

## ASX ANNOUNCEMENT

9 JUNE 2023

### IRON PEAK DEPOSIT MAIDEN ORE RESERVE

#### Highlights:

- **Maiden 362Mt at 16.8% mass recovery Probable Ore Reserves defined for Iron Peak deposit**
- **Iron Peak prioritised in mining schedule to benefit from higher grade**
- **Further Iron Peak upside potential pending further drilling and studies**
- **Razorback Iron Ore Project Ore Reserves increased to 2.0 billion tonnes**

#### Magnetite Mines CEO Tim Dobson commented:

*“We are excited to announce the maiden Probable Ore Reserve for Iron Peak, our highest quality magnetite deposit, adding 362 million tonnes to existing Ore Reserves. The MGT team has done an extraordinary job in growing the Razorback Iron Ore Project Ore Reserves from zero to two billion tonnes in under two years.*

*“Importantly, the conversion of the recently upgraded Iron Peak Mineral Resource to Ore Reserves not only adds years to the potential mine life, it also improves the economics of the Project due to the higher grade nature of the Iron Peak mineralisation and improved metallurgical response.*

*“The rapid growth in Ore Reserves at Razorback coincides with the Company’s transformation in readiness to lead the development of the Project, and the increasing interest of regional iron & steelmakers and major supply chain investors in securing the premium grade ore necessary to achieve low carbon steel production.*

*“We are also encouraged by the fact that Iron Peak remains open at depth and along strike and the study team is currently assessing potential further upside from the deposit from further drilling and investigations.”*

**Magnetite Mines Limited (ASX:MGT)** is pleased to announce an increase to its Probable Ore Reserves estimate for its 100% owned Razorback Iron Ore Project<sup>1</sup>, following a mining study completed by AMC Consultants which included the updated Iron Peak Mineral Resource Estimate<sup>2</sup>:

Table 1. Razorback Iron Ore Project Ore Reserves estimate at June 2023

Probable Ore Reserves*	Tonnes Mt	eDTR %	Fe %	Mag %
Weathered	149	12.9	17.9	10.7
Primary	1,828	14.8	17.5	13.9
<b>TOTAL</b>	<b>1,977</b>	<b>14.6</b>	<b>17.5</b>	<b>13.7</b>

\*Ore Reserves are a subset of Mineral Resources and are quoted at an 8% eDTR (Mass Recovery) cut-off grade

The updated Ore Reserves estimate for the Project has been derived from the recently updated Mineral Resources<sup>2</sup> by generating schedules with an estimated tonnage and grade which, in the opinion of the Competent Person, form the basis of a technically and economically viable project, after taking account of material relevant Modifying Factors. The Ore Reserves is an update to the previous announced Ore Reserve which only included mineralisation from the Razorback Ridge deposit<sup>1</sup>.

The term 'economically mineable' as used in the JORC 2012 guidelines implies that, in the judgement of the Competent Person, extraction of the Ore Reserves has been demonstrated to be both economic and viable using reasonable technical and financial assumptions. These assumptions have been provided by the Company, by various consulting and advisory groups commissioned by the Company, and by AMC Consultants, and have been reviewed by the Competent Person. Studies have confirmed a mine plan and production schedule that are technically achievable and economically viable and from which the Ore Reserves are derived.

### Summary Of Reporting Criteria

The updated Ore Reserves are classified as **Probable Ore Reserves** following JORC 2012 code and guidelines and are based on the Indicated Mineral Resource Estimate at the Razorback Iron Ore Project<sup>2</sup>. The Ore Reserves have been determined by AMC Consultants after consideration of all relevant geological, mining, metallurgical, social, environmental, statutory and financial aspects of the Project.

The capital and operating cost assumptions supporting the Ore Reserves estimate are based on pre-feasibility study (PFS) level cost estimates derived from optimisation studies conducted in early 2023. The cost estimates comprise a combination of AACE Engineering standards to Class 3, 4 and 5 level estimates with a targeted capital accuracy of  $\pm 25\%$ . The assumptions specific to the Ore Reserves estimation are summarised below and are further disclosed within JORC Table 1 – included as Appendix 1 to this announcement.

Ore Reserves were based on the Indicated portion of the Razorback and Iron Peak Mineral Resource Estimate<sup>2</sup> with small amounts (less than 2%) Inferred Mineral Resources and unclassified material added as dilution. The Ore Reserve was based on an open pit optimisation of the February 2023 block model<sup>1,2</sup> for the Razorback and adjacent Iron Peak deposits utilising appropriate modifying factors, followed by detailed mine design and mining production schedules.

### Project Overview

The Razorback Iron Ore Project utilises conventional truck and shovel open pit mining, with all rock requiring blasting. Two low strip ratio deposits, Razorback and Iron Peak, are mined delivering 38 Mtpa to the ROM pad. This feeds a processing plant employing tested technologies to produce 5 Mtpa of 68.5% Fe concentrate<sup>3,4</sup>. This will be hauled in road trucks approximately 50 km to the Broken Hill to Port Pirie rail line where a siding will be constructed to allow the concentrate to be loaded on to trains<sup>5</sup>. From there the concentrate will be hauled to Whyalla where it will be exported through the existing port infrastructure. Both the rail system and the port have sufficient available capacity to export 5 Mtpa of concentrate without capital expansions.

## Estimation Methods, Mining Methods and Assumptions

The calculation of Ore Reserves assumes the use of conventional open pit mining techniques involving drill and blast, truck and shovel operations, to extract a maximum of 38 million tonnes per annum (Mtpa) of ore for processing. The resulting mining schedule for the Project establishes a Life of Mine (LOM) strip ratio of 0.42 (waste to ore). The strip ratio for the initial 5-year period is 0.17, indicating that no significant pre-stripping is required. Mining areas with lower costs are prioritised during the early stages to enhance the project's value.

AMC Consultants Pty Ltd completed all mine planning activities, building upon their previous Razorback deposit studies which began in 2022 to develop an optimised mine plan. The early strategic analysis for the 5Mtpa concentrate production case suggested mining rates in the range of 40Mtpa to 70Mtpa will be required, which aligns with the use of 400t and 600t face shovels. A bench height of 10 metres was selected as it provided the best balance between ore dilution, drill and blast costs, and mining costs, and it is suitable for either of these shovel sizes. It is assumed that all mined material will require blasting.

AMC conducted a review of the 2013 Geotechnical assessment conducted by Golder Associates, which recommended a safe pit design with a wall angle of 75°, a berm width of 8.5 metres, and a batter height of 20 metres. With allowance for ramps this gave an overall wall angle of approximately 45°. Given the low strip ratios, sensitivity analysis identified that the Ore Reserve is not sensitive to changes in overall wall angle.

Subsequent to the determination of the pit geometry, AMC applied dilution to the Razorback Resource Model by consolidating across the strike based on cut-off grade and minimum mining width. Due to the deposit's massive nature and limited internal dilution, this led to an overall dilution of 3.3% and ore loss of 2.0% for Razorback, and dilution of 7.0% and ore loss of 6.3% for Iron Peak. The process led to minor (less than 2%) amounts of Inferred Mineral Resource and unclassified material being included in the Ore Reserve.

Open pit limits were optimised using the Whittle 4X® implementation of the Lerchs-Grossman (LG) algorithm, and the development sequence was optimised using the Minemax® software suite. These analyses defined the ultimate pit boundaries and demonstrated that >97% of the Indicated Mineral Resources generated positive cash flows when the base case parameters were applied.

The graphs in Figure 1 and 2 shows the LG results for the Razorback and Iron Peak deposits respectively.

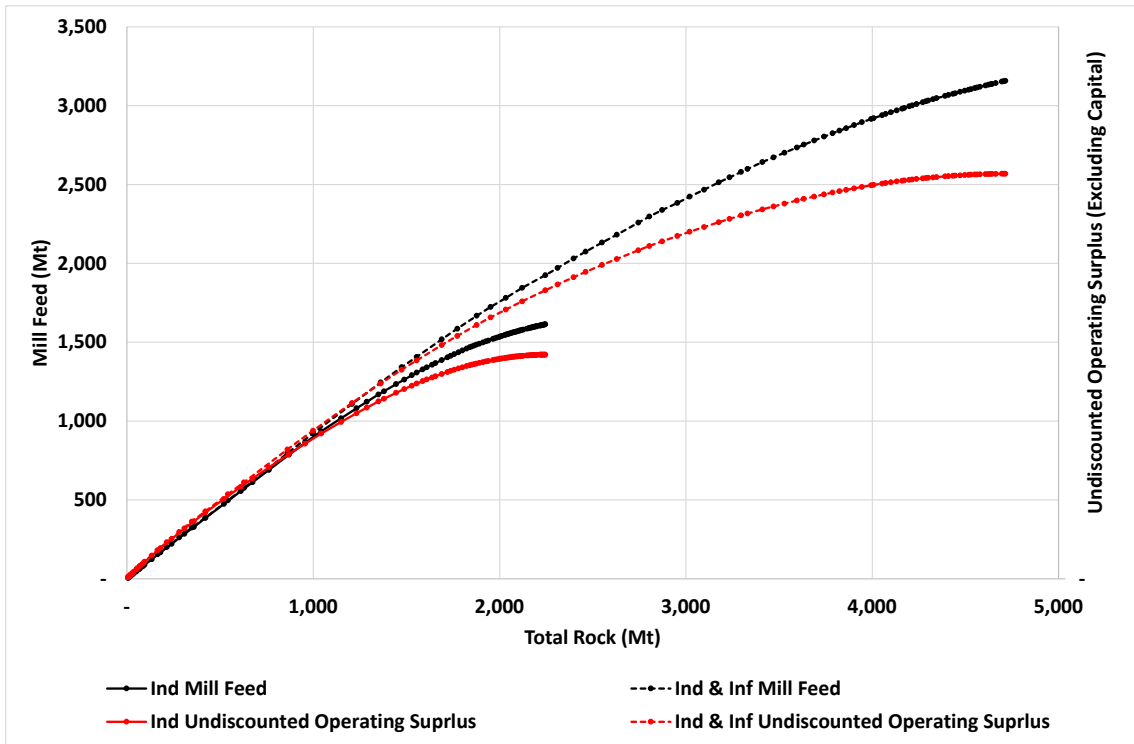


Figure 1. LG Results - Razorback - Mill Feed and Indicative Operating Surplus

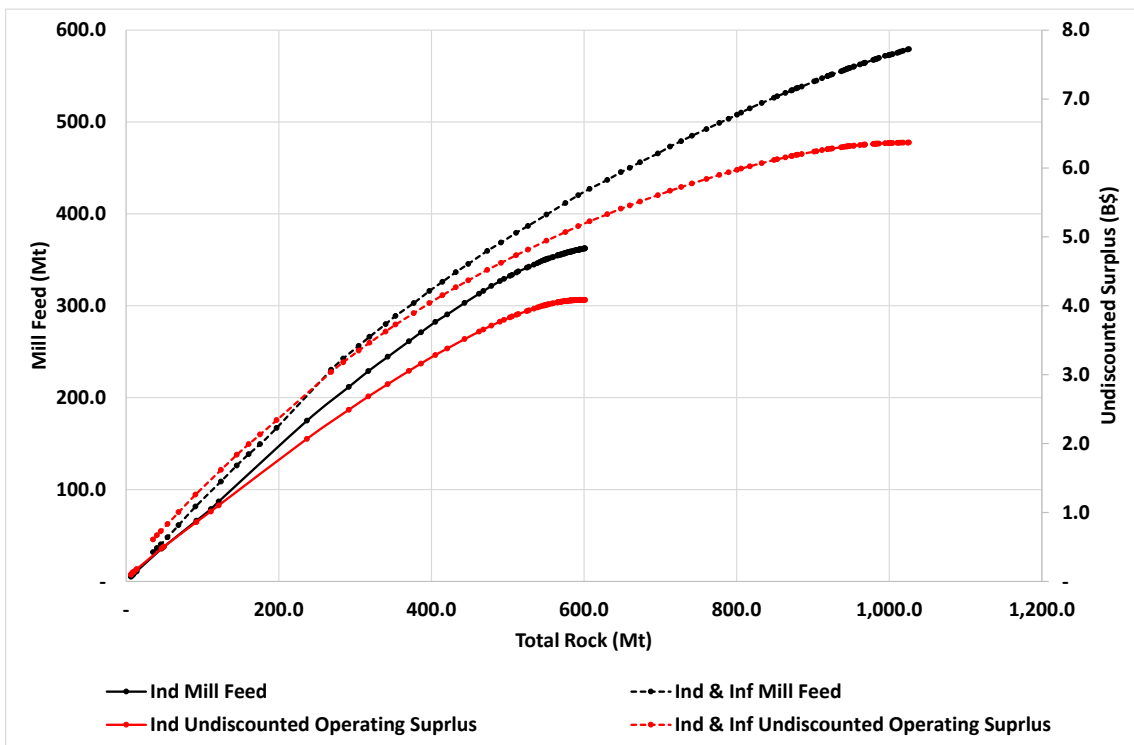


Figure 2. LG Results - Iron Peak - Mill Feed and Indicative Operating Surplus

The LG analysis developed shells at commodity prices up to the base case scenario. The graphs illustrate how the maximum surplus shell is very close to the shell generated using the base case parameters for both deposits.

The LG analysis identified that the base of the LG shells are driven by the boundary with Inferred Mineral Resources not a geological boundary or economic constraint, and it was considered appropriate to include all the Indicated Mineral Resources in the designs.

Review of the shells generated highlighted that the LG shells were reaching the base of the Indicated Mineral Resources at relatively low commodity prices, and then adding small peripheral increments.

This is illustrated in the section in both Figures 3 and 4 which shows the maximum surplus shell for both the Indicated only and the Indicated and Inferred cases.

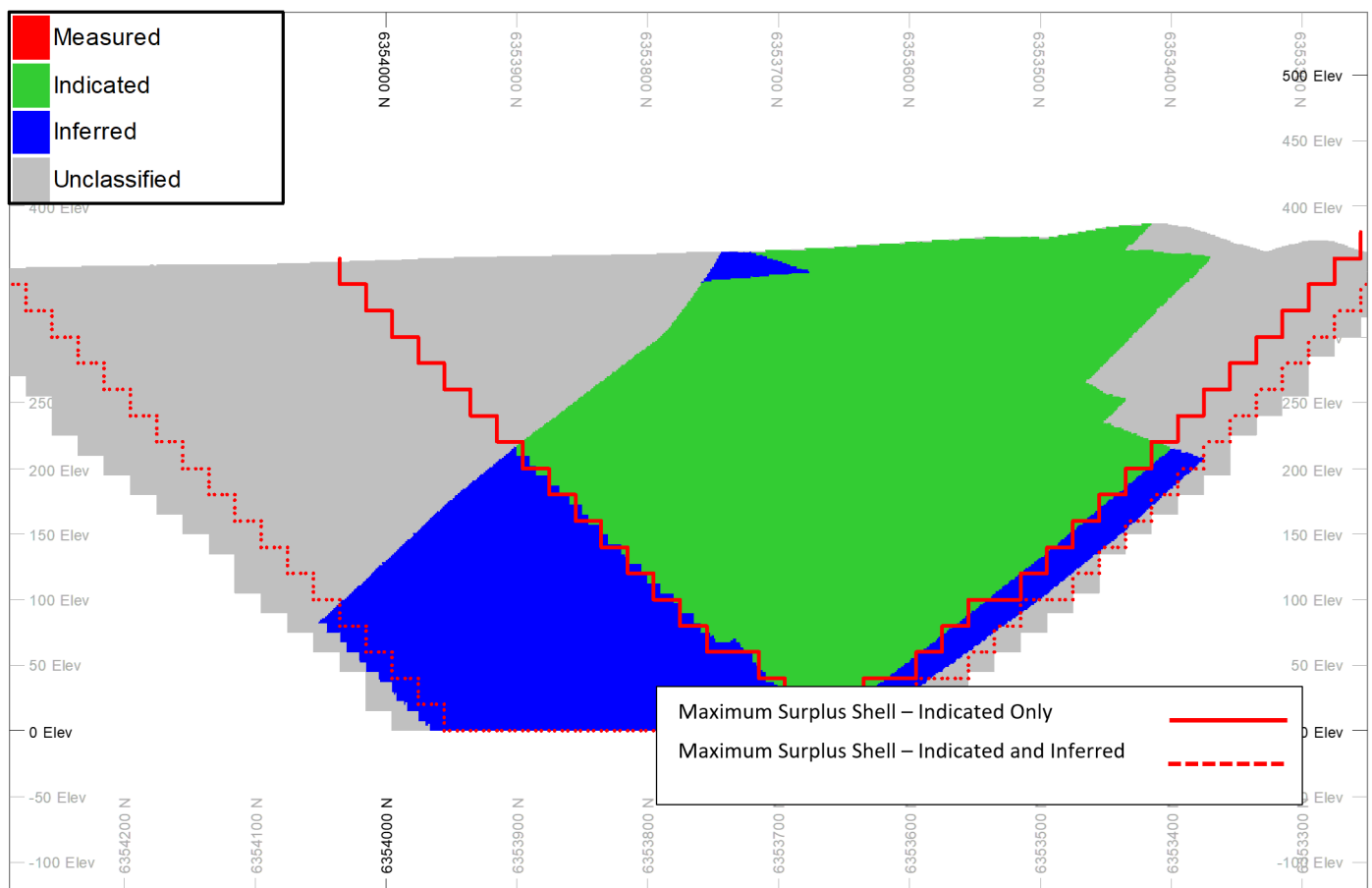


Figure 3. LG Results – Razorback – Classification and Shell Sections at 377,500 mE

