



GRAPHITE ONE INC.

ANNUAL INFORMATION FORM

For the Financial Year Ended December 31, 2022

February 21, 2024

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual information form (“AIF”) of Graphite One Inc. (“**Graphite One**” or the “**Company**”) contains forward-looking information and forward-looking statements (collectively, “**forward-looking statements**”) relating to the future operations of the Company and other statements that are not historical facts. Forward-looking statements are often identified by terms such as “will”, “may”, “should”, “anticipate”, “expects”, “intends”, “indicates” and similar expressions. All statements other than statements of historical fact, included in this AIF, including, without limitation, statements regarding the future plans and objectives of the Company are forward-looking statements. Forward-looking statements in this AIF include, but are not limited to statements regarding the Company’s future results; the anticipated timing and completion of a National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“**NI 43-101**”) compliant feasibility study (the “**Feasibility Study**”) on the Graphite One Project (as defined below), at which time a production decision will be made regarding the intended construction and commissioning timeline of the Graphite One Project; the construction, development and location of the advanced graphite material and battery anode manufacturing plant; the building and development of a recycling facility; the Company’s aim to make the Company the dominant American producer of battery anode materials integrate with a graphite resource; the Company’s commitment to locate the manufacturing plant in the United States; and other events or conditions that may occur in the future. Such forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect Company management’s current judgment regarding the direction of its business. Although management believes that these assumptions are reasonable, forward-looking statements inherently involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Such factors include, among others: risks related to exploration and development activities at the Company’s Graphite One Project and factors relating to whether or not mineralization extraction will be commercially viable; risks related to mining operations and the hazards and risks normally encountered in the exploration, development and production of minerals; uncertainties regarding regulatory matters, including obtaining permits and complying with laws and regulations governing exploration, development, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, site safety and other matters, and the potential for existing laws and regulations to be amended or more stringently implemented by the relevant authorities; uncertainties regarding estimating mineral resources, which estimates may require revision (either up or down) based on actual production experience; risks relating to fluctuating graphite prices and the ability to operate the Graphite One Project at a profit in the event of declining graphite prices and the need to reassess feasibility of a particular project that estimated mineral resources will be recovered or that they will be recovered at the rates estimated; risks related to title to the Graphite Creek Property (as defined below), including the risk that the Company’s title may be challenged or impugned by third parties; the ability of the Company to access necessary resources, including equipment and labour, on a timely basis and at reasonable cost; competition within the mining industry for the discovery and acquisition of properties from other mining companies, many of which have greater financial, technical and other resources than the Company, for, among other things, the acquisition of mineral claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees and other personnel; access to suitable infrastructure, such as roads, energy and water supplies in the vicinity of the Company’s Graphite Creek Property; and risks related to the stage of the Company’s development, including risks relating to limited financial resources, limited availability of additional financing and potential dilution to existing shareholders; reliance on its management and key personnel; risks relating to infectious diseases including current or future pandemics or epidemics; inability to obtain adequate or any insurance; exposure to litigation or similar claims; risks of not completing the accelerated Feasibility Study by the TIA Grant Due Date (as defined below) and, if applicable, not obtaining approval to extend past the TIA Grant Due Date; risks of reimbursement of all or any portion of grants pursuant to the TIA Grant (as defined below) due to unqualified expenditures thereunder; current unprofitable operations; risks regarding the ability of the Company and its management to manage growth; and potential conflicts of interest.

The foregoing list is not exhaustive of the factors that may affect any of the Company’s forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and

the Company's actual achievements or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including, without limitation, those referred to in this AIF.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this AIF and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results, except as may be required by applicable securities laws. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

INTRODUCTION

Currency

Unless otherwise indicated, all references to "\$" or "US\$" in this AIF are to U.S. dollars and all references to "CA\$" in this AIF are to Canadian dollars.

The following table reflects the low and high rates of exchange for one United States dollar, expressed in Canadian dollars, during the periods noted, the rates of exchange at the end of such periods and the average rates of exchange during such periods, based on the Bank of Canada daily exchange rates.

