

## QUARTERLY REPORT for the Quarter Ended 31 December 2014

### HIGHLIGHTS

**Magnetic Resources NL**  
ABN 34 121 370 232

**ASX Codes:** MAU and MAUCA

Ground Floor, 22 Delhi Street, West  
Perth WA 6005

T +61 8 9226 1777  
F +61 8 9485 2840  
E [info@magres.com.au](mailto:info@magres.com.au)

PO Box 1388  
West Perth WA 6872

**Issued Capital:**  
**Shares - Quoted:**  
97,936,814 ordinary shares.  
20,418,862 partly paid shares (\$0.20  
unpaid).

**Options - Unquoted**  
- 2,145,000 options exercisable at  
\$0.4607 by 21 December 2015  
- 12,757,143 options exercisable at  
\$0.1499 by 27 December 2016  
- 4,000,000 options exercisable  
at \$0.17 on or by 31 December 2017  
- 150,000 options exercisable at  
\$0.18 on or by 31 December 2017

**Cash:** \$1.1m

**Directors:**

**Gavin Fletcher**  
Managing Director

**Eric Lim**  
Non-Executive Director

**John Blanning**  
Non-Executive Director

**Company Secretary**  
Ben Donovan

### KAURING PROJECT:

- A recent drilling campaign of six holes including 676 metres of RC drilling and 144.2m metres of diamond drilling confirms additional banded iron formation [BIF] sequences exist down dip and laterally at the Central Kauring Target
- A twinned diamond hole (14KDD001) correlates very well with the previous RC hole (13KRC4) which gives further confidence that the bulk of future drilling can be undertaken with RC.
- This latest drilling entered fresh BIF in all three identified BIF zones which has extended the accumulated BIF true width from a previously interpreted 145m width near surface to an interpreted 180m width at about 200m.
- The previously mapped but undrilled Central BIF Zone for the Central Target is now confirmed to co-exist down hole. The presence of this additional lens between the previously reported Eastern and Western BIF's would have a very positive impact on the strip ratio of a future mining operation.
- A 5 year option agreement has been signed with the landholder of the Kauring Central Target which provides security of tenure and gives the ability to rapidly advance the project.
- Scope remains to include the weathered horizon as part of a future mine scenario [ASX Quarterly Report 3Q-2014].
- The confirmation of the Central BIF and the increased confidence of depth continuity is expected to result in a substantial increase in the previously reported Exploration Target. The company awaits assay data at which time the Exploration Target will be updated.
- Near term plans to conduct further drilling to delineate BIF along strike.
- Medium term plans to delineate a JORC resource with further drilling.

## KAURING PROJECT:

Magnetic Resource NL (**Magnetic or the Company**) is delighted to announce that the Company has recently entered into a 5yr Option agreement for the purchase of the farming land that covers a large area of the Central Target within the Company's 100% owned Kauring Project (**Kauring**).

The Kauring Project (Figure.1) was identified as an opportunity in December 2013 (ASX Announcement dated 19 December 2013) and initial drilling demonstrated the presence of very coarse grained magnetite with yields much higher than typical magnetite deposits.

