VANCOUVER, BRITISH COLUMBIA--(Marketwired - May 20, 2016) - Graphite One Resources Inc. (TSX VENTURE:GPH)(OTCQX:GPHOF) ("Graphite One", "GPH" or the "Company") announced results from initial performance tests on CR2016 coin cells manufactured with the Company's premium grade uncoated spheroidized graphite (U-SPG). Three of the five coin cells evidenced a first discharge capacity that approached natural graphite's theoretical maximum with results deviating by less than 1% and one coin cell result equaled it. Discharge capacity is a measure of a battery's energy storage capability once first charged. The test work is being conducted on the Company's STAX graphite - the acronym used to describe the graphite that shows *naturally occurring* Spheroidal, Thin, Aggregate and eXpanded - structures sourced from the Company's Graphite Creek deposit near Nome, Alaska. There is presently no U.S. production of flake graphite.

- *GPH U-SPG Test Results show First Discharge Capacity Approaching Natural Graphite's Theoretical Maximum Capacity in Three Tests and Equalling it in One.*
- *Results from Repeat Charge/Discharge cycles at C/20 Rate and Continuous cycling at C/3 Rate confirm High Performance, Repeatability and Stability - All Indicators of High-Quality GPH Graphite*
- *Potential Answer to Electric Vehicle (EV) Battery End-Users Quest for High-Power Plus High-Energy*
- *GPH remains on target to complete exploratory grade samples of C-SPG for delivery to potential end-users*

"These results support our material having demonstrated superior first discharge capacity for uncoated graphite," said Anthony Huston, CEO of Graphite One, "while the continuous cycling test shows the potential for our SPG to be used in EV applications. We believe the test results show impressive performance. These properties are inherent to Graphite Creek's flake graphite. It is important to note that the economics of the project have not been established at any level of confidence through the completion of a preliminary economic assessment (PEA), preliminary feasibility study or feasibility study."

To view the chart associated with this press release, please click here.

At present, EV battery manufacturers offset the lower-performance of natural flake graphite with a composite blend using significant amounts of higher-cost synthetic graphite, which typically accounts for 30% or more of anode material. With improvements in natural graphite quality (Tap Density and Scott Volume, for instance), the ratio of natural graphite in anodes is increasing.

"Up to this point, EV battery end-users have had to make a choice between systems that deliver high-power (near 100 kW) and high-energy (tens of kW hours between each charge). Based on these new results and observations made when processing STAX graphite, we will focus our development work on determining whether our STAX-derived SPG can deliver both high-energy and high-power performance," Huston added. "By displacing the need for synthetic graphite, higher-performance natural graphite produced at lower cost could deliver EV battery cost savings, one of the key factors in making EVs more affordable."

Graphite One Coin Cell Test Results

Coin Cell ID	SPG Description	Number of Cycles	First Reversible Discharge Capacity (Ah/kg)[1]	Irreversible Capacity Loss (%)
1203	Milled, spheroidized, uncoated	2	372.0	11.8
1207	Milled, spheroidized, uncoated	2	370.9	6.05
1208	Milled, spheroidized, uncoated	3	370.13	11.1
1209	Spheroidized, uncoated	3	369.1	16.9
1211	Direct spheroidized, uncoated	3	361.0	16.4

[1] - theoretical maximum = 372

Toronto-based, independent industry consultants TRU Group are directing the Company's testwork program with uncoated (U-SPG) and coated spheroidized graphite (C-SPG). The testwork was performed at a United States laboratory recognized for its capabilities in graphite characterization, processing and electrochemical performance (battery) testing.

Results from five coin cells cycled at C/20 are found in the table above. The first discharge capacity of coin cell 1203 equalled the theoretical discharge capacity of natural graphite of 372 Ah/kg. Three other coin cells, 1207, 1208 and 1209 had first discharge capacities that were within 1% of the theoretical maximum while coin cell 1211 had a first discharge capacity that deviated 3% from the theoretical maximum. Discharge capacity is a measure of a battery's energy storage capability once first charged. Graphite One's coin cell tests also demonstrated the ability of the graphite to achieve the same or similar discharge capacity in repeated subsequent charging/discharging cycles. This behaviour was evident in both the highest performing cell (1203) and lowest performing cell (1211) as seen in Graphs 1 and 2. Continuous cycling tests performed at C/3 rate are typical of EV batteries and provide an early indication of the Graphite One SPG stability and potential for use in such applications as seen in Graph 3.

"The test results provide good indicators for the initial line-of-sight development path for the Company's graphite, which is to target high-end, high-growth applications, such as electric vehicle (EV) battery materials." said Huston.

The coin cell test results with U-SPG provide important benchmarks to compare against C-SPG coin cells tests that are currently

being conducted.

John Roumeliotis, TRU Group Vice President and manager of the testwork programs commented: "The STAX graphite is performing robustly and in the manner in which we had predicted during TRU's initial investigation of the Graphite Creek deposit. It was anticipated that the morphology observed in the drill core samples would translate into processing and performance gains over conventional flake graphite."