	Years Ended December 31		
	2022	2021	2020
Low for the period	CA\$1.2451	CA\$1.2040	CA\$1.2718
High for the period	CA\$1.3856	CA\$1.2942	CA\$1.4496
Rate at the end of the period	CA\$1.3544	CA\$1.2678	CA\$1.2732
Average	CA\$1.3013	CA\$1.2535	CA\$1.3415

On February 20, 2024, the Bank of Canada daily exchange rate was US\$1.00 equaled CA\$1.3518.

Scientific and Technical Information

Unless otherwise indicated, scientific and technical information in this AIF has been reviewed and approved by Richard Goodwin, P.Eng. Mr. Goodwin is a "Qualified Person" as defined in NI 43-101.

In this AIF, the terms Mineral Resources and Inferred Mineral Resources have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum (the "**CIM**"), as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council, as amended.

Cautionary Notice to U.S. Investors

This AIF has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ materially from the requirements of United States securities laws applicable to U.S. companies. Information concerning the Company's mineral properties has been prepared in accordance with the requirements of Canadian securities laws, which differ in material respects from the requirements of the United States Securities and Exchange Commission (the "**SEC**") applicable to domestic United States issuers. Accordingly, the disclosure in this AIF regarding the Company's mineral properties is not comparable to the disclosure of United States issuers subject to the SEC's mining disclosure requirements.

The terms “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource”, are Canadian mining terms as defined in, and required to be disclosed in accordance with, NI 43-101, which references the guidelines set out in the *CIM Definition Standards on Mineral Resources and Mineral Reserves* (“**CIM Definition Standards**”), adopted by the CIM Council, as amended. However, these standards differ materially from the mineral property disclosure requirements of the SEC in Regulation S-K Subpart 1300 (the “**SEC Modernization Rules**”) under the United States Securities Act of 1934, as amended. The Company does not file reports with the SEC and is not required to provide disclosure on its mineral properties under the SEC Modernization Rules and will continue to provide disclosure under NI 43-101 and the CIM Definition Standards.

CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated in Alberta and commenced operations on March 16, 2006 under the name Cedar Mountain Exploration Inc. and on October 29, 2007 began trading on the TSX Venture Exchange (the “**TSXV**”) under the symbol “CED”. On March 23, 2012, the Company changed its name to Graphite One Resources Inc. and adopted the symbol “GPH” on the TSXV effective March 27, 2012. On June 11, 2012, the Company began trading in the over-the-counter market in the United States on the OTCQX under the symbol “GPHOF”. The Company was continued into British Columbia on September 12, 2014. Due to changes in the listing requirements of the OTCQX, the Company began trading on the OTCQB on April 1, 2017. In May 2021, the Company’s application to move back to the OTCQX was accepted by the OTC. On February 27, 2019, the Company changed its name to Graphite One Inc.

The Company is a reporting issuer in British Columbia and Alberta and files its continuous disclosure documents with the applicable Canadian securities authorities in such provinces. Such documents are available on SEDAR+ at www.sedarplus.ca.

The head office and principal address of the Company is located at 777 Hornby St., Suite 600, Vancouver, British Columbia, V6Z 1S4, Canada. The registered and records office of the Company is located at 25th Floor, 700 West Georgia Street, Vancouver, British Columbia, V7Y 1B3, Canada.

Intercorporate Relationships

As of the date of this AIF, the Company has one wholly-owned subsidiary, being Graphite One (Alaska) Inc. (“**G1 Alaska**”), which is incorporated under the laws of Alaska.

Unless otherwise noted or inconsistent with the context, references to Graphite One or the Company in this AIF are references to Graphite One Inc. and its subsidiary.

GENERAL DEVELOPMENT OF THE BUSINESS

Overview

The Company is focused on developing its Graphite One Project (the “**Project**” or “**Graphite One 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. Management’s current plan is for graphite to be mined from the Company’s Graphite Creek property (the “**Property**” or “**Graphite Creek Property**”), 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 Graphite One Technical Report (as defined below) which constitutes a preliminary feasibility study (“**PFS**”) for the Project on SEDAR+ and began work on the Feasibility Study. The Feasibility Study is expected to be completed in the fourth quarter of 2024 on an accelerated schedule, which is subject to funding availability, at which time a production decision will be made.

Three Year History of the Company

Year Ended December 31, 2020

The Company released the results of its inaugural Preliminary Economic Assessment (“**PEA**”) in 2017. The PEA positively assessed the potential economic viability of the Project and recommended the Company proceed with the Project’s PFS.

