



magnetic resources<sup>NL</sup>

**INVESTOR PRESENTATION**

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The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based on information compiled by George Sakalidis and Cyril Geach, who are Members of the Australian Institute of Geoscientists included in a list promulgated by the ASX from time to time. George Sakalidis is a full-time employee of the company, Cyril Geach is a contractor to the company and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sakalidis and Mr Geach consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

All reference to an exploration target are conceptual in nature. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

# Company Overview

Magnetic is listed on the Australian Stock Exchange (ASX Code: MAU).

Capital Structure	ASX:MAU
Shares on issue	90,612,758
Options on issue (various terms)	44,016,005
Fully diluted shares on issue	134,628,763
Current share price	\$0.18
Market capitalisation	\$16.3m

Experienced Board	Position Held
George Sakalidis	Managing Director
Gavin Fletcher	Executive Director
Eric Lim	Non-Executive Director
Ben Donovan	Company Secretary

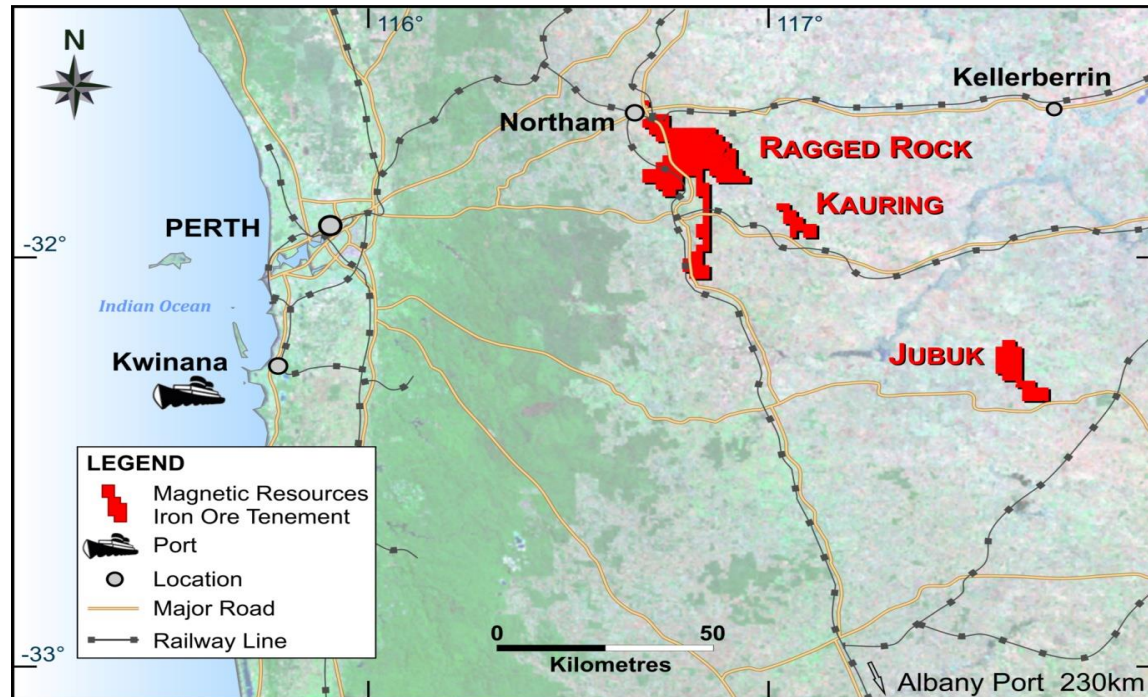
- ❑ Magnetic Resources offer a very unique investment opportunity.
- ❑ 3 key projects with coarse grained premium quality magnetite located in the South West of Western Australia.
- ❑ All situated close to the vital, rail and road infrastructure. Govt owned and open access.
- ❑ Global change in focus for high iron and low contaminants similar to our 3 projects.

# Magnetic Resources – Overview

Magnetic Resources NL (“Magnetic”) 4 key drivers

1	LOCATION – Close to infrastructure
2	METALLURGY & GEOLOGY - High quality deposit
3	LOW CAPEX/LOW OPEX
4	TRACK RECORD – Proven people