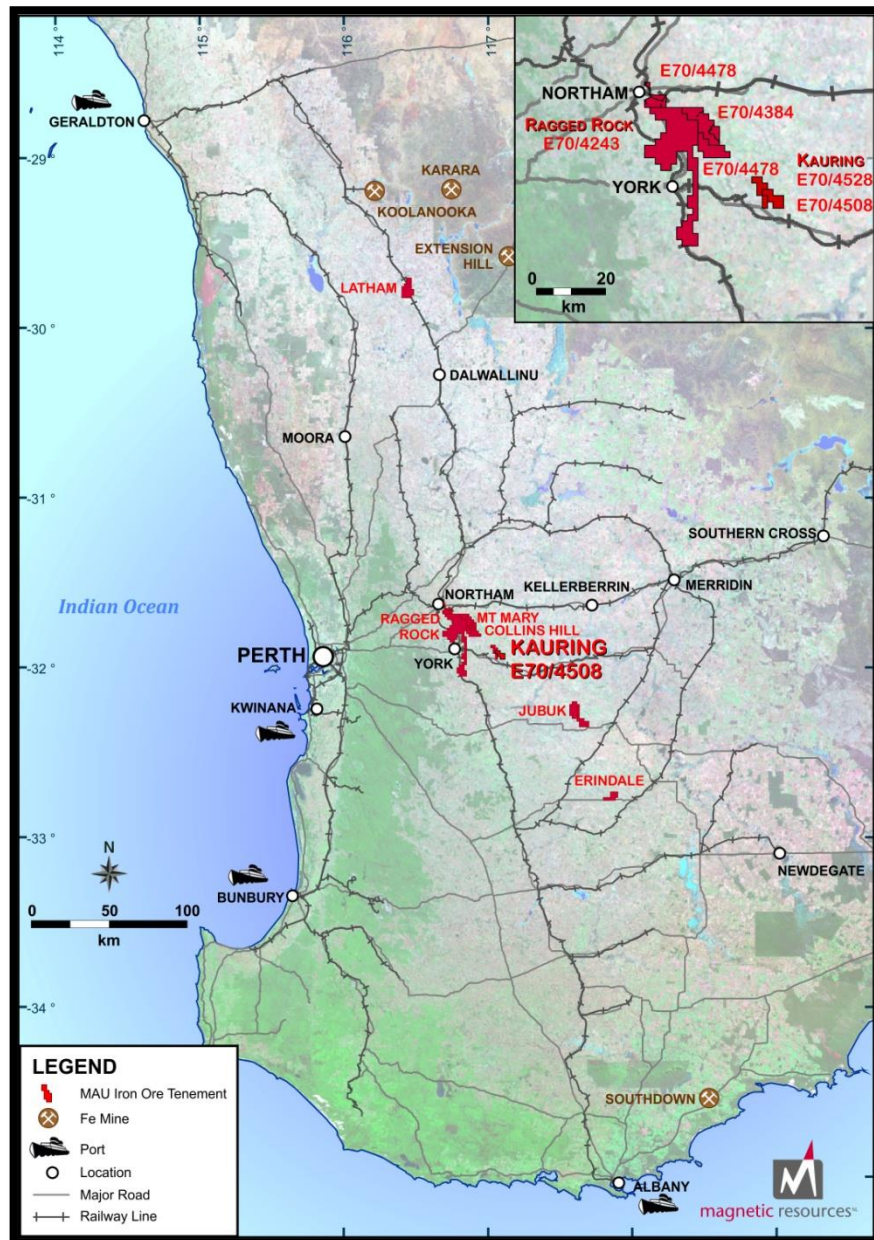


Figure 1: Location Map of Projects

The initial 2013 drilling campaign consisted of 5 holes which identified a number of stacked banded iron formation (BIF) lenses in close proximity to each other. A number of the holes intersected the deposit within a weathered zone, however, one of the drill-holes (13KRC4) intercepted a very thick and continuous lens of fresh BIF which was tested as a bulk sample and gave exceptional results. The composite sample was ground to a P80 of 100 micron (approx. 2-3 times coarser than most magnetite deposits) and yielded a high quality concentrate of 44.8% mass which is substantially higher than most other magnetite projects (typical yields of

20-30%). The coarseness of the magnetite, coupled with the very high mass yields bodes well for the economics of any future mining operation. Results from the first round of drilling encouraged the company to begin negotiations to secure tenure over the ground.

#### OPTION TO PURCHASE CENTRAL TARGET LAND:

An agreement signed with the landholder gives Magnetic the option to purchase property covering most of the Central Target (Figure 2) at any time within the next 5 years for an agreed sum. An option fee of \$10,000 is payable to the farmer on each anniversary of the signing of the agreement.

The agreement gives Magnetic the confidence to spend the required funds to develop the project knowing that the Company have the ability to take the project through to completion, subject to the normal mining approval process.

