ASX RELEASE

15 June 2015

MINING RESTRUCTURE, RESULTS UPDATE AND STRATEGIC REVIEW

Mining and materials group, Arrium Limited (ASX:ARI) today announced that it is further restructuring its Mining business to lower the cash breakeven price of its Middleback Ranges (MBR) hematite export iron ore operation to ~US$50/dmt for FY16.

In January 2015, the company announced it was re-designing its Mining business for the low iron ore price environment prevailing at that time, and that its targeted cost and capital expenditure reductions were expected to return it to a cash generative position in FY16[i].

The subsequent deterioration in actual and forecast iron ore prices led to the company announcing in April that additional work was underway to identify volume/grade/cost options to further optimise its MBR operation. This work has focussed on lowering the FY16 cash breakeven iron ore price for the MBR hematite export business, as well as providing the optimal cash outcome for the company over the medium term.

The business is now targeting an average cash breakeven price for FY16 of ~US$50/dmt[ii], (Platts 62% Fe CFR China), which at current prices would deliver an average contribution of ~A$16/dmt[iii] for the financial year.

This includes targeting an FOB loaded cash cost[iv] of ~US$26/wmt (~A$35/wmt) and a total CFR into China cash cost including capital expenditure of US$45/dmt (~A$59/dmt)[v] in FY16.[vi] This includes a significant reduction in planned capital expenditure to US$5/t (~A$6/t)[vii], down ~A$70 million from its prior FY16 target of A$13/t. Targeted sales for FY16 are 9 – 10 million tonnes, with grade for these sales expected to average ~58.5% Fe[viii]. Further reductions in capital expenditure are planned post FY16, decreasing the business' capital expenditure plan for FY16 – FY19 by ~$140 million.

The reduction in capital expenditure is expected to result in lower sales volumes of approximately 6 – 8Mtpa in FY17 – FY19[ix], however the business retains the flexibility to increase capital expenditure (exploration, capitalised waste and stripping) and sales volumes subject to the external environment.

FY15 earnings update

Underlying Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) for the year ending 30 June 2015 is expected to be between $335 million and $350 million[x]. This includes stronger underlying earnings in the second half from both Mining Consumables and Steel, as well as the impact of lower iron ore prices in Mining.

In February, Arrium stated that it expected Group underlying earnings for the second half of FY15 to be greater than the first half[xi] assuming prevailing iron ore prices and exchange rates continued through the balance of this financial year. Notwithstanding recent modest improvements in iron ore prices, the lower Group earnings expectation for the second half simply reflects the substantial deterioration in average iron ore prices since the February announcement.

In Mining Consumables, the business has continued to deliver strong volume growth across North and South America and maintain stable margins. In Steel, lower scrap prices and cost reductions have contributed to a significant improvement in underlying earnings for the second half.

Net debt

Assuming USD denominated debt is translated at an exchange rate of $0.77 cents, net debt at 30 June 2015 is expected to be between $1,750 million and $1,850 million, primarily due to lower earnings as a result of lower iron ore prices and foreign currency translation. This includes the expected impact of FX rates on translation of US dollar denominated debt at 30 June 2015 of around $100 million when compared to translation of the company's US dollar debt as at 31 December 2014[xii].

While the decline in the AUD/USD increases net debt in Australian dollars, it also increases the AUD value of the company's USD denominated assets and income streams.

Arrium announced in May the refinancing of ~A$200 million of debt facilities that were due to mature in FY17. The refinancing is for a four year period.

Impairments

The company expects to record a further asset impairment charge of ~A$320 million in its financial statements for the year ending 30 June 2015, primarily related to the impact of forecast lower iron ore prices on its future cash flows.[xiii] This includes an impairment of ~A$245 million in Mining, ~$45 million related to lower forecast ferrous margins in Recycling and ~$30 million related to Metalcentre, which is part of Steel's Retail business.

The impairment is expected to add approximately 3 percentage points to the company's gearing ratio.

Cost reductions

The company is on track with its targeted annualised cost savings of $60 – $90 million announced in September last year. It expects to achieve $40 – $50 million of these savings in FY15 and the balance in FY16, in line with guidance.

Cost reductions and efficiency improvements remain a key priority for Arrium. Work to identify further cost reductions across the Group has been accelerated.

Strategic review

Arrium is undertaking a strategic review of its business in a low iron ore price environment following a detailed assessment of its balance sheet and portfolio. Debt reduction continues to be a key priority for the company however the substantial deterioration in iron ore prices has had an adverse impact on the company's cash flows and level of debt.

The review includes an assessment of options for achieving an appropriate structure and level of debt. This will include the potential divestment of significant assets or businesses.

Arrium Managing Director and CEO, Mr Andrew Roberts said: "We have made significant progress across the company to reduce costs, including work in Mining to reduce our targeted FY16 cash breakeven iron ore price to ~US$50/t for the export business, with ongoing flexibility.

"Our Mining Consumables business is continuing to perform strongly, and we are seeing significant improvement in the performance of Steel. However, despite the benefits from restructuring Mining, and stronger earnings in our Mining Consumables and Steel businesses, the extent of the deterioration in iron ore prices means we have had to adjust our expectations around the timing and rate of debt reduction.

"The review will consider a range of options to deliver the best outcome for shareholders, a resilient business with a stronger and more robust balance sheet going forward," Mr Roberts said.

Further results information will be provided with the company's full year results announcement, scheduled for 19 August 2015.

Ends

CONTACTS:

Investor and analyst
Steve Ashe
General Manager
Investor Relations & External Affairs
Tel: +612 9239 6616
Mob: +61408 164 011
Email: steve.ashe@arrium.com

Media
Gillian Burrows
Chief Executive
Corporate Affairs
Tel: +612 9239 6661
Mob: +61 409 929 387
Email: gillian.burrows@arrium.com

[i] For MBR hematite export business based on FY16 broker consensus iron ore prices and FX at the time of the January 2015 announcement (US$72/t and AUD:USD $0.80), excludes restructuring and other one-off costs

[ii] For MBR hematite export business. Based on FX at US$0.75, total CFR China cash cost US$40/dmt, adjusted for targeted average realised price as a percentage of Platts 62% index CFR China i.e. US$40/0.89 plus capex ~US$5/t = ~$US50/dmt. Excludes working capital movements, restructuring and other one-off costs

[iii] At iron ore price of US$65 (Platts 62% Fe CFR China, published price 13 June 2015) and AUD:USD exchange rate of $0.77 (at 13 June 2015). Before working capital movements, excluding restructuring and other one-off costs

[iv] Includes mining, crushing, beneficiation, road haulage and transshipping costs. Excludes capitalised costs (infrastructure, pre-stripping and mining licences), depreciation and amortisation charges in respect of those costs, royalties, sales and marketing and corporate costs. Includes ~600kt of magnetite concentrate for blending

[v] Includes loaded cash cost, royalties, sale and marketing and corporate costs, adjustments for moisture content, freight and capitalised costs (exploration, infrastructure, pre-stripping and mining licences). Excludes working capital movements and D&A charges in respect of capitalised costs

[vi] Based on forecast FY16 FX of US$0.75c

[vii] Includes exploration, PPE and mine development in the hematite stream

[viii] Expected realised price guidance ~89% of Platts 62% Fe Index CFR China price

[ix] Majority from MBR Hematite and Magnetite reserves declared in Arrium's FY14 Reserves and Resources Statement, with the remainder from exploration targets. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised. The material assumptions underpinning this production target are set out in the Appendix to the Presentation accompanying this release

[x] Based on continuation of current iron ore prices US$65/dmt (Platts CFR 62% Fe, published price 13 June 2015) and exchange rates USD:AUD of $0.77c to 30 June 2015

[xi] 1H15 Group underlying EBITDA $189 million

[xii] Net debt at 31 December 2014 was $1,430 million at AUD:USD exchange rate of $0.82c

[xiii] Subject to audited closing balance sheet position as at 30 June 2015

arrium
MINING AND MATERIALS

Mining Restructure, Results Update & Strategic Review

15 June 2015

This presentation contains certain forward-looking statements with respect to the financial condition, results of operations and business of Arrium and certain plans and objectives of the management of Arrium. Forward-looking statements can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. All such forward looking statements involve known and unknown risks, significant uncertainties, assumptions, contingencies and other factors, many of which are outside the control of Arrium, which may cause the actual results or performance of Arrium to be materially different from any future results or performance expressed or implied by such forward looking statements. Such forward-looking statements speak only as of the date of this presentation. Factors that could cause actual results or performance to differ materially include without limitation the following: risks and uncertainties associated with the Australian and global economic environment and capital market conditions, the cyclical nature of the steel industry, the level of activity in the construction, manufacturing, mining, agricultural and automotive industries in Australia and North and South America and, to a lesser extent, the same industries in Asia and New Zealand, mining activity in the Americas, commodity price fluctuations, fluctuations in foreign currency exchange and interest rates, competition, Arrium's relationships with, and the financial condition of, its suppliers and customers, legislative changes, regulatory changes or other changes in the laws which affect Arrium's business, including environmental laws, a carbon tax, mining tax and operational risk. The foregoing list of important factors is not exhaustive. There can be no assurance that actual outcomes will not differ materially from these statements. Arrium does not endorse, confirm or express a view as to the accuracy of the consensus forecasts referred to in this Presentation.

Unless otherwise stated, this presentation contains certain non-statutory financial measures including underlying EBIT, underlying EBITDA, underlying NPAT, underlying earnings per share and underlying effective tax rate. These measures are used to assist the reader understand the financial performance of the company's operations. Non-statutory financial information has not been audited or reviewed. The Directors believe that using these non-statutory financial measures appropriately represents the financial performance of the Group's total operations including continuing and discontinued operations. All balance sheet items are based on expected or actual statutory financial information. Except as otherwise expressed, references in this document to net profit/loss after tax refer to net profit/loss attributable to equity holders of the parent.

The information in this report that relates to Mineral Resources or Ore Reserves is based on information compiled by Paul Leevers BSc (Hons), MSc Min Eng, a Competent Peron who is a Member of The Australasian Institute of Mining and Metallurgy and is a full-time employee of Arrium. Mr Leevers has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Leevers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by Geoff Johnson BSc (Hons), PhD, Grad Dip Env Sc., a Competent Person who is a Fellow of the Australian Institute of Geoscientists and a Fellow of the Australasian Institute of Mining and Metallurgy and is a full-time employee of OneSteel Manufacturing Pty Limited. Dr Johnson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Johnson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Contents

Overview

- Mining Restructure
  - Significantly lower cash breakeven price of ~US$50/dmt in FY16[1]
  - Sales volumes of 9-10Mt at ~58.5% Fe in FY16
- Expected FY15 underlying earnings (EBITDA) of $335 – 350 million
  - Mining Consumables – continued strong performance
  - Steel – significant improvement in 2H15
  - Mining – impacted by lower iron ore prices
- Expected FY15 Net Debt of $1,750 – $1,850 million[2]
- Further asset impairments of ~$320 million expected
- Strategic Review to assess options for appropriate structure and level of debt

1. For MBR hematite export business. Based on FX at US$0.75 total CFR China cash cost US$40/dmt, adjusted for targeted average realised price as a percentage of Platts 62% index CFR China i.e. US$40/0.89 plus capex ~US$5/t = ~US$50/dmt. Excludes working capital movements, restructuring and other one-off costs
2. Assumes AUD:USD of $0.77 at 30 June 2015

Arrium Mining Restructure

Overview

"Further restructuring to deliver optimal cash outcome"

- Mothballing of Southern Iron completed[1]
- Additional restructuring in response to further decline in iron ore prices

  Targets:
  - Lowering FY16 average cash breakeven price to ~US$50/dmt
  - Optimal cash outcome over medium term

  Includes:
    - Lower average total cash cost (CFR China)
    - Reduction in capital plan
  - Revised sales profile with potential upside
  - Exploration targeted to highly prospective low cost/capital areas
- Supportive customer base
- Flexibility to adjust operating model retained

1. Expected Q4 sales volume of ~2.9M dmt and loaded cash cost of ~A$43.50/wmt reflecting the transition to the MBR redesign

Re-design: Southern Iron mothballed

- Re-design announced January 2015
- Targeted return to cash generative position in FY16[1]
- Included:
  - Mothballing of higher cost Southern Iron operation
  - Optimisation of lower cost MBR operation to deliver ~9Mtpa
  - Outer harbour placed into care and maintenance
  - ‘Right sized’ Mining organisation
- Targeted FY16 financial profile announced in January:
  - ~27% reduction in hematite loaded cash cost from A$48/wmt to A$37/wmt (US$28/wmt[2])
  - ~20% reduction in total cash cost (CFR China) from A$71/dmt to A$57/dmt (US$43/dmt[2])
  - ~30% reduction in capital plan FY16 – 19
  - ~A$13/t capital expenditure FY16, average ~A$8/t FY16 – 19

1. For MBR hematite export business based on FY16 consensus iron ore prices and FX at time of January 2015 announcement (US$72/t and AUD:USD $0.80), excludes restructuring and other one-off costs
2. At FY16 forecast AUD:USD exchange rate of $0.75c

Additional restructuring of MBR

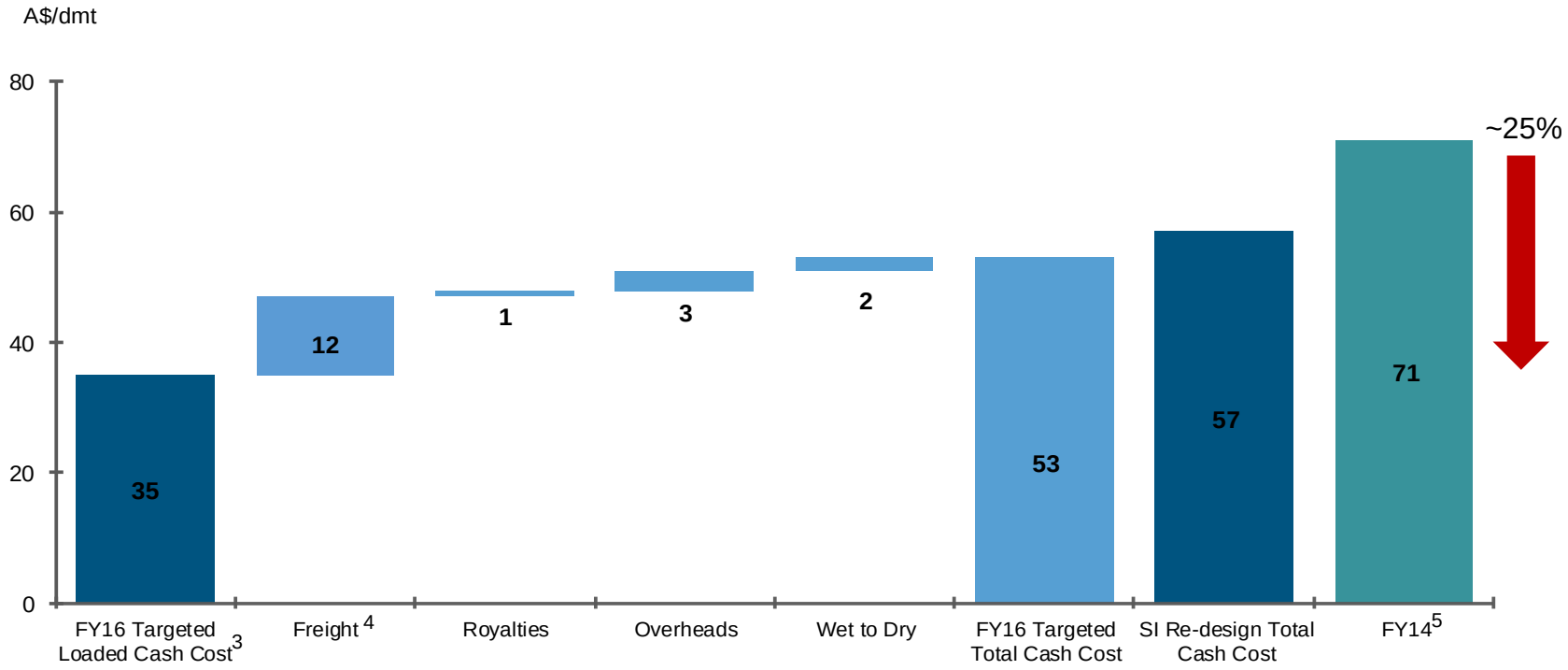
"FY16 cash breakeven ~US$50/t and optimal cash outcome over medium term"

- In response to further decline in actual and forecast iron ore prices
  - Further 25% reduction in FY16 broker consensus price (Platts 62% Fe) from US$72/t to US$54/t
- Target: ~A$59/dmt (US$45/dmt) total cash cost including capex for FY16[1]
  - Further A$11/t reduction in FY16 through MBR optimisation
    - ~A$4/t reduction in total cash cost (CFR China)
    - ~A$7/t reduction in capex
  - Further ~A$140 million reduction in FY16-19 capital plan[2]
- Includes re-design of overall ore body profile and optimisation of pits:
  - Bring forward lower cost ores
  - Reduce capital requirements
- Targets optimal cash outcome over medium term
  - Continuation of operation and minimises contractors break/exit costs

1. Includes loaded cash cost, royalties, sale and marketing and corporate costs, adjustments for moisture content, freight and capitalised costs (exploration, infrastructure, pre-stripping and mining licences). Excludes working capital movements and D&A charges in respect of capitalised costs
2. Includes exploration

Total cash cost down 25% to A$53/t (US$40/t)[1]

"Targeted total cash cost (CFR China)[2] down A$18/dmt"

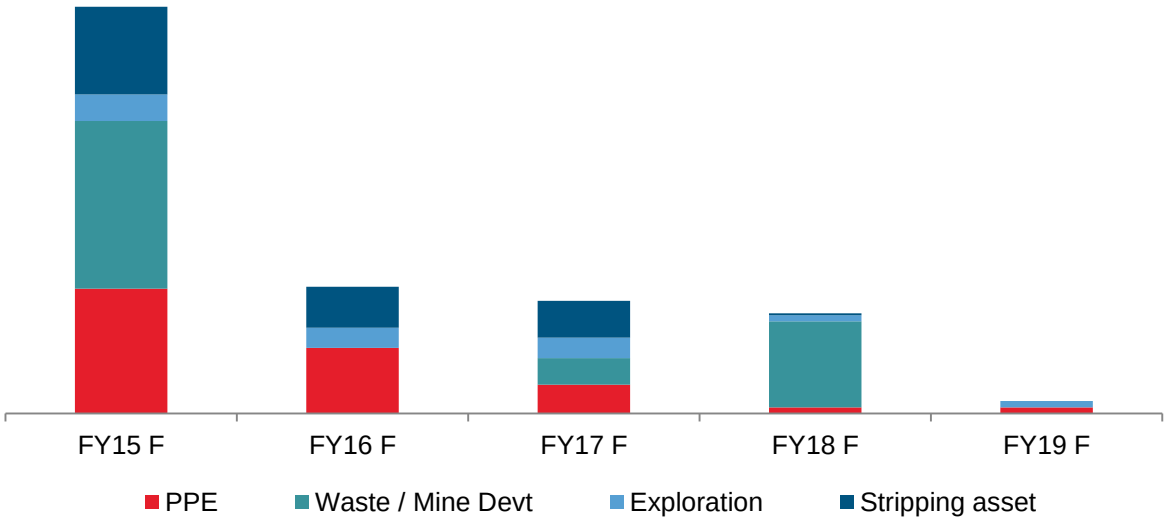


1. Compared to FY14 total cash cost
2. MBR hematite export total cash cost (CFR China) excludes FY16 capex of A$6/t , D&A charges in respect of those costs and working capital movements
3. Includes mining, crushing, beneficiation, road haulage and transshipping costs. Excludes capitalised costs (infrastructure, pre-stripping and mining licences), depreciation and amortisation charges in respect of those costs, royalties, sales and marketing and corporate costs. Includes ~600kt of magnetite concentrate for blending
4. Freight includes current Pilbara C5 x 1.4 and impact of weighted average of Arrium's COAs and translated to AUD at 0.75c FX
5. FY14 reported total cash cost (CFR China) of $73/dmt included $2/t related to magnetite overheads

Hematite capital plan reduced ~70%[1]

- FY16 – 19 capital plan reduced by ~A$320 million or ~70%
  - ~$180 million – January re-design
  - ~$140 million – Additional restructuring
- Average FY16 – 18: ~A$7/t[2,3]
- FY16: ~A$6/t[3]

Arrium Mining Hematite Capex Plan (incl stripping asset)



1. Compared to pre-January 2015 Mining re-design FY16 -19 capital plan
2. For Production Target information refer to the Appendix of this Presentation
3. For MBR hematite export business. Includes PPE, mine development (including capitalised stripping) and exploration

Indicative FY16 MBR financial profile

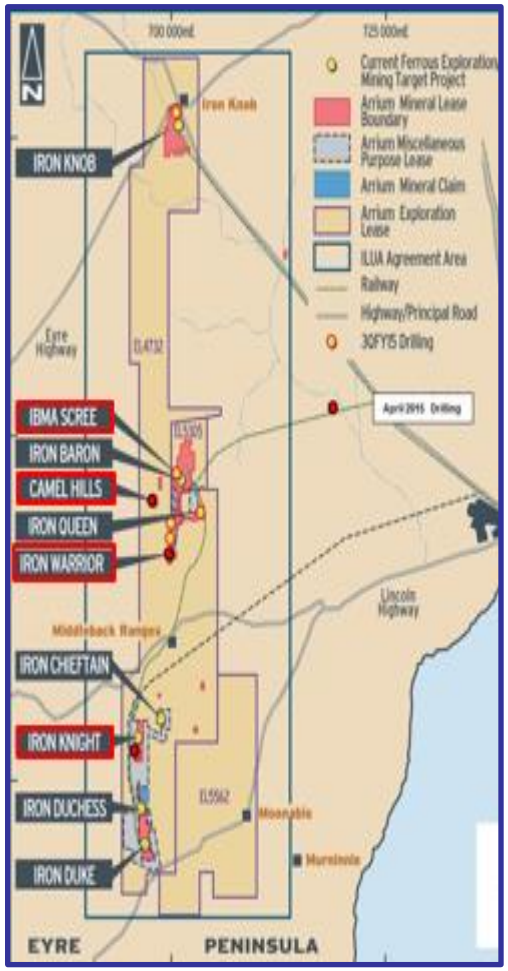
"Targeted average cash breakeven price lowered to ~US$50/dmt"