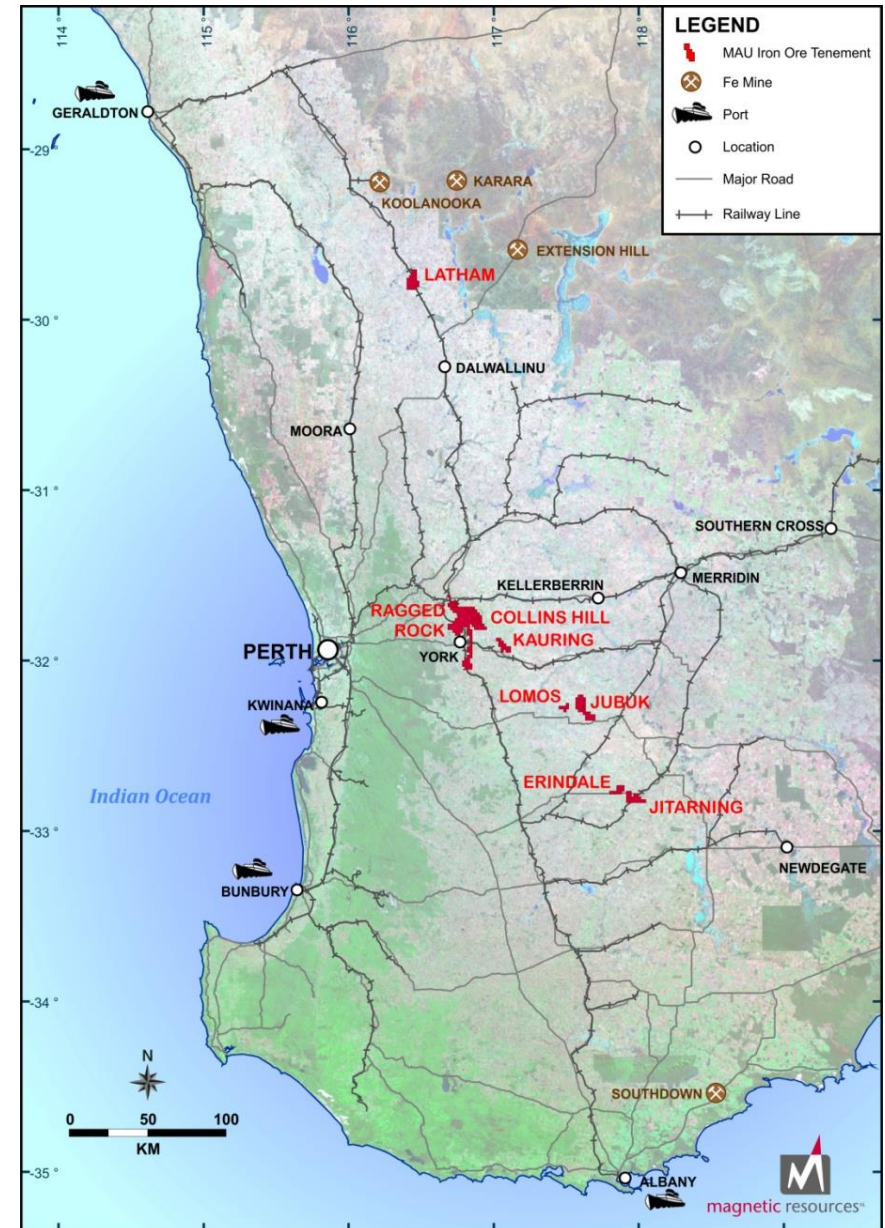
## LOCATION - Close to Infrastructure



- ❑ Magnetic Resources had “first mover” advantage in the area
- ❑ Several key projects representing >50km of coarse grained premium quality magnetite targets.
- ❑ Current focus are the Ragged Rock and Kauring projects
- ❑ All within 10-15km of Government owned, open access railways.

## LOCATION- Infrastructure in place

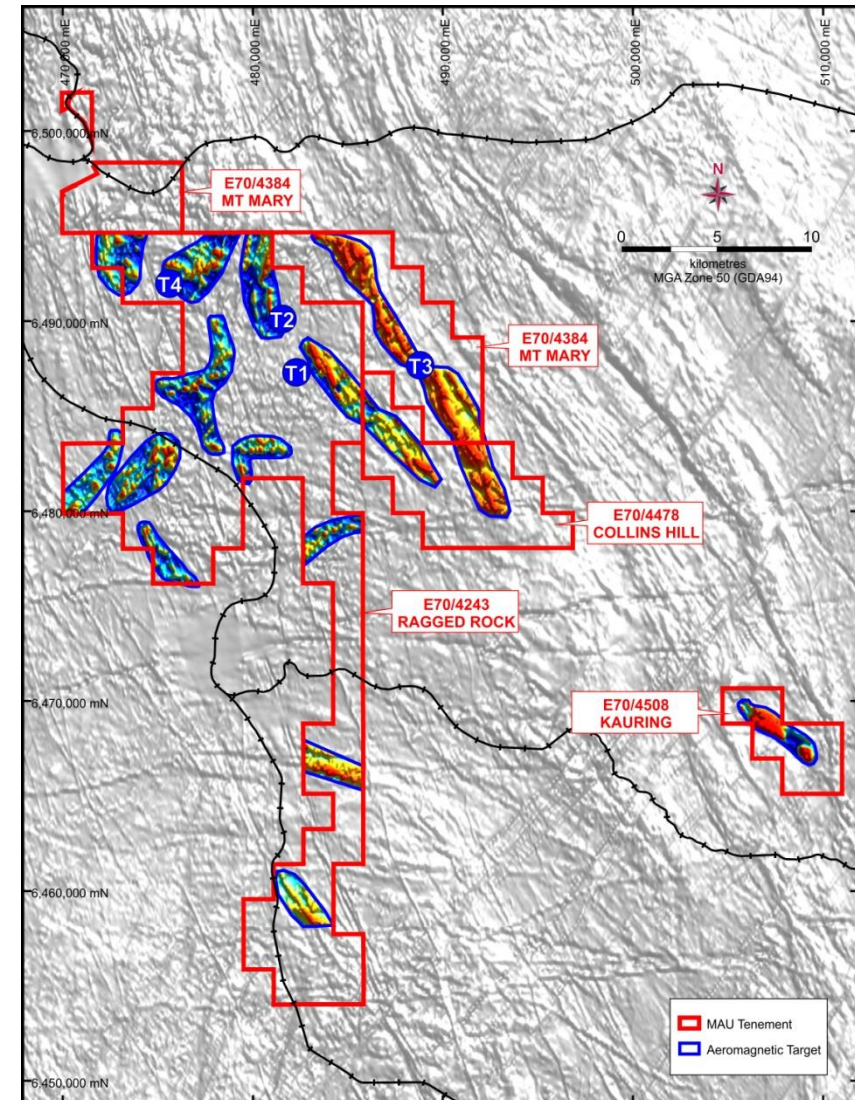
- ❑ Projects within 10-15km of existing rail
- ❑ Rail capacity for up to 3Mtpa of Magnetic's final product
- ❑ Access to port of Albany
- ❑ Port keen to finalise agreement
- ❑ 2 regional centres within 15 km.
- ❑ Grid power readily available
- ❑ No mining camp or FIFO required





