation and compression perpendicular to this, rigid bodies break up.
Breccia	Rock consisting of angular fragments enclosed in a matrix, usually the result of persistent fracturing by tectonic or hydraulic means.
Brittle	Rock deformation characterised by brittle fracturing and brecciation.
Cainozoic	An era of geological time spanning the period from 65 million years ago to the present.
Calcite	A mineral of composition CaCO <sub>3</sub> (calcium carbonate) it is an essential component of limestones and marbles.
Calcrete	Superficial residual deposits cemented by or precipitated from groundwater as secondary calcium carbonate as a result of evaporation.
Canga	A recemented detrital iron ore mineralised deposit.
Carbonate	Rock of sedimentary or hydrothermal origin, composed primarily of calcium, magnesium or iron and CO <sub>3</sub> . Essential component of limestones and marbles.
Carnotite	Yellow, strongly radioactive, potassium, uranium vanadate K <sub>2</sub> (UO <sub>2</sub> ) <sub>2</sub> (VO <sub>4</sub> ) <sub>2</sub> ·3H <sub>2</sub> O, usually occurring as a secondary uranium mineral deposited or precipitated from meteoric waters.
CAPEX	Capital expenditure.
Caprock	An impervious rock layer generally close to surface which may act as a seal.
Chalcopyrite	CuFeS <sub>2</sub> , a copper ore.
Chert	Fine grained sedimentary rock composed of cryptocrystalline silica.
Chlorite	A green coloured hydrated aluminium-iron-magnesium silicate mineral (mica) common in metamorphic rocks.
Clastic	Pertaining to sedimentary rocks composed primarily from fragments of pre-existing rocks or fossils.
Clays	A fine-grained, natural, earthy material composed primarily of hydrous aluminium silicates.
CMS	Magnetic separation circuit.
Concentrate	A product containing valuable metal from which most of the waste material has been eliminated (in this case high grade magnetite or



	hematite).
Contract-miner	An operating scenario in which the mine owner contracts a third party. The third party owns the mining fleet and directly employs personnel to conduct mining operations.
Colluvium	A loose, heterogeneous and incoherent mass of soil material deposited by slope processes.
Conglomerate	A rock type composed predominantly of rounded pebbles, cobbles or boulders deposited by the action of water.
Costean	Exploration trench.
Craton	Large, usually ancient, stable mass of the earth's crust.
Marginal Cutoff grade	The lowest grade of mineralised material. Considered to be economic for a particular project.
Density	Mass of material per unit volume.
Depletion	The lack of a mineral in the near-surface environment due to leaching processes during weathering.
Deposit	A mineralised body which has been physically delineated by sufficient drilling and found to contain sufficient average grade of metal or metals to warrant further exploration and development expenditure.
Dewater	The process of decreasing the water table below the current mining surface.
Diagenesis	Any chemical, physical, or biological change undergone by a sediment during and after its lithification, not including weathering and metamorphism.
Diamond drilling	A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.
Dilational	Open space within a rock mass commonly produced in response to folding or faulting.
Dilution	The lowering of the grade of ore being mined due to the inclusion of waste rock or low-grade ore.
Dip	The angle at which a rock stratum or structure is inclined from the horizontal.
Direct ship ore (DSO)	Material of sufficient grade and quality that little processing is required to produce a saleable product.
Disseminated	Widely and evenly spread.
Dmt	Dry metric tonne.
Dolerite	A medium grained mafic intrusive rock composed mostly of pyroxenes and sodium-calcium feldspar.
DTR	Davis Tube Recovery, a test to measure the weight recovery of magnetite from iron ore.
Ductile	Deformation of rocks or rock structures involving stretching or bending in a plastic manner without breaking.
Dunite	A dense igneous rock that consists mainly of olivine and is commonly a source of magnesium mineralisation.
Duricrust	Hard-pan, cemented material.
Dykes	A tabular body of intrusive igneous rock, crosscutting the host strata at a high angle.



