GRAPHITE ONE INC.

Management's Discussion and Analysis

For the three months ended March 31, 2022 and 2021

Graphite One

The Management's Discussion and Analysis ("MD&A") of the financial position and results of operations for Graphite One Inc. (the "Company" or "Graphite One") (TSX-V: GPH and OTCQX: GPHOF) should be read in conjunction with the condensed interim consolidated financial statements of the Company for the three months ended March 31, 2022 and 2021 ("Financial Statements") and related notes thereto. The Financial Statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") as applicable to interim financial reporting. For further information on the Company, reference should be made to its public filings on SEDAR.

This MD&A is prepared by management and approved by the Board of Directors as of May 26, 2022. The information and discussion provided in this MD&A covers the three months ended March 31, 2022, and where applicable, the subsequent period up to the date of issuance of this MD&A. Unless otherwise noted. All dollar amounts in this MD&A are expressed in United States ("US") dollars. References to "$" or "US$" in this MD&A are to US dollars and references to CA$ are Canadian dollars.

Forward Looking Statements

This MD&A contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of the applicable Canadian securities legislation. All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates and projections as at the date of this MD&A. Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward looking statements.

In this MD&A, forward-looking statements include, but are not limited to:

- release of the pre-feasibility study
- 2022 summer drilling program
- feasibility study
- entering into definitive agreements with Sunrise (Guizhou) New Energy Materials Co. Ltd. and Lab 4 Inc.

These forward-looking statements are based on reasonable assumptions and estimates of management of the Company at the time such statements were made. Actual future results may differ materially as forward-looking.

For a description of material factors that could cause the Company's actual results to differ materially from the forward-looking statements in this MD&A, please see "Mining Risks" and "Business Risks".

Nature of Operations

The Company continues to develop its Graphite One Project (the "Project"), whereby the Company could potentially become an American producer of high-grade anode materials that is integrated with a domestic graphite resource. The Project is proposed as a vertically integrated enterprise to mine, process, and manufacture high grade anode materials primarily for the lithium-ion electric vehicle battery market. As set forth in the Company's PEA, potential graphite mineralization mined from the Company's Graphite Creek Property, is expected to be processed into concentrate at a graphite processing plant. The proposed processing plant would be located on the Graphite Creek Property situated on the Seward Peninsula about 60 kilometers north of Nome, Alaska. Graphite anodes and other value-added graphite products would be manufactured from the concentrate and other materials at the Company's proposed advanced graphite materials manufacturing facility which is expected to be located in Washington State. The Company expects to release its Preliminary Feasibility Study on the Project in the first half of 2022 ("PFS"). The Company intends to make a production decision on the Project once a feasibility study is completed.

Appointments

On May 10, 2022, the Company appointed Mr. Scott Packman to the board of directors. Prior to joining the Company's board, Mr. Packman served as General Counsel and Executive Vice President of Madison Square Garden Entertainment Corp. (NYSE: MSGE). He also served as the General Counsel of MGM Holdings Inc., the owner of the iconic MGM movie and television studio, for over 12 years. Mr. Packman is currently the Managing Member of SSP Partners, which identifies, evaluates, and advises on strategic transactions for financiers. The appointment of Mr. Packman expands the Company's board of directors from four to five members.

On March 1, 2022, the Company announced the retirement of W. Alan Ahlgren, Chief Financial Officer and Corporate Secretary after seven (7) years with the Company. Gordon Jang was appointed Chief Financial Officer and Corporate Secretary effective March 1, 2022. Mr. Jang brings over 25 years of experience in senior management roles with mid-to-large mining companies. He has a wealth of expertise in capital markets, M&A, SOX compliance, financial reporting, corporate restructuring, and process improvements. Mr. Jang was previously the Vice-President of Finance and Accounting at Fortuna Silver Mines Inc. and held senior positions at August Resources, Lundin Mining and Pan American Silver.

Development Opportunities

On April 6, 2022, the Company entered into a non-binding memorandum of understanding ("MOU") with Sunrise (Guizhou) New Energy Materials Co. Ltd. ("Sunrise"), a Chinese lithium-ion battery anode producer to development an agreement to share expertise and technology for the design, construction, and operation of a US-based graphite material manufacturing facility. The plan for the materials facility, which is the second link to the Company's US supply chain solution for advanced graphite products, will be detailed in the prefeasibility study in the PFS.

On April 4, 2022, the Company entered into a MOU with battery material recycler Lab 4 Inc. ("Lab 4") of Nova Scotia, Canada whereby Lab 4 will work with the Company to design, develop and build a recycling facility for end-of-life EV and lithium-ion batteries. The Company and Lab 4 anticipate entering into a definitive agreement and ancillary documents within 180 days from signing the MOU to set out the proposed terms of the collaboration. The recycling facility would be located adjacent to the Company's planned advanced materials manufacturing plant in Washington State. The transaction is subject to a number of conditions including, but not limited to: (1) completion of due diligence by both parties ((ii) the parties negotiating and executing a definitive agreement on terms mutually agreed to by both parties, and (ii) receipt of all regulatory approvals and third-party consents, including the approval of the TSX Venture Exchange.