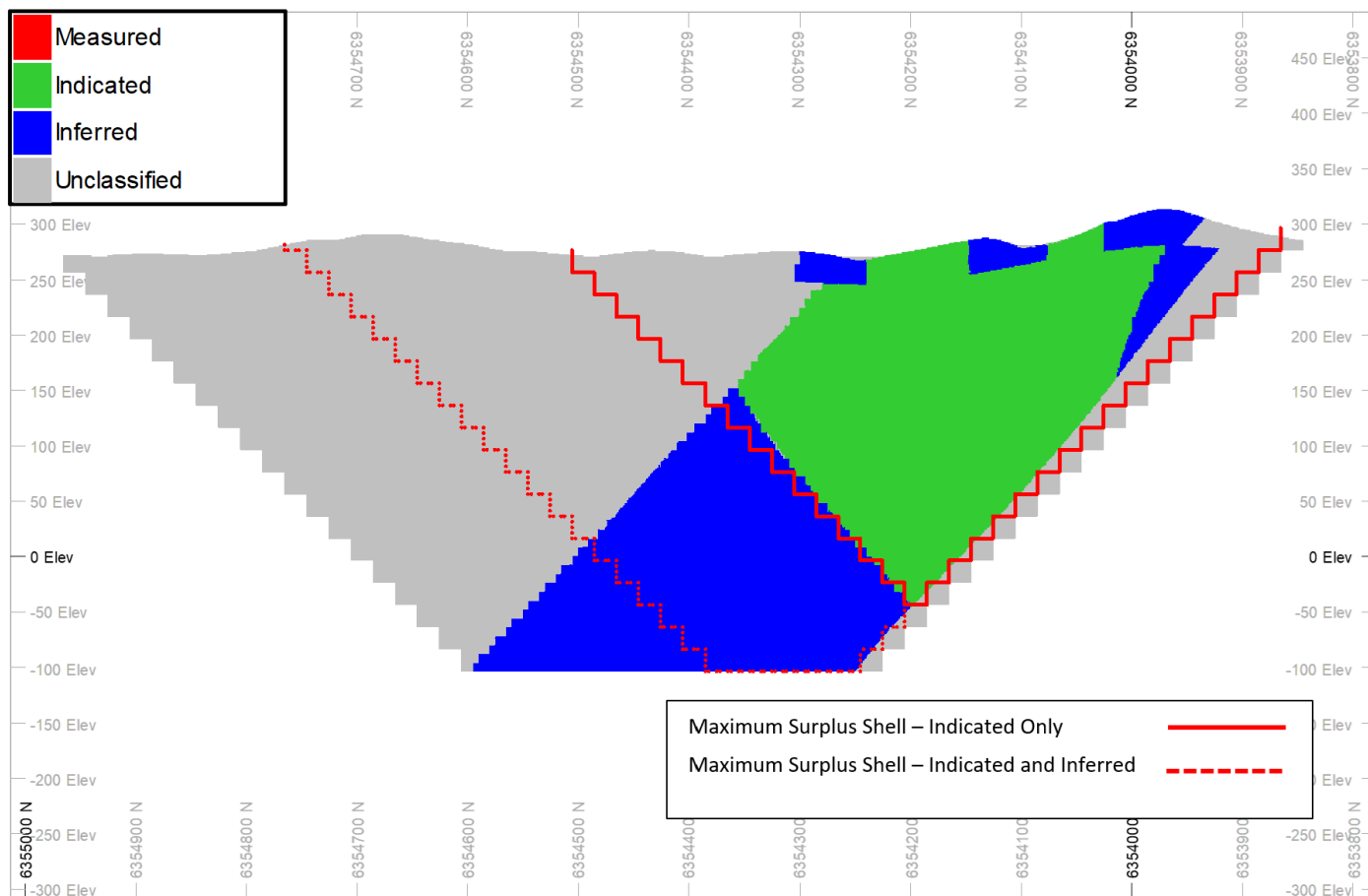


Figure 4. LG Results – Iron Peak – Classification and Shell Sections at 385,000 mE

The sections illustrate how the LG is hitting the bottom of that classification (Indicated) in both cases, and the base of the shell is not driven by an economic constraint, but by the level of confidence.

These shells indicate how the majority of Indicated Mineral Resource can potentially generate a positive surplus at the base case parameters. Hence it was decided to base the designs on the maximum surplus Indicated only shells shown in Figure 3 and 4.

The Minemax<sup>®</sup> schedule optimiser (software) was used with a conceptual haulage model to identify the pit development sequence which would maximise the value of the project. The LG shell and sequencing results were then used to guide the ultimate and staged pit designs.

Sequencing analysis tested the effect of different crushing locations and material handling options. The analysis identified there was no material difference in the development sequence driven by the different material handling options. It was decided to proceed with truck haulage to the primary crusher location identified in the PFS. Figure 5 illustrates the development sequence selected as the basis for design of the stages and ultimate pit.

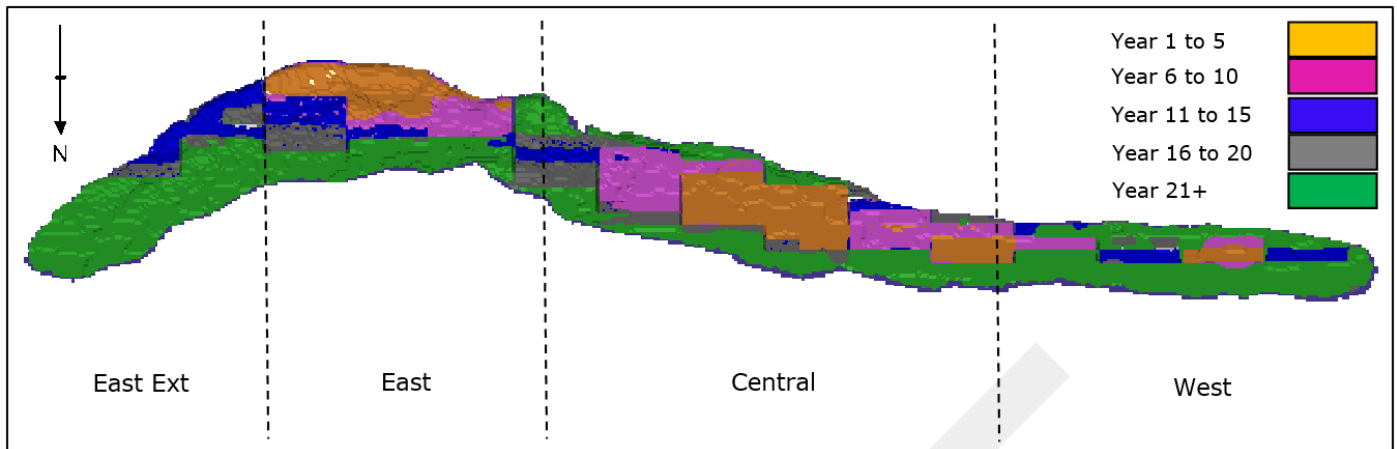


Figure 5. Development Sequence Plan – Primary Crusher

The analysis identified a sequence of stages developing Razorback from two areas in the centre and east of the deposit which expand to initially join and then expand to the east and west pit limits in a series of thirteen stages. Iron Peak has two starter pits in the east and west of the deposit, the third stage consolidates the initial two stages, and the final stage pushes out to the north-east pit limit.

A detailed haulage model was developed, and the stages were scheduled using Minemax software to identify the optimal schedule to deliver the required concentrate.

The bench turnover rates required for the schedule are generally low and illustrate that mine development should not be a potential risk to achieving the plan.

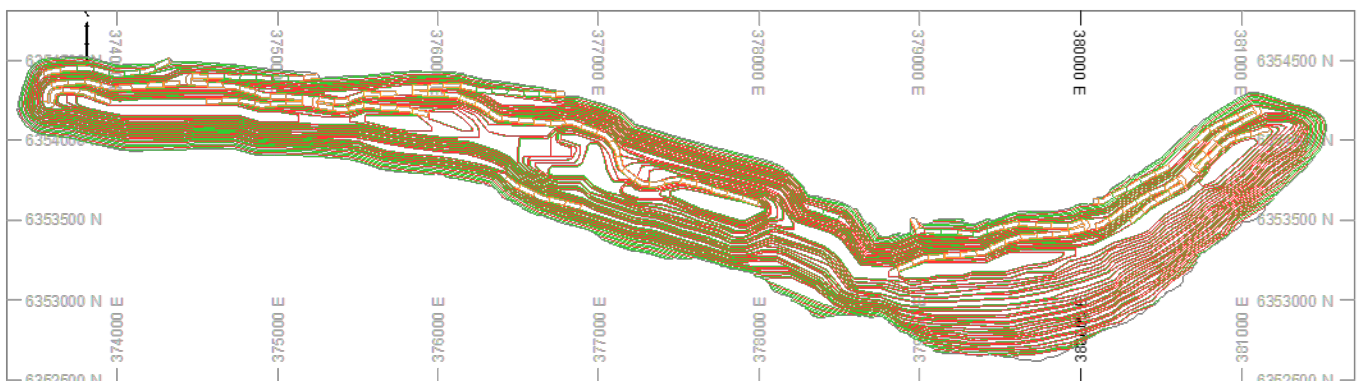


Figure 6. Fully refined mine design of final pit shell at Razorback deposit

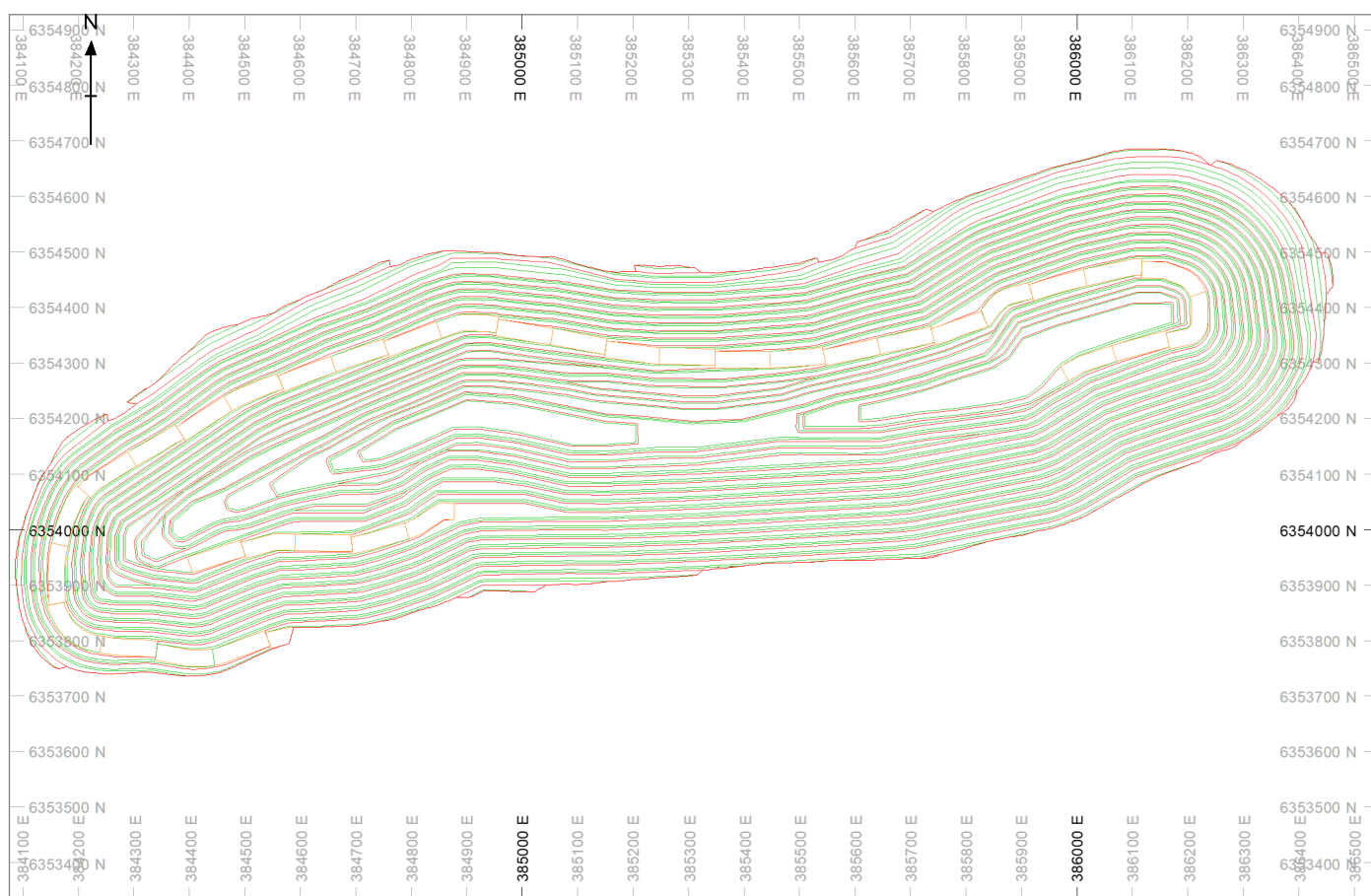


Figure 7. Fully refined mine design of final pit shell at Iron Peak deposit

Revenue inputs for the mining schedule used a 97% eDTR to plant mass recovery conversion factor (as advised by Hatch) and a 68.5% Fe concentrate quality (see below). All mining capital and operating cost inputs are based on OEM budget pricing and AMC's various databases.

### Processing Methods and Assumptions

Extensive metallurgical test work has been completed for the Razorback Iron deposit as previously reported by the Company<sup>3,4</sup>. The outputs of this work indicated the ore-body's ability to produce 67.5% to 68.5% Fe concentrates with testwork also validating flowsheet and equipment selection (Figure 8)<sup>3,4</sup>.

The metallurgical and process engineering work was undertaken by engineering consultants Hatch to refine the flowsheet, which was then used to generate an AACE Class 4 level of accuracy estimate with suitable accuracy for inclusion to PFS levels estimates for capital cost. The selected flowsheet was based on conventional gyratory crushing/cone crushers followed by air separation and HPGR grinding. Separation is based on conventional magnetite separation using LIMS followed by fine grinding and flotation. Following flotation processing, conventional pressure filtration will be used to dewater the



resulting high-grade product to 8% moisture content. The average final grind size of P80 38 microns is expected targeting a 67.5% to 68.5% Fe final concentrate product<sup>3,4</sup>.

Tailings will be directed to a Central Thickened Discharge tailings facility (CTD) from which process water is recovered. The Tailings Storage Facility (TSF) design and placement studies were completed by engineering consultants Hatch to Australian National Committee on Large Dams (ANCOLD) 2019 standards.

