

#### **ASX ANNOUNCEMENT**

By e-lodgement **16 November 2017** 

# Testwork confirms premium graphite product at Bunyu North

- Excellent results returned from Bunyu North product samples, including C content 99.6% and O content 0.08% with no impurities found – a highly ordered, defect-free material
- Testwork conducted by US based off-take partner Nano Graphene (NGI) renowned graphene expert confirms the quality across the entire Bunyu Project area
- Bunyu North is the focus for Stage 1 and Stage 2 development
- Bunyu graphite continues to be validated as a premium quality product across a range of markets by well-credentialed offtake partners NGI and CNBMGM

Volt Resources Limited (ASX: VRC) ("Volt" or "the Company") is pleased to advise that recent testwork undertaken on graphite product samples from the Company's flagship Bunyu Graphite Project has further confirmed the premium quality of the products derived from the Project's graphite.

Importantly, the purified graphite and graphene produced from Bunyu product samples by Volt's North American offtake customer NanoGraphene Inc. ("NGI") is of excellent quality and high purity.

NGI is using very clean and environmentally friendly processing technology for their graphene production. Of note the purified graphite and graphene was produced using physical processes with the addition of water only and without the use of damaging acids.

As previously advised (ASX Announcement 5 October 2017), initial test work undertaken by NGI confirmed that the Bunyu product is among the highest quality graphite flakes NGI had tested to date and is eminently suited to graphene production.

Graphene is a one-atom-thick sheet of carbon atoms arranged in a honeycomb-like pattern. Graphene is considered to be the world's thinnest, strongest and most conductive material - to both electricity and heat. Top quality graphene has numerous applications across a number of industrial fields including electricity, conductivity, energy generation, batteries and sensors.

Testwork completed by NGI had previously confirmed the high quality nature of product samples from Volt's Bunyu South deposit – with the most recent testwork conducted using product samples from the Bunyu North deposit, which will be the focus of the planned Stage 1 near-term development.

NGI Head of Research and Development Dr Jay Mondal, who is a highly-credentialed expert in the graphene sector, confirmed after elemental analysis was conducted on the samples using ultra high vacuum XRF, the samples returned C content 99.6% and O content 0.08%, with no impurity found. In addition, the properties exhibited by Bunyu graphite were excellent (see Figure 1 below).

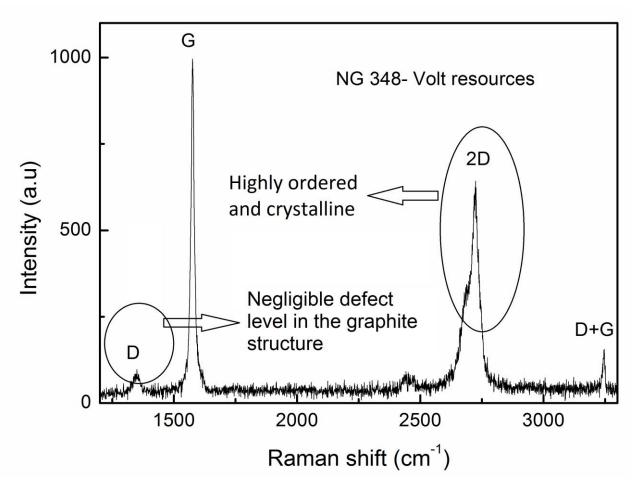


Figure 1: Raman Spectra results outlining the quality of graphene from Bunyu North product samples.

The results confirmed the product quality at Bunyu and follows the positive feedback received from Chinese partner China National Building Materials General Machinery ("CNBMGM") in October (ASX Announcement 5 October 2017).

It should be noted that NGI is in the process of securing supply agreements with a number of recogniseable end-users including a major semi-conductor producer and an emerging car manufacturer, both of which will utilise Volt's Bunyu graphite product.

## **Volt's Chief Executive Officer, Trevor Matthews commented:**

"We are pleased to have received these results, which is further validation of the premium quality of our Bunyu graphite products and this positive feedback will strengthen ties with our existing

offtake partners across the spectrum of graphite applications, including the high growth segments of expandable and spherical graphite, as well as graphene.

"Importantly, the initial testwork conducted by NGI earlier this year established the quality of the Bunyu South project area, but now that quality has also been replicated at Bunyu North which is a very significant step forward for the proposed Stage 1 development of the project in the near-term.

"Volt is also actively engaged in considering a number of funding options for the Stage 1 development of Bunyu and will provide shareholders with further updates on progress in due course."

### About NanoGraphene Inc.

NGI's Brooklyn-based plant has been commissioned and is now fully operational. Graphene production has commenced and will be steadlily ramped up over coming months.

Volt signed a binding offtake agreement with NGI in March 2017 for a minimum of 5,000 tonnes of flake graphite concentrate over 5 years commencing Q1 2018.

-ENDS-

For and on behalf of Volt Resources Limited

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#### **About Volt Resources Limited**

Volt Resources Limited is a graphite exploration company listed on the Australian Stock Exchange under the ASX code: VRC. Volt Resources is focused on the exploration and development of its existing wholly-owned Bunyu Graphite Project in Tanzania. As of December 2016, the Bunyu Project is the largest JORC Mineral Resource deposit in Tanzania with 461Mt @ 4.9% TGC (comprising 20Mt Measured Mineral Resources @ 5.3% TGC, 155Mt Indicated Mineral



<sup>&</sup>lt;sup>1</sup> Refer to Volt's ASX announcement titled "Pre-feasibility Study Completed" dated 15 December 2016. The Company confirms that it is not aware of any new information or data that materially affects the information included in this document and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.