Overall Performance and Results of Operations

The Company has generated no operating revenue to date. The Company relies on the issuance of common shares as well as debt to finance exploration on its exploration and evaluation property, and to provide general operating working capital. The majority of the Company's expenditures relate to the acquisition and exploration of its exploration and evaluation property which is reflected in the Company's consolidated financial statements as capitalized exploration and evaluation costs.

Summary of Quarterly Results

The following table is a summary of selected financial data for the Company for the eight most recently completed quarters:

Quarter ended	Mar 31 2022	Dec 31 2021	Sep 30 2021	Jun 30 2021
Net loss ($)	778,746	4,170,094	721,009	680,375
Basic and diluted loss per share ($)	0.01	0.05	0.01	0.01

Quarter ended	Mar 31 2021	Dec 31 2020	Sep 30 2020	Jun 30 2020
Net loss ($)	2,693,293	275,977	418,382	726,489
Basic and diluted loss per share ($)	0.05	0.00	0.01	0.02

The increase in expenses in first and fourth quarter of 2021 was due primarily to share-based payment expense of $1,960,126 and $3,112,033, respectively, related to stock option grants.

Results of Operations

For the three months ended March 31, 2022 and 2021

The net loss for the three months ended March 31, 2022, was $778,746, a $1,914,547 decrease from a net loss of $2,693,293 for the same period in 2021. The higher net loss for the first quarter of 2021 was primarily due to share-based payments expense of $1,960,126 from the stock option grants in the quarter. Higher marketing and investor relations expense was partially offset by lower personnel costs.

General and administrative expenses consist of management fees and salaries, marketing and investor relations, office and administration and professional fees.

Three months ended March 31,	2022	2021	Increase/ (decrease)
Management fees and salaries	$ 261,232	$ 510,658	$ (249,426)
Marketing, advisory and investor relations	285,621	79,714	205,907
Office and administration	91,676	41,712	49,964
Professional fees	12,270	26,637	(14,367)
	$ 650,799	$ 658,721	$ (7,922)

Management fees and salaries

Management fees and salaries decreased $249,426 to $261,232 for the three months ended March 31, 2022 compared to a $510,658 for the same period in 2021. The higher management fees and salaries in the first quarter of 2021 was primarily due to the awarding of performance bonuses.

Marketing, advisory and investor relations

Marketing, advisory and investor relations increased $205,907 to $285,621 for the three months ended March 31, 2022 compared to $79,714 in the same period in 2021. The increase was due to increased spending on marketing and investor relations campaigns.

Office and administration

Office administration expenses increased $49,964 to $91,676 for the three months ended March 31, 2022 compared to $41,712 for the same period in 2021. The increase was due primarily to higher directors and officers insurance and recruitment fees.

Professional fees

Professional fees decreased $14,367 to $12,270 for the first quarter of 2022 as compared to $26,637 for the same period in 2021. The decrease was due to the timing of commencing tax services.

Share-based payments

Share-based payments was $Nil for the three months ended March 31, 2022 compared to $1,960,126 for the same period in 2021 when 2,105,000 stock options were granted.

Liquidity, Capital Resources and Going Concern

The Company's condensed consolidated interim financial statements have been prepared on a going concern basis which assumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

As at March 31, 2022, the Company had cash and cash equivalent of $5,044,063 (December 31, 2021 - $6,376,049) and a working capital deficit of $1,924,127 (December 31, 2021 – working capital deficit of $472,129). Current liabilities as at March 31, 2022, were $7,276,229 (December 31, 2021 - $7,000,206) which included a loan from Taiga Mining Inc. ("Taiga Mining") of $6,505,718 (December 31, 2021 - $6,308,720) of which $187,539 is due on June 8, 2022 and $6,318,179 is due on September 6, 2022. The Company is in discussions with Taiga Mining to extend the maturity of the loan for an additional two years.

The Company has incurred losses since inception and has not generated any cash inflows from the operations. For the three months ended March 31, 2022, cash used in operating activities totaled $668,410 compared to $1,200,786 for the comparable period in 2021.

During the three months ended March 31, 2022, the Company issued 586,882 common shares for proceeds of CA$656,446 pursuant to the exercise of share purchase warrants at an average exercise price of CA$1.12 per share.

Going Concern

The Company's ability to continue to meet its obligations and carry out its planned exploration and development activities is uncertain and dependent upon the continued financial support of its shareholders and on securing additional financing.

