GRAPHITE ONE INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 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 and nine months ended September 30, 2022 and 2021 and related notes thereto which are 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 November 25, 2022. The information and discussion provided in this MD&A covers the three and nine months ended September 30, 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 dollars. Reference to "$" in this MD&A is the US dollar and reference to "CA$" is the Canadian dollar.

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.

It is important to note that:

- unless otherwise indicated, forward-looking information in this MD&A describes the Company's expectations as of the date of this MD&A;
- readers are cautioned not to place undue reliance on these statements as the Company's actual results, performance or achievements may differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements if known or unknown risks, uncertainties or other facts affect the Company's business, or if the Company's estimates or assumptions prove inaccurate. Therefore, the Company cannot provide any assurance that forward-looking statements will materialize.
- The Company assume no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or any other reason except as required by law.

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".

Technical Disclosure

All scientific and technical information in this MD&A has been reviewed and approved by Richard Goodwin, P. Eng. Mr. Goodwin is a qualified person for the purposes of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101").

Nature of Operations

The Company is focused on developing its Graphite One Project (the "Project"), aimed at making the Company the dominant American producer of battery anode materials integrated with a graphite resource. The Project is envisioned as a vertically integrated enterprise to mine, process, and manufacture anode materials for the electric vehicle lithium-ion battery market. The plan is for graphite to be mined from the Company's Graphite Creek Property (the "Proposed Mine"), situated on the Seward Peninsula about 55 kilometers (37 miles) north of Nome, Alaska, to be processed into concentrate at a mineral processing plant located adjacent to the mine. The resulting graphite concentrate would be shipped to the second link in the Company's proposed supply chain solution: a Manufacturing Plant where anode materials and other value-added graphite products would be manufactured. With the Company's commitment to locate the Manufacturing Plant in the U.S., the Company would provide a 100% U.S.-based advanced graphite materials supply chain. On October 14, 2022, the Company filed the Preliminary Feasibility Study ("PFS") for the Project on SEDAR and will commence a feasibility study on the Project in the fourth quarter. The Company intends to make a production decision on the Project once a feasibility study is complete.

Third Quarter 2022 Highlights

- Files a NI 43-101 compliant independent report titled "*Preliminary Feasibility Study, Technical Report – Graphite One Project, Alaska, USA*" on SEDAR.
- Completes a share for debt settlement transaction in an aggregate of $6,775,230, including $1,819,230 of accrued interest owing on two unsecured loan facilities dated June 6, 2020 and September 6, 2019, as amended and extended, between Taiga Mining Company, Inc. ("Taiga") and the Company.
- Completes the sale of 9,322,986 units at a price of CA$1.15 per unit for gross proceeds of CA$10,721,434 pursuant to an upsized non-brokered private placement of up to 18,500,00 units at a price of CA$1.15 per unit.
- Completes the 2022 field program with 2,090 meters of drilling.

On August 8, 2022, the Company announced a non-brokered private placement of 13,500,000 units at a price of CA$1.15 per unit which was subsequently upsized to 18,500,000 units for gross proceeds of up to CA$21,275,000 (the "Offering"). Each unit consists of one common share and one common share purchase warrant (a "Warrant") with each Warrant entitling the holder to acquire one common share of the Company at a price of CA$1.50 per common share for a period of 24 months from the closing date of the Tranche One Financing, subject to an accelerated exercise provision. In the event the common shares trade at a price of CA$2.00 or more on the TSXV or the Toronto Stock Exchange (if so listed at such time) for 10 consecutive trading days, the Company may, at its option, issue a press release and a notice to the warrant holders for the expiry of the warrants on the date that is 45 days from the press release date and the warrant holder may exercise the warrants during this 45-day period but no later than the expiry date.

The Company completed the sale of 9,322,986 units of the Offering raising gross proceeds of CA$10,721,434. On August 29, 2022, the Company closed the first tranche of 8,762,071 units for gross proceeds of CA$10,076,382 and the final tranche was closed on November 21, 2022 for 560,915 units for gross proceeds of CA$645,052.

The Company paid finder's fees of $303,015 (CA$393,225) and issued 356,022 transferrable, broker warrants, each warrant entitling the holder to acquire one additional share of the Company at a price of CA$1.50 with the same terms, as described above.

On September 19, 2022, the Company completed a share for debt transaction (the "Debt Settlement Transaction") to settle outstanding debt in an aggregate of $6,775,230, including $1,819,230 of accrued interest, owed on two unsecured loan facilities dated June 6, 2020 and September 6, 2019, as amended and extended, between Taiga and the Company. Under the terms of the debt settlement agreement, the Company issued 9,296,328 common shares at a revised, deemed price of CA$0.95 per share to Taiga in full settlement of the outstanding debt, subject to a statutory four months and one day hold period.

The Debt Settlement Transaction constitutes a 'related party transaction" within the meaning of Multilateral Instrument 61-101 - *Protection of Minority Security Holders in Special Transaction* as Taiga is an insider of the Company. As a result of the Debt Settlement Transaction, Taiga now holds 30,150,191 common shares and 8,768,189 warrants to purchase additional common shares of the Company.