	FY16 Consensus[1]		Spot[2]	
	A$/t	US$/t	A$/t	US$/t
Iron ore price (dmt)	71	53	84	65
Arrium realised price (dmt) *(~89% of Platts 62% Fe CFR Index)*	63	47	75	58
Loaded cash cost (wmt)	35	26	35	27
Total cash cost (dmt) *(CFR China)*	53	40	53	41
Arrium realised price LESS total cash cost	10	7	22	17
Capital expenditure	6	5	6	5
Realised price less cash cost and capex[3]	**4**	**2**	**16**	**12**

1. At FY16 forecast AUD:USD exchange rate of $0.75c, iron ore consensus is the average of the published forecasts of broker and major banks as at 10 June 2015, further details can be found at the Appendix to this Presentation
2. Spot = Platts 62% Fe (CFR China) price of US$65/dmt (published 13 June 2015) and AUD:USD $0.77 as at 13 June 2015
3. Excludes working capital movements

Revised sales profile with upside potential

- FY16 sales volumes ~9 –10Mtpa
  - Fe: ~58.5%, Mix: ~60% fines, 40% lump
- FY17 – FY19 sales volumes ~6 – 8Mtpa[1]
  - Fe: ~60% (mix of lump and blended ores)
- Additional sales potential from highly prospective exploration targets
  - History of adding ~1Mt reserves for each $1 million of exploration[2]
  - New opportunities discovered through recent work enabled by MBR indigenous agreement (ILUA)
  - Work accelerated on new low costs/capital targets
- Continue to maintain exploration leases to support new MBR ores for development subject to market conditions



1. Majority from MBR Hematite and Magnetite reserves declared in Arrium's FY14 Reserves and Resources Statement, with the remainder from exploration targets. Details of the basis for these targets are described in the Appendix to this Presentation. Potential grade and tonnage of each Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain if additional information will result in a mineral resource estimate.
2. As historical performance is not an indicator of future exploration expectations, this is not intended to be an exploration target

~70Mt low cost, low capital exploration targets

- FY16 exploration ~A$10 million – reduced 60% from original FY15 plan
- Narrower and highly targeted focus
  - New, highly prospective and low cost targets (close to surface and existing infrastructure) – upside potential for sales volumes and mine life
- Priority areas include:
  - Iron Baron area scree – exploration target >25Mt @40-45% Fe.[1] Regulatory approval received.
  - Camel Hills – exploration target >15Mt @ >60% Fe[1] plus 25km sparsely tested strike length to north
  - Iron Warrior – >500m strike length ~55-60% Fe[1] (scree ore under thin cover), >9km strike potential of both scree and primary hematite potential Development of pit re-design, including firming up grade and sequencing
- Minor spend on tenement and boundary protection retention
- Regular review of exploration outputs and refocusing of targets as appropriate
- Continue to adjust spend subject to external environment

1. Details of the basis for these targets are described in the Appendix to this Presentation. Potential grade and tonnage of each Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain if additional information will result in a mineral resource estimate

Customer update

- Supportive customer base
  - Relationship focus
  - Attractive product offer
    - Single fines and single lump products
    - Grade/impurities
  - Provides ‘diversification’
- Sales mix ~80% contract, ~20% spot sales targeted
- Contract customers
  - Transitional arrangements in place
  - Term contracts expected to be in place by end of June 15
    - 5 contract customers. Includes 2 new customers (supports focus on geographic diversity)
    - 12 month rolling agreements
    - Flexibility to respond to adverse price movements if required

Restructuring costs

- Southern Iron update:
  - Concluded discussions with majority of contractors
  - Working with other contractors to mitigate their fixed costs
  - Expected cash cost:
    - FY15 ~A$20 million
    - FY16 ~A$85 million
    - Balance subject to finalisation of discussions
  - Payback expected to be <1 year
  - Organisational re-design

- Middleback Ranges
  - Further optimisation and efficiencies
  - One-off restructuring costs not expected to be material
  - Working with contractors to reduce their fixed costs

Mining summary

"Targeted FY16 cash breakeven price lowered to ~US$50/dmt, with continued flexibility"

- Additional restructuring undertaken in response to further decline in forecast iron ore prices
- Restructuring targets:
  - FY16 cash breakeven price ~US$50/dmt
  - FY16 ~A$16/dmt contribution[1] at current prices
  - Optimal cash outcome for company over medium term
- Revised sales profile with upside potential through exploration
- Business retains optionality to flex up or down subject to external environment

1. At iron ore price of US$65/dmt (Platts CFR 62% Fe price published 13 June 2015) and AUD:USD exchange rate of $0.77 (at 13 June 2015). Before working capital movements, excluding restructuring and other one-off costs

Results Update and Strategic Review

FY15 results update

- Underlying EBITDA expected to be between $335 - $350 million
  - Mining Consumables 2H stronger than 1H – despite sale of Wire Ropes in March
  - Steel 2H stronger than 1H – despite impact of wet weather
  - Earnings in Mining impacted by low iron ore prices

- Net debt
  - AUD balance at 30 June 2015 expected to be between $1,750 - $1,850 million[1]
    - Includes impact of foreign currency translation, iron ore prices, restructuring costs and mothballing of Southern Iron.
    - Mothballing of Southern Iron ~$140 million (working capital reduction, restructuring and capital commitments)
    - FX translation impact on 30 June 2015 compared to 31 December 2014 is ~$100 million[2]
    - FX translation impact on 30 June 2015 compared to 30 June 2014 is ~$300 million [2]
    - Continue to comply with debt covenants
  - Lender support in May 2015 for refinancing of ~A$200 million in debt facilities due to mature in FY17

1. Assumes AUD:USD at 30 June 2015 of $0.77
2. AUD:USD at 31 December 2014 was $0.82 and at 30 June 2014 was $0.94

FY15 results update (cont.)

- Impairments
  - Further asset impairments of ~A$320 million[1] expected to be recorded in FY15 financial statements
    - Mining ~$245 million – lower forecast iron ore prices
    - Recycling ~$45 million – lower forecast ferrous margins
    - Metalcentre ~$30 million – lower forecast volumes

- Cost reductions
  - Cost reductions and efficiency improvements remain a key priority
  - On track to achieve targeted annualised savings of $60 – $90 million
    - $40 – $50 million in FY15
    - Balance in FY16
  - Work to identify further cost reductions across the Group has been accelerated

- Full year results announcement scheduled for 19 August 2015

1. Subject to audited closing balance sheet position as at 30 June 2015

Strategic review

- Arrium has undertaken significant work to lower its costs and improve earnings. This is reflected in the restructure of Mining and improved performance in Mining Consumables and Steel.
- Debt reduction remains a key priority, however the deterioration in iron ore prices has impacted both the level of debt and expectations around the timing and rate of debt reduction
- A strategic review of the business in a low iron ore price environment is being undertaken following a detailed assessment of the company's balance sheet and portfolio
- The review includes an assessment of options for achieving an appropriate structure and level of debt to underpin a resilient business going forward, and includes the potential divestment of significant assets or businesses

arrium
MINING AND MATERIALS

Appendix

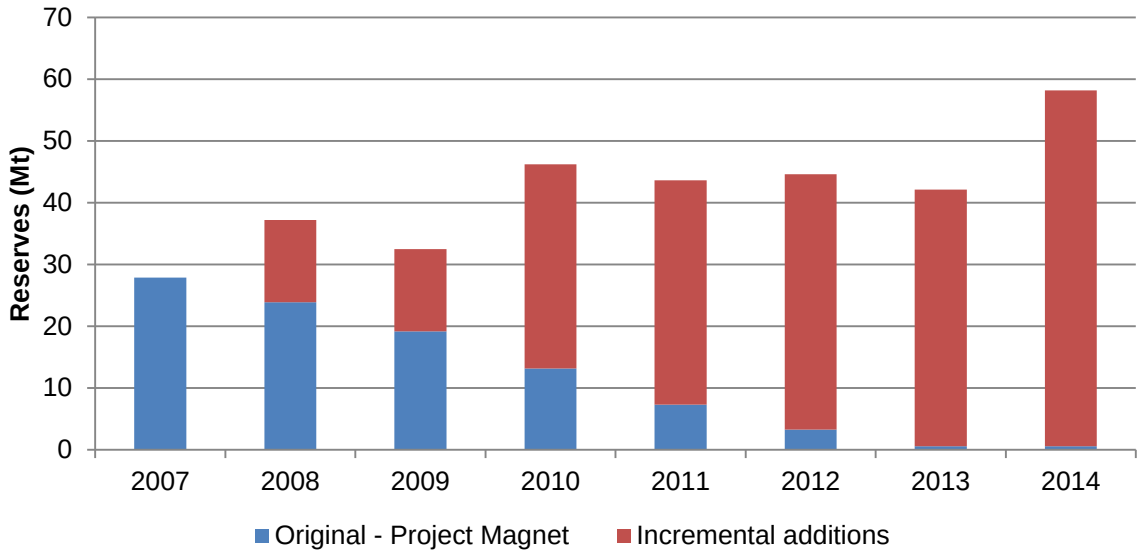
Overview of MBR export operating model

	Re-design announced Jan 15	Further restructuring
Simplified operating model	▪ Simplified product offer (single fines and single lump products) ▪ ~9Mtpa (60% fines, 40% lump) ▪ Average grade ~59% Fe ▪ Single point of blending at Inner Harbour ▪ Reduced overhead structure ▪ Capital plan (FY6-19) reduced ~$200m	▪ No change ▪ ~9-10Mtpa in FY16, ~6-8Mtpa FY17-19[1] ▪ ~58.5% Fe FY16, ~60% Fe FY17-19[1] ▪ No change ▪ Further reductions ▪ Further ~$120m reduction
Utilisation of existing infrastructure	▪ Consolidate all port operations within inner harbour ▪ Outer harbour operations on care and maintenance (~7Mtpa latent capacity) ▪ Lift additional magnetite concentrate to ~600kt for blending	▪ No change ▪ No change ▪ No change
Retain close customer relationships	▪ Tier 1 and 2 Chinese steel mills with regional diversity ▪ Strong support from contract customers ▪ Moving to rolling 12 month agreements ▪ Targeting sales mix ~70% contract, ~30% spot	▪ No change ▪ No change ▪ No change ▪ Targeting sales mix ~80% contract, ~20% spot

1. Majority from MBR Hematite and Magnetite reserves declared in Arrium's FY14 Reserves and Resources Statement, with the remainder from exploration targets. Details of the basis for these targets are described in the Appendix to this Presentation. Potential grade and tonnage of each Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain if additional information will result in a mineral resource estimate.

Historical ore replenishment

Track record of replenishing ores – subject to external environment



"History of adding 1Mt reserves for each A$1 million of exploration"[1]

1. As historical performance is not an indicator of future exploration expectations, this is not intended to be an exploration target

Targeting 6-8Mtpa at ~60% Fe FY17 to FY19

	Mt*
Ore sourced from FY14 Ore Reserves	
Current proved and probable hematite reserves scheduled from FY14 Reserves and Resources Statement	~ 12 - 15
Magnetite concentrate sourced from current probable Magnetite Reserves[1]	~ 1 - 2
Additional exploration targets from current exploration program	
The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised.	~ 5 - 8
	~18 - 25

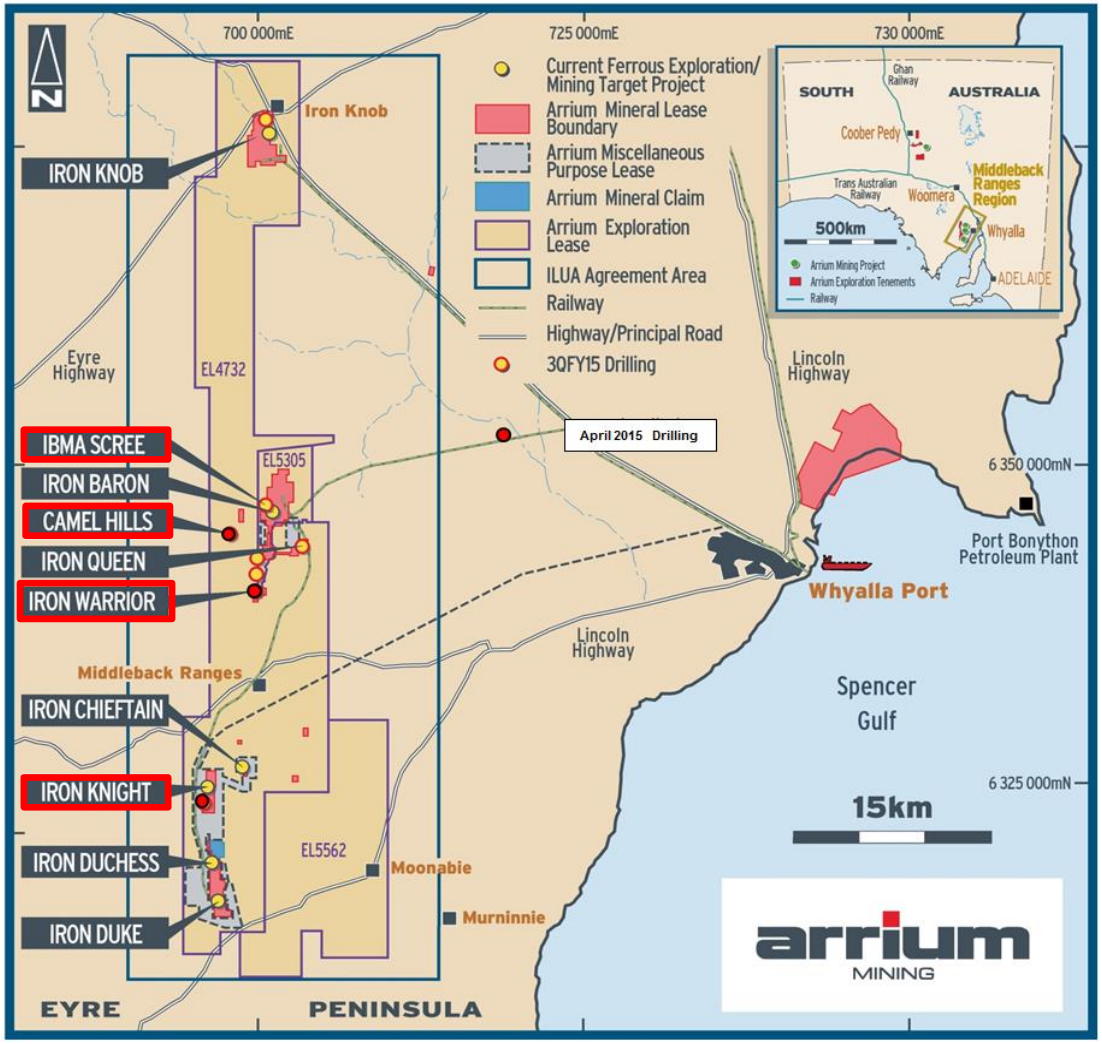
Production Target assumes that required infrastructure remains in place at Arrium Mining facilities; costs of extraction, pricing, inflation and foreign exchange rates remain in line with Arrium forecasts[2]; Arrium beneficiation plants operational; beneficiation yields 58% plant recovery and 100% recovery of feed material from stockpiles currently declared in the FY14 Reserves and Resources Statement; and conversion of Inferred resources within current Pit Shells at a success rate of 50%.

Exploration Target is based on continued development of Camel Hills and Scree Ore Prospects. Camel Hills has 13,200m of drilling completed with an additional 10,000m planned. Geotechnical and Mine Planning studies are currently being completed. The Scree Ore prospect has 1500m of Sonic drilling and 2000m of RC drilling completed with an additional 1000m planned during FY2016. Metallurgical sampling and beneficiation trials are currently being completed. Also based on current exploration projects on wholly owned Arrium tenements; established infrastructure near current tenements to support new projects; Arrium's historical performance of reserve replacement from within the Middleback Range mining area (primarily from the western side of the ranges prior to 2007 and greater than 50Mt DSO hematite reserves added since 2007, with 15Mt from the eastern side of the range); the use of focused and targeted drilling campaigns for brownfields exploration over the next 2-3 years on the eastern side of the ranges, including the identification of further beneficiation opportunities; and the combination of all geological data for that area.

1 Concentrate derived from Probable MBR Magnetite Project Reserves @ scheduled mass recovery average for the 4 years of 36%
2 These forecasts have not been disclosed as they are commercially sensitive to Arrium. Long term iron ore pricing is based on an independent external forecast, with inflation and foreign exchange been based on internal estimates. Arrium uses a consistent methodology for determining its internal forecasts, which are subject to Board and external Auditor review. Costs outlook underpinning reserves is based on current mine plans

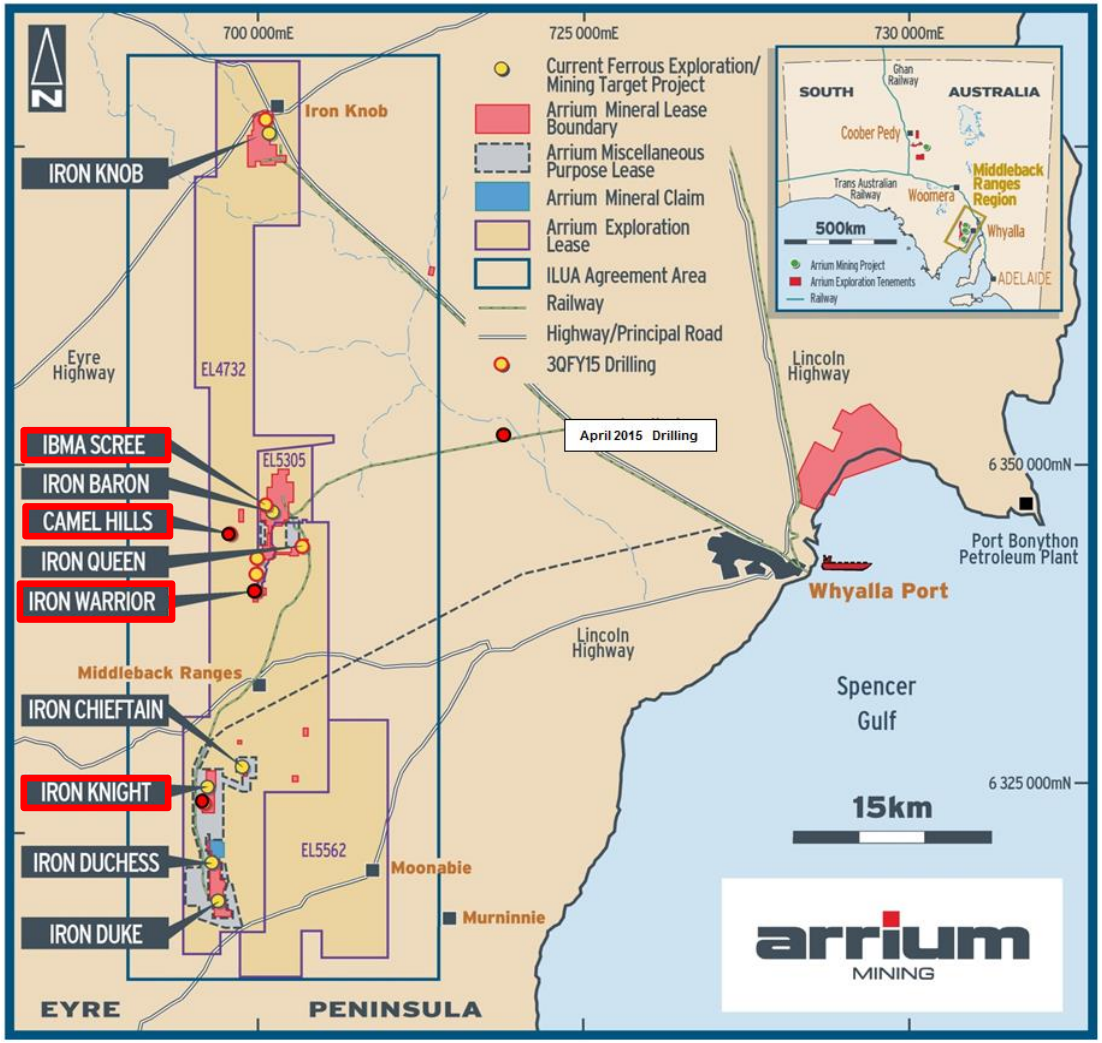
The estimated reserves and resources underpinning the production target are those as at 1 July 2014 and have been prepared by a competent person in accordance with the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code). Refer to the competent persons statement at p.2 of this Presentation.
*All numbers are approximate

Exploration targets



~70Mt low cost, low capital exploration targets

- FY16 exploration ~$10 million – reduced 60% from original FY15 plan
- Focus on highly prospective and low cost targets (close to surface and existing infrastructure). Priority areas include:
  - Iron Baron Area Scree – target >25Mt @40-45% Fe[1]
  - Camel Hills – target >15Mt @ >60% Fe (calc)[1] plus 25km sparsely tested strike length to north
  - Iron Warrior – >500m strike length @55–60%[1] Fe (scree ore under thin cover), >9km strike potential of both scree and primary hematite potential to north
- Mine Planning and Development, including firming up grade and sequencing
- Minor tenement and lease expenditure

