



# Mount Gibson Iron Limited

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## ASX ANNOUNCEMENT

**ASX Code: MGX**

30 September 2022

## Mineral Resources and Ore Reserves Statement as at 30 June 2022

- Koolan Island Ore Reserves of **16.0Mt at 65.4% Fe**, confirming Koolan Island's status as Australia's highest grade direct shipping hematite iron ore operation, and underpinning the next 4-5 years of high grade production. The movement from the prior year's Ore Reserve estimate (2021: 17.5Mt at 65.3% Fe) reflects mining depletion and minor estimation adjustments.
- Total Group Mineral Resources of **59.8Mt grading 62.2% Fe**, with movements from the prior year (2021: 67.4Mt at 61.7% Fe) reflecting mining depletion and the removal of remnant material at the rehabilitated Extension Hill and Iron Hill mine sites.
- The Shine project in the Mid-West retains its Mineral Resource Estimate (15.1Mt at 58.2% Fe), with the Ore Reserve removed given the project's current care and maintenance status.

Mount Gibson Iron Limited (**Mount Gibson** or the **Company**) has reported its Mineral Resource and Ore Reserve estimates as at 30 June 2022.

### Summary of information

This statement details the Mineral Resource and Ore Reserve estimates of Mount Gibson as at 30 June 2022. Total Mineral Resources are estimated at **59.8 million tonnes (Mt) of iron ore at an average grade of 62.2% Fe** (30 June 2021: 67.4Mt at 61.7% Fe). Total Ore Reserves are **16.0Mt at 65.4% Fe** (30 June 2021: 20.3Mt at 64.5% Fe).

The changes in the Mineral Resource estimates compared with the prior year largely reflect mining depletion at Koolan Island and the Shine deposit in the Mid-West, the removal of remnant Mineral Resources at the rehabilitated Extension Hill and Iron Hill mine sites, and removal of the Shine Ore Reserves following the operation's transition to care and maintenance status in late 2021.

Refer to Tables A and B on pages 3-4 of this release for details of the Mineral Resources and Ore Reserves by individual project and for the Group, and for Competent Person disclosures. Mineral Resources are reported inclusive of Ore Reserves and all tonnages have been estimated as dry metric tonnages.

### **Mineral Resources**

Mineral Resources at Koolan Island as at 30 June 2022 totalled 44.7Mt grading 63.6% Fe, including 34.9Mt grading 64.6% Fe within the high grade Main Deposit. This compares with 46.2Mt grading 63.7% Fe at Koolan Island at 30 June 2021, which included 36.4Mt grading 64.6% Fe in the Main Deposit.

Total Mineral Resources were reduced by approximately 7.6Mt in the year to 30 June 2022 through mining depletion of 1.5Mt at Koolan Island and 0.6Mt at Shine, and the removal of remnant Mineral Resources at the closed Extension Hill (1.8Mt) and Iron Hill (3.7Mt) mine sites.

The Company confirms that all material assumptions and technical parameters underpinning the Mineral Resource estimates continue to apply and have not materially changed.

### ***Ore Reserves***

All of Mount Gibson's current Ore Reserves are located in the Main Deposit at Koolan Island, where the Ore Reserve estimate totals 16.0Mt grading 65.4% Fe.

Mount Gibson's total Ore Reserves decreased by approximately 4.3Mt over the year, reflecting mining depletion and minor adjustments at Koolan Island, as well as mining depletion and the conservative removal of the remaining Ore Reserves at the Shine deposit in the Mid-West given that site's move to care and maintenance status in order to preserve the optionality of the deposit.

Reconciliations for all operations have provided confidence in the estimation methodology and results, with depletion from mining being in balance with production outputs.

### ***Other Disclosures***

No other significant changes occurred during the reporting period with regards to Mount Gibson's Mineral Resources and Ore Reserves.

Mount Gibson has maintained consistency and not changed sampling methods, sub-sampling techniques or sample assay analyses, drill and data spacing, estimation methodology, cut-off grade, or mining and metallurgical methods in any material way.

Mount Gibson's operations have been established for several years, and exploration results including sampling techniques and data analysis have previously been reported to the ASX under the Joint Ore Reserves Committee (JORC) standard and ASX continuous disclosure requirements. All of Mount Gibson's Mineral Resources and Ore Reserves are reported in compliance with the JORC Code, 2012 Edition and the ASX Listing Rules.

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## Mineral Resources and Ore Reserves Statement as at 30 June 2022

**Table A: Mineral Resources and Ore Reserves by Project as at 30 June 2022**

Koolan Island					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	2.8	60.1	13.46	0.29	0.007
Indicated	32.1	64.9	5.80	0.64	0.014
Inferred	9.8	60.5	12.31	0.59	0.013
<b>Total at 30 June 2022</b>	<b>44.7</b>	<b>63.6</b>	<b>7.71</b>	<b>0.61</b>	<b>0.013</b>
<i>Total at 30 June 2021</i>	<i>46.2</i>	<i>63.7</i>	<i>7.59</i>	<i>0.61</i>	<i>0.013</i>
<b>Ore Reserves, above 50% Fe</b>					
Proved	-	-	-	-	-
Probable	16.0	65.4	4.79	0.85	0.013
<b>Total at 30 June 2022</b>	<b>16.0</b>	<b>65.4</b>	<b>4.79</b>	<b>0.85</b>	<b>0.013</b>
<i>Total at 30 June 2021</i>	<i>17.5</i>	<i>65.3</i>	<i>4.80</i>	<i>0.88</i>	<i>0.013</i>
Extension Hill					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
<b>Total at 30 June 2022</b>	-	-	-	-	-
<i>Total at 30 June 2021</i>	<i>1.8</i>	<i>55.8</i>	<i>9.53</i>	<i>2.44</i>	<i>0.074</i>
Iron Hill					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
<b>Total at 30 June 2022</b>	-	-	-	-	-
<i>Total at 30 June 2021</i>	<i>3.7</i>	<i>55.0</i>	<i>12.76</i>	<i>1.99</i>	<i>0.076</i>
Shine					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	5.1	59.2	8.98	1.60	0.078
Indicated	6.3	58.1	9.97	1.27	0.070
Inferred	3.6	56.9	9.58	1.18	0.063
<b>Total at 30 June 2022</b>	<b>15.1</b>	<b>58.2</b>	<b>9.54</b>	<b>1.36</b>	<b>0.071</b>
<i>Total at 30 June 2021</i>	<i>15.7</i>	<i>58.1</i>	<i>9.55</i>	<i>1.44</i>	<i>0.071</i>
<b>Ore Reserves, above 55% Fe</b>					
<b>Total at 30 June 2022</b>	-	-	-	-	-
<i>Total at 30 June 2021</i>	<i>2.7</i>	<i>59.5</i>	<i>7.94</i>	<i>2.24</i>	<i>0.079</i>
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

**Table B: Total Mineral Resources and Ore Reserves as at 30 June 2022**

<b>Total Group Mineral Resources and Ore Reserves at 30 June (above 50% Fe)</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Total Mineral Resources at 30 June 2022</b>	<b>59.8</b>	<b>62.2</b>	<b>8.17</b>	<b>0.80</b>	<b>0.028</b>
<b>Total Ore Reserves at 30 June 2022</b>	<b>16.0</b>	<b>65.4</b>	<b>4.79</b>	<b>0.85</b>	<b>0.013</b>
<i>Total Mineral Resources at 30 June 2021</i>	<i>67.4</i>	<i>61.7</i>	<i>8.39</i>	<i>0.93</i>	<i>0.032</i>
<i>Total Ore Reserves at 30 June 2021</i>	<i>20.3</i>	<i>64.5</i>	<i>5.23</i>	<i>1.06</i>	<i>0.022</i>
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

**Competent Persons and Responsibilities***Exploration Results:*

*The information in this report that relates to Exploration Results including sampling techniques and data management is based on information compiled by Brett Morey, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy. Brett Morey is a full-time employee of Mount Gibson Iron Limited, and he has sufficient experience relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken, to qualify as a Competent Person as defined in the December 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Brett Morey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*Mineral Resources:*

*The information in this report relating to Mineral Resources is based on information compiled by Elizabeth Haren, a Competent Person who is a member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and member of the Australian Institute of Geoscientists. Elizabeth Haren was a full-time employee of, and is a consultant to, Mount Gibson Iron Limited. Elizabeth Haren 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'. Elizabeth Haren consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.*

*Ore Reserves:*

*The information in this report relating to Ore Reserves is based on information compiled by Brett Morey, a member of the Australasian Institute of Mining and Metallurgy. Brett Morey is a full-time employee of Mount Gibson Iron Limited. Brett Morey 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'. Brett Morey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## Mineral Resources and Ore Reserves Explanatory Notes

### KOOLAN ISLAND

Total Koolan Island Mineral Resources and Ore Reserves as at 30 June 2022.

<b>Koolan Island</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	2.8	60.1	13.46	0.29	0.007
Indicated	32.1	64.9	5.80	0.64	0.014
Inferred	9.8	60.5	12.31	0.59	0.013
<b>Total</b>	<b>44.7</b>	<b>63.6</b>	<b>7.71</b>	<b>0.61</b>	<b>0.013</b>
Total as at 30 June 2021	46.2	63.7	7.59	0.61	0.013
<b>Ore Reserves, above 50% Fe</b>					
Proved	-	-	-	-	-
Probable	16.0	65.4	4.78	0.85	0.013
<b>Total as at 30 June 2022</b>	<b>16.0</b>	<b>65.4</b>	<b>4.79</b>	<b>0.85</b>	<b>0.013</b>
Total as at 30 June 2021	17.5	65.3	4.81	0.88	0.013
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at Koolan Island has been depleted by approximately 1.5Mt through mining since 30 June 2021.

