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In relation to the changes as a result of the independent review of the PFS which has resulted in an increase in the Net Present Value (NPV) of the project to over \$2,780M with an annual EBITDA of \$474M and an increase in production from 8.2Mtpa to 9.3Mtpa, as required under the JORC Code 2012, it must be noted that at a Scoping Level there is a lower level of technical and geological confidence associated with inferred mineral resources than at a PFS level, and therefore there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

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## Razorback Premium Iron Project – South Australia



- **№** IRR of 39%<sup>1</sup>
- 9.3Mtpa production of 67.4% magnetite iron concentrate<sup>2</sup>
- 2.7 Billion tonnes of resources<sup>2</sup>
- PFS complete, independently reviewed

<sup>1</sup>Announced 27/11/13. The production target, or the forecast financial information derived from it, continue to apply and have not materially changed. <sup>2</sup>The Mineral Resource information for the project was prepared and first disclosed under the JORC Code 2004. The information has not been updated to comply with the JORC Code 2012 as the information has not materially changed since it was reported.





# **Presentation Agendum**



- The Razorback Premium Iron Project
- Project Financials
- Corporate Overview
- Summary









### **Investment Case:** Why Magnetite?

- Change in the Chinese Steel industry is being driven by crackdown on polluters
- China is shutting down old steel mills and forcing the rest to reduce energy and pollution levels<sup>1,2,3</sup>
- Lower grade haematite ores (fines) require more energy in the steel making process
- Magnetite concentrate imports by China are going to increase
- India aims to triple its steel capacity to 300 Mtpa by 2025<sup>4</sup>

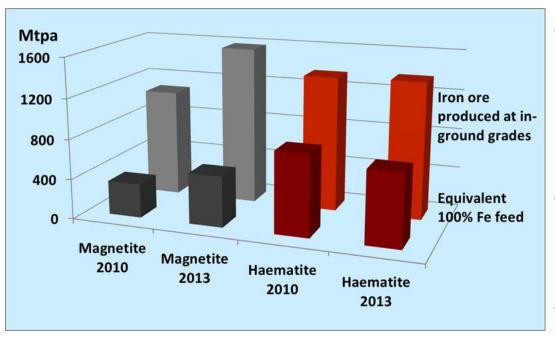


Downtown Shanghai on 5 Dec. 2013 (The Guardian, 26/02/14)

Environmental pressures will change the demand from low grade haematite to premium magnetite



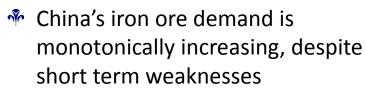
#### **Investment Case:** Magnetite market is increasing



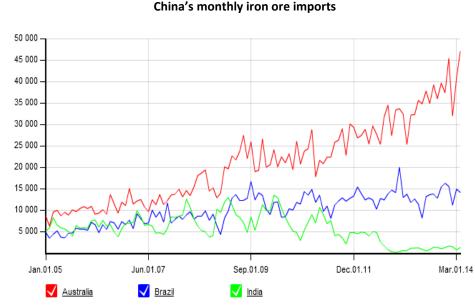
- Magnetite share of blast furnace feed, on a 100% Fe basis, has increased by approximately 49% during 2010 - 2013
- Over the same period, haematite has declined by about 11%
- Reflects the world-wide trend in decreasing haematite grades



### **Investment Case:** Iron ore demand to stay solid



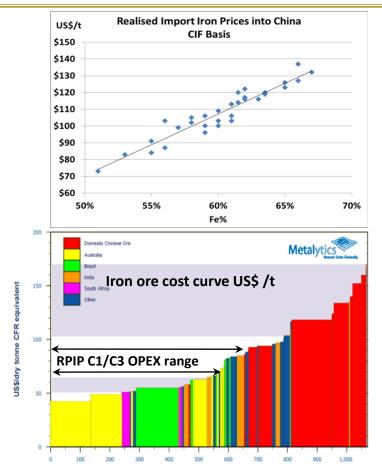
- Iron ore imports at an all time high in July (83 Mt)<sup>1</sup>
- Steel oversupply and crackdown on China's polluters is driving current weeknesss<sup>2</sup>