On August 11, 2022, the Company received TSXV approval to amend the terms of 10,429,981 warrants that were issued on August 12, 2021 and September 24, 2021, respectively. The amendment included extending the expiry date of the warrants from August 12, 2022 to May 12, 2023 and adds a new acceleration provision whereby if the Company's share price closes above CA$1.75 for 20 consecutive trading days, the Company may elect to accelerate the expiry date of the warrants by issuing a press release and notice to the warrant holders of the expiry of the warrants that is 45 days from the press release date. The original exercise price of CA$1.50 per warrant and all other terms of the warrants remain unchanged for the extended exercise period.

Appointment

On July 5, 2022, the Company announced the addition of Mr. Bedi A. Singh to the Company's Board of Directors following the Annual General and Special Meeting of Shareholders held on June 29, 2022.

Preliminary Feasibility Study ("PFS")

On October 14, 2022, the Company filed a NI 43-101 compliant independent report titled "*Preliminary Feasibility Study, Technical Report – Graphite One Project, Alaska, USA*" on SEDAR. The PFS was prepared by JDS Energy & Mining Inc. with assistance from various independent technical consultants.

PFS Highlights

- Parallel strategy to simultaneously develop a commercial scale battery anode materials manufacturing facility in Washington State and the Proposed Mine in Alaska. Manufacturing would begin with purchased materials until Alaska production is available.
- Pre-tax internal rate of return of 26.0%, using an 8% discount rate, with a net present value of $1.93 billion and a payback period of 4.6 years.
- Post-tax internal rate of return of 22.3%, using an 8% discount rate, with net present value of $1.4 billion and a payback period of 5.1 years.
- Measured plus Indicated and inferred resources increased 197% and 177% , respectively, over 2019 results.

The PFS plans the parallel design, permitting and construction of a Secondary Treatment Plant ("STP") and the Proposed Mine. Permitting and construction of the STP is estimated to take 3 years to complete. The STP would operate during the first four years by processing purchased graphite. Mine production is expected to commence in the third year of STP operations and begin supplying graphite to the STP in its fourth year of operation. By the fifth year, it is anticipated that the Proposed Mine would supply 100% of the STP's planned natural graphite requirement at full capacity. If the Proposed Mine begins production sooner, purchased graphite would be reduced accordingly.

Summary of PFS Economic Results

Economic Parameters			Project	STP	Mine
Pre-tax	NPV (8%)		$1,927 M		
	IRR		26.0%		
	Payback		4.6 Years		
Post-tax	NPV (8%)		$1,398 M		
	IRR		22.3%		
	Payback		5.1 Years		
Project Life			26 Years	26 Years	23 Years
Average Annual Production	Graphite Concentrate				51,813 tpy
	Anode Materials			49,615 tpy	
	Purified Graphite			7,354 tpy	
	Unpurified Graphite			18,057 tpy	
		Total		**75,026 tpy**	**51,813 tpy**
Capital Costs	Initial Capital Costs		$1,070 M	$571 M	$499 M
	Contingency		$170 M	$90 M	$80 M
		Sub-Total	**$1,240 M**	**$661 M**	**$580 M**
	Sustaining Capital Costs		$205 M		$205 M
	Contingency		$39 M		$39 M
		Sub-Total	**$244 M**		**$244 M**
	Total Capital Costs [2]		**$1,485 M**	**$661 M**	**$824 M**
Operating Costs	Average annual		$237 M	$165 M	$72 M
	Average per tonne production		$3,590 pt	$2,196 pt	$1,394 pt
Average Product Price			$7,301 pt		

Based on the PFS's updated graphite resource estimate, the Proposed Mine's life for the purposes of the PFS is 23 years. The PFS assumes the STP's operational life is 26 years based on its startup with purchased graphite and continued operation with graphite from the Mine.

On average over its life, the STP would produce about 75,000 tonnes per year of products. About 49,600 tpy would be anode materials, 7,400 tpy purified graphite products, and 18,000 tpy of unpurified graphite products. The anode materials are comprised of four products:

- CPN: Coated, spherical natural graphite;
- BAN: Blended natural and artificial graphites;
- SPN: Secondary particle natural graphite; and,
- SPC: Secondary particle composite.

Based on the PFS assumptions, the average price of all products over the STP's life is $7,301 per tonne. Product forecasts and prices have been developed based on numerous graphite market reports commissioned by or purchased by the Company, combined with the Company's internal information. The long-term market forecast used is based on Wood Mackenzie Limited's Graphite Market 2021 Outlook to 2050, updated by its Global Graphite

Market Strategic Planning Outlook – Q2 2022. Purchased graphite prices have been supported by non-binding indications of supply from current producers.