## LOCATION - Flagship Project : Ragged Rock

- ❑ >50km of highly prospective strike length
- ❑ 1500m of drilling completed on Target 1
- ❑ **JORC Exploration Target of 100Mt – 270Mt at 20% Fe – 40% Fe - Target 1 only**  
*The potential quantity and grade of Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource*
- ❑ Target 1 represents only 10% of Ragged Rock strike length. Excellent prospectivity.



## Ragged Rock Exploration Target Notes

- The Exploration Target is an estimate and the potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.
- About 41 line kilometres of ground magnetic geophysics carried out at 100 metre line spacing using a Cesium Vapour magnetometer confirms a correlation with BIF at surface and down-hole (Refer to Figure 1 for an explanation of the interpreted geophysical corridor at Target 1 which is given a 5 kilometre strike excluding the eastern BIF sequence).
- Airborne geophysics carried out by GSWA at 200 metres line spacing provides a regional overview and correlates with ground geophysics at Target 1 and BIF where elevated magnetic responses are found. Surface geological mapping and rock chip sampling confirming BIF. Rock chip assays for whole rock and Davis Tube magnetite recovery confirming BIF and the variability of fresh and weathered BIF.
- Reverse circulation drilling (8 drill holes utilised – RRC1-8) has confirmed a weathering profile to 10 metres with fresh BIF below, which coincides with previous petrological assessment. Good correlation of BIF with drill samples and magnetic susceptibilities ( $\times 10^{-3}$ SI). A magnetite BIF – quartzite meta-sedimentary sequence at Target 1 dipping to the east between 30-40 and 50-60 degrees based on geological mapping, geophysical modelling and drilling.
- A geophysical interpretation of ground geophysics outlines 3 distinct geophysical horizons across the BIF sequence encountered at Target 1, two of which have been drilled and confirmed to contain BIF. A combined 50-90 metre width of BIF has been assigned from drilling based on logged BIF/susceptibility measurements of BIF horizons encountered in RRC001-8 and geophysical interpretation. The weighted average estimated actual width for each horizon being about 20 metres with several horizons encountered.
- Based on the parameters of combined BIF width of between 50-90 metres, strike length at Target 1 of 5 kms (excluding the eastern BIF), depth as between 100-150 metres with an SG of 4.0 would equate to an Exploration Target of between 100Mt to 270Mt of magnetite BIF has been estimated. Fe grade between 20-40% Fe is based on rock chip sampling results to date.



**\*Refer to 03 April 2013 ASX release for details about the Ragged Rock Exploration Target (ET).**

**A magnetite BIF – quartzite meta-sedimentary sequence at Target 1, 5kms strike dipping to the east between 30-40 and 50-60 degrees based on geological mapping, geophysical modelling and drilling.**

**Next 12 months over the Ragged Rock Target proposed exploration involves further infill RC coupled with DDH drilling to improve the geological model being reported and subject to private land owner access agreement and permission to maintain further work in other Target areas comprising the ET.**

**The Ragged Rock ET is based on 200m airborne and 50m ground magnetic survey data interpretation, 19 RC drill holes, mapping, assaying and metallurgy.**

**Areas of high ground magnetic signatures corresponded accurately with the intersection of mineralisation, providing the Company with a high degree of confidence that further drilling along the length of the strike will result in additional mineralisation.**

**Metallurgical work over all drill holes present a coarse grained magnetite host in metamorphosed BIF.**

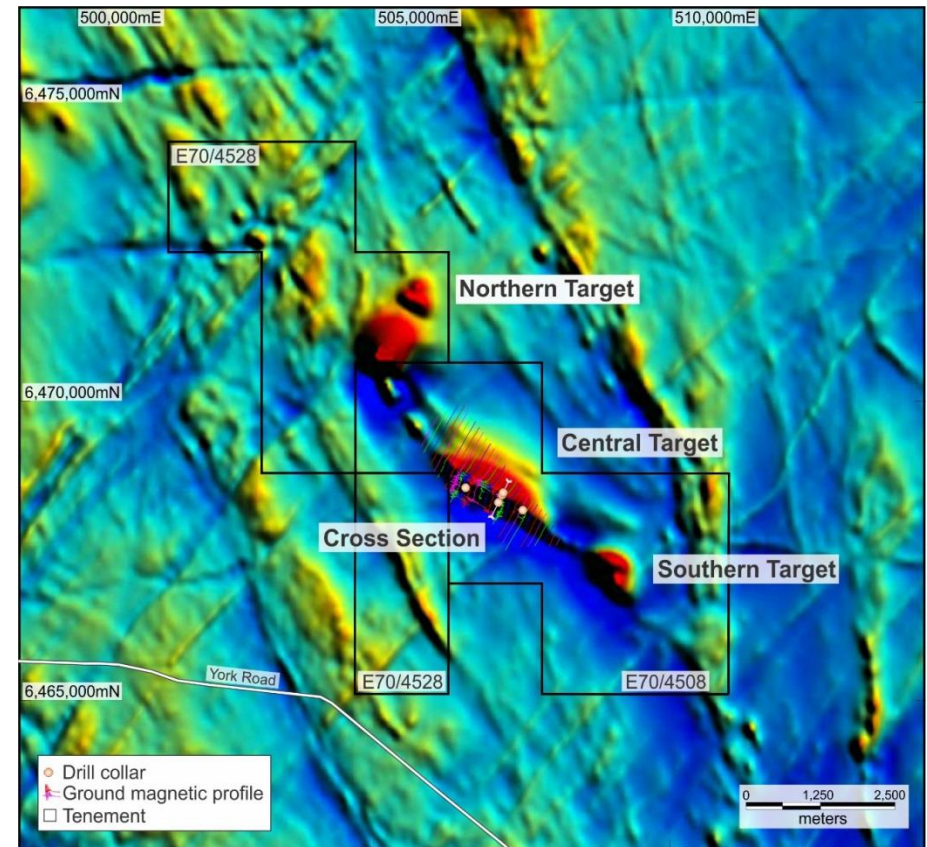
*The potential quantity and grade of Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource*

