

ASX ANNOUNCEMENT

09 FEBRUARY 2023

IRON PEAK MINERAL RESOURCE SIGNIFICANTLY IMPROVED

EXTENDING MINE LIFE & SUPPORTING DIRECT REDUCTION PREMIUM-GRADE TARGET

Highlights:

- **Iron Peak Mineral Resource elevated to highest quality deposit within MGT portfolio:**
 - **Mass recovery significantly increased to 19.4% (from 16.8%)**
 - **Tonnage increased to 503 Mt (from 419 Mt)**
 - **Superior metallurgy supports DR premium-grade product target**
 - **Enables opportunity to improve early mine life Project economics**
- **Razorback Iron Ore Project Mineral Resource increased to 3.3 billion tonnes (Bt) at 16.0% mass recovery:**
 - **Total Indicated Resources (available for potential conversion to Ore Reserves) increased to 1.7 Bt, up 12%**
- **MGT global Mineral Resources increased to 6.0 Bt, up 4% (Inferred and Indicated)**

MGT CEO Tim Dobson said:

"MGT has systematically increased the scale of its flagship Razorback Iron Ore Project over recent years, creating the long-life, large-scale mine plan needed to support investment in opening South Australia's massive but undeveloped Braemar iron province. Now we have turned our eye to improved product quality to not only enhance early-year project economics, but to also target the production of premium-grade DR products increasingly in demand by the decarbonising iron & steel sector.

This Iron Peak Mineral Resource update represents a turning point for MGT, with the deposit now boasting materially improved mass recovery to complement the previously announced superior metallurgical performance, including the capability of producing premium-grade DR products. Taking advantage of this new information, we have now commenced work aimed at processing high-grade Iron Peak mineralisation into the critical first years of the production plan.

In summary, Iron Peak presents MGT with an outstanding opportunity to process high-quality mineralisation early in the Project, reducing technical risk, decreasing costs and improving Project economics."

SUMMARY

Magnetite Mines Limited (ASX:MGT) is pleased to announce a Mineral Resource Estimate update for the Iron Peak Deposit, and the Razorback Iron Ore Project (Project), which is inclusive of Iron Peak. This update includes new drilling data that has substantially increased the size and quality of the Iron Peak Deposit and complements the superior metallurgical performance, relative to the wider Project, previously confirmed for Iron Peak^{1,2,3}.

Iron Peak is now of suitable size and quality to investigate processing the deposit in the first years of operations. The implications of this are potentially material improvements to the Project risk profile, cost base and overall economics.

Processing higher-grade (i.e. higher mass recovery) mineralisation translates to lower mining and processing volumes for a given concentrate output. It also increases the likelihood of achieving target concentrate grades, including premium-grade products suitable for feed into Direct Reduced Iron (DRI) facilities. Demand for premium-grade DR products, with associated price premiums, is forecast to continue growing over the coming 5 to 15 years as the global iron and steel industry transitions to fully decarbonised production by 2050.

Targeting high-grade mineralisation for the commencement of new mine operations is a well-proven strategy that improves project economics by maximising early-year cash flows, increasing net present value (NPV) on a discounted cash flow basis, and shortening the capital payback period.

The Iron Peak Deposit now stands at 503 million tonnes (up 20%) with a mass recovery of 19.4% (up 15%) making it the highest-grade deposit available to the Project to date³. The drilling campaign that has led to this Mineral Resource Estimate update specifically targeted the previously observed high-grade potential of the deposit. Drilling comprised shallow infill and metallurgical sample collection, and subsequent analyses included a significant increase in the number of DTR tests (Davis Tube mass recovery measurements), substantially increasing the confidence level in the quality of the Resource. The deposit remains open along strike and at depth, and there remains strong potential to increase the volume of high-quality mineralisation with further drilling at Iron Peak.

The total Razorback Project Mineral Resource Estimate, inclusive of Iron Peak, now stands at 3.3 billion tonnes at 16% mass recovery, incorporating 1.7 billion tonnes at Indicated classification and 1.6 billion tonnes at Inferred classification. The Mineral Resource Estimate update was completed by Widenbar Associates Pty Ltd, to JORC 2012 standards and guidelines and includes resource estimation methodology updates applied to the Razorback Deposit.

This update increases the Company's total iron Mineral Resource Estimate to 6.0 billion tonnes, combined Inferred and Indicated classifications, and includes the Ironback Hill Deposit⁴ and the recent addition of the Muster Dam Project⁵ to MGT's growing portfolio within South Australia's vast and undeveloped Braemar Iron Formation.

South Australia is a proven mining-friendly jurisdiction and continues to improve its attractiveness with respect to the development of decarbonised heavy industry, including magnetite mining, processing and export. In less than 20 years, South Australia has increased its renewable energy generation from 1% to 70%, and is on track to achieve 100% by 2030. The SA government has also recently committed \$0.6 billion to initiate a green hydrogen industry. Accordingly, the state is rapidly becoming an ideal location to establish value-adding industries such as iron ore pelletising (for downstream iron and steel making) and future "green steel" production, which requires carbon-free energy and hydrogen production.

IRON PEAK MINERAL RESOURCE UPDATE

An update to the Iron Peak Mineral Resource Estimate has been completed to incorporate new drilling data and has resulted in an increase to both the tonnage and mineralisation quality, which now stands at 503 Mt at 19.4% mass recovery³.

Table 1. Updated Iron Peak Mineral Resource Estimate

Classification	Million Tonnes (Mt, dry)	Mass (eDTR%)	Rec	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite%
INDICATED	286	19.3		18.5	47.8	8.2	0.16	5.8	16.1
INFERRED	216	19.5		17.9	48.3	8.3	0.16	5.9	15.8
TOTAL	503	19.4		18.2	48.0	8.2	0.16	5.8	16.0

Figures quoted at a 11% Mass Recovery cut-off

Location

The Iron Peak Deposit is located within 5 km of the Razorback Deposit and, along with the Razorback West Deposit, the three deposits make up the Razorback Iron Ore Project (Figure 1).

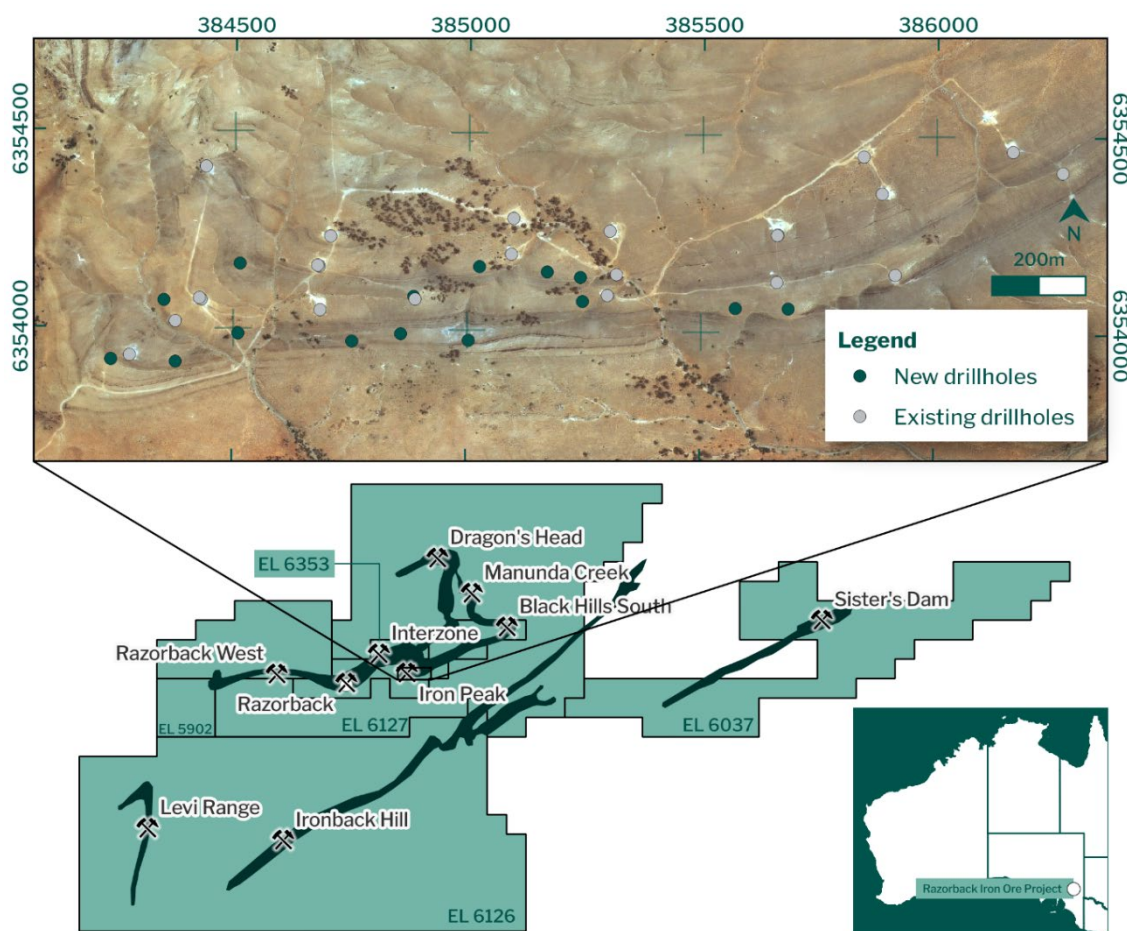


Figure 1. Iron Peak Deposit location showing 2022 drill collars (Metallurgical and Shallow Infill)

Increased Mass Recovery

Mass recovery (or weight recovery) is the most important measure of mineralisation quality in the evaluation of magnetite deposits and is the percentage of the head (feed) mineralisation by weight that is recoverable by concentration processes. The updated mass recovery for Iron Peak represents a substantial 15% increase over previous Mineral Resource Estimates³, making Iron Peak a standout deposit not only in terms of the Magnetite Mines portfolio, but also when compared with all currently announced Braemar Iron Formation Resource Estimates.

Superior Metallurgy

The importance of this updated Iron Peak Minerals Resource Estimate becomes evident when considered in light of recent metallurgical testwork results². As shown in Table 2 below, Iron Peak has produced the highest grade concentrate products to date for the Project: >69% Fe with less than 3% major impurities. This is considered premium-grade feed for Direct Reduction (DR) pellet facilities, extremely scarce in the current market, and increasingly in demand as DRI facilities replace carbon-intensive blast furnace operations globally. The Iron Peak sample also exhibit the lowest average bond ball work index (at 6.8kWh/t), and the lowest abrasion index (0.05)², translating to lower processing costs when compared with samples from other parts of the Project resource base.

Table 2. Summary of concentrate product results to-date²

Sample	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	TiO ₂ (%)	SiO ₂ +Al ₂ O ₃ +TiO ₂
RAZORBACK TEST 1	68.0	3.79	0.47	0.067	4.33
RAZORBACK TEST 2	68.5	3.31	0.42	0.064	3.79
RAZORBACK TEST 3	67.1	4.63	0.57	0.080	5.28
IRON PEAK TEST 1	69.7	2.34	0.29	0.034	2.66
AVERAGE	68.3	3.52	0.44	0.061	4.02

Final flotation tail testwork results; grind size P80 = 44microns

In summary, Iron Peak is now considered MGT's highest quality deposit in terms of in-situ grade (i.e. mass recovery), potential operating cost base and potential to produce premium-grade DR products.

Implications to Project Economics

The Iron Peak Deposit represents a portion of the wider Razorback Iron Ore Project Mineral Resource Estimate and lies approximately 4kms to the east of the current proposed process plant location.

The updated Mineral Resource includes an increase in the quantity of material in Indicated classification (available for potential conversion to Ore Reserves) to 286 Mt, up 14% from 247 Mt³. The combination of increased mass recovery and Indicated classification tonnage, along with superior metallurgical response, has positive implications for Project development as higher mass recovery enables more magnetite concentrate to be produced per tonne of plant feed.

Given the deposit's historically smaller tonnage and distance from the plant, the deposit has previously featured late in mine scheduling. Based on this new information, MGT's mining consultants have commenced new pit optimisation modelling and plant feed sequencing to assess concentrate production from Iron Peak mineralisation in the initial years of the Project life.

Drilling

Drilling at the Iron Peak deposit commenced in October 2021 and was completed in late January 2022^{1,6}. Sampling of core material for resource purposes followed metallurgical sampling and was completed in mid-2022 for analysis at Bureau Veritas Laboratories. The drill program consisted of two primary drill programs:



Figure 2. Drilling contractors undertaking metallurgical sample drilling at Iron Peak

Metallurgical Drilling

This drilling program consisted of 11 PQ diameter diamond drill holes, drilled vertically and for the purpose of metallurgical sampling. The program was designed to intersect varying lithologies across the Iron Peak deposit in both weathered and fresh domains of the resource, to represent early year plant feed. The metallurgical drill program comprised 1,393m of drilling and produced 1,326 samples for head grade (XRF and SATMAGAN) and Davis Tube Recovery (DTR – Mass Recovery) analysis^{1,6}.

Shallow Infill Drilling

This program followed metallurgical drilling and consisted of 6 HQ diameter diamond drill holes. The drill program was designed to intersect mineralisation at Iron Peak in areas with poor drill coverage, to improve near surface resource classification and intersect prospective stratigraphy previously inaccessible due to topography (Unit A). Drill holes were orientated to intersect mineralisation near-perpendicular to the dip-angle. The shallow infill drill program comprised 519m of drilling and produced 487 samples for head grade (XRF and SATMAGAN) and Davis Tube Recovery (DTR – Mass Recovery) analysis^{1,6}.

Drilling was undertaken with a KWL 1600H Multipurpose rig via drilling contractor Foraco. Drill site placement, geological logging and sampling was undertaken by MGT staff.



Figure 3. Iron Peak Drilling in difficult topography with outcropping magnetite (black) in foreground.

RAZORBACK DEPOSIT MINERAL RESOURCE UPDATE

Completed in parallel with Iron Peak, the Razorback Deposit Mineral Resource Estimate, which includes the Razorback Ridge and Razorback West prospects, has been updated to maintain consistency of resource estimation methodology across the deposits. Accordingly, the Razorback Deposit was subjected to the same domaining assumptions as applied to the Iron Peak Deposit, for the application of eDTR regressions to the weathering profile and fresh search domains. This resulted in a minor adjustment for this deposit with the Mineral Resource Estimate updated to 2,740Mt at 15.4% mass recovery*, up from 2,580Mt at 15.6% mass recovery³. Material changes to the Resource Estimate are discussed below.

Table 3. Razorback Deposit Mineral Resource Update*

Classification	Million Tonnes (Mt, dry)	Mass Rec (eDTR%)	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite%
INDICATED	1,390	15.3	18.3	48.1	8.0	0.18	5.4	14.8
INFERRED	1,350	15.6	17.7	48.6	8.2	0.18	5.5	15.5
TOTAL	2,740	15.4	18.0	48.3	8.1	0.18	5.4	15.2

*All figures quoted at a 11% Mass Recovery cut-off

COMBINED MINERAL RESOURCE ESTIMATE

In combination, the Iron Peak Mineral Resource Estimate, together with the updated Razorback Mineral Resource Estimate, form the Razorback Iron Ore Project Resource Estimate.

Following this update, the Company's global Mineral Resource Estimate has increased to 5,982 Mt for a combination of Inferred and Indicated classified iron mineralisation, per JORC 2012 code and guidelines (Table 4)^{3,4,5,7}.

Table 4. Summary of the Company's global iron Resource Estimates

Razorback Iron Ore Project (Razorback and Iron Peak Combined) ^a								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
INDICATED	1,675	15.95	18.36	48.02	8.06	0.18	5.46	15
INFERRED	1,570	16.09	17.74	48.6	8.23	0.18	5.53	15.6
TOTAL	3,245	16.02	18.06	48.3	8.15	0.18	5.49	15.3

Results presented at 11% eDTR cut-off

Ironback Hill ^{*b4}								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
INFERRED	1,187	-	23.2	44.4	7.2	0.21	5.4	12.9

Results presented with no cut-off

Muster Dam Iron Project ^{*c5}								
Classification	Tonnes (Mt)	Mass Rec (DTR%)	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite %
INFERRED	1,550	15.2	18.7	49.6	8.8	0.2	2.8	-

Results presented with 10% Mass Recovery cut-off

Combined Mineral Resource Estimate								
Classification	Tonnes (Mt)	Mass Rec (eDTR%)	Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	Magnetite %
INFERRED & INDICATED	5,982	-	19.4	48.1	8.2	0.2	4.8	-

Results presented as weighted averages of items A, B and C

Razorback Iron Ore Project, Ore Reserve ^{*7}			
Classification	Tonnes Ore (Mt)	Mass Rec %	Concentrate (Mt)
PROBABLE	472.7	14.5	68.5

Ore Reserves are a sub-set of Razorback Iron Ore Project Indicated Mineral Resource Estimate.

*The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements above, and in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements. Tonnages and grades presented above are estimates of in-situ rock characteristics.

No new nor changes to existing Ore Reserves are applicable to this Mineral Resource Estimate Update.

MATERIAL CHANGES TO THE RAZORBACK IRON ORE PROJECT MINERAL RESOURCE

Geological Modelling

Geological modelling and interpretation of bedding and structural geometry follows the previous Resource Estimate for the Razorback Iron Ore Project with minor wireframe updates³. The initial geological interpretation was completed by independent geological consultants and updated with additional drilling data acquired during the 2021/2022 metallurgical and infill drill program¹. Data included in the updated interpretation included lithological, geophysical (downhole magnetic susceptibility and density logging data) and photographic data. Geological model wireframes were updated and results of the interpretation were imported into the Micromine Resource Estimation software suite by Widenbar and Associates, for block modelling and resource estimation. All data and interpretations were verified by the Company's in-house geological team.