Secondary Treatment Plant

The STP is designed to produce lithium-ion battery anode materials on a commercial scale for the U.S. domestic market using natural graphite from Alaska as soon as it is available. At full capacity, it requires about 34.5 hectares (85 acres) of land, consists of 17 buildings, and expects to produce approximately 77,000 tonnes of manufactured graphite products per year. The products are grouped into battery anode materials, specialty purified graphite products, and traditional unpurified graphite products. The products are manufactured from natural graphite concentrate, artificial graphite precursors, coke and pitch. Key components of the manufacturing process are the purification of natural graphite and graphitization of artificial graphite precursors in high temperature, electrically heated furnaces. The STP's preferred location is in Washington State to access relatively low power rates using hydro generated electricity and a skilled workforce to construct and operate the plant.

Permitting and construction of the STP, once its design is finalized, is expected to take three years. The STP would be constructed in two phases, each with almost identical equipment and production capacity. An exception is that Phase 2 has three furnace lines, while Phase 1 has two. Phase 1 is assumed to operate at 90% capacity for the first year to allow for start up adjustments. Thereafter it would operate at full capacity of 37,500 tonnes per year. Phase 2 would come on stream in Year 2 and the STP would operate at its full capacity of approximately 77,000 tonnes per year thereafter, comprised of:

- 51,167 tpy of anode materials for the electric vehicle and energy storage battery markets;
- 7,585 tpy of purified, sized material for the speciality graphite market; and
- 18,622 tpy for the unpurified, traditional graphite market.

Graphite Creek Mine

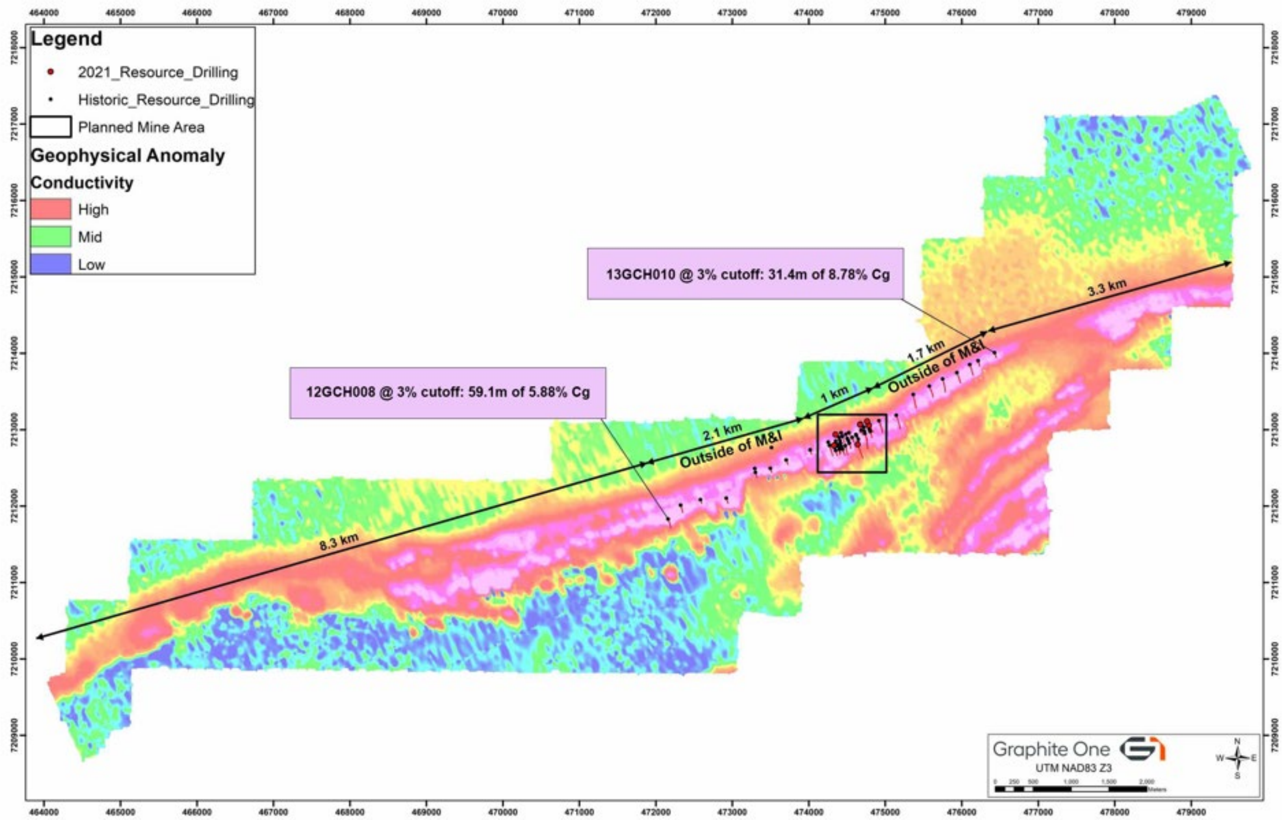
The Proposed Mine is expected to produce an average of 51,813 tonnes per year of graphite concentrate for the projected 23-year mine life. The deposit would be mined with conventional open pit mining methods including drilling, blasting, loading, and hauling. The strip ratio in the PFS plan is 2.2:1 with an ore cut-off grade of 2.0% graphitic carbon and an average head grade of 5.6% graphitic carbon. The pit would be mined in six phases over a period of 24 years. One year of pre-stripping would occur prior to the start-up of the process facility. Ore will be hauled to a process facility which will be built adjacent to the pit. Run of mine waste would be comingled with dewatered process tails and placed in waste dumps**.**

