

# Green Battery and Volt Carbon manufacture initial Lithium Ion Batteries with graphite anodes, that require no acid purification, flotation, spheroidization, or carbon coating.

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## **Highlights**

*Coin cells were fabricated by Volt Carbon using a graphite anode produced from Green Battery's Berkwood mineral deposit Zone 6*

*The anode material was fabricated from entirely dry processing of the mineral samples provided to Volt leading to an enhanced ESG score and a significantly reduced carbon foot print.*

*The test data from Volt affirms the high quality and integrity of Green Batteries' graphite mineralogy for LIBs.*

*The anode material was created by omitting several traditional costly processes*

[Green Battery Minerals Inc.](#) ("Green" or the "Company") (TSX-V:GEM) (FSE:BK2P) (WKN:A2QENP) (OTC:GBMIF) ) and Volt Carbon Technologies Inc. ("VCT" or "Volt Carbon", TSX-V: VCT, OTCQB: TORVF, BERLIN: WNF) are pleased to announce the test results of their LIB.

Volt Carbon Technologies Inc. is pleased to announce the commencement of battery anode development using graphite refined from Green Battery Minerals Berkwood property, accompanied by the release of initial test results affirming the high-grade graphite's suitability for lithium-ion batteries.

Utilizing the super jumbo flake graphite concentrate derived from rock samples provided by Green Battery to Volt in July 2023, Volt's Scarborough facility successfully executed a dry separation process, yielding a record-high total carbon content of 98.4%, as announced on August 15, 2023. Under the guidance of Dr. Aiping Yu, Volt's newest Board Member and University of Waterloo Professor, the graphite underwent a straightforward mechanical reduction process to achieve battery-grade anode sizes without the need for additional purification treatment.

This process used no harmful chemicals and did not go through two very costly and energy consuming processes of sphericalizing and coating. These two steps in the future may be added and tested which may improve the battery performance.

Dr. Yu's team extensively characterized the graphite using techniques such as x-ray diffraction (XRD), Inductively Coupled Plasma Mass Spectrometry (ICP-MS), and scanning electron microscopes (SEM), confirming its suitability for further battery anode development. This involved coin cell fabrication through a straightforward micronization process applied to the flake graphite concentrate.

Subsequently, coin cells were manufactured alongside benchmarked samples of commercially available graphite anodes and are currently undergoing cycle testing at both Solid Ultrabattery's and the University of Waterloo's labs. Initial coin cell testing revealed a capacity of 344mAh/g, achieved without any chemical processes and under entirely dry handling conditions and without the use of spheroidization and carbon coating. This highlights the efficacy of the mechanical reduction process and underscores the promising potential of sustainable dry-separated graphite for battery applications. With further process adjustments, the company aims to achieve results exceeding 360 mAh/g in the upcoming quarter.

The XRD and Raman shift plots below show the similarities of Green Batteries natural graphite structure against commercial battery grade anodes. The integrity of the graphite structure is evaluated by the ID/IG ratio of the samples. All of Green Batterys samples showed approximately the same ratio as the commercial anode.

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These outcomes mark the initial stride in optimizing Green Batteries graphite for lithium-ion batteries, reinforcing Volt Carbon's commitment to advancing battery technologies, as explicitly stated in our July 24, 2023, press release. Volt Carbon remains dedicated to refining dry processes for converting Green Batteries materials into battery-grade anodes, maximizing value with our mineral processing agreement with Green Battery while driving significant technical progress in the North American battery materials supply chain.

"The constraints on graphite trade in North America have spurred our determination to innovate and develop resources sustainably and cost-effectively within the region. We have determined through testing that high-grade graphite mineral deposits provides significant advantages, making the processing to graphite concentrate and anodes much simpler compared to low-grade deposits. We're on the brink of a great opportunity, and I'm eagerly looking forward to the upcoming results from our highly qualified technical teams" - V-Bond Lee, CEO of Volt Carbon Technologies.

Tom Yingling President and CEO States: "We are very impressed with Volts air separation process. The air separation process maintains the integrity of the large flake which has good Crystallinity and capacity for LIB."

In July Green Battery gave Volt 27 tonnes of graphitic material from its Berkwood Property. Volt has subsequently crushed, air separated the graphite from that material, and created lithium ion batteries with it.

#### About the Berkwood Graphite Project

The Berkwood Graphite Project is located within the jurisdiction of Quebec, in the Manicouagan Regional County Municipality, three hours driving time from the city of Baie-Comeau. Easy access is provided via a major secondary road and numerous tertiary and forest roads that traverse the property.

The Zone 1 graphite resource lies 8 km southwest of Nouveau Monde's deposit, which has a \$3.5 billion NPV on it. The Company believes its Zone 1 resource, and that of Nouveau Monde, share many similar geological characteristics, with Zone 1 being exceptionally high grade and coarse flake size by global standards.