Resource Modelling

The geological model has been used to constrain the interpolation of the block model, with hard boundaries being used for some 19 separate geological units at Razorback and 13 units at Iron Peak. Statistical analysis and metallurgical work indicated that the weathering (oxide) zone behaves differently to the fresh zone, and consequently the weathering/fresh interface has been used as a hard boundary.

Following geostatistical analysis, an Ordinary Kriging interpolation method has been used: block sizes of 10 m (E), by 5 m (N) by 5 m (RL) have been used, to enable adequate representation of geological zones, as the strike varies from 100° to 045° and dip from 30° to 70°.

The geological domains have been “unfolded” to simplify search orientation setup and interpolation was carried out in unfolded space. Blocks (and their sub-cells) are treated as sub-cells within a larger panel that is estimated as a parent cell (30 m x 5 m x 10 m). The unfold plane for each domain is its footwall, so all the blocks and data line up east-west and vertical; this also removes the effect of the faults and makes all the data available for estimation rather than small subsets within the faulted areas.

The unfolding projection is in a north-south sense onto the footwall of each domain, and fore-shortens the distance from 100 m sections in the main infill central area to 70 to 90 m; a 30 m along strike panel size is appropriate on this case. The variography is also carried out in unfolded space, so spatial relationships are properly maintained in setting up the kriging weighting factors.

Variables estimated were: DTR, Magnetite, Fe, SiO₂, Al₂O₃, TiO₂, MnO, CaO, P, S, MgO, K₂O, Na₂O, LOI, Cu and Zn.

A three-pass search strategy has been used (Table 5).

Table 5. Interpolation Search Parameters

	Search Distance (m)						
Search	Along	Down	Across	Minimum	Maximum	Minimum	Maximum
Pass	Strike	Dip	Dip	Samples	Samples	Holes	Per Hole
1	250	120	5	4	20	2	4
2	450	200	5	1	20	1	4
3	600	200	5	1	20	1	4

Drill hole section spacing is generally 200m by 50m, with infill lines at 100m in the central parts of the Razorback deposit. The resource has been classified in the Indicated and Inferred categories in accordance with the 2012 JORC Code. Classification is based on a combination of drill hole spacing and kriging output parameters (including number of sample and holes used in estimation, average distance to samples, kriging variance etc).

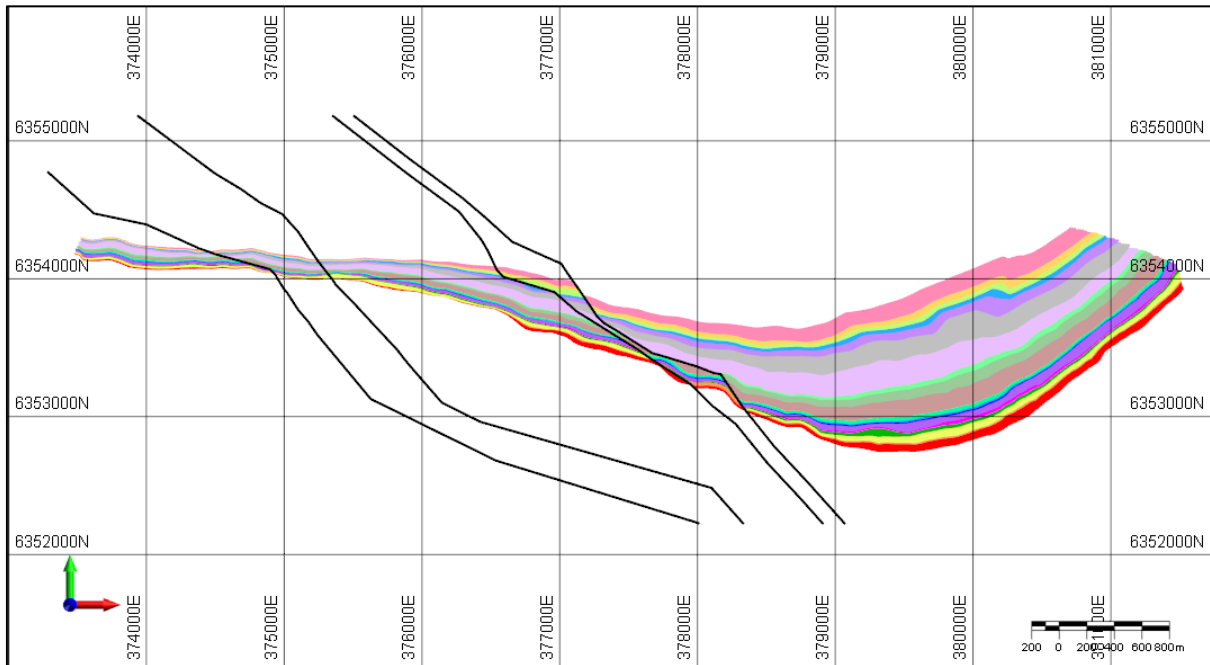


Figure 2. Razorback Geological Model Plan View displaying lithological sub-domains

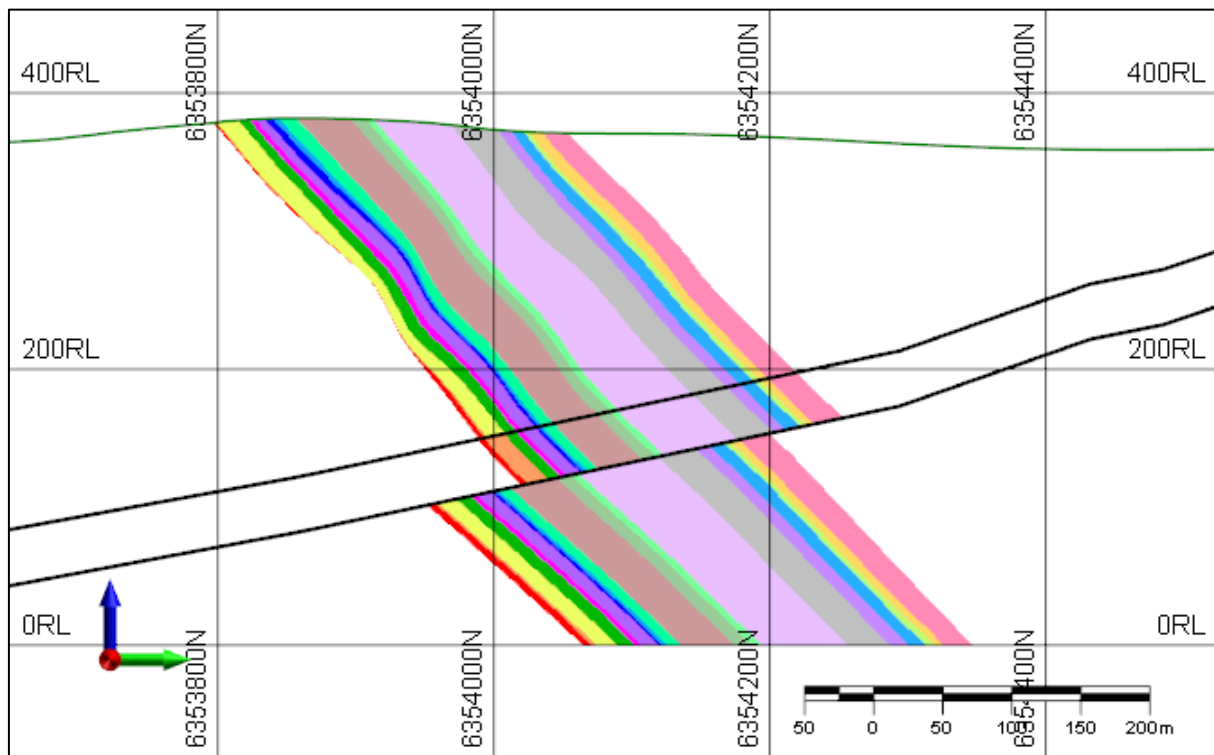


Figure 3. Razorback Geological Model Typical Section displaying lithological sub-domains and faulting

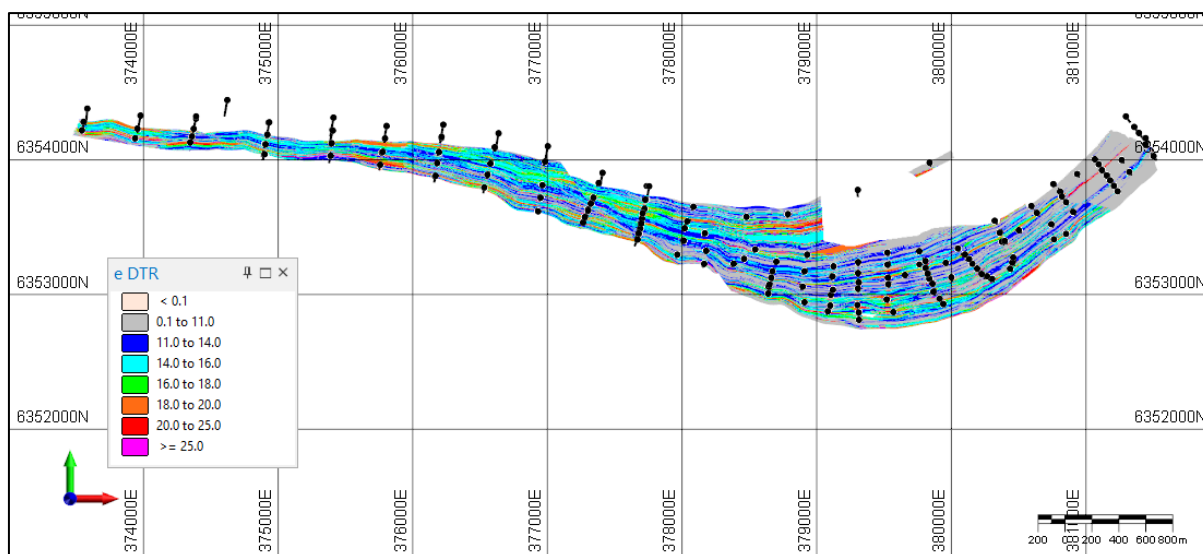


Figure 4. Razorback eDTR Grade Plan

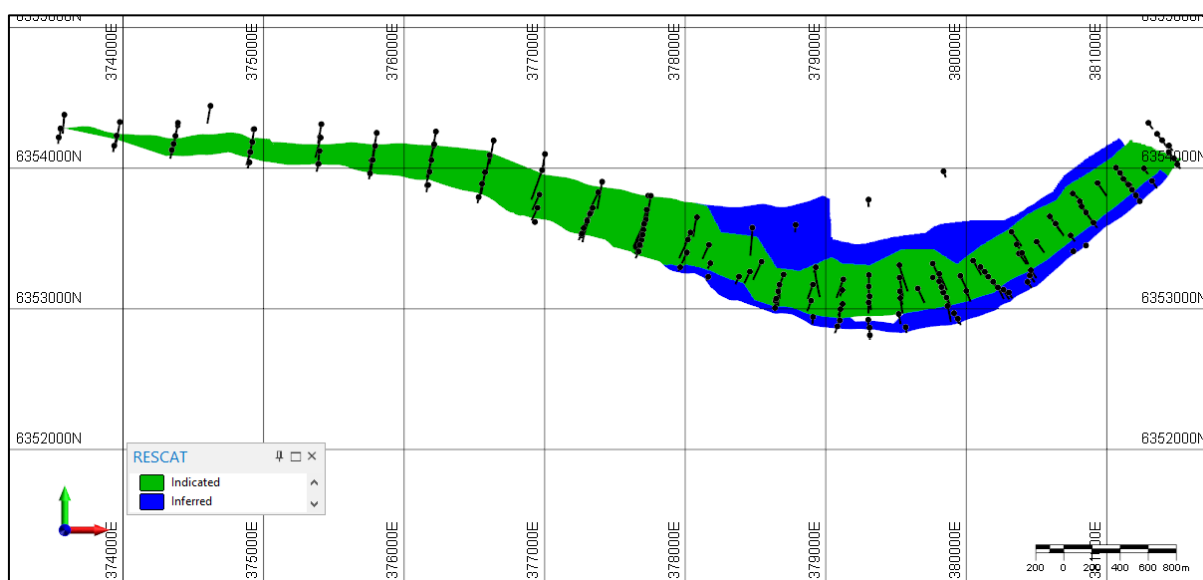


Figure 5. Razorback Resource Classification Plan

Bulk Density

A statistical analysis of bulk densities of the deposits using historic and updated specific gravity datasets was completed and updated for this Mineral Resource Estimate. This provided an improved understanding of the relationship of density to mineralisation and led to a regression of specific gravity data (g/cm³) vs head Fe% which was used during the resource estimation process for tonnage and grade estimates.

Davis Tube Recovery Testwork

Mass Recovery (or weight recovery) is critical in the evaluation of magnetite deposits. Mass Recovery is the percentage of the head (feed) mineralisation by weight that is recoverable by concentration processes. The Company utilises a combination of industry standard Davis Tube Recovery analytical technique and magnetite analysis known as SATMAGAN to determine an estimated mass recovery for its Mineral Resources, known as eDTR. A comparison of identical intervals of mass recovery % (DTR) and Magnetite% (SATMAGAN) provides statistically valid regressions, based on spatial and weathering

domains, which are used to estimate mass recovery for all samples with head (in-situ) Magnetite% analysis.

A significant increase in the number of DTR analyses were completed for the Iron Peak drill program for an additional 1813 head grade (XRF, SATMAGAN) and concentrate (DTR) analyses. This increase resulted in improved DTR regressions relative to near surface and fresh mineralisation domains. All additional samples shared the same DTR analysis method with a minimum 97% passing 45 micron (P97 45µm) grind size for the DTR feed samples. Further details for eDTR calculations are presented in the appended JORC Table 1.

EXPLORATION TARGET

In addition to the Mineral Resource Estimate Update, the Company has undertaken further work on the definition of an Exploration Target for the Razorback Iron Ore Project to include wider mineralisation as modelled from aeromagnetic datasets and available exploration drilling.

An Exploration Target of approximately 11 to 26 billion tonnes has been defined at a magnetite percent grade range of approximately 8.3% to 16.6% magnetite at an estimated cut off of 11% magnetite and for a total strike length of ~110km. The entire Exploration Target has been defined on prospects located within the Company's Razorback Iron Ore Project's tenement holdings in South Australia.

In summary, the exploration target has been defined through geophysical modelling, following aeromagnetic model capture and detailed comparison and rationalisation of results versus extensive drilling which has occurred across the Company's tenure. A detailed Exploration Target description is provided in Appendix 2, the information therein **does not constitute an estimate of a Mineral Resource nor Ore Reserve.**

Disclaimer regarding Exploration Targets:

An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource. The potential quantity and grade is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Further information and data collection is required to further delineate the extents and quality of mineralisation included in the report. The Exploration Target requires further definition work to be considered for inclusion within a Mineral Resource Estimate. Work programs include further desktop review, target definition, land access and stakeholder negotiations, environmental permitting, drilling of targets to confirm mineralisation and resource definition drilling. The timing of these exploration activities, designed to test the validity of the exploration target is anticipated to occur within the next two years, pending adequate resourcing and access requirements.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results and Exploration Targets is based on information originally compiled by Mr. Trevor Thomas, who is a Member of the Australian Institute of Mining and Metallurgy (AUSIMM) and Member of the Australian Institute of Geoscientists (AIG). Mr. Thomas is a full-time employee of Magnetite Mines Limited as Study Director. Mr. Thomas has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code 2012"). Mr. Thomas consents to the disclosure of this information in this report in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Lynn Widenbar, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Widenbar is a full time employee of Widenbar and Associates Pty Ltd. Mr Widenbar has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Widenbar consents to the inclusion in the report of the matters based on his information in the form and context that the information appears.

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

For further information contact:

Gemma Brosnan

General Manager - External Affairs

+61 8 8427 0516

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.