### Main Deposit

<b>Main</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	2.1	59.8	13.75	0.35	0.007
Indicated	27.5	65.6	4.86	0.66	0.012
Inferred	5.3	61.3	11.12	0.76	0.010
<b>Total as at 30 June 2022</b>	<b>34.9</b>	<b>64.6</b>	<b>6.33</b>	<b>0.66</b>	<b>0.011</b>
Total as at 30 June 2021	36.4	64.6	6.24	0.67	0.011
<b>Ore Reserves, above 50% Fe</b>					
Proved	-	-	-	-	-
Probable	16.0	65.4	4.78	0.85	0.013
<b>Total as at 30 June 2022</b>	<b>16.0</b>	<b>65.4</b>	<b>4.79</b>	<b>0.85</b>	<b>0.013</b>
Total as at 30 June 2021	17.5	65.3	4.81	0.88	0.013
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at the Main Deposit has been depleted by approximately 1.5Mt through mining since 30 June 2021.

- The reporting of the Mineral Resource of the Main Deposit is in compliance with the JORC Code, 2012 Edition and the current version of the ASX Listing Rules. A summary of the JORC Code, 2012 Edition Table 1 for Koolan Island Main is provided in Appendix 1.
- The Ore Reserve at the Main Deposit was depleted by approximately 1.4Mt through mining since 30 June 2021. A recovery factor applied to specific areas of poor reconciliation at the interface of the floor of historic mine workings has resulted in an additional minor 0.16Mt downward adjustment in Ore Reserves.
- The reporting of the Ore Reserve of Koolan Main is in compliance with the JORC Code, 2012 Edition and the current version of the ASX Listing Rules. A summary of the JORC Code, 2012 Edition Table 1 for Koolan Island Main is provided in Appendix 1.

## Acacia East Deposit

<b>Acacia East</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	0.7	60.9	12.63	0.15	0.008
Indicated	2.4	61.5	11.62	0.23	0.010
Inferred	3.4	60.0	13.70	0.19	0.010
<b>Total as at 30 June 2022</b>	<b>6.6</b>	<b>60.6</b>	<b>12.80</b>	<b>0.20</b>	<b>0.009</b>
Total as at 30 June 2021	6.6	60.6	12.80	0.20	0.009
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at the Acacia East deposit has not been re-interpreted or re-estimated since 30 June 2021.
- The reporting of the Mineral Resource of Acacia East is in compliance with the JORC Code, 2012 Edition and the current version of the ASX Listing Rules. A summary of the JORC Code, 2012 Edition Table 1 for Koolan Island Acacia East is provided in Appendix 2.

## Mangrove Deposit

<b>Mangrove</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
Measured	-	-	-	-	-
Indicated	2.1	59.9	11.36	0.80	0.039
Inferred	1.2	58.2	13.70	0.97	0.038
<b>Total as at 30 June 2022</b>	<b>3.3</b>	<b>59.3</b>	<b>12.21</b>	<b>0.86</b>	<b>0.039</b>
Total as at 30 June 2021	3.3	59.3	12.21	0.86	0.039
<i>Discrepancies may appear due to rounding. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at Koolan Island Mangrove deposit has not changed since 30 June 2021.
- The reporting of the Mangrove Mineral Resource is in compliance with the JORC Code, 2012 Edition and the current version of the ASX Listing Rules. A summary of the JORC Code, 2012 Edition Table 1 for Koolan Island Mangrove is provided in Appendix 3.

## EXTENSION HILL

Total Extension Hill Mineral Resources at 30 June 2022.

### Extension Hill Deposit

<b>Extension Hill</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
<b>Total as at 30 June 2022</b>	-	-	-	-	-
Total as at 30 June 2021	1.8	55.8	9.53	2.44	0.074
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at the Extension Hill deposit has been removed from the Mineral Resources and Ore Reserves Statement as there are no longer reasonable prospects for economic extraction.

## IRON HILL

Total Iron Hill Mineral Resources at 30 June 2022.

### Iron Hill Deposit

<b>Iron Hill</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b>Mineral Resources, above 50% Fe</b>					
<b>Total as at 30 June 2022</b>	-	-	-	-	-
Total as at 30 June 2021	3.7	55.0	12.76	1.99	0.076
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at the Iron Hill deposit has been removed from the Mineral Resources and Ore Reserves Statement as there are no longer reasonable prospects for economic extraction.

## SHINE

Total Shine Mineral Resources at 30 June 2022.

<b>Shine</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b><i>Mineral Resources, above 50% Fe</i></b>					
Measured	5.1	59.2	8.98	1.60	0.078
Indicated	6.3	58.1	9.97	1.27	0.070
Inferred	3.6	56.9	9.58	1.18	0.063
<b>Total as at 30 June 2022</b>	<b>15.1</b>	<b>58.2</b>	<b>9.54</b>	<b>1.36</b>	<b>0.071</b>
Total as at 30 June 2021	15.7	58.1	9.55	1.44	0.071
<b><i>Ore Reserves, above 55% Fe</i></b>					
<b>Total as at 30 June 2022</b>	-	-	-	-	-
Total as at 30 June 2021	2.7	59.5	7.94	2.24	0.079
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					

- The Mineral Resource at the Shine deposit has been depleted by approximately 0.6Mt and the Ore Reserve by approximately 0.3Mt through mining since 30 June 2021. The balance of the Ore Reserve was removed after the move to care and maintenance status in late 2021.
- The reporting of the Shine Mineral Resource is in compliance with the JORC Code, 2012 Edition and the current version of the ASX Listing Rules. A summary of the JORC Code, 2012 Edition Table 1 for Shine is provided in Appendix 4.

<b>Shine Hematite</b>					
	Tonnes millions	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %
<b><i>Mineral Resources, above 50% Fe</i></b>					
Measured	4.3	59.3	9.06	1.73	0.083
Indicated	5.1	58.0	10.51	1.35	0.072
Inferred	0.5	56.4	12.60	1.61	0.085
<b>Total as at 30 June 2022</b>	<b>9.9</b>	<b>58.5</b>	<b>9.98</b>	<b>1.53</b>	<b>0.077</b>
Total as at 30 June 2021	10.6	58.4	9.97	1.64	0.077
<b>Shine Magnetite</b>					
<b><i>Mineral Resources, above 50% Fe</i></b>					
Measured	0.8	58.6	8.55	0.89	0.050
Indicated	1.2	58.8	7.71	0.91	0.061
Inferred	3.1	56.9	9.10	1.11	0.060
<b>Total as at 30 June 2022</b>	<b>5.1</b>	<b>57.6</b>	<b>8.68</b>	<b>1.03</b>	<b>0.058</b>
Total as at 30 June 2021	5.1	57.5	8.86	1.03	0.059
<i>Discrepancies may appear due to rounding. Mineral Resources are reported inclusive of Ore Reserves. All tonnages have been estimated as dry tonnages.</i>					



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## APPENDIX 1 – Koolan Island, Main Deposit

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<p>All of the data used for resource estimation is based on the logging and sampling of RC and diamond core drilling.</p> <p>Percussion samples were composited over 2m intervals.</p> <p>Diamond samples were taken at 1m intervals.</p> <p>Reverse Circulation samples were taken over 1m intervals. Historical sampling (pre 1993) is of lower quality and where any ambiguity exists is excluded from the database for estimation.</p>
<b>Drilling techniques</b>	<p>Historic BHP drill hole data from 1957 to 1986 was mostly percussion drilled. BHP drilled 1 diamond hole, 25 RC holes with diamond tails, 44 RC holes and an adit. The BHP data makes up 26% of the total database.</p> <p>Aztec drilled 32 reverse circulation holes which make up 10% of the database.</p> <p>Mount Gibson Iron Limited has drilled 243 reverse circulation drill holes and four diamond holes since 2007. The Mount Gibson holes make up the majority of the database.</p>
<b>Drill sample recovery</b>	<p>Geologist or driller records sample recovery during drilling. No issues were detected.</p> <p>Standard drilling techniques were adequate for sample recovery.</p> <p>No relationship between sample recovery and grade has been demonstrated. No bias to material size has been demonstrated.</p>
<b>Logging</b>	<p>All drill holes have been geologically logged appropriately to the mineralisation style to support Mineral Resource estimation with logging subsequently confirmed through mining.</p> <p>The total length of drill holes is 49,834.5m with approximately 98% of the drill holes logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>Samples are received and prepared at the SGS run Koolan Island lab as 2 to 5 kg RC chip samples. They are dried for 12 hours at 105°C, crushed to &lt;2mm and split and reduced using rotary sampling devices to 300 grams. The 300 gram sample is pulverised to 75µm, from which an aliquot is taken for XRF and LOI analysis.</p> <p>Sample preparation from historical drilling prior to 1993 by BHP is not clearly understood, however this makes up 26% of the drill database, and less than 10% of sample and assay data used for the remaining Mineral Resource.</p>
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the sample preparation techniques employed by Mount Gibson Iron Limited are to industry standard.</p> <p>Most BHP holes were shallow and the areas have since been mined out. No QA/QC information is available for these holes. Comparison between BHP holes and Aztec holes in 2005 showed there is good agreement between both datasets for Fe, and QA/QC data supports the accuracy of the Aztec data across the assay suite. While the BHP SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> data differs, there is no good reason to doubt its quality given that the company was able to operate and successfully meet sales contracts.</p> <p>Aztec Resources Ltd holes had field duplicates, lab duplicates and site made standards as QA checks. Results were of acceptable quality.</p> <p>Mount Gibson Iron Limited uses certified reference material as a standard, along with field and laboratory duplicates. Mount Gibson Iron Limited's QA/QC procedures and results are of acceptable quality.</p>
<b>Verification of sampling and assaying</b>	<p>No external verification was completed.</p> <p>Historical BHP data was twinned by Aztec RC holes and found to be acceptable</p> <p>Drill hole data found to be spurious was excluded from the database</p> <p>Adjustments to data were made where required after data validation processes.</p>
<b>Location of data points</b>	<p>Survey control of hole locations have been established through the mine survey department, while detailed down hole surveys of accessible holes have been conducted by contractors, Surtron.</p>

