

FOR IMMEDIATE RELEASE

## **Volt Carbon Technologies Announces the Synthesis of Diamonds from its Dry Separated Natural Flake Graphite**

August 21, 2024, Calgary, AB, Canada – Volt Carbon Technologies Inc. (“Volt Carbon” or the “Company”) (TSX-V: VCT) (OTCQB: TORVF), is pleased to announce the successful synthesis of diamonds from its dry separated natural flake graphite produced at the Company’s Scarborough, Ontario Facility.

### **Highlights;**

Volt Carbon produced a graphite concentrate blend specifically developed for diamond synthesis. Using the high pressure-high temperature (HPHT) method, this graphite was converted into synthetic diamonds. The specially purified -30+50 mesh natural flake graphite, produced from the Berkwood Deposit (owned by Green Battery Minerals Inc.) (TSX-V: GEM.V), was transformed into near-gemstone-quality crystals ranging from 2 to 5 carats. Figure 1 illustrates the two batches of diamonds produced through this process.

Volt Carbon's dry separation techniques preserved the natural catalyst materials needed for the graphite-to-diamond transformation in the HPHT reaction chamber. The results were on par with competitor graphite materials processed through flotation and chemical separation. A third-party assessment confirmed the effectiveness of Volt Carbon's processed graphite for synthetic diamond production. Furthermore, it was observed that the high graphitic structure and low oxidation characteristics of Volt Carbon's graphite enabled diamond synthesis at temperatures up to 200 degrees Celsius lower than typical commercially available flake graphite concentrate, potentially reducing energy use costs and carbon footprint. Volt Carbon's graphite materials were combined with additional catalyst materials and compressed into diamond seeds before entering the HPHT process. The outcome demonstrated that Volt Carbon's modified flake graphite concentrate has potential for production of high-quality diamond structures ideal for various applications including gemstones, metalworking, lapping compounds, coatings for cutting, drilling, and grinding tools.



Figure 1: Left Batch Diamond Seed 1, Right Batch Diamond Seed 2

Looking ahead, Volt Carbon aims to advance to the next phase of development by synthesizing diamonds for wafer structures in semiconductor and medical applications. This innovative approach highlights the Company's dedication to maximizing the potential of its low-oxidation graphite concentrate—a key benefit of its dry separation process—and to delivering high-value products with tangible carbon offsets across diverse industries.

V-Bond Lee, CEO and President, stated, "In our first attempt, we nearly reached gemstone-quality diamonds. We are excited about this material and will continue to develop our natural flake graphite for both gemstone, industrial, and semiconductor applications. This unique material blend will be available in our online store next month."

### **About Volt Carbon Technologies**

Volt Carbon is a publicly traded carbon science company, with specific interests in energy storage and green energy creation, with holdings in mining claims in the provinces of Ontario, Quebec and British Columbia in Canada. For the latest information on Volt Carbon's properties and news please refer to the website [www.voltcarbontech.com](http://www.voltcarbontech.com).

On behalf of the Board of Directors,

### **Volt Carbon Technologies Inc.**

V-Bond Lee, P. Eng.  
CEO, President, Chairman of the Board and Director

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*FORWARD LOOKING STATEMENTS: This press release contains forward-looking statements, within the meaning of applicable securities legislation, concerning Volt Carbon's business and affairs. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "intends" "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Such forward-looking statements include those with respect to: (i) successful synthesis of diamonds from its dry separated natural flake graphite produced at the Company's Scarborough, Ontario Facility; (ii) Volt Carbon produced a blend of graphite concentrate specifically processed for diamond synthesis; (iii) the highly structured and low oxidation characteristics of Volt Carbon's graphite enabled diamond synthesis at temperatures 200 degrees Celsius lower than those required for typical commercially available flake graphite concentrate, potentially reducing energy use and carbon footprint; (iv) The outcome demonstrated that Volt Carbon's modified flake graphite concentrate has potential for high-quality diamond structures ideal for various metalworking applications, such as lapping compounds and coatings for cutting, drilling, and grinding tools; (v) Volt Carbon aims to advance to the next phase of development by growing diamonds for wafer structures for semiconductor and medical applications; (vi) Company's dedication to maximizing the potential of its low oxidation graphite concentrate and delivering high-value products with tangible carbon offsets across diverse industries*

*Statements of past performance should not be construed as an indication of future performance. Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors, including those discussed above, could cause actual results to differ materially from the results discussed in the forward-looking statements. Any such forward-looking statements are expressly qualified in their entirety by this cautionary statement.*

*All of the forward-looking statements made in this press release are qualified by these cautionary statements. Readers are cautioned not to place undue reliance on such forward-looking statements. Forward-looking information*

*is provided as of the date of this press release, and Volt Carbon assumes no obligation to update or revise them to reflect new events or circumstances, except as may be required under applicable securities legislation.*