The process facility would process an average of 2,860 tpd for 365 days per year. The flowsheet design is based on metallurgical test work conducted at SGS Canada Inc.'s facilities at Lakefield, Ontario. The flowsheet consists of a jaw crusher that feeds a semi autogenous grinding circuit. After grinding, the ore is subjected to a series of seven flotation/regrind steps. The flotation/regrind steps are designed to recover the graphite at its largest possible flake size while still maintaining a concentrate with a graphitic carbon grade of greater than 95%. The graphite concentrate would be filtered and dried on site. The dried concentrate would be bagged and shipped by barge from Nome, Alaska to the STP in Washington during the annual shipping season. The tails from the flotation circuit would be dewatered, comingled with the waste rock, and placed in a lined waste storage facility. Any drainage from the lined waste storage facility would be treated through a water treatment plant prior to discharge.

Mineral Resources and Reserves

The Graphite Creek property (the "**Property**") is located on the Seward Peninsula, Alaska about 60 km North of Nome. The Property comprises 9,600 hectares (23,680 acres) of State of Alaska mining claims. The claim block consists of 176 claims, of which 163 are wholly owned by Graphite One (Alaska) Inc. and 13 are leased to Graphite

One (Alaska). The graphitic mineral zone is exposed on the surface and strikes East/Northeast along the North face of the Kigluaik Mountains. The geophysical expression of the deposit spans more than 16 km (Figure 1).



Comparisons to the previous resource estimate from the 2019 NI 43-101 report are summarized in the table below.

Resource Estimate Comparison - 2022 PFS Update to 2019 Report

MINERAL RESOURCE CLASSIFICATION	RESOURCE REPORT	TONNAGE (Million Tonnes)	GRAPHITE GRADE (% Cg)	CONTAINED GRAPHITE (Tonnes)
Inferred	2022 PFS Results	254.67	5.11%	13,004,017
	Change from March 2019	177%	-36%	77%
Indicated	2022 PFS Results	27.87	5.15%	1,435,135
	Change from March 2019	201%	-33%	101%
Measured	2022 PFS Results	4.67	5.83%	272,205
	Change from March 2019	176%	-27%	101%
Measured + Indicated	2022 PFS Results	32.54	5.25%	1,707,340
	Change from March 2019	197%	-32%	101%

The increased tonnage and contained graphite in each category of resource estimate, albeit at lower grades, were due to the application of a lower cut-off grade of 2% compared to the 5% cut-off grade reported in the March 2019 updated mineral resource estimate.

Qualified Persons and NI 43-101 Technical Report

Qualified Person	Company	Responsibility
Richard Goodwin, P.Eng.	JDS Energy & Mining Inc.	Primary QP
Tysen Hantelmann, P.Eng.	JDS Energy & Mining Inc.	OP Mining
Mike Levy, P.E.	JDS Energy & Mining Inc.	OP Geotech
Carly Church, P.Eng.	JDS Energy & Mining Inc.	Economic Model
Robert Retherford, P.Geo.	Alaska Earth Sciences, Inc.	Geology and Resource Estimate
H. M. Bolu, P.Eng.	Bomenco Minerals Engineering	Primary Processing (AK)
Michael Herrell, P.Geo. (BC,NT)	SRK Consulting (Canada) Inc.	Geochemistry
Tom Sharp, P.Eng.	SRK Consulting (Canada) Inc.	Water Treatment
Les Galbraith, P.Eng.	Knight Piésold Ltd.	Water and Water Management

Feasibility Study

Based on the positive results of the PFS, work has begun on the Feasibility Study (the "FS"). Due to the increasing demand for Graphite materials, the FS will begin by evaluating the benefits of increasing the mine and plant capacity. Increasing the process plant capacity will require additional drilling to increase the measured and indicated reserves and maintain mine-life. The projected completion of the FS is in the third quarter of 2024. Commencement of the bids process for the engineering work will begin in the fourth quarter of 2022.

2022 Summer Field Program Update

The Company completed the summer drilling program and shut down operations at the Camp on September 9, 2022. As at September 30, 2022, the Company had incurred $13,346,000 on this summer's drilling program.

Assays and metallurgy	$ 240,000
Geological consulting	1,254,000
Drilling and fieldwork	9,737,000
Engineering	10,000
Community consultation	135,000
Environmental studies	958,000
Project management and field office costs	433,000
Equipment purchases	579,000
Total summer drilling program	**$ 13,346,000**

Highlights include:

- Geotechnical drilling on the proposed access route
- Baseline environmental studies including:
    - Raptor surveys
    - Freshwater fishery surveys
    - Imuruk Basin water quality and Basin fishery surveys
    - Stream flow surveys
    - Pit water quality testing
    - Waste/Ore Humidity Cell testing
    - Installation of weather stations
- 2,090 meters of core drilling on the resource were completed

Assays are expected to be received starting late in the fourth quarter of 2022.