Typical Chinese natural graphite anodes average a first discharge capacity of approximately 360 Ah/kg, while only the very high end and costliest synthetic graphite anodes average between 360 and 362 Ah/kg. Graphite One's uncoated SPG coin cells display high, at or near theoretical, first discharge capacity which was reproduced in multiple charging and discharging cycles. Short duration (50 hour) continuous cycling of coin cell 1211 at C/3 rate also demonstrated, stable and repeatable charging and discharging behaviour. These results point to a high performance, cyclical charging capabilities - properties which are inherent in the graphite found in the Company's Graphite Creek deposit.

Graph 1: Multi-cycle charge-discharge curves for coin cell 1203 (milled, spheroidized, uncoated graphite) showing first reversible capacity of 372 Ah/kg. Second discharge curve and capacity coincide with first cycle discharge results. To view Graph 1, please click here.

Graph 2: Multi-cycle charge-discharge curves for coin cell 1211 (direct spheroidized, uncoated graphite) showing first reversible capacity of 361 Ah/kg. Second and third discharge curve and capacity approximate first cycle discharge results. To view Graph 2, please click here.

Graph 3: Continuous cycling curve for cycles 16 to 26 for coin cell 1211 cycled at rate of C/3 showing consistent charging and discharging over a 50 hour period. To view Graph 3, please click here.

The graphite used for the coin cell tests was extracted from surface historic mine working samples which were first segregated into three lots by visual inspection. Each lot was then analyzed to determine which of the three corresponded to the mineralogy of the higher graphite grading zone (Zone 1) targeted for initial exploitation as identified in the Company's conceptual study prepared by TRU Group. The graphite sample lot that corresponded to Zone 1 was then characterized to confirm the occurrence of STAX morphology. Once this was confirmed, that sample was processed to extract an impure concentrate, which was subsequently purified to at least 99.98+% fixed carbon. This material was then processed into SPG. As previously reported, high (74%) conversion yield from flake graphite to SPG was achieved at lower energy intensity by direct spheroidization of the purified flake graphite - an achievement attributed to the STAX graphite morphology and properties inherent to the Company's Graphite Creek deposit. As these samples were selected, they may not be representative of the Graphite Creek deposit as a whole and the findings of these preliminary metallurgical results must be confirmed by further test work on drill core samples.

Roumeliotis also stated: "The graphite concentrate extracted from the surface sample used in this exploratory R&D phase conforms to graphite that was similarly extracted and characterized from samples originating from drill core segments that were from Zone 1."

Follow-up testwork will be conducted on graphite concentrate produced from testwork currently underway that is validating the mineral processing flowsheet using drill core segments from Zone 1.

Management of Graphite One and TRU Group will hold a conference call to discuss these results in detail on Thursday May 26, 2016 at 10:00 am PST (1:00pm EST). Conference call-in numbers are (647) 788-4919 (Local or International) and (877) 291-4570 (Operator Assisted Toll-Free).

About Graphite One

Graphite One Resources Inc. (TSX VENTURE:GPH)(OTCQX:GPHOF) is exploring with the intent to develop the Graphite Creek Project, USA's largest known large flake graphite deposit situated on the Seward Peninsula of Alaska about 60 kilometers north of Nome. The deposit has 17.95 million metric tons of indicated resources grading 6.3 percent graphitic carbon and 154.36 metric tons of inferred resources at 5.7 percent graphitic carbon identified. The Graphite Creek Project is progressing from the exploration to the evaluation phase. Work to date has identified a large, high grade and at-surface resource with simple geology and good mineralization continuity. For more information please see www.graphiteoneresources.com.

Mr. David Hembree, C.P. Geol., General Manager Operations for Graphite One and a Qualified Person under NI 43-101, is responsible for and has reviewed and approved the technical content of this press release.

ON BEHALF OF THE BOARD OF DIRECTORS

"Anthony Huston" (*signed*)

For more information on Graphite One Resources Inc. please visit the Company's website, www.GraphiteOneResources.com.

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This release includes certain statements that may be deemed to be forward-looking statements. All statements in this release, other than statements of historical facts, are forward-looking statements. Forward-looking information in this release includes, but is not limited to, statements regarding the actual ability to produce spherical graphite, ultimate further and final results of the test-work, the anticipated progress of both the TRU Group and Graphite One during 2016, the timing and successful completion of the PEA, the industry projections regarding electric vehicles and smart grid power storage devices, the results of the TRU Group's study being accurate regarding the characteristics of the Graphite Creek mineralization, exploration drilling, exploitation activities and events or developments that the Company expects, the sustainability and ultimate environmental effects of spherical graphite, are all forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include the results of the product development test work may not be indicative of the advancement of the project as anticipated, or at all, market prices, exploitation and exploration successes, continuity of mineralization, uncertainties related to the ability to obtain necessary permits, licenses and title and delays due to third party opposition, changes in government policies regarding mining and natural resource exploration and exploitation, and continued availability of capital and financing, and general economic, market or business conditions. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in this press release, and the Company undertakes no obligation to update publicly or revise any forward-looking information, except as required by applicable securities laws. For more information on the Company, investors should review the Company's continuous disclosure filings that are available at www.sedar.com.

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