MAGNETITE MINES
High Grade Iron Ore Concentrate

ASX Announcement
24 May 2021

Razorback High Grade Iron Ore Concentrate Project Mineral Resource Upgrade

Highlights

- **Razorback High Grade Iron Ore Concentrate Project Mineral Resource remodelled at high resolution to support detailed mining studies**
- **Greater resource confidence, with Indicated Mineral Resource up 50% to 1.5 billion tonnes**
- **Majority of near surface weathering zone now included in resource at Indicated classification**
- **Slight upgrade in total resources at Razorback to 3 billion tonnes from 2.7 billion tonnes.**

** All figures are quoted at an 11% mass recovery cut-off.*

Magnetite Mines Limited (ASX:**MGT**)(Company) is pleased to announce a JORC Code 2012 Mineral Resource upgrade for the Razorback High Grade Iron Ore Concentrate Project (Razorback Iron Project). This resource is separate to the previously released resources at Ironback Hill[2] and Muster Dam[3].

As part of the Pre-Feasibility Study (PFS)[4,5], the Company has incorporated the results of refined geological understanding of mineral distribution. The re-modelling of the resources with significantly smaller block sizes was undertaken to optimise selective mining studies[6]. Also, as a result of the re-classification of much of the near-surface weathering material from Inferred to Indicated Resource, the Company will be able to include this material as plant feed rather than waste, thus improving stripping ratios, particularly in the early years.

The improved Mineral Resource estimate has increased the total tonnage of the Razorback Iron Project (JORC Indicated and Inferred) to 3.0 billion tonnes (from 2.7 billion tonnes[1]) for the Razorback and Iron Peak deposits, which are currently the focus of the PFS. The increase in Mineral Resource tonnage, particularly at the higher confidence Indicated classification, and estimated mass recovery is the result of an improved geological dataset and studies related to an updated geological model and the near surface weathered zone, which has demonstrated amenability to mineral processing through the additional Davis Tube Recovery (DTR) testwork and geometallurgical studies.

Of particular significance is the improvement in the total tonnage of Indicated Resource classification to 1.5 billion tonnes (from 1 billion tonnes[1]). Indicated Mineral Resources are part of a Mineral Resource for which quantity, grade, density, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. The Mineral Resource estimate of 1.5 billion tonnes at Indicated classification is therefore critical to ore reserve estimation mine planning and optimisation studies which are currently the focus of PFS assessments.

The increase in mass recovery in the new Mineral Resource model has positive implications for mineral processing. Global mass recovery for the deposits has increased to 15.8% (from 15.3%[1]), with Razorback deposit now 15.6% and Iron Peak now at 16.9%. The mass recovery improvement should lead to better overall concentrate recovery during processing.

Technical Director, Mark Eames, commented on the resource upgrade:

“This resource upgrade is the result of 12 months of systematic and careful work by our Company’s geology team working closely with our trusted external advisers. The higher resolution of the resulting geological model, the improved understanding of resource lithology and the inclusion in resource of near surface weathering material together provide a firm foundation for project optimisation and the Pre-Feasibility Study work now nearing completion.

We would like to thank our external advisers, McElroy Bryan Geological Services, Widenbar and Associates and Mr Richard Harmsworth. Their support for our geology team was pivotal in this work.

This milestone is an essential step on the path towards completing the PFS, which is due by the end of the first half of this year.”

2021 Mineral Resource Estimate

The upgraded Mineral Resource estimate at the Razorback Project was completed by Widenbar and Associates and is based on a refined geological model and new DTR assay data to support material changes to the now superseded Mineral Resource estimate update completed in 2018[1]. The Indicated and Inferred Mineral Resource estimates for the combined Razorback and Iron Peak deposits are summarised below.

Table 1. Razorback Iron Project May 2021 Mineral Resource Estimate at 11% eDTR cut-off grade, Widenbar and Associates

Classification	Million Tonnes (Mt, dry)	Mass Rec (eDTR%)	Fe%	SiO_2%	Al_2O_3%	P%	LOI%	Magnetite%
INDICATED	1,500	15.6	18.5	47.9	8.0	0.18	5.4	15.0
INFERRED	1,500	16.0	18.0	48.3	8.2	0.18	5.5	15.9
TOTAL	**3,000**	**15.8**	**18.2**	**48.1**	**8.1**	**0.18**	**5.5**	**15.5**

All figures quoted at an 11% eDTR cut-off

Reasonable prospects for eventual economic extraction have resulted in an eDTR cut-off of 11% being used for Mineral Resource tonnage estimate. The use of eDTR regression data is implicit in the resource classification for JORC Indicated and Inferred Mineral Resource estimates.