Camp buildout at Graphite Creek began in early May once melting snow allowed for onsite work. Initial work consisted of repairs to the 2021 camp which was heavily damaged by the winter storm in Nome, Alaska. The 24-person camp was fully repaired and operational by early June, coinciding with the landing of the first barge to Nome with 2022 program materials and equipment. By late June the project team safely coordinated a successful mobilization of over 750,000 pounds of camp and drill materials to the Project without incident and ahead of schedule. The team also engaged with community members and stakeholders in Nome and nearby villages through a series of community meetings.

Both Nome and Graphite Creek Camps were established and available for project use. The Nome Camp was ready for occupancy in late June, while the Graphite Creek Expansion camp continued additional build-out through to early August. Both camps will be winterized with reinforced storm-force construction to better withstand the regional winter weather. Each camp will be available for project use in late spring 2023.

The sonic drilling contractor arrived in Nome in early July. By mid-July, the sonic team was drilling geotechnical holes. The rig is currently drilling a resource core hole, and its next and final hole will be a sonic geotechnical hole. It will then be demobilized for the season. The drilling crews will continue drilling resource core holes with the smaller and efficient "Gopher" core drill owned by the Company.

Hydrogeologic studies were conducted in all sonic holes and on some resource core holes.

Preparation for the 2023 Field Program

To reduce costs and improve efficiency, the 2023 drilling program will be converted from a helicopter-based program to a track drill-based program. A bulldozer and excavator have been purchased and staged for transporting to the site this winter. This equipment will be used to make drill roads and drill pads which will reduce the need for helicopters and pad building crews.

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. Most of the Company's expenditures relate to the acquisition and exploration of its exploration and evaluation property reflected in the Company's consolidated financial statements as exploration and evaluation property.

Results of Operations

For the three and nine months ended September 30, 2022 and 2021

The net loss for the three months ended September 30, 2022 was $2,142,604, an increase of $1,421,595 compared to a net loss of $721,009 for the same period in 2021. The higher net loss was due primarily to the Company recognizing a $1,281,628 loss on settlement of the Taiga debt as well as a $114,826 provision for contractually obligated share-based payments.

The net loss for the nine months ended September 30, 2022 was $3,933,103, a decrease of $161,574 compared to a net loss of $4,094,677 for the same period in 2021. Operating expenses increased $279,432 on higher marketing costs, a $1,281,628 non-cash loss on settlement of the Taiga debt, and a $74,665 increase in foreign exchange loss from the settlement of the US dollar denominated Taiga loan held in an entity where the functional currency is the Canadian dollar. These increases were partially offset by a $1,854,712 decrease in share-based payments were the main factors for the decrease in the net loss.

Operating Expenses

	Three months ended September 30, 2022	Three months ended September 30, 2021	Increase (Decrease)	Nine months ended September 30, 2022	Nine months ended September 30, 2021	Increase (Decrease)
Expenses						
Management fees and salaries	$ 278,587	$ 199,157	$ 79,430	$ 797,401	$ 935,286	$ (137,885)
Marketing, advisory and investor relations	129,782	279,882	(150,100)	723,127	501,051	222,076
Office and administration	117,483	39,353	78,130	333,228	166,652	166,576
Professional fees	21,373	200	21,173	67,904	39,238	28,666
Share-based payments	114,826	(51,027)	165,853	114,826	1,969,538	(1,854,712)
	$ 662,050	$ 467,565	$ 194,485	$ 2,036,485	$ 3,611,765	$ (1,575,280)

Management fees and salaries

Management fees and salaries for the three months ended September 30, 2022 increased $79,430 to $278,287 compared to $199,157 for the same period in 2021. The increase was due primarily to increased director fees to two new independent directors and higher management salaries.

Management fees and salaries for the nine months ended September 30, 2022 decreased $137,885 to $797,401 from $935,286 reported in the same period in 2021. The decrease was due to the awarding of performance bonuses in 2021 compared to $nil in 2022.

Marketing, advisory and investor relations

Marketing, advisory and investor relations for the three months ended September 30, 2022 decreased $150,100 to $129,782 compared to $279,882 for the same period in 2021. The decrease was due to lower spending on marketing and investor relations campaigns.

Marketing, advisory and investor relations for the nine months ended September 30, 2022 increased $222,076 to $723,127 compared to $501,051 for the same period in 2021. The increased spending was due primarily to higher digital marketing costs.

Office and administration

Office and administration for the three months ended September 30, 2022 increased $78,130 to $117,483 compared to $39,353 for the same period in 2021. The increase was due primarily to higher D&O insurance premiums and AGM meeting costs.

Office and administration for the nine months ended September 30, 2022 increased $166,652 to $333,228 compared to $166,652 for the same period in 2021. The increase is due to higher D&O insurance premiums of $58,402 and executive recruiting fees and personnel costs of $100,342.