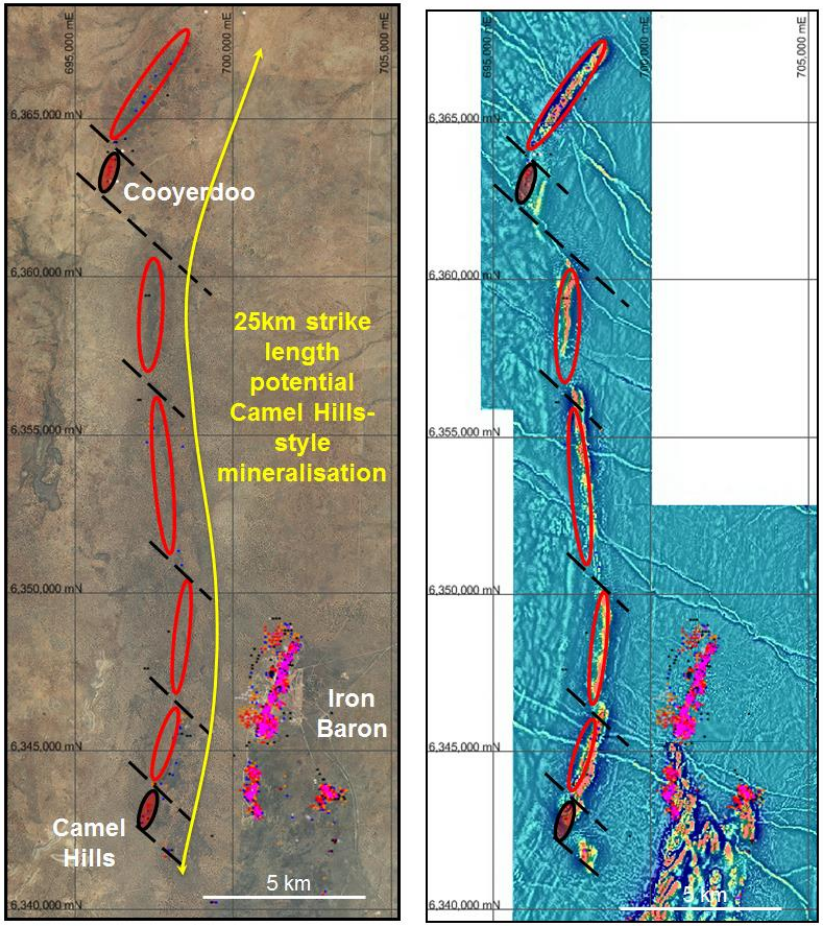


1 Details of the basis for these targets are described in this Appendix. Potential grade and tonnage is conceptual in nature, there has been insufficient exploration to estimate a mineral resource and it is uncertain if additional information will result in a mineral resource estimate

Exploration - Camel Hills trend[1]

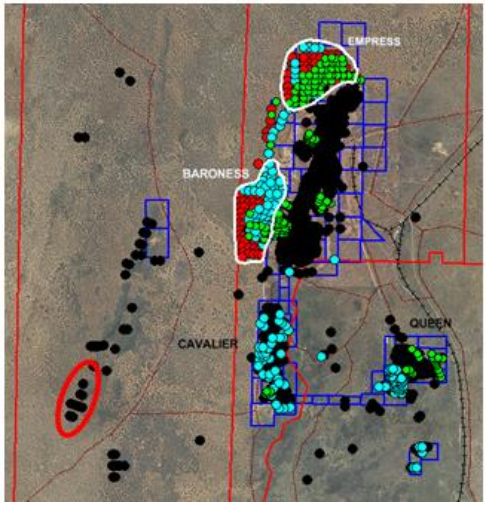
- Camel Hills Trend represents new style mineralisation, limonite/goethite, >15Mt >60% Fe (calc)[2]

  Potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource
- Deposit close to surface, shallow dip, >50m thick
- Potentially similar mineralisation known from historic drilling at Cooyerdoo[3]
- 25km strike potential from Camel Hills to Cooyerdoo[4]
- Heritage clearance planned 1QFY16
- RC drilling proposed on wide spaced traverses initially, with infill in areas of mineralisation[5]

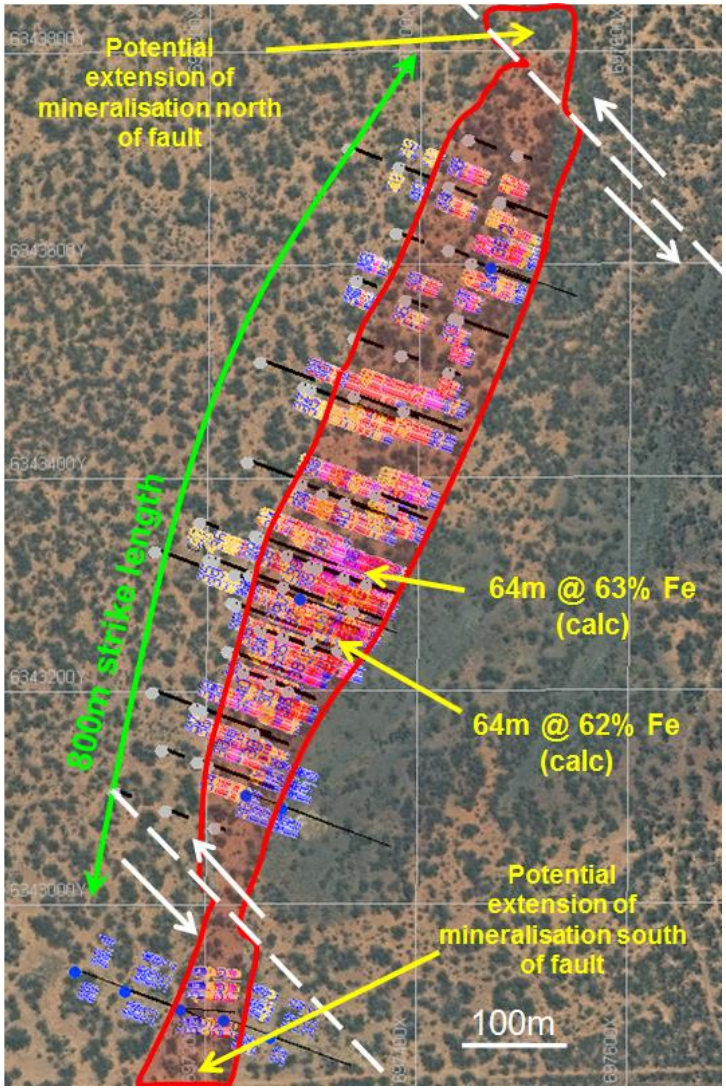


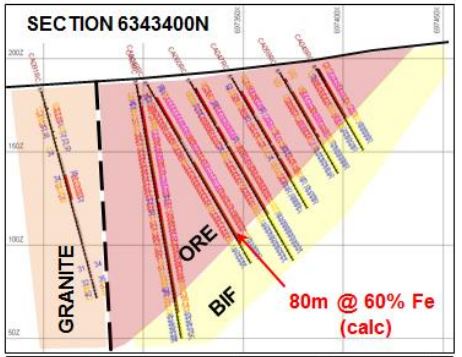
1 Subject to Arrium Board approval and not in capital plan
2 Assumed target is based on multiple 45 degree dipping tabular bodies approximately 1000m x 50m x 50m thick, bulk densities estimated at 2g/cm3-2.75g/cm3. Grade estimates completed using ordinary kriging from Fe assays
3 Exploration completed by BHP in the early 1980's consisting of approximately 40 RC and RAB holes
4 Strike potential derived based on wide spaced drilling to date and close spaced gravity and magnetic geophysical data
5 Planned drilling FY2016 of 10,000m

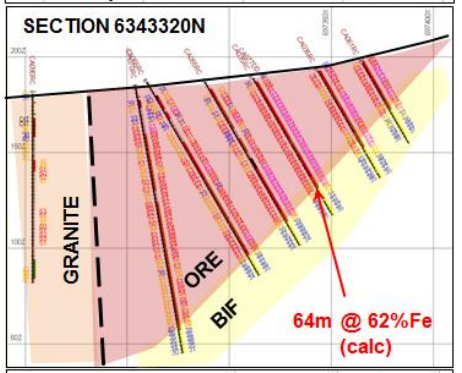
Exploration - Camel Hills trend[1]

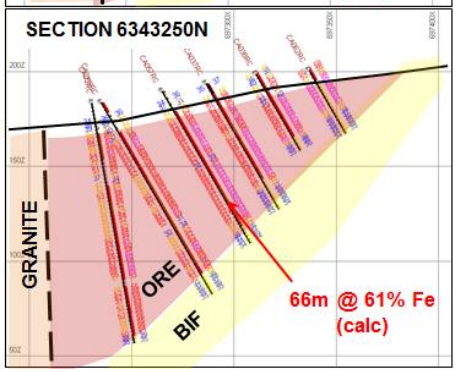


- Structurally simple but variable weathering profile and S, K_2O, Mn contents
- 5km to Iron Baron crushing and Rail Head







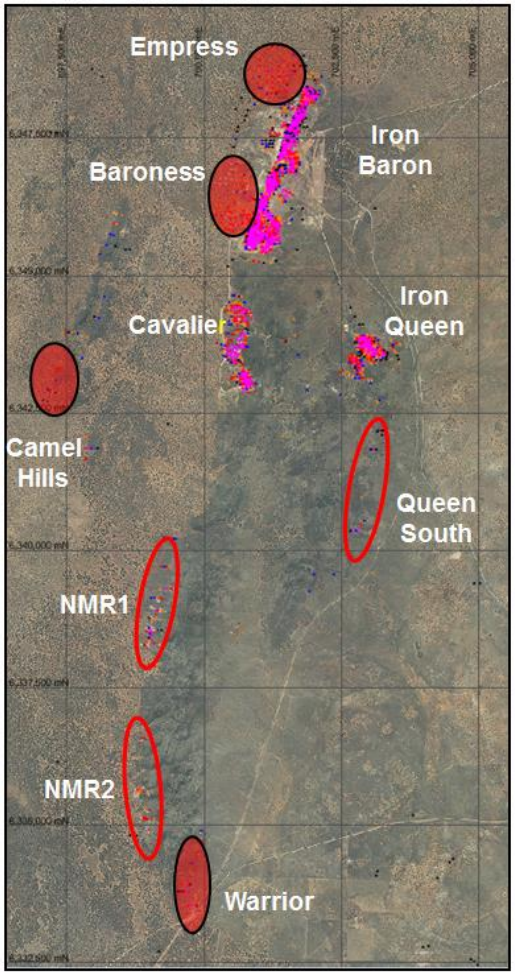


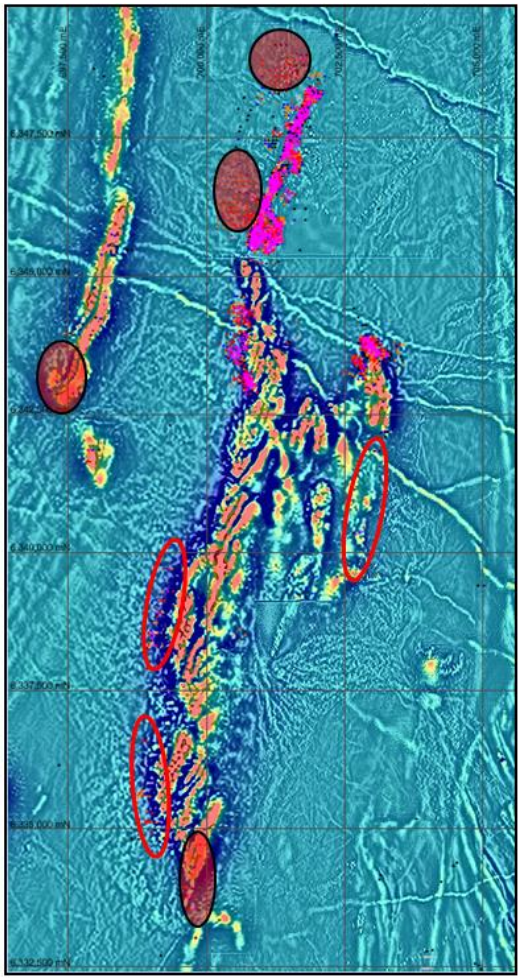
1 Subject to Arrium Board approval and not in capital plan

Exploration – Nth Middleback Ranges

- Warrior combined scree & primary hematite[1,2] mineralisation, ~5Mt @55-60% Fe

  Potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource
- Deposits close to surface, shallow dip
- Potential for similar mineralisation at NMR1, NMR2, Queen South
- >9km strike potential[3]
- Both scree and primary hematite potential
- RC drilling proposed on wide spaced traverses initially, with infill in areas of mineralisation
- 9,000m planned

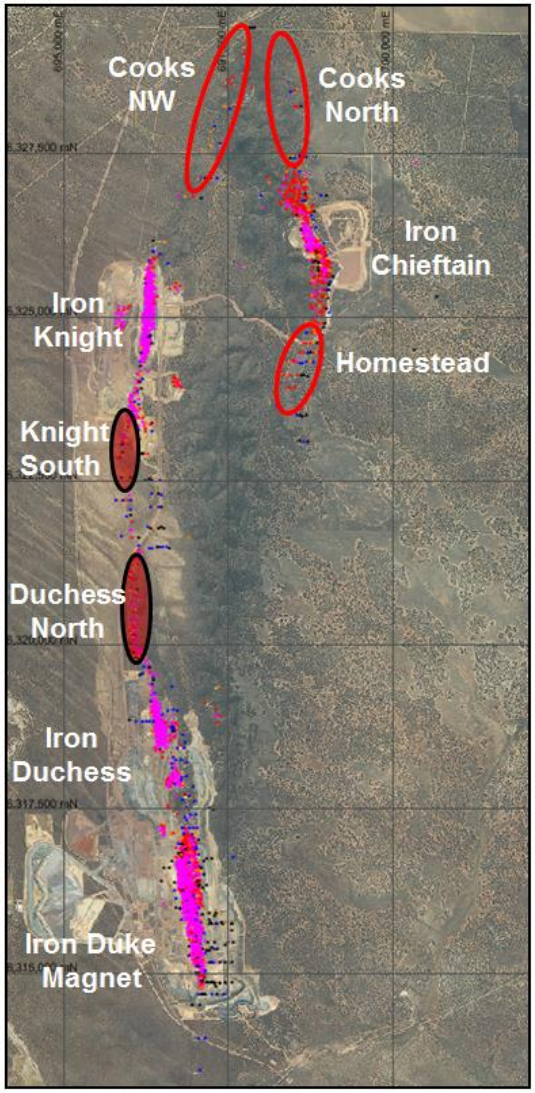


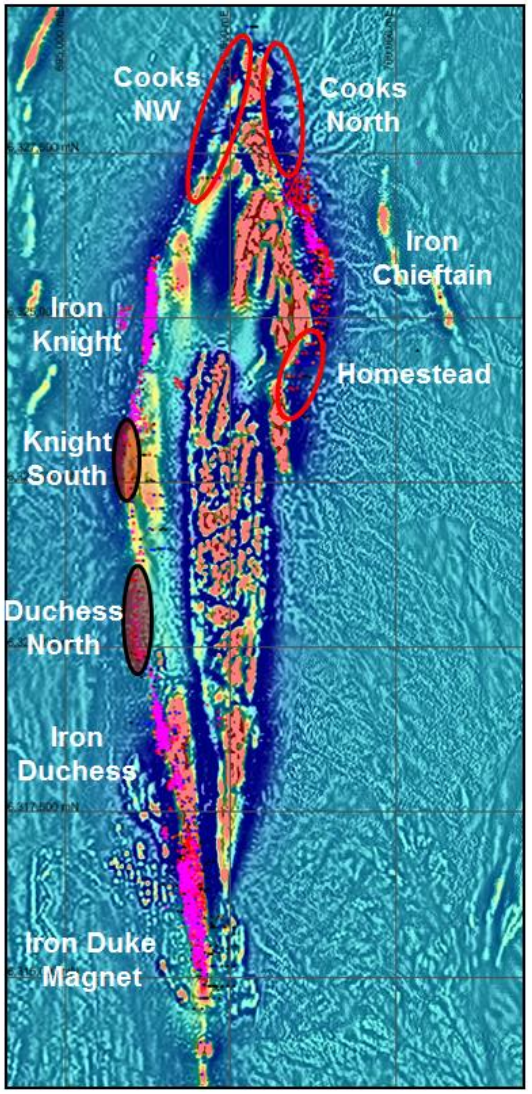


1 Assumed target is a dipping tabular orebody approximately 600m x 50m x 30m thick, bulk densities estimated at 3.5g/cm3-4.0g/cm3. Grade estimates completed using ordinary kriging from Fe assays
2 Scree Target is a flat lying tabular ore body approximately 1000m x 300m x 30m thick
3 Strike potential derived based on wide spaced drilling to date and close spaced gravity and magnetic geophysical data

Exploration – Sth Middleback Ranges

- Potential Chieftain-style mineralisation at Homestead, Cooks North and Cooks NW
- Deposits close to surface, shallow dip
- >6km strike potential[1]
- Both scree and primary hematite potential
- Limited drilling at Cooks North to date has already intersected mineralisation
- RC drilling proposed on wide spaced traverses initially, with infill in areas of mineralisation
- 10,000m RC drilling planned



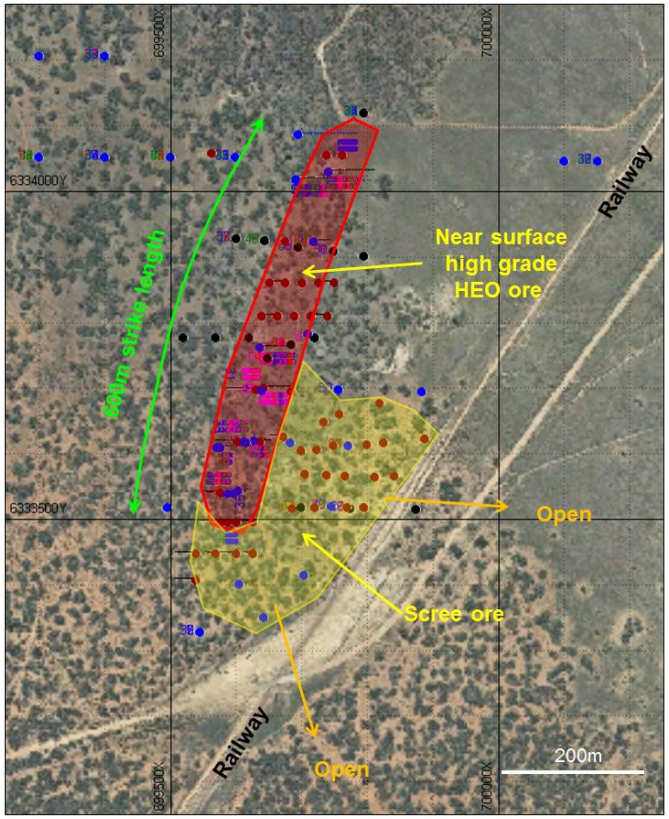


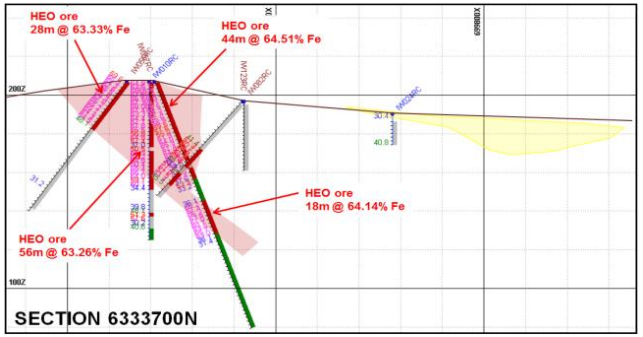
1 Strike potential derived based on wide spaced drilling to date and close spaced gravity and magnetic geophysical data

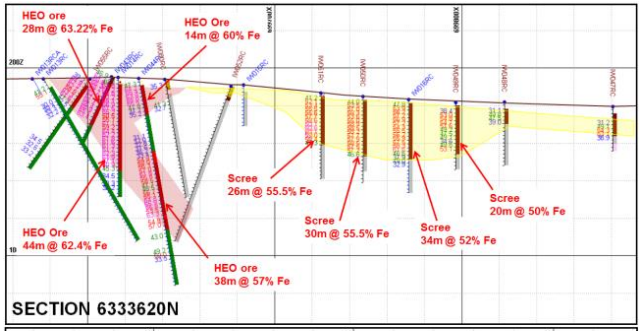
Exploration - Iron Warrior[1]

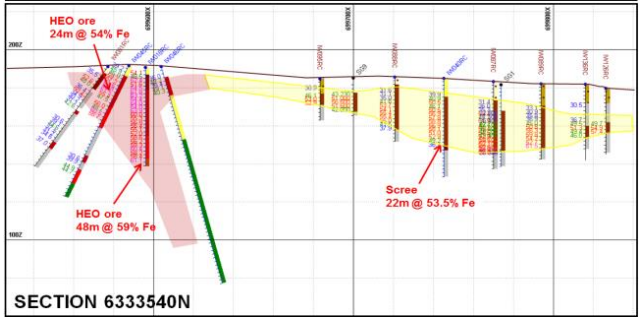
- > 500m strike length
- HEO ore ~60% Fe[2] close to surface

  Potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource
- Scree[3] ore open to south and east under thin cover
- Adjacent to rail







