

20 June 2017

BULK SAMPLE TESTWORK IMPROVES GRADE AND FLAKE SIZE

Graphex Mining Limited (ASX: GPX) is pleased to announce that recently completed metallurgical testwork has shown improved results for both the concentrate grade and the flake size distribution of its Chilalo graphite:

- Chilalo can produce a graphite concentrate with an average grade of 98.1% total graphitic carbon (TGC) – a significant improvement on previous testwork;
- Grades in excess of 99% TGC were found in flake sizes coarser than +80 mesh;
- A near doubling in the percentage of +35 mesh material; and
- A significant reduction in the proportion of -100 mesh material.

The table below shows the recent results in comparison to the previously reported specifications for Chilalo product. It is important to note however that the previously reported specifications in the table below were prior to substantial metallurgical testwork undertaken by CN Docking Joint Investment & Development Co. Ltd ('CN Docking') as part of their due diligence.

Flake Size	Microns	Mesh	Previous Mass Distribution (%)	June 2017 Mass Distribution (%)	Previous Grade (TGC %)	June 2017 Grade (TGC %)
Super Jumbo	> 500	35	1.9	3.7	95.9	98.7
Jumbo	300 – 500	50	24.0	18.3	95.6	99.3
Large	180 – 300	80	22.5	27.0	93.7	98.7
Medium	150 – 180	100	6.0	11.6	93.9	97.4
Small	75 – 150	200	20.6	22.3	94.9	98.1
Fines	<75	-200	25.0	17.1	90.0	96.2
Total			100.0	100.0	93.5	98.1

The testwork was carried out by SGS Lakefield in Canada on a 7 tonne composite sample of oxide and fresh material extracted from a series of trenches and test pits. The purpose of the testwork program was to generate marketing samples for distribution to potential customers in China. As the Company's negotiations with CN Docking have advanced, the parties identified a significant number of end users interested in purchasing Chilalo product for the growing expandable graphite market. Sample material is being dispatched to such end users.

CN Docking leads a Chinese investment syndicate that recently agreed key terms for the joint venture, offtake and prospective financing for the Chilalo Graphite Project (see ASX announcement 24 May 2017).

Managing Director, Phil Hoskins, commented, *“We always believed that there was scope for improved metallurgical outcomes with further testwork and are pleased that these results have delivered such improvement. Together with an 80% increase in the Chilalo Mineral Resource announced in February 2017¹, these results are expected to improve the already attractive economics of our Chilalo Project.*

“We continue to be encouraged by the interest in our graphite from Chinese end users and the dispatch of the concentrate produced by SGS Lakefield will only support our marketing efforts.”

These results follow independent testwork performed by Suzhou Design and Research Institute for Non-Metallic Minerals (**‘Suzhou’**) as part of the feasibility study that was commissioned by CN Docking. Testwork previously conducted by BatteryLimits Pty Ltd also confirmed the marketability of Chilalo graphite. In addition, testwork carried out by Suzhou and end users in China have found that Chilalo graphite has exceptional expandability.

Basket price implications

Whilst the general principle is that coarser flake and higher purity results in higher prices, pricing of graphite concentrate is far more complex than applying those two simple parameters. The Company understands the market’s desire to see revised independent guidance on current market pricing for Chilalo product however cannot do so until it has assessed the testwork and feasibility study completed by Suzhou.

Chilalo’s graphite has however consistently demonstrated exceptional expandability characteristics and pricing for this type of graphite commands a premium compared to similar sized flake graphite sold into traditional industrial markets such as refractories and even to spherical graphite producers for the lithium-ion battery sector.

Recent supply side developments, including a slowdown in Madagascar graphite supply and mine closures in the Shandong Province, have increased supply pressure on coarse flake graphite for the expandable graphite market in China and are considered by the Company to be positive for the price of Chilalo graphite.



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1. Graphex confirms that it is not aware of any new information or data that materially affects the information included in the announcement of the updated Chilalo Mineral Resource estimate on 2 February 2017 and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

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 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.