Electromagnetic survey	A geophysical technique whereby transmitted electromagnetic fields are used to energise and detect conductive material beneath the earth's surface.
Eluvial	Weathered material which is still at or near its point of formation.
En echelon	Parallel or sub-parallel, closely-spaced, overlapping or step-like minor structural features in rock, such as faults and tension fractures, that are oblique to the overall structural trend.
Epiclastic	Rocks formed from fragments of pre-existing volcanic rock.
Epithermal	Mineralisation style of gold or silver formed deep within the Earth's crust from ascending hot solutions.
Erosional	The group of physical and chemical processes by which earth or rock material is loosened or dissolved and removed from any part of the Earth's surface.
Excavator	A mining unit which excavates material in an open pit and loads it into a truck or other materials handling unit.
Facies	Characteristic features of rocks such as sedimentary rock type, mineral content, metamorphic grade, fossil content and bedding characteristics.
Fault zone	A wide zone of structural dislocation and faulting.
Feldspar	A group of rock forming minerals.
Felsic	An adjective indicating that a rock contains abundant feldspar and silica.
Ferricrete	A mineral conglomerate consisting of surficial sand and gravel cemented into a hard mass by iron oxide derived from the oxidation of percolating solutions of iron salts.
Ferruginous	Iron-rich.
Fluvial deposits	Applied to sand and gravel deposits laid down by streams or rivers.
Foliated	Banded rocks, usually due to crystal differentiation as a result of metamorphic processes.
Footwall	Surface of rock along the fault plane having rock below it.
g/t	Grams per tonne.
Gabbro	A fine to coarse grained, dark coloured, igneous rock composed mainly of calcic plagioclase, clinopyroxene and sometimes olivine.
Gangue	That part of an ore deposit from which a metal or metals is not extracted.
Geochemical	Pertains to the concentration of an element.
Geophysical	Pertains to the physical properties of a rock mass.
GIS database	A system devised to present partial data in a series of compatible and interactive layers.
Gneiss	Coarse-grained, banded metamorphic rock.
Gossan	Leached, oxidised near surface part of a vein containing sulphides, especially iron-bearing sulphides.
Grader	A mining unit which uses a long blade to create or maintain a flat and smooth road surface.
Granite	A common type of intrusive, felsic, igneous rock.
Gravity separation	The recovery of minerals utilising variances in specific gravity to separate the minerals (in this case non-magnetic hematite).



Greenschist facies	A low grade, low temperature regional metamorphism that results in a mineral assemblage typically containing chlorite, epidote and/or actinolite.
Greenstone belt	A broad term used to describe an elongate belt of rocks that have undergone regional metamorphism to greenschist facies.
Greywackes	A sandstone like rock, with grains derived from a dominantly volcanic origin.
Hangingwall	The mass of rock above a fault, vein or zone of mineralisation.
Hematite	A common iron ore, natural iron oxide that is reddish or brown in colour.
Hinge zone	A zone along a fold where the curvature is at a maximum.
Hydrothermal	A term applied to hot aqueous solution having temperatures up to 400° C which may transport metals and minerals in solution.
Igneous	A rock that has solidified from molten rock or magma.
Infill	Refers to sampling or drilling undertaken between pre-existing sample points.
In-situ	In the natural or original position.
Interflow	Refers to the occurrence of other rock types between individual lava flows within a stratigraphic sequence.
Integrated waste landform (IWL)	A combined waste/tailings storage facility which encapsulates the tailings in a hard rock cell.
Intermediate	A rock unit which contains a mix of felsic and mafic minerals.
Intra-cratonic	Situated between or within cratons.
Intrusion/Intrusive	A body of igneous rock that invades older rock.
Ironstone	A rock formed by cemented iron oxides.
Jig feed (Jig)	Material contaminated with dilutants which may be economically recoverable through gravity separation.
Joint venture	A business agreement between two or more commercial entities.
JORC	Joint Ore Reserves Committee (of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia).
JORC Code	A code developed by the Australian Joint Ore Reserves Committee which sets minimum standards for public reporting of exploration results, mineral resources and ore reserves.
kg/m <sup>3</sup>	Kilogram per cubic metre.
kg/t	Kilograms per tonne, a standard mass unit for demonstrating the concentration of uranium in a rock.
Kinematic	produced by motion.
Komatiite	Magnesium-rich mafic to ultramafic extrusive rock.
Lacustrine	Lake environment.
Lag	Concentration of ferruginous material left after removal of soil fines by wind and water.
Laterite	A cemented residuum of weathering, generally leached in silica with a high alumina and/or iron content.
Leaching	Removal of elements from soil by their dissolution in water and moving downward in the ground.
Limonite	General term for mixtures of hydrated iron oxides and iron hydroxides.