Material Changes to the Razorback Iron Project Mineral Resource

Geological Modelling

A geological review of the Razorback Iron Project deposits towards selective mining was completed by McElroy Bryan Geological Services (MBGS)[5]. The two-stage study examined the selective mining opportunity of the Razorback Iron Project by assessing the distribution of mineralisation within the stratigraphy of the Braemar Iron Formation at the Razorback and Iron Peak deposits.

MBGS conducted an initial qualitative study of the deposit and demonstrated the stratabound nature of mineralisation, occurring within discrete layers or bands commonly at scales between 0.5m to 2m as defined by down-hole geophysical data and additional high resolution (small interval) DTR analysis.[5] These bands of mineralisation were then traced laterally across the deposit, in some cases as far as 5 km along strike. This demonstrated the lateral continuity of mineralisation and therefore the potential for applying selective mining methods to reduce internal dilution by waste, hence improving the feed grade to the processing plant.

The initial qualitative study was followed by a second stage re-modelling of the deposits using gridded seam modelling software (MINEX). MBGS used existing downhole geological and geophysical logging and geochemical datasets to re-interpret the stratabound mineralisation as subunits within the existing stratigraphic model. This discrete mineralisation was most apparent as bedded lithologies, which showed internal stratabound mineralisation separated by interstitial low-grade material. This is in contrast to the massive lithologies which are generally more consistent in internal grade distribution but still subject to sub domaining where appreciable changes in mineralisation were apparent.

Drill hole data for the weathering zone, a near surface mineralised sub-domain for the Razorback Iron Project, was subject to statistical analysis to quantitatively define the extent of oxidation with depth. The ratio between head Fe% and Magnetite% was found to reliably define the base of this zone, resulting in an overall decrease in thickness for the weathering zone for resource modelling compared with the previous interpretation.

Structural features identified in the west of Razorback were incorporated into the geological model. The re-interpretation of faulting was completed by tracing down hole geophysical data patterns and reconciling these with geochemical assay and core photography.

Following geological modelling, gridded geological surfaces were imported into the Micromine resource estimation software suite by Widenbar and Associates, with internal layers composited as appropriate for block modelling. The high-resolution geological modelling input from MBGS allowed for additional flexibility in the sub-domaining of lithological strata for use in Mineral Resource estimation and largely provided the basis for the optimisation in this Mineral Resource estimate.

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 both Razorback and 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 unfolded 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 m 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, SiO_2, Al_2O_3, TiO_2, MnO, CaO, P, S, MgO, K_2O, Na_2O, LOI, Cu and Zn.

A three pass search strategy has been used:

	Search Distance (m)						
Search Pass	Along Strike	Down Dip	Across Dip	Minimum Samples	Maximum Samples	Minimum Holes	Maximum 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 200 m by 50 m, with infill lines at 100 m 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).