References

1. ASX Announcement -25 Oct 2021 - Razorback Iron Ore Project Drilling Commences
2. ASX Announcement - 21 July 2021 - Positive Interim Metallurgical Test Results
3. ASX Announcement - 24 May 2021- Razorback Iron Ore Project Mineral Resource Upgrade
4. ASX Announcement - 20 November 2018 - Ironback Hill Deposit - JORC 2012 Resource Update
5. ASX Announcement - 3 November 2022 - Muster Dam Mineral Resource Estimate
6. ASX Announcement - 27 April 2022 - Third Quarter Activities & Cashflow Reports
7. ASX Announcement - 30 June 2021 - Maiden Ore Reserve for the Razorback Iron Project

APPENDIX 1 - JORC TABLE 1

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	- RC samples are collected through a sampling trailer, which has a dust collector, cyclone and non-adjustable riffle splitter. - Each 1 meter drilled is captured in a plastic bag and kept at the drill site. A 2 meter 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. - The sampling was done on the rig by the drilling contractors and the process was supervised by Magnetite Mines geological staff. - Duplicates were processed via a secondary riffle splitter whereby a 2m composite was split 50/50 and rebagged for assay. - All diamond drill cores were marked up on site by field technicians and core loss recorded. - Phase 1 - 3: - 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 meter in interstitial material. - Core was cut on site and sampled at 1m intervals. - Phase 4: - 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. - Core was cut at the core processing facility in Wingfield and sampled at 1m intervals.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	- Phase 1 drilling was carried out in 2010, with 66 RC holes completed for 7,162m and was completed on the Razorback Ridge prospect - Drilling was undertaken by Budd Contract Exploration, using an Explorer 300 rig, with ancillary Booster. - 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 - 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. - Eleven additional diamond drill holes were completed as twin holes for RC drilling, using a combination of HQ, PQ and NQ. - All RC drilling used 5 ½" face sampling hammers. - Phase 3 was carried out in 2011/2012, with 52 RC holes, 10 RC/DDH combination holes, 4 DDH holes and 1 DDH

Criteria	JORC Code explanation	Commentary
		extension completed for a total of 15,944m (average depth 235.6m) - 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. - 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.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - 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.	- Nearly all of the RC samples showed good recovery and there were very few issues with wet samples (<1% would be considered poor or wet). Any wet or poorly recovered sample was recorded by the geologist and entered into the database. - The HQ diamond core was shown to be quite cohesive and have good recovery of >98%, with issues only occurring in the first few meters near surface, where drilling occurred within broken ground, or in minor fault zones. - All cores were marked up on site by field technicians and core loss recorded.
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	- RC and diamond drilling were supervised and drill chips geologically logged (using Magnetite Mines' geological rock codes) by contractor and Magnetite Mines geological staff. - For each RC drill hole, meter samples were collected for reference in chip trays.
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of	- 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. - Twenty five centimetre whole-core segments were retained for all mineralized lithological units for future metallurgical testing - In RC holes, a 2 meter composite for assay was collected as a ~ 3 kg sample. - Duplicates were processed via a secondary riffle splitter whereby a 2m composite was split 50/50 and rebagged for assay by the geologist.

Criteria	JORC Code explanation	Commentary
	<i>the material being sampled.</i>	
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - 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.	- Both the RC and diamond samples were assayed at ALS Chemex Laboratories, with sample preparation done in Adelaide and analysis carried out in Perth. - 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. - Samples were analysed using XRF fusion (ALS code ME-XRF11b), with Fe, Al₂O₃, SiO₂, TiO₂, MnO, CaO, P, S, MgO, K₂O, Na₂O, Cu, Ni, Pb, V, and LOI measured. Accuracies for each element are stated in the database. - 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. - 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. - Within drilling Phase 2 the frequency of standard insertion increased to every 20th sample. Similarly for duplicates, every 20th sample was a duplicate. - 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. - Duplicate, Resample and Umpire sampling was also carried out. - 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. - A regression to estimate Mass Recovery (referred to as estimated DTR or eDTR) was calculated using SATMAGAN (Magnetite %) and laboratory DTR. - RH Regression notes 'for prediction of eDTR' - Following data verification, regression analysis of DTR mass recovery vs Magnetite % was performed on the following data subsets: - Weathered zone (all Razorback Project): 111 representative samples; - Fresh zone: Razorback main prospect, 330 representative samples; - Fresh zone: Razorback West prospect 237 representative samples; - Oxide zone: Iron Peak prospect: 415 representative samples. - Fresh zone: Iron Peak prospect: 1380 representative samples. The resulting regressions are as follows: - Oxidised (Razorback): eDTR % = 1.3776 * Mag % (Satmagan) + 2.7242 (R² = 0.5568, n = 111)

Criteria	JORC Code explanation	Commentary
		- Fresh (Razorback Main): $\text{eDTR \%} = 0.8435 * \text{Mag \% (Satmagan)} + 2.1831$ ($R^2 = 0.8286$, $n = 330$) - Fresh (Razorback West): $\text{eDTR \%} = 0.7836 * \text{Mag \% (Satmagan)} + 4.0857$ ($R^2 = 0.7943$, $n = 237$) - Oxidised (Iron Peak): $\text{eDTR \%} = 0.8028 * \text{Mag \% (Satmagan)} + 2.9117$ ($R^2 = 0.8692$, $n = 102$) - Oxide (Iron Peak): $\text{eDTR \%} = 1.673763 * \text{Mag \% (Satmagan)} + 1.291398$ ($R^2 = 0.7888$, $n = 415$) - Fresh (Iron Peak): $\text{eDTR \%} = 1.173747 * \text{Mag \% (Satmagan)} + 0.062922$ ($R^2 = 0.9300$, $n = 1380$)
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Six twinned DD and RC holes have been drilled and compared, producing acceptable results. - All data was entered into either a customized Excel spreadsheet or Access database and then entered into the Datashed database. - QAQC data was managed within Datashed software. - No adjustments of assay data are considered necessary.
Location of data points	- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used. - Quality and adequacy of topographic control.	- 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. - 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. - 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. - 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.
Data spacing and distribution	- Data spacing for reporting of Exploration Results. - 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. - Whether sample compositing has been applied.	Drill hole spacing is considered appropriate for the level of confidence quoted.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	- RC and diamond drill holes were oriented, wherever possible, perpendicular to the mineralisation dip. 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

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	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.
Sample security	<i>The measures taken to ensure sample security.</i>	The chain of custody was controlled by Magnetite Mines. Samples were delivered to ALS Adelaide by either Magnetite Mines staff or by Burra Couriers.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No independent reviews of audits of sampling have been carried out.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary																																																							
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	- 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 km² and 725km² respectively and contains the Razorback, Interzone and Iron Peak Prospects. - Resource payments calculated at \$0.01 per DTR tonne of Measured Resources (resource payment = tonne of Measured resource x \$0.01 x DTR%). - A 1% royalty on the value of the product produced from the tenement measured at the 'mine gate'. - All tenements are in good standing and no known impediments exist.																																																							
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	- 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 - 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.																																																							
Geology	Deposit type, geological setting and style of mineralisation.	- 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. - 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. - 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. - The magnetite is similar to that seen in the bedded ore type. Haematite occurs, but is irregularly distributed through the rock.																																																							
Drill hole Information	- A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth	<table><tr><th>Hole ID</th><th>Easting</th><th>Northing</th><th>Total Depth</th><th>Inclination (°)</th></tr><tr><td>IPMT0001</td><td>384510</td><td>6353987</td><td>133.70</td><td>-90</td></tr><tr><td>IPMT0002</td><td>384510</td><td>6353987</td><td>133.60</td><td>-90</td></tr><tr><td>IPMT0003</td><td>384885</td><td>6354084</td><td>169.70</td><td>-90</td></tr><tr><td>IPMT0004</td><td>384513</td><td>6354164</td><td>112.60</td><td>-90</td></tr><tr><td>IPMT0005</td><td>384351</td><td>6354070</td><td>172.60</td><td>-90</td></tr><tr><td>IPMT0006</td><td>385246</td><td>6354075</td><td>132.00</td><td>-90</td></tr><tr><td>IPMT0007</td><td>385170</td><td>6354149</td><td>115.65</td><td>-90</td></tr><tr><td>IPMT0008</td><td>385686</td><td>6354061</td><td>103.65</td><td>-90</td></tr><tr><td>IPMT0009</td><td>385573</td><td>6354061</td><td>100.60</td><td>-90</td></tr><tr><td>IPMT0010</td><td>384858</td><td>6353989</td><td>109.60</td><td>-90</td></tr></table>	Hole ID	Easting	Northing	Total Depth	Inclination (°)	IPMT0001	384510	6353987	133.70	-90	IPMT0002	384510	6353987	133.60	-90	IPMT0003	384885	6354084	169.70	-90	IPMT0004	384513	6354164	112.60	-90	IPMT0005	384351	6354070	172.60	-90	IPMT0006	385246	6354075	132.00	-90	IPMT0007	385170	6354149	115.65	-90	IPMT0008	385686	6354061	103.65	-90	IPMT0009	385573	6354061	100.60	-90	IPMT0010	384858	6353989	109.60	-90
Hole ID	Easting	Northing	Total Depth	Inclination (°)																																																					
IPMT0001	384510	6353987	133.70	-90																																																					
IPMT0002	384510	6353987	133.60	-90																																																					
IPMT0003	384885	6354084	169.70	-90																																																					
IPMT0004	384513	6354164	112.60	-90																																																					
IPMT0005	384351	6354070	172.60	-90																																																					
IPMT0006	385246	6354075	132.00	-90																																																					
IPMT0007	385170	6354149	115.65	-90																																																					
IPMT0008	385686	6354061	103.65	-90																																																					
IPMT0009	385573	6354061	100.60	-90																																																					
IPMT0010	384858	6353989	109.60	-90																																																					

Criteria	JORC Code explanation	Commentary					
	○ hole length. • 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.	IPMT0011	384754	6353969	109.60	-90	
		IPDD0001	385003	6353974	81.00	-60	
		IPDD0002	385241	6354136	45.10	-60	
		IPDD0003	385025	6354161	51.10	-60	
		IPDD0004	384239	6353919	48.10	-60	
		IPDD0005	384377	6353914	146.90	-60	
		IPDD0006	384239	6353919	147.10	-60	
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Exploration results are not being reported.					
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Exploration intercepts are not being reported. • However, where possible drill holes are oriented to cut at right angles across the mineralised zones.					
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Appropriate maps and sections are available in the body of the Mineral Resource Estimate.					
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading	• Reporting of results in this report is considered balanced.					

Criteria	JORC Code explanation	Commentary
	reporting of Exploration Results.	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Exploration results are not being reported.
Further work	- The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	- Infill drilling at a 100 x100m scale is planned towards JORC classification improvement. - Metallurgical drilling is planned to test spatial distribution of geometallurgical properties of the ore body. - Step-out drilling to test lateral mineralisation at the Razorback and Iron Peak prospects is planned. - The nature of drill hole locations is commercially sensitive and is not disclosed herein.

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	- 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. - Data validation procedures used.	- 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. - 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. - All data was entered into either a customized Excel spreadsheet or Access database and then entered into the Dashed database. - Drill hole data was imported into Micromine mining software (V 2023) for further validation, including: - Checks for duplicate collars. - Checks for missing samples. - Checks for down hole from-to interval consistency. - Checks for overlapping samples. - Checks for samples beyond hole depth. - Checks for missing assays. - Checks for down-hole information beyond hole depth. - Checks for missing down-hole information. - Checks for missing or erroneous collar survey. - Widenbar and Associates considers that the database represents an accurate record of the drilling undertaken at the project.
Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	- The Competent person made a Site Visit to Razorback and Iron Peak on 10th October 2022. - Geological input to the modelling was provided by experienced site-based geologists and the Competent Person has confidence in geological aspects of the modelling. - Diamond drill core and photos have been reviewed as part of the validation process.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- Confidence in the geological interpretation is high. - Detailed geological logging and surface mapping allows extrapolation of drill intersections between adjacent sections. - Alternative interpretations would result in similar tonnage and grade estimation techniques. - Geological boundaries are used as hard boundaries to control selection of data for each domain that is being estimated. - Geological boundaries are determined by the spatial locations of the various mineralised structures.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan	Razorback and Iron Peak extend approximately 7 km and 3km along strike respectively, with a maximum depth extent from outcrop at surface to approximately

Criteria	JORC Code explanation	Commentary																																																
	width, and depth below surface to the upper and lower limits of the Mineral Resource.	320m below surface and typical total thicknesses of 100 m to 150 m.																																																
Estimation and modelling techniques	- 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. - The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. - The assumptions made regarding recovery of by-products. - Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). - In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. - Any assumptions behind modelling of selective mining units. - Any assumptions about correlation between variables. - Description of how the geological interpretation was used to control the resource estimates. - Discussion of basis for using or not using grade cutting or capping. - The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	- 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. - Statistical analysis and variography has been carried out in unfolded coordinates to define parameters for an Ordinary Kriging estimation. - All analysis and estimation has been constrained by the geological interpretation of the mineralised domains. - All estimation was carried out using Micromine software version 2023. - Kriging parameters were defined using Fe as the primary variable. - A three-pass search strategy is used. Search parameters are:<table><tr><th colspan="8">Search Distance</th></tr><tr><th>Search</th><th>Along</th><th>Down</th><th>Across</th><th>Minimum</th><th>Maximum</th><th>Minimum</th><th>Maximum</th></tr><tr><th>Pass</th><th>Strike</th><th>Dip</th><th>Dip</th><th>Samples</th><th>Samples</th><th>Holes</th><th>Per Hole</th></tr><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></table> - Estimation has been carried out for the following variables: - Fe - SiO₂ - Al₂O₃ - LOI - Magnetite - TiO₂ - MnO - CaO - P - S - MgO - K₂O - Na₂O - Cu - Zn - Drill hole spacing is nominally 200 m by 50 m with 100 m spaced infill section lines in central areas of Razorback, and the block sizes were chosen to reflect the best compromise between spacing and the necessity to define the geological detail of each deposit. Parent block sizes are 10 m along strike, 5m down dip and 5 across strike. - As there are no extreme values no capping has been applied. - Block model validation has been carried out by several methods, including: - Drill Hole Plan and Section Review - Model versus Data Statistics by Domain - Easting, Northing and RL swathe plots - All validation methods have produced acceptable results.	Search Distance								Search	Along	Down	Across	Minimum	Maximum	Minimum	Maximum	Pass	Strike	Dip	Dip	Samples	Samples	Holes	Per Hole	1	250	120	5	4	20	2	4	2	450	200	5	1	20	1	4	3	600	200	5	1	20	1	4
Search Distance																																																		
Search	Along	Down	Across	Minimum	Maximum	Minimum	Maximum																																											
Pass	Strike	Dip	Dip	Samples	Samples	Holes	Per Hole																																											
1	250	120	5	4	20	2	4																																											
2	450	200	5	1	20	1	4																																											
3	600	200	5	1	20	1	4																																											
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.																																																

Criteria	JORC Code explanation	Commentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	- 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. - 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.
Mining factors or assumptions	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.	- Mining is assumed to be by conventional opt pit mining methods. - No dilution or ore loss factors have been applied.
Metallurgical factors or assumptions	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.	- 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 67-68% Fe concentrate with low deleterious elements (SiO₂, P, Al₂O₃, 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. - 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.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the	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 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.

Criteria	JORC Code explanation	Commentary
	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.	- Flora and Fauna – Based on a series of Flora and Fauna Surveys as completed by Rural Solutions SA and EcoLogical 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 - Noise – Given lack of local noise receptors (towns, settlements) there are no significant issues associated with noise generation.
Bulk density	- 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. - 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. - Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	- 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. - 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. - During the second phase of drilling density measurements were made on-site via gravimetric methods as above this was done on every 4 metres. - The global average from both the lab and field measurements was an SG of 3.2. No density was measured on the RC chips. - 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.
Classification	- The basis for the classification of the Mineral Resources into varying confidence categories. - 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). - Whether the result appropriately reflects the Competent Person's view of the deposit.	- 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: - Geological and grade continuity - 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. - Data quality. - 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 standards. Widenbar considers that the database represents an accurate record of the drilling undertaken at the project. - Drill hole spacing. - 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,

Criteria	JORC Code explanation	Commentary
		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. - Modelling technique and kriging output parameters, including Kriging Efficiency, search pass and number of composites used. - 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. - Estimation Properties - 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. - The Competent Person is in agreement with this classification of the resource.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The resource estimate has not been externally audited.
Discussion of relative accuracy/ confidence	- 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. - 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. - These statements of relative accuracy and confidence of the estimate should be compared with	- The relative accuracy of the various resource estimates is reflected in the JORC resource categories. - At the Indicated Resource classification level, the resources represent local estimates that can be used for further mining studies. - Inferred Resources are considered global in nature. - No production data is available for comparison.

Criteria	JORC Code explanation	Commentary
	production data, where available.	

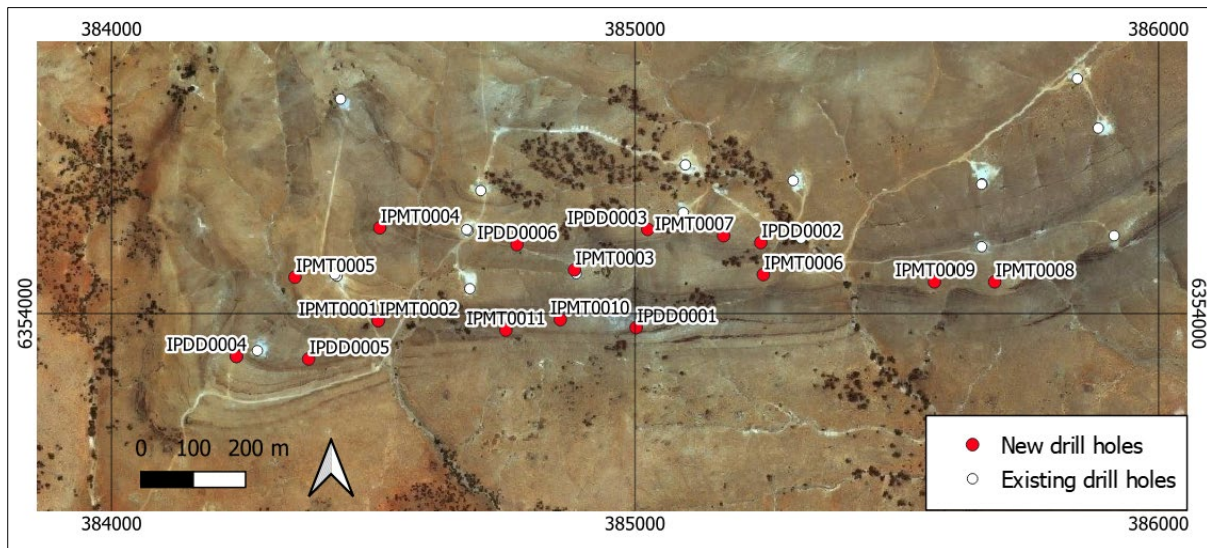


Table 1. Total Razorback Iron Project: Compliant Mineral Resource at a range of eDTR Mass Recovery cut-offs.