## LOCATION - Kauring : additional potential

- ❑ Second project with significant BIF potential
- ❑ Located 20-30km south east of Ragged Rock
- ❑ **JORC Exploration Target of 128-137Mt at 32-34%Fe for 150m of fresh BIF to 200m depth.**

*The potential quantity and grade of Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource*

- ❑ Excellent initial Metallurgical results including high mass yield of 45% over 50m intersection.
- ❑ Close enough to process ore through a Ragged Rock plant (increased Mineral inventory)



## Kauring Exploration Target Notes

- The Exploration Target is an estimate and the potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.
- The Exploration Target is primarily estimated by geophysical interpretation, geological mapping and drilling. Drilling has outlined two main BIF zones weathered and fresh at depth outlined in an ASX release dated 19 Dec 2013. Refer to Table 1 Exploration Target Summary. An SG of 3.5 and a fresh BIF depth to 100m (150m total depth) and 150m (200m total depth) is used as parameters. The range of %Fe is related to one drill hole KRC4 which entered into fresh BIF and interpretation is therefore preliminary as this is only one drill hole and the %Fe may vary as further results become available. Assignment of a range between 32-34%Fe is based upon uncut (55m of single assay results- average of 32%Fe) and a 20% bottom cut off (50m of single assay results- average of 34%Fe). Refer to Table 3 assay results. Aeromagnetic data indicates an original 2200m strike for the Central Target which reduces to 1800m based on more detailed ground magnetic interpretation.
- It has been estimated that an Exploration Target for the drilled Central Target mapped eastern and western zones is about 31.0 – 37.0Mt at 32%Fe-34%Fe. The eastern BIF zone may be up to 30% wider based on mapped surface geology to the geophysics which would increase from 31.0Mt to 37Mt at 32%Fe-34%Fe over the drilled Central Target. To the immediate north and south of this Central Target, the magnetics is subdued yet perceptible and termed the Central Extension. It appears that an additional 800m of BIF strike is possible based on 100m spaced ground magnetics for the Central Extension and assumes only the eastern BIF and about 50m width exists. This would be at an increased depth to the fresh outcropping 1000m of mapped Central Target. The deeper north and south extensions of the Central Extension would provide a further 14Mt which make the grand total for the Central Target and Central Extension between 45Mt - 51Mt at 32%Fe-34%Fe. Additionally, 1600m of BIF strike is interpreted from the airborne magnetics covering the Northern and Southern Targets. Applying the same reduction factor from the Central area to the North Target and South Target areas then this would reduce from 1600m to 1300m of BIF strike. Assuming the same width and depth size factors of the BIF co-exist across these targets as for the mapped Central Target, it is estimated could add about 41Mt of pro rata targeted BIF to 100m fresh BIF down to 150m depth and 61Mt to 150m fresh BIF down to 200m depth for the North and South Targets separate to the Central Target.
- A global Exploration Target for the South, Central and North Targets is by inference, based on airborne and ground magnetics with mapped and drilled geology at the Central Target, about 95-101Mt at 32%Fe-34%Fe for 100m of fresh BIF down to 150m depth and 128-137Mt at 32%Fe-34%Fe for 150m of fresh BIF down to 200m depth. This is quite attractive because the distance between these targets is only 6.5km. Also the ground magnetics within the Central Target indicate a continuous zone for the eastern BIF zone and less continuous for the western BIF zone. At this stage permission to complete the ground magnetics for the Northern and Southern Targets is awaited. Further assay work is being conducted over the weathered BIF of the Central Target, to determine the DSO potential from composite samples and petrology assessment and will advise in due course results when available.

**\*Refer to 19 February 2014 ASX release for details about the Kauring Exploration Target (ET).**

**Proposed exploration involves a broader ground magnetic survey, infill ground magnetics, geological mapping and further drilling to improve the geological model being reported. Next 12 months over the Central Target and subject to private land owner access agreement and permission to complete the ground magnetics for the Northern and Southern Targets.**