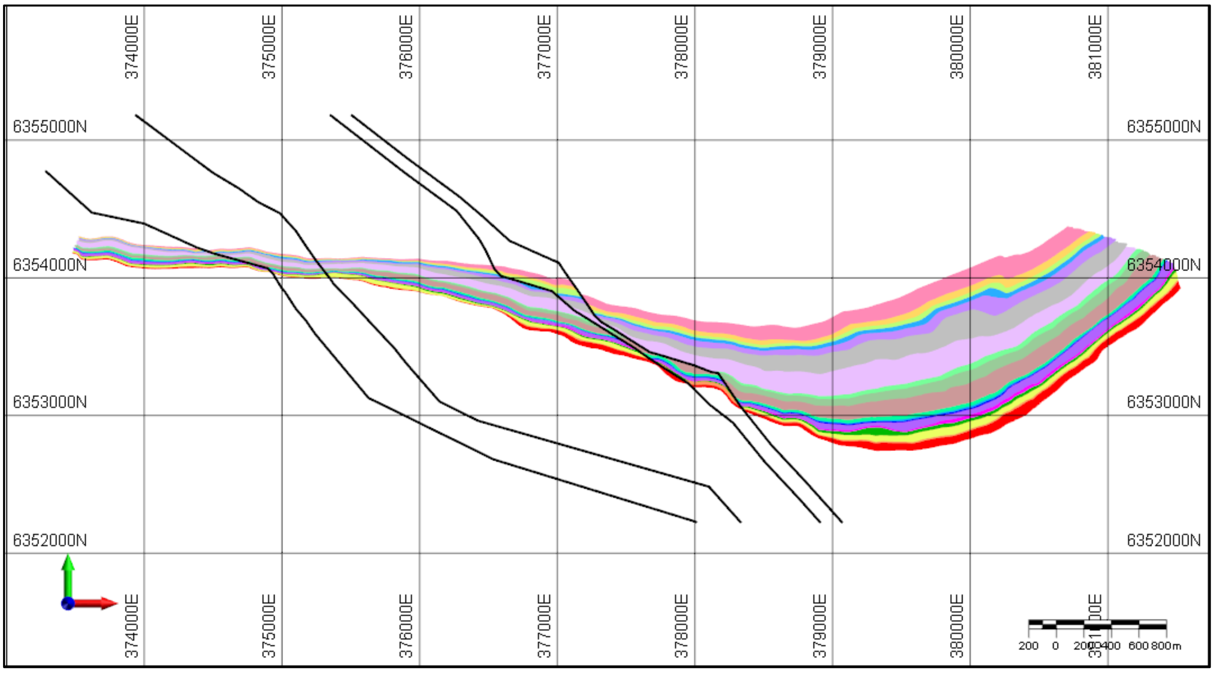

Figure 1. Razorback geological model plan view displaying lithological sub-domains

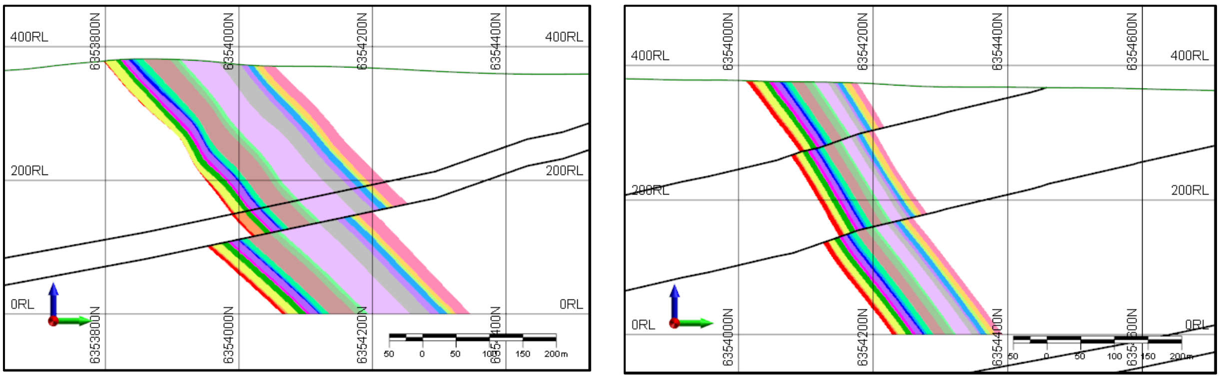

Figure 2. Razorback geological model typical sections displaying lithological sub-domains and faulting