Criteria	Commentary
	<p>Koolan Island Mine Grid (KIMG) is aligned consistent with average strike trends of the mineralisation at most of the known deposits, and the Main deposit in particular. The marked variants from this are the Eastern and Mullet limbs. All directional references in the Mineral Resources reports are according to the KIMG, which is rotated +30.18° relative to the Map Grid of Australia (MGA94_51).</p> <p>Topographic and survey control has been undertaken by either the mine-based survey team, or contract survey companies and is considered high quality.</p>
<b>Data spacing and distribution</b>	<p>The data spacing is approximately 50m along the strike of the mineralisation.</p> <p>The data spacing and distribution is more than adequate to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classifications applied.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The orientation of the mineralisation is well defined and drill holes were oriented to intersect mineralisation at an appropriate angle.</p>
<b>Sample security</b>	<p>Sample security was not considered a significant risk to the project. No specific measures have been taken by Mount Gibson Iron Limited to ensure sample security.</p>
<b>Audits or reviews</b>	<p>A formal audit of BHP drilling and survey data was carried out by Snowden Mining consultants in 2004. The historical BHP and Aztec data is generally of moderate quality as inferred by nearby Mount Gibson Iron Ltd drill holes confirming broadly the extent and tenor of Fe mineralisation. Most historical data is in mined out areas and has little influence on remaining Mineral Resources. Ongoing reconciliations have not to date indicated an urgent need for external audits of the resource database. An audit of the Koolan Island mineral laboratory was conducted in May 2014 by an external group with no material concerns or problems identified.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in section 1, and where relevant, in sections 3 and 4, also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Main Mineral Resource is located on Mining Lease M04/417-I held by Koolan Iron Ore Pty Ltd, a 100% owned subsidiary of Mount Gibson Iron Limited. The mining tenement is granted under the Western Australian Mining Act, 1978. Koolan Iron Ore Pty Ltd has a native title and heritage agreement with the Dambimangari Native title group.</p>
<b>Exploration done by other parties</b>	<p>Exploration has been conducted in the area of the Main resource since 1922, with active exploration (and mining) by BHP from 1957 to 1993, Aztec Resources from 2004 to 2006 and Mount Gibson Iron Ltd from 2006 to 2012.</p>
<b>Geology</b>	<p>The mineralised zone is an overturned enriched haematitic sandstone horizon within the Yampi Sandstone Member unconformably overlying the Elgee Siltstone. It is between 12 and 30 metres thick, and dips 55 to 80° to the south.</p>
<b>Drill hole information</b>	<p>As outlined in Drilling techniques of Section 1, there are more than 300 drill holes at or around the Main deposit dating back to 1957 forming the basis for the Mineral Resource estimate outlined in Section 3. Material drill results for Main pit have previously been announced to the market as required under the reporting requirements of the ASX Listing Rules. All material exploration results relevant to the Main area have been considered in establishing the Mineral Resource discussed in section 3.</p>
<b>Data aggregation methods</b>	<p>Not Applicable - No exploration results or drill hole intercepts are discussed in this ASX announcement.</p>
<b>Relationship between mineralisation</b>	<p>No exploration results or drill hole intercepts are discussed in this ASX announcement, however as the deposit has been mined for a number of years the true mineralisation widths are well known and understood.</p>

Criteria	Commentary
<i>widths and intercept lengths</i>	
<i>Diagrams</i>	Cross Sections, long sections and photos of the geology, mineralisation and mineral resource have been released in previous ASX announcements.
<i>Balanced reporting</i>	Not Applicable - No exploration results or drill hole intercepts are discussed in this ASX announcement.
<i>Other substantive exploration data</i>	Not Applicable - No exploration results or drill hole intercepts are discussed in this ASX announcement.

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2 and 4, also apply to this section.)

Criteria	Commentary
<i>Database integrity</i>	<p>Data extracted from the database for Mineral Resource estimation purposes is run through general checks to ensure data validity. The database is maintained by Mount Gibson Iron Limited with automated validation and extraction processes in place.</p> <p>Checks on data include sensible ranges of values for attributes, drill hole collars matching topography and within expected limits, overlapping sample intervals, depths, azimuths, dips and co-ordinates for consistency. Any inconsistent information is either modified or excluded from use in the estimation.</p> <p>Further checks are completed during the importing of the data into the mine planning software prior to modelling and estimation.</p>
<i>Site visits</i>	Elizabeth Haren, the Competent Person for Mineral Resources, has made several visits to Koolan Island. Elizabeth Haren was a full-time employee of, and is now a consultant to, Mount Gibson Iron Limited.
<i>Geological interpretation</i>	<p>There is an extremely high degree of confidence with the mineralisation interpretation. The mineralisation and geology is very consistent and has been proven by historical and current mining on Koolan Island.</p> <p>Interpretation used in the Mineral Resource estimate uses the drill holes exclusively.</p> <p>There are limited alternative interpretations possible for the mineralisation which would have a minimal impact on the Mineral Resource.</p> <p>The mineralisation is in the Yampi Sandstone directly above the unconformity of the Elgee Siltstone.</p> <p>The continuity of grade and geology is well defined.</p>
<i>Dimensions</i>	The Main deposit mineralisation is approximately 2,000 m in length and is currently modelled to approximately 215 m in depth below mean sea level. Mineralisation continues and extends beyond this depth however further infill drilling is required to define this area with confidence. The resource is open at depth.
<i>Estimation and modelling techniques</i>	<p>Ordinary Kriging of a suite of Iron Ore elements (Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, LOI, P, S, CaO, MnO, MgO, Na<sub>2</sub>O, TiO) was completed using CAE Studio software. Minor domains of limited extent and information were estimated using Inverse Distance.</p> <p>Waste material was estimated where enough quality data was present however the majority of waste material is assigned default grades.</p> <p>While the mineralisation tends to be planar in most cases, care was taken to ensure orientation changes were honoured by the sample search and estimation orientation regimes. Estimation parameter selection was guided by the results of mining reconciliation.</p> <p>No assumptions were made regarding recovery of by-products.</p>

<b>Criteria</b>	<b>Commentary</b>
	<p>A full suite of Iron Ore elements were estimated.</p> <p>Block sizes used are 25 mE, 6 mN and 8 mRL. The bulk of the drilling data is at a nominal 25 m x 25 m spacing at the western end of the deposit and increases to nominally 50 m x 50 m in the eastern end.</p> <p>No local estimation or SMU correction has been undertaken.</p> <p>Correlations between elements were considered and while co-kriging was not implemented, using similar estimation parameters for correlated elements allows some reproduction of correlations.</p> <p>All estimation was completed within mineralisation units using “hard” boundaries.</p> <p>In general, most element distributions did not have extreme outliers therefore minimal top-cutting was used. Where top-cutting occurred, this was done prior to sample compositing.</p> <p>Validation was completed by checking the global averages of composites versus model from each domain, by creating trend plots of composites versus model from each domain and by visual validation of grade trends in the model to ensure they honoured the input data.</p>
<b>Moisture</b>	All tonnages have been estimated as dry tonnages.
<b>Cut-off parameters</b>	<p>The 50% Fe cut-off is determined by the combined grade-tonnage characteristics as the minimum iron grade and/or maximum contaminant grades which will allow production to maintain contract-specified qualities for Lump and Fines products as currently occurring at Koolan Island.</p> <p>A cut-off study was completed by Coffey International Ltd (mining consultants) supporting the choice of 50% Fe as the cut-off.</p>
<b>Mining factors or assumptions</b>	The mining factors assumed correlate directly to recent operations at Koolan Island.
<b>Metallurgical factors or assumptions</b>	The metallurgical factors assumed correlate directly to recent operations at Koolan Island.
<b>Environmental factors or assumptions</b>	Environmental factors are already considered as part of the recent mining operations at Koolan Island.
<b>Bulk density</b>	<p>Surtron down hole survey data has been used to measure densities on all deposits at Koolan Island.</p> <p>In all cases the Surtron data confirms the positive relationship between Fe and density.</p> <p>Regression formulas have been used to assign densities with respect to Fe estimates. In 2013, review of reconciliation information between production and the Mineral Resource estimate led to a review of bulk density. On this basis the regression was modified to reflect higher densities for the 2013 Mineral resource. This method was reviewed and continued for subsequent Mineral Resource estimations.</p>
<b>Classification</b>	<p>The basis for the classification of the Mineral Resource has included:</p> <ol style="list-style-type: none"> <li>Quality and reliability of raw data;</li> <li>Confidence in the geological interpretation;</li> <li>Number, spacing and orientation of intercepts in each mineralised zone;</li> <li>Confidence concerning the known limits of mining;</li> <li>Knowledge of grade and density continuities gained from observations and;</li> <li>Geostatistical analyses.</li> </ol> <p>This information was used to code blocks meeting confidence criteria such as which estimation pass it was estimated in and the kriging variance of a block to define Measured, Indicated and Inferred material.</p>

Criteria	Commentary
<b>Audits or reviews</b>	The Mineral Resource estimates are reviewed internally within Mount Gibson Iron Limited on a three levelled assessment structure. Periodic updates are completed when new information and understanding is required to be reflected in the Mineral Resource.
<b>Discussion of relative accuracy/confidence</b>	The block model grade estimates were validated against the drill hole composites to ensure that the model reflects the input data. Monthly, quarterly and annual reconciliations are conducted, assessed and reported. The Koolan Island Mineral Resource models are provided as a basis for long term planning and mine design, and are not necessarily sufficient for shorter term planning and scheduling.

## Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	The Mineral Resource for Main deposit has not been re-interpreted or re-estimated since 30 June 2021. There has been no additional data or information to alter the Mineral Resource estimate. This Mineral Resource statement was signed by Elizabeth Haren, a consultant to Mount Gibson Iron Limited and an AusIMM member with sufficient relevant experience to qualify as a Competent Person. The Mineral Resource is inclusive of these Ore Reserves.
<b>Site visits</b>	Brett Morey, Chief Geologist with Mount Gibson Iron worked at Koolan Island for four years from 2012 to 2016 and in the corporate office since 2016.
<b>Study status</b>	A detailed and practical mine plan was developed within the previously established Main Pit. The Main Pit was optimised using Whittle software. Conventional open pit mining is planned to continue as per previous operations using hydraulic excavators and dump trucks. Standard modifying factors used for open pit mining were applied.
<b>Cut-off parameters</b>	A cut-off grade of 50% Fe was used. This cut-off grade reflects current mining practice, blending, and product sales. A cut-off grade study was undertaken in 2014 which supports the use of the 50% cut off used in this statement. Mount Gibson Iron Limited uses the definition of marginal cut-off grade as follows: “material that would produce a more positive cash flow if processed than when treated as waste in the process of mining towards the defined pit limits. It applies to material that will be mined or stockpiled in the process of gaining access to economic material.”
<b>Mining factors or assumptions</b>	The deposit has been mined by conventional open pit mining methods, utilising industry standard practices of drilling, blasting, and load and haul using hydraulic backhoe excavators. The overburden waste has been removed by large size excavators with bulk mining method. Where required medium size excavators have been used for selective mining of ore. Known mining parameters from Main pit were used in the optimisation and pit design. A review of the geotechnical parameters was completed by Mount Gibson Iron Limited technical staff in 2019 which resulted in an increased slope angle in the hangingwall rock units. The revised design parameters were validated by Mining One Consultants before being adopted in the Life of Mine pit design. Modelling of mining dilution in three dimensions is by the digital application of a dilution skin around the ore in the Mineral Resource model. Metallurgical parameters are then added to the diluted model. The final diluted mining block model is used directly for pit optimisation and scheduling, without the further application of global factors. Ore Reserves are reported directly from the diluted mining block model, with consideration of grade, topography and pit design.

<b>Criteria</b>	<b>Commentary</b>
	<p>Inferred Mineral Resources do not form part of the Ore Reserves.</p> <p>Mine infrastructure is well established following 9 years of mining operations.</p> <p>The physical width and therefore depth of Main Pit is constrained by the final hanging wall pit limit relative to the position of the seawall.</p>
<b>Metallurgical factors or assumptions</b>	<p>Ore from the Main deposit is crushed and screened at the existing Koolan Island process plant.</p> <p>Metallurgical characteristics of Main Pit ore are known from seven years of recent actual production data, and 30 years of historical mining and crushing prior to 1993.</p>
<b>Environmental</b>	<p>All statutory and regulatory approvals have been received for mining, occupational health and safety, environmental, and native title rights.</p>
<b>Infrastructure</b>	<p>Existing site infrastructure in place includes haul roads, pumping, crusher plant, stockpile areas, port, offices, workshop, warehouse, camp, water supply, airstrip, power generation, barge landing and associated facilities.</p>
<b>Costs</b>	<p>All costs for mining, processing and shipping were derived from the operating mine and existing contracts.</p> <p>Royalties currently paid to the State Government were included in cost modelling.</p> <p>Penalties and premiums currently applying to impurities levels in product sales to customers were included in cost modelling.</p>
<b>Revenue factors</b>	<p>Ore Reserves were calculated based on Mount Gibson Iron Limited FY2022 financial modelling. Financial assumptions used in cost modelling are derived from the operating mine and existing contracts and include:</p> <ul style="list-style-type: none"> <li>• forecast consensus Pilbara FOB benchmark iron ore contract prices</li> <li>• impurity penalties</li> <li>• freight</li> <li>• currency exchange rates</li> <li>• royalties</li> </ul> <p>Lump yield and product quality are derived from the LOM schedule.</p>
<b>Market assessment</b>	<p>Mount Gibson Iron Limited has customer contracts in place for all of Koolan Island's production volume.</p> <p>Koolan Island product is a very high quality ore that is sought after by customers.</p> <p>Crushed and screened products were sold to these customers in previous years.</p>
<b>Economic</b>	<p>The LOM financial model has demonstrated that Main pit will generate significant NPV. The NPV is most sensitive to iron ore price and foreign exchange rate variation, but has the benefit of a high Fe grade of 65.4%, and average strip ratio of 1.4:1 Waste:Ore.</p>
<b>Social</b>	<p>The Koolan Island mine has operated continuously under Mount Gibson management since 2006. Mount Gibson Iron Limited enjoys a good relationship with the Traditional Owners and local community.</p>
<b>Other</b>	<p>Major risks identified are:</p> <p>Seawall. Independent experts were engaged throughout the design process to review the seawall design to mitigate the risk of seawall failure and flooding of Main Pit. Ongoing external consultant peer reviews are completed monthly to assess the ongoing performance of the seawall.</p> <p>Footwall. Extensive geotechnical studies have been carried out, with established factors of safety of the footwall and a ground support plan established.</p> <p>Water ingress from high rainfall events and cyclones is a short term risk. Strategies are in place to control this risk, including implementation of a high capacity pumping system.</p> <p>Iron ore price variation and foreign exchange rates.</p>
<b>Classification</b>	<p>In-pit Measured and Indicated Mineral Resources have been converted to Proved and Probable Ore Reserves.</p> <p>Ore Reserves do not include Inferred Mineral Resources.</p> <p>Mr Brett Morey is satisfied that the stated Probable Ore Reserves accurately reflect the outcome of mine</p>

Criteria	Commentary
	planning and the input of economic parameters into optimisation studies.
<b><i>Audits or reviews</i></b>	<p>The project parameters and outcomes have been internally reviewed and approved by Mount Gibson Iron Limited executive management.</p> <p>Periodic updates are completed when new information and understanding is required to be reflected in the Ore Reserve.</p>
<b><i>Discussion of relative accuracy/confidence</i></b>	<p>All parameters are well defined from the existing mining operation.</p> <p>Monthly and annual reconciliations are conducted, assessed and reported. Historical reconciliation data indicates that the factors used to convert from Mineral Resource to Ore Reserve are robust.</p>



## APPENDIX 2 – Koolan Island, Acacia East Deposit

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<p>All of the data used for resource estimation is based on the logging and sampling of RC and diamond core drilling.</p> <p>Percussion samples were composited over 2m intervals.</p> <p>Diamond samples were taken at 1m intervals.</p> <p>Reverse Circulation samples were taken over 1m intervals. Historical sampling (pre 1993) is of lower quality and where any ambiguity exists, samples and assays are excluded from the database for estimation.</p>
<b>Drilling techniques</b>	<p>31 historic BHP drill holes from 1961 to 1986 were percussion drilled. BHP drilled 1 diamond hole in 1959. The BHP data make up 14% of the total database. 50 reverse circulation drillholes were completed by Aztec in 2004 &amp; 2005, and 136 reverse circulation holes completed by Mount Gibson Iron Limited from 2007 to 2012.</p>
<b>Drill sample recovery</b>	<p>Geologists or drillers recorded sample recovery during drilling. No issues were detected.</p> <p>Standard drilling techniques were adequate for sample recovery.</p> <p>No relationship between sample recovery and grade has been demonstrated. No bias to material size has been demonstrated.</p>
<b>Logging</b>	<p>All drill holes have been geologically logged appropriately to the mineralisation style to support Mineral Resource estimation.</p> <p>Some diamond core has been photographed.</p> <p>The total length of drill holes is 21,544.78m with approximately 98% of the drill holes logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>Samples are received and prepared at the SGS run Koolan Island lab as 2 to 5 kg RC chip samples. They are dried for 12 hours at 105°C, crushed to &lt;2mm and split and reduced using riffle splitters or rotary sampling devices to 300 grams. The 300 gram sample is pulverised to 75µm, from which an aliquot is taken for XRF and LOI analysis.</p> <p>Sample preparation from historical drilling prior to 1993 by BHP is not clearly understood, however this makes up 14% of the drill database, and less than 8% of sample and assay data used for the remaining Mineral Resource.</p>
<b>Quality of assay data and laboratory tests</b>	<p>Most BHP holes were shallow and the areas have since been mined out. No QAQC information is available for these holes. Comparison between BHP holes and Aztec holes in 2005 showed there is good agreement between both datasets for Fe, and QAQC data supports the accuracy of the Aztec data across the assay suite. While the BHP SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> data differs, there is no good reason to doubt its quality given that the company was able to operate and successfully meet sales contracts.</p> <p>Aztec Resources Ltd holes had field duplicates, lab duplicates and site made standards as QA checks. Results were of acceptable quality.</p> <p>Mount Gibson Iron Limited uses certified reference material as a standard, along with field and laboratory duplicates. Mount Gibson Iron Limited QAQC procedures and results are of acceptable quality.</p>
<b>Verification of sampling and assaying</b>	<p>No external verification was completed.</p> <p>Historical BHP data was twinned by Aztec RC holes and found to be acceptable</p> <p>Drill hole data found to be spurious was excluded from the database</p> <p>Adjustments to data were made where required after data validation processes.</p>
<b>Location of data points</b>	<p>Survey control of hole locations has been established through the mine survey department, while detailed down hole surveys of accessible holes have been conducted by contractors Surtron.</p> <p>Koolan Island Mine Grid (KIMG) which is aligned consistent with average strike trends of the mineralisation at most of the known deposits and the Main deposit in particular. The marked variants from this are the Eastern and</p>