**The weathered BIF horizons do not form part of the Exploration Target**

**The ET for the North, Central and Southern Targets is based on 200m airborne survey data interpretation.**

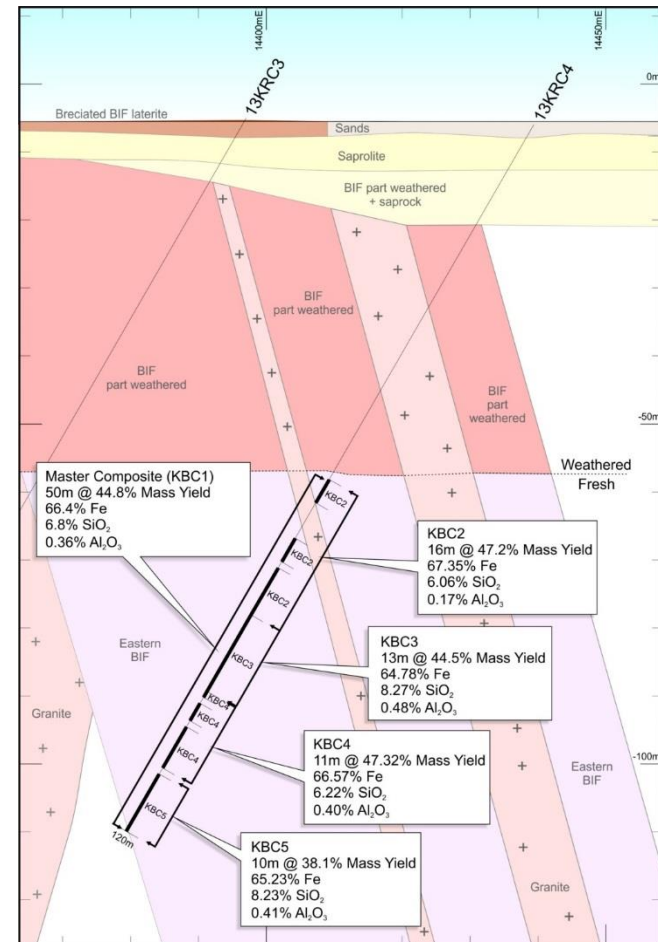
**At the Central Target a 100m infill geophysical data, mapping and drilling of 5RC holes substantiates the reason that the North and Southern geophysical Targets by inference also share like attributes to the Central Target. Further work will require broader ground magnetic survey, infill ground magnetics and further drilling to improve the geological model being reported.**

**Little exploration data is known about the physical - chemical nature of the reported logged drill intercepts at this point. Metallurgy will be an increasing determination.**

*The potential quantity and grade of Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource*

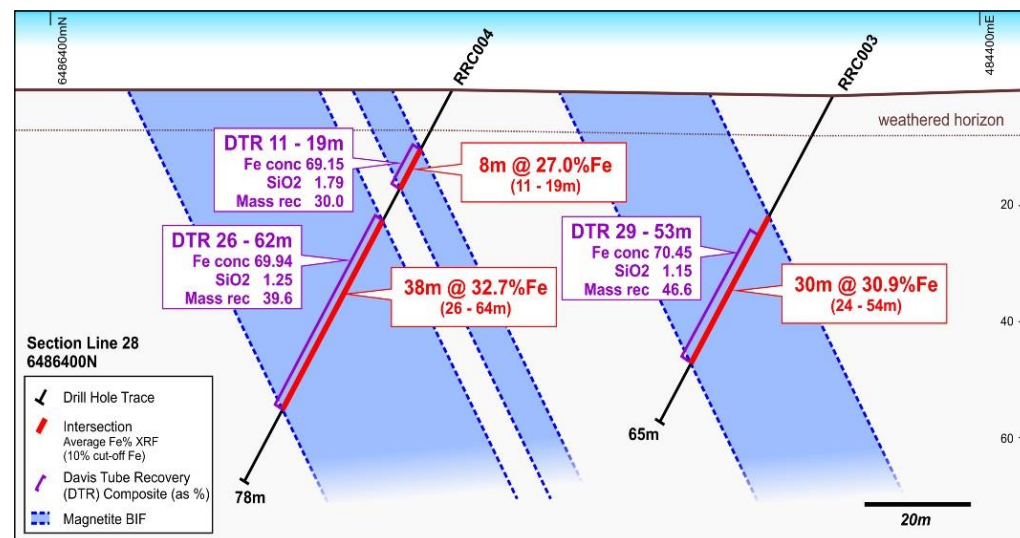
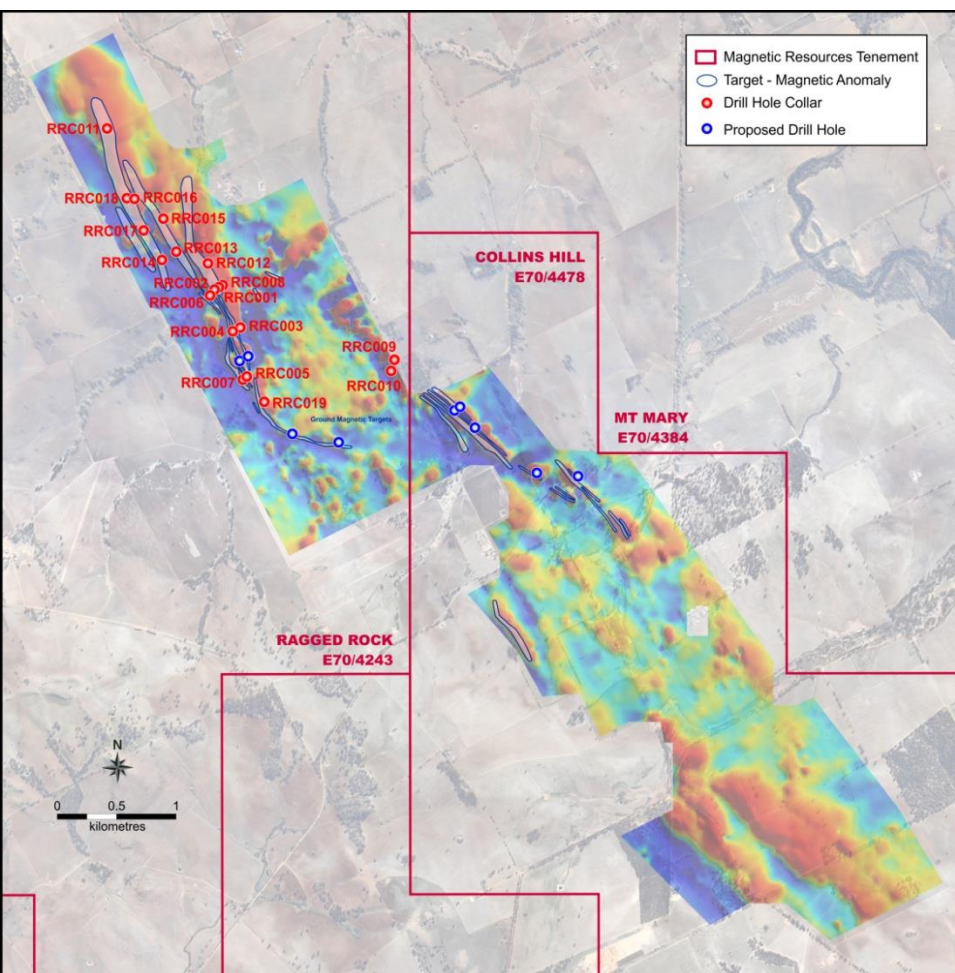
## LOCATION - Kauring : additional potential