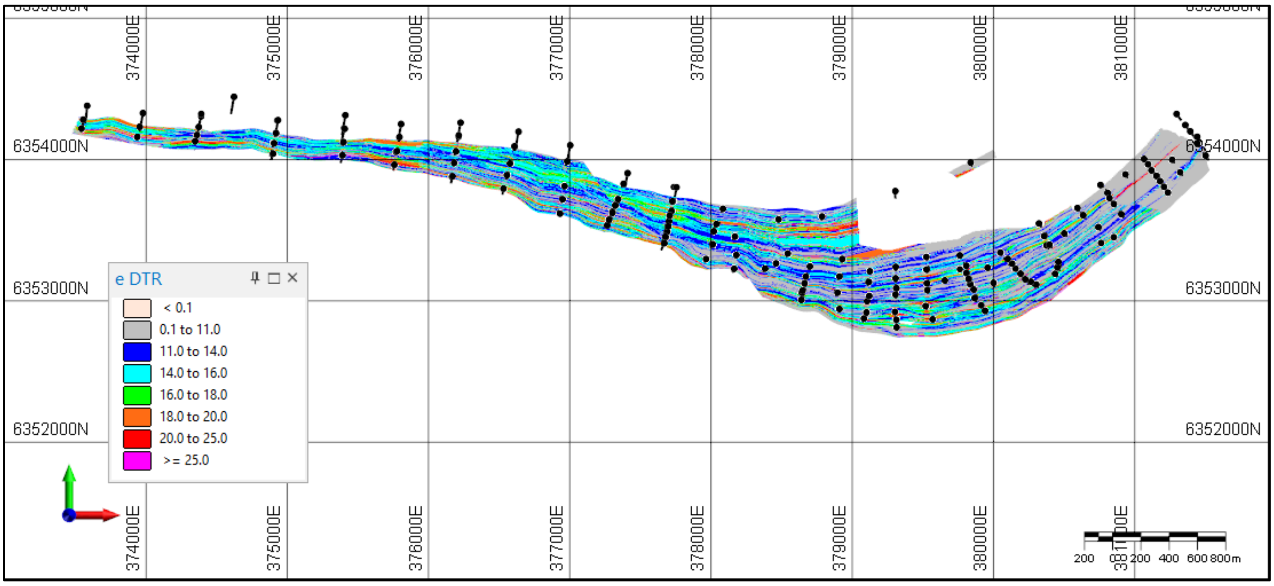

Figure 3. Razorback eDTR grade plan

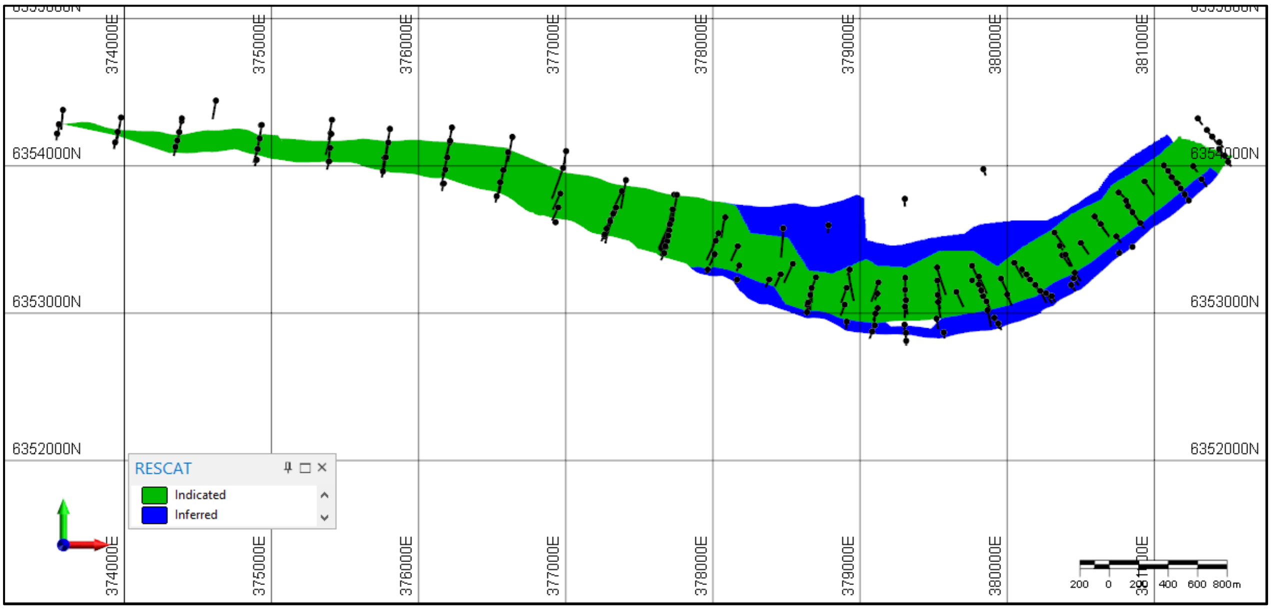

Figure 4. Razorback resource classification plan

Bulk Density

MBGS completed a statistical analysis of bulk densities of the deposits using historic and updated specific gravity datasets. This provided an improved understanding of the relationship of density to mineralisation and led to a regression of specific gravity data (g/cc) vs head Fe%. This was used during the resource estimation process for tonnage and grade estimates, in place of the previous constant density value.

Geometallurgical Testwork

Consultants Hatch were engaged to assess the geometallurgical properties of the Razorback and Iron Peak prospects. Hatch completed an initial review of the existing metallurgical studies, highlighting the need for early-stage mining (years 0-5) geometallurgical characterisation. Following the review, representative samples of drill core derived from historic drilling were submitted to Bureau Veritas Laboratories for testwork to assess their textural and liberation characteristics for early stage mining operation studies now under study in the PFS. Samples were subjected to multiple grinds to examine macro to micro grind liberation characteristics on pre and post DTR liberation products. A total of six spatially distributed samples, located within the early-stage mining area, were selected and subjected to DTR, QEMScan, Particle Size Distribution testing (PSD), X-Ray Fluorescence (XRF) and other analytical techniques with a focus on their liberation characteristics.