Based on projected administrative and project expenditures for 2022, the Company will require additional financing during the year to advance the completion of a feasibility study for the Project and to continue operating at the current activity levels. The Company will also seek to extend the maturity date of the Taiga Loan of $6,505,718 which matures on June 8, 2022 ($187,530) and September 6, 2022 (6,318,179). There can be no assurance that the Company will be successful in extending the maturity of Taiga Loan or securing the additional financing, which give rise to material uncertainties that may cast significant doubt regarding the going concern assumption and, accordingly, the ultimate appropriateness of the use of accounting principles applicable to a going concern. The consolidated financial statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and statement of financial position classifications that would be necessary if the Company were unable to realize its assets and settle its liabilities as a going concern in the normal course of operations for the foreseeable future. These adjustments could be material.

Financial Instruments and risk management

Financial instrument classification

The Company`s financial instruments recognized on the statement of financial position consist of cash and cash equivalents, deposits and trade and other accounts payable and loans.

The estimated fair market values of the Company`s financial instruments carried at amortized cost approximate their carrying values due to their short-term nature.

Financial Risk Management

The Company may be exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives. The main objectives of the Company's risk management processes are to ensure that risks are properly identified and that the capital base is adequate in relation to those risks. The principal risks to which the Company is exposed are described below.

Interest rate risk

Interest rate risk is the risk arising from the effect of changes in prevailing interest rates on the Company's financial instruments. The Company's cash balances held at financial institutions earn interest at rates which vary according to prevailing rates. The Company does not deem the associated interest rate risk to be material.

Credit risk

Credit risk is the risk of potential loss to the Company if a counter party to a financial instrument fails to meet its contractual obligations. Management does not believe that the Company is exposed to any material credit risk.

Foreign currency risk

Foreign currency risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will fluctuate because of changes in foreign exchange rates. The Company maintains a significant portion of its cash reserves in Canadian dollars and therefore subject to fluctuations in foreign exchange rates.

The Company has entered into dual currency swap contracts to provide a better interest rate yield in exchange of foreign currency risk. If the CAD/USD spot rate is less than or equal to the pre-determined conversion rate on settlement date, the principal amount will be settled in the conversion currency at the pre-determined conversion rate resulting in a foreign exchange loss. For the three months ended March 31, 2022, the Company has recorded a mark-to-market loss of $41,940 on the fair value of embedded derivative on the open contracts.

As at December 31, 2021, the Company has certain monetary items denominated in Canadian dollars. Based on these net exposures at December 31, 2021, a 10% appreciation or depreciation of the Canadian Dollar against the United States dollar would result in an increase or decrease the Company's net loss by $390,791.

Liquidity risk

Liquidity risk is the risk that the Company is not able to meet its financial obligations as they fall due. As of March 31, 2022, the Company had a working capital deficit of $1,924,127 (December 31, 2021 - $472,129 working capital deficit). The Company will seek to extend the maturity date of the Taiga Loan of $6,308,720 as well as to complete additional debt or equity offerings to fund ongoing operations and development project. There can be no assurance that the Company can extend the maturity of the Taiga loan or obtain additional financing on terms acceptable to the Company or at all. As at March 31, 2022, the Company has no bank covenants.

Related party transactions and balances

During the three months ended March 31, 2022, the Company accrued interest of $196,998 (three months ended March 31, 2021 - $170,157) related to the Taiga Loan. As at March 31, 2022, the Company owed $6,505,718 (December 31, 2021 - $6,308,720) in principal and interest on the Taiga Loan.

Key management compensation

Key management are those personnel having the authority and responsibility for planning, directing, and controlling the Company and include the President and Chief Executive Officer, Directors, Chief Financial Officer, Executive Chair and Chief Operations Officer.

Compensation paid to key personnel was as follows:

	Three months ended March 31,	
	2022	2021
Management fees	$ 75,000	$ 224,857
Director fees	15,000	65,860
Salaries and benefits	242,109	323,298
Share-based payments	-	1,912,435
	$ 332,109	$ 2,526,450

For the three months ended March 31, 2022, the Company capitalized $89,000 (three months ended March 31, 2021 - $104,300) of salaries and benefits and $Nil (March 31, 2021 - $47,909) of share-based payments to exploration and evaluation property. The amounts capitalized were related to project management.

Amounts owing to other related parties are non-interest bearing, unsecured and due on demand. The transactions were in the normal course of operations. As at March 31, 2022, the Company owed $10,000 (December 31, 2021 - $1,237) to related parties.

Managing Risks

Mining Risks
The Company is subject to risks typical in the mining business including uncertainty of success in exploration and development; unusual and unexpected geological formations, possible flooding and other conditions involved in drilling and removal of material, mitigation of possible environmental impacts, and the occurrence of other unexpected hazards. Risks also include the possibility that intended drilling schedules or estimated costs will not be achieved and unexpected fluctuations in the price of materials, supplies and currency exchange rates. The aggregate effect of these factors is impossible to predict with any degree of certainty.