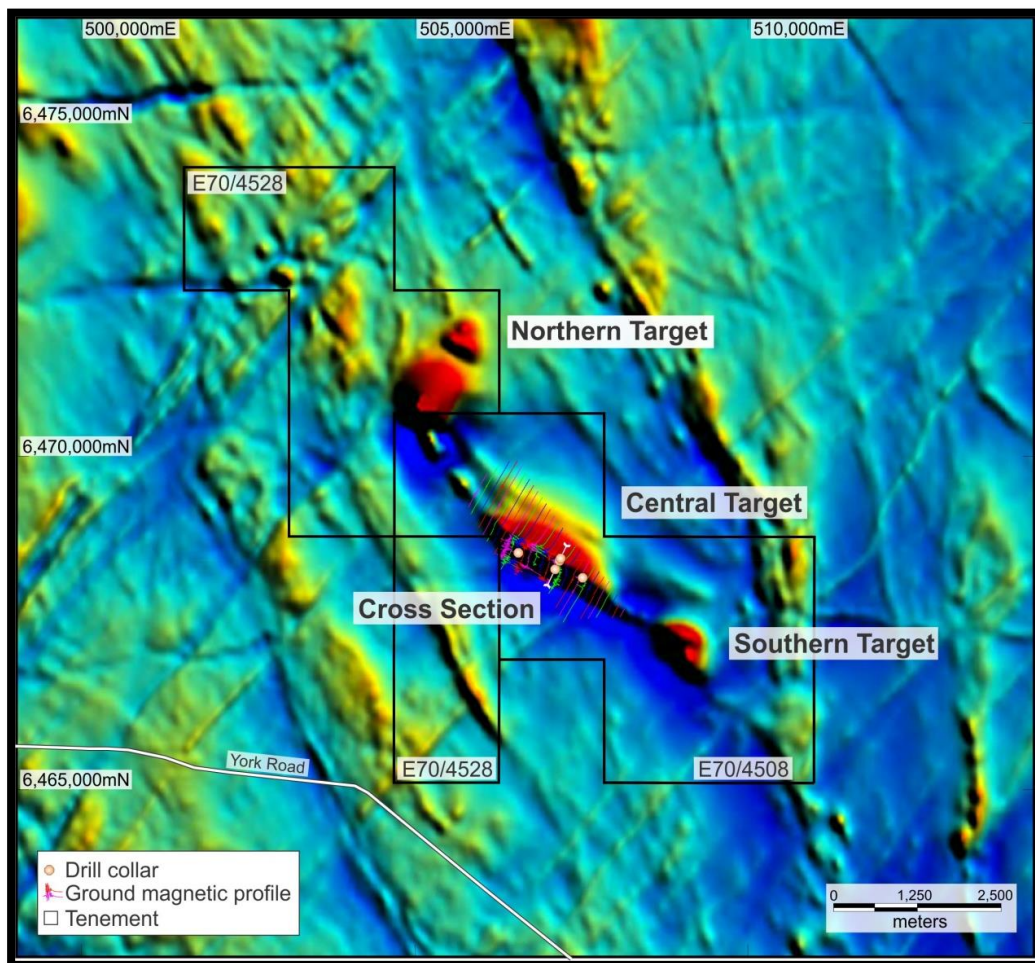


Figure 2: Kauring Project Targets

#### DRILLING 2014:

Over the 2013-2014 period, a total of 11 DHs for 1266.2m [10 x RCDH for 1122m and 1 x DDH for 144.2m] has been drilled on the Central Target. Refer to Figures 3-4 below, which illustrates the geophysical tenor and a cross section respectively, incorporating nine (9) drill holes [8 x RC and 1 x DDH] in combination with ground and airborne geophysical data. Refer to Tables 1 and 2 outline drill collars and pertinent data.

As a result of further drilling in late 2014 using a single diamond core drill hole (14KDD1) for 144.2m and five reverse circulation drill holes [14KRC1-5] for 676m, in total six (6) drill holes for 820.2m - a better interpretation and update on the Exploration Target at the Central Target will be made once assay results are available.

**Table 1 Drill-hole Collars 13KRC4:14KDD1 twin**

Hole ID	Easting	Northing	Dip	Azimuth	Fresh Massive BIF from	Fresh Massive BIF to	BIF Lens Width down hole
					metres	metres	metres
13KRC4	507217	6468467	60	207	69	120 EOH	51
14KDD1	507221	6468466	60	207	69.1	127.4	58.3

The initial 2013 drilling indicated a number of stacked lenses in close proximity to each other, with combined thickness in the order of 120m width. An initial number of the reverse circulation drill-holes intercepted BIF lenses in the weathered zone. Whilst these weathered zones demonstrate good potential for a beneficiated hematite (ASX Announcement September 2014 Quarterly), the Company required to gain an understanding of the fresh magnetite BIF which is now confirmed to lie below the weathered zone from 4Q-2014 drilling.

A schematic of the initial drilling campaign below (refer Fig 3) outlines the Company's understanding of the deposit and the weathered zone up until November 2014 and the reinterpretation (refer Figure 4) at December 2014.

#### **2014 Drilling Outcomes:**

An additional untested Central Zone of BIF is confirmed to exist between the previously reported Eastern and Western BIF's.

Evidence from drilling extends the true width for the Eastern BIF and also provides confidence of continuity at depth (currently 200m).