COMBINED RAZORBACK + IRON PEAK MINERAL RESOURCE ESTIMATE									
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO ₂	Al ₂ O ₃	P	LOI	Magnetite
TOTAL	15	1,655,000,000	18.89	20.30	46.30	7.70	0.19	5.20	18.29
TOTAL	14	2,053,000,000	18.04	19.60	46.93	7.84	0.19	5.28	17.41
TOTAL	13	2,469,000,000	17.27	19.00	47.46	7.96	0.19	5.35	16.61
TOTAL	12	2,881,000,000	16.59	18.49	47.91	8.07	0.18	5.43	15.89
TOTAL	11	3,245,000,000	16.02	18.06	48.30	8.15	0.18	5.49	15.28
TOTAL	10	3,511,000,000	15.60	17.79	48.55	8.20	0.18	5.53	14.84
TOTAL	9	3,705,000,000	15.28	17.56	48.76	8.24	0.18	5.57	14.49
TOTAL	8	3,837,000,000	15.05	17.40	48.92	8.28	0.18	5.59	14.24
TOTAL	0	4,137,000,000	14.38	16.90	49.30	8.37	0.17	5.63	13.52
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO ₂	Al ₂ O ₃	P	LOI	Magnetite
INDICATED	15	854,000,000	18.72	20.48	46.15	7.64	0.19	5.17	17.93
INDICATED	14	1,066,000,000	17.88	19.79	46.76	7.78	0.19	5.25	17.07
INDICATED	13	1,288,000,000	17.12	19.18	47.29	7.90	0.19	5.33	16.28
INDICATED	12	1,495,000,000	16.48	18.72	47.69	8.00	0.18	5.40	15.61
INDICATED	11	1,675,000,000	15.95	18.36	48.02	8.06	0.18	5.46	15.04
INDICATED	10	1,809,000,000	15.55	18.11	48.25	8.11	0.18	5.50	14.61
INDICATED	9	1,907,000,000	15.24	17.90	48.45	8.16	0.18	5.53	14.27

INDICATED	8	1,973,000,000	15.02	17.75	48.59	8.19	0.17	5.55	14.03
INDICATED	0	2,093,000,000	14.51	17.46	48.86	8.25	0.17	5.58	13.49
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
INFERRED	15	801,000,000	19.08	20.11	46.46	7.76	0.19	5.23	18.67
INFERRED	14	988,000,000	18.21	19.41	47.11	7.90	0.19	5.31	17.78
INFERRED	13	1,181,000,000	17.43	18.81	47.64	8.03	0.19	5.38	16.97
INFERRED	12	1,385,000,000	16.70	18.23	48.15	8.14	0.18	5.46	16.20
INFERRED	11	1,570,000,000	16.09	17.74	48.60	8.23	0.18	5.53	15.55
INFERRED	10	1,702,000,000	15.66	17.44	48.87	8.29	0.18	5.57	15.08
INFERRED	9	1,797,000,000	15.33	17.20	49.10	8.34	0.18	5.60	14.72
INFERRED	8	1,864,000,000	15.09	17.02	49.27	8.38	0.18	5.62	14.46
INFERRED	0	2,044,000,000	14.25	16.33	49.75	8.49	0.17	5.69	13.56

Table 2. Razorback: Compliant Mineral Resource at a range of eDTR Mass Recovery cut-offs.

RAZORBACK MINERAL RESOURCE ESTIMATE									
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
TOTAL	15	1,310,000,000	17.98	20.41	46.23	7.66	0.20	5.09	18.26
TOTAL	14	1,673,000,000	17.22	19.63	46.94	7.82	0.19	5.19	17.33
TOTAL	13	2,050,000,000	16.54	18.99	47.49	7.95	0.19	5.28	16.49
TOTAL	12	2,422,000,000	15.92	18.46	47.97	8.06	0.19	5.36	15.76
TOTAL	11	2,743,000,000	15.40	18.04	48.35	8.14	0.18	5.43	15.16
TOTAL	10	2,968,000,000	15.03	17.78	48.59	8.19	0.18	5.47	14.73
TOTAL	9	3,128,000,000	14.75	17.57	48.79	8.23	0.18	5.50	14.40
TOTAL	8	3,230,000,000	14.56	17.43	48.93	8.26	0.18	5.52	14.17
TOTAL	0	3,411,000,000	14.12	17.13	49.24	8.32	0.18	5.55	13.66
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
INDICATED	15	656,000,000	17.68	20.63	46.04	7.58	0.20	5.04	17.75
INDICATED	14	847,000,000	16.96	19.84	46.74	7.75	0.19	5.15	16.85
INDICATED	13	1,048,000,000	16.29	19.18	47.32	7.88	0.19	5.24	16.04
INDICATED	12	1,233,000,000	15.73	18.70	47.73	7.98	0.19	5.32	15.37
INDICATED	11	1,389,000,000	15.26	18.34	48.06	8.05	0.18	5.39	14.81
INDICATED	10	1,500,000,000	14.90	18.10	48.28	8.09	0.18	5.43	14.40
INDICATED	9	1,580,000,000	14.63	17.91	48.47	8.13	0.18	5.46	14.09
INDICATED	8	1,629,000,000	14.45	17.78	48.59	8.16	0.18	5.48	13.88
INDICATED	0	1,705,000,000	14.10	17.60	48.80	8.21	0.18	5.49	13.46
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
INFERRED	15	654,000,000	18.29	20.19	46.42	7.73	0.20	5.13	18.77
INFERRED	14	826,000,000	17.49	19.42	47.13	7.89	0.19	5.23	17.81
INFERRED	13	1,002,000,000	16.79	18.80	47.67	8.02	0.19	5.31	16.96
INFERRED	12	1,189,000,000	16.11	18.20	48.21	8.14	0.19	5.39	16.17
INFERRED	11	1,354,000,000	15.55	17.72	48.65	8.23	0.18	5.47	15.51
INFERRED	10	1,467,000,000	15.17	17.45	48.91	8.28	0.18	5.51	15.06
INFERRED	9	1,548,000,000	14.87	17.23	49.12	8.32	0.18	5.54	14.72
INFERRED	8	1,601,000,000	14.66	17.07	49.28	8.36	0.18	5.56	14.48
INFERRED	0	1,706,000,000	14.14	16.65	49.67	8.44	0.18	5.62	13.86

Table 3. Iron Peak: Compliant Mineral Resource at a range of eDTR Mass Recovery cut-offs.

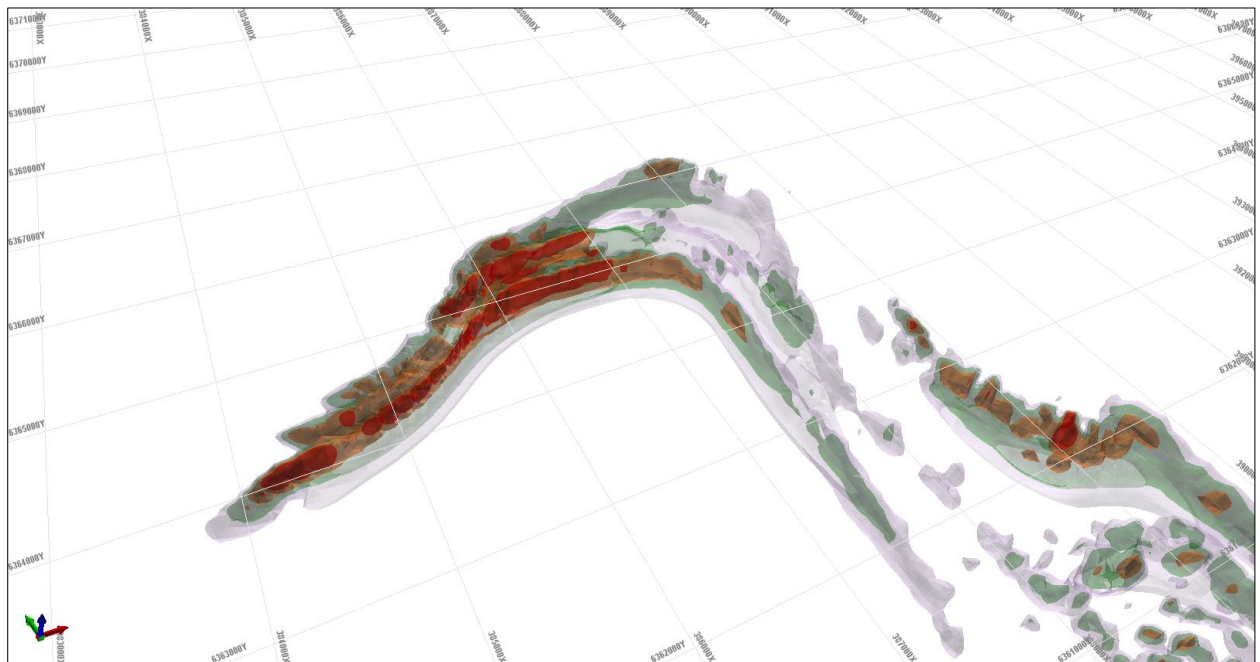
IRON PEAK MINERAL RESOURCE ESTIMATE									
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
TOTAL	15	345,000,000	22.34	19.89	46.54	7.85	0.17	5.61	18.39
TOTAL	14	380,000,000	21.62	19.48	46.91	7.93	0.17	5.66	17.81
TOTAL	13	419,000,000	20.86	19.06	47.28	8.02	0.17	5.72	17.19
TOTAL	12	459,000,000	20.14	18.65	47.64	8.10	0.16	5.78	16.59
TOTAL	11	503,000,000	19.38	18.21	48.01	8.20	0.16	5.84	15.97
TOTAL	10	543,000,000	18.73	17.83	48.34	8.28	0.16	5.89	15.43
TOTAL	9	577,000,000	18.18	17.51	48.63	8.35	0.16	5.93	14.98
TOTAL	8	607,000,000	17.70	17.24	48.87	8.40	0.16	5.95	14.58
TOTAL	0	727,000,000	15.63	15.85	49.61	8.60	0.15	6.01	12.86
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
INDICATED	15	198,000,000	22.16	19.97	46.48	7.84	0.17	5.59	18.53
INDICATED	14	219,000,000	21.44	19.58	46.84	7.92	0.17	5.64	17.92
INDICATED	13	240,000,000	20.73	19.20	47.18	8.00	0.17	5.69	17.33
INDICATED	12	263,000,000	20.02	18.83	47.51	8.08	0.17	5.74	16.73
INDICATED	11	286,000,000	19.31	18.47	47.82	8.15	0.16	5.79	16.13
INDICATED	10	308,000,000	18.69	18.14	48.11	8.22	0.16	5.84	15.61
INDICATED	9	327,000,000	18.16	17.86	48.37	8.28	0.16	5.87	15.16
INDICATED	8	344,000,000	17.69	17.63	48.57	8.33	0.16	5.90	14.77
INDICATED	0	388,000,000	16.32	16.81	49.13	8.46	0.15	5.95	13.60
Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO2	Al2O3	P	LOI	Magnetite
INFERRED	15	147,000,000	22.59	19.77	46.62	7.86	0.17	5.65	18.21
INFERRED	14	161,000,000	21.87	19.34	47.01	7.95	0.17	5.70	17.65
INFERRED	13	179,000,000	21.04	18.87	47.42	8.05	0.17	5.77	17.00
INFERRED	12	196,000,000	20.29	18.40	47.81	8.14	0.16	5.84	16.40
INFERRED	11	216,000,000	19.47	17.87	48.27	8.25	0.16	5.91	15.75
INFERRED	10	235,000,000	18.77	17.42	48.65	8.35	0.16	5.96	15.19
INFERRED	9	250,000,000	18.21	17.05	48.97	8.43	0.15	6.00	14.75
INFERRED	8	263,000,000	17.70	16.74	49.26	8.50	0.15	6.03	14.33
INFERRED	0	339,000,000	14.84	14.76	50.16	8.75	0.14	6.07	12.02



INFORMATION MEMORANDUM

EXPLORATION TARGET UPGRADE FOR THE RAZORBACK IRON ORE PROJECT AND SURROUNDING PROSPECTS

SOUTH AUSTRALIA

**Version 1.2**

January 2023

EXECUTIVE SUMMARY

- A revised exploration target for the Razorback Iron Ore Project and Surrounding Prospects has been derived from inverted 3D modelling of Magnetite Mines Limited's detailed aeromagnetic data.
- The magnetic modelling for the Company's Razorback tenement package identifies 11 to 26 billion tonnes of magnetite iron mineralization with a cut of 11% magnetite.
- The exploration target modelling aligns drilling data with aeromagnetic data which has been subject to 3D modelling to define an estimate of tonnage based on 3D volumes and magnetite grade parameters aligned with Resource drilling data for the Razorback Iron Ore Project
- Several areas in the Razorback Iron Ore Project and Surrounding Prospects are identified as potential standalone deposits similar to Razorback, including Manunda, South Black Hills, Dragon's Head, Big Cox and Ironback Hill East.
- It is recommended that drill testing of these exploration targets be undertaken to confirm stratigraphy and ore body thickness, mineralization quality and depth of cover where appropriate, to verify the model, and assist to prioritise and rank the areas for future resource development.
- A word of caution applies to the use of exploration targets and magnetic modelling regarding the tonnage determined and grade identified, and should only be used as a guide.

Disclaimer regarding Exploration Targets:

An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource. The potential quantity and grade is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.'

INTRODUCTION

This document sets out the results of geophysical modelling completed by Magnetite Mines Limited (MGT) and provides an updated magnetite Exploration Target estimate for the entire Razorback Iron Ore Project and Surrounding Prospects (Greater Razorback Project) and as held within MGT's current tenement holding. This work also examines potential high grade targets within the Project area.

PREVIOUS WORK

MGT underwent a process of determining a magnetite exploration target for the Razorback Area. Scientific Computing and Applications, an independent geophysical modelling company, was engaged to undertake the work. SCA use University of British Columbia software (WinDisp) to produce a constrained magnetic model based on 3D voxels, or blocks, to delineate mineralisation observed aeromagnetic data. The magnetic data is derived from a high resolution aeromagnetic survey commissioned by MGT in late 2009, with flight lines either 50 or 100 metres spaced.

As the model returns a magnetic susceptibility distribution, rather than discrete spatial (3D) bodies, the results require calibration to known drilling results. For this, the existing Resource Estimate at Razorback Ridge was used. This defined a magnetic susceptibility shell of 0.25 SI, approximately equivalent to 20% magnetite, from which a volume is derived (Figure 5). A density of 3.2 t/m³ was applied to the modelled volume to convert it to a tonnage, an average of the current Mineral Resource Estimation. As the magnetic model defines all magnetite in the area of interest, and not just the drilled resource, this procedure returns a very conservative tonnage estimate. That total tonnage was further discounted for areas that are unlikely to be realistic targets for mining, for example areas where the bedded magnetite horizon is too thin to mine, areas which may be environmentally problematic to access, (e.g. in major water courses), or zones that are “stranded”, i.e. too small and too distant from the major deposits to be economically viable.