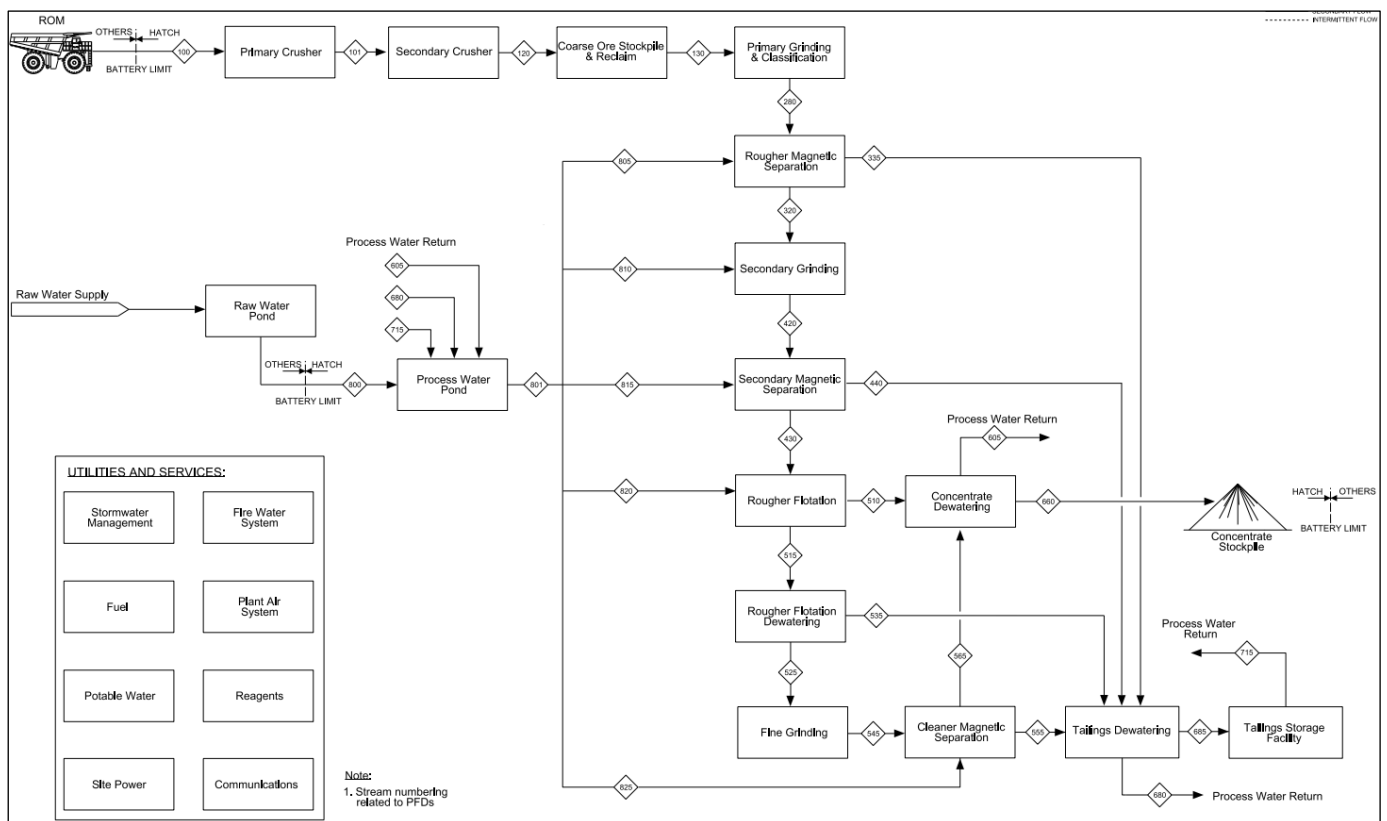


Figure 8. Razorback Process Flowsheet – block diagram

## Concentrate Logistics

An approximately 50 km haul road will be constructed to allow road train haulage of concentrate to the Broken Hill to Port Pirie rail line<sup>2,5</sup>. A siding and stockpile area will be constructed to allow trains to be loaded with a front-end loader<sup>2,5</sup>. The concentrate will then be railed along existing infrastructure to Whyalla where it will be unloaded to existing stockpiling areas then loaded onto capsize vessels using existing trans-shipping infrastructure.

Both the rail and port infrastructure have sufficient capacity to export 5 Mtpa of concentrate without capital expansions.

### **Economic Assumptions and Analysis**

A mining and processing strategy was developed based on consideration of annual processing plant throughput rate of 38Mt of ore. This was considered in conjunction with assumptions on the availability of capital and the long-term iron ore market. This equates to a base-case concentrate production of approximately 5 million tonnes per year.

Capital costs have been completed with a +/-25% accuracy. Operating costs are considered to be of a +/-25% level of accuracy. An 8% discount rate has been used for financial modelling, which includes all project level operating costs as well as initial and sustaining capital costs.

### **Cut-Off Grade Parameters**

An economic break-even cut off was determined utilising processing costs, commodity price and process recovery. The final open pit optimisation modifying factors were used to calculate the breakeven cut-off grade for the Ore Reserve Estimate. The breakeven cut-off grade was calculated at 3.21% eDTR (Mass Recovery). The Ore Reserve is based on an 8% eDTR (Mass Recovery). The grade tonnage curves illustrate that there is little mineralisation below this grade. 8% eDTR is significantly above the breakeven cut-off grade calculated from the base case parameters and appropriate for this application.

## Razorback Iron Ore Project Location and Tenure

The Razorback Iron Ore Project is located approximately 55 kilometres south of Yunta, on the margin of the Nackara Arc in regional South Australia (Figure 9).

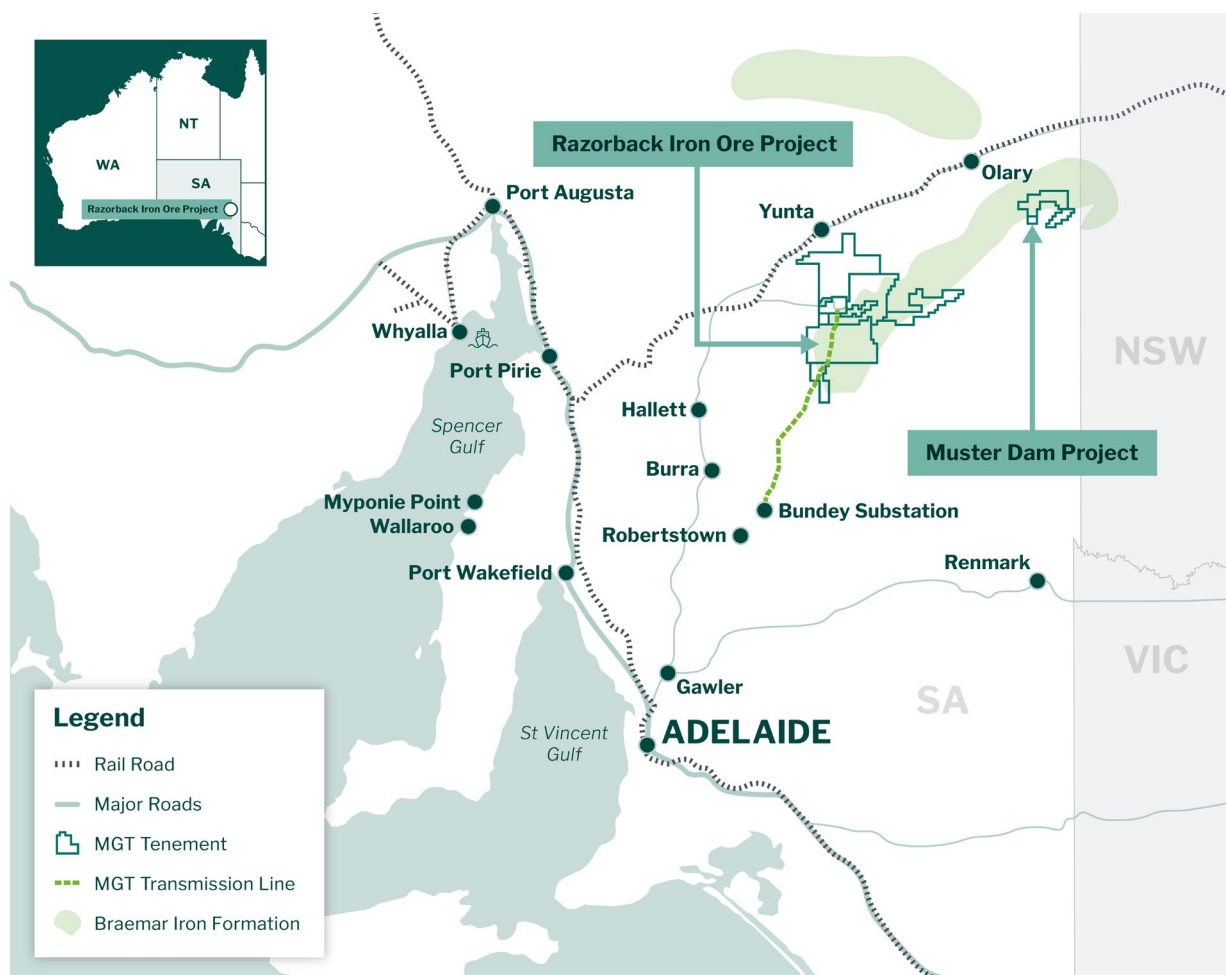


Figure 9. Razorback Iron Ore Project location and regional infrastructure

In total, the Company holds 2,251km<sup>2</sup> of tenure as related to the Razorback Iron Ore Project. The deposits associated with the Razorback Iron Ore Project are located primarily on the EL6353 and EL6126 tenements. Outside of those tenements the adjacent EL6127, 5902 and 6037 tenements host several Braemar Iron Formation prospects including the Ironback Hill deposit and will accommodate a combination of processing and non-process infrastructure associated with the Project mining development. The tenements are held by Magnetite Mines Limited together with its 100% owned subsidiaries Razorback Iron Pty Ltd and Ironback Pty Ltd.

The Ngadjuri People are the Native Title claimants and Traditional Owners of the Project area. The Company negotiated a Native Title Mining Agreement (NTMA) in 2011 for exploration purposes that is inclusive of the Razorback Iron Ore Project tenement package. A suitable agreement with the Traditional Owners will be required for mining purposes. Based on the results of ongoing baseline

studies there are no major social or environmental impediments known to exist with respect to the proposed mining operation.

### **Regional Infrastructure**

The Project site is within economic distances of existing infrastructure in the North East Pastoral district. Site access would be via the Barrier Highway and a new access road/haul approximately 50 kilometres in length. Engineering consultants, GHD undertook design of the access road sufficient for the development of an AACE Class 4 estimate using vehicle information provided by MGT. The road design will be suitable for construction traffic access, road haulage and daily operational traffic<sup>1,5</sup>.

Engineering consultants GHD investigated options for power supply to the mine site. Power supply for the Project is proposed from a connection to ElectraNet's regulated transmission network at the Bunday substation, south-southwest of the Project site<sup>6</sup>. The infrastructure consists of approximately 120 kilometres of new 275 kV transmission line, and new substation near the Razorback Mine Project site. The power line will interface to a new 275/11kV substation on site to service the mine site (including processing plant, non-process infrastructure, and camp)<sup>6</sup>.

The Project is planned to operate as a Drive-In Drive-Out (DIDO) operation with dedicated on-site accommodation and non-process infrastructure facilities designed and budgeted. Services and consumable supplies will be delivered by existing roads and the private haul access road. The Company currently holds the mineral rights the Project areas and prospects therein. The tenements extend beyond the immediate proposed mining area.

Water supply is assumed from a proposed coastal desalination plant and dedicated pipeline to the minesite, representing a feasible technical solution for water supply. Further water supply studies are ongoing to secure water offtake opportunities outside of this Ore Reserves assumption.

### **Approvals, environment and social**

The permitting process for the Project is pursuant to the South Australian Mining Act 1971 – an advanced, clearly defined and tested statutory framework recognised as one of the top 3 policy environments globally<sup>7</sup>. The Company has significantly progressed a range of baseline environmental and cultural heritage studies for mine and infrastructure development, with final characterisation due to be completed in the next six months.

Baseline environmental studies completed indicate limited potential interface with listed flora or fauna species within the mining area, with the Company continuing its assessment of fauna and flora (particularly within recently-revised infrastructure corridors). The Company has clear conceptualisation of local and regional hydrogeological systems and has completed extensive groundwater and surface water sampling. MGT is readying to commence impact assessment programs that will model potential environmental, social and cultural interactions from which management processes and monitoring programs will be formulated for construction, operational and closure project phases.

Waste rock and tailings characterisation work has been completed and all waste types and tailings are non-acid forming and have limited metal leachate potential. Site closure conceptualisation is underway to ensure a low-risk closure operating model for the benefit of all stakeholders.

Engagement with the South Australian Department of Energy and Mines (DEM) continues, with case manager appointed to facilitate the Company's development and permitting objectives, as well as cross-Government consultation. The company is engaging with a broad cohort of stakeholders, including First Nations groups, local communities and landowners. A memorandum of understanding with a local government authority was recently signed to support collaboration on engagement, infrastructure development and socio-economic development.

Land access activities continue, with MGT engaging approximately twenty parties as part of access negotiations. The Company recently secured a binding land access agreement for its planned rail hub at Hillgrange Siding.

### **Geology and Mineral Resources**

The Razorback Iron Ore Project covers sedimentary lithologies of the Adelaide Geosyncline, a linear north-south to north-east trending tectonic rift basin comprising sediments deposited during the late Proterozoic and early Cambrian Eras. The host rock to the magnetite at the Razorback Iron Ore Project Neoproterozoic glaciogenic meta-sediment of the Braemar Iron Formation<sup>1</sup>.

The mineralisation within the Braemar Iron Formation forms a simple dipping tabular body with only minor faulting, folding and intrusives. Grades, thickness, dip, and outcropping geometry remain very consistent over kilometres of strike. While the bedded magnetite has the highest in-situ iron content, typically 19-35% Fe, the tillitic unit, at typically 15-26% Fe is diluted by the inclusion of lithic fragments, such as iron-poor granite and metasedimentary dropstones<sup>2</sup>.

Razorback Ridge iron deposit is positioned on the north dipping (approximately 40° to 60°) limb of the Pualco Anticline. Whitten (1970) divided the Braemar Iron Formation at Razorback into seven sedimentary packages, comprising members A to G, with a total thickness ranging from 480m to 780m. Of these, members A, B, D and G are of economic interest and all outcrop or sub-crop at the surface, with member B forming the prominent ridge. The Iron Peak Deposit is located immediately to the east of the Razorback deposit ~4km away. The deposit is a continuation of the Razorback deposit, sharing the same stratigraphy and mineralisation units.

The Razorback Iron Ore Project Mineral Resource Estimate of February 2023 was completed by Widenbar and Associates using an updated geological model interpretation which sought to improve mineralisation resolution using down hole geophysics and high-resolution mass recovery determinations (through Davis Tube Recovery testwork)<sup>2</sup>. Mineral Resource estimation for the Razorback and Iron Peak deposits is compliant with 2012 JORC Code and guidelines and was presented to the market on 9 February 2023. The Mineral Resource estimate for the Razorback Iron Ore Project as of February 2023 is outlined in Table 2 below.

Table 2: Razorback Iron Ore Project February 2023 Mineral Resource Estimate<sup>2</sup>

Classification	Million Tonnes (Mt, dry)	Mass Rec (eDTR%)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%	Magnetite%
Indicated	1,675	15.9	18.4	48.0	8.1	0.18	5.5	15.0
Inferred	1,570	16.1	17.7	48.6	8.2	0.18	5.5	15.5
<b>TOTAL</b>	<b>3,245</b>	<b>16.0</b>	<b>18.1</b>	<b>48.3</b>	<b>8.1</b>	<b>0.18</b>	<b>5.5</b>	<b>15.3</b>

All figures quoted at an 11% eDTR cut-off. Magnetite Mines Limited is not aware of any new information or data that materially affects the information included in the resource announcement dated February 2023 and all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Analysis as part of the PFS supporting this Ore Reserve, completed post stating of the Mineral Resource, identified that a cut-off grade of 8% eDTR was both economically and geologically justifiable. The Mineral Resource models estimated grade down to 0% eDTR. As the cut-off was applied after the decision had been made on the level of confidence it is appropriate to use a different, lower cut-off grade, when estimating the Ore Reserve. This has been reviewed by Mr. Lynn Widenbar of Widenbar Associates the competent person for the Mineral Resource and is considered appropriate.