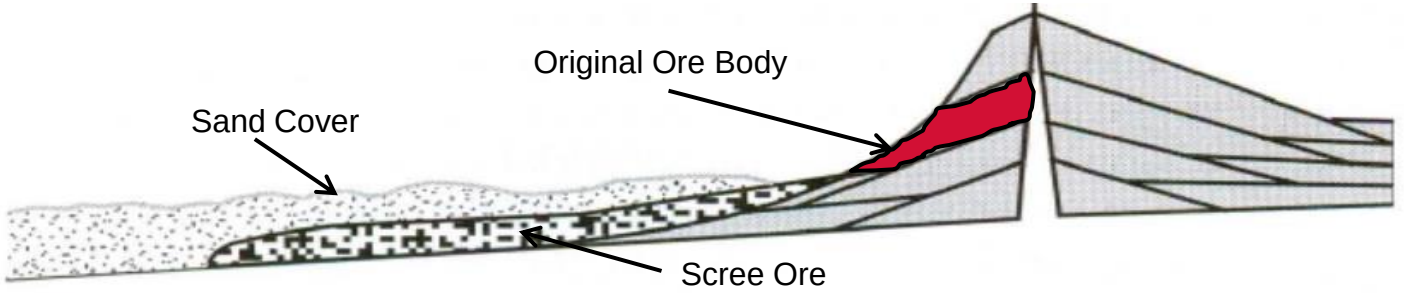


1 Subject to Arrium Board approval and not in capital plan
2 Assumed target is a dipping tabular orebody approximately 600m x 50m x 30m thick, bulk densities estimated at 3.5g/cm3-4.0g/cm3. Grade estimates completed using ordinary kriging from Fe assays
3 Target is a flat lying tabular ore body approximately 1000m x 300m x 30m thick

Iron Baron Area Scree

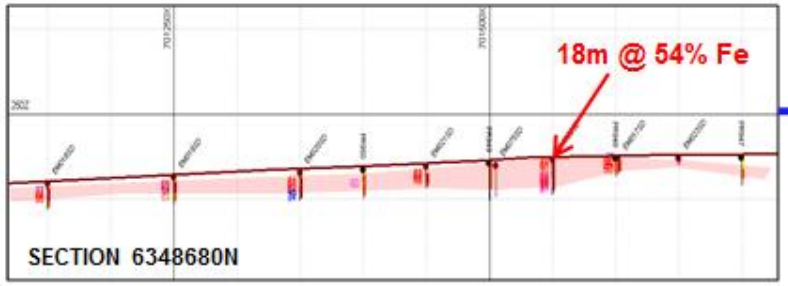
- Scree hematite ore discovered at IBMA - close to existing infrastructure
- Scree ore deposits are accumulations of iron ore nodules that have eroded from iron ore deposits and are located on the flanks of the original iron ore deposit, typically covered by shallow sand layers
- Identified exploration target of ~20-30Mt at Fe ~40-50%[1]

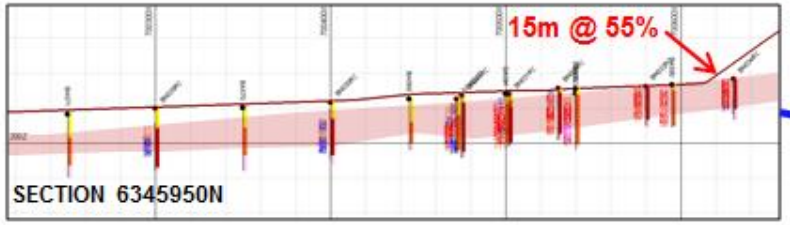
  Potential grade and tonnage is conceptual in nature, there has been insufficient exploration to estimate a mineral resource and it is uncertain if additional information will result in a mineral resource estimate.
- 550m Sonic and 500m historical open hole drilling – target at depth 2-20m
- Similar ore deposits yield ~55~60% Fe product after processing[2]
- Exploration drilling[3] and metallurgical test work expected to be finalised 2H15
- Regulatory approvals received

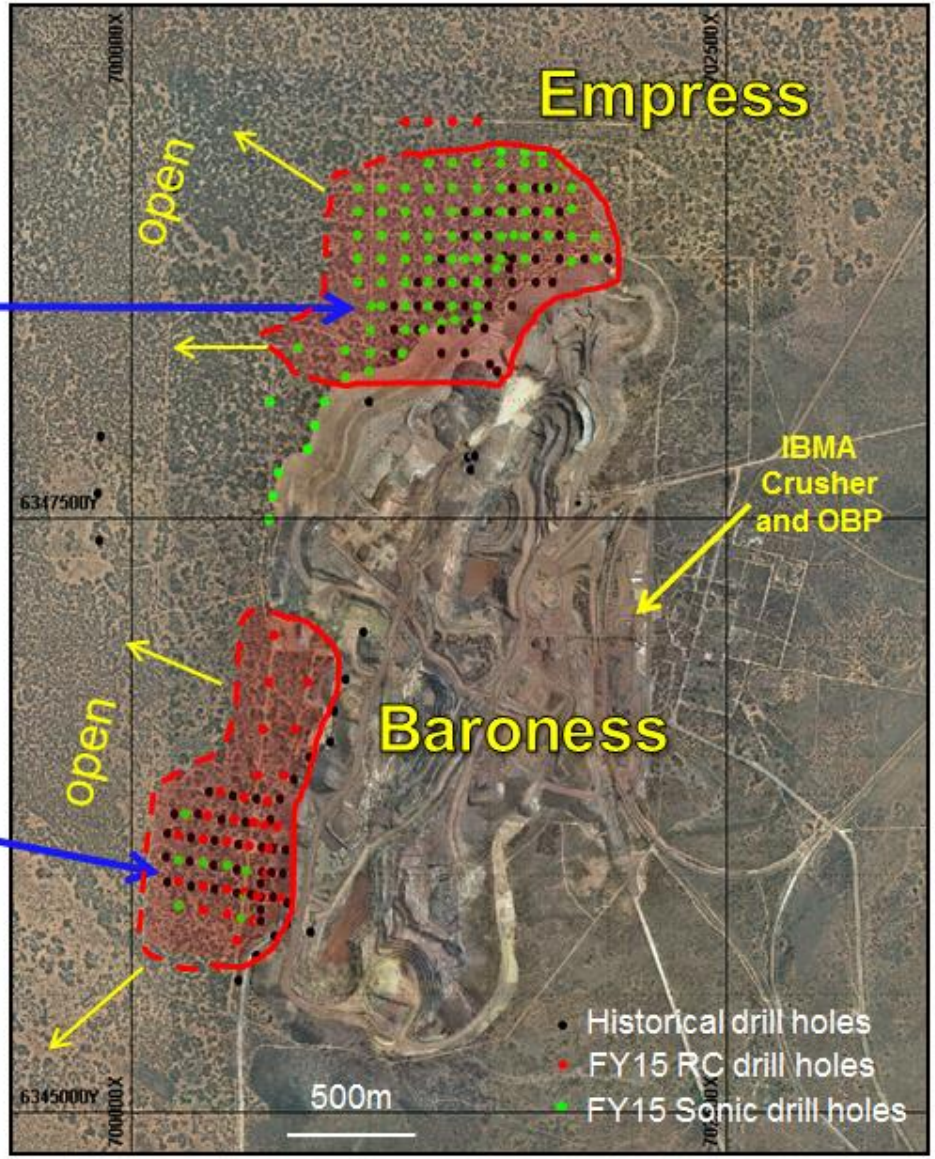


1. Target is two flat lying tabular bodies of ~750m x 1250m x 5m thick and 1000m x 1500m x 5m thick, respectively, bulk densities estimated at 2g/cm3-2.75g/cm3. Grade estimates completed using ordinary kriging from Fe assays
2. Based on results from processing of ~ 400kt of similar types of scree ore coincident to current Iron Baron mining operations
3. Forward program of ~600m of sonic drilling, ~1000m of RC drilling and ~20kt bulk samples

Iron Baron Scree Ore







JORC Code, 2012 edition, Table 1 Camel Hills

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.) These examples should not be taken as limiting the broad meaning of sampling.	Samples were collected from reverse circulation (RC), open hole percussion (OHP) or diamond (DD) drilling methods.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. DD core is sawn in half using a core saw.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	2m samples were collected from which 3kg was pulverised for X-ray fluorescence (XRF) analysis.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.)	Camel Hills has been subject to only a short exploration history. The vast majority of samples were obtained through RC drilling methods. Some diamond drilling has also been completed. A total of 136 drill holes for 5787m were available for use in preparing the Mineral Resource estimate. 100% of the drill holes have been completed since 1997, which is dominated by RC drilling methods.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC sample recovery and DD core recovery has been inconsistently recorded. Overall, RC sample and core recoveries are good. There are some wet zones that have been intersected at 30-40m below surface, this has resulted in lower RC recoveries.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. Samples are collected in pre-numbered calico bags directly from the splitter. A face sampling hammer has been used to reduce contamination in more recent RC drill holes. Core is sawn in half using a core saw.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship has been demonstrated between sample recovery and grade. Sample recovery has generally been good hence any grade bias due to sample recovery is considered not material.

JORC Code, 2012 edition, Table 1 Camel Hills

Criteria	JORC Code explanation	Commentary
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological and geotechnical logging data is considered to be of sufficient detail to enable the development of a robust geological model to support Mineral Resource estimation, mining studies and metallurgical studies. Geological logging is carried out by Arrium Mining personnel. Geotechnical logging is carried out by Peter O'Bryan and Associates – consultants in mining geomechanics.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Standardised codes were used for geological logging with rock type, mineralogy, texture, alteration, grain size and comments recorded. Geotechnical logging involves recording lithology and alteration weathering, rock hardness/ estimated rock strength, core runs and core losses, rock quality designation, fracture frequency, defect characteristics, orientation (alpha/beta), shape, roughness, aperture, infill, general comments/ observations (for example major structures (particularly when outside oriented intervals), groundwater, fractured zones). Representative rock samples are also selected for physical properties testing – mainly intact rock compressive strength and defect shear strength testing. Two holes have recently been drilled and logged by Arrium Mining. Peter O'Bryan and Associates checked the logging.
	The total length and percentage of the relevant intersections logged.	All drill holes were geologically logged in full. Geotechnical holes are designed, drilled and logged to achieve specific objectives.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Drill core is sawn in half. Half of the core is submitted for assay with the remaining half retained for future reference.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. The vast majority of samples in the mineralized zone were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation currently involves sorting and drying in a gas-fired oven at a nominal 105°C for a minimum of 4 hours. Samples are then weighed and crushed to a nominal 5mm particle size. If samples are greater than 3kg, samples are split to achieve a 3kg mass. 3kg samples are then pulverised using an LM5 pulveriser to 90% passing 106 µm. Two pulps are taken (one forwarded to the laboratory for assay and the other returned to Arrium Mining along with coarse residues).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	Arrium Mining has a written procedure in place ("Exploration Drilling Procedures") that outlines methods that are used to ensure sample representivity. The procedure includes geological and drilling personnel responsibilities and lists discrete tasks that are carried out including (for RC holes) cleaning splitting equipment, ensuring the sample is collected over the correct interval, blowing the hole clean after each rod and wet sample collection methods. DD sampling procedures (half coring) are also included. Procedures are consistent with industry good practice.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Field QA/QC data (duplicates and internal standards) is available from drill programmes completed since 2003, which constitutes approximately 15% of the total dataset at Camel Hills.
	Whether sample sizes are appropriate to the grain size of the material being sampled	The sample sizes are considered to be appropriate given the style and geometry of mineralisation which is observed at Camel Hills and the current sampling methodology. All samples have been taken at 2m intervals.

JORC Code, 2012 edition, Table 1 Camel Hills

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples are fused with lithium borate flux to form a glass disc and analysed by XRF for Fe, SiO2, Al2O3, P, CaO, Cu, Pb, Ba, V, MgO, Mn, S, TiO2, Na2O, Zn and K2O. Loss on Ignition (LOI) was determined using thermo-gravimetric methods. Samples are dried to 105°C, weighed, placed in a temperature controlled environment at 1000°C for one hour and then cooled and re-weighed.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools have been used in the preparation of this Mineral Resource estimate.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Samples were submitted to Amdel (now Bureau Veritas) Whyalla prior to 2011. Since 2011, samples have been sent to Bureau Veritas Adelaide, Newcastle or Whyalla. All samples are currently sent to Whyalla. Laboratory internal quality assurance / quality control procedures involve the use of blanks to monitor carry-over contamination splits to monitor precision and certified reference materials (CRMs) to monitor accuracy. Arrium Mining currently targets 10% quality assurance / quality control samples. Field duplicates, field blanks and external CRMs are currently collected. Arrium determined sub-sampling and assaying processes provide acceptable levels of accuracy and precision.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative	Significant intersections have not been verified by an independent third party.
	The use of twinned holes.	2 diamond holes have been twinned with 2 current RC drill holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data is entered into a set of comma delimited spreadsheets on Toughbook laptops in the field. The data is then imported into an acQuire database with appropriate validation
	Discuss any adjustment to assay data.	The only adjustments that were made to the analytical data involved replacing below detection values with value equal to half the detection limit. This does not materially impact
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Arrium currently collects collar coordinates using either a hand held GPS or a differential Global Position System (DGPS). Arrium considers it reasonable to assume collars were located using the best available method at the time. Recent drilling programs did not use downhole geophysics, with the set-up angle used.
	Specification of the grid system used.	The grid used is AMG66.
	Quality and adequacy of topographic control.	Topographic contours were created at 1m intervals. The file was generated from Lydar fly-over data supplied by AAM Hatch Pty Ltd. The topography data is considered to be high quality and adequate for the preparation of a Mineral Resource estimate.

JORC Code, 2012 edition, Table 1 Camel Hills

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drill pattern approximates 50m along strike (north-south) x 25m across strike – and
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The mineralized domains have sufficient geological and grade continuity to support the definition of Mineral Resources and Ore Reserves given the current drill pattern.
	Whether sample compositing has been applied.	Samples were composited to 2m prior to grade interpolation. This was considered appropriate given that the vast majority of the samples have been collected over this interval.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The majority of drilling is at 60 degrees dip towards the West. This is appropriate given that the broad mineralisation dips approximately 60 degrees the East.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Arrium Mining. Samples are stored in core yard at the Whyalla steelworks (secure site) then transported to Bureau Veritas in Whyalla. Bureau Veritas then either complete the analysis in Whyalla or transport the samples to Adelaide for analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Maxwell Geoservices Pty Ltd (Maxwell) completed a review of data capture and data management activities in May 2009. Maxwell found the procedures “to be of acceptable quality and broadly consistent with industry standards”. Maxwell also completed an audit of the Whyalla laboratory in 2009 and found that “practices are satisfactory and compatible with internationally accepted standards”.

JORC Code, 2012 edition, Table 1 Camel Hills

Section 2 Exploration and Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Arrium holds the following Exploration license EL4732 which covers the entire Camel Hills Prospect. The Tenure for EL4732 is 100% held by Arrium Pty Ltd.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All exploration has been carried out by Arrium or BHP.
Geology	Deposit type, geological setting and style of mineralisation.	Refer to Supporting documentation
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole dip and azimuth of the hole down hole length and interception depth hole length.	Refer to supporting documentation
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No information has been excluded
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually	Interceptions reported as length weighted composites within the mineralisation envelope defined by geological logging
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Intercepts reported as length weighted composites.
	The assumptions used for any reporting of metal equivalent values should be clearly	No metal equivalent values have been used in this estimate.

JORC Code, 2012 edition, Table 1 Camel Hills

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Ore intersections are at or near right angles to Orebody width and represent true thickness. All intercepts have been reported down hole. Drill holes have been drilled at 90 degrees to the dip of the mineralisation. True widths are known and can be viewed on the sections in the
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Sections and plans are contained in the attached supporting documentation.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Sections and Tables are contained in the supporting documentation and describe grades and mineralisation widths for the Camel Hills Deposit.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Bulk Density has been derived from 2 diamond holes drilled within the thickest areas Camel Hills South and ranges between 2.1 and 2.7 for the mineralisation with an average of 2.2. The density of overburden derived from the same core is estimated at 1.8. Groundwater has been intersected in drill holes at a depth of 30 to 60m down hole. Mineralisation is dominantly Limonite and Goethite with minor hematite. Deleterious elements that may impact on ore value are Sulphur and Manganese. Geotechnical investigations are currently being undertaken.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	A further 10,000m of RC infill drilling and exploration drilling is planned for FY2016 within the Camel Hills deposit and to test for extensions further South and North of The Camel Hills Deposit Diagrams highlighting the areas of possible extensions have been included in detailed supporting documentation that has been The information is contained within the attached supporting documentation.

JORC Code, 2012 edition, Table 1 Camel Hills

MIDDLEBACK RANGES HEMATITE PROJECT

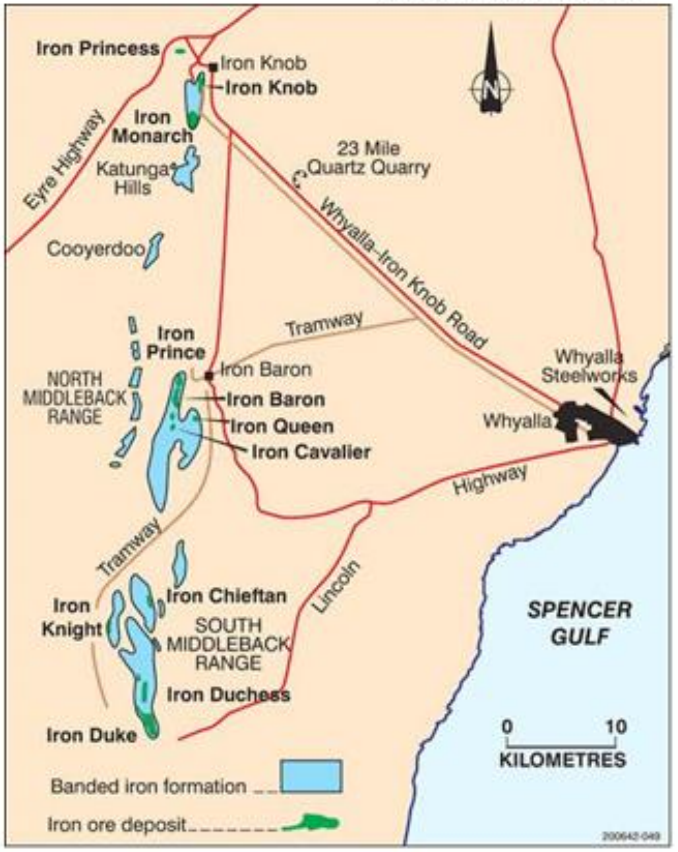
INTRODUCTION

The Middleback Ranges (MBR) Hematite Project is located on the north eastern Eyre Peninsular, South Australia (Figure 1). They extend from Iron Knob, approximately 50km northwest of Whyalla, to adjacent to the Lincoln Highway, approximately 50km southwest of Whyalla.

In 2000, BHP divested the Whyalla steelworks (including the mining operations) and parts of the manufacturing business in the new entity OneSteel Limited, and ceased operations in the MBR under its name. In July 2012, OneSteel Limited changed its name to Arrium Limited. Arrium's MBR hematite operations comprise the following areas:

- Iron Knob Mining Area (IKMA). IKMA lies at the northern end of the MBR, and includes the Iron Knob, Iron Monarch and Iron Princess pits.
- Iron Baron Mining Area (IBMA). IBMA lies approximately at the mid-way point of the MBR, and includes the Iron Baron, Iron Prince, Iron Queen and Iron Cavalier pits.
- South Middleback Range (SMR). SMR lies at the southern end of the MBR, and includes the Iron Knight, Iron Chieftain, Iron Duchess and Iron Duke (now depleted) pits.

Figure 1: Site Location



JORC Code, 2012 edition, Table 1 Camel Hills

GEOLOGY

Regional framework

Hematite in the MBR occurs as stratabound Palaeoproterozoic deposits of the Lower Middleback Iron Formation (LMIF), part of the Hutchison Group. The Hutchison Group forms part of the Cleve Subdomain of the Gawler Craton, and lies on its western edge (Figure 2). The Cleve Subdomain comprises tightly folded high-grade metamorphic rocks that are mainly derived from marine shelf sediments and mafic and acidic volcanics (Parker, 2012b).

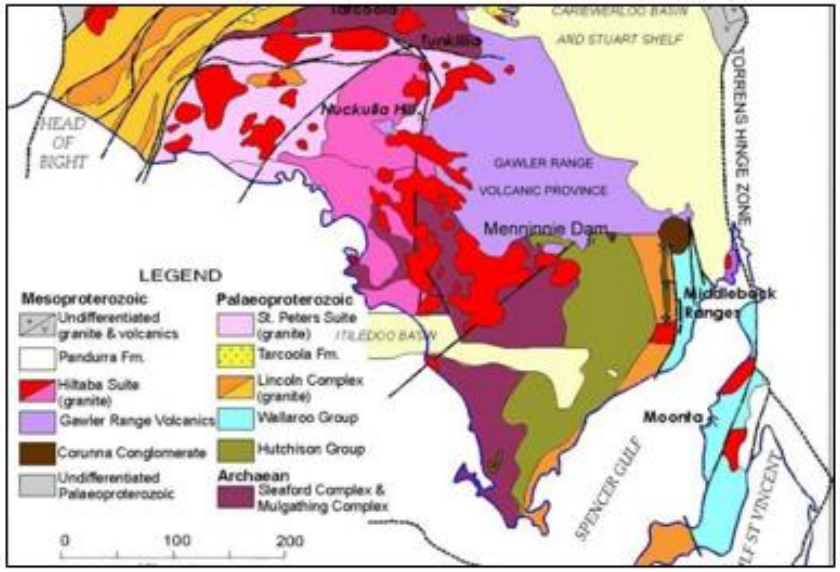
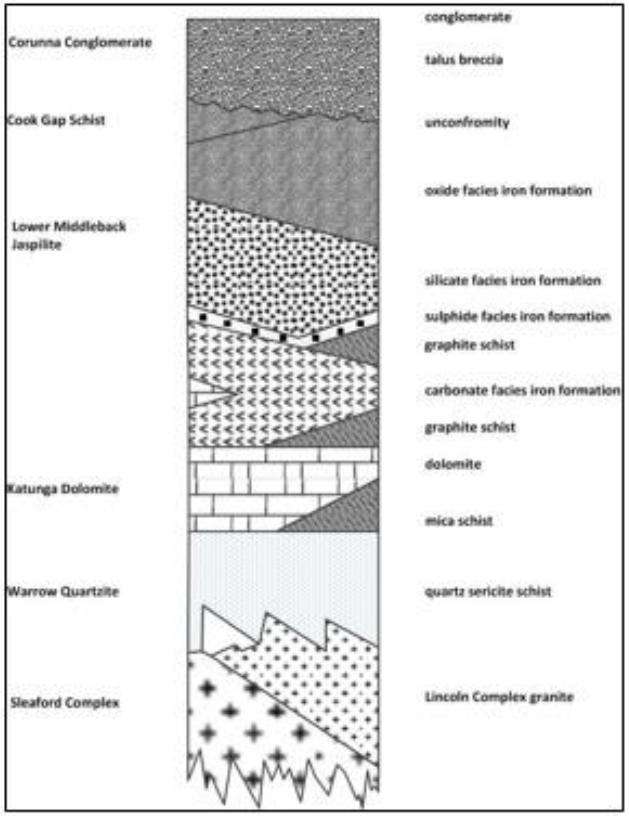


Figure 2: Regional Geology
Source: After Parker 2012b

Middleback Ranges Framework

In the MBR, the Hutchison Group is composed of the Warrow Quartzite and the Middleback Subgroup. However, the Warrow Quartzite is not identified at all locations. The Middleback Subgroup comprises the Katunga Dolomite, the LMIF, the Cook Gap Schist and the Upper Middleback Iron Formation (UMIF).
The LMIF hosts the Middleback Ranges hematite deposits.
Figure 3 provides a schematic of the MBR stratigraphy.