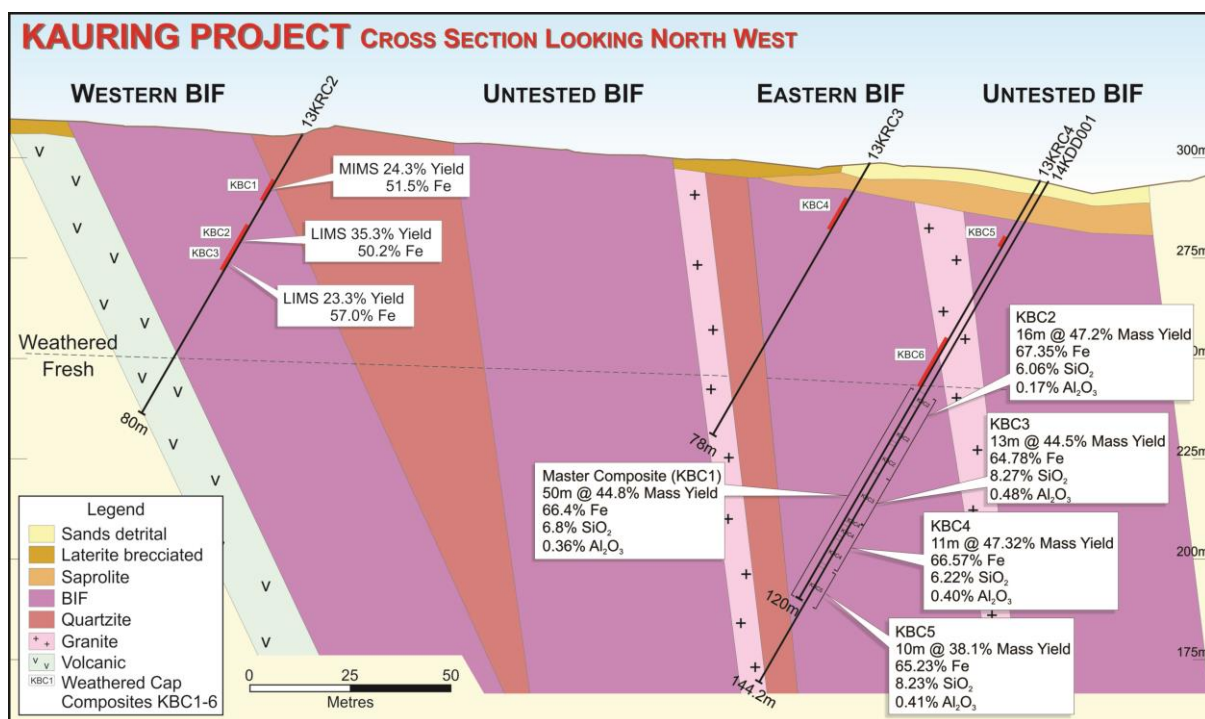
Intersecting all previously reported weathered BIF lenses at depths below the weathered zone in order to assess the properties of underlying fresh BIF has been achieved.

The additional drill-hole data now provides a more accurate understanding of the dip of these lenses, contacts with granite and gneiss rock types and suggestion that a synclinal fold structure exists at depth which may provide for even greater widths at depth.

Thickening of the BIF at depth is interpreted (refer to Figure 4).

Fresh BIF in all three identified BIF zones which has extended the accumulated BIF true width from an interpreted 145m width near to surface to an interpreted 180m width at about 200m depth over an approximate 300m width on surface and assuming a strike length of approximately 1200m along the section drilled.





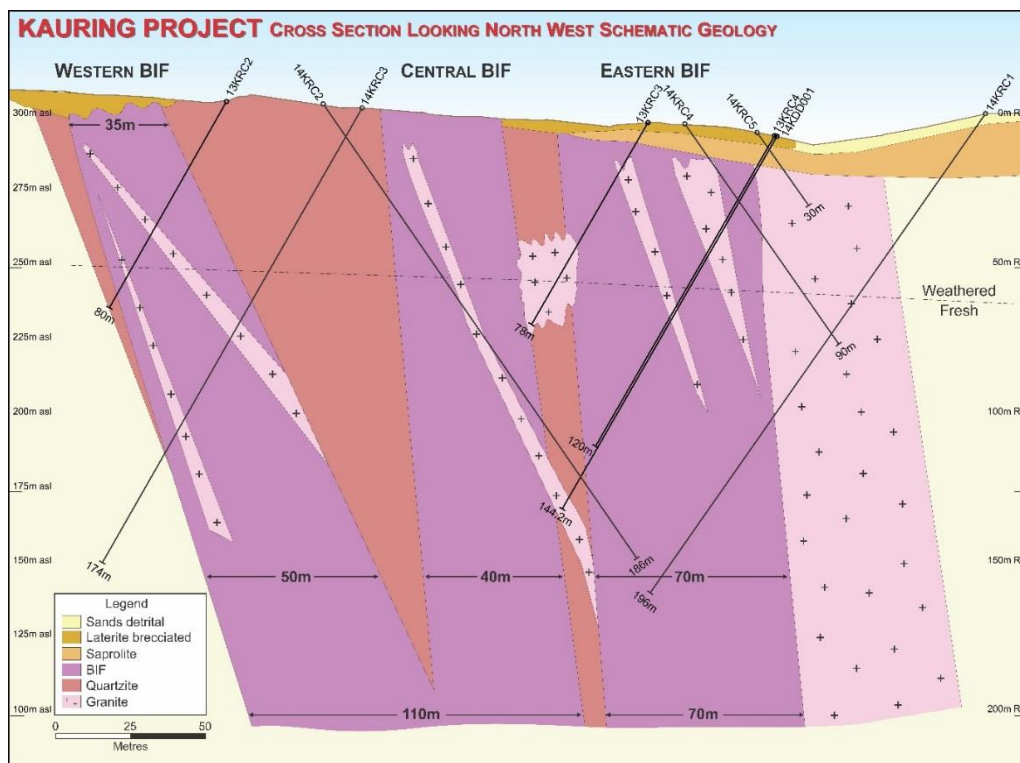
**Figure 3: Kauring Project Cross Section 14KDD1 with DTR fresh BIF and composite LIMS and MIMS assay test work on parts of weathered BIF**