Criteria	Commentary
	<p>Mullet limbs. All directional references in this report are according to the KIMG, which is rotated +30.18° relative to the Map Grid of Australia (MGA94_51).</p> <p>Topographic and survey control has been undertaken by either the mine-based survey team, or contract survey companies.</p> <p>The data spacing is approximately 25m along the strike of the mineralisation.</p>
<b>Data spacing and distribution</b>	<p>The data spacing and distribution is more than adequate to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classifications applied.</p> <p>Percussion samples were composited over 2m intervals.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The orientation of the mineralisation is well defined and drill holes were oriented to intersect mineralisation at an appropriate angle.</p>
<b>Sample security</b>	<p>Sample security was not considered a significant risk to the project. No specific measures have been taken by Mount Gibson Iron Limited to ensure sample security.</p>
<b>Audits or reviews</b>	<p>A formal audit of BHP drilling and survey data was carried out by Snowden Mining consultants in 2004. The historical BHP and Aztec data is generally of moderate quality as inferred by nearby Mount Gibson Iron Limited drill holes confirming broadly the extent and tenor of Fe mineralisation. Most historical data is in mined out areas and has little influence on remaining Mineral Resources. An audit of the Koolan mineral laboratory was conducted in May 2014 by an external group with no material concerns or problems identified.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in section 1, and where relevant, in sections 3 and 4, also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Acacia East Mineral Resource is located on Mining Lease M04/416-I held by Koolan Iron Ore Pty Ltd, a 100% owned subsidiary of Mount Gibson Iron Ltd. The mining tenement is granted under the Western Australian Mining Act, 1978. Koolan Iron Ore Pty Ltd has a native title and heritage agreement with the Dambimangari Native title group</p>
<b>Exploration done by other parties</b>	<p>Exploration has been conducted in the area of the Acacia East resource since 1959, with active exploration by BHP from 1959 to 1993, Aztec Resource from 2004 to 2006 and Mount Gibson Iron Limited from 2006 to 2012.</p>
<b>Geology</b>	<p>The mineralised zone is an enriched haematitic sandstone horizon within the Yampi Sandstone member unconformably overlying the Elgee Siltstone. It is between 8 and 20 metres thick, and dips 45 to 60o to the south.</p>
<b>Drill hole Information</b>	<p>As outlined in Drilling techniques of Section 1, there are 237 drillholes at the Acacia East resource dating back to 1959, forming the basis for the Mineral Resource estimate outlined in Section 3. Material drill results for Acacia East have previously been announced to the market as required under the reporting requirements of the ASX Listing Rules. All material exploration results relevant to the Acacia area have been considered in establishing the Mineral Resource discussed in section 3. Going forward any new exploration results that result in a material change to existing Mineral Resource in section 3 will be updated under the normal transitioning to JORC 2012.</p>
<b>Data aggregation methods</b>	<p>Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.</p>
<b>Relationship between mineralisation widths and</b>	<p>Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.</p>

Criteria	Commentary
<i>intercept lengths</i>	
<i>Diagrams</i>	No exploration results or drillhole intercepts are discussed in this ASX announcement. Cross Sections, long sections and photos of the geology, mineralisation and mineral resource have been released in previous ASX reports.
<i>Balanced reporting</i>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<i>Other substantive exploration data</i>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<i>Further work</i>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2 and 4, also apply to this section.)

Criteria	Commentary
<i>Database integrity</i>	<p>Data extracted from the database for Mineral Resource estimation purposes is run through general checks to ensure data is valid. The database is maintained by Mount Gibson Iron Limited with automated extraction processes in place.</p> <p>Checks on data include sensible ranges of values for attributes, drill hole collars matching topography and with expected limits, overlapping sample intervals, depths, azimuths, dips and co-ordinates for consistency. Any inconsistent information is either modified or excluded from use in the estimation.</p> <p>Further checks are completed during the importing of the data into the mine planning software prior to modelling and estimation.</p>
<i>Site visits</i>	Elizabeth Haren, the Competent Person for the Acacia East Mineral Resource, has made several visits to Acacia East at Koolan Island.
<i>Geological interpretation</i>	<p>There is an extremely high degree of confidence with the mineralisation interpretation. The mineralisation and geology is very consistent and has been proven by historical and current mining on Koolan Island.</p> <p>Interpretation used in the Mineral Resource estimate uses the drill holes exclusively.</p> <p>There are limited alternative interpretations possible for the mineralisation which would have a minimal impact on the Mineral Resource.</p> <p>The mineralisation is generally between two geological units.</p> <p>The continuity of grade and geology is very good.</p>
<i>Dimensions</i>	The Acacia East mineralisation is approximately 1,500m in length and is modelled to approximately 300 m in depth.
<i>Estimation and modelling techniques</i>	<p>Ordinary Kriging of a suite of Iron Ore elements (Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, LOI, P, S, CaO, MnO, MgO, Na<sub>2</sub>O, TiO) was completed using CAE Studio software. Minor domains of limited extent and information were estimated using Inverse Distance.</p> <p>Waste material was estimated where enough quality data was present however the majority of waste material is assigned default grades.</p>

<b>Criteria</b>	<b>Commentary</b>
	<p>While the mineralisation tends to be planar in most cases, care was taken to ensure orientation changes were honoured by the sample search and estimation orientation regimes. Estimation parameter selection was guided by the results of mining reconciliation.</p> <p>No assumptions were made regarding recovery of by-products.</p> <p>A full suite of Iron Ore elements were estimated.</p> <p>Block sizes used are 12.5 mE, 8 mN and 6 mRL. The bulk of the drilling data is on 50mE spaced sections or closer.</p> <p>No local estimation or SMU correction has been undertaken.</p> <p>Correlations between elements were considered and while co-kriging was not implemented, using similar estimation parameters for correlated elements allows some reproduction of correlations.</p> <p>All estimation was completed within mineralisation units using “hard” boundaries.</p> <p>In general, most element distributions did not have extreme outliers therefore minimal top-cutting was used. Where top-cutting occurred this was done prior to sample compositing.</p> <p>Validation was completed by checking the global averages of composites versus model from each domain, by creating trend plots of composites versus model from each domain and by visual validation of grade trends in the model to ensure they honoured the input data.</p>
<b>Moisture</b>	All tonnages have been estimated as dry tonnages.
<b>Cut-off parameters</b>	The 50% Fe cut-off is determined by the combined grade-tonnage characteristics as the minimum iron grade and/or maximum contaminant grades which will allow production to maintain contract-specified qualities for Lump and Fines products as currently occurring at Koolan Island.
<b>Mining factors or assumptions</b>	The mining factors are assumed to correlate directly to the current operation at Koolan Island.
<b>Metallurgical factors or assumptions</b>	The metallurgical factors are assumed to correlate directly to current operation at Koolan Island.
<b>Environmental factors or assumptions</b>	Environmental factors are already considered as part of the current mining operations at Koolan Island.
<b>Bulk density</b>	<p>Surtron down hole survey data has been used to measure densities on all deposits at Koolan Island.</p> <p>In all cases the Surtron data confirms the positive relationship between Fe and density.</p> <p>Regression formulas have been used to assign densities with respect to Fe estimates.</p>
<b>Classification</b>	<p>The basis for the classification of the Mineral Resource has included:</p> <ol style="list-style-type: none"> <li>Quality and reliability of raw data;</li> <li>Confidence in the geological interpretation;</li> <li>Number, spacing and orientation of intercepts in each mineralised zone;</li> <li>Confidence concerning the known limits of mining;</li> <li>Knowledge of grade and density continuities gained from observations and;</li> <li>Geostatistical analyses.</li> </ol>

<b>Criteria</b>	<b>Commentary</b>
	This information was used to guide digitising of strings around defined classification areas in either long section or plan, depending on the orientation of the mineralisation. The strings were then used to flag the classification to the model.
<b><i>Audits or reviews</i></b>	The Mineral Resource estimates are reviewed internally within Mount Gibson Iron Limited on a three levelled assessment structure. Periodic updates are completed when new information and understanding is required to be reflected in the Mineral Resource.
<b><i>Discussion of relative accuracy/confidence</i></b>	The Koolan Island Mineral Resource models are provided as a basis for long term planning and mine design, and are not necessarily sufficient for shorter term planning and scheduling. The block model grade estimates were validated against the drillhole composites to ensure that the model reflects the input data. Monthly, quarterly and annual reconciliations are conducted, assessed and reported.