Lineament	A significant linear feature of the Earth's crust, usually equating a major fault or shear structure.
Lithology	A term pertaining to the general characteristics of rocks.
Lode	A vein or other tabular mineral deposit with distinct boundaries.
M	Millions.
Mafic	A dark igneous rock composed dominantly of iron and magnesium minerals (such as basalt).magnetite A mineral comprising iron and oxygen which commonly exhibits magnetic properties.
Magnetic anomaly	Zone where the magnitude and orientation of the earth's magnetic field differs from adjacent areas.
Magnetite	A ferromagnetic mineral form of iron oxide (Fe <sub>2</sub> O <sub>3</sub> ).
Magnetometer	An instrument which measures the earth's magnetic field intensity.
Mass recovery	The percentage of mass recovered after processing.
Mesothermal	Hydrothermal deposit formed at intermediate temperatures (200-300° C).
Metabasalt	Metamorphosed basalt.
Metal recovery	The percentage of metal recovered after processing.
Metamorphism	Process by which changes are brought about to rock in the earth's crust by the agencies of heat, pressure and chemically active fluids.
Mineralisation	A geological concentration minerals or elements of prospective economic interest.
Mining recovery	The percentage of ore recovered during mining.
Mineral	A substance occurring naturally in the earth which may or not be of economic value.
Mineralised zone	Any mass of rock in which minerals of potential commercial value may occur.
Mineral Resource	A mineral inventory that has been classified to meet the JORC code standard.
Moisture content	Percentage of moisture in a rock mass.
Mottled zone	A layer that is marked with spots or blotches of different colour or shades of colour. The pattern of mottling and the size, abundance, and colour contrast of the mottles may vary considerably and should be specified in soil description.
Moz	Millions of ounces.
mRL	Metres reduced level, refers to the height of a point relative to a datum surface.
Mt	Million Tonnes.
Mullock	A rock which contains no gold or waste rock from which the gold has been extracted.
Mylonite	A hard compact rock with a streaky or banded structure produced by extreme granulation of the original rock mass in a fault or thrust zone.
OEM	Original equipment manufacturer.
Open pit	A mine working or excavation open to the surface.
OPEX	Operating expenditure.
Ore	Material that contains one or more minerals which can be recovered economically.
Ore Reserve	An ore reserve that has been classified to meet the JOR code standard.