**Table 2: 2013/2014 Drill-Hole Data:**

Drill Hole	Easting MGA94	Northing MGA94	Azimuth	Dip	Depth	Weathered BIF from-to	Fresh BIF from-to	Metres BIF down hole
13KRC1	507548	6468176	210	060	84	6-13/31-56		7+25 weathered
13KRC2	507134	6468303	210	060	80	13-72		59 weathered
13KRC3	507198	6468429	210	060	78	21-48		27 weathered
13KRC4**	507217	6468467	207	060	120	16-31	60-64/69-120 open ended	15 weathered 55 fresh open ended
13KRC5	506586	6468550	210	060	84	26-40		14 weathered
14KRC1	507257	6468526	210	055	196		124-196 open ended	72 fresh open ended
14KRC2	507152	6468330	20	055	186	41-54	58-80/92-128/153-156/160-176/181-186 open ended	13 weathered 72 fresh open ended
14KRC3	507145	6468349	200	060	174	29-46	73-82/89-	15

							118/125-129	weathered ochre 42 fresh
14KRC4	507204	6468440	30	055	90	18-33		15 weathered hematite
14KRC5	507218	6468460	30	055	30	0		granite
14KDD1**	507221	6468466	207	060	144.2	18.6-24.6/25.5-45.7	52.6-58/61.5-63.5/69.1-127.4	26.2 weathered / 7.4 part weathered / 58 fresh

An \*EIS funded twinned diamond core drill-hole 14KDD1, recently completed to 144.2m for QA/QC and engineering purposes, confirmed the 13KRC4 drill-hole in all aspects of QA/QC logging. Refer to Table 1 for collar details. (\*EIS: the Exploration Incentive Scheme of the State of WA through the Department of Mines and Petroleum).



**Figure 4: Cross Section update with 2013-2014 drill holes 13KRC2, 3, 4, 14KDD1 and 14KRC1-5**

#### **MEDIUM TERM PLANS:**

Subject to the assay results pending from the 2014 drilling campaign, the company is now in a position to undertake further drilling with the intention of delineating a future JORC resource over the next 12-24 months.

If the findings of the short term program are consistent with the Company's understanding of the size, width and dip of the BIF lenses stated in the Central Exploration Target (ASX release 19 February 2014), it is believed this central zone of Kauring indicates approx. 145m near surface to an interpreted 180m of magnetite BIF at 200m depth over an approximate 300m width on surface and a strike length of approximately 1200m.

Once all assay results are known a statement of a revised Exploration Target will be released.

Based on this relatively small footprint, the Company believes that a 2012 JORC inferred mineral resource can be delineated with a relatively modest drill program of approximately 20 drill-holes, subject to ability to drill to target depths.

#### **GENERAL:**

Commenting on the signing of the Kauring agreement, Managing Director Gavin Fletcher said “the signing of this agreement is a major step forward for our company. We now have the confidence to commit the resources to developing this very promising project knowing that we have the ability to take the project all the way through to a mine”

#### **RAGGED ROCK PROJECT: (Magnetic 100%)**

Further to previous quarter outlining several ground magnetic surveys as future exploration targets, drilling will be subject to agreements with land holders.

#### **JUBUK PROJECT: (Magnetic 100%)**

Application for retention and extension status has been made for the Jubuk coarse grained magnetite deposit near Corrigin. This will allow Magnetic to focus on evaluating its Ragged Rock and Kauring projects. The Company has been advised of a 5 year extension of exploration licence is expected in January 2015. Application for Retention Status is pending.

