

#### **ASX ANNOUNCEMENT**

By e-lodgement 22 June 2023

# **Volt Receives Order for Natural Graphite Anode Material Following Excellent Test Performance**

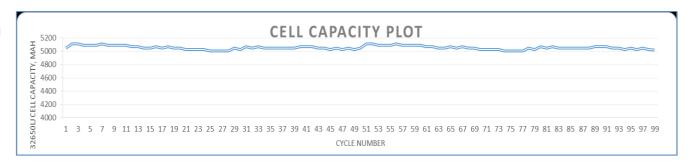
## **Highlights**

- A North America-based technology partner successfully produced Natural Graphite Anode (NGA) material using Volt's natural flake graphite
- The NGA was incorporated in a 32650-format lithium ion battery and tested for cycle life, one of the key metrics for batteries in electric vehicle applications
- Results of test were highly encouraging and showed long cycle life, well in excess of typical industry target.
- Following the test results, Volt has received a sample order for NGA material received from a North American customer

Graphite producer and natural graphite anode developer Volt Resources Limited (ASX: VRC) ("Volt" or "the Company") is pleased to announce the progress in development of its graphite anode business.

Volt's natural graphite anode has undergone industry testing to assess how well it meets market requirements. Volt's flake graphite was purified to greater than 99.95% purity, spherodized, coated and then incorporated into multiple 32650 lithium-ion cylindrical batteries (a popular size and format). Except for Volt NGA, other components of the 32650 batteries of 5 Ah capacity were commercial products.

The battery was cycled between 4.25 to 2.50 volt to evaluate its cycle life. Cycle life data obtained over 100 cycles are shown below. Extrapolation of these data suggest that one can obtain 1,331 cycle life (number of cycles needed to get 20% degradation of capacity) with Volt NGA. This exceeds the typical electric vehicle target of 1,000 cycles. We plan to continue the product optimization and cycle life studies.



Cycle Life of Volt Natural Graphite Anode in 32650 Lithium Ion Battery

Following the results of the testing, a qualification battery-ready lot of Volt's NGA material was ordered by a North American LIB producer. We plan to deliver the sample to the customer in June 2023.

Graphite, a critical mineral in both US and Europe, is one of the largest components by weight of lithium-ion batteries (LIB), with a typical electric vehicle battery containing 60-70 kg of graphite. Graphite demand in North America for LIBs is expected to reach 800-1,000 Ktpa by 2030, which offers a tremendous growth opportunity for integrated NGA producers such as Volt and is driving an increased customer interest in testing our NGA.

Commenting on the progress, Volt Resources Limited's Chief Executive Officer, Prashant Chintawar, said:

"We are excited about the progress in our downstream business and execution of our integrated graphite anode production strategy. We believe that this strategy offers our customers Inflation Reduction Act compliant product that meets performance criteria and supply chain security especially considering demand vs supply gap".

-ENDS-

This announcement was authorised for release by the CEO of Volt Resources Ltd.

## For further information please contact

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## **About Volt Resources Limited**

Volt Resources Limited ("Volt") is critical minerals and battery material company listed on the Australian Stock Exchange under the ASX code VRC. We are a graphite producer and an emerging natural graphite anode (a key component of lithium-ion batteries) producer. Volt has a 70% interest in the Zavalievsky Graphite (ZG) business in Ukraine. The ZG mine and processing facilities have been in operation since 1934 and are near key markets with significant developments in lithium-ion battery production. ZG benefits from an existing customer base and graphite product supply chains based on excellent transport infrastructure covering road, rail, river, and sea freight combined with reliable grid power, ample potable ground water supply and good communications1<sup>[1]</sup>.

Volt acquired three licence applications that are prospective for lithium-borate mineralisation. The licence applications are in respect to a total area of 291km², located in Serbia and are west and south-west of the Serbian capital, Belgrade<sup>[2]</sup>.

Volt is progressing the development of its large wholly owned Bunyu Graphite Project in Tanzania. The Bunyu Graphite Project is ideally located near to critical infrastructure with sealed roads running through the project area and ready access to the deep-water port of Mtwara 140km from the Project. In 2018, Volt reported the completion of the Feasibility Study ("FS") into the Stage 1 development of the Bunyu Graphite Project. The Stage 1 development is based on a mining and processing plant annual throughput rate of 400,000 tonnes of ore to produce on average 23,700tpa of graphite products<sup>[3]</sup>. A key objective of the Stage 1 development is to establish infrastructure and market position in support of the development of the significantly larger Stage 2 expansion project at Bunyu.

<sup>&</sup>lt;sup>[1]</sup> Refer to Volt's ASX announcements titled "Volt to Acquire European Graphite Business following Completion of Due Diligence" dated 14 May 2021 and "Completion of the ZG Group Transaction Following Execution of New Convertible Securities Facility" dated 26 July 2021.

<sup>&</sup>lt;sup>[2]</sup> Refer to Volt's ASX announcement titled "Strategic European Lithium Acquisition – Jadar North" dated 18 November 2021.
<sup>[3]</sup> Refer to Volt's ASX announcement titled "Positive Stage 1 Feasibility Study Bunyu Graphite Project" dated 31 July 2018. 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.