### **Investment Case:** Premium product pricing

- Low grade haematite producers report increasingly deep discounts
- ♣ 58% Fe DSO haematite now receiving only 80% of the spot price
- High grade iron ore attracts a pricing premium
- Magnetite receives a premium of typically US\$2 to US\$5/Fe%/t

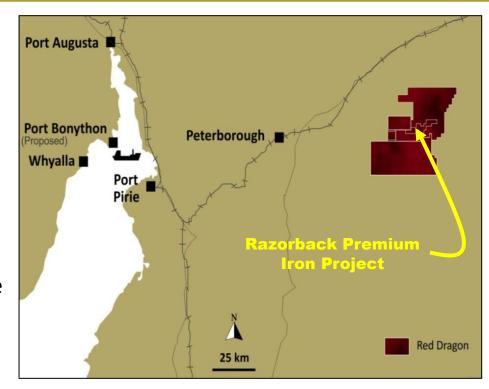


Sources: <a href="www.umetal.com">www.steelhome.cn</a>, Royal Resources analysis, Metalytics, FMG June 2014 Quarterly Report



### Razorback Premium Iron Project: Not a remote operation

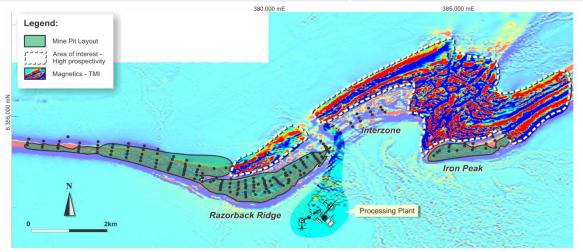
- Razorback is one of the largest undeveloped magnetite resources in Australia
- Close to coast, grid power, and skilled labour force
- Over 1,400km² tenement holding in South Australia
- Razorback is the gateway to the emerging Braemar Iron District
- Sole management focus is this 100% owned Razorback Premium Iron Project





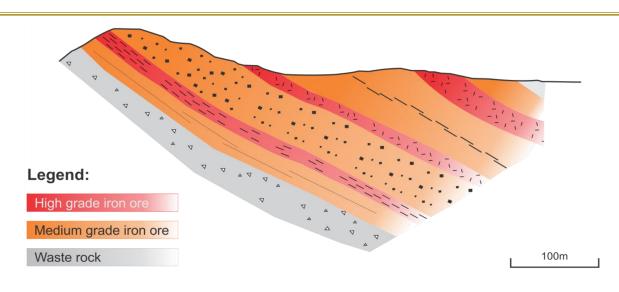
# Razorback Premium Iron Project: Deposit geology

Characteristics	Benefit to Project
Magnetite in metamorphic sediment, not hard BIF	Softer ore for mining and crushing
Simple layer cake geology	Simple mine design
Average 300 metres thick and 10km in length	Very low stripping ratio (<0.25:1)
Outcropping	No pre-strip





# Razorback Premium Iron Project: Thick mining widths, from surface



Stratigraphic Units	Million Tonnes <sup>1</sup>	DTR%	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Р%
Unit A,B1,B3,D,G	1,783	16.2	19.8	46.9	7.7	0.19
Low Grade - Unit B2, C and E	949	13.5	15.2	50.3	8.7	0.15
Total <sup>1</sup>	2,732	15.3	18.2	48.1	8.0	0.18
Magnetite Concentrate	424	100	67.4	4.74	0.54	0.016

<sup>&</sup>lt;sup>1</sup> Tonnages rounded to significant values. Total may not appear correct as a result. Inferred and Indicated Resource. Reported under the JORC<sub>2004</sub> Code and announced 11/6/13. There have been no material changes to the Mineral Resources since that time requiring updating to JORC<sub>2012</sub> 1