The new testwork built on pre-existing testwork and datasets and confirmed the amenability of Razorback Iron Project mineralisation to liberation using conventional and technologically mature magnetite processing flow sheets. The results of the testwork, together with additional DTR testwork undertaken in tandem, demonstrated the amenability of the Razorback deposits to produce high grade concentrates. It also formed the basis for process flow sheet design and optimisation as part of ongoing PFS studies in conjunction with Hatch. In particular, this testwork confirmed the ability of samples from the weathering zone, which displays some degree of martisation i.e. oxidation of magnetite to hematite, to produce high grade concentrates.

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.

As previously mentioned, additional DTR testwork was completed towards assessing selective mining and improving confidence in the weathering zone sub-domain. An additional 179 DTR samples were submitted to ALS and Bureau Veritas laboratories (2021) for analysis and were combined with 600 historically processed samples (2012), all 779 samples shared the same DTR analysis method with a minimum 97% passing 45 micron (P97 45µm) grind size for the DTR feed samples.

The improved dataset was used to update previous eDTR regression formulae used in the 2013 and 2018 Mineral Resource estimates. Regression formulae were applied to Magnetite% head data and appropriate domains prior to block modelling using Ordinary Kriging to estimate mass recovery given as ‘eDTR’. Further details of the regressions and formulae are given in JORC Code Table 1.

The weighted mean average of DTR concentrate Fe grade for all the standard DTR testwork done is 67.3% Fe with fresh material at 67.3% Fe (as occurring below the near surface weathering zone) and 67.4% for weathered (as occurring near-surface). The weighting factor for these averages is sample drillhole intersection length * density * DTR mass recovery.

About the Razorback Iron Project

The Razorback and Iron Peak Prospects occur within the Razorback Iron Project, located 244 km NNE of Adelaide, South Australia. Drilling of the prospects began in 2010 and was completed in 2012 resulting in several iterations of Mineral Resource estimates over time. The drilled resource covers approximately 12 km of strike length of the magnetite-rich Neoproterozoic aged Braemar Iron Formation. The drilling completed represents approximately 36,000 m Reverse Circulation and Diamond Drilling during the 2010 to 2012 period. The Razorback Iron Project Mineral Resource estimate at various cut-offs, as extracted from the updated resource model, is shown in Table 2 below.

Table 2. Razorback Iron Project: May 2021 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_2O_3**	**P**	**LOI**	**Magnetite**
TOTAL	15	1,534,000,000	18.38	20.45	46.14	7.67	0.20	5.15	18.61
TOTAL	14	1,911,000,000	17.62	19.76	46.78	7.82	0.19	5.23	17.68
TOTAL	13	2,292,000,000	16.93	19.15	47.32	7.94	0.19	5.31	16.86
TOTAL	12	2,672,000,000	16.30	18.64	47.76	8.04	0.19	5.40	16.10
TOTAL	11	2,998,000,000	15.78	18.23	48.12	8.12	0.18	5.47	15.49
TOTAL	10	3,262,000,000	15.36	17.92	48.41	8.18	0.18	5.52	14.98
TOTAL	9	3,471,000,000	15.01	17.65	48.66	8.23	0.18	5.56	14.56
TOTAL	8	3,634,000,000	14.71	17.43	48.88	8.28	0.18	5.59	14.21
TOTAL	0	3,976,000,000	13.98	16.97	49.35	8.39	0.17	5.63	13.32
Resource Classification	**Mass Recovery (eDTR) Cutoff**	**Tonnes**	**eDTR**	**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**Magnetite**
INDICATED	15	745,000,000	18.15	20.73	45.92	7.58	0.20	5.10	18.07
INDICATED	14	937,000,000	17.40	19.99	46.58	7.74	0.19	5.18	17.17
INDICATED	13	1,137,000,000	16.72	19.35	47.15	7.87	0.19	5.26	16.36
INDICATED	12	1,330,000,000	16.11	18.85	47.59	7.97	0.19	5.34	15.63
INDICATED	11	1,494,000,000	15.60	18.47	47.93	8.04	0.18	5.41	15.03
INDICATED	10	1,628,000,000	15.18	18.17	48.21	8.10	0.18	5.46	14.53
INDICATED	9	1,736,000,000	14.84	17.93	48.44	8.15	0.18	5.50	14.12
INDICATED	8	1,814,000,000	14.56	17.75	48.62	8.19	0.18	5.52	13.78
INDICATED	0	1,972,000,000	13.90	17.49	48.94	8.27	0.17	5.54	12.97
INFERRED	15	788,000,000	18.60	20.19	46.36	7.76	0.19	5.21	19.13
INFERRED	14	974,000,000	17.82	19.53	46.97	7.90	0.19	5.28	18.16
INFERRED	13	1,156,000,000	17.14	18.95	47.49	8.02	0.19	5.36	17.34
INFERRED	12	1,341,000,000	16.50	18.43	47.92	8.11	0.18	5.46	16.57
INFERRED	11	1,503,000,000	15.96	18.00	48.30	8.19	0.18	5.54	15.94

Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO_2	Al_2O_3	P	LOI	Magnetite
INFERRED	10	1,633,000,000	15.53	17.66	48.62	8.26	0.18	5.58	15.43
INFERRED	9	1,735,000,000	15.17	17.37	48.89	8.31	0.18	5.62	15.01
INFERRED	8	1,821,000,000	14.86	17.12	49.14	8.36	0.18	5.65	14.63
INFERRED	0	2,004,000,000	14.06	16.45	49.76	8.51	0.17	5.72	13.67

RAZORBACK MINERAL RESOURCE ESTIMATE

Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO_2	Al_2O_3	P	LOI	Magnetite
TOTAL	15	1,290,000,000	18.14	20.30	46.31	7.70	0.20	5.10	18.20
TOTAL	14	1,628,000,000	17.38	19.61	46.93	7.84	0.19	5.18	17.30
TOTAL	13	1,969,000,000	16.71	19.01	47.46	7.96	0.19	5.27	16.50
TOTAL	12	2,303,000,000	16.10	18.53	47.87	8.06	0.19	5.35	15.78
TOTAL	11	2,579,000,000	15.61	18.15	48.21	8.13	0.19	5.42	15.21
TOTAL	10	2,786,000,000	15.23	17.88	48.47	8.17	0.18	5.46	14.77
TOTAL	9	2,941,000,000	14.93	17.67	48.68	8.22	0.18	5.49	14.42
TOTAL	8	3,059,000,000	14.68	17.49	48.87	8.25	0.18	5.52	14.12
TOTAL	0	3,292,000,000	14.08	17.19	49.20	8.33	0.18	5.54	13.40
Resource Classification	**Mass Recovery (eDTR) Cutoff**	**Tonnes**	**eDTR**	**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**Magnetite**
INDICATED	15	601,000,000	17.83	20.65	46.04	7.58	0.20	5.01	17.46
INDICATED	14	769,000,000	17.10	19.88	46.72	7.74	0.20	5.11	16.62
INDICATED	13	945,000,000	16.43	19.23	47.29	7.87	0.19	5.20	15.85
INDICATED	12	1,112,000,000	15.84	18.75	47.71	7.97	0.19	5.28	15.16
INDICATED	11	1,247,000,000	15.37	18.40	48.02	8.04	0.19	5.34	14.61
INDICATED	10	1,350,000,000	15.00	18.14	48.27	8.09	0.18	5.39	14.18
INDICATED	9	1,428,000,000	14.71	17.94	48.46	8.13	0.18	5.42	13.83
INDICATED	8	1,481,000,000	14.48	17.80	48.61	8.16	0.18	5.44	13.56
INDICATED	0	1,598,000,000	13.88	17.67	48.84	8.21	0.18	5.43	12.82
Resource Classification	**Mass Recovery (eDTR) Cutoff**	**Tonnes**	**eDTR**	**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**Magnetite**
INFERRED	15	689,000,000	18.40	20.00	46.54	7.80	0.19	5.18	18.84
INFERRED	14	859,000,000	17.63	19.37	47.13	7.94	0.19	5.25	17.91
INFERRED	13	1,024,000,000	16.97	18.81	47.62	8.05	0.19	5.33	17.11
INFERRED	12	1,191,000,000	16.34	18.32	48.03	8.14	0.19	5.43	16.36
INFERRED	11	1,331,000,000	15.83	17.92	48.39	8.21	0.18	5.50	15.77
INFERRED	10	1,436,000,000	15.44	17.64	48.66	8.26	0.18	5.53	15.32
INFERRED	9	1,513,000,000	15.14	17.41	48.88	8.30	0.18	5.57	14.97
INFERRED	8	1,578,000,000	14.87	17.19	49.11	8.34	0.18	5.59	14.65
INFERRED	0	1,694,000,000	14.27	16.73	49.54	8.44	0.18	5.64	13.95

IRON PEAK MINERAL RESOURCE ESTIMATE

Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO_2	Al_2O_3	P	LOI	Magnetite
TOTAL	15	244,000,000	19.70	21.25	45.27	7.55	0.18	5.45	20.83
TOTAL	14	283,000,000	18.98	20.59	45.91	7.68	0.18	5.53	19.84
TOTAL	13	323,000,000	18.30	20.00	46.46	7.81	0.17	5.60	19.00
TOTAL	12	369,000,000	17.58	19.36	47.03	7.94	0.17	5.69	18.11
TOTAL	11	419,000,000	16.85	18.74	47.56	8.07	0.16	5.79	17.19

