

# Magnis Resources

L I M I T E D

FOR RELEASE  
6 April 2016

## 99.99% TGC COATED SPHERICAL GRAPHITE ACHIEVED WITHOUT CHEMICAL PURIFICATION

- **Purity of 99.99% TGC achieved in coated spherical graphite product**
- **Low carbon footprint anode graphite produced in the lowest cost quartile**
- **Product targeted to fast growing sustainable industries**
- **End user Product qualification with potential offtake partners is progressing**

Magnis Resources Limited ("**Magnis**" or the "**Company**") (ASX:MNS) is pleased to announce the latest results from ongoing qualification and development work on the production of high-purity anode graphite for lithium-ion batteries.

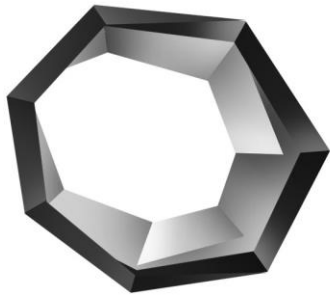
Exceptionally high purity of 99.99% TGC has been achieved in the production of coated anode graphite for lithium-ion batteries. The production of the anode graphite from concentrate, involved a two-step process whereby the graphite flake concentrate was firstly converted to uncoated spherical graphite at 99.8% TGC without the use of chemical purification. The uncoated spherical graphite was then subjected to a thermal coating process, which further purified the graphite in the process of making the final coated anode product.

Magnis CEO Dr Frank Houllis commented: "The significance of today's announcement is that Magnis has now verified each step in the production of an anode graphite material that meets or exceeds end user specifications. The exceptional crystal structure of Nachu flake graphite with low impurities has also demonstrated excellent performance metrics in lithium-ion batteries. The production of 99.99% TGC represents a major step in end user qualification."

"Eliminating purification in the production of spherical graphite means that graphite concentrate feedstock from Nachu can avoid the additional cost, risk and environmental impact of downstream chemical purification which is involved in the production of the majority of purified spherical graphite.

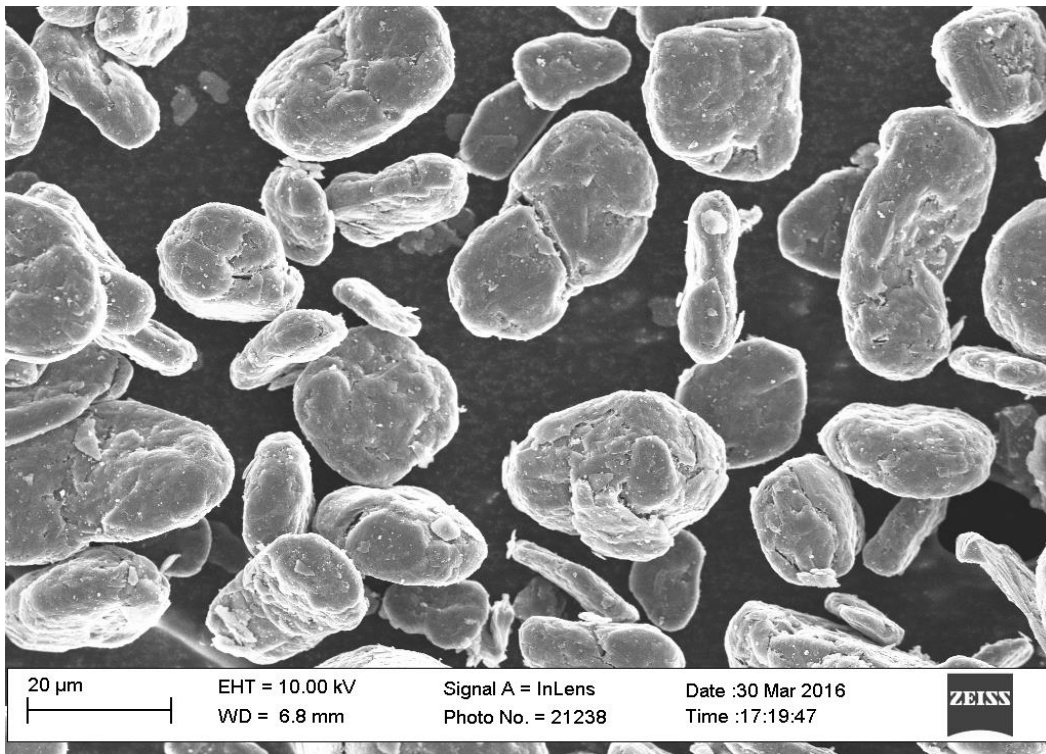
"With lowest quartile cost and significantly reduced environmental footprint, Magnis expects its anode graphite to be a compelling choice for sustainable industries using lithium-ion batteries."

For personal use only



# Magnis Resources

L I M I T E D



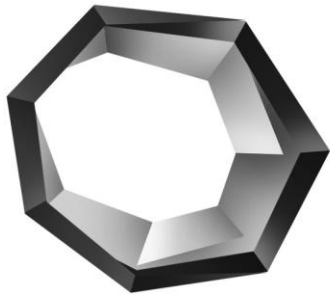
**Figure 1 - Scanning Electron Microscope image of Nachu Coated Spherical Graphite**

## Lithium-ion batteries

In recent times, there has been a continual stream of news in the evolving and expanding lithium-ion battery sector. The major markets for high-end batteries include consumer electronics, electric vehicles and stationary energy storage. In addition to the 87 GWh of capacity at various gigafactories under construction, there have been further major announcements including:

- Construction of a second battery plant by Mercedes worth €500 million;
- Samsung's escalation in manufacturing capacity;
- Volkswagen to offer 20 different models of electric vehicles by 2020;
- Toyota's goal to eliminate gasoline cars by 2050; and
- The recent release of the Tesla Model 3.

The association of lithium-ion batteries with sustainable industries is a positive development for Magnis given the demonstrated low carbon footprint of its product.



# Magnis Resources

L I M I T E D

## **Progress with Potential End Users**

The process of product qualification and collaboration continues with potential supply chain partners and end-users in North America, Europe, Korea and Japan.

Dr Frank Houllis  
Chairman

**Magnis Resources Limited**

+61 (0)2 8397 9888

For personal use only