Orogen	A belt of deformed rocks, usually comprising metamorphic and intrusive igneous rocks, mostly occurring along the collision zone between cratons.
Outcrops	Surface expression of underlying rocks.
Outlier	A limited area of younger rocks completely surrounded by older rocks.
Owner-Operator	An operating scenario in which the mine owner also owns the mining fleet and directly employs personnel to conduct mining operations.
Oxidized ore	Metalliferous minerals by which have been altered by weathering and partially or completely converted into oxides.
Palaeochannels	An ancient preserved stream or river.
Pallid clays	A relatively pale coloured clay-rich weathering horizon in a lateritic profile which is depleted in iron, usually by leaching.
Pedogenic	A product of soil processes.
Pegmatite	A very coarse grained intrusive igneous rock which commonly occurs in dyke-like bodies containing lithium-boron-fluorine-rare earth bearing minerals.
Pelites	Sedimentary rock composed of very fine clay or mud particles.
Percussion drilling	Drilling method of where rock is broken by the hammering action of a drill bit.
Pisolitic	Describes the prevalence of rounded manganese, iron or alumina-rich chemical concretions, frequently comprising the upper portions of a laterite profile.
Playa	Very flat, dry lake bed of hard, mud-cracked clay.
Pluton	A large body of intrusive igneous rock.
Polymictic	Referring to coarse sedimentary rocks, typically conglomerate, containing clasts of many different rock types.
Porphyries	Felsic intrusive or sub-volcanic rock with larger crystals set in a fine groundmass.
ppb	Parts per billion; a measure of low level concentration.
Production Drill Rig	A drill rig designed to drill production blastholes.
Pre-split Drill Rig	A drill rig designed to drill the holes around the edge of an open pit, in order to create a smoothly contoured wall profile.
Primary Loading	The excavation and loading of material from its insitu location in the open pit.
Proterozoic	Geological eon that extended from 2.5 billion to 542 million years ago.
Pyrite, pyrrhotite	A common, pale bronze iron sulphide mineral.
Quartz	Mineral species composed of crystalline silica (SiO <sub>2</sub> ).
RAB drilling	A relatively inexpensive and less accurate drilling technique (compared to RC drilling) involving the collection of sample returned by compressed air from outside the drill rods.
Radiometric	Geophysical technique measuring emission from radioactive isotopes.
Rafts	A relatively large block of foreign rock incorporated into an intrusive magma.
RC drilling	Reverse Circulation drilling, whereby rock chips are recovered by airflow returning inside the drill rods, rather than outside, thereby returning more reliable samples.
Reclamation	The process in which land disturbed by mining activities is reclaimed back to a beneficial land use.



Reconnaissance	An examination or survey of a region in reference to its general geological character.
Redox	The boundary between a reducing environment and an oxidising environment.
Regolith	General term for gravels, soils, alluvials, clays and other materials which cover the bedrock.
Rehandle	Material which is loaded more than once between the location in which it is first mined and the location in which it is finally dumped.
Reserves	The portion of a mineral deposit which could be economically extracted or produced at the time of the reserve determination. These are classified as either proven, probable or possible ore reserves based on the JORC code.
Resource	An occurrence of material of intrinsic economic interest in a form that provides reasonable prospects for eventual economic extraction. These are classified as Measured, Indicated or Inferred ore resources based on the JORC code.
Rock chip sampling	The collection of rock specimens for mineral analysis.
Roll front	A uranium deposit that forms where groundwater in permeable sandstone or conglomerate encounters the interface between oxidizing and reducing conditions.
ROM Pad	The transfer area for ore from the mine to the processing plant.
Run of mine ore (ROM)	Ore in its state as extracted from the mine.
SMU	Service metre unit.
Saline	Salty.
Sandstone	Sedimentary rock comprising predominantly of sand.
Saprock	Zone of weathered rock preserved within the weathered profile.
Satellite imagery	The images produced by photography of the Earth's surface from satellites.
Schistose	Containing schistose (strongly foliated metamorphic rock).
Scree	The rubble composed of rocks that have formed down the slope of a hill or mountain by physical erosion.
Secondary Loading	Refers to the loading of rehandled material, or the loading of small amounts of insitu material during clean-up operations.
Sedimentary	Rocks formed by the deposition of particles carried by air, water or ice.
Sericite	A white or pale apple green potassium mica, very common as an alteration product in metamorphic and hydrothermally altered rocks.
Serpentine	The main alteration product of olivines and pyroxenes.
Shale	Fine grained sedimentary rock with well-defined bedding planes.
Sheared	A zone in which rocks have been deformed primarily in a ductile manner in response to applied stress.
Shovel	A mining unit which excavates material in an open pit and loads it into a truck or other materials handling unit.
Silcrete	Superficial deposit formed by low temperature chemical processes associated with ground waters, and composed of fine grained, water-bearing minerals of silica.
Silicified	Rock into which silica has been introduced.



