

ASX ANNOUNCEMENT ASX: GPX

7 December 2016

## Basic flotation achieves 99.4% purity for Chilalo graphite concentrate

Graphex Mining Limited (ASX: GPX) is pleased to advise that basic flotation testwork on Chilalo graphite has achieved concentrate grades up to 99.4% total graphitic carbon (TGC). The testwork was designed to confirm that Chilalo is capable of producing high purity concentrates through basic flotation.

The results provide additional flexibility and optionality for the Chilalo Project in Tanzania, however Graphex's core focus continues to be on the exceptional coarse flake size and expandability characteristics of its Chilalo graphite.

Graphex's market strategy is to supply the large Chinese market with those graphite products that are in short supply, rather than competing with established Chinese spherical graphite producers who source graphite predominantly from within China. Whilst higher purity graphite concentrate can reduce purification costs required for spherical graphite, it should be noted that the pursuit of higher concentrate grades inevitably impacts the flake size distribution. Graphex also believes there is a significant level of operational risk in achieving a 99% TGC product at scale.

As such, the Company remains committed to producing a coarse flake product with excellent expansion characteristics, a product which has already been confirmed as highly desirable by its Project Partners.

Graphex Managing Director, Phil Hoskins, commented, "We are pleased with these results and the optionality it provides in relation to the markets that Chilalo graphite can access.

"Nonetheless, we remain market focused and the consistent and strong message we have received from potential buyers is that preservation of flake size is critically important and it is the flake size distribution and the expandability of our product that makes it desirable. This was confirmed in September (ASX announcement 20 September 2016), when our Project Partners confirmed that graphite concentrate from Chilalo met their required specifications for offtake. There is no need for us to sacrifice flake size for higher grade, given we have a premium product that is in demand by end users."

The testwork was carried out by independent process engineering consultancy, BatteryLimits Pty Ltd, and applied basic flotation to low-grade ore from Graphex's Chilalo Project. The testwork program consistently produced concentrate grades in excess of 99% TGC, demonstrating that Chilalo graphite is capable of producing a higher purity product than shown in the project's pre-feasibility study.

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PHIL HOSKINS
Managing Director

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## **About Graphex**

Graphex Mining Limited is an Australian exploration and development company, dedicated to advancing the world class Chilalo Graphite Project, located in south-east Tanzania. Chilalo is host to a high-grade mineral resource and has demonstrated an ability to produce a premium graphite concentrate with a substantial portion of large and jumbo flake material. Chilalo graphite possesses outstanding expandability characteristics, making it ideally suited to the rapidly growing expandable graphite market.

Graphex's current focus of effort is on securing offtake and financing agreements for the development of Chilalo. In accordance with an existing MOU, Graphex is working closely with CN Docking Joint Investment & Development Co. Ltd, a subsidiary of China National Building Materials and China Gold Group Investment Co. Ltd. on the negotiation of such agreements.

Graphex has an experienced board and management team with specific skills and extensive experience in African based project development, exploration, mining and processing. Tanzania is a stable democracy, with a globally competitive tax and regulatory regime. The Company has a long and well-established presence in Tanzania.

For more information, visit www.graphexmining.com.au.