Triton Minerals Ltd. Market Leading Flotation Results Ancuabe Project

18.05.2015 | ABN Newswire

Perth, Australia (ABN Newswire) - Triton Minerals Ltd. (ASX:TON) (Triton or Company) is pleased to confirm receipt of the latest assays and flake size distribution results for the Ancuabe project.

Triton Minerals' Managing Director & CEO Brad Boyle said: "These latest outcomes reaffirm the previous results that the Ancuabe project contains world-leading graphite grades and flake distributions.

Triton is extremely encouraged by these outstanding metallurgical and flotation results as it appears the flake distribution are up there with the best, if not the best in the world, based of published results.

As previously stated these results support the concurrent advancement of the Ancuabe project and we are looking forward to undertaking the upcoming drilling program at Ancuabe. These quite extraordinary results bode well for Triton establishing a new global benchmark through TMG for the highest quality graphite products.

Further, Ancuabe may allow Triton the ability to provide greater flexibility in the range of TMG products, for a wide range of clients, this would place Triton in a unique and superior position in comparison to its peers."

FLOTATION RESULTS RECOVERS JUMBO GRAPHITE FLAKES

Triton is pleased to announce that the latest metallurgical test work program from the Ancuabe Graphite Project in Mozambique, undertaken at the Mintek Laboratories in Johannesburg, continues to produce encouraging results. The material used for this test work was derived from a representative 100kg composited reconnaissance sample of outcropping graphite mineralisation averaging 14%TGC.

The results confirm the high value potential of the Ancuabe project, with high graphite grades of up to 24%TGC obtained in certain coarse size fractions and the majority of the graphite flake sizes contained within the jumbo and super jumbo flake range. Graphite concentrate produced in this flake size range can attract sales prices in excess of US$2,000 per tonne.

The objectives of the testing was to achieve a graphite grade of >90% while maintaining maximum flake size, refer to Figure 1 in link below.

As previous announced by Triton on 29 April 2015, the preliminary metallurgical tests confirmed grades of up to 98.7% TGC, after only 4 cleaner stages after a single bead mill regrind has very positive implications for potential downstream economics of processing the Ancuabe graphite ore.

The latest flotation results continue to demonstrate the strong presence and recovery of jumbo graphite flakes, and including graphite flakes in excess of 3mm being identified during the flotation process.

The latest Mintek flotation tests continue to confirm the outstanding graphite flake size distribution, with results of 92.1% of the graphitic flakes in the samples were larger than 150um.

The results show only a small portion, less than 8%, of the sample is smaller than 150um, showing the superior quality of the Ancuabe graphite flake distribution. This means that Triton could establish a new benchmark in graphite quality and thus obtain a premium sale price for the graphitic material.

These results support Triton's views that Ancuabe may allow the Company greater flexibility in the range of TMG products, for a wide range of clients, thus placing Triton in an extremely unique and superior position in comparison to its peers.

Triton has completed a series of flotation tests on the Ancuabe graphitic material with the aim of refining the graphite flake recovery and flake preservation processes.

Triton notes when referring to flotation process outlined in Figure 1 below, that at the 3rd cleaner stage of the +425um process 99.2% of the graphite material was above 150um. Such results give Triton potential for

optionality in the manner in which various coarse flake fractions are either directly marketed or customised within the TMG product range.

These results give a strong indication that the large and jumbo flakes can be readily separated and recovered during the process, providing Triton the option to selectively target particular graphite flake sizes, which is likely to have positive economic implications when processing the Ancuabe graphite material.

The confirmation of the very large size fractions of high graphite grade recovered from flotation is consistent with the mineralogical observations and is considered an extremely positive result for Triton.

The very high graphite grades were obtained through the standard methods of crushing, grinding, rougher and cleaner flotation, without the need to complete a regrind of the graphite concentrate and demonstrates how readily the graphite flakes can be separated during the flotation process, which are strong indicators of the high quality nature of the Ancuabe project.

The reduced processing requirements during the graphite flotation will likely have a positive impact for Triton reducing the time and energy needed to complete the process.

Ongoing optimisation of the metallurgical process is expected to further enhance the quality of the final product concentrate and reduce production costs. The Company is also reviewing options to see if the graphite concentrate can be further upgraded using supplementary treatments.

Triton considers these updated results to be very encouraging and these flotation tests confirm the majority of the graphite can be liberated cleanly from the surrounding gangue material during the initial crushing, without the need for additional processing. The Company is optimistic of further encouraging results with the completion of additional metallurgical test work.

BEST FLAKE DISTRIBUTION IN THE GRAPHITE SECTOR

By world standards, Triton's Ancuabe material compares favorably when benchmarked against various other graphite deposits. Figure 6, shows a graphical representation of the main flake size categories and the characteristic flake distribution for each deposit within these categories.

Most significantly, is the dominant proportion of recovered large flakes sizes at the Ancuabe project, with over 92% at >100 mesh (150um).

Triton considers that these metallurgical results confirm that Ancuabe has the potential to become a market leading graphite project. Analysis of publicly released information from peer graphite companies shows that the Ancuabe graphite has the best flake size distribution in the world and the largest majority of jumbo and super jumbo graphite flakes, with 92.1% of the graphite flakes are than larger than 150um (+80 mesh) and 84.4% larger than 212um.

These outstanding results were obtained through a minimal series of crushing, grinding, rougher and cleaner flotation, without the need to complete a regrind of the graphite concentrate. The reduced processing requirements during the graphite flotation will likely have a positive impact for Triton reducing the time and energy needed to complete the process. A yield, or mass pull, of only 15.4% essentially means that less material needs to be processed to produce a specific amount of concentrate.

Ongoing optimisation of the metallurgical process is expected to further enhance the quality of the final product concentrate. The Company is conducting further tests to explore options to reduce energy requirements in the milling circuit, which could further reduce future operating costs.

CONCLUSIONS

The latest metallurgical results from Ancuabe confirms the very high quality nature of the Ancuabe graphite project and signify positive implications for potential downstream economics.

Should the upcoming drilling program help Triton to demonstrate economic quantities of large and jumbo flake graphite at Ancuabe, it could complement the TMG products range and provide the Company with the potential to produce large volumes of high grade (high value) graphite in the full range of flake sizes, thereby accommodating a wider range of end-user requirements.

To view all figures and tables, please visit:
http://media.abnnewswire.net/media/en/docs/ASX-TON-719758.pdf

About Triton Minerals Limited:

Triton Minerals Ltd. (ASX:TON) is an ASX listed, responsible mineral explorer and resource management company headquartered in Perth, Australia.

Led by a highly experienced management team, Triton Minerals' vision is to grow shareholder's value through discovery or development of base metal, gold and other precious metal deposits.

Triton has made excellent progress with its three Graphite projects located in the Cabo Delgado Province in Mozambique, with the program successfully identifying a number of graphitic exposures.

It is the Company's belief that the Mozambique, Balama North Project could host multiple and very substantial world class graphite deposits.

Contact:

Triton Minerals Ltd.
Brad Boyle
T: +61-8-6489-2555
F: +61-8-9388-1252
www.tritonmineralsltd.com.au