In 2019, information collection for the PFS commenced. The work included a late fall drilling program (the “**2019 Field Program**”) comprised of 3 geotechnical core holes primarily to collect data for mine design and engineering purposes. The 2019 Field Program also included geotechnical analysis for tailings management and process plant sites, access route analysis, continuation of environmental baseline surveys, design of primary and secondary treatment facilities, financial modeling and preparation of metallurgical samples for testing. Meetings took place with local communities in 2019 to provide project updates and to learn about any concerns.

The PFS work continued in 2020 with a resource update and work on open-pit mine engineering, facilities design, metallurgical testing, financial modeling, product development and report writing. Due to the late-season start to the 2019 Field Program, the completion and compilation of all drill results and geotechnical data analysis were not completed until the first quarter of 2020. By the second quarter of 2020, work on the PFS was significantly slowed because of impacts of COVID-19 followed by the need to efficiently utilize available funds.

On October 13, 2020, the Company exercised an option (the “**NSR Purchase Agreement**”) to acquire a 2% net smelter production royalty (“**NSR**”). In settlement of this purchase, the Company issued 2,500,000 common shares at a price of CA\$0.40 per share and 2,500,000 warrants with an exercise price of CA\$0.50 per share. The NSR applied to future production from 28 Alaska state claims owned by the Company. The Company’s option to purchase the NSR expired on January 24, 2021. The NSR Purchase Agreement was subsequently amended on November 6, 2020 to re-price the common shares at an issue price of CA\$0.82 and the warrants with a revised exercise price of CA\$0.61. All other terms of the NSR Purchase Agreement remained unchanged.

Year Ended December 31, 2021

In 2021 the Company carried out a summer field program (the “**2021 Field Program**”) to collect information for the PFS. The 2021 Field Program included infill and step out core drilling in the resource area and additional core and sonic drilling for geotechnical data collection in the proposed mill site and dry tailings/waste rock storage areas. A total of 2,052 meters were drilled during the 2021 Field Program including 1,695 meters of HQ core drilling and 357 meters of sonic drilling. Additional core drilling was completed to collect detailed geotechnical information for open pit and mill site engineering, and for groundwater investigations. The 5 sonic holes completed in the dry tailings/waste rock storage area were for the purpose of providing detailed geotechnical information to advance the engineering of these facilities. As part of the 2021 Field Program, the Company also implemented its Community and Workplace Protection Plan which detailed COVID-19 protocols that met all State of Alaska and City of Nome requirements for detecting and mitigating the spread of COVID-19.

On February 23, 2021, the Company completed a private placement for total gross proceeds of CA\$8,000,000. Pursuant to this private placement, the Company issued a total of 16,000,000 units (the “**2021-1 Units**”) at a price of CA\$0.50 per 2021-1 Unit. Each 2021-1 Unit consists of one common share

and one transferable common share purchase warrant (a “**2021-1 Warrant**”). Each 2021-1 Warrant entitled the holder to purchase one additional common share of the Company at a purchase price of CA\$0.61 per share for two years. The Company paid finder’s fees in the amount of CA\$614,400 and issued 1,228,800 transferrable broker warrants, each warrant entitling the holder to purchase one common share of the Company at CA\$0.61 per share.

On February 23, 2021, the Company completed a private placement for total gross proceeds of CA\$2,000,000. Pursuant to this private placement, the Company issued a total of 2,564,104 units (the “**2021-2 Units**”) at a price of CA\$0.78 per 2021-2 Unit. Each 2021-2 Unit consists of one common share and one transferable common share purchase warrant (a “**2021-2 Warrant**”). Each 2021-2 Warrant entitled the holder to purchase one additional common share of the Company at a price of CA\$0.98 per share for two years.