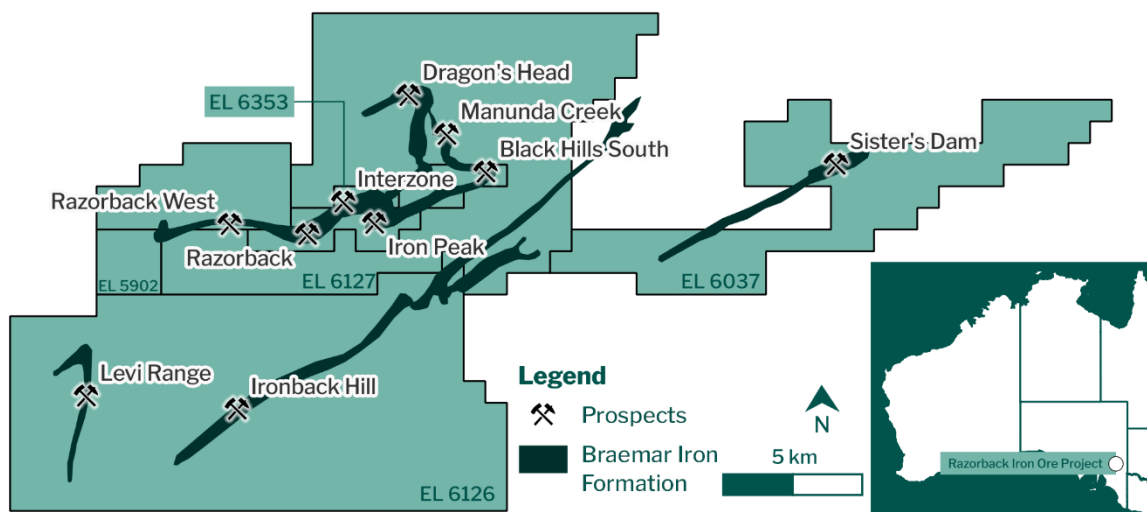


Figure 1. Magnetite Mines Tenements with Braemar iron Formation

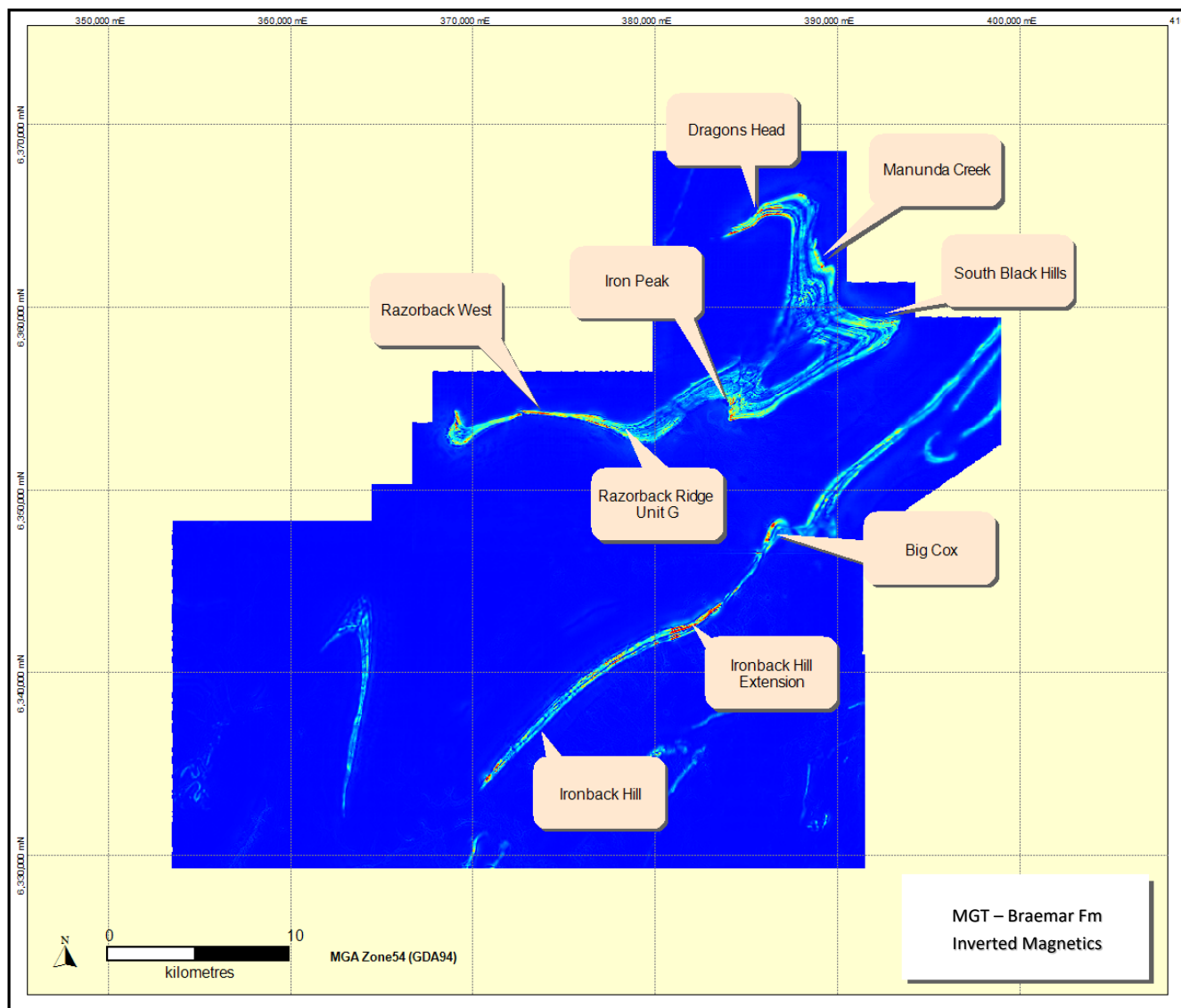


Figure 2. Geophysical modelling with prospects within MGT tenure

METHODOLOGY

A correlation between known drilling results and inverted 3D models was required to determine an estimate for in-situ magnetite. The following section describes the methodology utilised for the volume and tonnage estimation.

Magnetite estimation

The inverted geophysical modelling produces 3D shells representing magnetic susceptibility cut-offs as defined by the geologist, represented as SI units derived from the aeromagnetic data. To correlate insitu samples with aeromagnetic magnetic susceptibility, a regression was derived using data collected from RC drilling programs.

Laboratory SATMAGAN assay results, which provide Magnetite % values, were correlated with handheld magnetic susceptibility (S.I.) data collected in the field during drill programs. A correlation, suitable for an exploration target was established for the data sets as below and the power-trend line equation applied to determine accurate equivalent magnetite (e_{Mag}) conversions between magnetic susceptibility (x) and magnetite (y) via the equation (Figure 3):

$$y = 44.166x^{0.6054}$$

By establishing a correlation and associated regression between magnetic susceptibility (S.I.) and magnetite %, an estimate of the grade for the user defined 3D shell S.I. could be established.

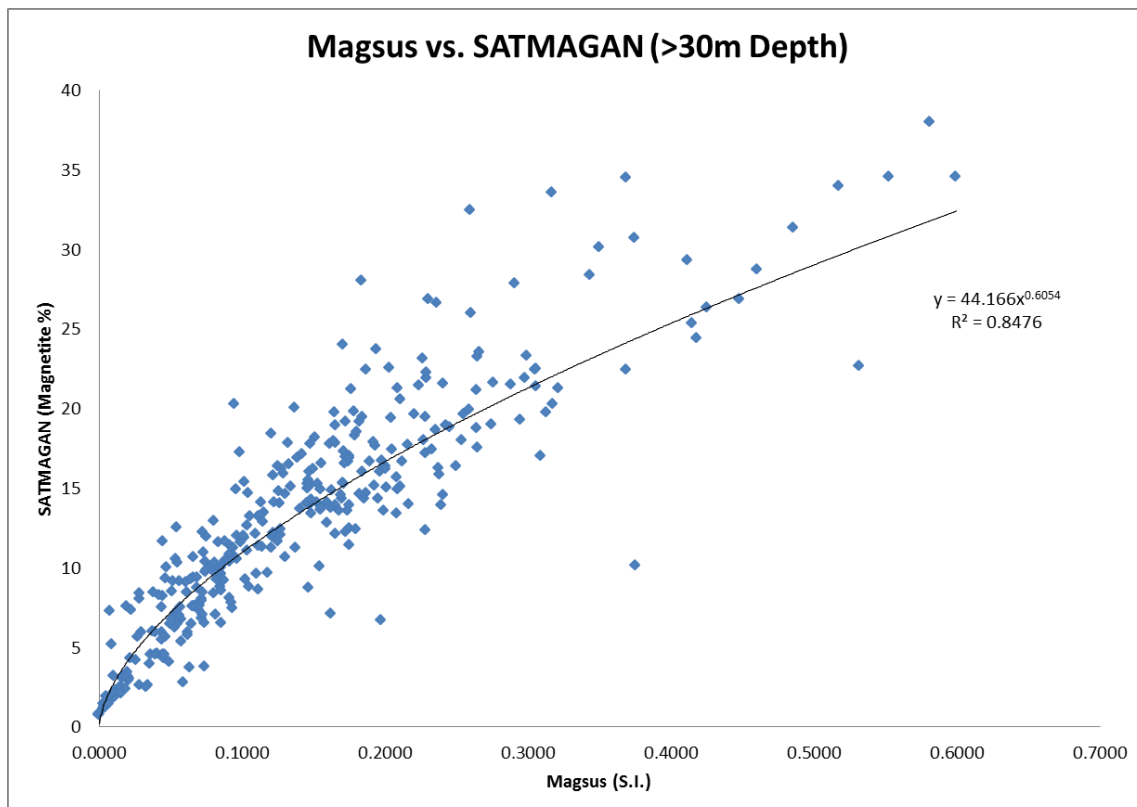


Figure 3. Correlation between handheld Mag Susceptibility and SATMAGAN (Magnetite %) to derive a regression.

Physical constraints of the model

A conservative approach was applied to exploration target modelling. This is because the magnetic modelling oversimplifies (smooths) the ore body, with resolution far less than what can be achieved through drilling. A comparison between block modelled resource outlines the derived 3D magnetite model shows that while in many areas the models are similar (e.g. see Figure 4), other places where the resource is more complex, with internal dilution, the magnetic model overestimates (see Figure 4). To mitigate the overestimation of mineralisation models, physical constraints were applied to the model to assist in providing a more realistic exploration target. This included applying a -400 metre RL, which is approximately the current Razorback Resource depth limit. A 0-15 metre depth cut was also applied to remove near surface oxidation mineralisation. The calculation of the exploration target tonnage did not include 3D volumes which would be too small or isolated to be realistically mined, as well as any edge effects that produced unrealistic blocks in the modelling.

Finally, and given the low accuracy nature of Exploration targets, to constrain the model further, only half the value of the 3D model volumes were applied for high and low range tonnage calculations, with calculated tonnages represented in the 'high' range tonnage calculations and a 50% discount applied to 'Low' range tonnages. This final adjustment was made to discount the ore bodies for internal dilution and interstitial lithologies that may be encompassed in the 3D model, providing a conservative estimate of the exploration potential in keeping with the low accuracy nature of Exploration Targets.

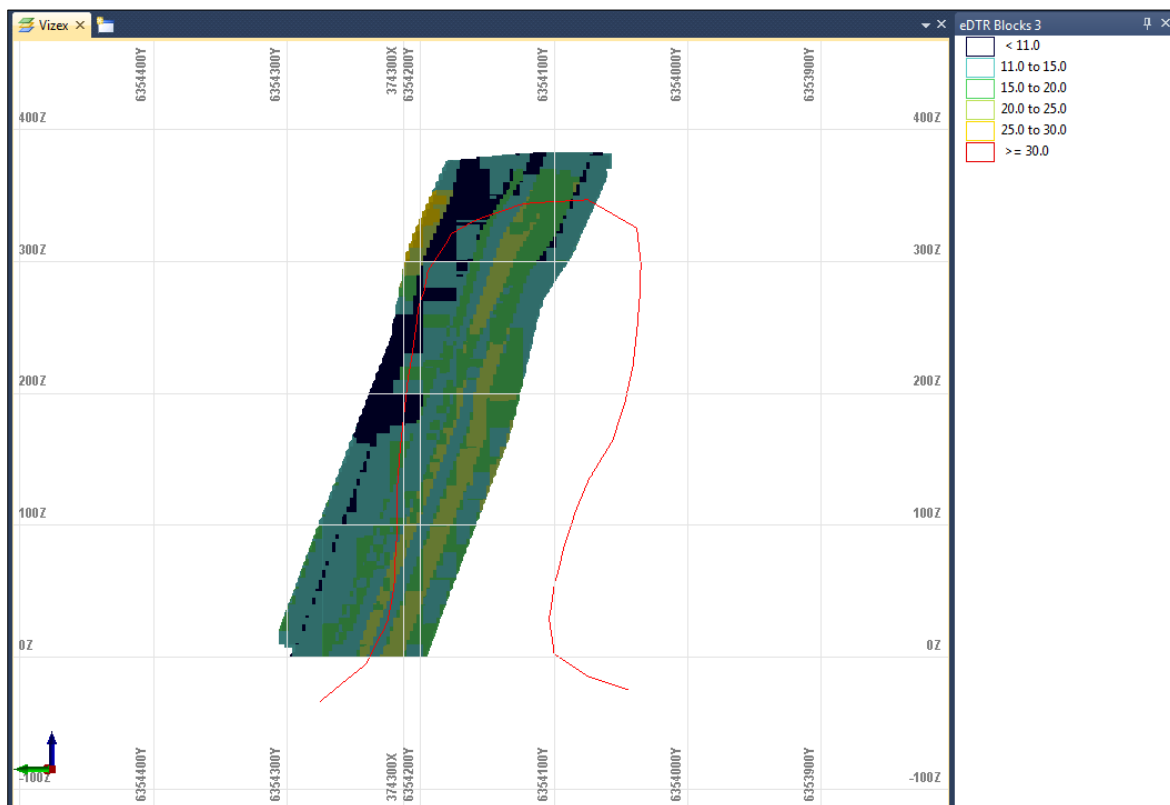


Figure 4. Section from Western Razorback, depicting similar Resource block modelling vs geophysical modelling (red) in Micromine.

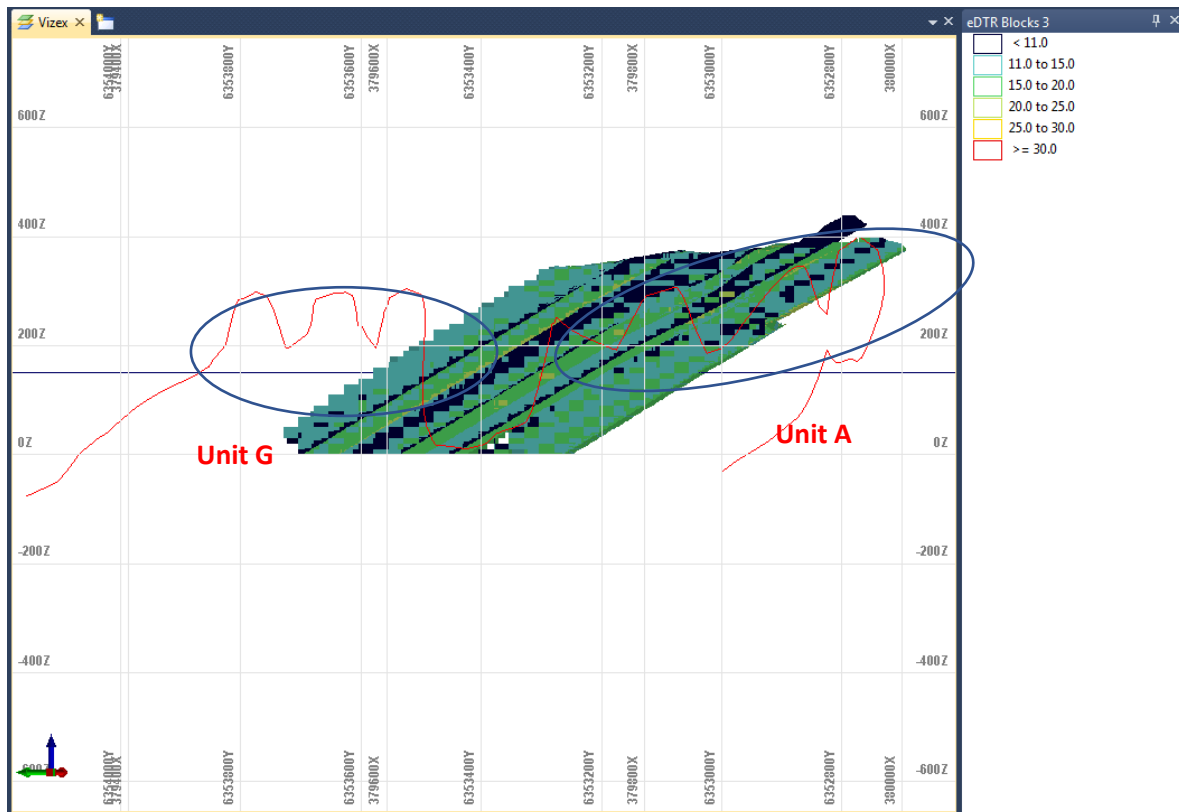


Figure 5. Section from the Razorback Ridge showing a comparison between Resource block modelling vs geophysical modelling (red) in Micromine. Note at the tops of the magnetic model it has identified internal dilution (circled blue), but as the model becomes deeper, the resolution decreases and the model homogenises.

RAZORBACK PROJECT EXPLORATION MODEL

The current Razorback Iron Ore Resource Estimate has an estimated magnetite cut-off of 11%, which from the conversion factor seen in Figure 3, equates to about 0.1 SI units. The 0.1 SI unit 3D model for the northern portion of the Project is seen in Figure 6. As mentioned above, the model has been cropped at the top by 15m to account for possible oxidation and to 400m depth. For this estimation, the models were divided by prospect in order to determine better defined tonnage and grade, as well as to more easily remove spatially stranded bodies and geophysical artefacts from the calculation which would be unfeasible in a production scenario. The exploration model, determined from the magnetic modelling for the Project is summarised below in Table 1.

Table 1: Greater Razorback Project geophysical modelling tonnage calculations by prospect

Prospect	SI Cut-Off (11% Magnetite equivalent)	3D Model Volume (m³)	S.G.	Model Defined Tonnage Range (Bt) (Low)	Model Defined Tonnage Range (Bt) (High)	Target less defined Resource Estimates (Low)	Target less defined Resource Estimates (High)	Current JORC Resource (Bt)	Estimated Grade Mag % (Low)	Estimated Grade Mag % (High)
Razorback Deposit	0.1	1,226,746,971	3.2	0.98	1.96				8.02	16.04
Razorback West	0.1	332,794,778	3.2	0.27	0.53				10.51	21.02
Dragons Tail	0.1	751,375,852	3.2	0.60	1.20				9.49	18.98
Interzone	0.1	849,014,912	3.2	0.68	1.36				7.84	15.68
Iron Peak	0.1	1,691,541,404	3.2	1.35	2.71				8.34	16.68
Razorback Project Subtotal		4,851,473,917		3.88	7.76	0.68	4.56	3.2	8.49	16.99
Ironback Hill	0.1	2,525,962,754	3.2	2.02	4.04				7.855	15.71
Ironback Project Subtotal		2,525,962,754		2.02	4.04	0.82	2.84	1.2	7.855	15.71
Dragons Head	0.1	1,300,582,370	3.2	1.04	2.08				9.875	19.75
South Black Hills	0.1	2,409,216,071	3.2	1.93	3.85				8.055	16.11
Manunda	0.1	1,181,290,185	3.2	0.95	1.89				8.275	16.55
Big Cox	0.1	4,352,830,741	3.2	3.48	6.96				8.18	16.36
Levi Range	0.1	1,386,897,319	3.2	1.11	2.22				8.265	16.53
Big Pav	0.1	895,604,588	3.2	0.72	1.43				7.625	15.25
Braemar	0.1	282,851,701	3.2	0.23	0.45				7.335	14.67
Other Prospects SubTotal		11,809,272,975		9.45	18.89	9.45	18.89	0	8.29	16.59
TOTAL	0.1	19,186,709,646	3.2	15.35	30.70	10.95	26.30	4.40	8.29	16.58

In Summary, the modelling defines an exploration target of **10.95 to 26.30 billion (11 to 26 billion) tonnes** at an estimated magnetite grade of **8.29 to 16.58% (8.3 to 16.6%)** at an estimated magnetite cut off of 11%. These figures sit well within expected ranges for grade and tonnage as exemplified in recent Mineral Resource Estimate modelling.