Table 3: Razorback Iron Ore Project February 2023 Indicated Mineral Resource Estimate – Cut-off Grade<sup>1</sup>

Cut-off Grade (%eDTR)	Million Tonnes (Mt, dry)	Mass Rec (eDTR%)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%	Magnetite%
15	854	18.7	20.5	46.1	7.6	0.2	5.2	17.9
14	1,066	17.9	19.8	46.8	7.8	0.2	5.2	17.1
13	1,288	17.1	19.2	47.3	7.9	0.2	5.3	16.3
12	1,495	16.5	18.7	47.7	8.0	0.2	5.4	15.6
11	1,675	15.9	18.4	48.0	8.1	0.2	5.5	15.0
10	1,809	15.5	18.1	48.3	8.1	0.2	5.5	14.6
9	1,907	15.2	17.9	48.4	8.2	0.2	5.5	14.3
8	1,973	15.0	17.8	48.6	8.2	0.2	5.6	14.0
0	2,093	14.5	17.5	48.9	8.3	0.2	5.6	13.5

Hence the Ore Reserve is based on a Mineral Resource of 2.0Bt at 15.0% eDTR. This has been reviewed by Mr. Lynn Widenbar.

The Ore Reserves and associated proposed mine plan are considered technically achievable. All proposals for the operational phase involve the application of conventional mining technology which is widely utilised in Australia and globally. Financial modelling completed as part of the PFS shows that the Project is economically viable under current assumptions. In the opinion of the Competent Person, cost

assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. The Ore Reserve is considered to provide the basis of a technically and economically viable project. Material assumptions (mining, processing, infrastructure, economic, commercial, environmental and social) have been considered as part of the PFS and during the Ore Reserves estimation process. Further detailed is provided in Appendix 1.

The below table highlight the higher grade nature of Iron Peak compared to Razorback at varying cut offs. For example, the Iron Peak Mineral Resource holds 220Mt at over 21% mass recovery, for a 14% COG. An opportunity to bring forward the Iron Peak deposit as a stand-alone mining production will be explored in the upcoming value engineering phase as the Company seeks to enhance value in early year production models.

Table 4. Mineral Resource and Diluted Ore Reserves comparison.

COG	In Pit Mineral Resource Estimate - Indicated				Diluted Ore Reserves			
	Iron Peak		Razorback		Iron Peak		Razorback	
	Tonnes (Mt)	eDTR %	Tonnes (Mt)	eDTR %	Tonnes (Mt)	eDTR %	Tonnes (Mt)	eDTR %
8	344	17.52	1,580	14.42	362	16.8	1,615	14.2
10	308	18.53	1,454	14.87	339	17.4	1,560	14.3
12	261	19.86	1,192	15.70	298	18.3	1,343	14.9
14	216	21.29	815	16.94	247	19.6	954	15.8

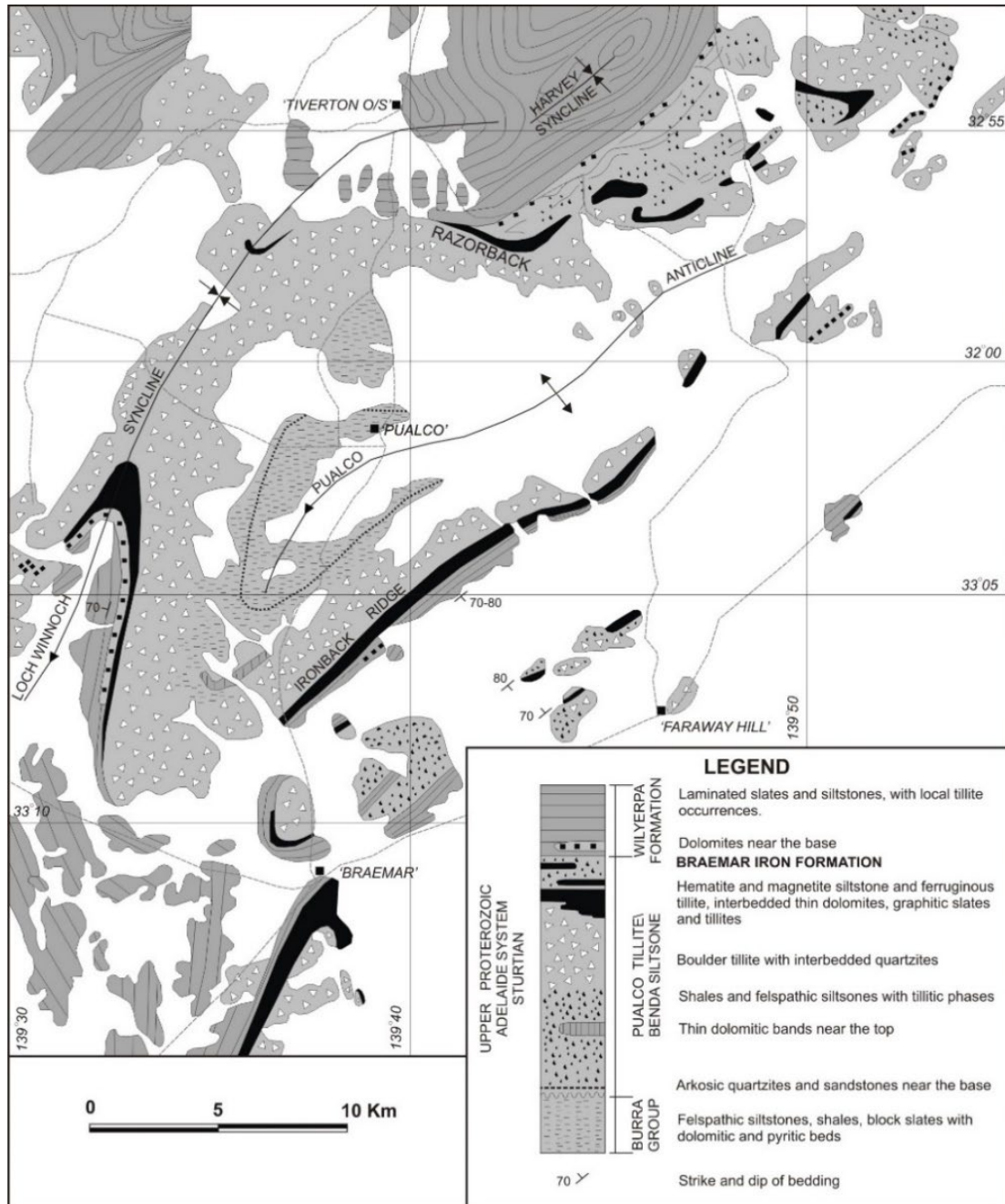


Figure 10. Regional geology of the Razorback Iron Ore Project area (modified after Lottermoser and Ashley, 2000)

**Competent Persons Statement:**

The information in this report that relates to Ore Reserves is based on and fairly represents information and supporting documentation compiled by James Stoddart, BEng(Mining), a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). James Stoddart is a Principal Mining Engineer for AMC Consultants Pty Ltd and is consulting to Magnetite Mines Limited. James Stoddart has sufficient experience that is relevant to the style of mineralisation and type of deposit



under consideration and to the activities 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' (JORC 2012). James Stoddart consents to the inclusion in the report of the matters based on his information in the form and context in which they appear. The Ore Reserves estimates have been compiled in accordance with the guidelines defined in the JORC Code.

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**This announcement has been authorised for release to the market by the Board.**

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## ABOUT MAGNETITE MINES

Magnetite Mines Ltd is an ASX-listed iron ore company focused on the development of magnetite iron ore resources in the highly-prospective Braemar iron region of South Australia. The Company has a 100% owned Mineral Resource of 6 billion tonnes of iron ore and is developing the Razorback Iron Ore Project, located 240km from Adelaide, to meet accelerating market demand for premium iron ore products created by iron & steel sector decarbonisation, with the potential to produce high-value Direct Reduction (DR) grade concentrates. Razorback is set to become a very long-life iron ore project with expansion optionality in a tier 1 jurisdiction that will produce a superior iron ore product sought by steelmakers globally. For more information visit [magnetitemines.com](https://magnetitemines.com).

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## References

1. ASX Announcement – 22 March 2023 - [Razorback Iron Ore Project Ore Reserves Increase 340% - UPDATE](#)
2. ASX Announcement – 9 Feb 2023 - [Iron Peak Mineral Resource Significantly Improved](#)
3. ASX Announcement – 21 July 2022 - [Positive Interim Metallurgical Test Results](#)
4. ASX Announcement - 28 Feb 2023 - [Metallurgy Confirms Flowsheet and DR Pellet Feed Potential](#)
5. ASX Announcement – 18 April 2023 - [Razorback Iron Ore Project Rail Access Unlocked](#)
6. ASX Announcement – 23 Feb 2023 – [Renewable Grid Power for Razorback Project](#)
7. URL – Fraser Institute - <https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2022>

## APPENDIX 1 - JORC TABLE 1

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>RC samples are collected through a sampling trailer, which has a dust collector, cyclone and non-adjustable riffle splitter.</li> <li>Each 1 meter drilled is captured in a plastic bag and kept at the drill site. A 2 metre composite for assay was collected as a ~ 3 kg sample in a calico bag, which is captured from the sampling chute at the side of the splitter.</li> <li>The sampling was done on the rig by the drilling contractors and the process was supervised by Magnetite Mines geological staff.</li> <li>Duplicates were processed via a secondary riffle splitter whereby a 2m composite was split 50/50 and rebagged for assay.</li> <li>All diamond drill cores were marked up on site by field technicians and core loss recorded.</li> <li>Phase 1 - 3: <ul style="list-style-type: none"> <li>S.G. measurements were made on site via the Archimedes immersion method with handheld magnetic susceptibility measurements taken every 25cm within mineralized zones (as defined by the geologist) and every 1 metre in interstitial material.</li> <li>Core was cut on site and sampled at 1m intervals.</li> </ul> </li> <li>Phase 4: <ul style="list-style-type: none"> <li>S.G. measurements were made at the core processing facility in Wingfield via the Archimedes immersion method with handheld magnetic susceptibility measurements taken in continuous scanning mode along 0.8-1.2m lengths along the entire core.</li> <li>Core was cut at the core processing facility in Wingfield and sampled at 1m intervals.</li> </ul> </li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Phase 1 drilling was carried out in 2010, with 66 RC holes completed for 7,162m and was completed on the Razorback Ridge prospect</li> <li>Drilling was undertaken by Budd Contract Exploration, using an Explorer 300 rig, with ancillary Booster.</li> <li>During Phase 1, nine diamond drill holes were completed as twin holes for RC drilling or areas where RC rig access was found to be too difficult. The drilling was undertaken by Budd Contract Exploration, using a UDR jack-up rig, with HQ standard tube. A total of 990 metres were completed at Razorback</li> <li>Phase 2 drilling was carried out in 2011, with an additional 61 RC holes for 8,022m. This drill program was completed on both the Razorback and Iron Peak prospects where the drilling and sampling procedures between the two projects were equivalent.</li> <li>Eleven additional diamond drill holes were completed as twin holes for RC drilling, using a combination of HQ, PQ and NQ.</li> <li>All RC drilling used 5 ½" face sampling hammers.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Phase 3 was carried out in 2011/2012, with 52 RC holes, 10 RC/DDH combination holes, 4 DDH holes and 1 DDH extension completed for a total of 15,944m (average depth 235.6m)</li> <li>Phase 3 drilling was undertaken by Coughlans Drilling for RC (UDR 650 rig) and by Coughlans Drilling and Range/Hodges Drilling for DDH utilising a UDR 650 and VK600 truck mounted rigs respectively. Phase 3 was completed on both the Razorback and Iron Peak prospects where the drilling and sampling procedures between the two projects were equivalent.</li> <li>Phase 4 drilling was carried out at Iron Peak in 2021-2022 by Foraco, utilising a KWL 1600H multi-purpose rig. The drilling and sampling procedures between the two projects were equivalent to previous phases drilled by MGT with minor difference noted above.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Nearly all of the RC samples showed good recovery and there were very few issues with wet samples (&lt;1% would be considered poor or wet). Any wet or poorly recovered sample was recorded by the geologist and entered into the database.</li> <li>The HQ diamond core was shown to be quite cohesive and have good recovery of &gt;98%, with issues only occurring in the first few metres near surface, where drilling occurred within broken ground, or in minor fault zones.</li> <li>All cores were marked up on site by field technicians and core loss recorded.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>RC and diamond drilling were supervised and drill chips geologically logged (using Magnetite Mines' geological rock codes) by contractor and Magnetite Mines geological staff.</li> <li>For each RC drill hole, meter samples were collected for reference in chip trays.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for</li> </ul>	<ul style="list-style-type: none"> <li>DDH core was sampled as 1m intervals, with one quarter of core sampled for XRF and magnetic susceptibility assay with DTR compositing to follow at a later date, one quarter for metallurgical analysis at AMTEC and half core kept for reference.</li> <li>Twenty five centimetre whole-core segments were retained for all mineralized lithological units for future metallurgical testing</li> <li>In RC holes, a 2 metre composite for assay was collected as a ~ 3 kg sample.</li> <li>Duplicates were processed via a secondary riffle splitter whereby a 2m composite was split 50/50 and rebagged for assay by the geologist.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>field duplicate/second-half sampling.</p> <ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometres, 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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Both the RC and diamond samples were assayed at ALS Chemex Laboratories, with sample preparation done in Adelaide and analysis carried out in Perth.</li> <li>In Adelaide, the samples were sorted, dried, and sample numbers reconciled. The dry sample weights were recorded, then crushed to a nominal 3mm and pulverised to -75µm size.</li> <li>Samples were analysed using XRF fusion (ALS code ME-XRF11b), with Fe, Al<sub>2</sub>O<sub>3</sub>, Si<sub>2</sub>O<sub>2</sub>, TiO<sub>2</sub>, MnO, CaO, P, S, MgO, K<sub>2</sub>O, Na<sub>2</sub>O, Cu, Ni, Pb, V, and LOI measured. Accuracies for each element are stated in the database.</li> <li>Within Drilling Phase 1 for the purpose of QA/QC, every 50th sample was a standard. The standards consisted of a certified standard (magnetite standard GIOP-31 with a value of 37.37% +/- 0.28% Fe) from Geostats Pty Ltd of Perth and an "in-house" standard from tillitic material sampled from the Adit stockpile and assayed by ALS Perth 15 times to produce a standard of 25.4%, +/- 0.1% Fe.</li> <li>Six field duplicate samples were submitted for every 100 samples sent to the lab. Field duplicates are principally a measure of the Field RC sampling collection procedure but also test analytical precision.</li> <li>Within drilling Phase 2 the frequency of standard insertion increased to every 20th sample. Similarly for duplicates, every 20th sample was a duplicate.</li> <li>For additional QA/QC, one hundred and fifty seven samples were split from the original field sample at ALS Laboratory Adelaide, and sent to AMDEL Adelaide as an umpire sample for laboratory analytical validation. In addition, one hundred field duplicates were re-sampled from the 1m bulk sample on site and composited by a ripple splitter to make a 2kg x 2m sample. This was sent to ALS laboratories, Perth for analysis to test the competence of the RC cone splitter at the rig site.</li> <li>Duplicate, Resample and Umpire sampling was also carried out.</li> <li>A total of 779 Davis Tube Recovery (DTR) samples were submitted for analysis and utilised for the current Mineral Resource estimate. All of the Company representative samples were milled in a ring mill pulveriser to a minimum grind of 97% passing 45 µm (P97 45 µm) as feed to the DT test.</li> <li>A regression to estimate Mass Recovery (referred to as estimated DTR or eDTR) was calculated using SATMAGAN (Magnetite %) and laboratory DTR.</li> <li>RH Regression notes 'for prediction of eDTR'</li> <li>Following data verification, regression analysis of DTR mass recovery vs Magnetite % was performed on the following data subsets: <ul style="list-style-type: none"> <li>Weathered zone (all Razorback Project): 111 representative samples;</li> <li>Fresh zone: Razorback main prospect, 330 representative samples;</li> <li>Fresh zone: Razorback West prospect 237 representative samples;</li> <li>Oxide zone: Iron Peak prospect: 415 representative</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>samples.</p> <ul style="list-style-type: none"> <li>Fresh zone: Iron Peak prospect: 1380 representative samples.</li> </ul> <p>The resulting regressions are as follows:</p> <ul style="list-style-type: none"> <li>Oxidised (Razorback): <math>eDTR \% = 1.3776 * Mag \% (Satmagan) + 2.7242 (R^2 = 0.5568, n = 111)</math></li> <li>Fresh (Razorback Main): <math>eDTR \% = 0.8435 * Mag \% (Satmagan) + 2.1831 (R^2 = 0.8286, n = 330)</math></li> <li>Fresh (Razorback West): <math>eDTR \% = 0.7836 * Mag \% (Satmagan) + 4.0857 (R^2 = 0.7943, n = 237)</math></li> <li>Oxide (Iron Peak): <math>eDTR \% = 1.673763 * Mag \% (Satmagan) + 1.291398 (R^2 = 0.7888, n = 415)</math></li> <li>Fresh (Iron Peak): <math>eDTR \% = 1.173747 * Mag \% (Satmagan) + 0.062922 (R^2 = 0.9300, n = 1380)</math></li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Six twinned DD and RC holes have been drilled and compared, producing acceptable results.</li> <li>All data was entered into either a customized Excel spreadsheet or Access database and then entered into the Datashed database.</li> <li>QAQC data was managed within Datashed software.</li> <li>No adjustments of assay data are considered necessary.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The co-ordinates for each drill hole collar were initially surveyed by GPS, where the accuracy was within 3-5 metres. Subsequent DGPS hole collar surveying has been undertaken. The current database contains the coordinates for all drill holes in the MGA 94/54 grid system and this grid was used for the estimation.</li> <li>Topography RL's are based on a Digital Terrain Model, derived from a 50m line-spaced aeromagnetic survey captured by UTS for Magnetite Mines Ltd, during December 2009 and January 2010.</li> <li>Drill hole azimuth and dip at surface were determined by compass and clinometer respectively. Due to the magnetic nature of rocks at Razorback Ridge and Iron Peak, only the dips were recorded from the Eastman single and multi-shot surveys taken at approximately every 40m and azimuth data discarded.</li> <li>Given the shallow nature of the holes, the azimuths are assumed to be similar to that on surface. Subsequent gyroscopic work was conducted between Phase 1 and 2 drilling on a combination of 10 DDH and RC holes.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole spacing is considered appropriate for the level of confidence quoted.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>RC and diamond drill holes were oriented, wherever possible, perpendicular to the mineralisation dip.</li> <li>11 metallurgical holes (PQ diameter) at Iron Peak were drilled vertically in order to intersect an exaggerated thickness and obtain more mass of target lithologies, however the bedding orientation is well understood and is taken into account in resource estimates. The remaining 6 'shallow infill' drill holes (HQ diameter) were drilled at an angle, to intersect mineralisation as close to perpendicular where possible.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The chain of custody was controlled by Magnetite Mines. Samples were delivered to ALS Adelaide by either Magnetite Mines staff or by Burra Couriers.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No independent reviews of audits of sampling have been carried out.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Magnetite Mines Limited, through its 100% owned subsidiary Razorback Iron Pty Ltd, has secured the EL6353 and EL6126 leases over the Razorback Ridge and Iron Peak iron deposits. The Razorback/Iron Peak tenement EL6353 and EL6126 covers approximately 60 km<sup>2</sup> and 725km<sup>2</sup> respectively and contains the Razorback, Interzone and Iron Peak Prospects.</li> <li>Resource payments calculated at \$0.01 per DTR tonne of Measured Resources (resource payment = tonne of Measured resource x \$0.01 x DTR%).</li> <li>A 1% royalty on the value of the product produced from the tenement measured at the 'mine gate'.</li> <li>All tenements are in good standing and no known impediments exist.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Whitten, on behalf of the Geological Survey of South Australia, carried out a detailed study at the Razorback Ridge area during the 1950's and 60's</li> <li>This work was structured to assess the iron content, possible metallurgical processing and costs of mining the iron at the prospect. Detailed geological mapping, 3 diamond drill holes and an adit reaching 134.1 metres were carried out on the ridge itself.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The magnetite host rock at Razorback and Iron Peak occurs as either tillitic or bedded siltstone. The bedded or laminated ore is dense dark blue and can show sedimentary features such as cross bedding and slumping. The Geology of the Iron Peak Prospect is an extension of the geology at Razorback as following the consistent lateral continuity of the Braemar Iron Formation. For this reason there are no deviations to the methodologies/procedures utilised towards drilling and sampling between the two prospects.</li> <li>The magnetite occurs as 10 to 150 micron euhedra in layers up to 500 micron thick, and can form up to 80% of the rock. Haematite can occur associated with crosscutting right angle cleavage, related to later deformation.</li> <li>The tillitic ore is medium to dark grey, massive and contains erratics from 10mm to 1m in diameter. The fragments are typically metasediments, metavolcanics and granites.</li> <li>The magnetite is similar to that seen in the bedded ore type. Haematite occurs, but is irregularly distributed through the rock.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul> </li> </ul>	Please refer to Appendix 2, for drill hole collar information