Sills	Sheets of igneous rock which is flat lying or has intruded parallel to stratigraphy.
Silts	Fine-grained sediments, with a grain size between those of sand and clay.
Soil sampling	The collection of soil specimens for mineral analysis.
Spot price	Current delivery price of a commodity traded in the spot market.
Strike	The bearing of a rock formation.
Stripping ratio	The ratio of waste material mined to ore mined.
Stratiform	The arrangement of mineral deposit in strata or layers.
Strike	Horizontal direction or trend of a geological structure.
Sulphide	A general term to cover minerals containing sulphur and commonly associated with mineralisation.
Supergene	Process of mineral enrichment produced by the chemical remobilisation of metals in an oxidised or transitional environment.
t	Tonne.
Tpa	Tonnes per annum.
Tailings	Material rejected from the plant after valuable minerals have been Recovered.
Tenements	Large tracts of land granted under lease to mining companies and prospectors by the government.
Track Dozer	A mining unit designed to push materials, which has tracks rather than wheels.
Trammel	Screened cylinder used to separate materials by size.
Truck	A mining unit which transports material from the location where it is mined to the location where it is dumped.
Ultramafic	Dark to very dark coloured igneous rocks composed mainly of mafic minerals.
Unconformably	Having the relation of uniformity to the underlying rocks; not succeeding the underlying strata in immediate order of age or parallel position.
Unconformity	Description of rock strata where the layers are interrupted, discontinuous.
Uranyl	A common uranium mineral occurring in the oxidised portion of uranium deposits.
Veins	A thin infill of a fissure or crack, commonly bearing quartz.
Vibracoring	Obtains sediment samples by vibrating a core barrel into the sediment.
Volcanogenic	Rocks having volcanic origin.
Wmt	Wet metric tonne.
Waste	Material which does not contain minerals of economic merit.
Wheel Dozer	A mining unit designed to push materials, which has wheels rather than tracks.
Wheel Loader	An excavating unit which has wheels rather than tracks.
Whittle	A mining software package which optimises the size of an open pit based on a set of physical and financial input parameters.
Zone of oxidisation	The upper region of a mineral deposit which has undergone oxidisation.

**Lodge your vote:**

**Online:**  
[www.investorvote.com.au](http://www.investorvote.com.au)

**By Mail:**  
 Computershare Investor Services Pty Limited  
 GPO Box 242 Melbourne  
 Victoria 3001 Australia

 Alternatively you can fax your form to  
 (within Australia) 1800 783 447  
 (outside Australia) +61 3 9473 2555

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 (custodians) [www.intermediaryonline.com](http://www.intermediaryonline.com)
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 000001 000 FRS  
 MR SAM SAMPLE  
 FLAT 123  
 123 SAMPLE STREET  
 THE SAMPLE HILL  
 SAMPLE ESTATE  
 SAMPLEVILLE VIC 3030

## Proxy Form



Vote online, 24 hours a day, 7 days a week:

**[www.investorvote.com.au](http://www.investorvote.com.au)**

**Cast your proxy vote**

**Review and update your securityholding**
**Your secure access information is:**
**Control Number: 999999**
**SRN/HIN: 1999999999**
**PIN: 99999**

**PLEASE NOTE:** For security reasons it is important that you keep your SRN/HIN confidential.

 **For your vote to be effective it must be received by 10.30am (EST) Saturday 27 August 2011**

### How to Vote on Items of Business

All your securities will be voted in accordance with your directions.