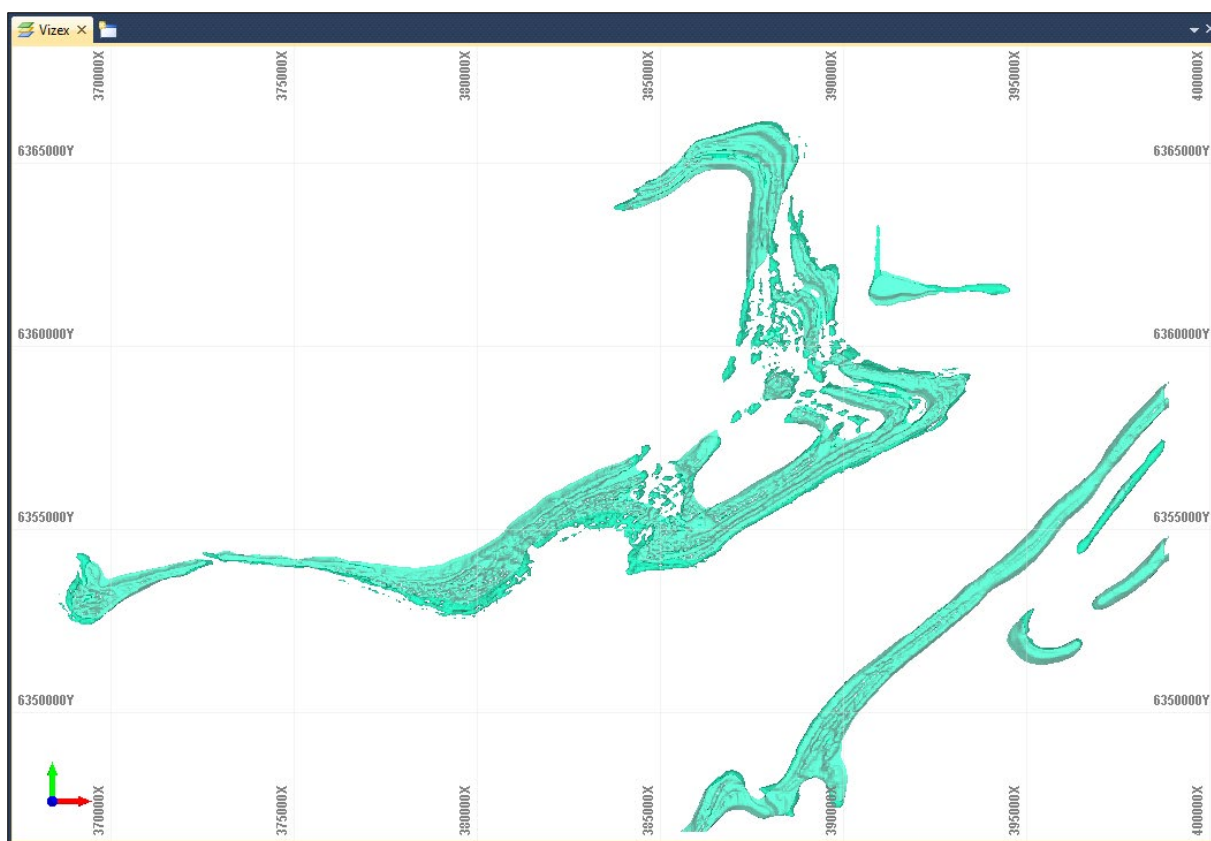


Figure 6: 3D Geophysical modelling -50m at 0.1 S.I. cutoff plan view, northern Project Area.

EXPLORATION TARGETS – PROSPECT SCALE

The 3D geophysical modelling over the Project has identified a number of prospective targets outside of the current resource area which have the potential to increase the current modelling estimates or exist as stand alone resources, some of which suggest higher magnetic susceptibility than observed at Razorback.

Below is a summary of the Prospect areas:

Razorback Ridge

To date, a total of 4 drilling phases have been completed at the Project for a total of 3.2Bt. Previous drilling programs left out large areas in both the Resource foot wall and hanging wall untested. This material poses an attractive option for resource upgrade given it's continuity with the current mineralisation and proximity to the existing mine infrastructure, however topography and hence drilling rig access remains the key imposition to the intersection of mineralisation via drilling methods.

Two main bodies of mineralisation remain untested at Razorback Ridge; Unit A and Unit G. The Resource drilling at Razorback Ridge only partially intersected the upper most part of the Braemar Iron Formation in Unit A and was classified as Inferred due to lack of data. This unit consists of either two or three ~ 10 metre thick high grade bedded or laminated magnetite siltstone beds, inter-bedded with uneconomic chlorite rich siltstones and fine sandstones. At Iron Peak, Unit A is the highest grade unit in the sequence, averaging 20%

DTR. Figures 7 and 8 depict the potential high grade shells untested by drilling at Razorback Ridge.

A large thick portion of Unit G striking ~ 2 km, located in the Resource hanging wall still remains untested, as seen in Figure 8. Unit G can be 70 to 100 metres thick and previous drilling of Unit G west of this untested zone showed grades of 16 to 17% eDTR. Unit G also continues to the east of Razorback Ridge (see Figure 6) into the Interzone Prospect, where the magnetic modelling and outcrop mapping show evidence of unit G continuing another 3 km in strike length. It is recommended that a series of exploration holes be drilled to test the Unit A and Unit G high grade shells at Razorback Ridge and Interzone Prospects.

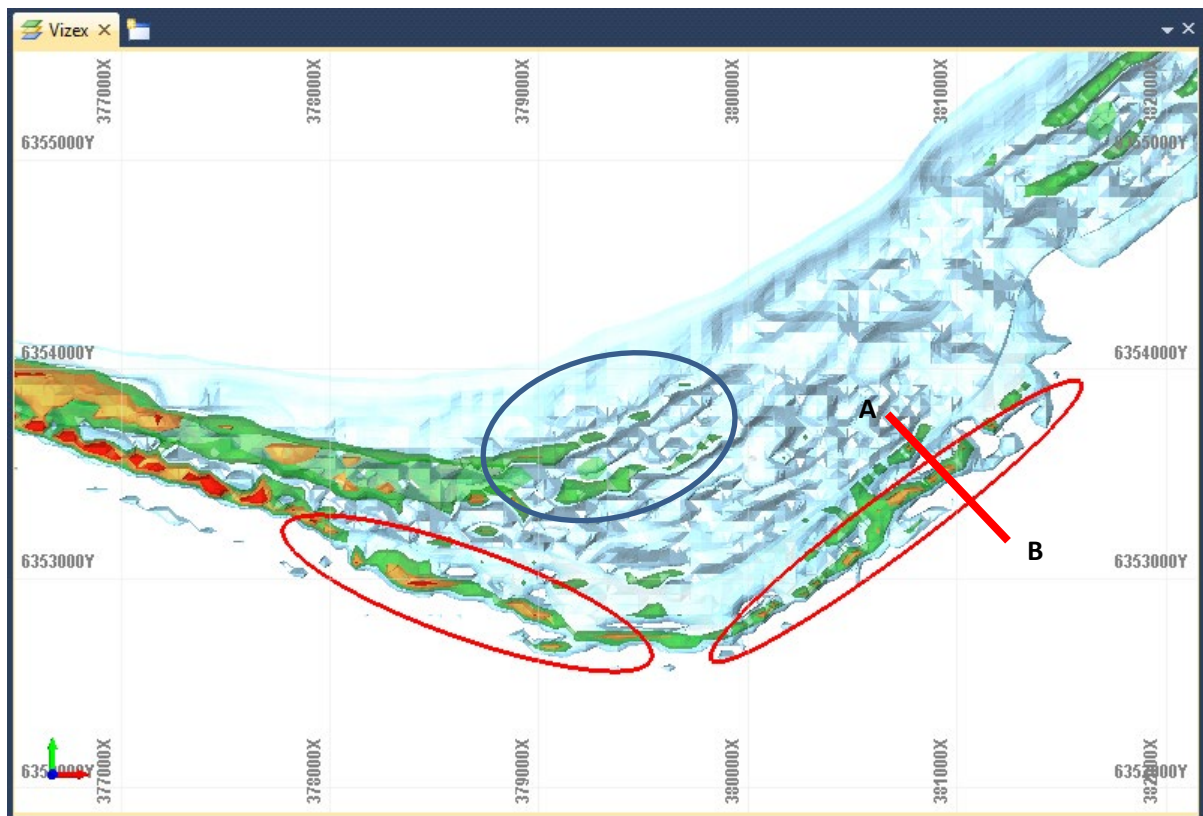


Figure 7. High grade Unit A material as seen in geophysical modelling at Razorback Ridge. 3D Shells: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red. See section in Figure 7. Note the continuation of Unit G at Interzone (Blue Circle).

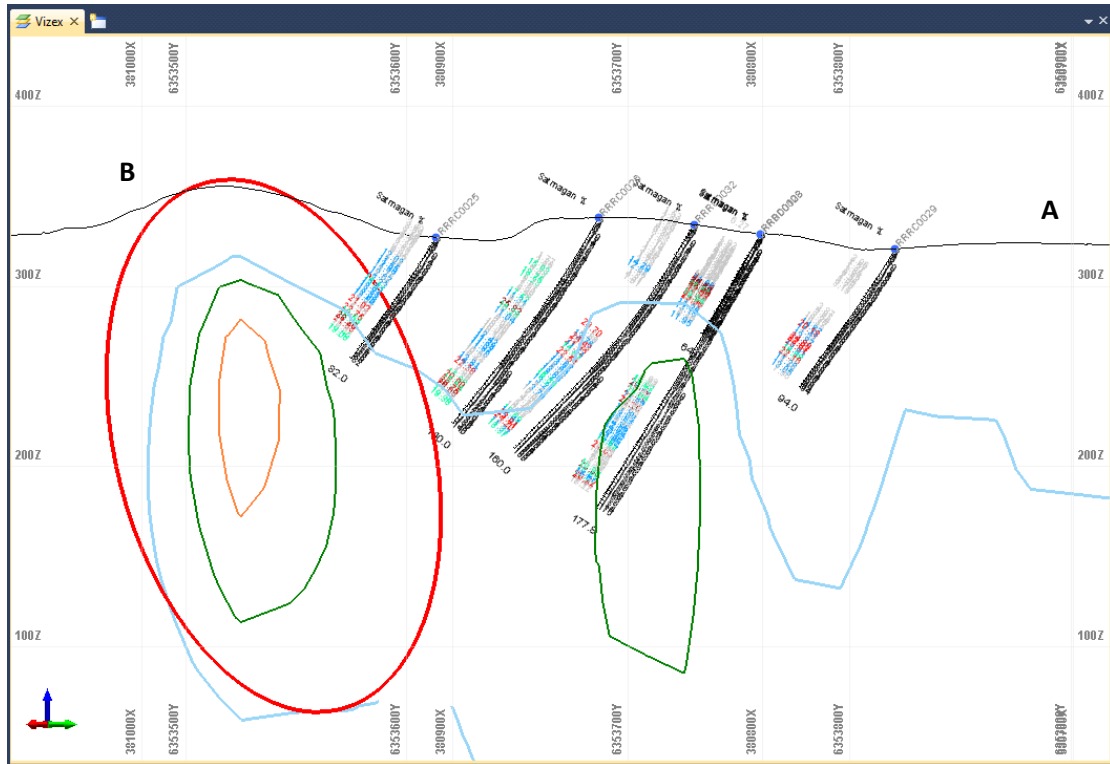


Figure 8. Cross-Section (location shown in Figure 6). Drilling potential of Unit A at Razorback Ridge (highlighted red ellipse). 0.1 SI unit cutoff - Blue; 0.25 SI unit cutoff - Green; 0.4 SI unit cutoff - Orange

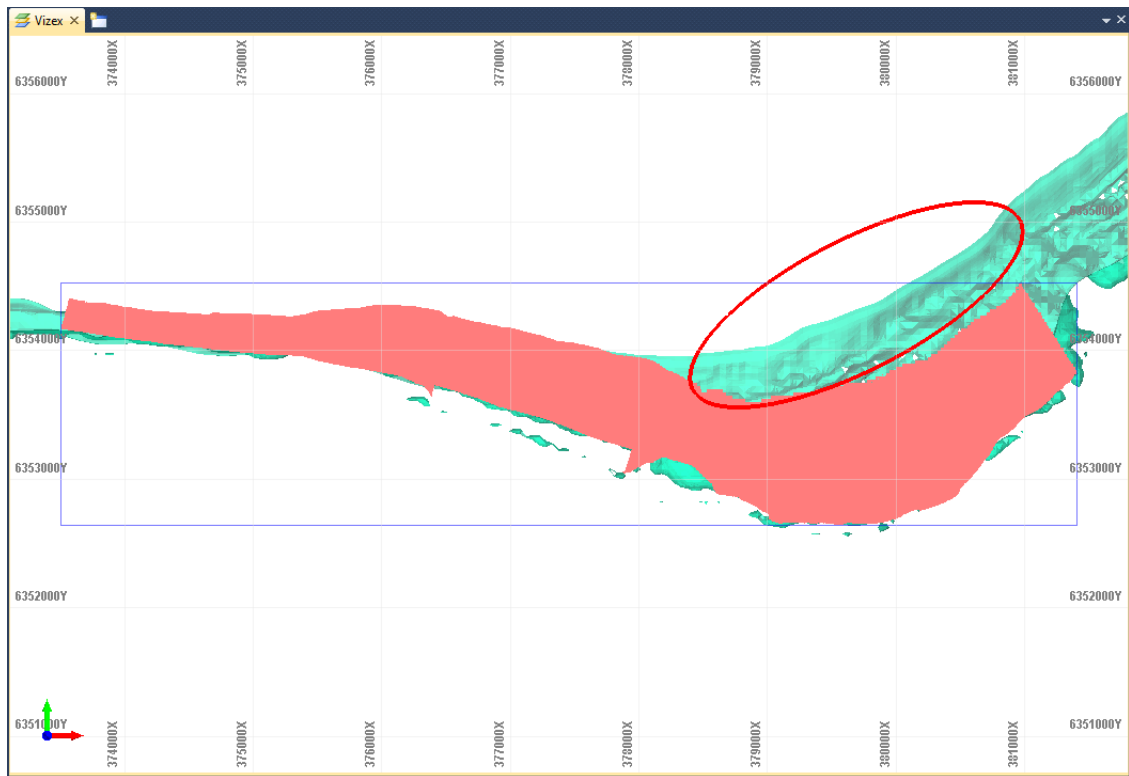


Figure 9. Plan View Razorback resource block modelling (pink) over 0.1 SI unit cutoff geophysical model (green). Unaccounted mineralisation (red ellipse)

Iron Peak

Located to the east of Razorback Ridge, Iron Peak is the highest proven grade bearing deposit for the Project. With a shallow to moderate dip of 40°N in the hinge zone and the greatest continuity of high grade ore, it represents a high potential prospect. Iron Peak Prospect is located within a parasitic fold (Figures 2 and 10). Drilling on the eastern limb of the synclinal fold hinge has defined a resource of ~0.5 Bt.