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> <li>• 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.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not being reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration intercepts are not being reported.</li> <li>• However, where possible drill holes are oriented to cut at right angles across the mineralised zones.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections are available in the body of the Mineral Resource Estimate.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable,</li> </ul>	<ul style="list-style-type: none"> <li>• Reporting of results in this report is considered balanced.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not being reported.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Infill drilling at a 100 x100m scale is planned towards JORC classification improvement.</li> <li>• Metallurgical drilling is planned to test spatial distribution of geometallurgical properties of the ore body.</li> <li>• Step-out drilling to test lateral mineralisation at the Razorback and Iron Peak prospects is planned.</li> <li>• The nature of drill hole locations is commercially sensitive and is not disclosed herein.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The Razorback drill hole data is managed by Magnetite Mines Ltd via industry standard SQL Server based software known as 'DataShed' and externally audited by 'Rock Solid Data' database consultants.</li> <li>Data validation occurred via several stages, onsite via initially excel spreadsheets with macro enabled validation tools and via common industry point of site capture software known as 'LogChief'. These software tools prevent the duplication of data, typographical errors and maintain coding consistency between geologists. The data then underwent database validation and QAQC procedures via 'DataShed' software prior to database generation. Dashed also tests the data for coding inconsistencies.</li> <li>All data was entered into either a customized Excel spreadsheet or Access database and then entered into the Dashed database.</li> <li>Drill hole data was imported into Micromine mining software (V 2023) for further validation, including: <ul style="list-style-type: none"> <li>Checks for duplicate collars.</li> <li>Checks for missing samples.</li> <li>Checks for down hole from-to interval consistency.</li> <li>Checks for overlapping samples.</li> <li>Checks for samples beyond hole depth.</li> <li>Checks for missing assays.</li> <li>Checks for down-hole information beyond hole depth.</li> <li>Checks for missing down-hole information.</li> <li>Checks for missing or erroneous collar survey.</li> </ul> </li> <li>Widenbar and Associates considers that the database represents an accurate record of the drilling undertaken at the project.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent person made a Site Visit to Razorback and Iron Peak on 10<sup>th</sup> October 2022.</li> <li>Geological input to the modelling was provided by experienced site-based geologists and the Competent Person has confidence in geological aspects of the modelling.</li> <li>Diamond drill core and photos have been reviewed as part of the validation process.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the geological interpretation is high.</li> <li>Detailed geological logging and surface mapping allows extrapolation of drill intersections between adjacent sections.</li> <li>Alternative interpretations would result in similar tonnage and grade estimation techniques.</li> <li>Geological boundaries are used as hard boundaries to control selection of data for each domain that is being estimated.</li> <li>Geological boundaries are determined by the spatial locations of the various mineralised structures.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>Razorback and Iron Peak extend approximately 7 km and 3km along strike respectively, with a maximum</li> </ul>

Criteria	JORC Code explanation	Commentary																																			
	expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	depth extent from outcrop at surface to approximately 320m below surface and typical total thicknesses of 100 m to 150 m.																																			
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>Due to the variable dip and strike of the Razorback deposit, an “unfolding” technique has been used to simplify setup of search ellipse and modelling parameters.</li> <li>Statistical analysis and variography has been carried out in unfolded coordinates to define parameters for an Ordinary Kriging estimation.</li> <li>All analysis and estimation has been constrained by the geological interpretation of the mineralised domains.</li> <li>All estimation was carried out using Micromine software version 2023.</li> <li>Kriging parameters were defined using Fe as the primary variable.</li> <li>A three-pass search strategy is used. Search parameters are: <table border="1" data-bbox="711 862 1307 1003"> <thead> <tr> <th rowspan="2">Search Pass</th> <th colspan="3">Search Distance</th> <th rowspan="2">Minimum Samples</th> <th rowspan="2">Maximum Samples</th> <th rowspan="2">Minimum Holes</th> <th rowspan="2">Maximum Per Hole</th> </tr> <tr> <th>Along Strike</th> <th>Down Dip</th> <th>Across Dip</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>250</td> <td>120</td> <td>5</td> <td>4</td> <td>20</td> <td>2</td> <td>4</td> </tr> <tr> <td>2</td> <td>450</td> <td>200</td> <td>5</td> <td>1</td> <td>20</td> <td>1</td> <td>4</td> </tr> <tr> <td>3</td> <td>600</td> <td>200</td> <td>5</td> <td>1</td> <td>20</td> <td>1</td> <td>4</td> </tr> </tbody> </table> </li> </ul>	Search Pass	Search Distance			Minimum Samples	Maximum Samples	Minimum Holes	Maximum Per Hole	Along Strike	Down Dip	Across Dip	1	250	120	5	4	20	2	4	2	450	200	5	1	20	1	4	3	600	200	5	1	20	1	4
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Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>																																			

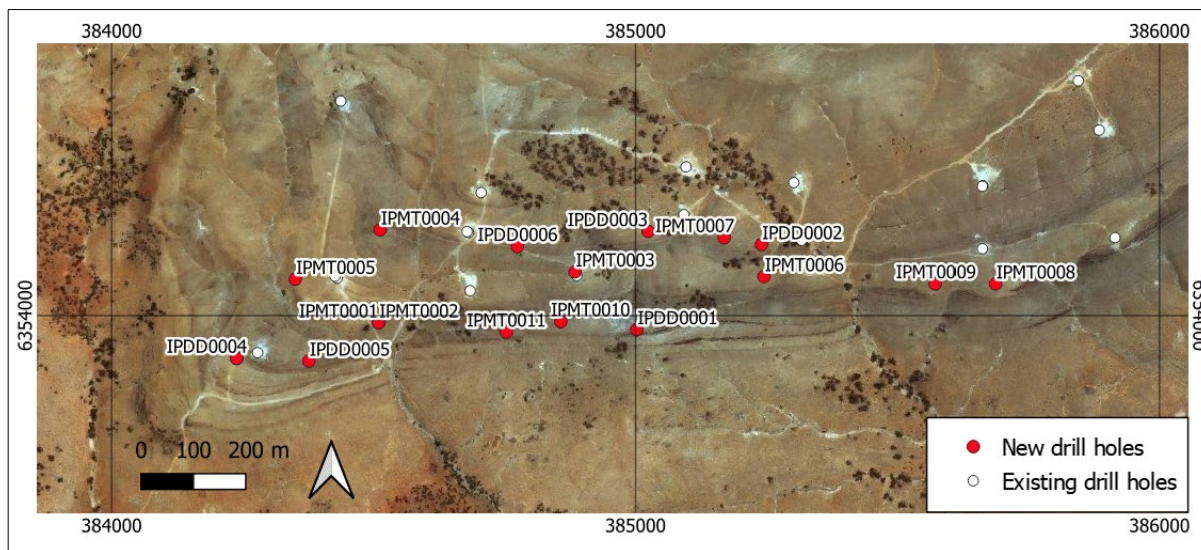
Criteria	JORC Code explanation	Commentary
	<i>the method of determination of the moisture content.</i>	
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Pre-feasibility economic studies have reviewed various mining methods and cutoffs between 10 and 12%. Currently 11% is considered the appropriate cutoff for resource reporting.</li> <li>The resource has also been reported at a range of eDTR cut-offs from 8% to 15% to give an idea of tonnage/grade changes with changes in cutoff.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mining is assumed to be by conventional opt pit mining methods.</li> <li>No dilution or ore loss factors have been applied.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical testwork as undertaken during PFS and PFS optimisation studies confirms DTR analyses via lab-scale testwork. The use of conventional magnetite processing flow sheets is able to produce a 67.5-68.5% Fe concentrate with low deleterious elements (SiO<sub>2</sub>, P, Al<sub>2</sub>O<sub>3</sub>, V). Bulk testwork utilising conventional magnetite processing flow sheets undertaken at Nagrom, Bureau Veritas and ALS laboratories has been completed and is ongoing. A combination of grinding, rougher magnetic separation and further grinding to liberation at 38-45microns, 3 stage low intensity magnetic separation, flowed by hydroseparation confirms that the Razorback deposit ores are amenable to magnetite concentrate production.</li> <li>Significant metallurgical testwork has been completed to date ranging from bench to pilot scale testwork. The work was completed in line with the Company's Definitive Feasibility Studies. The metallurgical testwork was designed to test all stages of the processing flow sheet. Testwork included UCS, DTR, Bond ball work Index, SMC, QEMScan, flotation bulk and variable, abrasion, VRM, HPGR, air classification. The results of the updated testwork confirm earlier (PFS 2013) metallurgical testwork albeit with a much improved dataset.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for</i></li> </ul>	<ul style="list-style-type: none"> <li>Tailings – Based on a 15.5% Mass recovery, ~85% mass will be deported to the tailings fraction. Given the lack of toxicity, negligible prospectivity for acid mine drainage (Parsons Brinckerhoff), availability of low-density land area and bulk handling methods, it is envisaged that waste will be adequately handled should mining occur. It is expected that tailings ponds as</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</p>	<p>commonly utilised in mining operations will be used, however initial testwork into dry-stacked tailings amenability is proposed and is a potential option for waste management. Native vegetation and vegetation clearance will be required as a consequence of mining and associated tailings disposal.</p> <ul style="list-style-type: none"> <li>• Flora and Fauna – Based on a series of Flora and Fauna Surveys as completed by Rural Solutions SA and Eco Logical Australia, no species or vegetation communities have been identified to contain regional, state or national conservation rating. Assessment by Rural Solutions SA states that fauna within the project area is unlikely to be significantly impacted by the Project with appropriate management actions in place.</li> <li>• Noise – Given the lack of local noise receptors (towns, settlements) there are no significant issues associated with noise generation.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>• During Phase 1, density was measured on ¼ cut diamond core material using gravimetric methods (weight in air / weight in water) at ALS Adelaide. Given the homogeneous nature of the sampled material, ¼ core is seen as representative of the entire core. Four holes were measured at 1 m intervals, to use as a calibration for down hole density logging. The other diamond holes were measured every 4th metre.</li> <li>• Density was also measured on selected intervals on site, measuring coherent core length greater than 0.5 metre. The density was determined by weighing the sample and measuring the length to determine the volume.</li> <li>• During the second phase of drilling density measurements were made on-site via gravimetric methods as above this was done on every 4 metres.</li> <li>• The global average from both the lab and field measurements was an SG of 3.2. No density was measured on the RC chips.</li> <li>• Density is calculated using a regression equation on Fe grades, where Density = Fe * 0.0243 + 2.6215. When applied to the block model, this results in an average density of 3.05 at 11% DTR cutoff.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been classified in the Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: <ul style="list-style-type: none"> <li>• Geological and grade continuity <ul style="list-style-type: none"> <li>○ Magnetite Mines geologists are sufficiently confident in the continuity and volume of the mineralised solids as represented by the domain wireframes, and this is demonstrated and supported by statistical and spatial analysis.</li> </ul> </li> <li>• Data quality. <ul style="list-style-type: none"> <li>○ Resource classification is based on information and data provided from the Magnetite Mines database. Descriptions of drilling techniques, survey, sampling/sample preparation, analytical techniques and database management/validation provided by Magnetite Mines indicate that data collection and management is well within industry</li> </ul> </li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>standards. Widenbar considers that the database represents an accurate record of the drilling undertaken at the project.</p> <ul style="list-style-type: none"> <li>• Drill hole spacing. <ul style="list-style-type: none"> <li>○ Drill hole location plots have been used to ensure that local drill spacing conforms to the minimum expected for the resource classification. Spacing varies because of the nature of the topography, but is typically 100m to 200m along strike and 50m to 100m across strike in areas assigned to the Indicated category, and 200m to 400m along strike and 50m to 100m across strike in areas assigned to the Inferred category. These dimensions are within the range of continuity as defined from variography. There is sufficient confidence in the location and continuity of the mineralization to support the classification proposed.</li> </ul> </li> <li>• Modelling technique and kriging output parameters, including Kriging Efficiency, search pass and number of composites used. <ul style="list-style-type: none"> <li>○ A conventional 3D Ordinary Kriging modelling technique has been used, with an unfolding methodology applied to provide a dynamic element to the allocation of search ellipses. The modelling technique is suitable to the domains being estimated allowing reasonable expectation of mining selectivity across the mineralised domain.</li> </ul> </li> <li>• Estimation Properties <ul style="list-style-type: none"> <li>○ Information from the estimation process, including search pass, number of composites used in the search and kriging variance are all used in conjunction with drill spacing to finalise classification domains.</li> </ul> </li> <li>• The Competent Person is in agreement with this classification of the resource.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The resource estimate has not been externally audited.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy of the various resource estimates is reflected in the JORC resource categories.</li> <li>• At the Indicated Resource classification level, the resources represent local estimates that can be used for further mining studies.</li> <li>• Inferred Resources are considered global in nature.</li> <li>• No production data is available for comparison.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</p> <ul style="list-style-type: none"> <li>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