- ❑ Wide zones of coarse grained magnetite
- ❑ encountered on both the Eastern BIF(50m) and the Western BIF (40m)
- ❑ Excellent Davis Tube Recovery (45% mass recovery) and high Fe contents averaging 32% Fe head assay over 55m of magnetite BIF
- ❑ Potential for DSO style product from weathered cap (50m depth)





# METALLURGY & GEOLOGY - Ragged Rock



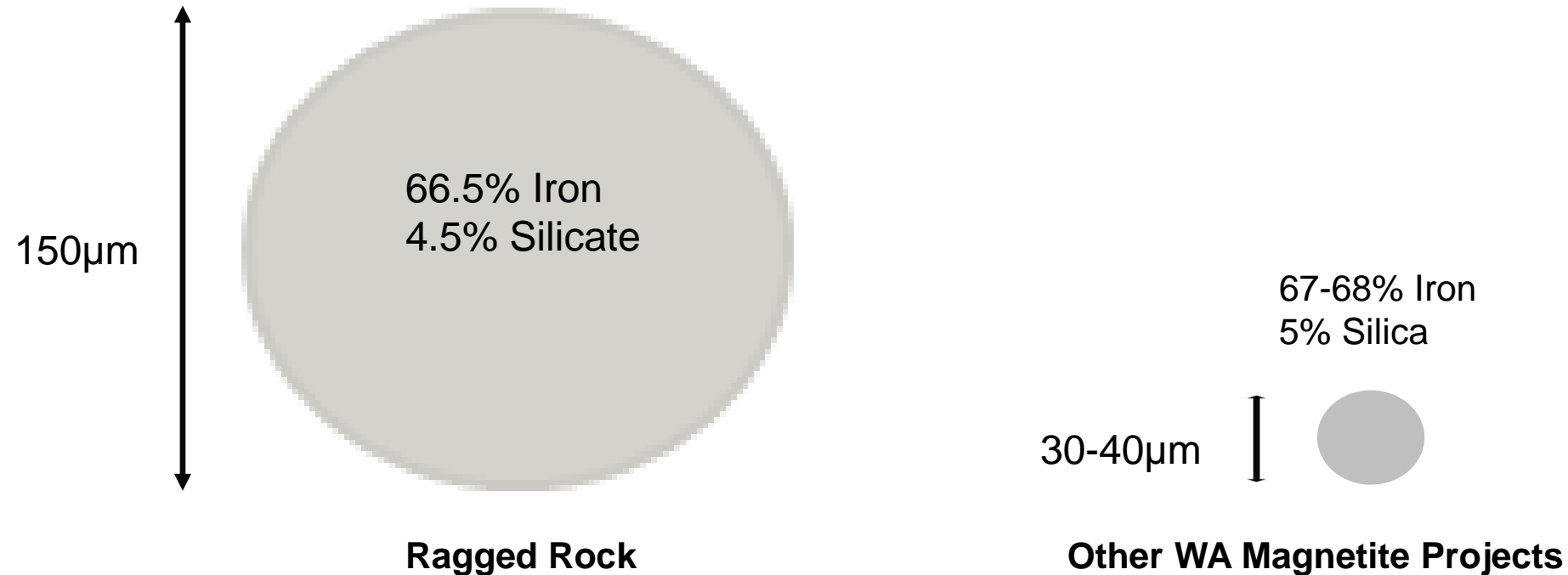
ARE A	NAME	TARGET TONNAGE*	TARGET TYPE	TARGET GRADES %Fe*
1	RAGGED ROCK	100-270Mt	BIF	20-40
2	JUBUK	50Mt	BIF	20-25
3	KAURING	50-100Mt	BIF	20-30

Target tonnage based on drilling results, aeromagnetic and ground magnetic models, historical data, density of 3.5 and target depth of 100m for BIF styles and density of 2.8 and target depth of 250m for gneiss styles. The potential quality and grade is conceptual in nature as there has not yet been sufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the determination of a mineral resource.