The current mineral resource at the Berkwood Graphite Project includes in-pit constrained resources totaling 1,755,300 tonnes of indicated resources at 17.00 % Cgr and 1,526,400 tonnes in inferred resources at 16.39 % Cgr.

#### In-pit Resource at Lac Gueret South (Berkwood Graphite Project) (rounded numbers)

##### Current Resources (as of June 17th, 2019)

Minerals Resources Category	Tonnage (Mt)	Grade (% Cgr)	Cgr (t)	Cut off
Indicated	1.76	17.0	299,200	6.81%
Inferred	1.53	16.4	250,200	6.81%

The mineral resource estimates above are described in the technical report entitled, NI 43-101 Technical Report Mineral Resource Estimate on the Lac Gueret South Graphite Property, Quebec, Canada. With an Effective date of June 30th, 2019, by Edward Lyons, PGeo., Florent Baril, ing., and Claude Duplessis, ing.

Link to Report:

[https://greenbatteryminerals.com/wp-content/uploads/ReportFINAL\\_compressed.pdf](https://greenbatteryminerals.com/wp-content/uploads/ReportFINAL_compressed.pdf)

QAQC Comments: All samples were collected by typical field methods according to CIM best practices, selected samples were collected by representative rock chips into numbered samples bags. A total of five (5) samples (including 1 blank and 1 standard) were shipped to ALS Canada Ltd. In Val-d'Or. They were prepared (PREP-31a) and analyzed by the lab for carbon (graphite; C-IR18) and for total carbon and total sulphide (ME-IR08). The standard used is an Oreas 723 (5.87 % graphitic carbon). Sample analysis results are not yet available.

The historical data presented in this release is derived from public domain reports, the results have not been verified by the author, no subsequent drilling has been completed to confirm the drilled intersections of graphite from LG-13-04N.

Sources:

1. Roy, I., 2004; Projet Lac Guéret Nord (1339N): Rapport sur les travaux d'exploration 2004 Secteur du Bloc C. SOQUEM INC. et Quinto Technology Inc. <https://gq.mines.gouv.qc.ca/documents/examine/GM61184/GM61184.pdf>
2. Caron, Y., 2013; Propriete du Lac Gueret: Rapport des Forages D'Exploraion, Region La Cote-Nord, Quebec. Mason Graphite Inc. <https://gq.mines.gouv.qc.ca/documents/examine/GM68992/GM68992.pdf>
3. Cassoff, P., Grandillo, A., Piciacchia, L., Fortier, S., Duplessis, C., and Rachidi, M., 2018; NI 43-101 Technical Report Feasibility Study Update - Lac Guéret Graphite Project. Mason Graphite Inc. Effective Date: December 5, 2018. [https://masongraphite.com/wp-content/uploads/2021/06/a53b7c\\_22115be39ccf4d85b9579f359680997c.pdf](https://masongraphite.com/wp-content/uploads/2021/06/a53b7c_22115be39ccf4d85b9579f359680997c.pdf)

About the Company: Green Battery Minerals is managed by a team with over 150 years collectively with a proven track record of not just finding numerous mines but building and operating them too. The Green Battery Mineral management team's most recent success is discovering the Berkwood graphite resource in Northern Quebec. Green Battery Mineral owns this asset 100 percent, and the Company's shareholders will benefit from this asset as the demand for Graphite for electric vehicles increases significantly.

On Behalf of the Board of Directors

Green Battery Minerals Inc.

'Thomas Yingling'

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Disclaimer for Forward-Looking Information:

Certain statements in this document which are not purely historical are forward-looking statements, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Forward looking statements in this news release include that the Company will carry out the drill program described in this news release, conduct the Offering and expend funds on Berkwood Graphite Project exploration. It is important to note that the Company's actual business outcomes and exploration results could differ materially from those in such forward-looking statements. Risks and uncertainties include that further permits may not be granted timely or at all; the mineral claims may prove to be unworthy of further expenditure; there may not be an economic mineral resource; methods we thought would be effective may not prove to be in practice or on our claims; economic, competitive, governmental, environmental and technological factors may affect the Company's operations, markets, products and prices; our specific plans and timing drilling, field work and other plans may change; we may not have access to or be able to develop any minerals because of cost factors, type of terrain, or availability of equipment and technology; and we may also not raise sufficient funds to carry out our plans. Additional risk factors are discussed in the section entitled "Risk Factors" in the Company's Management Discussion and Analysis for its recently completed fiscal period, which is available under Company's SEDAR profile at [www.sedar.com](http://www.sedar.com). No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. These forward-looking statements reflect management's current views and are based on certain expectations, estimates and assumptions, which may prove to be incorrect. Except as required by law, we will not update these forward-looking statement risk factors.

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