

# Magnis Resources

L I M I T E D

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## 99.6% TGC GRAPHITE PRODUCT WITHOUT CHEMICAL PURIFICATION

- ❑ **Product grades of up to 99.6% TGC achieved from milling and flotation testwork without chemical or thermal purification**
- ❑ **Jumbo (+300 microns) and Large Flake (+180 microns) flotation products at 99.4% TGC without chemical or thermal purification demonstrate excellent expansion performance**
- ❑ **Qualification work for performance of Nachu graphite in lithium-ion batteries underway**

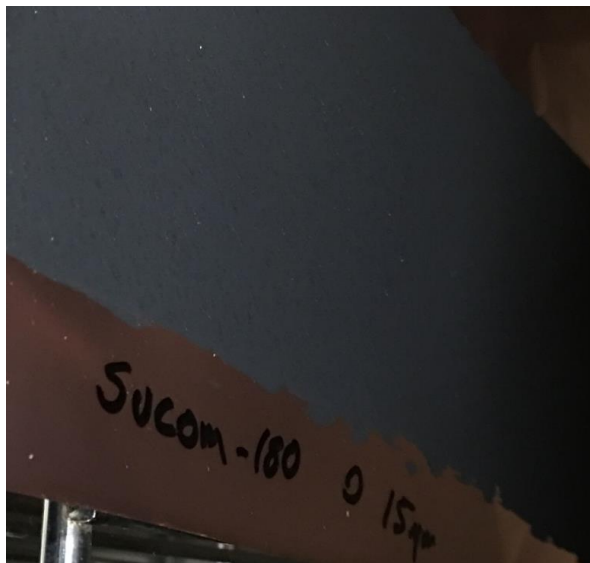
Magnis Resources Limited (ASX: MNS) is pleased to announce that it has made significant progress in further increasing the purity of concentrate produced from its Nachu Graphite Project (Nachu) without the use of any form of chemical or thermal purification.

Recent metallurgical testing has centered on taking advantage of the graphite quality from Nachu to generate high purity products from low cost milling and flotation processing. Premium products exceeding 99% TGC are now being produced using the process developed for the mine processing plant. The absence of any requirements for chemical or thermal purification in generating high purity products of up to 99.6% TGC will ensure concentrates from Nachu will have a significant marketing advantage with cost savings as against synthetic graphite, natural graphite and potential graphite producers. There are also inherent environmental advantages obviating the need to use and dispose of environmentally harmful chemicals.

The natural flake graphite market is currently experiencing phenomenal growth due to the increasing demand for lithium-ion batteries for electric vehicles and stationary energy storage generated from renewable energy. Magnis is now undertaking qualification work for determining the performance of Nachu graphite for use as anode material in these batteries. There are promising early indications that Magnis can competitively produce anode graphite material in fewer processing steps than is current practice.

CEO Dr Frank Houllis commented: "Today's announcement further highlights the quality of the graphite found at Nachu. With the growth being experienced in the lithium-ion battery market coupled with our unique results, all bodes well for the future of Nachu."

The high purity products produced without chemical or thermal purification have been sent to numerous potential end users for evaluation. This included the delivery of Jumbo (+300 microns) and Large (+180 microns) graphite samples at 99.4% TGC without chemical purification that were tested for their expansion performance against chemically purified equivalents (reference samples). The reported expansion weight of the Jumbo flake product at 3 g/L was comparable to reference samples, whilst the 4.8 g/L achieved by the Large flake product was significantly better than the reference samples. These products combined with their low halide concentration will demand premium pricing and estimated revenues for these products are consistent with the assumptions used in the Nachu PFS. The market for expanded graphite is predicted to experience significant growth in coming years.



**Figure 1 - Lithium-ion battery anode made with graphite from Nachu**

Product development and marketing is occurring concurrently with final process validation for future operations. Locked cycle testing with recovery and recycle of water at each stage has established no detrimental impact to the process in terms of key performance indicators, including recovery and concentrate grade. Such testing is an important item in the current BFS for validating the consistency of the selected metallurgical process.

Dr Frank Houllis  
Chief Executive Officer  
**Magnis Resources Limited**  
+61 (0)2 8397 9888