Resource Classification	Mass Recovery (eDTR) Cutoff	Tonnes	eDTR	Fe	SiO_2	Al_2O_3	P	LOI	Magnetite
TOTAL	10	476,000,000	16.09	18.12	48.10	8.20	0.16	5.86	16.24
TOTAL	9	530,000,000	15.42	17.56	48.58	8.33	0.16	5.93	15.38
TOTAL	8	575,000,000	14.87	17.15	48.96	8.41	0.15	5.97	14.67
TOTAL	0	684,000,000	13.49	15.91	50.07	8.68	0.15	6.08	12.94
Resource Classification	**Mass Recovery (eDTR) Cutoff**	**Tonnes**	**eDTR**	**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**Magnetite**
INDICATED	15	144,000,000	19.51	21.08	45.40	7.60	0.18	5.47	20.61
INDICATED	14	168,000,000	18.81	20.50	45.97	7.72	0.18	5.53	19.70
INDICATED	13	192,000,000	18.15	19.97	46.47	7.83	0.17	5.60	18.88
INDICATED	12	218,000,000	17.46	19.38	47.02	7.96	0.17	5.67	18.01
INDICATED	11	247,000,000	16.77	18.84	47.48	8.07	0.17	5.75	17.14
INDICATED	10	278,000,000	16.06	18.32	47.95	8.18	0.16	5.82	16.24
INDICATED	9	308,000,000	15.44	17.89	48.33	8.27	0.16	5.88	15.45
INDICATED	8	333,000,000	14.92	17.53	48.66	8.35	0.16	5.92	14.78
INDICATED	0	374,000,000	13.98	16.72	49.35	8.51	0.15	6.02	13.59
Resource Classification	**Mass Recovery (eDTR) Cutoff**	**Tonnes**	**eDTR**	**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**Magnetite**
INFERRED	15	99,000,000	19.99	21.50	45.09	7.48	0.18	5.43	21.14
INFERRED	14	115,000,000	19.22	20.73	45.83	7.63	0.18	5.52	20.05
INFERRED	13	132,000,000	18.51	20.04	46.46	7.77	0.17	5.61	19.18
INFERRED	12	150,000,000	17.76	19.32	47.04	7.92	0.17	5.73	18.25
INFERRED	11	172,000,000	16.96	18.58	47.66	8.08	0.16	5.84	17.26
INFERRED	10	197,000,000	16.14	17.83	48.31	8.24	0.16	5.93	16.25
INFERRED	9	222,000,000	15.40	17.11	48.92	8.41	0.15	6.01	15.28
INFERRED	8	243,000,000	14.81	16.63	49.36	8.51	0.15	6.05	14.51
INFERRED	0	310,000,000	12.90	14.93	50.94	8.88	0.14	6.15	12.14

Figure 5. Razorback Iron Project – Razorback Ridge outcropping with distinctive dark iron ore banding at surface (looking south west)

Competent Persons Statement

The information in this report that relates to Exploration Results 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 General Manager – Geology. 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.

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

For Further information contact:
Peter Schubert
Executive Chairman and CEO
+61 416 375 346

References

The following references can be accessed via the ASX website (https://www2.asx.com.au/markets/company/mgt)

1. 12/11/18 – ASX Announcement – Razorback Iron Project – JORC 2012 Resource Update
2. 20/11/18 – ASX Announcement – Ironback Hill Deposit – JORC 2012 Resource Update
3. 01/03/21 – ASX Announcement – Muster Dam Iron Project Tenements awarded to Magnetite Mines
4. 30/04/21 – ASX Announcement – Revised Third Quarter Activities and Cashflow Reports
5. 18/06/20 – ASX Announcement – Commencement of PFS and Appointment of Expert Advisors
6. 19/08/20 – ASX Announcement – Selective Mining

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. 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.
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 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.