On August 12, 2021, the Company completed the first tranche of a brokered private placement (“**2021-3 Private Placement**”), raising gross proceeds of CA\$7,727,000 through the issuance of 7,727,000 units (“**2021-3 Units**”) at a price of CA\$1.00 per 2021-3 Unit consisting of one common share and one share purchase warrant (“**2021-3 Warrant**”). Each 2021-3 Warrant entitled the holder to acquire one common share of the Company at a price of CA\$1.50 per warrant for a period of 12 months from the closing date of the closing of the first tranche of the 2021-3 Private Placement. The Company paid finder’s fees in the amount of CA\$540,890 equal to 7% of the gross proceeds of the 2021-3 Private Placement and issued 540,890 compensation warrants. The exercise price of the foregoing compensation warrants is CA\$1.50 per share and expires 12 months from the date of the closing, subject to adjustment in certain circumstances.

Concurrent with closing the 2021-3 Private Placement, Taiga Mining Company, Inc. (“**Taiga**”) purchased 2,501,581 2021-3 Units for gross proceeds of CA\$2,501,581.

On September 24, 2021, the Company completed the final tranche of the 2021-3 Private Placement for CA\$998,000 through the issuance of 998,000 units at a price of CA\$1.00 per unit. Each unit consisted of one common share and one share purchase warrant entitling the holder to acquire one common share of the Company at a price of CA\$1.50 per warrant for a period of 12 months from the closing date.

During the year ended December 31, 2021, the Company issued 12,624,459 common shares for proceeds of CA\$9,050,671 pursuant to the exercise of stock options, share purchase warrants and broker warrants at an average exercise price of CA\$0.72 per share. During the year ended December 31, 2021, the Company completed three financings, raising total gross proceeds of CA\$21.2 million.

Year Ended December 31, 2022

On March 1, 2022, the Company announced the retirement of W. Alan Ahlgren, Chief Financial Officer and Corporate Secretary after seven years with the Company. Subsequently, the Company announced the appointment of Mr. Gordon Jang, CPA, CMA as Chief Financial Officer and Corporate Secretary. On May 10, 2022, the Company announced the appointment of Mr. Scott Packman to the Company’s Board of Directors. On June 1, 2022 the Company announced the appointment of Mr. Mike Schaffner as Senior Vice-President, Mining of G1 Alaska. On July 5, 2022, the Company announced the appointment of Mr. Bedi A. Singh to the Company’s Board of Directors effective the date of the Company’s Annual General and Special Meeting of Shareholders held on June 29, 2022.

On April 4, 2022, the Company entered into a memorandum of understanding (“**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 Lab 4 MOU was further extended on July 28, 2022.

On April 6, 2022, the Company entered into a non-binding MOU with Sunrise (Guizhou) New Energy Materials Co. Ltd. (“**Sunrise**”), a Chinese lithium-ion battery anode material producer to develop an

agreement to share expertise and technology for the design, construction, and operation of a U.S.-based graphite material manufacturing facility.

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 added a new acceleration provision. The original exercise price of CA\$1.50 per warrant and all other terms of the warrants remain unchanged for the extended exercise period.

On August 30, 2022, the Company closed the first tranche of a non-brokered private placement (the “**2022 Private Placement**”) of 8,762,071 units at a price of CA\$1.15 per unit for gross proceeds of CA\$10,076,382. Each unit consisted of one common share and one transferable, common share purchase warrant entitling the holder to purchase one common share of the Company at a price of CA\$1.50 per share for 2 years from the date of issuance. The Company paid finder’s fees and other share issuance costs of CA\$426,178 and issued 316,758 transferrable broker warrants, each warrant entitling the holder to acquire one common share of the Company at a price of \$1.50 per warrant.

On August 22, 2022, the Company entered into a debt settlement agreement with Taiga (the “**Taiga Debt Settlement Agreement**”), the Company’s largest shareholder, to settle the outstanding principal of US\$4,800,000 and accrued interest of US\$1,975,230 on two unsecured loan facilities dated June 6, 2020 and September 6, 2019, as amended and extended, between Taiga and the Company, subject to approval by the TSXV (the “**Taiga Debt Settlement Transaction**”).

On September 19, 2022, the Company completed the Taiga Debt Settlement Transaction. Under the terms of the Taiga Debt Settlement Transaction, the Company issued 9,296,328 common shares at a revised price of CA\$1.12 per share to Taiga in full settlement of the outstanding debt, subject to a statutory four month and one day hold period. The Company recognized a US\$1,079,139 loss on the Taiga Debt Settlement Transaction.

On October 14, 2022, the Company filed the NI 43-101 compliant Graphite One Technical Report.

