



# Mount Gibson Iron Limited

ABN 87 008 670 817



Level 1, 2 Kings Park Road  
West Perth 6005, Western Australia  
PO Box 55, West Perth WA 6872  
Telephone: 61-8-9426-7500  
Facsimile: 61-8-9485 2305  
E-mail: [admin@mtgibsoniron.com.au](mailto:admin@mtgibsoniron.com.au)

VIA: [WWW.ASXONLINE.COM](http://WWW.ASXONLINE.COM)

## ASX ANNOUNCEMENT

ASX Code : **MGX**

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### Maiden Hematite Mineral Resource declared for T1 deposit at Tallering Peak

- Maiden Indicated and Inferred Mineral Resource of 1.51Mt @ 60.3% Fe declared for T1 deposit at Tallering Peak
- Reserve estimation and mine planning targeted for completion early in June Quarter 2013
- Confirms potential for short extension of Tallering Peak mine life

Mount Gibson Iron Limited (**Mount Gibson**) is pleased to announce a maiden Mineral Resource estimate for the T1 deposit at the Company's Tallering Peak iron ore mine, 260km east of Geraldton.

Comprehensive drilling and evaluation of the T1 prospect, 1 km east of the T6 pit, has resulted in a maiden Indicated and Inferred Resource of 1.51 million tonnes of hematite grading 60.3% Fe using a 55% Fe cut-off grade (refer table 1 below). The resource estimate was prepared by Snowden Mining Industry Consultants (**Snowden**). A detailed explanation of the mineral resource estimation and Competent Person attribution is provided in Appendix A.

**Table 1: T1 Mineral Resource as at January 2013, reported above a 55% Fe cut-off**

Resource Category	Tonnes (Mt)	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> %
<b>Indicated</b>	1.32	60.5	10.6	0.69	0.05	1.07	0.10	0.003	0.72	0.03	0.05	0.06
<b>Inferred</b>	0.19	58.3	14.8	0.73	0.05	0.29	0.12	0.003	0.65	0.02	0.20	0.06
<b>Total</b>	<b>1.51</b>	<b>60.3</b>	<b>11.2</b>	<b>0.70</b>	<b>0.05</b>	<b>0.97</b>	<b>0.10</b>	<b>0.003</b>	<b>0.72</b>	<b>0.03</b>	<b>0.07</b>	<b>0.06</b>

*Small discrepancies may occur due to the effects of rounding*

Ore Reserve estimation and detailed mine planning for the T1 deposit are well advanced and are expected to be complete early in the June quarter of 2013.

Subject to the successful completion of this work, and timely receipt of all necessary approvals, Mount Gibson hopes to be in a position to establish an open pit and commence mining at the T1 deposit late in the second half of calendar year 2013.

Current mining in the T6 pit is scheduled for completion in November 2013, after which time sales from low grade ore stockpiles are expected to continue until early 2014. Tallering Peak remains on track to produce 2.5 million tonnes of direct shipping (DSO) hematite iron ore in FY2013.

Mount Gibson Chief Executive Officer Jim Beyer said the successful delineation of a maiden resource at T1 highlighted the Company's focus on extracting maximum value from its existing operations while also focusing on long term growth.

"The T1 resource has the potential to deliver additional value from what has been a highly successful investment by Mount Gibson over more than a decade.

"It also demonstrates our ongoing faith in the Mid West region, where we have invested heavily in strategic export capacity and are targeting opportunities that will complement our Extension Hill hematite operation so that we remain a substantial producer in the region for many years to come."

For further information:

**Jim Beyer**

Chief Executive Officer  
Mount Gibson Iron Limited  
+61-8-9426-7500

**John Phaceas**

Manager External Relations  
Mount Gibson Iron Limited  
+61-8-9426-7500

**Alan Deans**

Last Word Corporate  
Communications  
+61 (0)427 490 992

[www.mtgibsoniron.com.au](http://www.mtgibsoniron.com.au)

## **APPENDIX A**

### **Mineral Resource Estimate**

The Maiden Resource Estimate for T1 has been prepared by John Graindorge from Snowden Mining Industry Consultants Pty Ltd (Snowden). John Graindorge is a Competent Person as defined in the 2012 JORC Code. Mount Gibson has reviewed the estimate and prepared this Appendix in accordance with the 2012 JORC Code based on documentation provided by Mr Graindorge.

The T1 Mineral Resource is on Mining Lease 70/896 held by Mount Gibson Mining which expires in 2017. Mount Gibson is currently mining the T6 deposit from the same mining lease. Historical drilling and mapping were conducted from 1958 to 2000 by WA Government, KSL Signet, WMC and Kingstream.

The T1 Mineral Resource is an iron enriched banded iron formation (BIF) unit between 7 and 20 metres thick overlying volcanic tuff and a non-enriched BIF. Using a grid based on true north the mineralised unit strikes south-west to north-east dipping at  $\sim 75^\circ$  to the north-west, and plunging gently at  $10^\circ$  to the west. Dolerite dyke intrusions truncate the mineralised unit to the north-east and at approximately 125m depth. The Mineral Resource outcrops with mineralised hematite from the surface to a transitional zone grading into magnetite from approximately 110 metres below surface. The total strike length is approximately 400 metres. A 5 to 10 metre thick iron enriched zone of canga and detrital regolith flanks the north-west side of the T1 hill.