Figure 3: MBR Stratigraphy
Source: After Yeates 1990



JORC Code, 2012 edition, Table 1 Camel Hills

LOCAL GEOLOGY

Camel Hills are formed as cuesta landforms with generally steep eastern slopes and gently western slopes formed by west to north-west dipping strata. There has been considerable speculation in historic literature as to whether the hills are formed in a compressed MIF stratigraphy (or separate stratigraphy), with a possible thin equivalent CGS unit in the valleys where parallel ridges are formed 1-10. Katunga Dolomite sub-crop exposures are observed along parts of the western side of the range (e.g. Bark Hills), indicating the basal LMF sequence may be present or part of a single BIF unit. It is also possible that there is a facies change west of the Middleback Ranges with a thin stratigraphic sequence represented in Camel Hills. Granitic basement and dolerite is commonly encountered on both sides of Camel Hills, whilst dolerite and amphibolite intrusions within the range are rare, apart from cross-cutting structures. Schist / quartzite units are observed along the eastern side of the hills.

There is a generally uniform dip to the north-west - and most goethite/limonite mineralisation occurs on the western side of the range (typically as small areas) with a bounding thrust fault or shear zone trending along the west side of the range. This supports why an enriched stratigraphy appears to directly overlie oxide facies BIF that outcrops along the ridgelines. Upright folding is sometimes observed in the Camel Hills ridgelines, this tends to be minor and parasitic in nature.

The limonite/goethite ore zone has an apparent moderate dip to the north-west and formed sub-parallel to the underlying BIF and schist sequence to the east. A faulted / sheared contact occurs between the ore zone and BIF. The western side of the orebody is truncated by an apparently steep westerly dipping structure, with weathered basement gneiss/granite and dolerite encountered further west. A thin cover of goethitic and jaspilite scree material occurs on the lower western slopes of the ridge and overlying the orebody.

DRILLING

In addition to Iron Knob, BHP knew of the presence of other hematite mineralisation within the Middleback Ranges from the early 1930s.

All drilling and exploration at the Camel Hills Prospect has been completed since 1996 and has been dominantly RC with minor diamond drilling. The drilling history is summarised in Table 1

RC is now the preferred drilling method, with limited use of DDH.

BHID From	BHID To	Date From	Date To	Number of Holes	m Total	m OHP	m RC	m DD	Comments
CMC001	CMC034	1996	1997	34	2386		2386		
CA001RC	CA032RC	2009	2010	32	4474		4474		
CA033RC	CA117RC	2015	2015	70	11443		11223	220	
Total				136	18303		18083	220	

Table 1 Camel Hills Exploration History Summary Table

JORC Code, 2012 edition, Table 1 Camel Hills

SAMPLING

All RC sample intervals are 2m. DD sample intervals are depended on lithology – maximum interval is 2 m, with shorter intervals collected according to lithology.

RC samples passed through a cyclone fitted with a dust collector, and then split through either a three-stage riffle splitter or a rig mounted cone splitter into pre-numbered calico bags. Prior to sampling, Arrium cuts diamond core in half, with half submitted for analysis and half retained for future reference.

Half drill core for geochemical analysis was crushed, riffle split down, combined within intervals nominated by the logging geologist and then processed in a similar way to RC chips.

Twinning of 2 RC Holes via diamond twin holes were drilled at Camel Hills are:
CA076DD – twin hole of CA044RC
CA077DD – twin hole of CA035RC
Both confirmed accuracy of the RC holes.

ANALYTICAL METHOD

Sample Preparation

Arrium uses Bureau Veritas (BV) for sample analysis. BV Whyalla and BV Adelaide completed the most recent analytical work. BV's sample preparation process involves the following activities:

- Sorting & drying
- Weighing.
- Crushing.
- Pulverising.
- Sizing.

  Where samples weigh more than 3kg the sample is split to provide a nominal 3kg weight for sample pulverising.

JORC Code, 2012 edition, Table 1 Camel Hills

SAMPLE ANALYSIS

Samples with Lithium Borate flux to form a glass disc and analysed by X-Ray Fluorescence (XRF). The samples were analysed for the following analytes (with detection limits in ppm):

Fe (100)	SiO_2 (100)	Al_2O_3 (100)	Mn (100)	TiO_2 (100)	CaO (100)
MgO (100)	K_2O (100)	P (10)	S (10)	Na_2O (100)	Cu (10)
Pb (10)	Zn (10)	Ba (10)	V (10)		

To determine Loss on Ignition (LOI), samples dried at 105°C, weighed, placed in a temperature-controlled environment at 1,000°C for one hour, cooled, and re-weighed with LOI reported as a percentage.

QA/QC

Field QA/QC

Limited QA/QC was completed prior to 2003. Arrium introduced field duplicates and Certified Reference Material (CRM) from 2003. The field duplicate results give confidence in sample collection procedures and analytical precision for this period.

Arrium used three in-house CRMs from 2003 through 2006, and used third-party supplied CRMs post-2006, with variable results. The majority of results for the other CRMs lie within the plus / minus two standard deviation range providing confidence in the accuracy of the dataset for this period.

Arrium introduced the use of Field Blanks in 2011, and sources Blank in bulk from its Ardrossan dolomite quarry.

From 2011, Arrium targeted a QA/QC value of 10% of the Primary Samples. To maximise the likelihood of achieving this, Arrium inserts CRMs every 25 samples (i.e. in sample bags ending in 25, 50, 75, 00), and aims for 4% each of field duplicates and field blank samples. Arrium requires drill rig geologists to target ore and near-ore material for duplicates, and to add a field blank immediately after the duplicate pair. Selecting samples for duplication is subjective, and thus the area where most variation occurs in terms of actual assays collected.

Laboratory QA/QC

The objective of the Laboratory QA/QC Program is to measure the precision and accuracy of the analytical data. Quality assurance involves the planned and systematic actions necessary to provide confidence in each analytical result. The QA/QC Program has two components:

- Quality Assurance (QA) - the system used to verify that the entire analytical process is operating within acceptable limits; and
- Quality Control (QC) - the mechanisms established to measure non-conforming method performance

JORC Code, 2012 edition, Table 1 Camel Hills

Exploration Drilling Results

Significant 2m composite intercepts of cut-off grade of >47% Fe for Camel Hills drill collar details are listed in Table 2

Northing	Holeid	EASTING	NORTHING	RL	DIP	AZIMUTH	DEPTH	INTE - Depth	INTERCEPT
6343400	CA091RC	697242.1	6343413	185.25	-75	110	116	102	14
	CA069RC	697290.4	6343393	188.911	-80	110	142	28	96
	CA049RC	697297.1	6343391	189.37	-60	110	112	14	80
	CA060RC	697319.8	6343382	191.257	-60	110	112	20	56
	CA047RC	697341.4	6343376	192.938	-60	110	82	16	46
	CA059RC	697371	6343380	195.267	-60	110	64	16	28
	CA048RC	697384.9	6343366	196.612	-60	110	52	6	28
6343320	CA090RC	697199	6343358	182.393	-90	0	100	-	0
	CA070RC	697251.9	6343342	186.4	-80	110	142	46	80
	CA056RC	697258.2	6343339	186.869	-60	110	118	40	66
	CA055RC	697285	6343325	188	-60	110	100	24	56
	CA035RC	697304.6	6343312	190.085	-60	110	84	14	56
	CA036RC	697335.2	6343306	194.435	-60	110	66	18	32
	CA061RC	697360.3	6343296	198.671	-60	110	46	6	26
6343250	CA072RC	697231.7	6343280	185.242	-80	110	130	24	90
	CA058RC	697235.1	6343279	185.444	-60	110	118	26	74
	CA057RC	697256	6343254	186.863	-60	110	94	20	56
	CA037RC	697282.6	6343247	188.978	-60	110	78	10	42
	CA038RC	697306.9	6343241	193.368	-60	110	48	18	28
	CA062RC	697333.9	6343235	199.545	-60	110	40	6	16

Table 2: Camel Hills Drilling 2m Composite Samples Significant Downhole Intercepts (Fe > 47%)