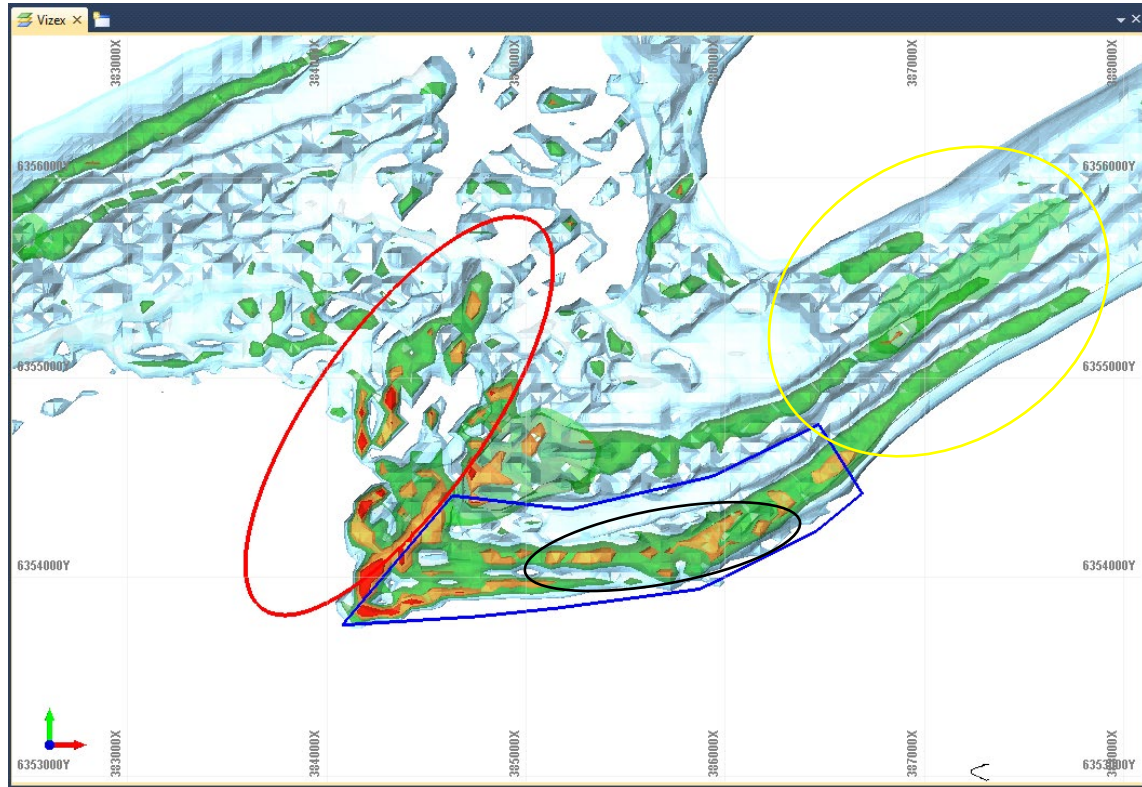


Figure 10. Iron Peak Geophysical modelling, western limb highlighted in red, eastern extension in yellow, Unit E in black and current resource in blue. 3D models: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red

West Limb

Only minimal drilling has occurred on the western limb, due to poor topographical access, heritage and structural complexity, with the stratigraphy fragmented by faulting. The western limb forms a semi-continuous 1.3km strike length, with magnetics displaying a number of high grade shells within the fold hinge itself and as discrete segments in the limb. During early 2014 the area was mapped in detail, which will assist in drill planning.

Unit E

A thick shell depicted by magnetic susceptibility of > 0.4 SI Unit is evident, sitting above the current Iron Peak Resource with a thickness of between 200 to 500 metres (Figure 9). Outcrop in the area is sporadic, but the hills show evidence of laminated magnetite siltstone. It is unclear in which part of the stratigraphy this section sits, but

it is currently interpreted to be Unit E. Several diamond holes were planned to test the entire Unit E sequence in this area during 2013, but due to finance limitations this drilling did not eventuate. Access in the area is difficult, due to the steep terrain.

East Limb Extension

Magnetics suggest that the Iron Peak Resource existing eastern limb continues to the NE towards the South Black Hills Prospect. Units A, B and D in the eastern limb appear to diminish in thickness and grade moving eastwards, suggesting only a further 1.7km should be tested. However, the modelling suggests Units E and G shells begin to become prominent, with reasonable magnetic susceptibility and thicknesses of 100 to 200m in each Unit (Figure 9).

South Black Hills

The South Black Hills Prospect lies 8 km north east of the Iron Peak Deposit and is characterised by a moderately steeply dipping (60°) fold hinge hosting the Braemar Iron Formation. The Prospect has had limited exploratory drilling conducted on its southern limb and was mapped in detail in 2014, which indicated thick bedded and laminated magnetite siltstone existing in the northern limb, where the Braemar Iron Formation has a maximum thickness of 2.5 km. Geophysical modelling displays four distinct shells with low to moderate grade magnetic susceptibility, with Band 1 and Band 2 showing best prospectivity (see Figure 10). The northern limb of the hinge and the hinge itself appear to display the best area for targeting. Band 1 displays continuity and thickness of moderate mineralisation (green shells of > 0.25 SI unit) with intermittent higher grade shells (orange shells of > 0.4 SI Units) along a 4.5km strike length, with potential shallowing of the dip in the hinge zone. The medium grade shell varies in thickness from 200 to 400m metres in the limb to over 1 km thickness in the hinge. Drilling of the main, higher grade target area has been limited by access in the past, as a drainage channel bisected the prospect in the hinge zone. Some of the area has now been cleared through heritage. Band 2 has similar strike length, but the medium magnetic susceptibility shells are only 50 to 200m in thickness.

Given its location with respect to the proposed mine at Razorback, the South Black Hills prospect remains potentially viable as a resource for additional tonnes.

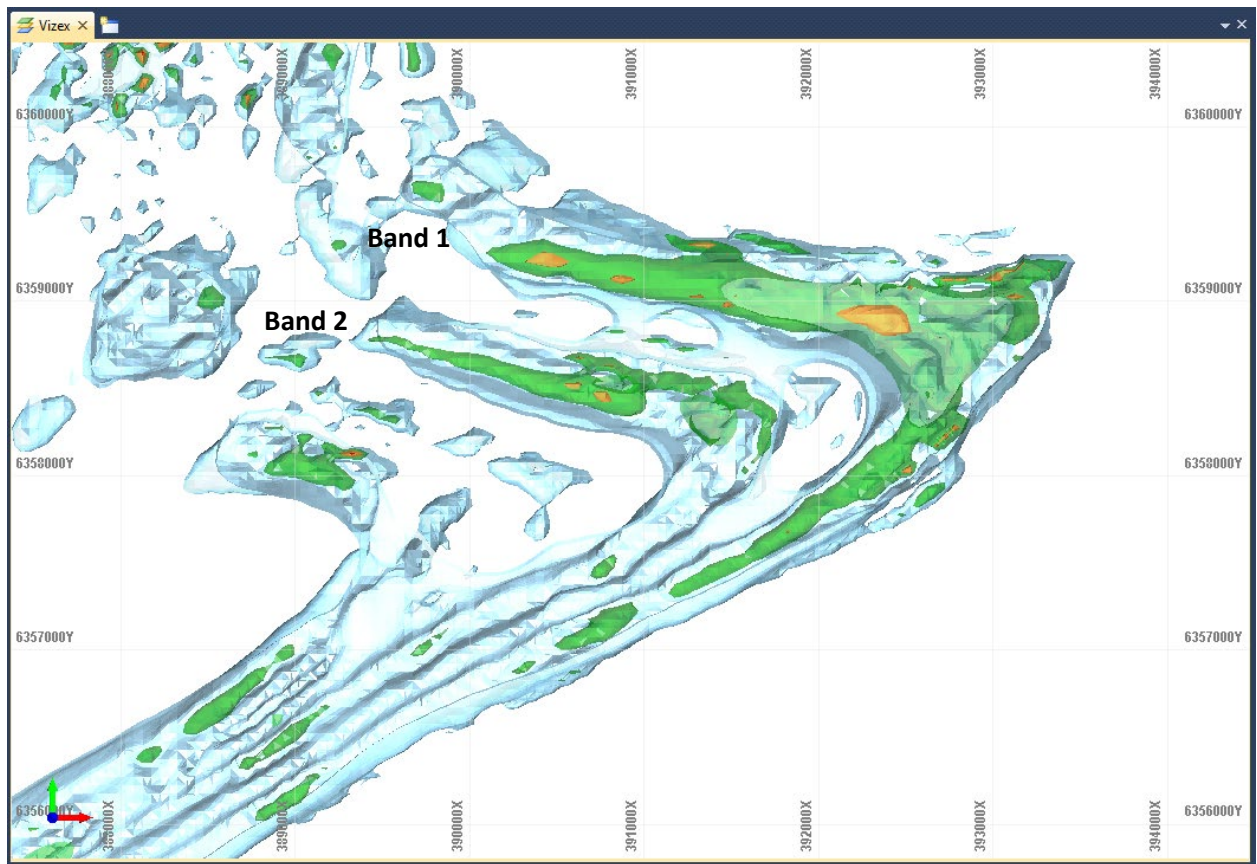


Figure 10. The geophysical modelling of South Black Hills, with shells: 0.1 SI units – Blue; 0.25 SI units – Green; 0.4 SI units – Orange.

Manunda Prospect

The Manunda Creek Prospect is host to the highest grade drill hole at the GRP to date, with 83m @23% DTR, including 18m @36.6% DTR, 66% Fe Concentrate (Figures 12 and 13). The hole finished in mineralisation, with Units B1 and A untested and the hole abandoned due to potential flooding with incoming weather in 2012. The magnetic modelling suggests the drill hole failed to intersect the high grade shell (Figure 14). Surface sampling appears to confirm drilling results with grades of up to 50% Fe from rock chips in this area (Figure 13). The dip of the stratigraphy varies from 45 to 70°, with lateral continuity of a moderate to high grade shell evident over a ~2 km strike length (Figure 12), and is 100 to 400 metres wide. This area may provide an opportunity for a high grade, low tonne start up option, if the stripping ratio doesn't undo the advantageous grade when it comes to operating costs. Access to this prospect may be an issue, both environmental and culturally, with the magnetic highs sitting along major drainage in the area.

To the southwest of the Manunda Creek Prospect is the Manunda Hill Prospect. The geophysical modelling suggests a major band of low to medium grade mineralisation approximately 300 metres thick on the flat near the creek itself, with the rest of the Prospect on the hill showing small discontinuous bodies (Figure 12). In the field, the flat area near the creek shows poor or highly weathered outcrop, while the Manunda Hill has good outcrop with a dip of 45°. The geology resembles Unit G at Razorback Ridge,

showing discrete bands of magnetite siltstone, with rock chip sampling indicating grades of 15 to 35% Fe and SATMAGAN measurements of 10 to 25% magnetite. These SATMAGAN values indicate the material is fresh at surface (Figure 13).

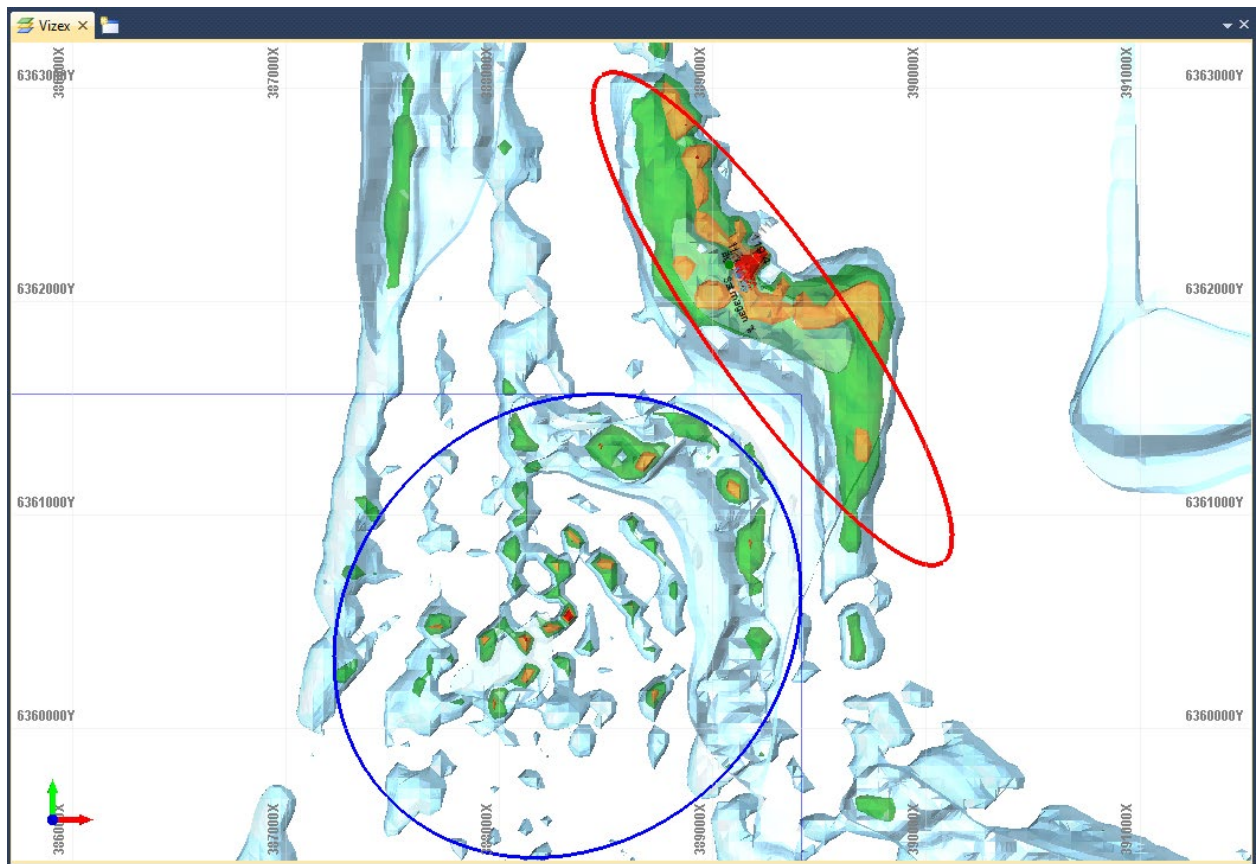


Figure 1: Magnetic modelling showing Manunda Creek (red) and Manunda Hill (blue). 3D shells: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff– Orange; 0.6 SI unit cutoff – Red