Information used for the Mineral Resource estimate was sourced from logging and samples of Diamond core and RC drilling. Records for 111 drill holes were initially considered in the T1 estimate. On review 18 historical holes were omitted due to concerns relating to the data quality. Of the 93 drill holes used in the estimate the majority of the information relevant to the mineralised area is from 41 RC drill holes completed by Mt Gibson between June and September 2012.

Drill holes at T1 average 160 metres in length with some diamond holes greater than 350m long.

RC holes are either 133 mm or 124 mm in diameter with 1 metre samples collected using a face sampling hammer. RC samples were reduced using a rig mounted cone splitter to approximately 5kg. Sample recovery for 2012 RC Drilling was 65-70%. Half core sampled diamond core from 1994 drilling was used, which is predominantly PQ (85mm) and HQ (63.5mm) in diameter.

Logging of drill chips and diamond core was done in conjunction with surface mapping to confirm geological continuity at depth.

Samples were prepared and analysed for a typical iron ore suite of elements using XRF by Spectrolab Pty Ltd at the Talling Peak Mine Site Laboratory. The samples were reduced using a riffle splitter to approximately 500 grams and then pulverised to  $100\mu\text{m}$  from which a 100 gram subsample was taken for analysis. Multi-stage Loss on Ignition (LOI) thermo gravimetric analysis was conducted by Spectrolab Pty Ltd at its Geraldton laboratory.

Snowden's analysis of the QAQC data for the T1 deposit did not identify any significant issues with the assay data which could be material to the Mineral Resource estimate. Twin holes were drilled to validate the use of historical drilling from 1994 and 2000 and showed reasonable comparison. Field duplicate samples were collected at nominal 30 metre intervals downhole, with blank standards inserted every 30 metres downhole. Certified reference material (CRM's) were used at a rate of one standard sample per drillhole, with a combination of pulp and coarse CRM's used.

Drill holes were planned and drilled using the local Talling Peak mine grid with grid north being  $42.13^\circ$  west of true north. Collar locations from drilling conducted in 2012 were surveyed using DGPS, with 10% of collars resurveyed and validated for quality control.

In the central portion of the deposit, the drill spacing is a nominal section spacing of 20 metres with holes spaced at approximately 25 metres on each section line. Due to the steep terrain, multiple holes are often collared from a communal drill pad, and some drill holes were drilled sub-parallel to mineralisation.

Downhole surveys were conducted using gyro techniques which are not affected by the magnetism of the host rock. Some drill holes were also downhole surveyed using an Eastman camera with the dip orientation used as a check for the gyro survey.

Snowden consider the location and orientation of the majority of the T1 drilling is appropriate given the strike and morphology of the iron mineralisation.

No specific measures were warranted to ensure sample security as the samples were prepared and assayed at Mount Gibson's Tallering Peak mine site.

Historical information in the database has been checked against historical records and when uncertainty exists these drill holes have not been used.

A site visit to T1 was conducted by John Graindorge, Principal Consultant (Snowden) on 28 November 2012 viewing the outcropping iron mineralisation and drill collars.

The mineralised envelope has been interpreted using a combination of geological and downhole geophysical observations and Fe threshold grades. SiO<sub>2</sub> and LOI values were also considered in the interpretation.

Alternative interpretations were considered using the same 55% Fe cut-off criteria however they were little changed from the current interpretation and would be unlikely to significantly change the volume of the mineralised zone or classified Mineral Resource. The outcropping iron mineralisation and geological units were also used in the geological interpretation and validate the interpretation from the drill samples.

Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, LOI, CaO, K<sub>2</sub>O, MgO, MnO, S and TiO<sub>2</sub> were estimated using ordinary block kriging for all bedded units including the mineralised zone with hard domain boundaries. Inverse distance squared was used for the dolerite and canga. Top-cuts were applied for each domain to reduce high grade influences, especially for the deleterious elements. The block model was constructed using a parent cell size of 20 metres by 10 metres by 5 metres in the X, Y and Z directions respectively.

The block model grade estimates were validated against the drill hole composites to ensure that the model reflects the input data.

All tonnages have been estimated as dry tonnages.

A cut-off grade of 55% Fe was used on the assumption that T1 will be mined with similar costs and methods as the adjacent T6 pit currently in production. A hematite direct shipping ore would be produced with low metallurgical complexity and minimal processing. It is assumed lump and fines products would be produced through crushing and screening.

It is assumed there are limited environmental factors due to the proximity of the resource to an operating mine and that in-pit dumping of waste into previous pits would be considered.

The bulk density was estimated into the model blocks using ordinary kriging based on downhole geophysical logging. Measurements from drillcore validate the downhole geophysical density logging. The average bulk density value (4.5 t/m<sup>3</sup>), whilst high, is similar to the nearby T2, T3, T4 and T6 deposits.

Only the hematite mineralisation has been considered as part of the Mineral Resource with the magnetite mineralisation below the dolerite dyke not classified. The resources have been classified based on the continuity of both the geology and the Fe grades, along with the drill hole spacing and data quality.

No external audits have been conducted on the resource estimate however Mount Gibson has conducted a review of the estimate completed by Snowden.

**Attribution**

*The information in this report relating to Mineral Resources is based on information compiled by John Graindorge, who is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking 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". John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd, and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears.*

*The information in this report that relates to Exploration Results is based on information compiled by Gregory Hudson, who is a member of the Australian Institute of Geoscientists. Gregory Hudson is an employee of Mount Gibson Iron Limited group, and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Gregory Hudson has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears.*