



**ASX ANNOUNCEMENT**

By e-lodgement

31 March 2020

## **Excellent Initial Testwork Results Highlight Significant Potential to Improve Bunyu Graphite Economics**

**Key points include:**

- Scope to significantly improve sales revenue from Bunyu graphite products – initial testwork shows significant increase in the percentage of high priced (+30# and +50#) graphite flake and a reduction mainly in the lower priced fine graphite flake
- Other key results from the first phase of the testwork program include:
  - Production of a 99.95% thermally purified graphite product suitable for a number of end uses including battery anode material feedstock
  - ICP analysis which identified very low Boron levels in the thermally purified graphite which makes the Bunyu product suitable for nuclear industry components and as a feedstock in the manufacture of synthetic diamonds
  - Excellent preliminary BET, Scott volume and tap density measures which point to the Bunyu graphite product being a good quality feedstock for Li-ion battery cell anode material
- Volt continues to advance its Mauritian Note Offer to raise up to US\$30M and alternative finance sources to fund Stage 1 development of Bunyu Graphite Project

Tanzanian-focused flake graphite developer **Volt Resources Limited (ASX: VRC)** ("**Volt**" or "**the Company**") is pleased provide the excellent results from the first stage of a testwork program on graphite ore from the Bunyu Graphite Project in Tanzania. The testwork program was undertaken by highly respected technical group, American Energy Technologies Company ("**AETC**") which is headquartered and operates research and laboratory facilities in Chicago, Illinois.

**AETC testwork program summary**

In January 2020 Volt commissioned AETC to undertake a testwork program using a representative sample of ore from drilling completed as part of the Stage 1 Feasibility Study<sup>1</sup> at the Company's Bunyu Graphite Project. The scope was to prepare a graphite product from the Bunyu ore sample and to analyse the product for certain physical, chemical and processing properties to provide information for its suitability for several graphite markets including as anode feedstock for Li-ion cells.

Volt's Bunyu Graphite Stage 1 Project will produce on average 23,700tpa of natural flake graphite product at up to 96% TGC. Product size, grade distribution and average sales price reported in the Stage 1 Feasibility Study is shown in the following table.

### Graphite product size, grade distribution and average sales price

Size (µm)	Size (#)	% Distribution	% TGC	Price US\$/tonne
+500	+32	1	95	2,530
+300	+50	11	93	1,990
+180	+80	27	92	1,077
+150	+100	15	92	985
-150	-100	46	96	704
	Total	100		<b>1,195*</b>

\*Weighted average price based on all product sizes

Below is a table with the Stage 1 product size distribution compared with the product distribution from the AETC graphite product from the testwork program.

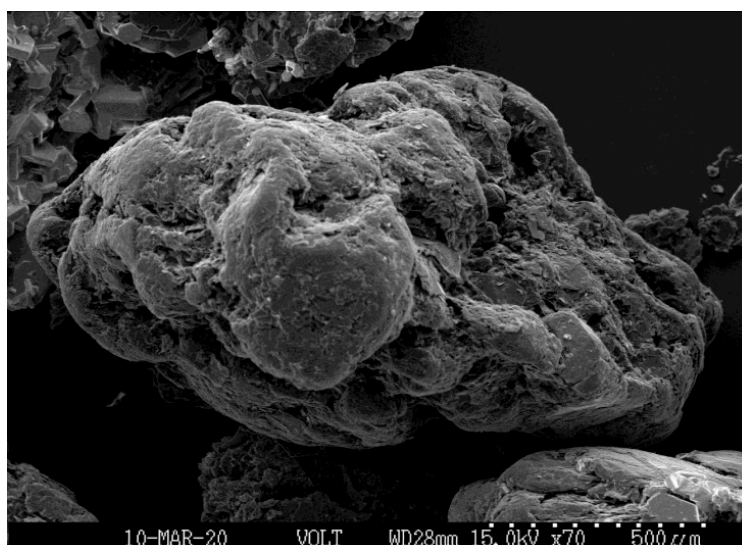
**There is a substantial increase in the percentage of high priced +30# and +50# graphite flake with a consequent reduction mainly in the lower priced fine graphite flake. This will have major economic benefits for both the Stage 1 and Stage 2 Bunyu project.**

Size (µm)	Size (#)	% Distribution Stage 1 FS	% Distribution AETC Testwork
+500	+30	1	7
+300	+50	11	32
+180	+80	27	25
+150	+100	15	8
-150	-100	46	28
	Total	100	100

The above initial results require further analysis and testwork. If through further testwork the benefits in flake size distribution continue and there is sufficient time available, the next steps would be to incorporate the changes into the Stage 1 flowsheet design and a change in the processing reagents. The operating and capital cost changes to the current Stage 1 plant are expected to be minimal and more than offset by the substantial increase in sales revenue.

The above results are from the first phase of the AETC program and the Company looks forward to releasing further testwork results as they become available.

Scanning electron microscope image of +30# graphite flake from Bunyu screened product



## Management commentary

Volt's Chief Executive Officer, Trevor Matthews, commented; "We are delighted with these initial testwork results provided by AETC which confirm that Bunyu's flake distribution is suitable for supply to traditional markets and for use in new high demand applications such as battery anode end markets.

"Given these latest results we expect to be able to make significant improvements to the project economics outlined in the Stage 1 Feasibility Study for Bunyu, with further details on these changes to be provided in due course.

"Our Stage 1 funding initiatives continue to advance, even in light of the current COVID-19 crisis which is causing delays in the process, and I look forward to providing updates on our Mauritian Note Offer and other funding sources in due course."

This announcement is authorised for release by Volt's Chief Executive Officer, Trevor Matthews.

**-ENDS-**

*For and on behalf of Volt Resources Limited*

**Trevor Matthews**  
**Chief Executive Officer**

**For further information please contact:**

<b>Trevor Matthews</b> <b>Chief Executive Officer</b> <b>Tel: +61 8 9486 7788</b>	<b>Released through Sam Burns</b> <b>Six Degrees Investor Relations</b> <b>M: +61 400 164 067</b>
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## **About Volt Resources Limited**

Volt Resources Limited ("Volt") is a graphite exploration and development company listed on the Australian Stock Exchange under the ASX code VRC. Volt is currently focused on the exploration and development of its 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 away.

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>1</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.

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<sup>1</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.