Professional fees

Professional fees for the three months ended September 30, 2022 increased $21,173 to $21,373 compared to $200 for the same period in 2021. The increase was due primarily to legal fees incurred on preparation of annual general meeting documents and other general corporate matters.

Professional fees for the nine months ended September 30, 2022 increased $28,866 to $67,904 compared to $39,038 for the same period in 2021. The increase was due to the same reasons explained above.

Share-based payments

Share-based payments for the three months ended September 30, 2022 was $114,826 compared to a $51,027 recovery of share-based payments for the same period in 2021. The increase was due to an accrual for contractually obligated equity-based compensation payments.

Share-based payments for the nine months ended September 30, 2022 were $114,826 compared to $1,969,538 for the same period in 2021 when 2,105,000 stock options were granted to employees, officers, and service providers. Although no stock options were granted during the first nine months of 2022 the Company accrued for contractually obligated equity-based compensation payments that is expected to be issued in the fourth quarter of 2022.

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	Sep 30 2022	Jun 30 2022	Mar 31 2022	Dec 31 2021
Net loss ($)	2,142,604	1,011,753	778,746	4,170,094
Basic and diluted loss per share ($)	0.02	0.01	0.01	0.05

Quarter ended	Sep 30 2021	Jun 30 2021	Mar 31 2021	Dec 31 2020
Net loss ($)	721,009	680,375	2,693,293	275,977
Basic and diluted loss per share ($)	0.01	0.01	0.05	0.00

The increase in the net loss for the third quarter of 2022 was due primarily to the Company recognizing a $1,281,628 loss on the settlement of debt arising from the difference between the fair value of 9,296,328 shares over the carrying value of the Taiga loans at the date of settlement and higher marketing costs.

The increase in the net loss for the first quarter of 2021 was due primarily to share-based payment expense of $1,960,126 related to fair value of the stock option granted in the quarter.

Liquidity, Capital Resources and Going Concern

The Company's condensed interim consolidated 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 September 30, 2022, the Company had cash and cash equivalent of $1,188,806 (December 31, 2021 - $6,376,049), a working capital deficit of $2,447,545 (December 31, 2021 – working capital deficit of $472,129). The working capital deficit includes $3,610,761 of unpaid project expenditures.

The Company has incurred losses since inception and has not generated any cash inflows from the operations. Cash used in operating activities for the nine months ended September 30, 2022 was $2,330,998 compared to $2,697,928 for the comparable period in 2021.

On November 21, 2022, the Company completed the final tranche of a non-brokered private placement for gross proceeds for $479,521 (CA$645,052). Pursuant to this private placement, the Company issued 560,916 units at a price of CA$1.15 per unit. The terms of each unit are described below. The Company paid finder fees of $33,567 ($45,154) and issued 39,264 non-transferrable broker warrants.

On September 19, 2022, the Company issued 9,296,328 common shares at a deemed price of CA$0.95 to settle the maturity of Taiga loans in the amount of $4,956,000 and $1,819,230 of accrued interest.

On August 29, 2022, the Company completed the first tranche of a non-brokered private placement for gross proceeds of $7,745,700 (CA$10,076,381). Pursuant to this private placement, the Company issued 8,762,071 units at a price of CA$1.15 per unit. Each unit consists of one common share and one transferable, share purchase warrant entitling the warrant holder to acquire one common share at a price of CA$1.50 per share for a two-year period from the date of issuance. The warrants include an accelerated exercise clause whereby, in the event the common shares trade at a price of CA$2.00 or more on the TSXV or the Toronto Stock Exchange (if so listed at such time) for 10 consecutive trading days, the Company may, at its option, issue a press release and a notice to the warrant holders for the expiry of the warrants on the date that is 45 days from the press release date and the warrant holder may exercise the warrants during this 45 day period but no later than the expiry date. Based on the residual valuation method, no value was attributed to the warrants.

The Company paid finder's fees in the amount of $269,448 (CA$348,071) and issued 316,758 transferrable, broker warrants, each warrant entitling the holder to acquire one additional share of the Company at a price of CA$1.50 and under the same the terms, as described above.

The Company issued 1,755,702 common shares for proceeds of $1,481,625 (CA$1,859,739) pursuant to the exercise of share purchase warrants at an average exercise price of $0.84 (CA$1.06) per warrant.

The Company issued 610,750 common shares for proceeds of $475,840 (CA$610,750) pursuant to the exercise of broker warrants at an average exercise price of $0.78 (CA$1.00) per warrant.

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.

During the nine months ended September 30, 2022, the Company raised gross proceeds of $9,703,166 (CA$12,546,870) from completing the sale of 8,762,071 units at a price of CA$1.15 per unit and the exercise of 2,366,452 warrants at an average exercise price of CA$1.04 per warrant. On September 19, 2022, the Company issued 9,296,328 common shares at a revised deemed price of CA$0.95 per share in full settlement of an outstanding debt and accrued interest of $6,775,230 owed pursuant to an unsecured loan facility between Taiga and the Company.