#### **OTHER TENEMENTS:**

Magnetic has rationalised its tenement holdings in order to focus on its Ragged Rock and Kauring projects. As a result of this focus, no exploration was carried out on Magnetic’s other tenements during the quarter.

#### **CORPORATE:**

On 20 October 2014, Magnetic announced a board restructure, with the resignation of Mr George Sakalidis from the position of Managing Director of the Company, and the appointment of Mr Gavin Fletcher to the position of Managing Director. The board also appointed, Mr John Blanning as a non-executive director, with Mr Blanning having significant experience in mining, production and project development.

On 27 November, Magnetic issued 119,056 shares in consideration of drilling expenses.

The Company’s Annual General Meeting was held on 27 November 2014 with all resolutions passing unanimously.

#### **TENEMENT SCHEDULE:**

Tenement Schedule in accordance with ASX Listing Rule 5.3.3  
Tenements held at the end of the Quarter

Location	Tenement	Nature of Interest	Project	Equity (%) held at start of Quarter	Equity (%) held at end of Quarter
WA	E70/3536	Granted	JUBUK	100%	100%
WA	E70/3716	Granted	LOMOS	100%	100%
WA	E70/4243	Granted	RAGGED ROCK	100%	100%
WA	E70/4384	Granted	MT MARY	100%	100%
WA	E70/4478	Granted	COLLINS HILL	100%	100%
WA	E70/4508	Granted	KAURING	100%	100%
WA	E70/4528	Granted	KAURING	100%	100%
WA	E70/4598	Granted	LATHAM ROCK	0%	100%
WA	E77/2035	Granted	LAKE SEABROOK	Gold Rights Only	Gold Rights Only

Mining Tenements acquired during the Quarter

WA	nil				
----	-----	--	--	--	--

Mining Tenements disposed during the Quarter

WA	nil				
----	-----	--	--	--	--

For more information on the company visit [www.magres.com.au](http://www.magres.com.au)

Gavin Fletcher  
 Managing Director  
 Phone (08) 9226 1777  
 Mobile 0400 747 179  
 Email [gavin@magres.com.au](mailto:gavin@magres.com.au)

### Competent Person's Statement

The information in this report that relates to exploration results is based on information compiled or reviewed by Mr Cyril Geach BSc (Hons-Geology) who is a member of the Australian Institute of Geoscientists. Cyril Geach is an independent consultant with his own business, Cyril Geach - Geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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'. Cyril Geach consents to the inclusion of this information in the form and context in which it appears in this report.

### About Magnetite

Magnetite is a major source of iron and accounts for about 30% of global iron furnace feed for steel production. The largest producer of iron ore and iron is China and its main iron ore source is magnetite. North America is the sixth largest producer and is also mostly a magnetite producer.

Magnetite (Fe<sub>3</sub>O<sub>4</sub>) is a magnetic mineral, an important property in aiding discovery using magnetic surveys and in ore processing. Ore can be crushed, passed over a magnet and the magnetite extracted to produce a clean, high grade iron product.

Magnetite ore grades are usually lower than commercially exploited hematite ores but after processing, a product with much higher iron grades and much lower costly impurities is derived.