1.1



Section 4 - Estimation and Reporting of Ore Reserves – 2023 Update

Criteria	JORC Code Explanation	Commentary																																																																		
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.  Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource Estimate used as the basis for the conversion to Ore Reserve was announced to the public via ASX on 9 February 2023 with consultant Mr. Lynn Widenbar of Widenbar Associates providing competent person sign off for Resource and Mr. Trevor Thomas providing competent person sign off for Exploration data.																																																																		
		The Mineral Resource includes two models, Razorback and Iron Peak. The contents of these at the 11% cut-off grade used for the last Mineral Resource Statement are shown in the table below.																																																																		
		<table border="1"> <thead> <tr> <th>Classification</th> <th>Million Tonnes (Mt, dry)</th> <th>Mass Rec (eDTR%)</th> <th>Fe%</th> <th>Magnetite%</th> </tr> </thead> <tbody> <tr> <td colspan="5"><b>Total</b></td> </tr> <tr> <td><b>INDICATED</b></td> <td>1,680</td> <td>15.9</td> <td>18.4</td> <td>15.0</td> </tr> <tr> <td><b>INFERRED</b></td> <td>1,570</td> <td>16.1</td> <td>17.7</td> <td>15.5</td> </tr> <tr> <td><b>TOTAL</b></td> <td>3,250</td> <td>16.0</td> <td>18.1</td> <td>15.3</td> </tr> <tr> <td colspan="5"><b>Razorback</b></td> </tr> <tr> <td><b>INDICATED</b></td> <td>1,390</td> <td>15.3</td> <td>18.3</td> <td>14.8</td> </tr> <tr> <td><b>INFERRED</b></td> <td>1,350</td> <td>15.6</td> <td>17.7</td> <td>15.5</td> </tr> <tr> <td><b>TOTAL</b></td> <td>2,740</td> <td>15.4</td> <td>18.0</td> <td>15.2</td> </tr> <tr> <td colspan="5"><b>Iron Peak</b></td> </tr> <tr> <td><b>INDICATED</b></td> <td>286</td> <td>19.3</td> <td>18.5</td> <td>16.1</td> </tr> <tr> <td><b>INFERRED</b></td> <td>216</td> <td>19.5</td> <td>17.9</td> <td>15.8</td> </tr> <tr> <td><b>TOTAL</b></td> <td>503</td> <td>19.4</td> <td>18.2</td> <td>16.0</td> </tr> </tbody> </table>		Classification	Million Tonnes (Mt, dry)	Mass Rec (eDTR%)	Fe%	Magnetite%	<b>Total</b>					<b>INDICATED</b>	1,680	15.9	18.4	15.0	<b>INFERRED</b>	1,570	16.1	17.7	15.5	<b>TOTAL</b>	3,250	16.0	18.1	15.3	<b>Razorback</b>					<b>INDICATED</b>	1,390	15.3	18.3	14.8	<b>INFERRED</b>	1,350	15.6	17.7	15.5	<b>TOTAL</b>	2,740	15.4	18.0	15.2	<b>Iron Peak</b>					<b>INDICATED</b>	286	19.3	18.5	16.1	<b>INFERRED</b>	216	19.5	17.9	15.8	<b>TOTAL</b>	503	19.4	18.2	16.0
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		Analysis as part of the PFS supporting this Ore Reserve, completed post stating of the Mineral Resource, identified that a cut-off grade of 8% eDTR was both economically and geologically justifiable. The Mineral Resource models estimated grade down to 0% eDTR. As the cut-off was applied after the decision had been made on the level of confidence it is appropriate to use a different, lower cut-off grade when estimating the Ore Reserve. This has been reviewed by Mr. Lynn Widenbar of Widenbar Associates the competent person for the Mineral Resource and is considered appropriate.																																																																		
		The contents of the Mineral Resource based on an 8% cut-off grade are shown in the table below.																																																																		
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<b>Site visits</b>	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>If no site visits have been undertaken indicate why this is the case.</p>	<p>The competent person visited site in December 2021. The full area of the pit, plant and proposed rail load out were visited. No potentially significant issues were noted.</p>
<b>Study status</b>	<p>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</p> <p>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</p>	<p>The Ore Reserve is supported by a Pre-Feasibility level study compiled by Magnetite Mines Limited. Including contributions from specialist consultants:</p> <ul style="list-style-type: none"> <li>• Widenbar Associates – Mineral Resource estimate</li> <li>• Hatch/Bureau Veritas - Geometallurgical and mineralogical testwork (basis for plant design)</li> <li>• Hatch – Mineral Processing and Tailings design – AACE Class 3 Estimate</li> <li>• AMC Consultants – Pit optimisation, Mine design, scheduling and mining cost estimation.</li> <li>• Eco Logical Australia – Permitting and approvals, baseline environmental assessments, hydrogeological and borefield design studies.</li> <li>• GHD – Non-Process Site Infrastructure, Water</li> <li>• Electranet/GHD - Power and electrical studies</li> <li>• GHD – Transport and haul road studies</li> <li>• SIMEC – Port usage proposal</li> </ul>
<b>Cut-off parameters</b>	<p>The basis of the cut-off grade(s) or quality parameters applied.</p>	<p>An economic break-even cut-off calculation is defined as:</p> $\text{Cut-off grade} = \frac{\text{Processing costs}}{(\text{Net Commodity Price} \times \text{Process Recovery} \%)}$ <p>The final open pit optimisation modifying factors utilised to calculate the breakeven cut-off grade for the Ore Reserve estimate were:</p> <ul style="list-style-type: none"> <li>• Processing cost = A\$5.42/t ore</li> <li>• Price (CFR destination incl. premium) = A\$227.80/t</li> <li>• Transport and shipping cost = A\$42.15</li> <li>• Royalties (@ 6.25% of Mine Gate Price i.e. price – transport) = A\$11.60</li> <li>• Net Commodity Price = A\$174.05/t concentrate</li> <li>• Recovery = 97%</li> </ul> $\Rightarrow \text{Breakeven cut-off grade (eDTR\%)} = \frac{\$5.42}{(\$174.05 \times 97\%)}$ $= 3.21\% \text{ eDTR}$ <p>The Ore Reserve is based on an 8% eDTR (Estimated Davis Tube Recovery). The grade tonnage curves illustrate that there is little mineralisation below this grade. 8% is significantly above the breakeven cut-off grade calculated from the base case parameters.</p>

Criteria	JORC Code Explanation	Commentary															
<b>Mining factors or assumptions</b>	<p>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</p> <p>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</p> <p>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</p> <p>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</p> <p>The mining dilution factors used.</p> <p>The mining recovery factors used.</p> <p>Any minimum mining widths used.</p> <p>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</p> <p>The infrastructure requirements of the selected mining methods.</p>	<p>Razorback is large very low strip ratio project (Waste:Ore average 0.4 with a number of early stages less than 0.2). The proposed mining operation is based on a conventional open pit truck and shovel operation utilising 400t face shovels loading 180t trucks supported by appropriate drilling and ancillary equipment.</p> <p>The rock is hard and it has been assumed that all material will require blasting with powder factors around 0.9 kg/bcm.</p> <p>Mining will be on 10m benches and grade control will be based on dedicated holes drilled ahead of production. The data will be gathered ahead of blast design allowing discrete ore and waste blasts to be designed. This will minimise dilution and ore loss.</p> <p>The mineralisation was diluted by consolidating the material across strike based 15m minimum ore and waste widths and achieving an 8% minimum grade. Because of the large homogenous nature of the mineralisation with limited internal waste, the dilution and ore loss is low at 3.3% and 2.0% for Razorback and 7.0% and ore loss of 6.3% for Iron Peak. The dilution process led to inclusion of a small amount of Inferred Mineral Resource and unclassified material, this represents less than 2% of the Ore Reserve and is not material.</p> <p>Slope designs are based on PFS standard work completed by Golder Associates in 2013 and reviewed by AMC in 2022. Because of the low strip ratio the deposit is not sensitive to overall wall angle. The recommended slope angles are shown in the table below.</p> <table border="1"> <thead> <tr> <th></th> <th>Foot wall</th> <th>Hanging wall</th> </tr> </thead> <tbody> <tr> <td>Batter slope angle (BSA) (degrees)</td> <td>70</td> <td>75</td> </tr> <tr> <td>Berm width (m)</td> <td>8.5</td> <td>8.5</td> </tr> <tr> <td>Batter slope height (m)</td> <td>20</td> <td>20</td> </tr> <tr> <td>Inter ramp angle (IRA)</td> <td>52</td> <td>55</td> </tr> </tbody> </table> <p>The final designs utilised 8m berms. This gave a slight steepening of the walls which is not material to the Ore Reserve given the strip ratio, project life and insensitivity of the designs to overall wall angle.</p> <p>Lersch-Grossman (LG) analysis identified that applying the base case parameters all the Indicated Mineral Resources could be economically extracted, and when the Inferred Mineral Resource were included the economic shells mined significantly deeper. LG analysis testing sensitivity to changes in revenue, cost and overall slope angle identified that the size of the shell was relatively insensitive to changes in these parameters. Based on this, pits were designed which extracted the full Indicated Mineral Resource.</p> <p>The Razorback pit has been designed with thirteen stages commencing in the centre and centre east areas. These sections then consolidate before pushing out to east and west to reach the ultimate pit limits. Iron Peak has two starter pits in the east and west of the deposit, the third stage consolidates the initial two stages, and the final stage pushes out to the north-east pit limit.</p> <p>The designs are based on:</p> <ul style="list-style-type: none"> <li>• Ramps 30m wide at 10% gradient</li> <li>• Minimum mining width 70m to 100m</li> </ul> <p>The schedule limited bench turnover rates to 8 benches per annum in a stage. Achieving the required 5Mt of concentrate per year from a maximum of 38Mt of feed required mining of between 40Mt and 70Mt pa. With the large size of the deposits the operation will not be mine constrained, allowing the operation to focus on efficient cost-effective operations.</p>		Foot wall	Hanging wall	Batter slope angle (BSA) (degrees)	70	75	Berm width (m)	8.5	8.5	Batter slope height (m)	20	20	Inter ramp angle (IRA)	52	55
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Criteria	JORC Code Explanation	Commentary
		<p>Waste storage has been designed with sufficient capacity for all the waste mined from the Ore Reserve pit.</p> <p>The key infrastructure for the truck and shovel method selected are:</p> <ul style="list-style-type: none"> <li>• ROM pad, high grade and low-grade stockpiles.</li> <li>• Magazine and bulk explosives storage facility.</li> <li>• Heavy and light vehicle maintenance workshop.</li> <li>• Mine administration area including offices, crib rooms and training rooms.</li> <li>• Fuel farm.</li> <li>• Camp accommodation for mine workers.</li> <li>• Offsite water supply (coastal desalination plant and pipeline) for both concentrator requirements and the mine dust suppression requirements that cannot be supplied by pit water.</li> <li>• Power lines and on-site transformers and switches for the supply of power to the workshop, offices and camp.</li> <li>• Roads, including mine access roads, ore haul roads (from pit to concentrator) and product haul roads (from concentrator to rail loading area)</li> </ul> <p>Inferred Mineral Resources within the pit design have not been considered as part of the Ore Reserve estimate, in line with the JORC 2012 guidelines. Potential upside in near surface mineralisation currently classified as Inferred exists and recommended for further resource definition.</p>
<p><b>Metallurgical factors or assumptions</b></p>	<p>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</p> <p>Whether the metallurgical process is well-tested technology or novel in nature.</p> <p>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</p> <p>Any assumptions or allowances made for deleterious elements.</p> <p>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</p> <p>For minerals that are defined by a</p>	<p>The proposed flow sheet includes:</p> <ul style="list-style-type: none"> <li>• Two stages of crushing followed by primary grinding.</li> <li>• Rougher Magnetic separation producing an initial concentrate.</li> <li>• Secondary grinding.</li> <li>• Secondary magnetic separation producing concentrate and tail.</li> <li>• The concentrate is floated and the flotation concentrate is sent to fine grinding.</li> <li>• The flotation tailings is part of the final product</li> <li>• The fine ground material flows to the cleaner magnetic separator.</li> <li>• The flotation tailings and cleaner magnetic separator concentrates are combined, dewatered and filtered to produce the final concentrate.</li> </ul> <p>This process is appropriate for the type of mineralisation and is based on well-tested technology.</p> <p>Samples were selected from the 5-10 year feed horizon. A total of 34 samples were selected for comminution, 30 samples for variability testwork and 3 samples for bulk programs. The samples were new and existing drill core and material collected from the adit. Samples were selected from 4m intervals with all material included in the sample, except for the bulk samples, where larger selections were made for mass purposes. All samples submitted for testwork intersected mineralisation within the proposed pits for the Razorback deposit and within both oxidised and fresh mineralisation as given in the 5-10 year feed horizons. Both smaller and larger (bulk) samples contained a variety of spatially distributed host lithologies primarily composed of bedded, interbedded/laminated and tillitic ironstone as per local stratigraphy and per internal domaining in block modelling.</p> <p>No significant deleterious elements have been identified</p> <p>Three bulk samples were collected for localised variation and flowsheet validation work was carried out with vendor equipment. The entire proposed flowsheet was validated with each of the three samples.</p> <p>Magnetic minerals inclusive of magnetite and mag-hematite/martite were targeted as part of the metallurgical testwork program owing to their magnetic properties as utilised in magnetic separation. Residual iron species such as hematite is present within concentrate products as a result of textural associations and entrainment with little to</p>

Criteria	JORC Code Explanation	Commentary
	specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications.	<p>no effect in product specification nor pricing.</p> <p>Test work illustrated a strong correlation between the model eDTR estimates and lab mass recoveries. This analysis supports use of a 97% recovery of the estimated eDTR grades to a 67.5 -68.5% Fe concentrate the Ore Reserve is based on.</p>
<b>Environmental</b>	The status of studies of potential environmental impacts of the mining and processing operation.	<p>The appraisal of potential environmental impacts resulting from mining and/or processing operations encompasses a two-stage approach – firstly, the quantification and qualification of existing environmental conditions (or baseline studies), and the completion of an environmental impact assessment.</p> <p>Baseline environmental studies have commenced for all principal study areas. Primary field ecology surveys (flora, fauna, ecosystems) are complete, with final targeted surveys planned. Detailed desktop reviews for groundwater, surface water, soils, air quality and noise investigations have all commenced and will be completed in the coming months.</p> <p>While formal impact assessment has not yet commenced, a risk and opportunities assessment of baseline study results to date indicate:</p> <ul style="list-style-type: none"> <li>• there is limited potential for listed species to be present in the Project area; final field surveys will confirm whether management strategies are required to adequately protect any species of significance</li> <li>• there are several potential aquifer systems (of varying quality) that may be accessible to the Company; regional groundwater use is limited to stock and domestic applications, with some ecosystem use likely from smaller, shallow groundwater systems</li> <li>• existing regional profiles for soil, noise and air quality conditions are available, and form the basis of baseline condition quantification.</li> </ul> <p>Following completion of the baseline studies, and once an optimised Project has been established, environmental impact assessment will be completed to establish any potential impacts and the management / mitigation strategies to be adopted during construction and / or operations.</p>