- ❑ High quality, coarse grained nature
- ❑ DR quality produced at 75 micron (70% Fe). World class pellet feed at substantially coarser grind than competitors.
- ❑ High quality Sinter Feed at 150 micron (66% Fe). Competes with much lower quality DSO products (~58%Fe)
- ❑ Very low impurities (Silica, Alumina, Phosphorous, Titanium)
- ❑ Very high mass yielding (up to 46.6%). Reduces mining and processing costs considerably

## GEOLOGY - Ragged Rock compared to other Magnetite projects



- Easy to grind = less power
- Easy to separate = better quality
- Easy to filter = no penalties for water
- Easy to transport = no shipping problems
- Simplicity = low cost = low risk
- Readily marketable as sinter feed
- Competing with ~58%Fe DSO products
- Premium product = premium pricing

- At least 3 stages of grinding
- Very challenging processing (magnetic separation, flotation)
- Very challenging to filter = penalties and difficulties to meet TML
- Difficult to transport – liquification (TML)
- High complexity = high cost = higher risk

### Ragged Rock iron ore product quality compares favorably with typical iron ore projects

- ❑ Excellent results from product recoveries testing (DTR) to date:
  - ❑ Premium concentrate with low silica and impurities with corresponding global focus for this high quality concentrate.
  - ❑ Premium direct reduction iron ore pellet feed
- ❑ High weight recovery, leading to increased saleable product per tonne of feed
- ❑ Low impurities consistent with industry benchmarks
- ❑ Low bond work index reduces energy required to liberate iron

Reduced energy requirements

Very low Capex

Lower Opex

Higher profit margin

### Product Recoveries - Test work

	Ragged Rock	Other WA Projects
Grind size required	150µm	26µm→35µm
Concentrate grade	66%	64%-66%
Recovery	35%	20-30%
Energy (total)	~25	≈ 50-60





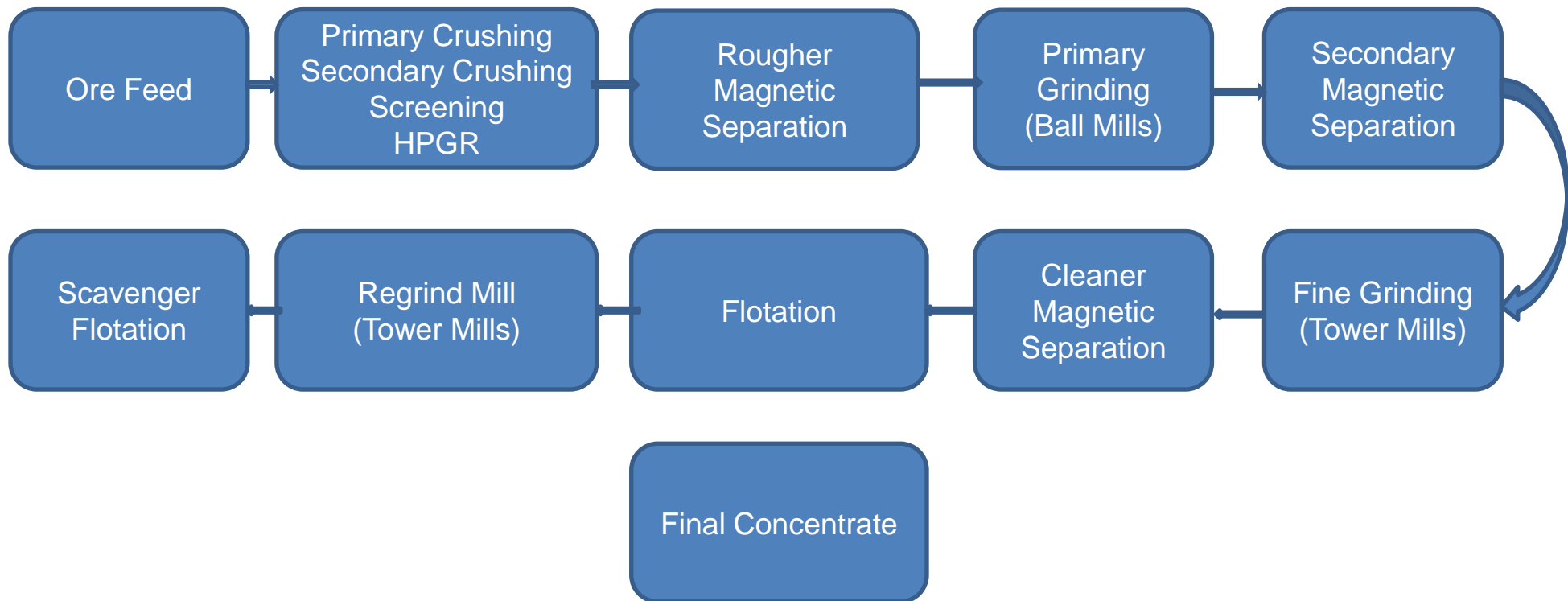
## LOW CAPITAL COST – LOW OPERATING COST

- ❑ No construction of railway required.  
(Most projects require 100km+ of Rail at ~\$4M/km)
- ❑ Located on cleared farm land
- ❑ Minimal environmental issues
- ❑ Fresh water readily available
- ❑ Freehold land = no state royalties
- ❑ Freehold land = no native title claims
- ❑ Quicker approval process
- ❑ Bitumen road from Project site