Criteria	JORC Code explanation	Commentary
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 the material being sampled.*	• 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.
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, Si2O2, 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

Criteria	JORC Code explanation	Commentary

		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 pulverizer 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;
		  • Fresh zone: Iron Peak prospect: 101 representative samples.
		The resulting regressions are as follows:
		  • Oxidised (Weathered): eDTR % = 1.3776 * Mag % (Satmagan) + 2.7242 (R^2 = 0.5568, n = 111)
		  • Fresh (Razorback Main): eDTR % = 0.8435 * Mag % (Satmagan) + 2.1831 (R^2 = 0.8286, n = 330)
		  • Fresh (Razorback West): eDTR % = 0.7836 * Mag % (Satmagan) + 4.0857 (R^2 = 0.7943, n = 237)
		  • Fresh (Iron Peak): eDTR % = 0.8028 * Mag % (Satmagan) + 2.9117 (R^2 = 0.8692, n = 102)

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

Criteria	JORC Code explanation	Commentary
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.* • *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.*	• RC and diamond drill holes were oriented, wherever possible, perpendicular to the mineralisation dip.
Sample security	• *The measures taken to ensure sample security.*	• 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	• *The results of any audits or reviews of sampling techniques and data.*	• 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 km^2 and 725km^2 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.

Criteria	JORC Code explanation	Commentary
		• 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* ○ *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.*	• Refer to details of drilling in tables in the body of this report and the appendices.
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.

Criteria	JORC Code explanation	Commentary
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 Exploration Results.*	- Reporting of results in this report is considered balanced.
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. Datashed 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 Datashed database. - Drill hole data was imported into Micromine mining software (V 2021.5)for further validation, including: o Checks for duplicate collars. o Checks for missing samples. o Checks for down hole from-to interval consistency. o Checks for overlapping samples. o Checks for samples beyond hole depth. o Checks for missing assays. o Checks for down-hole information beyond hole depth. o Checks for missing down-hole information. o 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.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td><i>Site visits</i></td><td>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>
• <i>If no site visits have been undertaken indicate why this is the case.</i></td><td>• The Competent person has not made a Site Visit, as drilling was completed during 2010 and 2011 and there has been no activity since.
• 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.
• If there is future drilling or further site work, a Site Visit will be arranged.</td></tr>
<tr><td><i>Geological interpretation</i></td><td>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>
• <i>Nature of the data used and of any assumptions made.</i>
• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>
• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i>
• <i>The factors affecting continuity both of grade and geology.</i></td><td>• 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.</td></tr>
<tr><td><i>Dimensions</i></td><td>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></td><td>• Razorback and Iron Peak extend approximately 7 km and 3km along strike respectively, with a maximum depth extent from outcrop at surface to approximately 320m below surface and typical total thicknesses of 100 m to 150 m.</td></tr>
<tr><td><i>Estimation and modelling techniques</i></td><td>• <i>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.</i>
• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>
• <i>The assumptions made regarding recovery of by-products.</i>
• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i>
• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>
• <i>Any assumptions behind modelling of selective mining units.</i>
• <i>Any assumptions about correlation between variables.</i>
• <i>Description of how the geological interpretation was used to control the resource estimates.</i>
• <i>Discussion of basis for using or not using grade cutting or capping.</i>
• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></td><td>• 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 2021.5.
• Kriging parameters were defined using Fe as the primary variable.
• A three-pass search strategy is used. Search parameters are:
<table>
<tr><th></th><th colspan="3">Search Distance</th><th></th><th></th><th></th><th></th></tr>
<tr><th>Search Pass</th><th>Along Strike</th><th>Down Dip</th><th>Across Dip</th><th>Minimum Samples</th><th>Maximum Samples</th><th>Minimum Holes</th><th>Maximum 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 :
○ eDTR
○ Fe
○ SiO_2
○ Al_2O_3
○ LOI
○ Magnetite
○ TiO_2
○ MnO
○ CaO
○ P
○ S
○ MgO
○ K_2O
○ Na_2O
○ Cu
○ Zn</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• 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: o Drill Hole Plan and Section Review o Model versus Data Statistics by Domain o Easting, Northing and RL swathe plots • All validation methods have produced acceptable results.
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.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource has been reported at a range of eDTR cut-offs from 8% to 15%. Reasonable prospects for eventual economic extraction have resulted in an eDTR cut-off of 11% being used for Mineral Resource tonnage estimate.
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.
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 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*	• 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. • Flora and Fauna – Based on a series of Flora and Fauna Surveys as completed by Rural Solutions SA, no species or vegetation communities have been identified to contain regional, state or national conservation rating. Assessment

Criteria	JORC Code explanation	Commentary
	with an explanation of the environmental assumptions made.	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 4th 1m interval metre of core. • Waste and mineralised rocks have very low porosity as demonstrated by minimal differences between pychnometer-measured S.G. determinations and core immersions. • The global average from both laboratory and field measurements was an SG of 3.2 g/cm3 which formed the basis of previous resource estimations. • Density is calculated using a regression equation on Fe head grades, where Density = Fe head x 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, 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.

Criteria	JORC Code explanation	Commentary
		• 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 been 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 production data, where available.*	• 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.