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## PILOT SCALE TESTWORK CONFIRMS

### OUTSTANDING METALLURGICAL PROPERTIES AT RAGGED ROCK

#### Highlights

- A bulk sample representing the 5km of strike length of Ragged Rock Target 1 has confirmed outstanding metallurgical properties at Pilot Scale.
- Final product quality of nearly 66% Iron and 6% Silica
- Very high mass recovery to concentrate of over 37%
- Very high quality Sinter Feed produced at a very coarse grind size of 150 micron
- Very coarse grained magnetite will reduce any future Capex and Opex considerably
- Coarse grained, high purity Magnetite can be readily sold into the DSO (sinter) market
- Sinter Testwork to be conducted in China over the next 3 months

Magnetic Resource NL (**Magnetic** or the **Company**) recently completed a 19 hole RC drill program covering the 5km of strike at Ragged Rock, Target 1.

Based on the consistent and very promising metallurgical results obtained across all areas of mineralization, the Company compiled a bulk representative sample to conduct Pilot Scale testwork.

Pilot Scale testwork is conducted to check that the excellent results obtained during Laboratory scale testwork will be closely replicated in a large scale processing plant in the future.

The sample was carefully selected to represent the average ore expected to be fed to a future processing plant at Ragged Rock. All testwork was conducted by Nagrom in Kelmscott which is a highly reputable laboratory for bulk pilot plant testwork.

The main goal of the testwork was to determine an appropriate grind size for the ore which would consistently achieve a high purity, low contaminant product of a sufficiently coarse size to be readily useable in the steel making process known as Sintering.

Typically, a magnetite ore needs to be ground extremely fine (30-45 micron) in order to make an acceptable final product. The final product is then too fine to be used in Sintering and must be processed through a Pelletising process which is a high cost, high energy consuming process.

The exceptionally favourable geology of the Ragged Rock project enables a very high quality, low impurity product to be obtained at a grind size 4-5 times coarser than most other Australian magnetite projects. The very coarse nature of the product also means that it can be used in the Sintering process and would therefore be sold into the DSO market where the average ore supplied is far lower in grade and higher in total impurities.

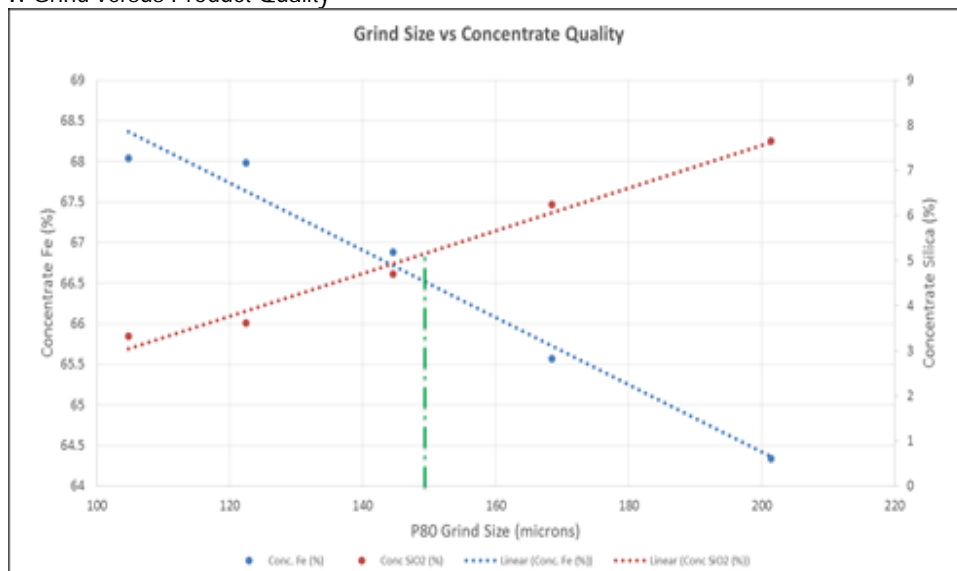
### Grind size versus product quality

The drilling samples were fully mixed to create a bulk sample of 923kg. A representative head sample was taken and this sample was split into 5 identical samples and tested at various grind sizes around the target grind size. Results of the tests are shown below:

**Table 1:** Bulk sample head grade analysis

Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)
30.89	44.55	4.64	0.051

**Graph 1:** Grind versus Product Quality



**Table 2: Grind versus Product Quality**

Concentrate Grade						
Grind Size (P80)	Mass Yield	Fe	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	P	S
microns	%	%	%	%	%	%
201	37.2%	64.34	7.65	1.32	0.008	0.086
168	36.1%	65.57	6.25	1.3	0.006	0.084
145	35.3%	66.88	4.7	1.27	0.004	0.077
122	35.3%	67.98	3.62	1.23	0.004	0.071
105	34.0%	68.04	3.33	1.22	0.003	0.07

The results obtained are extremely encouraging for a number of key reasons including:

1. Very high mass yields to final product. This markedly enhances the future profitability of a mining operation
2. Very high quality product consistently achieved over a number of different grind sizes
3. Minor variation in Silica content over a wide range of coarse grind sizes. A typical Australian magnetite at these grind sizes would contain silica values in the order of 20%. This minor variation bodes very well for future Process Plant design.
4. Very low total impurities across all grind sizes tested
5. Exceptionally low Phosphorous values achieved at all grind sizes
6. Acceptable Sulphur grades achieved at all grind sizes

#### **Bulk sample Pilot Plant trial**

Based on the results above, a grind size of 150 microns was selected for the bulk pilot plant trial. The material was processed through a pilot scale crushing, grinding and magnetic separation flowsheet and the following final product quality was achieved:

Mass Recovery (%)	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	S (%)
37.15	65.84	6.07	1.27	0.005	0.095

This pilot scale result compares very closely to the laboratory scale DTR tests and provides a very high degree of confidence that a very high quality product can be readily produced in a full scale processing facility in the future.

### Sinter Testwork in China

One of the additional benefits of the Pilot Plant trial is the generation of over 300kg of final product which can be used for various forms of testwork for Process Plant design and possible investors into the project.

Approximately 150kg of this final product will shortly be despatched to a highly reputable University test facility where Sintering testwork will be carried out. The coarse nature and high purity of the Ragged Rock product is expected to perform well in this Sintering testwork.

Results from this testwork are expected to enhance the ability of Magnetic Resources to obtain a strategic investor into the project and also obtain offtake agreements for any future production.

Commenting on the success of the Pilot Plant trial, Managing Director, George Sakalidis said “we continue to be very pleased with the excellent results being obtained for our product. Confirmation that we are able to achieve very high quality product at very coarse grind sizes is very promising for the economics of our future project. The commencement of Sinter testwork is also an exciting phase for the company which will further improve our ability to attract a strategic investor and offtake for future production”

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

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### Competent Person's Statement

The information in this report that relates to exploration results is based on information compiled or reviewed by Mr George Sakalidis BSc (Hons) who is a member of the Australasian Institute of Mining and Metallurgy and Mr Cyril Geach BSc (Hons-Geology) who is a member of the Australian Institute of Geoscientists. George Sakalidis is a director of Magnetic Resources NL. George Sakalidis 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 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. George Sakalidis consents to the inclusion of this information in the form and context in which it appears in this report.

Cyril Geach is an independent consultant of 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 2004 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.