Based on projected administrative and project expenditures for the next twelve months, the Company will require additional financings to complete the feasibility study for the Project and to continue operating at current activity levels. There can be no assurance that the Company will be successful in securing additional financings, 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. These 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.

Credit risk

Credit risk is the risk of potential loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its cash and cash equivalents.

The Company has assessed its exposure to credit risk on its cash and cash equivalents and has determined that such risk is minimal. Majority of the Company's cash and cash equivalents are held with a chartered bank in Canada.

Liquidity risk

Liquidity risk is the risk that the Company is not able to meet its financial obligations as they fall due. As of September 30, 2022, the Company had a working capital deficit of $2,447,545 (December 31, 2021 - $472,129 working capital deficit) and will require additional financings to complete a feasibility study for the Project and to continue operating at current activity level. To improve liquidity, the Company completed a Debt Settlement Transaction whereby the Company issued 9,812,791 common shares at a deemed price of CA$0.95 to Taiga in full settlement of the outstanding loans totaling $6,775,230, including $1,819,230 of accrued interest. There can be no assurance that the Company can obtain additional financings on terms acceptable to the Company or at all.

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 had $1,188,806 in cash and cash equivalents as of September 30, 2022 (December 31, 2021 - $6,376,049), on which it earns variable rates of interest, and may therefore be subject to a certain amount of risk, though this risk is considered immaterial.

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.

As at September 30, 2022, the Company has certain monetary items denominated in Canadian dollars. 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 $142,693 (December 31, 2021 - $296,928).

Related party transactions and balances

Relationships	**Nature of the relationship**
Huston and Huston Holdings Corp. ("Huston")	Huston and Huston Holdings Corp. is a private company controlled by Anthony Huston, an Officer and Director of the Company, which provides management services to the Company.
Rockford Resources, LLC ("Rockford")	Rockford is a private company controlled by Pat Smith, a Director of the Company, which provides Director Services to the Company.
SSP Partners LLC ("SSP Partners")	SSP Partners is a private company controlled by Scott Packman, a Director of the Company, which provides Director Services to the Company.
Taiga Mining Company, Inc. ("Taiga")	Taiga is a private company and a Control Person of the Company in accordance with Policy 4.1 of the TSX Venture Exchange Corporate Finance Manual.
ROTAK LLC ("ROTAK")	ROTAK is a provider of helicopter support services to the Company in Alaska. One of Taiga's principals is also a manager in the entity that controls ROTAK.

During the three and nine months ended September 30, 2022, the Company accrued interest of $64,220 and $466,510 (three and nine months ended September 30, 2021 - $175,423 and $524,176), respectively, related to the Taiga Loan.

On August 23, 2022, the Company entered into a Debt Settlement Transaction with Taiga whereby the Company would issue 9,812,791 common shares at a deemed price of CA$0.90 per share to Taiga in full settlement of the unsecured Taiga loans totaling $6,775,230, including $1,819,230 of accrued interest, subject to final approval by the TSX Venture Exchange.

On August 29, 2022, Taiga participated in the closing of the first tranche of a non-brokered private placement of 8,762,071 units at a price of CA$1.15 per unit and acquired 2,258,957 units at a purchase price of $2,000,000 (CA$2,597,801).

On September 19, 2022, the Company completed the Debt Settlement Transaction by issuing 9,296,328 Settlement Shares to Taiga at a revised deemed price of CA$0.95 per share and recognized a $1,281,628 loss on the settlement of the debt. The Settlement Shares are subject to four months and one day hold period pursuant to applicable securities laws.

During the three and nine months ended September 30, 2022, ROTAK Helicopter Services, whose owners are significant shareholders of the Company, charged the Company $6,596 (2021 - $903,843) and $446,372 (2021 - $1,205,191), respectively, for helicopter services relating to the Company's summer drilling program.

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, Chief Financial Officer, Executive Chair, Chief Operating Officer, Senior Vice-President, Mining, and the Directors. Compensation paid to key personnel was as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Management fees	$ 75,000	$ 74,964	$ 225,000	$ 374,897
Director fees	30,000	15,088	61,401	96,013
Salaries and benefits	219,483	186,498	683,284	692,582
Share-based payments	114,826	-	114,826	1,912,435
	$ 439,309	$ 276,550	$ 1,084,511	$ 3,075,927

Salaries and benefits and share-based payments, if any, related to the Graphite Creek project are capitalized to exploration and evaluation property. For the three and nine months ended September 30, 2022, the total amount capitalized to the exploration and evaluation property was $88,233 and $216,233 (three and nine months ended September 30, 2021 - $64,000 and $217,000), respectively.

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 September 30, 2022, the Company owed $36,395 (December 31, 2021 - $1,237) to related parties, which were paid subsequent to September 30, 2022.

Changes in Accounting Policies and Critical Accounting Estimates and Judgements

The Company describes its significant accounting policies as well as any changes in the accounting policies in Note 3 "Significant Accounting Policies" of the September 30, 2022 Condensed Interim Consolidated Financial Statements.