Section 1 Sampling Techniques and Data	
(Criteria in this section apply to all succeeding sections)	<p><b>Magnetic Resources Kauring Report Release 19 December 2013 update with</b>  <b>Magnetic Resources Kauring Report Release 19 February 2014 update with</b>  <b>Magnetic Resources Kauring Report Release 04 &amp; 20 March 2014 update with</b>  <b>Magnetic Resources Kauring Report Release 07 April 2014 update with</b>  <b>Magnetic Resources Quarterly Report to 30 September 2014 update with</b>  <b>Magnetic Resources Kauring Report 24 November 2014 and this release January 2015</b></p>
Sampling techniques	Reverse Circulation Drilling collected at 1m , 2m and 4m interval and sub sample split through a cyclone rotary splitter
	Duplicates taken using a 75:25 riffle splitter at every 20-30m and standards introduced at every 30-40m
	Susceptibility readings taken at each 1m from larger sample collected using a Georadus K10 magnetic susceptibility meter x10-3SI
	Hand held Delta Dynamic XRF Model DP-4000-C Serial No 510246 used to test every 5-7 metres of collected sample for early recognition of Fe content. Error 5-10%Fe to assay expected.
Drilling techniques	Reverse Circulation Drill Rig owned by Orbit Drilling Pty Ltd, Breakthru Drilling PL using a 140mm RC hammer drill bit, pre-collar to 6m and Mt Magnet Drilling HQ and NQ DDH
Drill sample recovery	Visual observation and noted where water occurs - water was minimal and 90% of sample recovery water free
	Drilling companies engaged ensure the efficiency is acceptable and audit of machine efficiency through Duplicates carried out.
	It is assumed minimal bias to sample recovery and grade and if so expect at the 1m interface between geological horizons bias to occur backed up where susceptibility and duplicates are a measure of down-hole consistency. Duplicate results indicate in a number of samples that future improved recovery at the rig is required, but as this is an exploratory drill program results are deemed acceptable at this initial level, but would need to improve QA/QC consistency for JORC purposes at MR level when testing the weathered horizon in particular.
Logging	Logging at 1m intervals to assess the geological interpretation. DDH 14DD1 was accurate in duplicating 13KRC4 DH log detail to within 1m of the fresh interface.
	RC sampling at 1m interval is quantitative using Hand Held XRF and will become qualitative after assaying is carried out. Assay results previously reported in ASX release February 2014 and March 2014 are firm data.
	Total length of intersections logged 1266.2 metres as 100% of the drilling at Kauring
Sub-sampling techniques and sample preparation	RC sampling at 1m, 2m and 4m interval is quantitative using Hand Held XRF and became qualitative after assaying data is to be released. Composite sub sampling was on a volumetric method taking a scoop <1kg from a shaken calico sub sample of 1m collected drill material and combined repeatedly equally as a scoop sub sample with other samples for 2 or 4m combined. Portable XRF assays are recorded of the sub samples in the field to be compared v lab assay to detect any major errors. Duplicate samples are 1m samples only.
	Rotary Split at rig at 1m intervals into Calico for 0.5-2.0kg sub samples and riffle split at 75:25 for duplicates >3Kg
	Dry samples into calico bags for assay vary with size of collected sample between 0.5-2.0kg weight - expect the sample to be homogenous over the 1m collected
	Cyclone cleaned regularly at every 5-10m to prevent cross contamination or cleansed more if clayey or damp conditions prevailed however minimal <10%
	Duplicate at every 20-30m to measure continuity of the drill rig and sample recovery, particularly the BIF. Duplicate results indicate in a number of samples that future improved recovery at the rig is required, but as this is an exploratory drill program results are deemed acceptable at this initial level, but may need to improve QA/QC consistency for JORC purposes at MR level when testing the weathered horizon in particular.
	Grain size mostly fine powdery in weathered zone and fresh zone
Quality of assay data and laboratory tests	Total digest and XRF methods employed for Fe suite elements when assaying to be employed. Hand Held XRF used as quantitative tool not qualitative.
	Hand held XRF self-calibrating specific for Fe and limited to testing a portion of the calico sub sample. Susceptibility readings an average reading across a 1m sample not all the sample able to be read. Hand held XRF tested against known standards to determine any start, middle and end bias. So far accuracy extremely good for Fe% and within tolerable ranges of 2S for Al, P, S.
	Quality control methods using 3 x Geostats CRM standards and duplicates. Duplicates to be tested at 2 laboratories for umpire testing in later rounds of drilling. No blanks used. Internal checks and standards satisfy control of lab methods Fire Assay Fe suite XRF / ICP /MS methods by certified laboratory Bureau Veritas.