JORC Code, 2012 edition, Table 1 Camel Hills

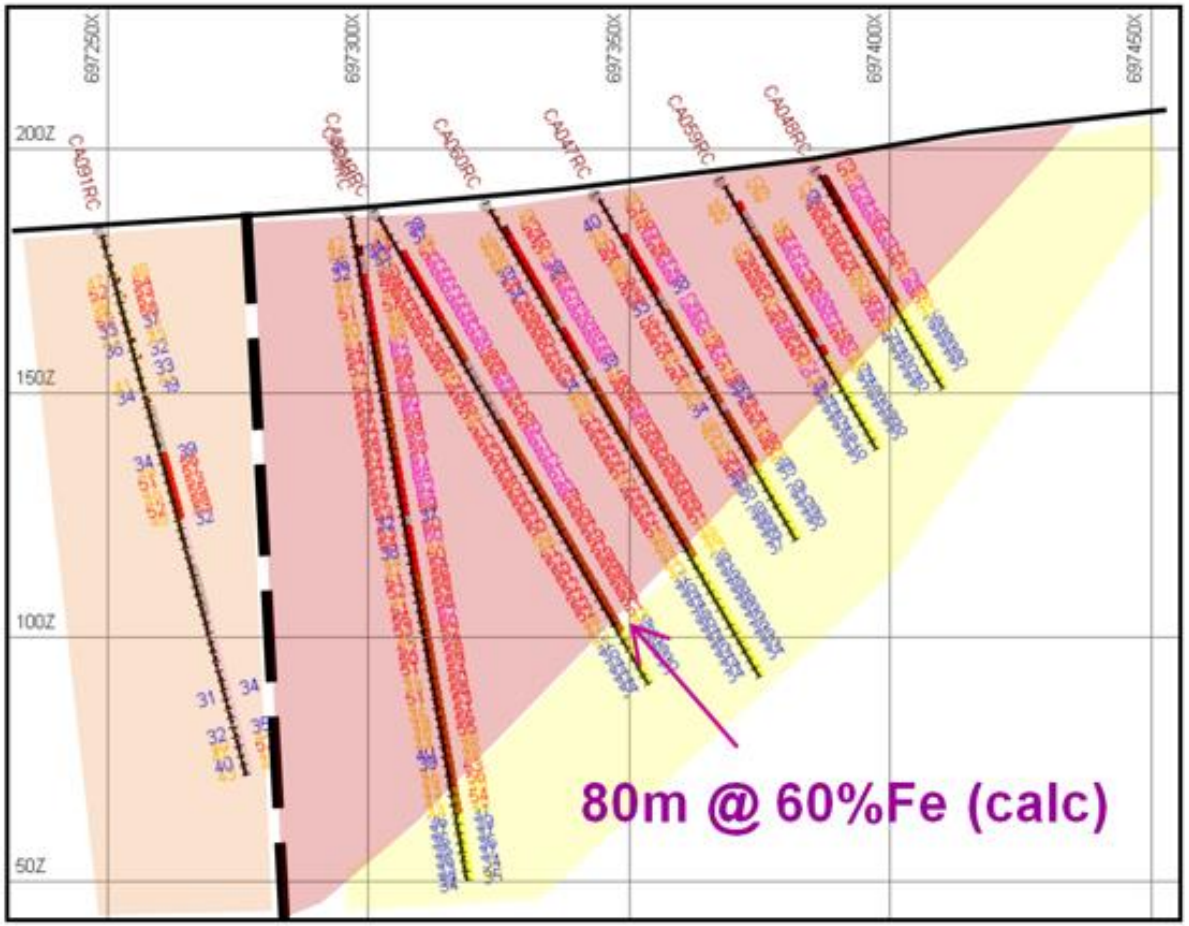


Figure 4: Camel Hills Deposit Cross Section 6343400 mN

JORC Code, 2012 edition, Table 1 Camel Hills

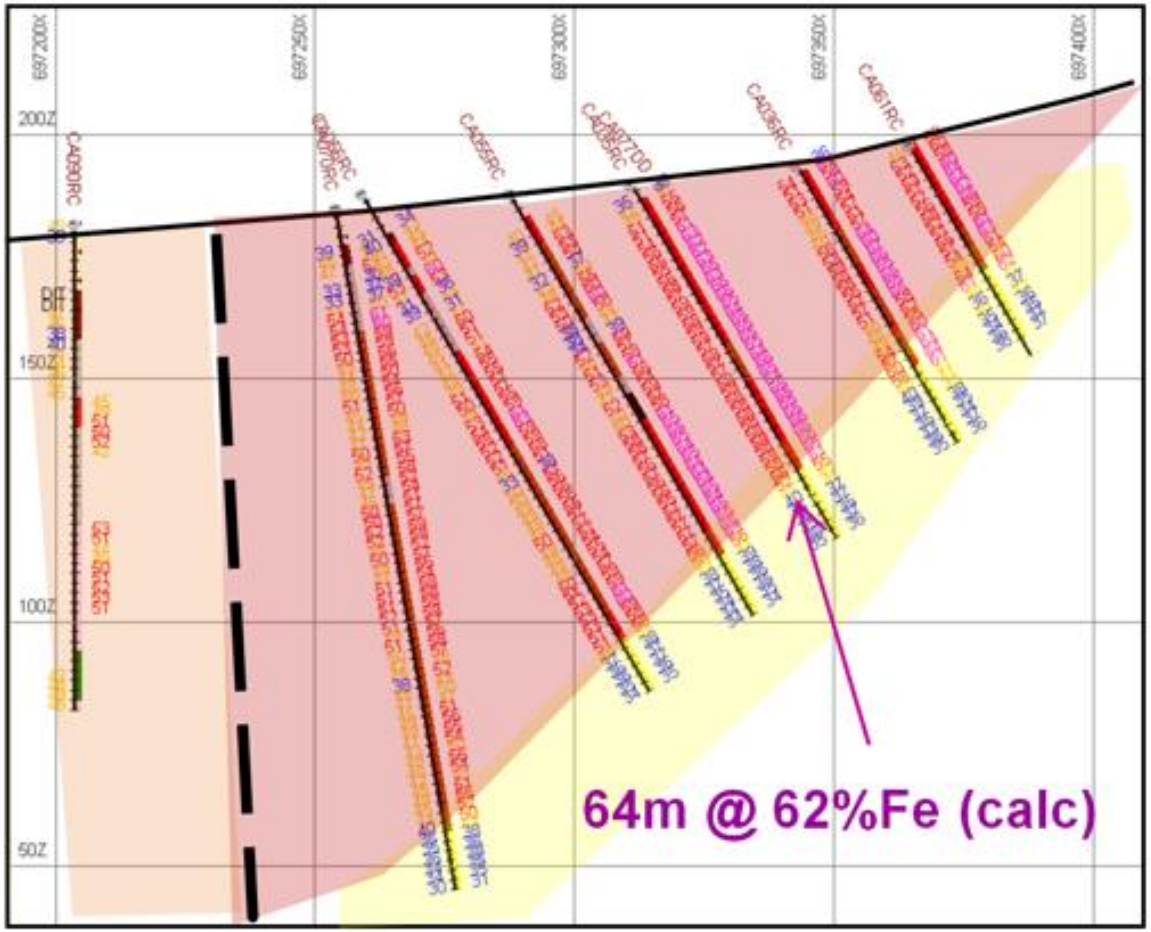


Figure 5: Camel Hills Deposit Cross Section 6343320 mN

JORC Code, 2012 edition, Table 1 Camel Hills

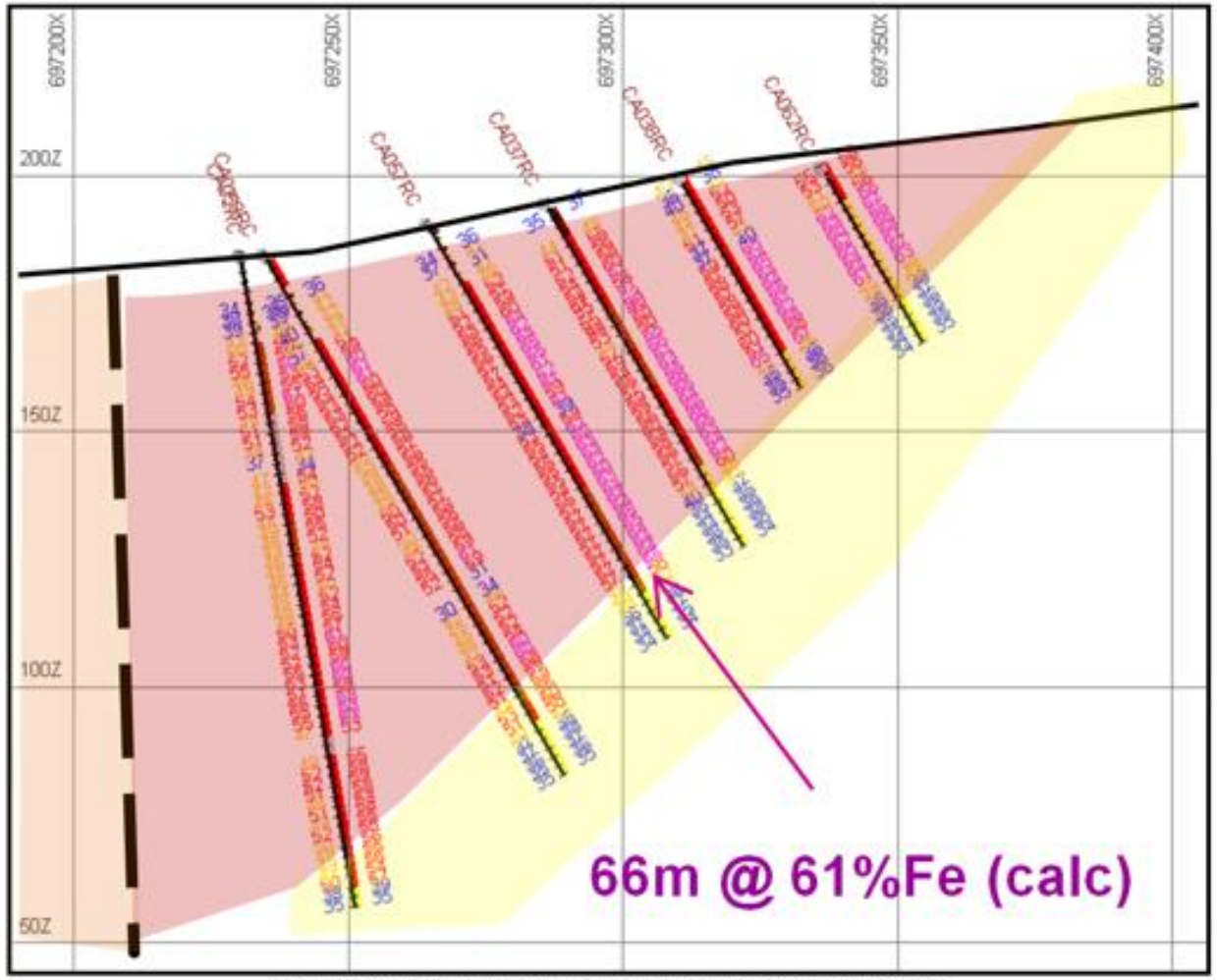


Figure 6: Camel Hills Deposit Cross Section 6343250 mN

JORC Code, 2012 edition, Table 1 Camel Hills

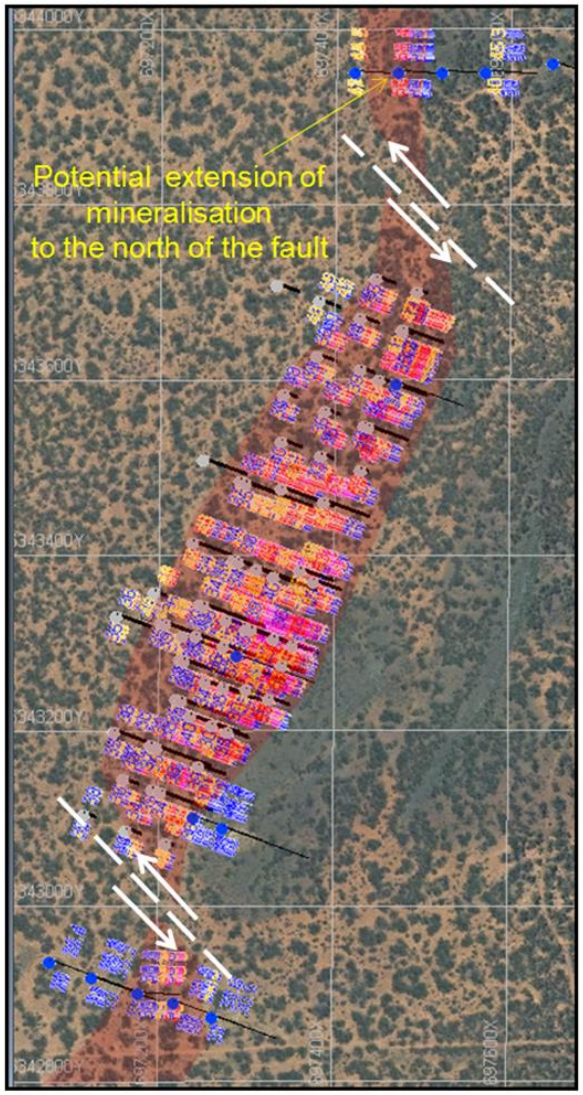


Figure 7: Camel Hills Intersection and Drillhole Locations

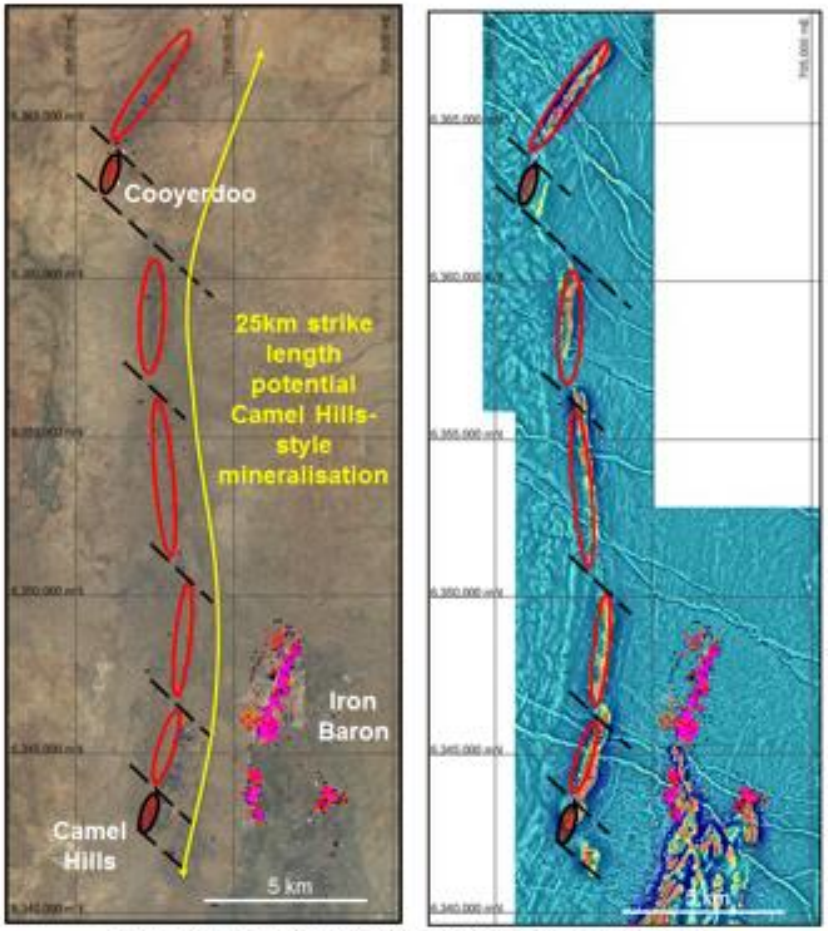


Figure 8: Camel Hills Potential Resource Extensions

JORC Code, 2012 edition, Table 1 Warrior

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The vast majority of samples were collected through either reverse circulation (RC) or diamond (DD) drilling methods and sonic drilling (SD)
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. DD core is sawn in half using a core saw.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	SD and RC drilling was used to obtain 2 m samples from which 3 kg was pulverised for X-ray fluorescence (XRF) analysis.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	A total of 145 drill holes for 8,989 m were available for use in preparing the exploration target. 1978 (SG series) – 346 m RC (5.5" or 5.75" hammer). 1996 (WRC series) – 746 m RC (5.5" or 5.75" hammer). 2015 (IW series) – 7,350 m RC, 211.5m DD and 246m SD. (5.5" or 5.75" hammer).
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	SD and RC sample recovery is recorded. Overall RC sample and core recoveries are high. Sonic sample weights typically exceeded 25kg before splitting using a ground-based riffle splitter.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. Samples are collected in pre-numbered calico bags directly from the splitter. A face sampling hammer has been used to reduce contamination in RC holes. SD captures complete samples in a plastic tube. Samples are divided into metre samples and riffle split after logging. Samples were collected in pre-numbered calico bags directly from the splitter.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship has been demonstrated between sample recovery and grade. Sample recovery has generally been good hence any grade bias due to sample recovery is not considered to be material.

JORC Code, 2012 edition, Table 1 Warrior

Criteria	JORC Code explanation	Commentary
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	The logging data is considered to be of sufficient detail to enable the development of a geological model to support Mineral Resource estimation, mining studies and metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Standardised rock codes are used for logging. Only rock type data are present in the database.
	The total length and percentage of the relevant intersections logged.	All drill holes were geologically logged in full.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Drill core is sawn in half. Half of the core is submitted for assay with the remaining half retained for future reference.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples pass through a cyclone with a dust collector and are split through either a three stage riffle splitter or a rig mounted cone splitter. The vast majority of samples in the mineralized zone were dry. SD samples were split using a three-tier riffle splitter
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation currently involves sorting and drying in a gas-fired oven at a nominal 105° C for a minimum of 4 hours. Samples are then weighed and crushed to a nominal 5 mm particle size. If samples are greater than 3 kg, samples are split to achieve a 3 kg mass. 3 kg samples are then pulverised using an LM5 pulveriser to 90% passing 106 µm. Two pulps are taken (one forwarded to the laboratory for assay and the other returned to Arrium Mining along with coarse residues).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Arrium Mining has a written procedure in place (“Exploration Drilling Procedures”) that outlines methods that are used to ensure sample representivity. The procedure includes geological and drilling personnel responsibilities and lists discrete tasks that are carried out including (for RC holes) cleaning splitting equipment, ensuring the sample is collected over the correct interval, blowing the hole clean after each rod and wet sample collection methods. DD sampling procedures (half coring) are also included. Procedures are consistent with industry good practice.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Field QA/QC data (duplicates and internal standards) is available for the 2015 drill programme, which constitutes approximately 85% of the dataset at Iron Warrior. Commercial standards and field blanks were also used. The field QA/QC results give confidence in sample collection procedures and analytical precision.
	Whether sample sizes are appropriate to the grain size of the material being sampled	The sample sizes are considered to be appropriate given the style and geometry of mineralisation which is observed at Iron Warrior and the current sampling methodology. The vast majority of samples have been taken at 2 m intervals.

JORC Code, 2012 edition, Table 1 Warrior

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples are fused with lithium borate flux to form a glass disc and analysed by XRF for Fe, SiO_2, Al_2O_3, P, CaO, Cu, Pb, Ba, V, MgO, Mn, S, TiO_2, Na_2O, Zn and K_2O.
		Loss on Ignition (LOI) was determined using thermo-gravimetric methods. Samples are dried to 105° C, weighed, placed in a temperature controlled environment at 1000° C for one hour and then cooled and re-weighed.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools have been used in the preparation of this exploration target result.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Laboratory quality assurance/quality control procedures involve the use of blanks to monitor carry-over contamination, splits to monitor precision and certified reference materials (CRMs) to monitor accuracy. Analytical results are not released if an issue is identified in the sample preparation or analysis stages.
		Arrium introduced field duplicates and CRMs from 2003.
		The field duplicate results give confidence in sample collection procedures and analytical precision for this period.
		Arrium used three in-house CRMs from 2003 through 2006, and implemented use of third-party supplied CRMs post-2006. The majority of results for the other CRMs lie within the plus / minus two standard deviation range providing confidence in the accuracy of the dataset for this period.
		Arrium introduced the use of Field Blanks in 2011, and sources Blank in bulk from its Ardrossan dolomite quarry.
		Arrium determined sub-sampling and assaying processes provide acceptable levels of accuracy and precision.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have not been verified by an independent third party.
	The use of twinned holes.	No twinning of drill holes has been completed at Iron Warrior.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data is entered into a set of comma delimited spreadsheets on Toughbook laptops in the field. The data is then imported into an acQuire database with appropriate validation procedures in place prior to import.
	Discuss any adjustment to assay data.	The only adjustments that were made to the analytical data involved replacing below detection values with value equal to half the detection limit.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole collars are currently set out with a hand held global positioning system (GPS) instrument with the final collar position determined using a differential GPS for all drilling completed post 2009.
		No downhole survey data is available for the drill holes (all holes have been assigned the set up dip and azimuth). A large percentage of the drill-holes are vertical and the average drill-hole length is 190 m, hence significant deviation is not expected.
		The fact that lithologies and mineralisation correlate relatively well between historical and recent drill hole positions suggests that a high level of confidence can be placed in the location of historical holes.
	Specification of the grid system used.	The grid used is AMG66, Zone 53H.
	Quality and adequacy of topographic control.	Topographic contours were created at 1 m intervals. The file was generated from Lydar fly-over data supplied by AAM Hatch Pty Ltd.
		The topography data is considered to be high quality and adequate for the preparation of a Mineral Resource estimate.

JORC Code, 2012 edition, Table 1 Warrior

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drill pattern approximates 50 m along strike (north-south) x 50 m down-dip in the southern and central deposit areas. Further north, the drill pattern
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and	The mineralized domains have sufficient geological and grade continuity to support the definition of a Mineral Resource Estimate given the current drill pattern.
	Whether sample compositing has been applied.	The majority RC samples were collected as 2m samples
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The vast majority of the drilling is either vertical or designed at angles inclined to intersect mineralisation approximately perpendicularly.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Arrium Mining. Samples are stored in core yard at the Whyalla steelworks (secure site) then transported to Bureau Veritas in Whyalla. Bureau Veritas then either complete the analysis in Whyalla or transport the samples to Adelaide for analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Maxwell Geoservices Pty Ltd (Maxwell) completed a review of data capture and data management activities in May 2009. Maxwell found the procedures "to be of acceptable quality and broadly consistent with industry standards". Maxwell also completed an audit of the Whyalla laboratory in 2009 and found that "practices are satisfactory and compatible with internationally accepted standards".

JORC Code, 2012 edition, Table 1 Warrior

Section 2 Exploration and Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Arrium holds the following Mining Licenses (MLs) over the Iron warrior area: ML 2723, ML 2661 and ML 4748. Exploration license EL 4732 also covers the Iron Warrior area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Tenure for EL4732 is 100% held by Arrium Pty Ltd.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All exploration has been carried out by Arrium or BHP.
Geology	Deposit type, geological setting and style of mineralisation.	Iron Warrior is hosted within Palaeoproterozoic Hutchison Group metasediments at the southern end of the Middleback Ranges within the Gawler Craton. Economic hematite mineralisation has formed through supergene enrichment processes. There is also a structural control with numerous faults present. Late stage amphibolite dykes cross-cut and stope out the mineralisation. For further information refer to the attached supporting document
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Refer to the attached supporting document.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No Information excluded

JORC Code, 2012 edition, Table 1 Warrior

Criteria	JORC Code explanation	Commentary
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Interceptions reported as length weighted composites within the mineralisation envelope defined by geological logging
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Intercepts reported as length weighted composites.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalents are not reported in the Exploration target.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	The Primary Warrior mineralisation is generally east dipping at about 60 degrees. Given the spacing of the holes, it was deemed adequate to portray the interpreted ore zones. Scree ore is sub horizontal.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	All Warrior Scree drilling is vertical. The mineralization is sub-horizontal. The Primary warrior mineralisation is steeply dipping to the East.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Down-hole intercepts have been tabulated in Table 1. True intercepts are not known however the down-hole intercepts appear to represent very close to true width given the orientation of the drilling.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to attached supporting document.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Refer to attached supporting document.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No other exploration data is considered material in the context of the Exploration target which has been prepared. All relevant data has been described elsewhere in Section 1.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	New resource calculations and pit optimization studies are underway and additional drilling is scheduled next financial year.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to attached supporting document.

JORC Code, 2012 edition, Table 1 Warrior

IRON WARRIOR PROJECT

INTRODUCTION

The Middleback Ranges (MBR) occurs on the northeastern Eyre Peninsula, South Australia (Figure 1). They extend from Iron Knob, approximately 50km northwest of Whyalla, to Iron Duke, approximately 50km southwest of Whyalla.

In 2000, BHP divested the Whyalla steelworks (including the mining operations) and parts of the manufacturing business in the new entity OneSteel Limited, and ceased operations in the MBR under its name. In July 2012, OneSteel Limited changed its name to Arrium Limited (Arrium).

Arrium operates hematite operations at the following areas:

- Iron Knob Mining Area (IKMA). IKMA lies at the northern end of the MBR, and includes the Iron Knob, Iron Monarch and Iron Princess pits.
- Iron Baron Mining Area (IBMA). IBMA lies approximately at the mid-way point of the MBR, and includes the Iron Baron, Iron Prince, Iron Queen and Iron Cavalier pits.
- South Middleback Range (SMR). SMR lies at the southern end of the MBR, and includes the Iron Knight, Iron Chieftain, Iron Duchess and Iron Duke (now depleted) pits.

Arrium is actively exploring for additional hematite sources in proximity to these operations.

The Iron Warrior prospect is located at the southern tip of the North Middleback Ranges.

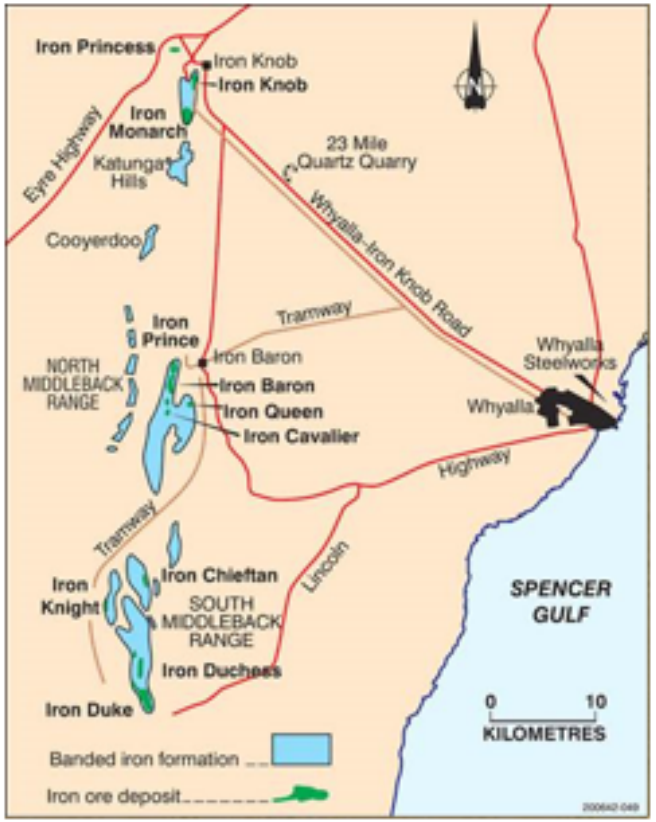


Figure 1: Site Location

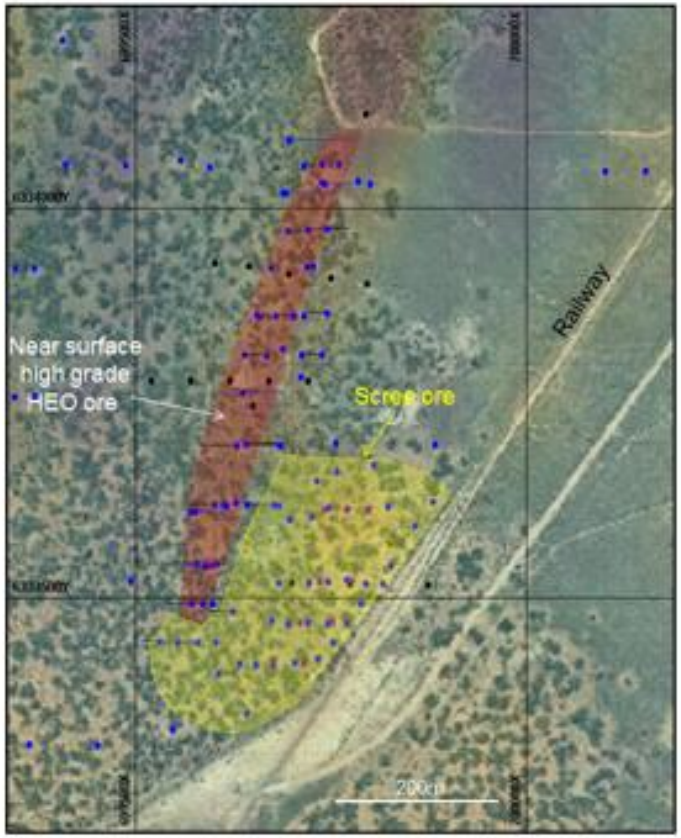
JORC Code, 2012 edition, Table 1 Warrior

GEOLOGY

Regional framework

Hematite in the MBR occurs as stratabound Palaeoproterozoic deposits of the Lower Middleback Iron Formation (LMIF), part of the Hutchison Group. The Hutchison Group forms part of the Cleve Subdomain of the Gawler Craton, and lies on its western edge (Figure 3). The Cleve Subdomain comprises tightly folded high-grade metamorphic rocks, mainly derived from marine shelf sediments and mafic and felsic volcanics.

Figure 2: Iron Warrior Deposits



Iron Warrior Geology

The Iron Warrior primary ore deposit outcrops as a 40 x 150 metres low ridge of massive hematite with significant magnetite. Quartz hematite BIF outcrops immediately to the north and chlorite schists (possibly associated with the Katunga Dolomite) were intersected at depth. The area is extensively intruded by highly weathered mafic dykes. Granite was intersected near surface to the east of the deposit. Scree and alluvium cover much of the prospect area. The deposit is interpreted to be a fault-bounded synformal structure, plunging shallowly to the north.

The Warrior scree deposit is characterised by the presence of aeolian sand cover (up to 20m in thickness) and vary in thickness from 1-30m. The basement in the area is a moderately to strongly weathered, foliated gneiss. The scree consists predominantly of hematite cobbles/pebbles, with larger boulders or cemented agglomerations of ~1m in size encountered in drillholes. Hematite pebbles varied from very hard to friable.

With depth the Warrior scree deposit grades from unconsolidated hematite cobbles to limonite and clay cemented pisolite conglomerates. Typical iron grades vary from ~30-60% Fe with sand, clays, calcrete and other gangue rock types as the main contaminants.

JORC Code, 2012 edition, Table 1 Warrior

DRILLING

BHP knew of the presence of the Iron Warrior deposit from the late 1960s. Historical drilling programs identified the deposits completed in 1978 and 1996. Historical drilling used tri-cone roller bits, and open-hole percussion (OHP 1978) or reverse circulation drilling (RC 1996).
Arrium reassessed these deposits in 2015 using a combination of sonic drilling (SD) reverse circulation drilling (RC) and Diamond drilling (DD). Appendix A contains collar locations images by deposit.

Project	SD	DD	RC	OHP
Iron Warrior	(m)	(m)	(m)	(m)
1978 SG series				346
1996 WRC series			746	
2015 IW series	246	211.5	7350	
Totals	246	211.5	8096	346

Table 1: Drilling Summary of Material Deposits

SAMPLING

Table 1 shows resource drilling methods varied between the two project areas. Arrium collects both SD and RC scree samples in one-metre intervals.
During RC drilling the drill rig automatically splits samples using a rig-mounted cone splitter. Arrium manually split sonic samples using a riffle splitter.
In both cases samples were placed directly into pre-numbered calico bags.

ANALYTICAL METHOD

Sample Preparation

Arrium uses Bureau Veritas (BV) for sample analysis. BV Whyalla and BV Adelaide completed the most recent analytical work. BV's sample preparation process involves the following activities:

- Sorting & drying
- Weighing.
- Crushing.
- Pulverising.
- Sizing.
- Where samples weigh more than 3kg the sample is split to provide a nominal 3kg weight for sample pulverising.

Sample Analysis

Sample material is mixed with Lithium Borate flux to form a glass disc and analysed by X-Ray Fluorescence (XRF). The samples were analysed for the following analytes (with detection limits in ppm):

Fe (100)	SiO_2 (100)	Al_2O_3 (100)	Mn (100)	TiO_2 (100)	CaO (100)	MgO (100)	K_2O (100)	P (10)
S (10)	Na_2O (100)	Cu (10)	Pb (10)	Zn (10)	Ba (10)	V (10)		

To determine Loss on Ignition (LOI), samples were dried at 105°C, weighed, placed in a temperature-controlled environment at 1,000°C for one hour, cooled, and re-weighed with LOI reported as a percentage.

JORC Code, 2012 edition, Table 1 Warrior

QA/QC

Field QA/QC

Limited QA/QC was completed prior to 2003. Arrium introduced field duplicates and Certified Reference Material (CRM) from 2003. The field duplicate results give confidence in sample collection procedures and analytical precision for this period.

Arrium used three in-house CRMs from 2003 through 2006, and used third-party supplied CRMs post-2006, with variable results. The majority of results for the other CRMs lie within the plus / minus two standard deviation range providing confidence in the accuracy of the dataset for this period.

Arrium introduced the use of Field Blanks in 2011, and sources Blank in bulk from its Ardrossan dolomite quarry.

From 2011, Arrium targeted a QA/QC value of 10% of the Primary Samples. To maximise the likelihood of achieving this, Arrium inserts CRMs every 25 samples (i.e. in sample bags ending in 25, 50, 75, 00), and aims for 4% each of field duplicates and field blank samples. Arrium requires drill rig geologists to target ore and near-ore material for duplicates, and to add a field blank immediately after the duplicate pair. Selecting samples for duplication is subjective, and thus the area where most variation occurs in terms of actual assays collected.