Risk Factors

The operations of the Company are speculative due to the high-risk nature of its business, which is the exploration of its mining properties. The following are not the only risks and uncertainties that the Company faces. Additional risks and uncertainties not presently known to the Company or that the Company currently considers immaterial may also impair its business operations. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company.

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.

Uninsurable Risks

Mining processing operations generally involve a high degree of risk. Exploration, development and production operations on mineral properties involve numerous risks, including but not limited to unexpected or unusual geological operating conditions, seismic activity, rock bursts, cave-ins, fires, floods, landslides, earthquakes and other environmental occurrences, and political and social instability, any of which could result in damage to, or destruction of life or property, environmental damage and possible legal liability. Although the Company believes that appropriate precautions to mitigate these risks are being taken, operations are subject to hazards such as equipment failure or failure of structures, which may result in environmental pollution and consequent liability. It is not always possible to obtain insurance against all such risks and the Company may decide not to insure against certain risks because of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate the Company's future profitability and result in increasing costs and a decline in the value of the Common Shares. While the Company may obtain insurance against certain risks in such amounts as it considers adequate, the nature of these risks is such that liabilities could exceed policy limits or be excluded from coverage. The potential costs that could be associated with any liabilities not covered by insurance or in excess of insurance coverage may cause substantial delays and require significant capital outlays, thereby adversely affecting the Company's business and financial condition.

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 Feasibility Study, permitting, construction and start-up.
- Market risks include the 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.

Negative Operating Cash Flow and Dependence on Third Party Financing

The Company has no source of operating cash flow and there can be no assurance that the Company will ever achieve profitability. Accordingly, the Company is dependent on third party financings to continue exploration activities on the Company's properties, maintain capacity and satisfy contractual obligations. Accordingly, the amount and timing of expenditures depends on the Company's cash reserves and access to third party financings. Failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the Company's Graphite Creek Project or require the Company to sell one or more of its properties (or an interest therein).

Uncertainty of Additional Financing

As stated above, the Company is dependent on third party financings, whether through debt, equity, or other means. Although the Company has been successful in raising funds to date, there is no assurance that the Company will be successful in obtaining the required financing in the future or that such financing will be available on terms acceptable to the Company. The Company's access to third party financing depends on a number of factors including the price of graphite, the results of ongoing exploration, the results of the Feasibility Study and any other economic or other analysis, a claim against the Company, a significant event disrupting the Company's business or graphite industry generally, or other factors may make it difficult or impossible to obtain financing through debt, equity, or other means on favorable terms, or at all. As previously stated, failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the Company's Graphite Creek Project or require the Company to sell one or more of its properties (or an interest therein).

Reliance upon Key Management and Other Personnel

The Company relies on specialized skills of management in the areas of mineral exploration, geology and business negotiations and management. The loss of any of these individuals could have an adverse effect on the Company. The Company does not currently maintain key-man life insurance on any of its key employees. In addition, as the Company's business activity continues to grow, it will require additional key financial, administrative, and qualified technical personnel. Although the Company believes that it will be successful in attracting, retaining, and training qualified personnel, there can be no assurance of such success. If it is not successful in attracting, retaining, and training qualified personnel, the efficiency of the Company's business could be affected, which could have an adverse impact on its future cash flows, earnings, results of operation and financial condition.

Imprecision of Preliminary Feasibility Study and Mineral Resource Estimates

The preliminary feasibility study and the mineral resource figures are estimates, and such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While the Company believes that its mineral resource estimate is well established and reflects management's best estimates, by their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Should the Company encounter mineralization or formations different from those predicted by past sampling and drilling, resource estimates may have to be adjusted.

These are not the only risks and uncertainties that the Company faces. Additional risks and uncertainties not presently known to the Company or that the Company currently considers immaterial may also impair its business operations. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company.

Outlook

The Company's primary focus is the continued evaluation of the Graphite Creek Project which includes the Proposed Mine and primary processing facilities on the Seward Peninsula in Alaska and the STP 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 has initiated preliminary discussions with Washington State official to secure a site for the STP. This process is expected to take several quarters to finalize the terms of the agreement.

The Company expects to take several months to finalize the terms, conditions, each party's roles and responsibilities in two separate definitive agreements with:

- Sunrise (Guizhou) New Energy Material Co. Ltd., on a technology licensing agreement to share expertise and technology for the design, construction of the STP; and
- Lab 4 Inc. on a technology licensing agreement involving the design, construction, and operation of a battery materials recycling facility.

Planning is underway for 2023 drilling program to be converted from a helicopter-based to a track drill-based program. Equipment has been purchased and staged for transporting to site and will be used to make drill roads and drill pads, which will reduce the need for helicopters and pad building crew.

Outstanding Share Data

The following table summarizes the Company's outstanding share capital as at November 25, 2022:

Common shares issued and outstanding	107,608,199
Stock options outstanding (weighted average exercise price CA$0.93)	8,352,429
Warrants outstanding (weighted average exercise price CA$1.17)	36,935,750
Broker warrants outstanding (weighted average exercise price CA$1.19)	620,623
Fully diluted	153,517,001

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.