# Razorback Premium Iron Project: A new generation mine

	Common Issues*	Razorback Solution
ı	Hard ore: excessive wear rate	Half the hardness and a third the abrasiveness of BIFs
	Difficult tailings dewatering	Use of sea water obviates the need for full water recovery
Š	Sticky ores	Simple mineralogy of Razorback ores, no clays or sulphides
	Barging & wharf delays	RPIP product is slurried directly on to a floating stockpile
	Dangerous fibres	None present
	Use of local ground water	Use sea water - local water resources are untouched
	Diesel and tyre dependent shovel and truck mining	In-pit Crushing and Conveying minimises soft tyred vehicle fleet and enhances safety in the pit
	Multi-handling of product	Slurry pipeline eliminates multi-handling; reduced OPEX and CAPEX
	Need for a Cape sized conventional port	Product is slurried directly onto a Cape size floating stockpile in deep water. No port required

<sup>\*</sup> Sino, Karara, Roper Bar mines

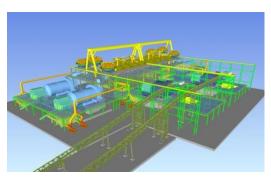


# Razorback Premium Iron Project: Conventional mining & processing

- Lower cost In-Pit Crushing and Conveying (IPCC)
- No pre-strip, low Life of Mine strip, long mine life +25 years
- 9.3Mtpa production using two-module processing plant, each consisting of:
  - SAG Mill
  - Two Ball Mills, 45μm grind size
- Iron recovered via a 3 stage wet LIMS<sup>1</sup> all sea water processed



Sino Iron Project in-pit crusher



Proposed RPIP processing plant



Proposed RPIP mine layout



## Razorback Premium Iron Project: Integrated "to ship" infrastructure

- Single infrastructure corridor for slurry pipeline, power, water, and communications
- Pipelines are buried safe and environmentally benign
- Low cost state grid power
- Closed circuit sea water
- Pipeline loads slurry directly to a permanently moored dewatering transshipment vessel (DTSV)
- Direct access to Cape sized anchorage for optimum shipping sizes; obviates the need for a conventional port





# Project Financial: Large, low cost, premium grade magnetite

- Long-life operation (+25 years) backed by **2.7 Billion tonne** Mineral Resource<sup>2</sup>
- ₱ 9.3 Mtpa 67.4% Fe magnetite concentrate production¹
- ♣ \$1,200 Million CAPEX, sub \$69/t OPEX estimates
- ♣ \$2,780 Million NPV, 39% IRR with an average EBITDA of \$474 Million¹
- Third party to provide all transport and utilities infrastructure
  - Braemar Infrastructure owned by Gordon Toll (major shareholder in Royal)

<sup>1</sup>Announced 27/11/13. The production target, or the forecast financial information derived from it, continue to apply and have not materially changed. <sup>2</sup>The Mineral Resource information for the project was prepared and first disclosed under the JORC Code 2004. The information has not been updated to comply with the JORC Code 2012 as the information has not materially changed since it was reported.