Criteria	JORC Code Explanation	Commentary
	<p>Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</p>	<p>An initial 2012 acid-rock drainage study examined the characteristics of selected samples of hanging wall and footwall rocks, magnetite ore and low-grade ore. Of the 13 samples tested, seven (including a duplicate sample) were classified as acid consuming material (ACM) and six samples were classified as non-acid forming (NAF) indicating that ARD is highly unlikely to occur. On the basis of these initial test results, it is considered that there is negligible potential for ARD conditions to be developed at the Razorback Project based on initial mineralization and waste zone types and extent.</p>
<p><b>Infrastructure</b></p>	<p>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</p>	<p>No infrastructure currently exists at site. Land required for the project development is currently held in pastoral lease or Crown Perpetual Lease. Mine infrastructure (excluding haul road and power line) will situate within the mining lease or an associated licence area under the <i>SA Mining Act 1971</i>.</p> <p>A power line will be required from the appropriate ElectraNet substation to the concentrator. The planned route is approximately 120km and will require land access agreements and a licence under the <i>SA Mining Act 1971</i>.</p> <p>A water bore field will be required for construction purposes with remaining process make up water produced from a coastal desalination plant with pipeline delivery to the mine site. All prospective drilling for the bore field is to the south and east of the and are partially within the mining lease extents. Where the bore field extends outside of the mining lease, land access agreements and a licence under the <i>SA Mining Act 1971</i> will be required. The bore field will initially be supplied with power from diesel generators.</p> <p>An approximately 50 km haul road will be constructed to allow road train haulage of concentrate to the Broken Hill to Port Pirie rail line. A siding and stockpile area will be constructed to allow trains to be loaded with a front-end loader. The concentrate will then be transported along existing infrastructure to Whyalla where it will be unloaded to existing stockpiling areas then loaded onto cape size vessels using existing transshipping infrastructure.</p> <p>Both the rail and port infrastructure have sufficient capacity to export 5 Mtpa of concentrate without capital expansions.</p> <p>The concentrate haul road will provide access to site from the Barrier Highway under all conditions except major flooding and will double as the mine access for workers and supplies. The planned route is approximately 50km and will require land acquisition or agreements, and a licence under the <i>SA Mining Act 1971</i>. The train loading facility will require land acquisition or agreements as part of the haul road arrangement and a licence under the <i>SA Mining Act 1971</i>.</p> <p>The mine accommodation will be accessed from the concentrate haul road, approximately 5km from the concentrator, on the mine lease. Communications with the village and site will be via a 4G booster tower.</p> <p>South Australia has an extensive mining history and a well-established, highly skilled workforce. The South Australian energy and mining sector employs more than 41,000 people, providing a large pool of skilled project development and operations staff. Significant capacity exists within South Australian training institutions to maintain a capable and accessible workforce, and Government-supported training programs (apprenticeships, traineeships, industry initiatives) are readily accessible.</p>
<p><b>Costs</b></p>	<p>The derivation of, or assumptions made, regarding projected</p>	<p>AMC Consultants developed mining operating and capital cost from first principles.</p> <p>Hatch Australia have provided capital costs for the concentrator and associated tailings disposal.</p>

Criteria	JORC Code Explanation	Commentary
	capital costs in the study.	
		<p>GHD has provided capital costs estimate templates for:</p> <ul style="list-style-type: none"> <li>• Camp accommodation (with support from Ausco Australia).</li> <li>• Mine administration area including offices (with support from Ausco Australia).</li> <li>• Heavy Vehicle and Light Vehicle maintenance facilities, wash down bays and tire change facilities.</li> <li>• Warehouse and stores facilities.</li> <li>• Mine supporting site civil infrastructure.</li> <li>• Potable water and waste water facilities.</li> <li>• Water bore field</li> </ul> <p>GHD has provided capital cost estimates for the power line.</p> <p>Labour costs used in the study have been guided by inputs from:</p> <ul style="list-style-type: none"> <li>• WorkPac South Australia</li> <li>• Hatch Australia</li> <li>• AMC</li> </ul> <p>Concentrate haul road capital cost have been provided by GHD</p> <p>The capital costs that have been absorbed into operating costs are:</p> <ul style="list-style-type: none"> <li>• Magazine and bulk explosives storage facilities.</li> <li>• Concentrate haul trucks.</li> <li>• Concentrate haul road maintenance equipment.</li> <li>• Locomotive and rail wagons.</li> <li>• Mining Support equipment and light vehicles</li> </ul>
	The methodology used to estimate operating costs.	<p>Mining operating costs have been developed from a first-principles basis utilising:</p> <ul style="list-style-type: none"> <li>• Up-to-date equipment costs (capital and operating) from OEMs</li> <li>• Current salary and labour rates based on 2:1 week rosters</li> <li>• Blasting assumed 0.9kg/bcm powder factors and used recent vendor estimates of explosive costs</li> <li>• Diesel cost of \$1.17/l</li> </ul> <p>Mining costs were calculated for the following activities:</p> <ul style="list-style-type: none"> <li>• Clearing and grubbing</li> <li>• Topsoil removal and storage</li> <li>• Road building</li> <li>• Drilling and blasting</li> <li>• Loading and hauling (including support equipment)</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>Personnel including operational and maintenance, technical and management/supervision are included in the site administration cost</li> <li>Rehabilitation and closure allowance</li> </ul> <p>The resulting LOM cost is approximately \$3.74/tonne ex-pit inclusive of capital.</p> <p>Processing costs have been estimated to a Class 4 level by Hatch Australia based on the plant design and detailed costings. This includes, but is not limited to, estimates for:</p> <ul style="list-style-type: none"> <li>Labour</li> <li>Power reticulation</li> <li>Water reticulation</li> <li>Reagents</li> <li>Consumables</li> <li>Maintenance parts</li> <li>Site and corporate general and administrative costs</li> </ul> <p>Operating costs related to Non-Process Infrastructure (e.g. accommodation etc) included:</p> <ul style="list-style-type: none"> <li>Accommodation</li> <li>Maintenance facilities</li> <li>Services – Waste water and power reticulation</li> </ul> <p>Off-site costs related to product transport have been adjusted for diesel and volume from quotes received from Bis Industries and Aurizon and SIMEC provided pricing for port handling and transshipping.</p>
	Allowances made for the content of deleterious elements.	Not applicable
	The source of exchange rates used in the study.	The exchange rates were sourced from publicly available data and were based on a forward view developed internally by Magnetite Mines
	Derivation of transportation charges.	Shipping costs were derived from historical rates, FOB from Whyalla to Qingdao. The earliest of these rates sources were from February 2014.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	Processing and refining costs have been derived by Hatch Australia based on their design of the processing plant.
	The allowances made for royalties payable, both Government and private.	<p>Allowances made for royalties payable include:</p> <ul style="list-style-type: none"> <li>Government: 5% of profit as determined by Department of Energy and Mines (DEM) schedule of royalties and rates</li> <li>Vendor: 1% royalty over mine profit payable to the vendor of the exploration licenses (Mintech Resources). A vendor royalty of A\$6 million has been included upon commencement of mining.</li> <li>Native Title/Traditional Owners: An allowance of 0.25% royalty has been assumed.</li> </ul> <p>All royalties are based on the value of the product produced at the 'mine gate'.</p>
<b>Revenue factors</b>	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter	<p>Head grade has been calculated in the Mining Reserve using:</p> <ul style="list-style-type: none"> <li>An eDTR to Mass Recovery conversion factor of 97%. This is based on bench scale flow sheet simulations.</li> <li>Ore dilution and ore loss is a function of consolidating blocks in the geological model and included in the modified mining model.</li> </ul> <p>Revenue is derived from a 62% Fe fines CFR price of US\$115/tonne. This is based on a 10 year average from December 2022 backwards, adjusted by Annual US headline CPI. The dry product grade was 68.5% Fe. An additional premium of \$39.9/t was assumed for the grade over the 62% Fe benchmark. This premium was based on extrapolating the average annual premium of the 65% Fe Fines price (over the 62% benchmark) for the</p>

Criteria	JORC Code Explanation	Commentary
	<p>returns, etc.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</p>	<p>last 5 years (to December 2022). A 5 year average was used instead of the 10 year due to the lack of volume in the 65% Fe Fines index in the early years (the index began in 2013).</p> <p>For all revenue inputs, the exchange rate used was AU\$:US\$ 0.68.</p>
<p><b>Market assessment</b></p>	<p>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</p> <p>A customer and competitor analysis along with the identification of likely market windows for the product.</p>	<p>Steel is the most widely used metal in modern society. It is the key structural component in all large civil infrastructure and all transport infrastructure, except for aircraft.</p> <p>Recent growth in steel use has been driven by industrialisation in China. Future growth is expected to be driven by two themes:</p> <ol style="list-style-type: none"> <li>1. The industrialisation of developing countries, in particular India and south-east Asia.</li> <li>2. The overhaul of energy generation and transmission infrastructure in the developed world.</li> </ol> <p>Global steel production is presently dominated by China, at over 1000Mt crude steel in 2020 (Commonwealth Department of Industry, Innovation and Science (IIS) “Resources and Energy Quarterly March 2021”) produced from high cost, small scale domestic production and 1,170Mt of iron ore imports (RMG Consulting 2021). Indian iron ore imports are expected to grow as the government targets a doubling of steel production from 154Mt to 300Mt between 2022 and 2032.</p>



Criteria	JORC Code Explanation	Commentary
	<p>Price and volume forecasts and the basis for these forecasts.</p> <p>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</p>	<p>Razorback product is a high-grade concentrate that is expected to be attractive to blend at low levels into sinter feed, ‘sweetening’ sinter quality, or blast furnace pellet production. Product grade is expected to average 68.5% Fe, with alumina at less than 0.4% and 3.5-4.5% silica. The Fe grade and Al grade are DR pellet specification (Liming Lu, 2022), while the concentrate has the right size fraction and a favourable Blaine index for pelletisation without any prior treatment.</p> <p>As a ‘headline’ grade, 68.5% compares favourably to other concentrates such as Anglo’s Minas Rio BF product (66-67% Fe) or Champion Iron’s Bloom Lake product at 66.5%, both of which have achieved substantial sales at premium prices that are considerably higher than the major fines brands.</p> <p>Actual pricing of Razorback material will depend on a range of attributes as well as iron. The concentrate will be relatively fine, but not unusually so compared to other concentrate products. Phosphorus levels are very low, which is an increasing advantage as Pilbara phosphorus levels appear to be trending up.</p>
<b>Economic</b>	<p>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</p> <p>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</p>	<p>The economic analysis undertaken to determine the Ore Reserve used a discount rate of 8%. There is no account for inflation in revenue calculations or operating costs. No sensitivity analysis has been undertaken within the financial model.</p> <p>A conservative approach of 20% contingency on all capital expenditure has been taken.</p>
<b>Social</b>	<p>The status of agreements with key stakeholders and matters leading to social licence to operate.</p>	<p>The Project sits within the Ngadjuri Nation #2 Native Title Claim (ref SC2011/002) area, which was accepted for registration in 2012. The resolution of this claim is anticipated prior to the end of 2023 where it is expected that Native Title will be granted. The determination of the Native Title provides the most-suitable opportunity to commence an agreement-making process with Ngadjuri representatives that satisfies the requirements of the <i>SA Mining Act 1971</i>.</p> <p>It is expected that either a mining agreement pursuant to the SA Mining Act 1971 or an Indigenous Land Use Agreement under the Commonwealth Native Title Act 1993 will be entered into. Frameworks for each process are well-formed, and extensive support is available from local Native Title lawyers and service providers to ensure fair, robust and meaningful negotiations and outcomes for both parties.</p> <p>The mine, plant and other infrastructure principally exist within Pastoral leases and Crown Perpetual leases. These are established by separate legislation and administered by the South Australian Government. Principal tenure for the project is established by licences granted under the SA Mining Act 1971 but requires an agreement with the leaseholder of a Pastoral or Perpetual lease to be exercised. Planning for these agreements has commenced, with initial discussions commenced with leaseholders in the mining area.</p>

Criteria	JORC Code Explanation	Commentary
<b>Other</b>	<p>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</p> <p>Any identified material naturally occurring risks.</p> <p>The status of material legal agreements and marketing arrangements.</p> <p>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</p>	<p>No material naturally occurring risks have been identified. Severe weather including the risk of flooding will not completely cease operations for an extended period of time with supporting infrastructure designed with flood immunity in mind and avoiding major water courses. The mine and mine support operations exist in a low seismic activity zone.</p> <p>No material legal or marketing agreements have been entered into.</p> <p>In South Australia, mineral resources are the property of the Crown. The South Australian Government, through the <i>SA Mining Act 1971</i>, issues tenements to companies to provide rights to explore for and extract mineral resources. Magnetite Mines holds exploration rights to the Razorback Iron Ore Project through Exploration Licences (ELs). The rights inferred under these licences can support a range of other activities required during the prefeasibility and definite feasibility study programs. The right to mine is awarded with the granting of a Mining Lease.</p> <p>Combined the Company holds 1,520km<sup>2</sup> of tenure as related to the Razorback Iron Ore Project. The deposits associated with the Razorback Iron Ore Project are located primarily on the EL6353 and EL6126 tenements, while infrastructure may also extend into EL6127 and EL5902.</p> <p>Magnetite Mines has registered its intention with the South Australian Government to undertake the Mining Lease application process for the Project. A Case Manager has been designated by the South Australian Government to provide support and facilitation through the established approvals and permitting processes. Early engagement with government mining and other technical specialists has commenced and demonstrate a clear support for the project. A project approvals schedule is being developed between the Company and the South Australian Government.</p> <p>Eco Logical Australia has been engaged to prepare application documentation. The South Australian Government provides clear requirements on the application process and scope of information to be provided to ensure a robust planning and assessment process. A review against these requirements demonstrates that the development and provision of such information to form the mining lease application is readily achievable.</p> <p>Baseline environmental studies are well-advanced and will be reviewed by Government stakeholders as part of an iterative process to ensure alignment to necessary standards and other expectations.</p>
<b>Classification</b>	The basis for the classification of the Ore Reserves into varying confidence categories.	As the Mineral Resource for the Razorback Iron Ore Project consists of JORC (2012) Indicated and Inferred resources, a portion of the Indicated Resources have been converted to Probable Reserves. Over 98% of the mineralisation classified as Probable Ore Reserves is currently classified as Indicated following JORC 2012 code and guidelines.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The estimated Ore Reserves are, in the opinion of the Competent Person, appropriate for these deposits.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Not applicable
<b>Audits or reviews</b>	The results of any audits or reviews of Ore Reserve estimates.	No third-party audits have been undertaken. AMC have performed their usual internal peer review of the mining aspects supporting the PFS.
<b>Discussion of relative</b>	Where appropriate a statement of the relative	Considerations in favour of a high confidence in the Ore Reserves include: The mine plan is supported by high accuracy capital and operating cost estimates

Criteria	JORC Code Explanation	Commentary
<p><b>accuracy/ confidence</b></p>	<p>accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</p> <p>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</p> <p>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	<p>Production is of a scale and throughput that has been successfully implemented at other large Iron Ore Projects in Australia.</p> <p>Significant metallurgical test work has been completed with a high degree of accuracy including pilot scale testwork with OEM vendors</p> <p>The process flowsheet utilised existing, demonstrated technologies producing a single saleable concentrate.</p> <p>Considerations in favour of a lower confidence in Ore Reserves include:</p> <p>There is a degree of uncertainty associated with geological estimates. The Reserve classifications reflect the levels of geological confidence in the estimates.</p> <p>Commodity prices and exchange rate assumptions are subject to market forces and present an area of uncertainty.</p> <p>There is a degree of uncertainty regarding estimates of impacts of natural phenomena including geotechnical assumptions, hydrological assumptions, and the modifying mining factors, commensurate with the Pre-Feasibility level of detail of the study.</p> <p>The Ore Reserve is based on a global estimate. Modifying factors have been applied at a local scale.</p>