#### Appointment of Proxy

**Voting 100% of your holding:** Direct your proxy how to vote by marking one of the boxes opposite each item of business. If you do not mark a box your proxy may vote as they choose. If you mark more than one box on an item your vote will be invalid on that item.

**Voting a portion of your holding:** Indicate a portion of your voting rights by inserting the percentage or number of securities you wish to vote in the For, Against or Abstain box or boxes. The sum of the votes cast must not exceed your voting entitlement or 100%.

**Appointing a second proxy:** You are entitled to appoint up to two proxies to attend the meeting and vote on a poll. If you appoint two proxies you must specify the percentage of votes or number of securities for each proxy, otherwise each proxy may exercise half of the votes. When appointing a second proxy write both names and the percentage of votes or number of securities for each in Step 1 overleaf.

**A proxy need not be a securityholder of the Company.**

### Signing Instructions for Postal Forms

**Individual:** Where the holding is in one name, the securityholder must sign.

**Joint Holding:** Where the holding is in more than one name, all of the securityholders should sign.

**Power of Attorney:** If you have not already lodged the Power of Attorney with the registry, please attach a certified photocopy of the Power of Attorney to this form when you return it.

**Companies:** Where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the Corporations Act 2001) does not have a Company Secretary, a Sole Director can also sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please sign in the appropriate place to indicate the office held. Delete titles as applicable.

### Attending the Meeting

 Bring this form to assist registration. If a representative of a corporate securityholder or proxy is to attend the meeting you will need to provide the appropriate "Certificate of Appointment of Corporate Representative" prior to admission. A form of the certificate may be obtained from Computershare or online at [www.investorcentre.com](http://www.investorcentre.com) under the information tab, "Downloadable Forms".

**Comments & Questions:** If you have any comments or questions for the company, please write them on a separate sheet of paper and return with this form.

**GO ONLINE TO VOTE,  
 or turn over to complete the form** →

MR SAM SAMPLE  
FLAT 123  
123 SAMPLE STREET  
THE SAMPLE HILL  
SAMPLE ESTATE  
SAMPLEVILLE VIC 3030

**Change of address.** If incorrect, mark this box and make the correction in the space to the left. Securityholders sponsored by a broker (reference number commences with 'X') should advise your broker of any changes.



I 9999999999

I ND

## Proxy Form

Please mark  to indicate your directions

### STEP 1 Appoint a Proxy to Vote on Your Behalf

XX

I/We being a member/s of FerrAus Limited hereby appoint

the Chairman of the meeting OR

**PLEASE NOTE:** Leave this box blank if you have selected the Chairman of the Meeting. Do not insert your own name(s).

or failing the individual or body corporate named, or if no individual or body corporate is named, the Chairman of the Meeting, as my/our proxy to act generally at the meeting on my/our behalf and to vote in accordance with the following directions (or if no directions have been given, as the proxy sees fit) at the General Meeting of FerrAus Limited to be held at the Marriott Sydney Harbour Circular Quay, 30 Pitt Street, Circular Quay, Sydney NSW 2000 on Monday, 29 August 2011 at 10.30am (EST) and at any adjournment of that meeting.

### STEP 2 Items of Business

**PLEASE NOTE:** If you mark the **Abstain** box for an item, you are directing your proxy not to vote on your behalf on a show of hands or a poll and your votes will not be counted in computing the required majority.

	For	Against	Abstain
Resolution 1 Approval to Issue Subscription Shares	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resolution 2 Approval to Issue Consideration Shares	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Chairman of the Meeting intends to vote undirected proxies in favour of each item of business.

### SIGN Signature of Securityholder(s) *This section must be completed.*

Individual or Securityholder 1

Sole Director and Sole Company Secretary

Securityholder 2

Director

Securityholder 3

Director/Company Secretary

Contact Name \_\_\_\_\_

Contact Daytime Telephone \_\_\_\_\_

Date / /