# **Project Financials:** Peer analysis



	Razorback <sup>1</sup>	Karara <sup>2</sup>	Sino <sup>3</sup>	Central Eyre <sup>4</sup>	Hawsons <sup>5</sup>
Owner	Royal (100%)	Gindalbie/ Angang (38:62)	CITIC Pacific (100%)	Iron Road (100%)	Carpentaria (60%)
Pre-strip	0	\$184M	35Mt \$???	US\$480M	60-100m \$???
Strip ratio (waste: ore)	0.2	0.42	1.2	1.22	0.3
Grind size (μm)	45	28	28	130	35
Mass recovery	15.5%	40.8%	32.0%	15.1%	14.9%
Mined rock: saleable product (t/t)	7.7	3.5	6.9	14.7	8.7
Power requirement (MW/t)	9.5	15.0	16.1	21.0	8.7
Product grade (Fe SiO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )%	67.4 4.7 0.5	65.0 4.8 0.1	65.0 6.5 ?	67.0 4.0 2.0	69.7 2.9 0.2
Transport to coast	Pipeline	Rail	Pipeline	Rail	Truck & rail
Port	DTSV	Geraldton	New	New	Port Pirie
CAPEX (Million)	A\$1,200	\$2,750	\$9,500	US\$3,980	\$3,100
Capital Intensity	A\$129/t	\$275/t	\$339/t	US\$185/t	~ \$160/t
OPEX (per tonne of product)	A\$69/t	\$76/t <sup>6</sup>	~\$100 - \$140	US\$44/t???	N/A
NPV (Million)	A\$2,780	\$2,252	-	US\$2,690	\$3,200
IRR (pre-tax*, post-tax*)	39%*	24.6%*	-	21%#	23%*
	Pre-strip Strip ratio (waste: ore) Grind size (µm) Mass recovery Mined rock: saleable product (t/t) Power requirement (MW/t) Product grade (Fe SiO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )% Transport to coast Port CAPEX (Million) Capital Intensity OPEX (per tonne of product) NPV (Million)	OwnerRoyal (100%)Pre-strip0Strip ratio (waste: ore)0.2Grind size (μm)45Mass recovery15.5%Mined rock: saleable product (t/t)7.7Power requirement (MW/t)9.5Product grade (Fe SiO2 Al2O3)%67.4 4.7 0.5Transport to coastPipelinePortDTSVCAPEX (Million)A\$1,200Capital IntensityA\$129/tOPEX (per tonne of product)A\$69/tNPV (Million)A\$2,780	Owner         Royal (100%)         Gindalbie/Angang (38:62)           Pre-strip         0         \$184M           Strip ratio (waste: ore)         0.2         0.42           Grind size (μm)         45         28           Mass recovery         15.5%         40.8%           Mined rock: saleable product (t/t)         7.7         3.5           Power requirement (MW/t)         9.5         15.0           Product grade (Fe SiO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )%         67.4 4.7 0.5         65.0 4.8 0.1           Transport to coast         Pipeline         Rail           Port         DTSV         Geraldton           CAPEX (Million)         A\$1,200         \$2,750           Capital Intensity         A\$129/t         \$275/t           OPEX (per tonne of product)         A\$69/t         \$76/t <sup>6</sup> NPV (Million)         A\$2,780         \$2,252	Owner         Royal (100%)         Gindalbie/ Angang (38:62)         CITIC Pacific (100%)           Pre-strip         0         \$184M         35Mt \$???           Strip ratio (waste: ore)         0.2         0.42         1.2           Grind size (μm)         45         28         28           Mass recovery         15.5%         40.8%         32.0%           Mined rock: saleable product (t/t)         7.7         3.5         6.9           Power requirement (MW/t)         9.5         15.0         16.1           Product grade (Fe SiO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )%         67.4 4.7 0.5         65.0 4.8 0.1         65.0 6.5 ?           Transport to coast         Pipeline         Rail         Pipeline           Port         DTSV         Geraldton         New           CAPEX (Million)         A\$1,200         \$2,750         \$9,500           Capital Intensity         A\$129/t         \$275/t         \$339/t           OPEX (per tonne of product)         A\$69/t         \$76/t <sup>6</sup> ~\$100 - \$140           NPV (Million)         A\$2,780         \$2,252         -	Owner         Royal (100%)         Gindalbie/ Angang (38:62)         CITIC Pacific (100%)         Iron Road (100%)           Pre-strip         0         \$184M         35Mt \$???         US\$480M           Strip ratio (waste: ore)         0.2         0.42         1.2         1.22           Grind size (μm)         45         28         28         130           Mass recovery         15.5%         40.8%         32.0%         15.1%           Mined rock: saleable product (t/t)         7.7         3.5         6.9         14.7           Power requirement (MW/t)         9.5         15.0         16.1         21.0           Product grade (Fe SiO <sub>2</sub> Al <sub>2</sub> O <sub>3</sub> )%         67.4 4.7 0.5         65.0 4.8 0.1         65.0 6.5 ?         67.0 4.0 2.0           Transport to coast         Pipeline         Rail         Pipeline         Rail           Port         DTSV         Geraldton         New         New           CAPEX (Million)         A\$1,200         \$2,750         \$9,500         US\$3,980           Capital Intensity         A\$129/t         \$275/t         \$339/t         US\$185/t           OPEX (per tonne of product)         A\$69/t         \$76/t <sup>6</sup> ~\$100 - \$140         US\$2,690