## APPENDIX 3 – Koolan Island, Mangrove Deposit

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<p>All of the data used for the Mineral Resource estimation is based on the logging and sampling of RC and diamond core drilling.</p> <p>Percussion samples were composited over 2m intervals. Diamond samples were taken at 1m intervals. Reverse Circulation samples were taken over 1m intervals. Historical sampling is of lower quality and where any ambiguity exists is excluded from the database for estimation.</p>
<b>Drilling techniques</b>	9 percussion drilled holes and 44 reverse circulation holes were used for estimation.
<b>Drill sample recovery</b>	<p>Geologist or driller records show sample recovery during drilling. No issues were detected.</p> <p>Standard drilling techniques were adequate for sample recovery.</p> <p>No relationship between sample recovery and grade has been demonstrated. No bias to material size has been demonstrated.</p>
<b>Logging</b>	All drill holes have been geologically logged appropriately to the mineralisation style to support Mineral Resource estimation with logging subsequently confirmed through mining.
<b>Sub-sampling techniques and sample preparation</b>	Samples are received and prepared at the SGS run Koolan Island lab as 2 to 5 kg RC chip samples. They are dried for 12 hours at 105°C, crushed to <2mm and split and reduced using riffle splitters or rotary sampling devices to 300 grams. The 300 gram sample is pulverised to 75µm, from which an aliquot is taken for XRF and LOI analysis.
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the sample preparation techniques employed by Mount Gibson Iron Limited are to industry standard.</p> <p>Most BHP holes were shallow and the areas have since been mined out. No QA/QC information is available for these holes. Comparison between BHP holes and Aztec holes in 2005 showed there is good agreement between both datasets for Fe, and QA/QC data supports the accuracy of the Aztec data across the assay suite. While the BHP SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> data differs, there is no good reason to doubt its quality given that the company was able to operate and successfully meet sales contracts.</p> <p>Aztec Resources Ltd holes had field duplicates, lab duplicates and site made standards as QA checks. Results were of acceptable quality.</p> <p>Mount Gibson Iron Limited uses certified reference material as a standard, along with field and laboratory duplicates. Mount Gibson Iron Limited QA/QC procedures and results are of acceptable quality.</p>
<b>Verification of sampling and assaying</b>	<p>No external verification was completed.</p> <p>Historical BHP data was twinned by Aztec RC holes and found to be acceptable</p> <p>Drill hole data found to be spurious was excluded from the database</p> <p>Adjustments to data were made where required after data validation processes.</p>
<b>Location of data points</b>	<p>Survey control of hole locations have been established through the mine survey department, while detailed down hole surveys of accessible holes have been conducted by contractors Surtron.</p> <p>Koolan Island Mine Grid (KIMG) is aligned consistent with average strike trends of the mineralisation at most of the known deposits and the Main deposit in particular. The marked variants from this are the Eastern and Mullet limbs. All directional references in the Mineral Resources reports are according to the KIMG, which is rotated +30.18° relative to the Map Grid of Australia (MGA94_51).</p> <p>Topographic and survey control has been undertaken by either the mine-based survey team, or contract survey companies and is considered high quality.</p>

Criteria	Commentary
<b>Data spacing and distribution</b>	<p>The data spacing is approximately 50m along the strike of the mineralisation.</p> <p>The data spacing and distribution is more than adequate to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classifications applied.</p> <p>Percussion samples were composited over 2m intervals.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The orientation of the mineralisation is well defined and drill holes were oriented to intersect mineralisation at an appropriate angle.</p>
<b>Sample security</b>	<p>Sample security was not considered a significant risk to the project. No specific measures have been taken by Mount Gibson Iron Limited to ensure sample security.</p>
<b>Audits or reviews</b>	<p>A formal audit of BHP drilling and survey data was carried out by Snowden Mining consultants in 2004. The historical BHP and Aztec data is generally of moderate quality as inferred by nearby Mount Gibson Iron Limited drill holes confirming broadly the extent and tenor of Fe mineralisation. Most historical data is in mined out areas and has little influence on remaining Mineral Resources. An audit of the Koolan mineral laboratory was conducted in May 2014 by an external group with no material concerns or problems identified.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in section 1, and where relevant, in sections 3 and 4, also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>The Mangrove Mineral Resource is located on Mining Lease M04/417-I held by Koolan Iron Ore Pty Ltd, a 100% owned subsidiary of Mount Gibson Iron Ltd. The mining tenement is granted under the Western Australian Mining Act, 1978. Koolan Iron Ore Pty Ltd has a native title and heritage agreement with the Dambimangari Native title group</p>
<b>Exploration done by other parties</b>	<p>Exploration has been conducted in the area of the Mangrove resource since 1955, with active exploration by BHP from 1957 to 1993, Aztec Resource from 2004 to 2006 and Mount Gibson Iron Limited from 2006 to 2012.</p>
<b>Geology</b>	<p>The mineralised zone is an enriched haematitic sandstone horizon within the Yampi Sandstone Member unconformably overlying the Elgee Siltstone. It is between 12 and 30 metres thick. The mineralised unit is overturned and dips from 80° to the south in the west, twisting to right way up and 80° to the North in the east.</p>
<b>Drill hole Information</b>	<p>As outlined in Drilling techniques of Section 1, there are 9 percussion drill holes and 44 reverse circulation drill holes at Mangrove, which form the basis for the Mineral Resource estimate outlined in Section 3. Material drill results for Mangrove have previously been announced to the market as required under the reporting requirements of the ASX Listing Rules. All material exploration results relevant to the Mangrove area have been considered in establishing the Mineral Resource discussed in section 3. Going forward any new exploration results that result in a material change to existing Mineral Resource in section 3 will be updated under the normal transitioning to JORC 2012.</p>
<b>Data aggregation methods</b>	<p>Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.</p>

Criteria	Commentary
<b>Diagrams</b>	No exploration results or drillhole intercepts are discussed in this ASX announcement. Cross Sections, long sections and photos of the geology, mineralisation and mineral resource have been released in previous ASX reports.
<b>Balanced reporting</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Other substantive exploration data</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Further work</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2 and 4, also apply to this section.)

Criteria	Commentary
<b>Database integrity</b>	<p>Data extracted from the database for Mineral Resource estimation purposes is run through general checks to ensure data is valid. The database is maintained by Mount Gibson with automated extraction processes in place.</p> <p>Checks on data include sensible ranges of values for attributes, drillhole collars matching topography and with expected limits, overlapping sample intervals, depths, azimuths, dips and co-ordinates for consistency. Any inconsistent information is either modified or excluded from use in estimation.</p>
<b>Site visits</b>	Elizabeth Haren, the Competent Person for Mineral Resources, has made several visits to Koolan Island.
<b>Geological interpretation</b>	<p>There is an extremely high degree of confidence with the mineralisation interpretation. The mineralisation and geology is very consistent and has been proven by historical and current mining on Koolan Island.</p> <p>Interpretation uses the drill holes exclusively.</p> <p>There are limited alternative interpretations possible for the mineralisation which would have a minimal impact on the Mineral Resource.</p> <p>The mineralisation is generally between two geological units.</p> <p>The continuity of grade and geology is very good.</p>
<b>Dimensions</b>	The Mangrove mineralisation is approximately 1,000m in length and is modelled to approximately 250 m in depth.
<b>Estimation and modelling techniques</b>	<p>Ordinary Kriging of a suite of Iron Ore elements (Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, LOI, P, S, CaO, MnO, MgO, Na<sub>2</sub>O, TiO) was completed using CAE Studio software. Minor domains of limited extent and information were estimated using Inverse Distance.</p> <p>Waste material was estimated where enough quality data was present however the majority of waste material is assigned default grades.</p> <p>While the mineralisation tends to be planar in most cases, care was taken to ensure orientation changes were honoured by the sample search and estimation orientation regimes. Estimation parameter selection was guided by the results of mining reconciliation.</p> <p>No assumptions were made regarding recovery of by-products.</p> <p>A full suite of Iron Ore elements were estimated.</p> <p>Block sizes used are 12.5 mE, 8 mN and 6 mRL. The bulk of the drilling data is on 50mE spaced sections or closer.</p>



<b>Criteria</b>	<b>Commentary</b>
	<p>No local estimation or SMU correction has been undertaken.</p> <p>Correlations between elements were considered and while co-kriging was not implemented, using similar estimation parameters for correlated elements allows some reproduction of correlations.</p> <p>All estimation was completed within mineralisation units using “hard” boundaries.</p> <p>In general, most element distributions did not have extreme outliers therefore minimal top-cutting was used. Where top-cutting occurred this was done prior to sample compositing.</p> <p>Validation was completed by checking the global averages of composites versus model from each domain, by creating trend plots of composites versus model from each domain and by visual validation of grade trends in the model to ensure they honoured the input data.</p>
<b>Moisture</b>	All tonnages have been estimated as dry tonnages.
<b>Cut-off parameters</b>	The 50%Fe cut-off is determined by the combined grade-tonnage characteristics as the minimum iron grade and/or maximum contaminant grades which will allow production to maintain contract-specified qualities for Lump and Fines products as currently occurring at Koolan Island.
<b>Mining factors or assumptions</b>	The mining factors are assumed to correlate directly to current operations at Koolan Island.
<b>Metallurgical factors or assumptions</b>	The metallurgical factors are assumed to correlate directly to current operations at Koolan Island.
<b>Environmental factors or assumptions</b>	Environmental factors are already considered as part of the current mining operations at Koolan Island.
<b>Bulk density</b>	Surtron down hole survey data has been used to measure densities on all deposits at Koolan Island.
	In all cases the Surtron data confirms the positive relationship between Fe and density.
	Regression formulas have been used to assign densities with respect to Fe estimates.
<b>Classification</b>	<p>The basis for the classification of the Mineral Resource has included:</p> <ol style="list-style-type: none"> <li>Quality and reliability of raw data;</li> <li>Confidence in the geological interpretation;</li> <li>Number, spacing and orientation of intercepts in each mineralised zone;</li> <li>Confidence concerning the known limits of mining;</li> <li>Knowledge of grade and density continuities gained from observations and;</li> <li>Geostatistical analyses.</li> </ol> <p>This information was used to guide digitising of strings around defined classification areas in either long section or plan, depending on the orientation of the mineralisation. The strings were then used to flag the classification to the model.</p>
<b>Audits or reviews</b>	<p>The Mineral Resource estimates are reviewed internally within Mount Gibson Iron Limited on a three levelled assessment structure.</p> <p>Periodic updates are completed when new information and understanding is required to be reflected in the Mineral Resource.</p>
<b>Discussion of relative accuracy/confidence</b>	The block model grade estimates were validated against the drill hole composites to ensure that the model reflects the input data. The Koolan Island Mineral Resource models are provided as a basis for long term planning and mine design, and are not necessarily sufficient for shorter term planning and scheduling.