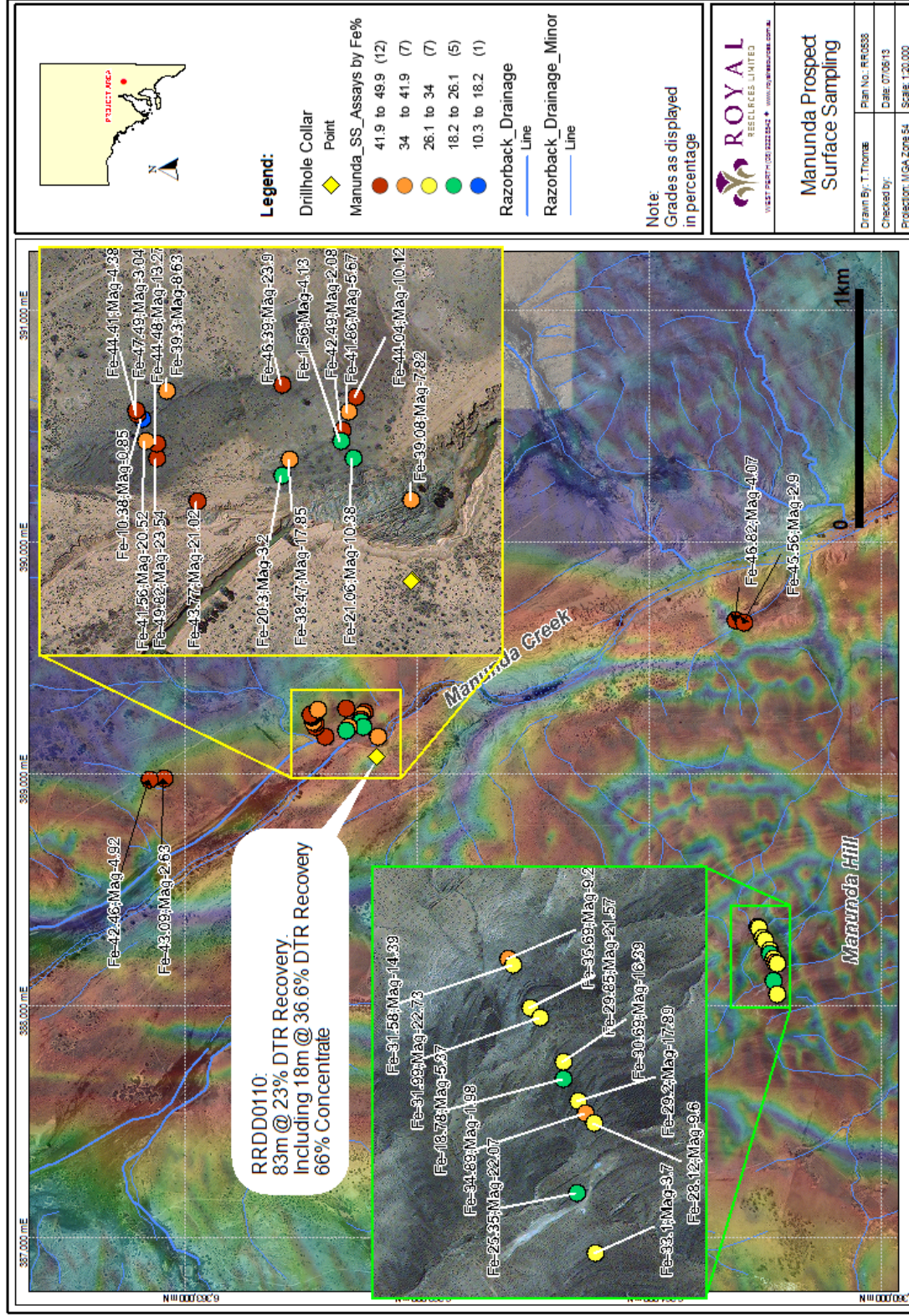


Figure 13: Rock chip sampling at Manunda

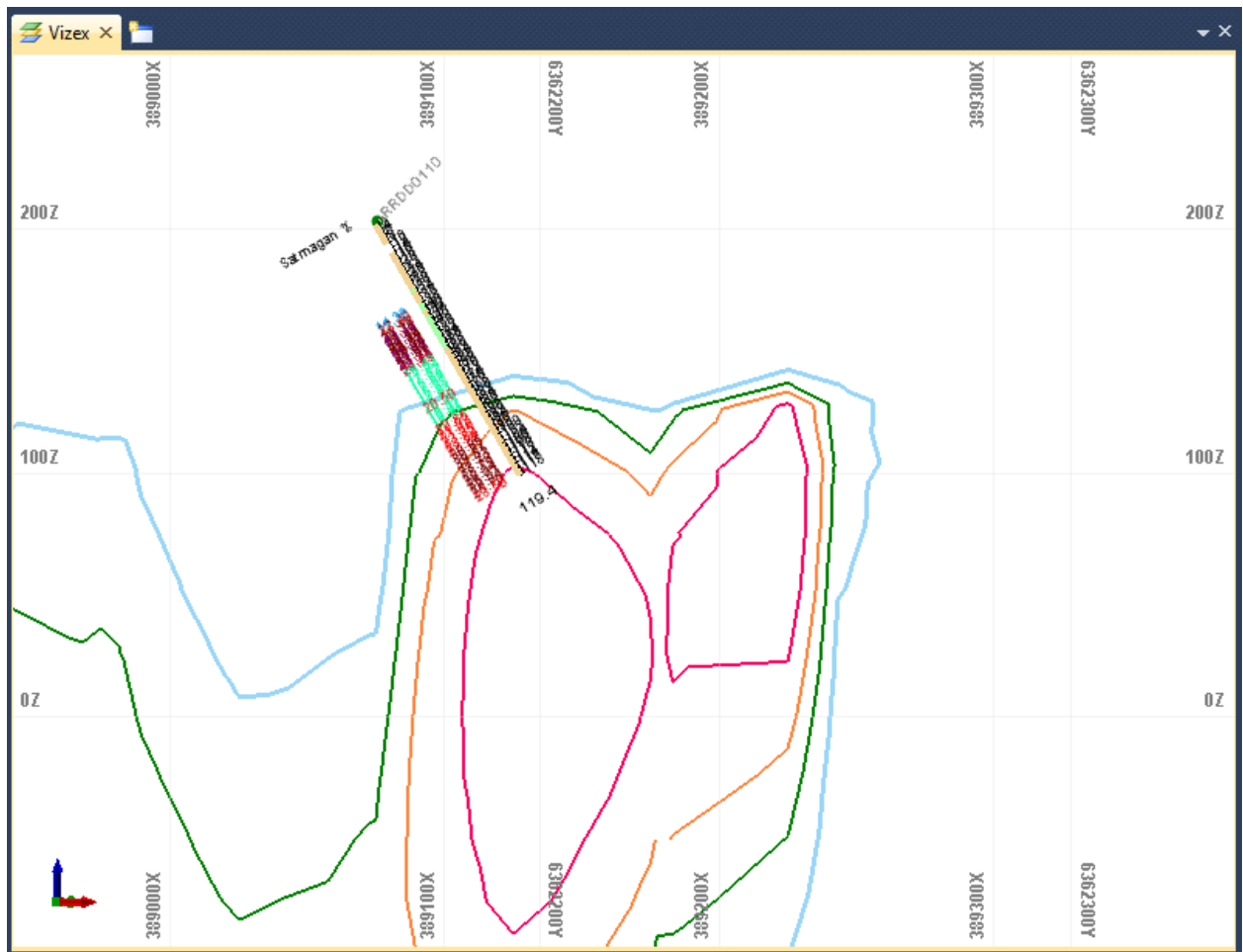


Figure 2. Cross-Section of Manunda Creek RRDD0110 drill hole. Drilling fails to intersect high grade shell in the magnetic model? 3D shells: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red

Dragons Head

From a geophysical perspective, the Dragons Head Prospect ranks highly, with the highest magnetic response received in ground magnetics and geophysical modelling of the aeromagnetic data depicting a large shell of medium to high magnetic susceptibility (Figure 14). However, a fence line of drill holes in 2012 which intersected the modelled shells show that the grades returned are at a similar level or only marginally better to that observed at the Razorback deposits (Figure 15). The entire stratigraphic sequence was not intersected during the drilling, with ground magnetics suggesting a thick basal section of the Braemar Iron Formation at Red Dragon remains untested. This would likely be Units B and A, which often hold the highest grades.

Geological logging and thin section analysis by Pontifex and Associates of selected intervals from diamond core drilled at Dragons Head reveal that apart from near surface effects of oxidation (i.e. 0 to 20m depth), there is limited martitisation of magnetite in the deeper samples. Iron levels from the assaying (averaging ~ 15% Fe) and the SATMAGAN (magnetite %) results suggest that in most cases, much of the iron is taken up in the magnetite and there appears to be generally less hematite than that observed

at Razorback Ridge. While fine hematite is observed in three of the petrology samples, the deepest petrology sample showed a total absence of any hematite.

The area was mapped in detail in 2014 from limited sub crop and outcrop, which may help in planning further drilling.

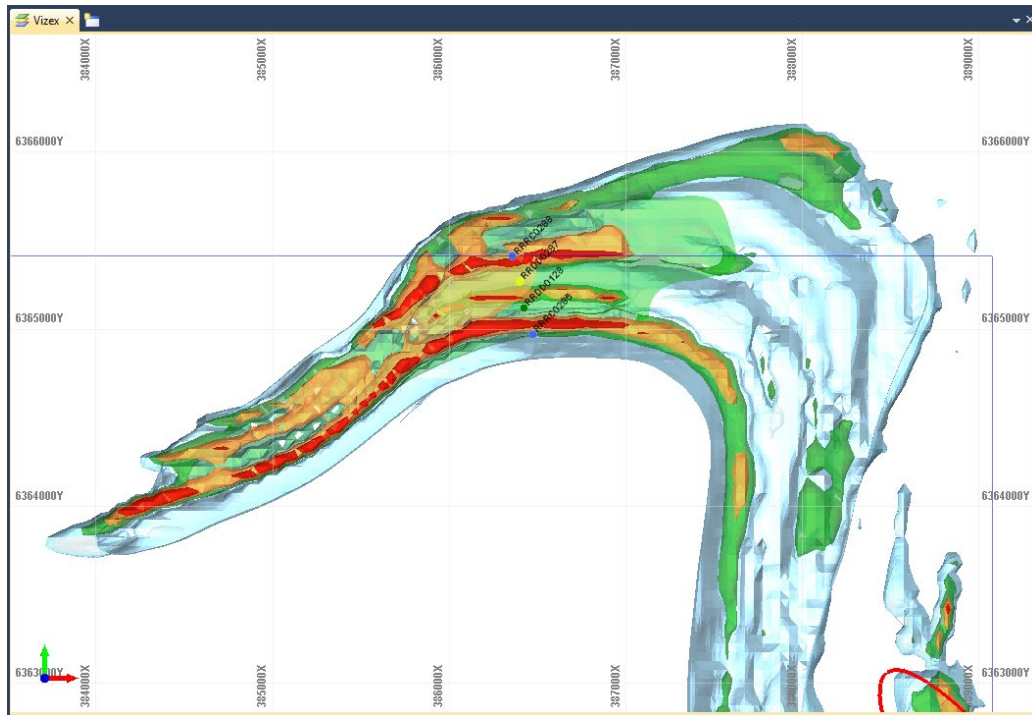


Figure 14: Magnetite model of the Dragons Head Prospect, with drill holes included. Model shells: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red



Figure 15: Cross-Section of Dragons Head drill line, with magnetic shells. While the model shells show very high magnetic susceptibility, the drilling failed to meet the same expectation. 3D shells: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6SI unit cutoff – Red

Ironback Hill East Extension

Situated adjacent to the current Ironback Hills Resource of 1.2Bt @ 23.2% Fe, the Ironback Hills eastern extension is yet to be drilled. The Ironback Hill Resource drilling in 2011-12 stopped at the boundary between Perpetual and Pastoral Lease boundaries.

Magnetic modelling shows Ironback Hill eastern extension has shells of medium to high grade (i.e. 0.25 to 0.6 SI), 200 to 500 metres thick, and over 5 km in strike length (Figure 16). Highlighted by the red circle in Figure 16, this 3 km stretch of strata has a high magnetite grade shell. While the shells appear near the surface, the real depth of oxidation for this area is untested.

It is recommended that an exploration fence line be drilled into this identified high grade zone. However, the location of a nearby registered heritage site poses a potential concern for this prospect with the highest grade regions lying immediately adjacent to a carving site. However, if an exclusion buffer were to be negotiated, then drilling may still be achievable.

Figure 3. Ironback Hill East (red) with excluded geophysical artifact (blue) geophysical modelling. 3D models: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red.

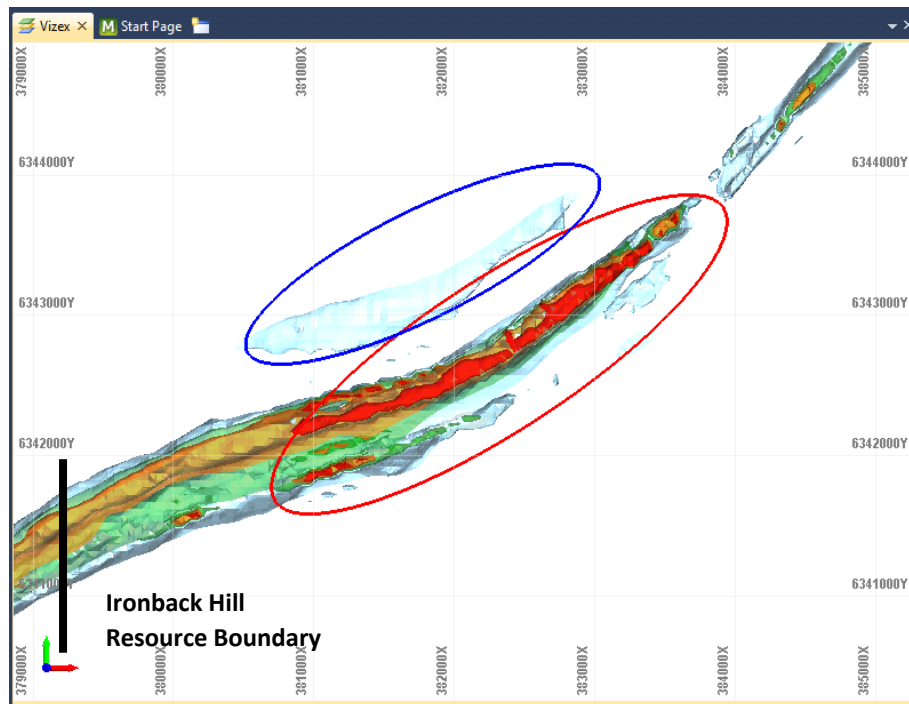


Figure 16. Ironback Hill East (red) with excluded geophysical artifact (blue) geophysical modelling. 3D models: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red.

Big Cox

The Big Cox Prospect, like the Ironback Hill Extension is untested to date. Located 10km to the north east of the Ironback Hill Prospect, Big Cox is characterised by localised small fold and faulting along the Ironback Hill Range (Figure 17). Drilling was planned for this prospect previously, but was cancelled due to heritage constraints at the time.

The modelling suggests small localised zones of high grade ore within a small fold zone 1.5 km in strike and 200 to 400 metres thick. Field reconnaissance of the fold area has identified good magnetic response for mineralisation in sub-crop, with apparent thicknesses of 30 to 40m. Bedding however dips near vertical and a primary zone of high grade seen in the inverted 3D magnetic model failed to outcrop. The fold zone is truncated to the east by a northwest-southeast fault. Further extension of Braemar strata to the north-east of the fault zone depicts a shell of moderate grade (> 0.25 SI unit) striking continuously for 7km and 200 to 400m in thickness. Like Ironback Hill Extension, the shells here appear near the surface, but the real depth of oxidation for this area is not known.

Two drill fence lines are recommended for the Big Cox Prospect, but of only moderate priority compared to other targets.

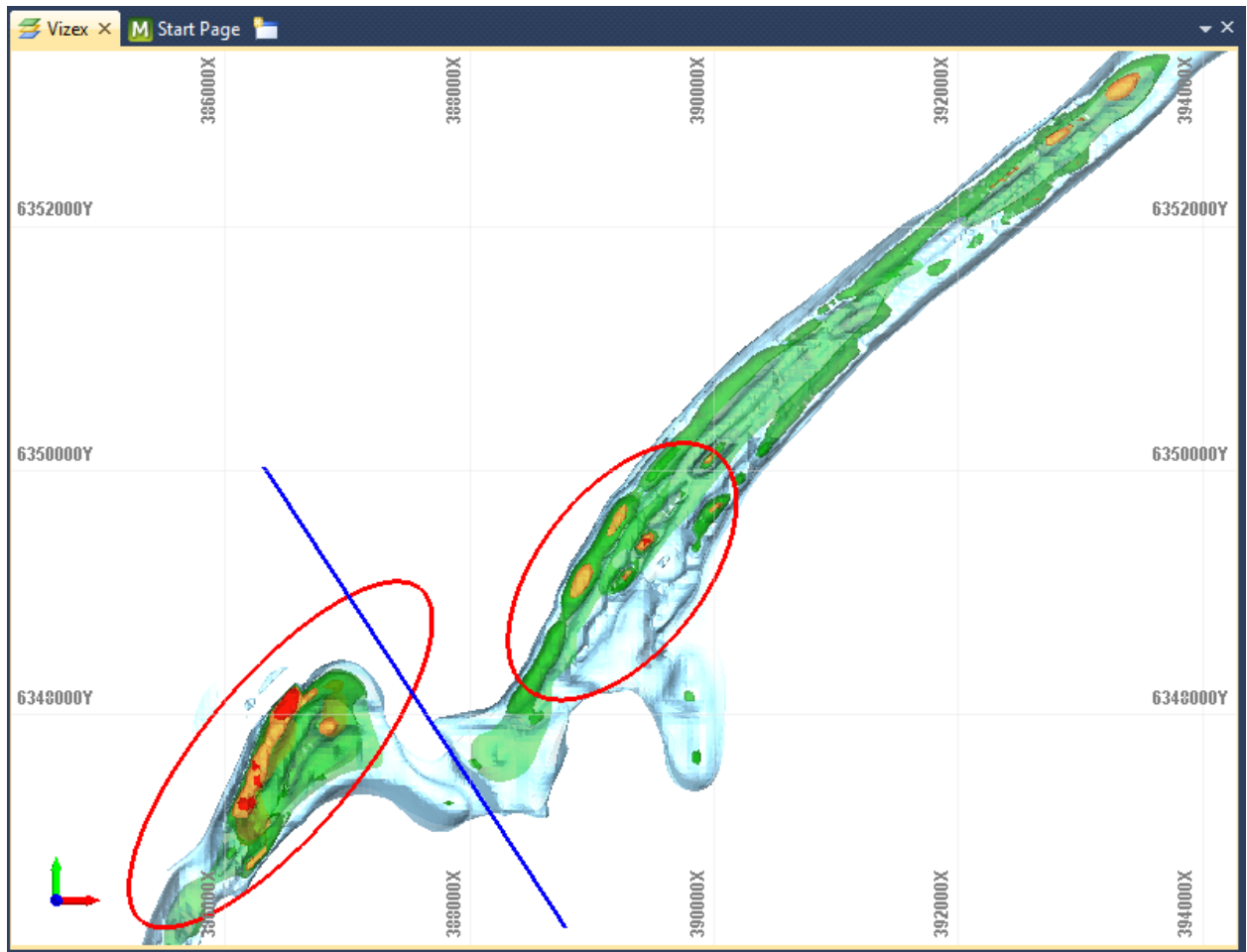


Figure 4: Big Cox Prospect – high grade areas highlighted (red) with interpreted fault zone (blue). 3D models: 0.1 SI unit cutoff – Blue; 0.25 SI unit cutoff – Green; 0.4 SI unit cutoff – Orange; 0.6 SI unit cutoff – Red

CONCLUSION

- A revised exploration target for the Greater Razorback Project has been derived from recent inverted 3D modelling of MGT's detailed aeromagnetic data.
- The new magnetic modelling at the Razorback Project calculates 11 to 26 Billion tonnes with a cut of 11% (0.1 SI unit) magnetite, with an average magnetite content of ~8.3 to 16.6%.
- The new modelling uses parameters aligned with those determined from the PFS / Resource drilling of Razorback Iron Project and appears more realistic based on current assumptions and knowledgebase.
- The magnetic model of the Razorback Iron Project identifies potential tonnage near to the current Resource which is untested and includes:
 - Unit A and G at Razorback Ridge
 - Unit G at Interzone
 - Iron Peak Prospect, targeting the western limb area, Unit E area and the eastern extension of the current resource
- Several areas in the Razorback Iron Project are identified as potential standalone deposits of similar magnitude or higher grade to Razorback, including:
 - Manunda Prospect, with a high grade core of at Manunda Creek area
 - South Black Hills, with two distinct thick bands of medium grade magnetite.
 - Dragon's Head with magnetite mineralisation confirmed in limited drilling
 - Big Cox with magnetite mineralisation confirmed in stratigraphic drilling recently completed
 - Ironback Hill East with the highest magnetic intensity of the Project area
- It is recommended that an exploration drilling program be undertaken to verify these magnetic target areas, to assist ranking the prospects for future resource development.
- A word of caution applies to any magnetic model regarding the tonnage determined and grade identified, and should only be used as a guide.

Disclaimer regarding Exploration Targets:

An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource. The potential quantity and grade is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.'