Laboratory QA/QC

The objective of the Laboratory QA/QC Program is to measure the precision and accuracy of the analytical data. Quality assurance involves the planned and systematic actions necessary to provide confidence in each analytical result. The QA/QC Program has two components:

- Quality Assurance (QA) - the system used to verify that the entire analytical process is operating within acceptable limits; and
- Quality Control (QC) - the mechanisms established to measure non-conforming method performance

JORC Code, 2012 edition, Table 1 Warrior

Exploration Drilling Results

Significant 2m composite intercepts of cut-off grade of >50% Fe for Iron warrior primary ore mineralisation and warrior scree ore mineralisation intercepts with a cut-off grade of > 30% Fe with drill collar details listed in Table 2.

Iron warrior primary ore mineralisation best intercept was 56 m on IW010RC. The Warrior scree best intercept was 34 m on drill-hole IW016RC.

SECTION	TYPE	BHID	EAST	NORTH	RL	DEPTH	DIP	AZIMUTH	FROM	TO	INTERCEPT LENGTH
6333540	SCREE	SG1	699,774	6,333,520	182	43	-90	-	20	36	16
	SCREE	IW089RC	699,794	6,333,520	181	40	-90	-	12	34	22
	SCREE	SG9	699,700	6,333,521	186	24	-90	-	8	18	10
	SCREE	IW088RC	699,721	6,333,521	184	34	-90	-	12	26	14
	SCREE	IW095RC	699,683	6,333,522	186	22	-90	-	8	14	6
	SCREE	IW040RC	699,745	6,333,522	184	52	-90	-	10	32	22
	SCREE	IW136RC	699,813	6,333,522	180	34	-90	-	18	24	6
	SCREE	IW087RC	699,770	6,333,525	182	46	-90	-	16	38	22
	PRIMARY	IW045RC	699,588	6,333,542	190	76	-65	270	6	30	24
	PRIMARY	IW018RC	699,596	6,333,542	189	52	-90	-	4	52	48
	SCREE	IW126RC	699,826	6,333,543	180	34	-90	-	20	30	10
	PRIMARY	IW081RC	699,577	6,333,546	190	64	-55	270	10	14	4
	SCREE	IW046RC	699,604	6,333,546	190	118	-75	90	6	16	10

Table 2: Iron Warrior 2m samples Significant Down-hole Intercepts (Fe > 50% for Primary and > 30% for scree).

JORC Code, 2012 edition, Table 1 Warrior

SECTION	TYPE	BHID	EAST	NORTH	RL	DEPTH	DIP	AZIMUTH	FROM	TO	INTERCEPT LENGTH
6333620	SCREE	IW051RC	699,725	6,333,605	186	46	-90	-	2	28	26
	PRIMARY	IW013RC	699,576	6,333,612	193	100	-60	90	4	8	4
	SCREE	IW049RC	699,797	6,333,615	182	36	-90	-	6	26	20
	SCREE	IW016RC	699,772	6,333,616	183	50	-90	-	4	38	34
	SCREE	IW050RC	699,747	6,333,618	185	46	-90	-	2	32	30
	SCREE	IW048RC	699,823	6,333,618	181	34	-90	-	6	14	8
	PRIMARY	IW014RC	699,616	6,333,620	194	64	-90	-	6	50	44
	PRIMARY	IW055RC	699,601	6,333,621	193	58	-55	270	4	16	12
	PRIMARY	IW043RC	699,613	6,333,621	194	40	-65	270	4	32	28
	PRIMARY	IW044RC	699,627	6,333,624	193	112	-80	90	6	20	14 and 38
	SCREE	IW047RC	699,881	6,333,625	178	24	-90	-	10	16	6
6333700	PRIMARY	IW082RC	699,684	6,333,697	196	64	-50	270	0	24	24
	PRIMARY	IW056RC	699,629	6,333,697	206	82	-55	270	0	28	28
	PRIMARY	IW057RC	699,642	6,333,700	206	136	-70	90	0	44	44 and 18
	PRIMARY	IW010RC	699,639	6,333,700	205	82	-90	-	0	56	56
	SCREE	IW024RC	699,756	6,333,701	189	16	-90	-	0	4	4

Table 2 (continued): Iron Warrior 2m samples Significant Down-hole Intercepts (Fe > 50% for Primary and > 30% for scree).

JORC Code, 2012 edition, Table 1 Warrior

Figure 3 Iron Warrior Exploration target Geology Section at 6,333,540 m N

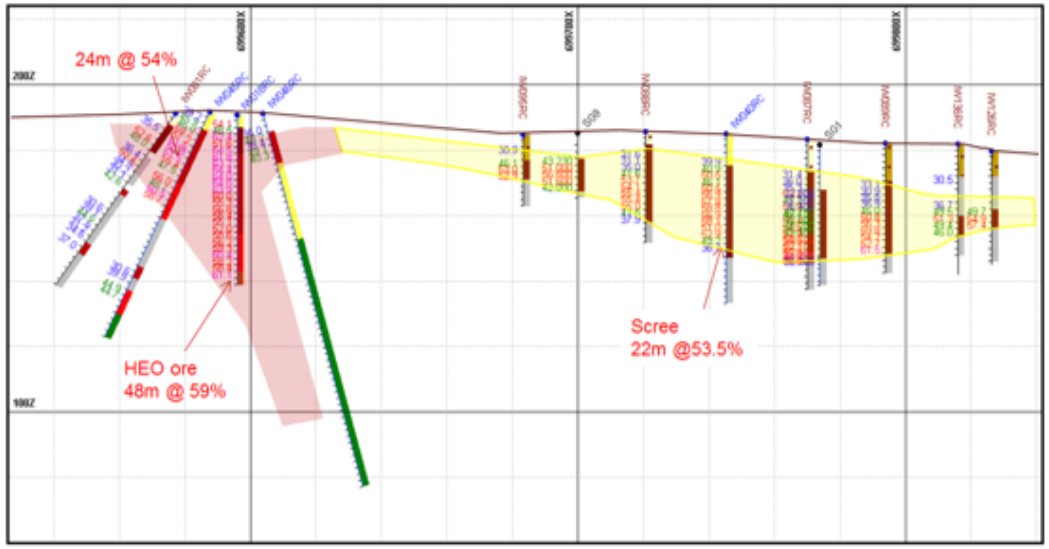
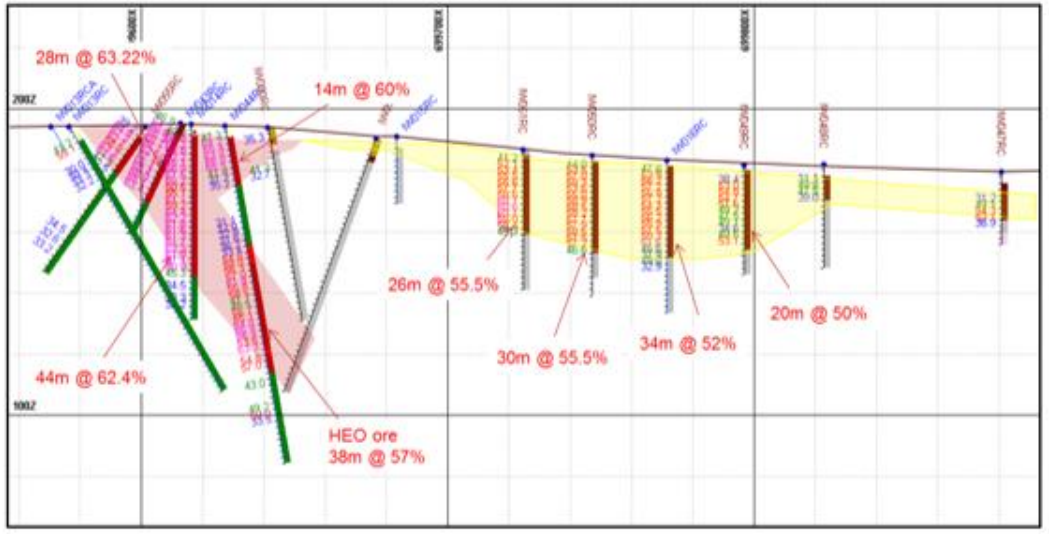


Figure 4 Iron Warrior Exploration target Geology Section at 6,333,620 m N



JORC Code, 2012 edition, Table 1 Warrior

Figure 5 Iron Warrior Exploration target Geology Section at 6,333,700 m N

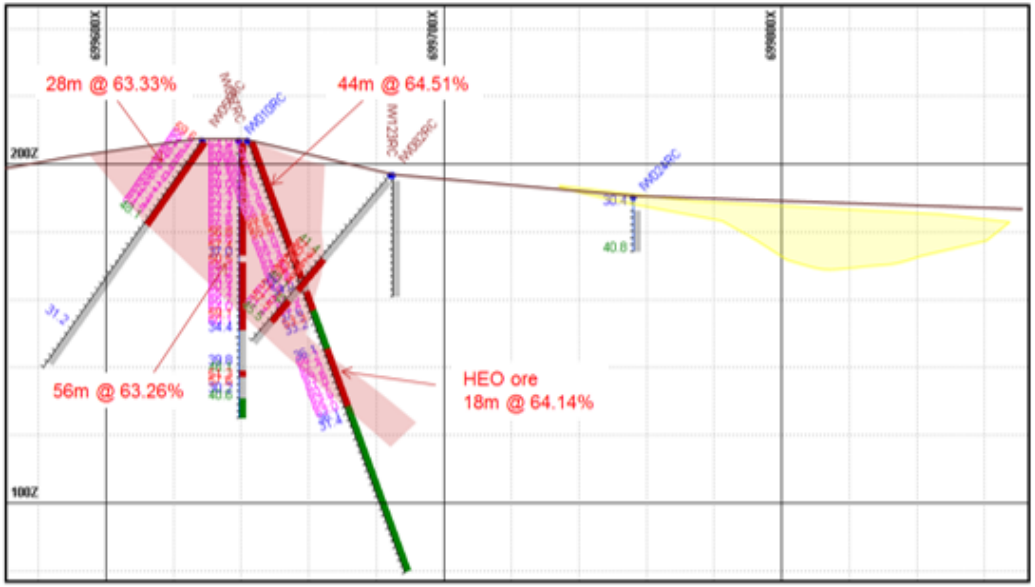
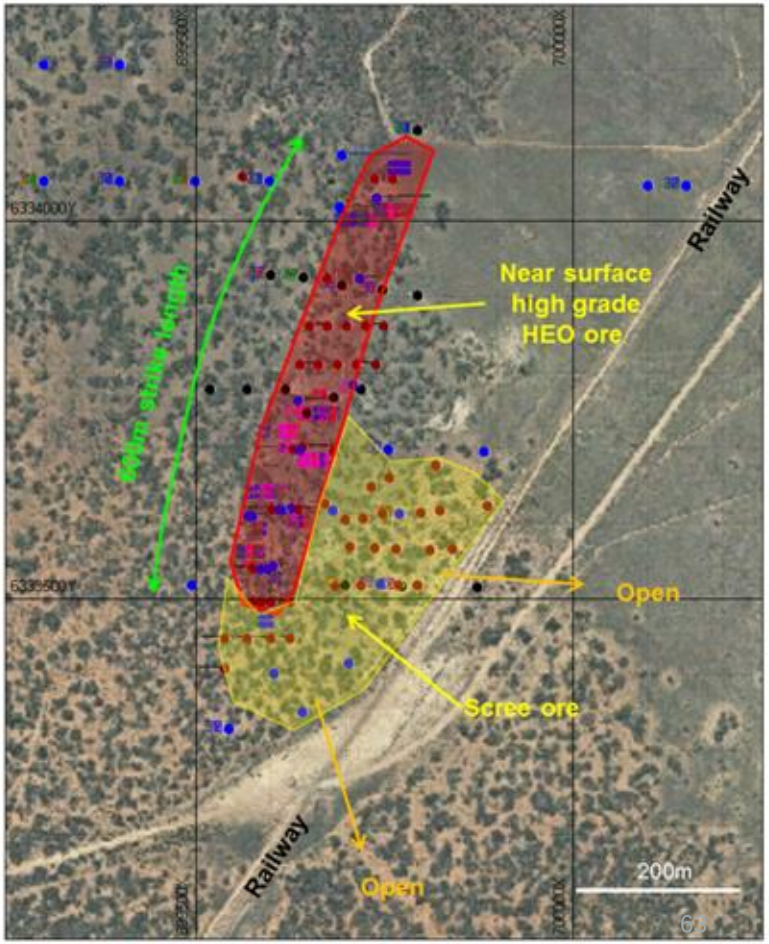


Figure 6 Iron Warrior drill collar locations



JORC Code, 2012 edition, Table 1 Empress/Baroness

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Assessment used a combination of sonic drilling (SD),reverse circulation drilling (RC) and diamond drilling (DD).
		Project / **SD (m)** / **DD (m)** / **RC (m)** **Empress** 842.5 23 1076 **Baroness** 1286 32 3640 **Totals** **2128.5** **55** **4716**
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All drilling was logged with recovery recorded and entered into a sampling database with standardised codes onsite as soon as practically possible after the drill hole was completed.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information	Collection of SD or RC samples in one metre downhole intervals for whole rock analysis. Samples delivered to Bureau Veritas (BV) Laboratory Whyalla for sample preparation and analysis.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	RC and SD drilling are the primary drilling techniques.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC and SD sample recovery is recorded. Logging geologists assessed sample recovery visually and recorded on site for transfer to the database for each 1m interval. Sonic sample weights typically exceeded 25kg before splitting using a ground-based riffle Overall sample recoveries are considered appropriate.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drilling delivers samples representative samples from the hammer through the inner tube and into the sample bags by way of a cone splitter. Samples were collected in pre-SD captures complete samples in a plastic tube. Samples are divided into metre samples and riffle split after logging. Samples were collected in pre-numbered calico bags directly from the splitter.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship has been demonstrated between sample recovery and grade. Exploration geologists assess sample recovery visually during logging. Arrium consider sample recovery is appropriate for resource modelling. Any grade bias due to sample recovery (if present) is not material in the context of this Mineral Resource estimate.

JORC Code, 2012 edition, Table 1 Empress/Baroness

Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Sonic and RC samples were logged in the field for colour, weathering, minerals, magnetism, main particle size and general observations in standard company template using a standard code library. The logging & sample interval was 1m.
		The logging data is sufficiently detailed for the development of robust geological models to support Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of drill holes is qualitative, recording rock type, mineralogy, texture, alteration, grain size and comments using standardised logging codes originally developed by BHP.
	The total length and percentage of the relevant intersections logged.	All drill holes were geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No sampling of diamond core was used
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split using a cone splitter. Sample interval was 1m. SD samples were split using a three-tier riffle splitter. Sample interval was 1m.
		The majority of samples in the mineralised zone were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The laboratory dries and crushes each sample and splits samples to nominal 3kg. Each 3kg sample is pulverised to 90% passing 106µm.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Arrium's documented sampling procedures ensure field staff collect samples to maximise representivity.
		The sampling techniques are considered appropriate, and provide a representative sample for assaying.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Field QA/QC data (duplicates, blanks and internal standards) is available from the program.
	Whether sample sizes are appropriate to the grain size of the material being sampled	The sample sizes are appropriate for the grain size of the material being sampled. One metre sample intervals can determine the internal architecture of broad zones of Fe mineralisation.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were fused with Lithium Borate flux to form a glass disc and analysed by XRF for Fe, SiO_2, Al_2O_3, P, CaO, Cu, Pb, Ba, V, MgO, Mn, S, TiO_2, Na_2O, Zn and K_2O.
		Loss on Ignition (LOI) samples were dried to 105° C, weighed, placed in a temperature controlled environment at 1000° C for one hour and then cooled and re-weighed.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools used in the preparation of this Mineral Resource estimate.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Laboratory quality assurance/quality control procedures involve the use of blanks to monitor carry-over contamination, splits to monitor precision and certified reference materials (CRMs) to monitor accuracy. Analytical results are not released if an issue is identified in the sample preparation or analysis stages.
		The field duplicate results give confidence in sample collection procedures and analytical precision for this period.
		Arrium uses third-party supplied CRMs, and sources Field Blank in bulk from its Ardrossan dolomite quarry.
		Arrium determined sub-sampling and assaying processes provide acceptable levels of accuracy and precision.

JORC Code, 2012 edition, Table 1 Empress/Baroness

arrium MINING AND MATERIALS

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have not been verified by an independent third party.
	The use of twinned holes.	Twinned holes were not drilled in this
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data is either entered into a set of comma-delimited spread sheets on Toughbook laptops in the field or logged on paper and transcribed into Excel spread sheets. The data is then imported into an acQuire™ database with Arrium standard validation procedures in place prior to import.
	Discuss any adjustment to assay data.	The only adjustments made to the analytical data involved replacing below detection values with a value equal to the negative detection limit. This does not materially impact the Mineral Resource estimate.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	ARI currently collects collar coordinates using either a hand held GPS or a differential Global Position System (DGPS).
	Specification of the grid system used.	The grid used is AMG66, Zone 53.
	Quality and adequacy of topographic control.	A new digital terrain model (DTM) of the original topographic surface for the various deposit areas was utilised. AAM Hatch Pty Ltd generated the new DTM (incorporating 1 m contour intervals) from LIDAR fly-over.
		The topography data is considered to be high quality and adequate for the preparation of a Mineral Resource estimate.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Grid spacing across these projects are shown in the table below:
		Project / **Drill holes** / **Drillhole Spacing** **Empress** / 125 / Approximately 100m x 50m **Baroness** / 166 / Approximately 100m x 50m
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The mineralised domains have sufficient geological and grade continuity to support the definition of Mineral Resource given the current drill pattern.
	Whether sample compositing has been applied.	Drill samples were collected as 1m samples.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Drill holes were vertical.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified.
Sample security	*The measures taken to ensure sample security.*	Arrium manages Chain of Custody. Samples for analysis in Whyalla were delivered direct to the laboratory from the field. Bureau Veritas acknowledges receipt of the samples by email. No information is available for historical data.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Maxwell Geoservices Pty Ltd (Maxwell) completed a review of data capture and data management activities in November/December 2014. Maxwell found current data "*…PASSED the Maxwell data and assay audit process*".

JORC Code, 2012 edition, Table 1 Empress/Baroness

Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Sonic and RC samples were logged in the field for colour, weathering, minerals, magnetism, main particle size and general observations in standard company template using a standard code library. The logging & sample interval was 1m.
		The logging data is sufficiently detailed for the development of robust geological models to support Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of drill holes is qualitative, recording rock type, mineralogy, texture, alteration, grain size and comments using standardised logging codes originally developed by BHP.
	The total length and percentage of the relevant intersections logged.	All drill holes were geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No sampling of diamond core was used
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split using a cone splitter. Sample interval was 1m. SD samples were split using a three-tier riffle splitter. Sample interval was 1m.
		The majority of samples in the mineralised zone were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The laboratory dries and crushes each sample and splits samples to nominal 3kg. Each 3kg sample is pulverised to 90% passing 106µm.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Arrium's documented sampling procedures ensure field staff collect samples to maximise representivity.
		The sampling techniques are considered appropriate, and provide a representative sample for assaying.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Field QA/QC data (duplicates, blanks and internal standards) is available from the program.
	Whether sample sizes are appropriate to the grain size of the material being sampled	The sample sizes are appropriate for the grain size of the material being sampled. One metre sample intervals can determine the internal architecture of broad zones of Fe mineralisation.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were fused with Lithium Borate flux to form a glass disc and analysed by XRF for Fe, SiO_2, Al_2O_3, P, CaO, Cu, Pb, Ba, V, MgO, Mn, S, TiO_2, Na_2O, Zn and K_2O.
		Loss on Ignition (LOI) samples were dried to 105° C, weighed, placed in a temperature controlled environment at 1000° C for one hour and then cooled and re-weighed.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools used in the preparation of this Mineral Resource estimate.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Laboratory quality assurance/quality control procedures involve the use of blanks to monitor carry-over contamination, splits to monitor precision and certified reference materials (CRMs) to monitor accuracy. Analytical results are not released if an issue is identified in the sample preparation or analysis stages.
		The field duplicate results give confidence in sample collection procedures and analytical precision for this period.
		Arrium uses third-party supplied CRMs, and sources Field Blank in bulk from its Ardrossan dolomite quarry.
		Arrium determined sub-sampling and assaying processes provide acceptable levels of accuracy and precision.

JORC Code, 2012 edition, Table 1 Empress/Baroness

Section 2 Exploration and Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Arrium holds (through its subsidiary OneSteel Manufacturing Pty Ltd) the necessary mining leases (MLs), miscellaneous purpose licences (MPLs) and exploration licences (ELs) for continued operations across the MBR. There are no material issues with any third parties.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Tenure for EL4732 is 100% held by Arrium Pty Ltd.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	BHP or Arrium completed all exploration.
Geology	*Deposit type, geological setting and style of mineralisation.*	Scree deposits occur as alluvial fans resulting from the erosion and deposition of outcropping hematite orebodies. This is similar to the method of formation of other detrital ore bodies elsewhere in Australia (eg the Pilbara).
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* – *easting and northing of the drill hole collar* – *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* – *dip and azimuth of the hole* – *down hole length and interception depth* – *hole length.*	Baroness & Empress See Table 1 in the supporting document
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No information Excluded
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Interceptions reported as length weighted composites within the mineralisation envelope defined by geological logging.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All assay intervals 1m composites
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent calculations were applied.

JORC Code, 2012 edition, Table 1 Empress/Baroness

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Mineralisation is generally close to surface flat lying and holes were drilled vertical, given the spacing of the holes, it was deemed adequate to portray the interpreted ore zones.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Mineralisation is generally close to surface flat lying and holes were drilled vertical
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Given the shallow nature of the scree ore body, minimum width and assay is 1m.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to the supporting document.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Summary results showing 1m composite assays >30% Fe
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Bulk Density has been derived from 1 diamond hole drilled within the thickest area of the Iron Baroness. Metallurgical test work used to define initial recovery data has been derived from sonic drilling samples and diamond core.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Exploration for Scree Ore is on-going across the MBR in support of mining operation.
		Additional bulk sample drilling and additional Sonic Drilling for metallurgical test work is planned in H1 of FY2016.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to the attached supporting documentation.