## APPENDIX 4 – Shine Project

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<p>The bulk of the data used for Mineral Resource estimation is based on the logging and sampling of RC drilling conducted by Gindalbie Metals Ltd (Gindalbie) prior to acquisition of the Shine Project by Mount Gibson Iron Limited as well as the drill results from additional drilling conducted by Mount Gibson Iron Limited between 11 April 2014 and 9 June 2014.</p> <p>The Gindalbie RC samples (wet and dry) were collected at 1 m intervals using a cone splitter. Within the hematite mineralisation, 33 % of the samples are recorded as either wet or damp.</p> <p>The Gindalbie diamond core samples were half-core or quarter-core sampled using the same nominal sample interval</p> <p>The additional Mount Gibson Iron Limited drilling totalled 6,243 samples consisting of 5,558 primary samples and 685 secondary samples which were collected and submitted to the Extension Hill laboratory for assaying. Primary samples were 1 m samples collected off a static cone splitter mounted to the RC rig and were used in the resource estimation. Secondary samples were collected as 2 – 4 m composites using the spear method of sample collection and these are not considered in the Mineral Resource estimation. Average sample weight was about 3kg but sample weights ranged from 0.5 kg to 4 kg depending on sample recovery.</p> <p>Of all the Mount Gibson Iron Limited samples, 33% were recorded as either wet or damp.</p> <p>Quality control measures during sampling were implemented to prevent sample contamination which in turn ensures integrity of the samples and ultimately the integrity of the assays.</p>
<b>Drilling techniques</b>	<p>Gindalbie completed 154 RC holes using a 140 mm face sampling hammer. Gindalbie also drilled 23 diamond drill holes of HQ and PQ diameter.</p> <p>In 2014, Mount Gibson Iron Limited completed an additional 78 RC holes using either a 138 mm or 140 mm face sampling hammer and 6 diamond holes of PQ diameter. The RC drilling was conducted by VM Drilling using a track mounted HYDCO 800 RC drill rig. The rig utilised a mounted compressor with a capacity to produce 1150cfm @ 500psi and a separate auxiliary booster with a capacity to produce 2400cfm @ 1000psi.</p> <p>The total air pressure utilised to lift the sample into the cyclone affects the quality of the sample, sample recoveries and how representative the final primary sample is to the material generated from the face hammer per meter interval. The drilling was conducted by experienced drillers with a rig with sufficient air pressure to ensure excellent sample recoveries.</p>
<b>Drill sample recovery</b>	<p>Sample recovery information for the 2014 Mount Gibson Iron Limited samples from the RC drilling is based on visual judgement and is indicative. The data indicates 81% of the samples to have been judged as attained high sample recovery, with 12% having moderate sample recovery and 7% having poor sample recovery. The majority of the samples with poor sample recovery were determined to come from the first 6m of each drill hole and were generated whilst the RC drill hole was being collared.</p> <p>The information from the Gindalbie RC drill hole data regarding sample recovery is indicative only and suggests the majority of samples have achieve moderate to high sample recovery.</p> <p>No relationship between sample recovery and grade has been ascertained due to the subjective nature of sample recovery information.</p>
<b>Logging</b>	<p>Logging data from previous drilling was provided to Mount Gibson by Gindalbie Metals. Lithological units were determined by Gindalbie based on geological logging and geochemistry.</p> <p>Mount Gibson conducted qualitative logging utilising LogChief to capture the logging data. LogChief is logging software with inbuilt data validation commands. In addition to LogChief internal validations, the logging data was validated visually by geologists and also post-validated against geochemistry.</p> <p>Logging, geochemistry (assays) and cross section interpretations conducted during and after Mount Gibson drilling confirms the geological continuity at depth, of mapped outcrops of the hosting banded iron formation and associated outcropping iron mineralisation.</p> <p>An independent consultant, Haren Consulting, sighted diamond core from the Shine Mount Gibson 2014 diamond drilling to confirm the continuity of the mineralised intercepts.</p>

Criteria	Commentary
	<p>Mount Gibson Iron Limited logging of RC chips captured information about lithological variations, textures, alteration, mineralisation, level of oxidation and weathering, sample condition and sample recoveries. Geotechnical logging was also conducted on diamond core in addition to the above.</p> <p>Downhole geophysical logging data include Gyroscopic orientation data, density, resistivity and magnetic susceptibility.</p> <p>It is concluded that logging of drill hole samples was done with sufficient detail to meet the requirements of Mineral Resource estimation and Ore Reserve feasibility studies.</p>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p>RC drill samples (33% of mineralised samples recorded as damp or wet from both Gindalbie and Mount Gibson Iron Limited drill programs) were collected using a cone splitter. Diamond core was generally half-core or quarter-core sampled.</p> <p>For Gindalbie samples three analytical laboratories were used for sample preparation and subsequent XRF analysis – Amdel Ltd in Perth and Adelaide, along with Ultra Trace Pty Ltd in Perth.</p> <p>Gindalbie sample preparation comprises oven drying and crushing to approximately 3 mm, followed by pulverising to 90% passing 105µm.</p> <p>Mount Gibson in 2014 used Extension Hill (EH) Spectrolab as the primary assaying laboratory for the Shine RC samples. Upon receiving samples from Shine, the EH Spectrolab sorted and registered the samples on to the lab tracking &amp; processing system.</p> <p>Each sample was reduced by riffle splitting to approximately a 400g sub-sample. The sub-sample was re-bagged and the residue returned to the original calico bag. The sub-samples was oven dried for 4 hours at temperatures between 100°C and 110°C before being pulverized to 90% passing 106µm fraction.</p> <p>The splitting of the samples into sub-samples and the sample sizes were considered to be appropriate to correctly represent the mineralisation, based on the style of mineralisation (massive hematite), the thickness and consistency of intersections and the drilling methodology.</p> <p>No samples from the 2014 Mount Gibson Iron Limited PQ diamond program have been used in the Mineral Resource estimation.</p>
<p><b>Quality of assay data and laboratory tests</b></p>	<p>Samples were assayed using the XRF method for a preferred iron ore suite of elements and compounds by Gindalbie and Mount Gibson. Loss on Ignition (LOI) was determined by Thermo-gravimetric analyser at 1000°C.</p> <p>In-house standards and field duplicates were inserted by Gindalbie Metals into the sample batches (nominal rate of 1:50 for standards and 1:25 for field duplicates) to monitor sampling and assaying quality.</p> <p>Previous analysis of the Gindalbie QAQC data for the Shine deposit did not identify any significant issues with the assay data which could be material to the resource estimate.</p> <p>Mount Gibson implemented quality control (QC) measures to qualify the assay data and laboratory tests. Approximately 4% duplicate samples were collected and inserted in the sampling stream and approximately 5% commercially available Certified Reference Material (CRM) were incorporated in the sampling stream submitted to Spectrolab for XRF analysis.</p> <p>Analysis of QC duplicates results suggests that the bulk of the sample material in the sample splitting system (static cyclone) was evenly split with geochemical variability between parent sample and duplicate sample within acceptable ranges. There were very few outliers and these are considered not material to the Mineral Resource.</p> <p>Results of the CRM data demonstrates that in general, that Spectrolab consistently reproduced assay results within the required limits for the particular CRM types used, indicating lab accuracy was good. On 3 occasions an assay batch failed a Fe standard. In each case the entire assay batch was re-analysed and returned Fe CRM results within the acceptable range.</p> <p>Mount Gibson Iron Limited implemented quality assurance (QA) measures to verify the sampling and assaying process. Approximately 10% of the total primary samples were submitted to a secondary lab with half of these being pulps and the other half coarse rejects. QA plots indicate no bias and good relative precision for the majority of analytes except for Al<sub>2</sub>O<sub>3</sub> which showed minor variation between Spectrolab and the secondary lab. This is not considered to be material to the Mineral Resource.</p>
<p><b>Verification of sampling and assaying</b></p>	<p>Haren Consulting has not conducted any independent verification of the assay data from either Gindalbie or Mount Gibson.</p> <p>All data from Gindalbie was collected electronically and stored in a SQL database with appropriate validation procedures.</p>