On November 22, 2022, the Company closed the second and final tranche of the 2022 Private Placement of 560,915 units at a price of CA\$1.15 per unit for gross proceeds of CA\$645,052. Each unit consists of one common share and one transferable common share purchase warrant entitling the holder to purchase one common share of the Company at a price of CA\$1.50 per share during the 2 years from the date of issuance. The Company paid finder’s fees and other share issuance costs of CA\$65,079 and issued 39,264 transferrable broker warrants, each warrant entitling the holder to acquire one common share of the Company at a price of CA\$1.50 per warrant.

Subsequent events to financial year ended December 31, 2022

On January 19, 2023, the Board of Directors approved grants of 1,517,743 stock options exercisable at CA\$1.00 per option and 2,719,101 restricted share units (“**RSUs**”) at a price of CA\$1.00 per RSU pursuant to the Company’s Omnibus Plan to its employees, officers and directors. The stock options vest one-third (1/3) on each anniversary date over three (3) years and expire five (5) years from the grant date. The RSUs vest over three (3) years except for certain RSUs which vest quarterly beginning on the first anniversary date and over the following three quarters. On the vesting date, each RSU entitles the holder to receive one common share of the Company.

On February 7, 2023, the Company announced the drill results from its 2022 field program at its Graphite Creek Property, located approximately 60 kilometers (37 miles) north of Nome, Alaska. The field program was conducted from June to September 2022 and comprised of increasing the field camp capacity, completing key environmental baseline studies, and drilling 1,940 meters of core drilling for resource definition as well as 210 meters of geotechnical drilling for mine site and tailing area determination.

On March 13, 2023, the Company announced an updated resource estimate which showed a 15.5% increase in Measured and Indicated tonnage with a corresponding 13.1% increase of contained tonnes of graphite against the 2022 resource estimate.

On March 27, 2023, the Company signed an extension and amendment to the MOU with Sunrise to share Sunrise's expertise and technology for the design, construction and operations of the Company's proposed U.S.-based graphite material manufacturing facility.

On April 3, 2023, the Company announced the appointment of Kevin Torpy as Vice-President, Operations of G1 Alaska and the promotion of Andrew Tan to Vice-President, Advanced Materials.

On April 27, 2023, the Company received active anode material samples produced from the Graphite One Project by Sunrise which were provided to the U.S. Department of Energy's Pacific Northwest National Laboratory for additional testing and sample material.

On June 13, 2023, the Company entered into an agreement to buy back a 1% NSR interest. The NSR is applied to future production from 133 Alaska state claims owned or leased by the Company which make up a part of the Company's Graphite One Project in Alaska. In settlement of this buy back on June 21, 2023, the Company issued to Mr. Sheardown 456,500 common shares of the Company at a price of CA\$1.30 per share for total consideration of CA\$593,450 (US\$450,163). The common shares issued are subject to resale restrictions.

On July 17, 2023, the Company's wholly-owned subsidiary, G1 Alaska, was awarded a Department of Defense ("DoD") Technology Investment Agreement grant of up to US\$37.5 million (the "**TIA Grant**") under Title III of the Defense Production Act ("**DPA**"), funded through the Inflation Reduction Act. The DPA funding allows Graphite One to accelerate the completion of its Graphite One Project. The Graphite Creek Property was confirmed by the U.S. Geological Survey to be the country's largest known graphite resource, and among the largest in the world¹. The total amount covered under the TIA Grant is up to US\$75.0 million of which the DoD's share is up to US\$37.5 million and G1 Alaska's share is up to US\$37.5 million. The drawdown of the TIA Grant is equal to each dollar of eligible feasibility study expenditures spent on the Feasibility Study until November 30, 2024 ("**TIA Grant Due Date**"). The Company may request an extension to the TIA Grant Due Date to complete the Feasibility Study, if required.