JORC Code, 2012 edition, Table 1 Empress/Baroness

IRON BARONESS & IRON EMPRESS SCREE PROJECT

INTRODUCTION

The Middleback Ranges (MBR) occur on the northeastern Eyre Peninsula, South Australia (Figure 1). They extend from Iron Knob, approximately 50km northwest of Whyalla, to Iron Duke, approximately 50km southwest of Whyalla.

In 2000, BHP divested the Whyalla steelworks (including the mining operations) and parts of the manufacturing business in the new entity OneSteel Limited, and ceased operations in the MBR under its name. In July 2012, OneSteel Limited changed its name to Arrium Limited (Arrium).

Arrium operates hematite operations at the following areas:

- Iron Knob Mining Area (IKMA). IKMA lies at the northern end of the MBR, and includes the Iron Knob, Iron Monarch and Iron Princess pits.
- Iron Baron Mining Area (IBMA). IBMA lies approximately at the mid-way point of the MBR, and includes the Iron Baron, Iron Prince, Iron Queen and Iron Cavalier pits.
- South Middleback Range (SMR). SMR lies at the southern end of the MBR, and includes the Iron Knight, Iron Chieftain, Iron Duchess and Iron Duke (now depleted) pits.

Arrium is actively exploring for additional hematite sources in proximity to these operations. The Baroness and Empress Scree Deposits lie within the IBMA (Figure 2), in close proximity to existing site infrastructure.

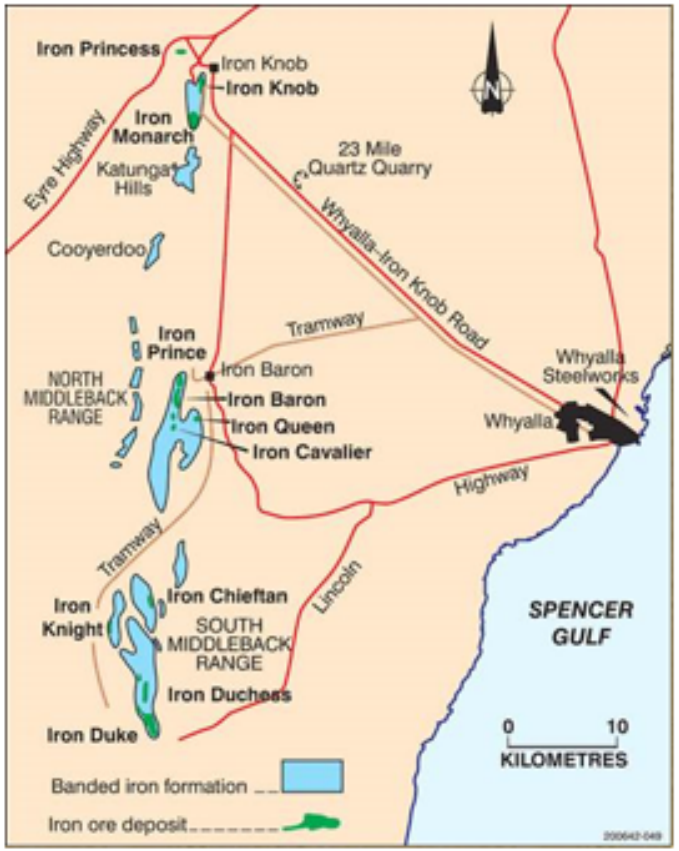
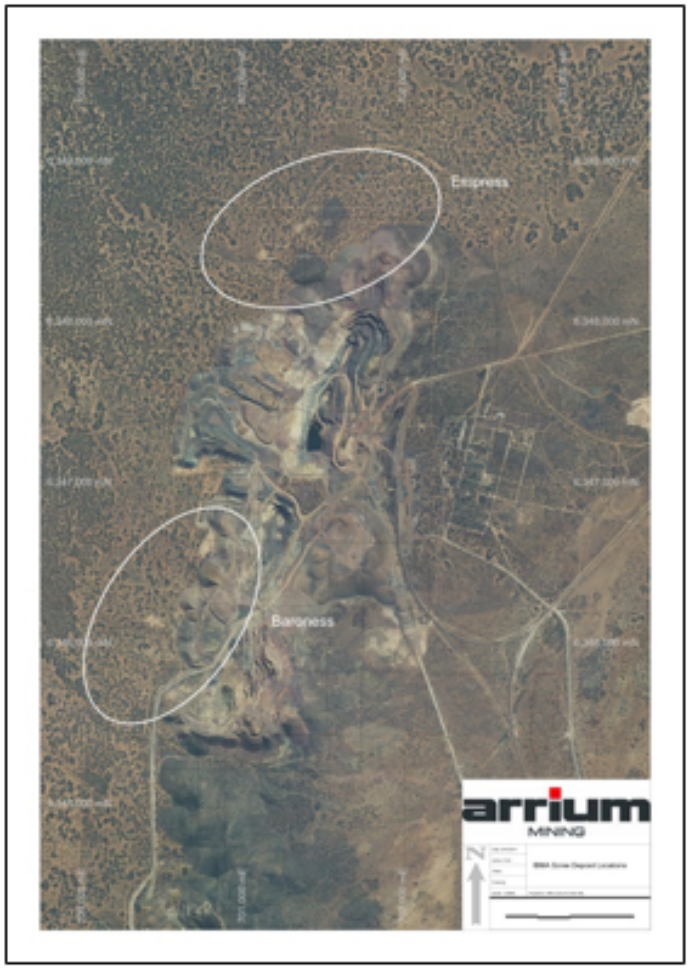


Figure 1: Site Location

JORC Code, 2012 edition, Table 1 Empress/Baroness

Figure 2: IBMA Scree Deposits



GEOLOGY

Regional framework

Hematite in the MBR occurs as stratabound Palaeoproterozoic deposits of the Lower Middleback Iron Formation (LMIF), part of the Hutchison Group. The Hutchison Group forms part of the Cleve Subdomain of the Gawler Craton, and lies on its western edge (Figure 3). The Cleve Subdomain comprises tightly folded high-grade metamorphic rocks, mainly derived from marine shelf sediments and mafic and felsic volcanics[1].

The Baroness and Empress Scree deposits are detrital concentrations of iron ore scree from the Iron Baron and Iron Prince deposits respectively, and are analogues of other known Detrital Iron Deposits (DID) elsewhere in Australia. The scree deposits formed by the erosion of exposed iron ore deposits such as the Iron Prince and Big Baron ore bodies and have accumulated over time in alluvial fans at the foothills of the in-situ iron deposits.

Middleback Ranges Scree Origin

Both the Empress and Baroness deposits are characterised by the presence of aeolian sand cover (up to 20m in thickness) and vary in thickness from 1-30m. The basement in the area is a moderately to strongly weathered, foliated gneiss. The scree consists predominantly of hematite cobbles/pebbles, with larger boulders or cemented agglomerations of ~1m in size encountered in drillholes. Hematite pebbles varied from very hard to friable.

With depth the scree deposits grade from unconsolidated hematite cobbles to limonite and clay cemented pisolite conglomerates. Both the Empress and Baroness deposits have lateral extents greater than a kilometre. Typical iron grades vary from ~30-60% Fe with sand, clays, calcrete and other gangue rock types as the main contaminants.

1 Parker, A.J., 2012b. Geological Framework. In: Drexel, J.F., Priess, W.V. and Parker, A.J. (Eds), *The Geology of South Australia. Vol. 1, The Precambrian*. South Australian Geological Survey Bulletin 54, pp. 51-68 (Reprinted with minor corrections 2012)

JORC Code, 2012 edition, Table 1 Empress/Baroness

DRILLING

BHP knew of the presence of IBMA scree deposits from the late 1960s. Multiple historical drilling and trenching programs identified the deposits. Historical drilling used tri-cone roller bits, and open-hole percussion (OHP).
Arrium reassessed these deposits in late 2014 using a combination of sonic drilling (SD) and reverse circulation drilling (RC; Table 1). Only this recent drilling was used to develop this resource estimate. Appendix A contains collar locations images by deposit.

Table 1: Drilling Summary of Material Deposits

Project	SD	DD	RC
	(m)	(m)	(m)
Empress	842.5	23	1076
Baroness	1286	32	3640
Totals	2128.5	55	4716

SAMPLING

Table 1 shows resource drilling methods varied between the two project areas. Arrium collects both SD and RC scree samples in one-metre intervals.
During RC drilling the drill rig automatically splits samples using a rig-mounted cone splitter. Arrium manually split sonic samples using a riffle splitter.
In both cases samples were placed directly into pre-numbered calico bags
Baroness
BN040DD (PQ Diamond Hole) Twin of SC001SD (4 Inch Sonic) as well as BN142RC – Confirming geology and grade intersections consistent
BN041RC – Twin hole of SC002SD confirming grade and geology
BN042RC – Twin hole of SC003SD Confirming grade and geology

Empress
Only one twin hole
EM057DD twin of EM022SD confirming similar grades but intersection varied in thickness hole was approximately 5m away from twin leading to variation in geology.

JORC Code, 2012 edition, Table 1 Empress/Baroness

ANALYTICAL METHOD

Sample Preparation

Arrium uses Bureau Veritas (BV) for sample analysis. BV Whyalla and BV Adelaide completed the most recent analytical work. BV's sample preparation process involves the following activities:

- Sorting & drying
- Weighing.
- Crushing.
- Pulverising.
- Sizing.
- Where samples weigh more than 3kg the sample is split to provide a nominal 3kg weight for sample pulverising.

Sample Analysis

Sample material is mixed with Lithium Borate flux to form a glass disc and analysed by X-Ray Fluorescence (XRF). The samples were analysed for the following analytes (with detection limits in ppm):

Fe (100)	SiO_2 (100)	Al_2O_3 (100)	Mn (100)	TiO_2 (100)	CaO (100)	MgO (100)	K_2O (100)	P (10)
S (10)	Na_2O (100)	Cu (10)	Pb (10)	Zn (10)	Ba (10)	V (10)		

To determine Loss on Ignition (LOI), samples were dried at 105°C, weighed, placed in a temperature-controlled environment at 1,000°C for one hour, cooled, and re-weighed with LOI reported as a percentage.

Field QA/QC

Limited QA/QC was completed prior to 2003. Arrium introduced field duplicates and Certified Reference Material (CRM) from 2003. The field duplicate results give confidence in sample collection procedures and analytical precision for this period.

Arrium used three in-house CRMs from 2003 through 2006, and used third-party supplied CRMs post-2006, with variable results. The majority of results for the other CRMs lie within the plus / minus two standard deviation range providing confidence in the accuracy of the dataset for this period.

Arrium introduced the use of Field Blanks in 2011, and sources Blank in bulk from its Ardrossan dolomite quarry.

From 2011, Arrium targeted a QA/QC value of 10% of the Primary Samples. To maximise the likelihood of achieving this, Arrium inserts CRMs every 25 samples (i.e. in sample bags ending in 25, 50, 75, 00), and aims for 4% each of field duplicates and field blank samples. Arrium requires drill rig geologists to target ore and near-ore material for duplicates, and to add a field blank immediately after the duplicate pair. Selecting samples for duplication is subjective, and thus the area where most variation occurs in terms of actual assays collected.

Laboratory QA/QC

The objective of the Laboratory QA/QC Program is to measure the precision and accuracy of the analytical data. Quality assurance involves the planned and systematic actions necessary to provide confidence in each analytical result. The QA/QC Program has two components:

- Quality Assurance (QA) - the system used to verify that the entire analytical process is operating within acceptable limits; and
- Quality Control (QC) - the mechanisms established to measure non-conforming method performance

JORC Code, 2012 edition, Table 1 Empress/Baroness

Cutoff Grade

The Mineral Resource has been reported to a domain horizon only with an Fe range of approximately 30% to 60%.

Exploration Drilling Results

Significant 1m composite intercepts of cutoff grade of >30% Fe for Baroness and Empress with drill collar details are listed in Table 1 & Table 2 At Baroness the best intercept was 24m on BN031RC and BN032RC, where Empress best intercept was 18m on hole EM022RD.

Northing	Holeid	EASTING	NORTHING	RL	DIP	AZIMUTH	DEPTH	INTE - Depth	INTERCEPT
6345950	BN094RC	700065.8	6345977	211.668	0	-90	40	17	9
	BN093RC	700102.2	6345993	212.565	0	-90	33	17	4
	BN095RC	700152	6345987	214.183	0	-90	34	16	9
	BN028RC	700200.1	6345974	216.675	0	-90	36	14	12
	BN096RC	700251.2	6345965	218.491	0	-90	34	16	12
	BN029RC	700310.5	6345958	220.457	0	-90	36	16	11
	BN097RC	700344.7	6345953	221.711	0	-90	34	17	10
	BN030RC	700389.5	6345942	224.04	0	-90	36	11	18
	BN098RC	700401.1	6345918	225.47	0	-90	34	16	13
	BN041RC	700470.2	6345927	228.199	0	-90	36	12	21
	SC002SD	700471.5	6345925	228.221	0	-90	31	12	18
	BN031RC	700495	6345928	228.257	0	-90	30	4	24
	BN032RC	700538.9	6345912	232.328	0	-90	30	3	24
	BN033RC	700583	6345911	232.648	0	-90	24	1	19
	BN034RC	700621.5	6345897	237.356	0	-90	24	2	16
	BN160SD	700725.7	6345873	271.56	0	-90	35	20	5

Table 1 - Baroness Drilling 1m Composite Samples Significant Downhole Intercepts (Fe > 30% for section 6345950.

JORC Code, 2012 edition, Table 1 Empress/Baroness

Northing	Holeid	EASTING	NORTHING	RL	DIP	AZIMUTH	DEPTH	INTE - Depth	INTERCEPT
6348680	EM101RC	700861	6348705	198.76	-90	0	16	10	5
	EM073RC	700948.4	6348702	202.183	-90	0	16	9	5
	EM074RC	701005.7	6348702	204.724	-90	0	18	9	5
	EM103RC	701080.1	6348697	207.325	-90	0	16	6	6
	EM018SD	701140.9	6348700	208.958	-90	0	17	5	6
	EM019SD	701249.3	6348701	212.744	-90	0	17	5	9
	EM020SD	701349.5	6348701	216.292	-90	0	17	4	12
	EM021SD	701449.6	6348694	220.523	-90	0	16	4	7
	EM075RC	701499.5	6348700	222.184	-90	0	16	4	8
	EM022SD	701551.4	6348699	224.681	-90	0	21.5	1	18
	EM017SD	701598.2	6348701	226.206	-90	0	10	0	9
	EM023SD	701647.4	6348698	224.789	-90	0	12	-	-
	EM102RC	701705.9	6348702	225.047	-90	0	22	10	1
	EM024SD	701748	6348697	225.574	-90	0	16	11	3
	EM025SD	701847.6	6348697	225.822	-90	0	19	16	1

Table 2 -Empress Drilling 1m Composite Samples Significant Downhole Intercepts (Fe > 30% for section 6348680.

JORC Code, 2012 edition, Table 1 Empress/Baroness

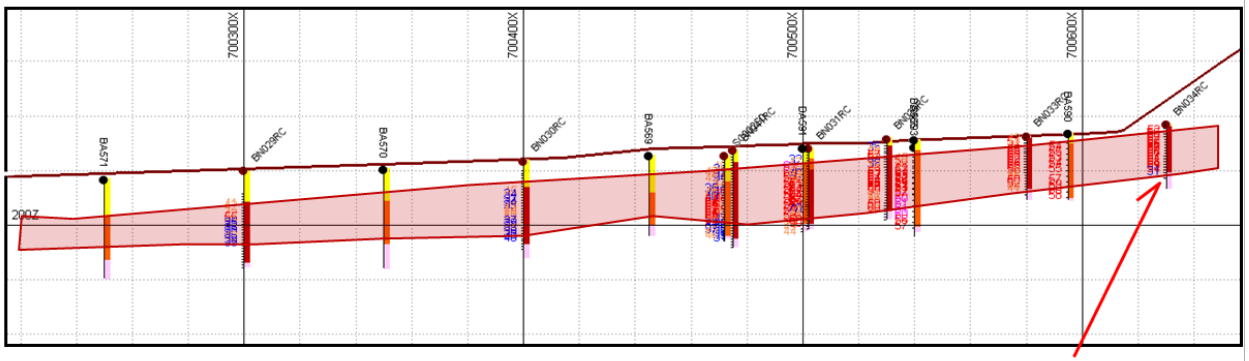


Figure 1 – Baroness Deposit Cross Section 6345950 mN

BN034RC
15m @ 55%

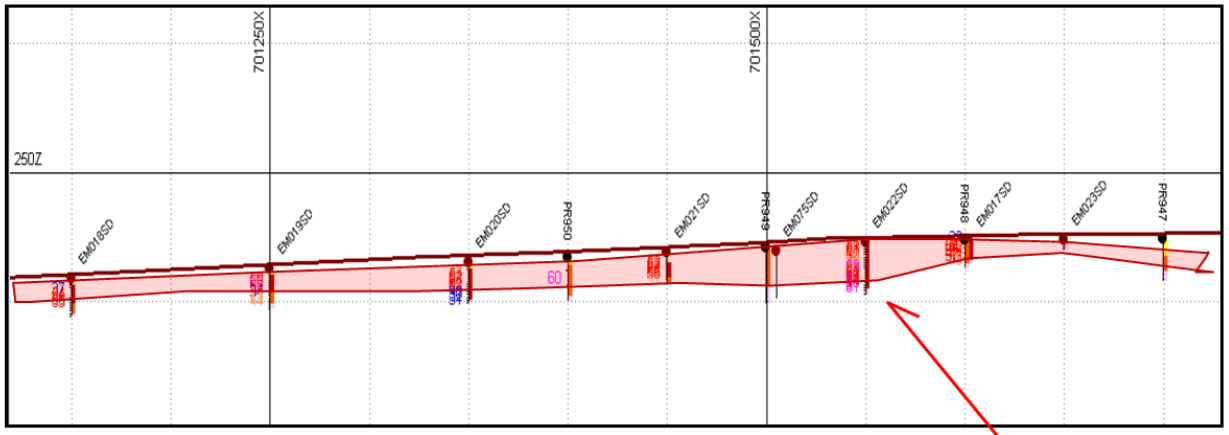


Figure 2 – Empress Deposit Cross Section 6345950 mN

EM022SD
18m @ 54%

JORC Code, 2012 edition, Table 1
Empress/Baroness

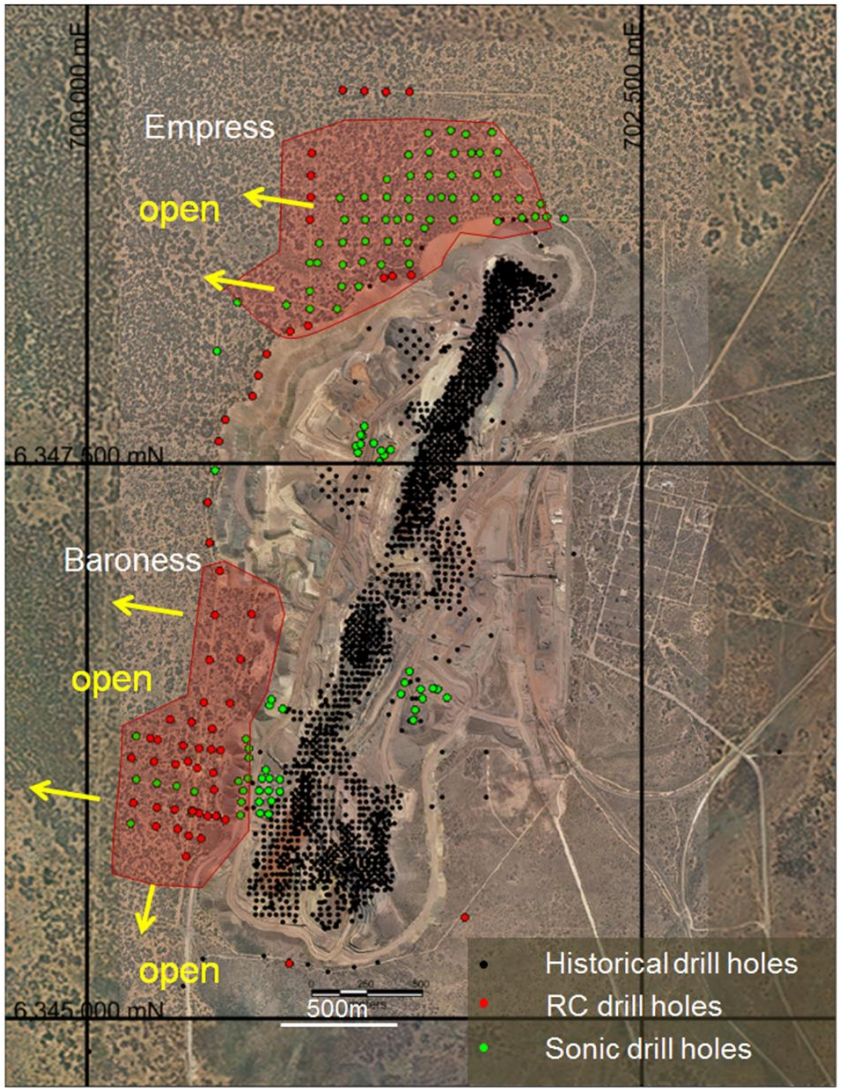


Figure 3: Iron Empress and Baroness Drill-Hole Collar Locations.

Iron ore FY16 consensus

FY16 iron ore consensus estimates are the average of the published forecasts of broker and major banks current as at 10 June 2015

The range of broker and bank views are set out below:

	High	Low	Consensus
Platts 62% Fe (CFR China)			
FY16	US$64	US$39	US$53

Arrium does not endorse, confirm or express a view as to the accuracy of the consensus forecast