**APPENDIX 2.**

Hole_ID	Orig_East	Orig_North	Max_Depth	Dip	Hole_Type	Orig_Grid_ID
RRDD0044	378671.1	6353173	215.1	-70	RCDD	MGA94_54
RRDD0047	380375	6353390	176.8	-60	DD	MGA94_54
RRDD0049	380321.9	6353548	242.5	-60	RCDD	MGA94_54
RRDD0055	379306.7	6353160	203.5	-60	RCDD	MGA94_54
RRDD0057	379761.5	6353322	239.5	-60	RCDD	MGA94_54
RRDD0090	378478.1	6353577	432	-60	RCDD	MGA94_54
RRDD0095	376963.1	6353812	217.2	-60	RCDD	MGA94_54
RRDD0100	380633.7	6353606	180.8	-60	DD	MGA94_54
RRDD0101	380453.8	6353237	107.7	-60	DD	MGA94_54
RRDD0102	379310.2	6353090	171.7	-60	DD	MGA94_54
RRDD0103	379314.1	6352813	60	-60	DD	MGA94_54
RRDD0104	378639.5	6353008	36	-50	DD	MGA94_54
RRDD0105	380302.9	6353116	90.1	-60	DD	MGA94_54
RRDD0106	381158.9	6353883	77.3	-60	DD	MGA94_54
RRDD0107	379940.7	6352930	78.3	-60	DD	MGA94_54
RRDD0108	380807.7	6353765	177.8	-60	DD	MGA94_54
RRDD0111	378010.5	6353397	152.6	-60	DD	MGA94_54
RRDD0112	377301.7	6353632	234.8	-60	DD	MGA94_54
RRDD0115	379305	6353777	105.4	-60	DD	MGA94_54
RRDD0117	379569.1	6352870	83.3	-60	DD	MGA94_54
RRDD0118	379519.7	6352964	137.6	-60	DD	MGA94_54
RRDD0119	378382	6353227	117	-60	DD	MGA94_54
RRDD0123	375770	6354053	150.2	-60	DD	MGA94_54
RRDD0124	375398	6354123	192.6	-60	DD	MGA94_54
RRDD0125	377731	6353705	387.6	-60	DD	MGA94_54
RRDD0126	377323	6353677	350	-60	DD	MGA94_54
RRDD0127	377323	6353677	349.9	-60	DD	MGA94_54
RRDD0129	379762	6353224	379.9	-50	DD	MGA94_54
RRDD0130	379762	6353226	474.4	-50	DD	MGA94_54
RRDD0222	378084.6	6353652	426.1	-70	RCDD	MGA94_54
RRDD0235	374902	6354116	133.25	-55	RCDD	MGA94_54
RRDD0258	376982	6353985	357.2	-60	RCDD	MGA94_54
RRRC0001	380264.8	6353137	142	-60	RC	MGA94_54
RRRC0002	380225	6353152	160	-60	RC	MGA94_54
RRRC0003	380155.4	6353229	43	-60	RC	MGA94_54
RRRC0004	380131.7	6353264	63	-60	RC	MGA94_54
RRRC0005	380101.4	6353298	91	-60	RC	MGA94_54
RRRC0006	379913	6352970	151	-60	RC	MGA94_54
RRRC0007	379866.3	6353021	190	-60	RC	MGA94_54

RRRC0008	379836	6353117	36	-60	RC	MGA94_54
RRRC0009	379825.3	6353152	160	-60	RC	MGA94_54
RRRC0010	379807.1	6353197	79	-60	RC	MGA94_54
RRRC0011	381153.2	6353884	139	-60	RC	MGA94_54
RRRC0012	381179.5	6353847	115	-60	RC	MGA94_54
RRRC0013	381207.4	6353807	60	-60	RC	MGA94_54
RRRC0014	381234.4	6353766	30	-60	RC	MGA94_54
RRRC0015	381440.8	6354116	100	-60	RC	MGA94_54
RRRC0016	381393.5	6354199	134	-60	RC	MGA94_54
RRRC0017	381357.8	6354244	106	-60	RC	MGA94_54
RRRC0018	381501.7	6354028	82	-90	RC	MGA94_54
RRRC0019	381477.7	6354070	80	-90	RC	MGA94_54
RRRC0020	381443.2	6354106	88	-90	RC	MGA94_54
RRRC0021	381442.3	6354162	94	-60	RC	MGA94_54
RRRC0022	381118.2	6353924	178	-60	RC	MGA94_54
RRRC0023	381094.1	6353967	184	-60	RC	MGA94_56
RRRC0024	381065.4	6354004	142	-60	RC	MGA94_54
RRRC0025	380905.2	6353613	82	-60	RC	MGA94_54
RRRC0026	380851.9	6353686	140	-60	RC	MGA94_54
RRRC0027	380742.3	6353523	106	-60	RC	MGA94_54
RRRC0028	380807.8	6353765	64	-60	RC	MGA94_54
RRRC0029	380757.4	6353820	94	-60	RC	MGA94_54
RRRC0030	380635.8	6353607	58	-60	RC	MGA94_54
RRRC0031	380594.6	6353658	208	-60	RC	MGA94_54
RRRC0032	380820.8	6353729	160	-60	RC	MGA94_54
RRRC0033	380435.9	6353192	100	-60	RC	MGA94_54
RRRC0034	380451.8	6353238	106	-60	RC	MGA94_54
RRRC0035	380459.6	6353276	124	-60	RC	MGA94_54
RRRC0036	379082.8	6352876	106	-60	RC	MGA94_54
RRRC0037	379100.5	6352918	112	-60	RC	MGA94_54
RRRC0038	379105	6352998	160	-60	RC	MGA94_54
RRRC0039	379120.1	6353035	170	-60	RC	MGA94_54
RRRC0040	379118.1	6353134	100	-60	RC	MGA94_54
RRRC0041	378642	6353058	60	-60	RC	MGA94_54
RRRC0042	378662.2	6353125	184	-60	RC	MGA94_54
RRRC0043	378647.2	6353073	160	-60	RC	MGA94_54
RRRC0045	380851.7	6353451	58	-75	RC	MGA94_54
RRRC0046	380761.9	6353410	76	-75	RC	MGA94_54
RRRC0047	380396.1	6353398	172	-60	RC	MGA94_54
RRRC0048	380358.1	6353459	70	-60	RC	MGA94_54
RRRC0050	379528	6353125	186	-60	RC	MGA94_54

RRRC0051	379312.1	6352867	82	-60	RC	MGA94_54
RRRC0052	379302.6	6352923	100	-60	RC	MGA94_54
RRRC0053	379305.6	6353046	154	-60	RC	MGA94_54
RRRC0054	379312.9	6353090	172	-60	RC	MGA94_54
RRRC0056	379307.7	6353241	244	-60	RC	MGA94_54
RRRC0058	379859.5	6353081	154	-75	RC	MGA94_54
RRRC0059	380191.5	6353193	134	-60	RC	MGA94_54
RRRC0060	379807.7	6353249	210	-60	RC	MGA94_54
RRRC0061	379525.6	6353222	222	-60	RC	MGA94_54
RRRC0062	379530.8	6353077	178	-60	RC	MGA94_54
RRRC0063	380048.7	6353343	214	-60	RC	MGA94_54
RRRC0064	379940	6352930	88	-60	RC	MGA94_54
RRRC0065	381296.2	6354323	118	-60	RC	MGA94_54
RRRC0066	381264.8	6353999	106	-60	RC	MGA94_54
RRRC0089	378786.1	6353597	90	-60	RC	MGA94_54
RRRC0091	377669.9	6353409	120	-60	RC	MGA94_54
RRRC0092	377690	6353490	220	-60	RC	MGA94_54
RRRC0093	377721	6353635	294	-60	RC	MGA94_54
RRRC0094	376949.4	6353719	180	-60	RC	MGA94_54
RRRC0097	379124.9	6353210	240	-60	RC	MGA94_54
RRRC0098	379524.4	6353311	282	-60	RC	MGA94_54
RRRC0099	378909	6353173	228	-65	RC	MGA94_54
RRRC0100	378543.3	6353336	216	-60	RC	MGA94_54
RRRC0201	378917	6353248	300	-60	RC	MGA94_54
RRRC0202	378929.2	6353296	90	-70	RC	MGA94_54
RRRC0203	379958.2	6353235	186	-60	RC	MGA94_54
RRRC0204	379999.9	6353128	144	-60	RC	MGA94_54
RRRC0205	379655	6353145	186	-60	RC	MGA94_54
RRRC0206	378896	6353059	162	-60	RC	MGA94_54
RRRC0207	378700.1	6353245	174	-60	RC	MGA94_54
RRRC0208	380934	6353895	210	-60	RC	MGA94_54
RRRC0209	380500.5	6353478	174	-60	RC	MGA94_54
RRRC0210	377341.8	6353719	300	-60	RC	MGA94_54
RRRC0211	377703	6353563	270	-65	RC	MGA94_54
RRRC0212	378038	6353544	252	-75	RC	MGA94_54
RRRC0213	378169.4	6353456	204	-70	RC	MGA94_54
RRRC0214	378012.2	6353402	174	-75	RC	MGA94_54
RRRC0216	378460.4	6353265	142	-60	RC	MGA94_54
RRRC0217	379823.1	6353156	214	-60	RC	MGA94_54
RRRC0218	378019.4	6353492	196	-60	RC	MGA94_54
RRRC0219	377964.8	6353297	58	-60	RC	MGA94_54

RRRC0220	378164	6353228	58	-60	RC	MGA94_54
RRRC0221	378179.1	6353325	86	-60	RC	MGA94_54
RRRC0223	377302.5	6353624	160	-70	RC	MGA94_54
RRRC0224	377264.6	6353536	106	-60	RC	MGA94_54
RRRC0225	376931	6353618	34	-60	RC	MGA94_54
RRRC0226	378909.4	6352943	106	-60	RC	MGA94_54
RRRC0231	381321.6	6353910	112	-60	RC	MGA94_54
RRRC0232	377681	6353449	150	-65	RC	MGA94_54
RRRC0233	377696	6353526	276	-65	RC	MGA94_54
RRRC0234	377705	6353603	300	-65	RC	MGA94_54
RRRC0236	374900	6354041	72	-60	RC	MGA94_54
RRRC0237	377383	6353828	198	-60	RC	MGA94_54
RRRC0238	377323	6353677	300	-60	RC	MGA94_54
RRRC0239	377278	6353575	138	-60	RC	MGA94_54
RRRC0240	374360	6354175	150	-65	RC	MGA94_54
RRRC0241	374373	6354229	258	-65	RC	MGA94_54
RRRC0242	374346	6354132	114	-60	RC	MGA94_54
RRRC0243	374922	6354184	270	-65	RC	MGA94_54
RRRC0244	375793	6354157	252	-65	RC	MGA94_54
RRRC0245	375758	6353960	90	-65	RC	MGA94_54
RRRC0246	376530	6353792	90	-60	RC	MGA94_54
RRRC0247	376556	6353888	180	-65	RC	MGA94_54
RRRC0248	376579	6353972	300	-65	RC	MGA94_54
RRRC0249	375775	6354058	138	-65	RC	MGA94_54
RRRC0250	376638	6354195	300	-60	RC	MGA94_54
RRRC0251	376612	6354089	216	-60	RC	MGA94_54
RRRC0252	376164	6353878	90	-60	RC	MGA94_54
RRRC0253	376194	6354057	210	-65	RC	MGA94_54
RRRC0254	376182	6353976	186	-65	RC	MGA94_54
RRRC0255	376213	6354160	180	-60	RC	MGA94_54
RRRC0256	375387	6354030	102	-60	RC	MGA94_54
RRRC0257	375401	6354223	234	-60	RC	MGA94_54
RRRC0259	377003	6354099	300	-60	RC	MGA94_54
RRRC0260	374623	6354444	300	-60	RC	MGA94_54
RRRC0261	373937	6354159	90	-60	RC	MGA94_54
RRRC0262	373957	6354229	150	-60	RC	MGA94_54
RRRC0263	373978	6354330	270	-60	RC	MGA94_54
RRRC0264	373544	6354218	90	-60	RC	MGA94_54
RRRC0265	373554	6354279	150	-60	RC	MGA94_54
RRRC0266	373583	6354380	255	-60	RC	MGA94_54
RRRC0267	374390	6354304	264	-60	RC	MGA94_54

RRRC0268	374927	6354277	300	-60	RC	MGA94_54
RRRC0269	375409	6354313	294	-60	RC	MGA94_54
RRRC0270	375805	6354254	294	-60	RC	MGA94_54
RRRC0271	376226	6354261	300	-60	RC	MGA94_54
RRRC0272	377409	6353901	300	-60	RC	MGA94_54
RRRC0273	377736	6353806	300	-60	RC	MGA94_54
IPDD0001	385003	6353974	81	-60	DD	MGA94_54
IPDD0002	385259.2	6353995	45.1	-60	DD	MGA94_54
IPDD0003	385025	6354161	51.1	-60	DD	MGA94_54
IPDD0004	384804	6354137	48.1	-60	DD	MGA94_54
IPDD0005	384377	6353914	146.9	-60	DD	MGA94_54
IPDD0006	384239	6353919	147.1	-60	DD	MGA94_54
IPMT0001	384510	6353987	133.7	-90	DD	MGA94_54
IPMT0002	384510	6353987	133.6	-90	DD	MGA94_54
IPMT0003	384885	6354084	169.7	-90	DD	MGA94_54
IPMT0004	384513	6354164	112.6	-90	DD	MGA94_54
IPMT0005	384351	6354070	172.6	-90	DD	MGA94_54
IPMT0006	385246	6354075	132	-90	DD	MGA94_54
IPMT0007	385170	6354149	115.7	-90	DD	MGA94_54
IPMT0008	385686	6354061	103.65	-90	DD	MGA94_54
IPMT0009	385573	6354061	100.6	-90	DD	MGA94_54
IPMT0010	384858	6353989	109.6	-90	DD	MGA94_54
IPMT0011	384754	6353969	109.6	-90	DD	MGA94_54
RRDD0113	384431	6354072	297.02	-60	DD	MGA94_54
RRDD0120	384682	6354159	275.96	-60	DD	MGA94_54
RRDD0180	385662	6354248	282.5	-65	RCDD	MGA94_54
RRDD0274	384706	6354235	318.2	-55	RCDD	MGA94_54
RRDD0277	385097	6354284	312.4	-65	RCDD	MGA94_54
RRDD0279	385303	6354254	294.5	-65	RCDD	MGA94_54
RRDD0282	385844	6354448	384.6	-65	RCDD	MGA94_54
RRDD0284	386106	6354551	365.3	-65	RCDD	MGA94_54
RRRC0078	384376	6354017	136	-60	RC	MGA94_54
RRRC0079	384888.4	6354077	105	-60	RC	MGA94_54
RRRC0080	386269.9	6354410	124	-60	RC	MGA94_54
RRRC0081	385914.2	6354149	118	-60	RC	MGA94_54
RRRC0082	385299.3	6354091	94	-60	RC	MGA94_54
RRRC0083	385318	6354144	152	-60	RC	MGA94_54
RRRC0084	384679.1	6354161	187	-60	RC	MGA94_54
RRRC0085	384427	6354076	166	-60	RC	MGA94_54
RRRC0275	384685	6354048	174	-65	RC	MGA94_54
RRRC0276	385093	6354193	282	-65	RC	MGA94_54



RRRC0278	385661	6354128	198	-55	RC	MGA94_54
RRRC0280	385661	6354247	168	-65	RC	MGA94_54
RRRC0281	385884	6354354	288	-65	RC	MGA94_54
RRRC0283	386163	6354463	300	-65	RC	MGA94_54
RRRC0285	384279	6353930	180	-60	RC	MGA94_54