Mineral Processing Risks

The Company is subject to the risks typical in the mineral processing business including uncertainty that intended schedules, timelines, process performance criteria or estimated capital and operating costs will be achieved. There are risks beyond the Company's control, including: currency exchange rates; inflation; levels of interest rates; costs and availability of skilled workers, materials and supplies; global or regional political, economic and banking crises; and transportation and distribution disruptions. The aggregate effect of these factors is impossible to predict with any degree of certainty.

Business Risks

Natural resources exploration, project development, processing, and transportation; and, product development, processing, production, and marketing all involve a number of business risks, some of which are beyond the Company's control. These can be categorized as operational, market, financial and regulatory risks.

• Operational risks include finding and developing reserves economically; processing minerals competitively into successful products; product deliverability uncertainties; changing governmental law and regulation; hiring and retaining skilled employees and contractors; and conducting operations in a cost effective and safe manner. The Company continuously monitors and responds to changes in these factors and adheres to all regulations governing its operations. Insurance may be maintained at levels consistent with prudent industry practices to minimize risks however the Company is not fully insured against all risks nor are all such risks insurable.

• Operational risks also include the timing and successful completion of the Preliminary Feasibility Study, Feasibility Study, permitting, construction and start-up.

• Market risks include demand and prices for graphite and graphite products not achieving expectations and disruptions in transportation and distribution. These and other factors are beyond the Company's control, including levels of inflation and interest rates, the demand for commodities, global or regional political, economic and banking crises and production rates in competitive producing regions.

• Financial risks include the timely availability of capital and changes in commodity prices, interest rates, inflation, wages and salaries, taxation, and foreign exchange rates, all of which are beyond the Company's control.

• Regulatory risks include possible delays in regulatory approvals for developments and transactions that the Board of Directors believe to be in the best interest of the Company, increased fees for filings, and the introduction of ever more complex reporting requirements, the cost of which the Company must meet in order to maintain its exchange listing.

COVID-19

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus (COVID-19) as a pandemic, with outbreaks of the virus spreading globally. The spread of COVID-19 and its variants caused significant volatility in North America and international markets and affected the Company's operations. As of the date of this MD&A, restrictions necessitated by the pandemic are easing; however, the spread of new variants with disruptive affects on business remains a possibility. The Company is carefully monitoring this situation and will take all prescribed steps to minimize the impact of any new outbreaks of the COVID-19 pandemic on the health of its employees, contractors and consultants. Working remotely, testing of field personnel, conducting virtual instead of in-person meetings, restricting travel and other measures for physical distancing have been in place and, as the Company deems necessary, will either continue to be in place or be reinstated. As part of the 2022 field program in Alaska, the Company implemented its Community and Workplace Protection Plan (CWPP) which details COVID-19 protocols that meet all State of Alaska and City of Nome requirements for detecting and mitigating the spread of COVID-19. The CWPP defines protocols to be followed by all field program personnel to ensure appropriate measures are in place to detect and minimize the spread of COVID-19 to protect the local communities and our workforce. Due to the uncertainty as to the continuing impact of the pandemic with the ongoing threat of virus variants, the Company may find that there could be further delays in completing the PFS in the time expected or there may be other unexpected delays, which could affect progress on the Project.

Outlook

The Company's primary focus is the continued evaluation of the Graphite One Project which includes the proposed mine and primary processing facilities on the Seward Peninsula in Alaska and the graphite product manufacturing facilities expected to be located in Washington State. The Company's goal is to become a vertically integrated producer of premium anode materials and other advanced graphite products by creating an integrated American domestic supply chain. The ability of the Company to achieve this is contingent upon its ongoing ability to raise the risk capital necessary to advance its plans.

The Company is in preparation to commence an extensive 2022 summer drilling and technical assessment program at the Graphite Creek Property in Alaska to provide resource and technical information for the Company's feasibility study.

The Company is negotiating over the next several months, the terms and conditions along with the parties' expected roles and responsibilities in two separate definitive agreements with:

- Sunrise to share expertise and technology for the design, construction, and operation of a US based graphite material manufacturing facility; and
- Lab 4 for the design, construction and operation of a recycling facility for end for end-of-life and lithium-ion batteries.

Outstanding Share Data

The following table summarizes the Company's outstanding share capital as at May 26, 2022:

Common shares issued and outstanding	87,248,916
Stock options outstanding (weighted average exercise price CA$0.93)	8,352,429
Warrants outstanding (weighted average exercise price CA$1.07)	29,951,229
Broker warrants outstanding (weighted average exercise price CA$1.07)	875,351
Fully diluted	126,427,925

Other Information

Additional information related to the Company is available for viewing on SEDAR at www.sedar.com and on the Company's website at www.graphiteoneinc.com.