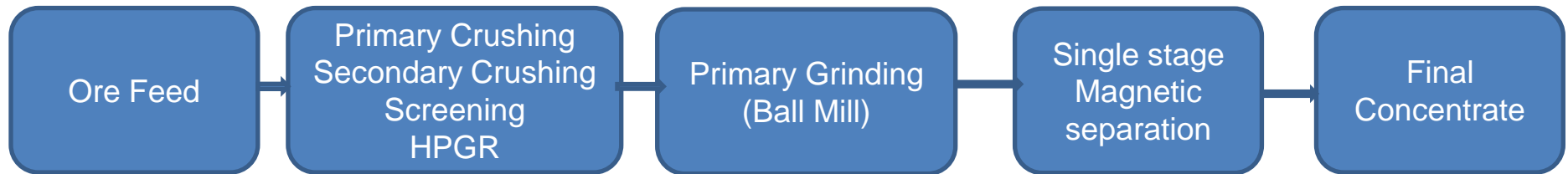




A typical Magnetite flow-sheet for a 30-45 micron product...



## Proposed Ragged Rock flow sheet...



***Coarse grained = Simple flow sheet = Low Capex = Low Opex = high likelihood of success!!***

## LOW CAPITAL COST – LOW OPERATING COST

CAPITAL INTENSITY - WA MAGNETITE PROJECTS		
Project	Planned Throughput (per annum)	Capex \$/annual tonne of concentrate
Southdown	10Mt	\$290
Extension Hill (Asia Iron)	10Mt	\$300
Karara (Gindalbie)	8Mt	\$320
Sino Iron	27.6Mt	>\$330
Magnetic Resources (expected)*	0.5-2Mt	\$90-\$120

- ❑ Significant CAPEX savings possible
- ❑ Magnetite quality delivered for a DSO build price

- ❑ Highly experienced Executive team covering resource identification and discovery, project development, operations and also financing.
- ❑ Ready made project development team invested into the company:
  - Metallurgists, Geologists, Mining Engineers, Managers and Supervisors
  - Key people involved with the start up of FMG, African Minerals and numerous other successful mining projects
  - Commissioning team and Optimisation team of Northern Iron Magnetite project

## TRACK RECORD - Indicative Timetable

	Activity	Completion Date	Activities
1	Initial capital raising	April 2014	Capital Raising to fund JORC drillout (item 2) and commencement of Feasibility Study (item 3)
2	JORC Resource	November 2014	24 RC drill holes aimed at proving up a JORC resource of approx. 70Mt for Ragged Rock Project. Sufficient for a 20 year initial mine life to commence cash flow.
3	Feasibility Study	Dec 2014	<p>Feasibility study to commence approx. April 2014. This work will cover all aspects of Project Development including:</p> <ul style="list-style-type: none"> <li>• Complete Environmental assessment</li> <li>• Complete Hydrogeological assessment (Water supply)</li> <li>• Complete Process Plant Design and Costing (+/-25%)</li> <li>• Complete Mining Design and Costing</li> </ul> <p>Complete Project Financial Modelling</p>
4	Capital Raising for Bankable Feasibility Study and/or Project Construction	Jan 2015	<p>Raise necessary funds for Bankable Feasibility Study. <b>**PLEASE NOTE THIS WILL NOT BE REQUIRED IF A STRATEGIC PARTNER IS FOUND AT THIS POINT IN TIME WHO IS WILLING TO FUND THE DEVELOPMENT FROM CASHFLOW.</b></p> <p>This work will focus on the following:</p> <ul style="list-style-type: none"> <li>• Additional drilling to increase the Resource category, including Indicated Resources (Bankable tonnages for the first several years of mining).</li> <li>• Formalised and committed pricing on Process Plant and Mining Costs</li> </ul>
5	Project Construction	Dec 2015	<ul style="list-style-type: none"> <li>• Includes all approvals processes</li> <li>• Includes construction of Process Plant, Initial Mining and Port infrastructure (if required)</li> <li>• 1,000,000t p.a Iron Ore producer</li> </ul>



- ❑ High grade, coarse grained magnetite, low impurities which is the current focus from the Chinese market.
- ❑ Significantly lower capex and opex project and within 10-15km of rail infrastructure points to stronger economic return
- ❑ Port access readily available
- ❑ Proven management with track record of developing projects
- ❑ 2 key projects – Ragged Rock and Kauring
- ❑ Global focus for high quality low impurity concentrate similar to Ragged Rock and Kauring.

## SUMMARY - Industry comparisons

### Trading comparisons

Company	Market Capitalisation (\$ million)	Share price (\$)	P/E Ratio (x)
Atlas Iron	888	0.975	8.45
Mount Gibson Iron	954	0.88	6.05
Fortescue Metals	16,628	5.34	6.03
BC Iron	592	4.77	5.44
Grange Resources	289	0.25	9.19
Iron Clad Mining	11	0.10	10.31
<b>Median</b>			<b><u>7.6</u></b>
<b>Sector Average</b>			<b>11.28</b>

Source: Netwealth

### Transaction comparisons (projects acquired)

Target	Acquirer	Date	EV (A\$m)	Contained Resource (Mt)	EV / Contained Resource (A\$/t Fe)
Southdown Project (9.9%)	Kobe Steel	Mar 12	285.0	41.2	6.91
Yerecoin Project	Cliffs	Dec 11	18.0	57.8	0.31
Balla Balla Project	Forge Resources	Dec 11	40.0	205.2	0.19
<b>Median</b>					<b>0.31</b>

Source: Bloomberg as at October 2012, Company Announcements.

Magnetic Resources provides a unique opportunity to invest in an emerging premium quality coarse grained magnetite producer with potentially very low Capex requirements and a high likelihood of project success.

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