Criteria	Commentary
	<p>Mount Gibson used Logchief as a data capturing software and the data was stored in Datashed (a database software).</p> <p>No adjustments or calibrations were made to any assay data used in the estimate, apart from resetting below detection limit values to half positive detection so as to not have negative assay values within the resource estimation.</p> <p>No twinned diamond core holes have been completed to validate the RC drilling assay results by either Gindalbie or Mount Gibson Iron Limited.</p>
<b>Location of data points</b>	<p>The grid is based on the MGA 94 Zone 50 grid datum. Collar locations for both Gindalbie and Mount Gibson Iron Limited drill holes were surveyed routinely by surveyors using RTK DGPS with mm accuracy in X, Y and Z.</p> <p>Downhole surveys were collected for the majority of drill holes using gyroscopic survey techniques for both Gindalbie and Mount Gibson Iron Limited. Gyroscopic surveys are not affected by the magnetism of the BIF host rock. The data was presented at 5 m or 10 m intervals. Where gyroscopic surveys could not be completed to end of hole the last gyroscopic survey azimuth taken down the hole was inferred to end of hole and dip measurements taken from drillers' magnetic tool were used to end of hole.</p> <p>The topography wireframe was based on 2m contours.</p>
<b>Data spacing and distribution</b>	<p>The drilling for both Gindalbie and Mount Gibson was completed along a set of east-west trending sections. The section spacing varies between 25 m and 50 m apart, with drill holes spaced 25 m apart on section.</p> <p>The section spacing achieved through drilling is sufficient to establish the degree of geological and grade continuity necessary to support the Mineral Resource classifications that were applied.</p> <p>The drilling was composited downhole using 1 m intervals.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The host Banded Iron Formation of the Shine iron mineralisation is sub-vertical and dips to the west at approximately -85°. Holes are predominately drilled at an inclination of -55° and -60° towards both west and east due to the sub-vertical nature of the hosting unit. Interpretation of the mineralised intercepts indicates that the mineralisation mimics the general sub-vertical orientation of the BIF. However, a horizontal orientation of the mineralisation is evident at the contact with an intervening flat lying dolerite dyke at depth. The location and orientation of the Shine drilling is appropriate given the strike, dip and morphology of the iron mineralisation.</p>
<b>Sample security</b>	<p>Haren does not believe that sample security poses a material risk to the integrity of the assay data used in the Mineral Resource estimate from the Gindalbie Metals drill results.</p> <p>All samples generated at Shine from the Mount Gibson 2014 drilling were handled, packaged and dispatched by Mount Gibson personnel to Spectrolab at the Mount Gibson Extension Hill Mine. There were no sample security issues during this process. No sample losses occurred between sampling and lab analysis with all samples were accounted for through field and lab tracking systems.</p>
<b>Audits or reviews</b>	<p>Haren are not aware of any audits or reviews for the Shine deposits, other than the due diligence conducted by Mount Gibson during the acquisition of Shine.</p> <p>Haren Consulting audited and reviewed the data capturing processes and the QAQC systems that Mount Gibson have in place and deemed them to be industry standard.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in section 1, and where relevant, in sections 3 and 4, also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Gindalbie are the vendors of the project to Mount Gibson. The Shine Project area is defined by an area previously agreed between the tenement holder "Minjar Gold" and the vendors Gindalbie who have iron mineral rights over the tenure. The Shine Project Area is over parts of 3 mining leases M59/406, M59/421 and M59/731.</p>
<b>Exploration done by other parties</b>	<p>Exploration for Iron at the Shine Project Area has only been conducted by Gindalbie prior to the 2014 Mount Gibson RC and Diamond drill programs.</p>

Criteria	Commentary
<b>Geology</b>	The Shine Hematite deposit is located within the Warriedar Fold Belt which is part of the Archaean Yalgoo-Singleton greenstone belt. The deposit is located along a north-northwest trending, sub-vertical 50 – 120 m wide banded iron formation (BIF) of the Windanning Formation which is part of the Luke Creek Group. The BIF forms a prominent ridge which is approximately 50 m to 90 m wide in the Shine area. A sequence of mafic, ultramafic and pelitic sediments bounds the BIF to the east while a talc-rich ultramafic schist dominates west of the BIF. Where the BIF does not outcrop it is covered by lateritic or colluvial material. The iron mineralisation (goethite, hematite and magnetite) is strata bound occurring only within the BIF unit.
<b>Drill hole Information</b>	The majority of the drilling by Gindalbie has been RC drilling with some diamond holes drilled for metallurgical and geotechnical assessment. Specific drill hole information from Gindalbie is not presented here as it has been previously reported in August 2012.  Appendix A contains drill hole information from drilling conducted by Mount Gibson in 2014. The drill hole information consists of drill hole collars, eastings and northings, elevations, dips and azimuths, hole maximum depths and significant intercepts.
<b>Data aggregation methods</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Relationship between mineralisation widths and intercept lengths</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Diagrams</b>	No exploration results or drillhole intercepts are discussed in this ASX announcement. Cross Sections, long sections and photos of the geology, mineralisation and mineral resource have been released in previous ASX reports.
<b>Balanced reporting</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Other substantive exploration data</b>	Not Applicable - No exploration results or drillhole intercepts are discussed in this ASX announcement.
<b>Further work</b>	No further exploration drilling will be required at Shine. The drilling conducted so far is sufficient enough to prove the lateral and depth continuity of the iron mineralisation at Shine and provides enough confidence to conduct Mineral Resource estimation prior to mining.

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2 and 4, also apply to this section.)

Criteria	Commentary
<b>Database integrity</b>	All data collected electronically and stored in a SQL database with appropriate data validation procedures. The database was managed by Gindalbie, and has now been transferred to MOUNT GIBSON IRON LIMITED.  Haren undertook a basic check of the data for potential errors as a preliminary step to compiling the resource estimate. No significant flaws were identified.
<b>Site visits</b>	No site visit has been conducted by the competent person for Mineral Resources.
<b>Geological interpretation</b>	The iron mineralisation has been interpreted based on a mixture of Fe threshold grades and the geological and geophysical logging.  Iron mineralisation occurs as hematite-goethite in the upper portions of the BIF, with magnetite occurring at depth below the base of oxidation which is approximately 100 m below surface.

Criteria	Commentary
	<p>The boundary between the hematite and magnetite is interpreted to occur over a relatively narrow zone (a few metres) and as such no transitional zone was modelled.</p> <p>An east-west striking, shallow dipping, narrow dolerite dyke is interpreted which stopes out the mineralisation.</p> <p>The northern and southern areas of the BIF and associated iron mineralisation are covered by a siliceous capping (a product of near-surface weathering processes), which thickens to the north and south (i.e. this zone is thinnest in the central parts of the deposit).</p> <p>Outcrops of the iron mineralisation and various lithologies, confirms the validity of the geological interpretation based on the drilling.</p> <p>Alternative interpretations of the mineralisation are unlikely to significantly change the overall volume of the Fe mineralised envelopes in terms of the reported classified resources at a 50 % Fe cut-off.</p>
<b>Dimensions</b>	<p>The Shine deposit is hosted within a north-south trending BIF. The mineralisation parallels the stratigraphy, trends roughly north-south and is sub-vertical, with a total strike length of about 1.7 km. The mineralisation occurs mainly in two sub-parallel zones which are up to 30 m wide in places.</p>
<b>Estimation and modelling techniques</b>	<p>Estimation of Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI, CaO, K<sub>2</sub>O, MgO, MnO, S, TiO<sub>2</sub>, Magnasat and density using ordinary block kriging for all domains with hard domain boundaries.</p> <p>Block model constructed using a parent cell size of 5 mE by 10 mN by 10 mRL for mineralised material. The search ellipse orientation and radius was based on the results of the grade continuity analysis, with the same search neighbourhood parameters used for all elements to maintain the metal balance and correlations between elements. An initial search of 200 m along strike by 100 m down dip by 20 m across the plane of mineralisation was used, with a minimum of eight and maximum of 20 samples.</p> <p>Hematite and magnetite mineralisation was modelled, along with the host rock domains. Where insufficient samples were available default values were assigned.</p> <p>Block estimates were validated against the input composite data both globally and locally.</p> <p>Snowden previously estimated the Shine resource in November 2011 and July 2012.</p>
<b>Moisture</b>	<p>All tonnages have been estimated as dry tonnages.</p>
<b>Cut-off parameters</b>	<p>The iron mineralisation within the hematite was reported above a 50 % Fe cut-off grade.</p> <p>The cut-off grade was provided by Mount Gibson and is based on the assumption that the Shine deposit will be mined by open pit mining methods and that costs will be similar to existing mines operated by Mount Gibson (e.g. Extension Hill and Tallering Peak).</p> <p>The iron mineralisation within the magnetite was reported above a 50 % Fe cut-off grade.</p>
<b>Mining factors or assumptions</b>	<p>It is assumed the deposit will be mined using open cut methods.</p>
<b>Metallurgical factors or assumptions</b>	<p>It is assumed that the hematite ore will be direct shipping with minimal processing required (crushing and screening only). Magnetite mineralisation will likely require beneficiation to produce a concentrate.</p>
<b>Environmental factors or assumptions</b>	<p>It is assumed that no environmental factors exist that could prohibit any potential mining development at the Shine deposit.</p>
<b>Bulk density</b>	<p>The bulk density was estimated into the model blocks using ordinary kriging based on downhole geophysical logging.</p>
<b>Classification</b>	<p>The Mineral Resource has been classified based on the continuity of both the geology and the Fe grades, along with the drill hole spacing and data quality.</p> <p>The Mineral Resource has been classified as a combination of Measured, Indicated and Inferred.</p> <p>The mineralisation was classified as a Measured Resource where the drilling density was 25 mE by 50 mE (or less) and the hematite mineralisation shows good geological continuity.</p>

<b>Criteria</b>	<b>Commentary</b>
	<p>The mineralisation was classified as an Indicated Resource where the drilling density was greater than 25 mE by 50 mN but less than 25 mE by 100 mN and the hematite mineralisation shows reasonable geological continuity.</p> <p>The remainder of the mineralisation was classified as an Inferred Resource due to structural complexity and the narrow, discontinuous geometry of the mineralisation.</p> <p>Poorly understood areas of mineralisation were not classified.</p>
<b><i>Audits or reviews</i></b>	No external reviews or audits have been completed.
<b><i>Discussion of relative accuracy/confidence</i></b>	The block model grade estimates were validated against the drill hole composites to ensure that the model reflects the local input data.