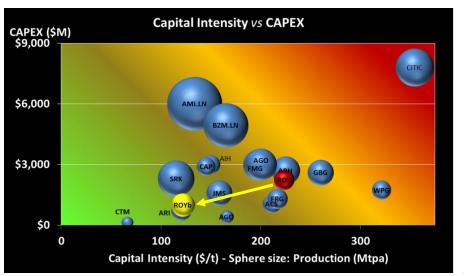
<sup>&</sup>lt;sup>1</sup> ROY 27/11/13, <sup>2</sup> GBG 3/9/07, <sup>3</sup> CITIC source, <sup>4</sup> IRD 26/2/14, <sup>5</sup> CAP 23/5/11, 25/2/14, 28/4/14 <sup>6</sup> Morning Star analysts report, 25/10/13



### **Project Financials:** Low Capital Intensity – \$129/t

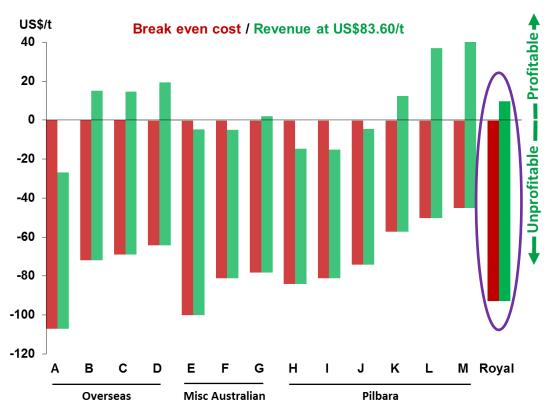
	PFS Base Case, 6.2Mtpa	Outsourced Infrastructure, 9.3Mtpa	BOO Infrastructure, 9.3Mtpa
CAPEX	A\$2,234M	A\$1,200M	A\$2,420M
OPEX (C1) FOREX parity	A\$68/t	A\$69/t	A\$58/t
OPEX (C1) A\$1:US\$0.85 FOREX	US\$58/t	US\$58/t	US49/t

- The Base Case places the project on the general trend of like projects around the world ("ROY")
- The Optimised Case makes it one of the lowest capital intensity projects in the industry ("ROYb")





### **Project financials:** RPIP is robust under weakening iron ore prices



- At low iron spot pricing the RPIP remains profitable
- A lot of DSO haematite companies are not
- Profitability driven by premium on quality product



## **Summary:** Credentials and project metrics make a compelling case

- Razorback has one of the lowest capital intensive magnetite projects in Australia
- An impressive NVP of \$2.7 Billion and IRR of 39%<sup>1</sup>
- MoU with major shareholder Gordon Toll's Braemar Infrastructure to provide all transport and infrastructure, heavily reducing the CAPEX
- Razorback is a part of a new generation of Magnetite Projects, with lessons learned from recent developers
- Experienced, compact and aligned Board
  - Only one capital raising in the last 5 years
  - PFS brought on in record time
  - One project focussed

<sup>&</sup>lt;sup>1</sup>Announced 27/11/13. The production target, or the forecast financial information derived from it, continue to apply and have not materially changed.



### **Appendix:** Corporate Overview of Royal Resources Limited



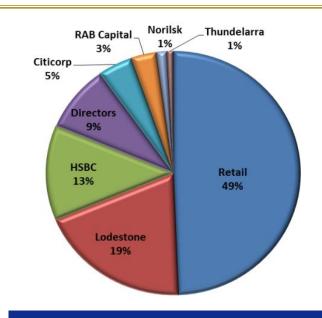
COMPANY SNAPSHOT	Issued shares	348.63M	
	Share price	5.0c	2.5 – 7.0c (12 months)
	Market Cap	\$17.4M	
	Cash (31.3.14)	\$3.2M	+\$100k in investments
	Тор 20	59%	

# BOARD OF DIRECTORS

Phil Crabb	Chairman
Marcus Flis	Managing Director and CEO
Frank DeMarte	Non Executive Director
Mal Randall	Non Executive Director

PROJECT MANAGER

Dr Gavin England Chief Geologist



Diversified register with supportive corporate, institutional investors and private investors.

Contact: info@royalresources.com.au