Verification of sampling and assaying	At this juncture no independent verification of geology apart from personnel involved in recovery of samples and log chip tray observation by third parties and management.
	One twinned holes to date proved accurate for validating previous fresh BIF drill hole 13KRC4
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols carried out
	Discuss any adjustment to assay data not carried out. Weighted assays for composite samples not viable in the field taken as a volumetric scoop size. Weighted in the lab.
Location of data points	No surveys or verification of drill holes apart from GPS located. Magnetic variation occurs which has potential to throw out magnetic bearing by up to 10 degrees and noted.
	GPS grid system to date
	GPS topographic control and located data from GSWA airborne survey
Data spacing and distribution	Data spacing for reporting of Exploration Results and Exploration Target are conceptual and not relevant at this juncture leading to a MR which may or may not be determined.
	Data spacing adequate along cross section enables appropriate geological control for Mineral Resource use at present requires further drilling to ascertain a MR.
	Sample compositing so far has been applied to parts of the drill column (February and March 2014 data to ASX) and at 1m and 2m spacing for zones of BIF of interest such as fresh BIF at Kauring.
Orientation of data in relation to geological structure	DDH 14KDD1 has confirmed a steep 85 degree dip for the eastern BIF. Orientation of sampling depends on the down hole travel of the drill string not yet determined apart from the DDH. Further drilling will assist in determining any bias.
	Mineralised structures and sample bias - too early to understand this affect
Sample security	Samples personally delivered to the laboratory and also stored on site for repeat sampling if necessary
Audits or reviews	Sample audits at this stage are duplicate and standards taken.
<b>Section 2 Reporting of Exploration Results</b>	
(Criteria listed in the preceding section also apply to this section.)	
Criteria	JORC Code explanation
Mineral tenement and land tenure status	E70/4508 granted 100% to Magnetic Resources no third party arrangement apart from standard Department of Mines and Energy requirement access agreements with farm owners, no Native Title or extricated land apart from the Avon Valley water catchment. Land ownership is private used as farm land. Future end agreements will have to be entered into with farmers and discussions begun with a select few. One 5 year option agreement in November 2014 has been signed with the farm owner over the Central Target.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area is subject to a Program of Work approval by DMP and granted for reconnaissance drill holes over Minerals to Crown land. Remnant bush may require a DEC survey in the future for flora and fauna. Minerals to Owner title may exist requiring agreements separate to DMP requirement.
Exploration done by other parties	No search for Fe by other parties known at Ragged Rock and Kauring.
Geology	Outcropping Banded Iron Formation (BIF) comprising weathered BIF and fresher BIF at depth within a gneissic strati-form layered succession steeply dipping NE including orthopyroxenite – hornblende in western BIF that differs from the eastern BIF which is a quartzite BIF at Kauring. Weathered BIF is partial weathered to goethite, hematite, and martite after magnetite at Kauring. Minor sulphide noticed in volcanics and testing to see if sulphide in fresh BIF in the eastern BIF can be separated by DTR analysis at Kauring. Work is ongoing with regard to understanding the relationship of weathered (hematite and martite) alteration over magnetite BIF at Kauring. Layered peridotite / pyroxenite / gabbro footwall to western BIF supports an EIS grant of \$141,323 for 20 x RC and 1xDDH in June 2014 quarter.
Drill hole Information	Data summary forms part of an ASX release dated 19 December 2013 and 19 February 2014 and ASX quarterly reports for December 2013, March 2014 and November 2014.
	o easting and northing of the drill hole collar provided
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar estimated not outlined
	o dip and azimuth of the hole provided
	o down hole length and interception depth provided

	o hole length provided
	azimuths are submitted with an error to 10% over the magnetic BIF until further accurate data can be submitted but not critical at such an early stage of reporting of ER or ET
Data aggregation methods	The use of Hand Held XRF data taken at 5-7m intervals is purely quantitative with expected errors of <1%Fe against known standards and Si / Al not reported until assay data is available and further reported
	Susceptibility readings taken at each 1m RC drill sample from larger sample collected using a Georadus K10 magnetic susceptibility meter x10-3SI vary across a wide and reported only an average until assay results are posted which will project a better understanding of the Fe% and susceptibility measured at 1m intervals or as composited samples that are yet to be determined.
	The assumptions used for any reporting of metal equivalent values should be clearly stated not undertaken or represented. Not used for this purpose.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results as outlined in the ASX release dated about 19 December 2013 by MAU. Fresh BIF sampled at 1m, 2m intervals whilst weathered BIF sampled at 2m and 4m composite levels on composites unreleased in current drill program. Incompatible elements in head grade by XRF on fresh BIF further determined using Satmagan and then if positive - Davis Tube Recovery to see if they are removed. Results awaited in January 2015. Sulphur was an element that showed normal and above normal levels down-hole in 13KRC drill samples but considered to be workable in context of the very low Al, P incompatible elements and high Fe% at a coarse grind at 100 micron at Kauring in overall sample collection.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported and is outlined in Figure 3 this report January 2014 at Kauring.
	If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). True widths and down hole widths reported together in Figure 3 this report January 2015.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included are reported in Figures 1-3 and Tables 1-2.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable – results released and prior reported and as detailed in Notes to the Exploration Target in December 2013, February 2014 and March 2014 ASX releases about Ragged Rock and Kauring.
Other substantive exploration data	Improved exploration data know about the physical - chemical nature of the reported logged drill intercepts occurs at this point. Metallurgy is an increasing determination and reported identifying coarse magnetite recoverable at a coarse grind. We know that a BIF sequence of rocks with 3 zones of BIF a western, central and eastern zone, occurs at Kauring as reported up to January 2015. Overburden of 50m of weathered BIF reported at Kauring with evidence parts are commercially interesting to date but not affirmative along strike.
Further work	Further work will require further drilling to improve the geological model being reported broader ground magnetic survey, infill ground magnetics.
	Figure 2 outlines the Kauring Project is subject to further access agreements over the north and south targets and future negotiations with farmers to determine a JORC MR.