On July 19, 2023, G1 Alaska entered into an unsecured loan agreement dated for reference July 17, 2023 with advances of up to US\$5.0 million (the "**Taiga Loan**") with Taiga, a related party. The Taiga Loan has a maturity date of July 24, 2024 and interest on the Taiga Loan accrues on the outstanding balance at a rate of twelve (12) percent per annum. The Taiga Loan was fully drawn as at September 30, 2023. As consideration for the Taiga Loan, G1 Alaska granted Taiga an option to purchase an NSR interest in 0.25% increments for every US\$1,250,000 advance up to a maximum one (1) percent on the 133 Alaska state claims which the Company bought back on June 21, 2023. The option may be exercised at any time prior to July 24, 2024 and, if exercised, the outstanding balance of the Taiga Loan and accrued interest will be deemed to be the consideration paid for the purchase of the NSR. See the disclosure below with respect to the Taiga option exercise announced on December 27, 2023.

On September 5, 2023, the Company arranged a strategic investment from Bering Straits Native Corporation of up to US\$10.4 million comprising of an initial investment of US\$2.0 million by way of a non-brokered private placement and an option to invest a further US\$6.0 million in common shares of the Company at any time within twelve (12) from the closing of the private placement. Each unit of the private placement is comprised of one common share of the Company and one share purchase warrant exercisable at CA\$1.21 per share expiring twelve (12) months from the closing of the private placement. On September 14, 2023, the Company closed 2,802,690 units at a price of CA\$0.97 for gross proceeds of CA\$2.7 million

¹ [Insights into the metamorphic history and origin of flake graphite mineralization at the Graphite Creek graphite deposit, Seward Peninsula, Alaska, USA | SpringerLink](#)

(US\$2.0 million) which will be used to support the Feasibility Study, community investment and for general corporate purposes.

On September 11, 2023, the Company received a US\$4.7 million contract from the U.S. Department of Defense's Defense Logistics Agency to develop a graphite and graphene-based foam fire suppressant as an alternative to incumbent PFAS fire-suppressant materials, as required by U.S. law. On September 25, 2023, the Company entered into a fixed price subaward agreement with Vorbeck Materials Corp.

On October 23, 2023, the Company announced the completion of the 2023 summer drilling program with 57 holes completed for a total of 8,736 metres (28,661 ft) of drilling, including 5 geotechnical holes for the primary purpose of evaluating construction sites or hydrology conditions. The 52 resource holes all intersected visual graphite mineralization and continued to demonstrate exceptional consistency of a shallow, high-grade deposit that remains open both to the east and west of the existing mineral resource estimate.

On November 1, 2023, the Company entered into a market-making services agreement with Independent Trading Group (ITG) Inc. ("**ITG**") to provide market-making services in accordance with TSXV policies and applicable laws. ITG will trade common shares of the Company on the TSXV with the objective of maintaining a reasonable market and improving the liquidity of the Company's shares. ITG will receive CA\$5,000 per month for an initial term of one (1) month and automatically renews for one (1) month periods unless either party provides written notice of termination to the other party thirty (30) days prior to the end of the additional term.

On December 5, 2023, the Company announced the appointment of Red Cloud Securities Inc. ("**Red Cloud**") to provide non-exclusive financial advisory and promotional services (the "**Red Cloud Services**"). Under the engagement, Red Cloud will be paid a fee of CA\$10,000 per month. The Red Cloud Services commenced on December 4, 2023 for an initial six-month term and automatically renews month-to-month thereafter unless either party provides written notice of termination to the other party thirty (30) days prior to the date of termination.

On December 12, 2023, the Company announced the delivery of synthetic graphite anode material samples for analysis by U.S.-based global end users. The synthetic graphite samples were prepared for Graphite One by Sunrise.

On December 27, 2023, the Company extended the vest date on certain, but for greater certainty not all, RSUs that were granted to certain employees and directors on December 27, 2022 and January 19, 2023 pursuant to the terms of the Omnibus Plan. For 729,605 RSUs that vest on December 27, 2023 and for 659,831 RSUs that vest on January 19, 2024, the Company and the grantees have agreed to extend such vest dates to June 14, 2024.

On December 27, 2023, the Company also announced that Taiga exercised its option to purchase a 1% NSR from the Company. The NSR is attached to 133 Alaska state claims owned or leased by the Company which the Company purchased on June 21, 2023 for CA\$593,450 (US\$450,163) by issuing to the vendor 456,500 common shares of the Company at a price of CA\$1.30 (US\$0.98) per share. The consideration paid for the sale of the NSR to Taiga is US\$5,220,274, which represents the outstanding Taiga loan balance and accrued interest.

The Company also announced the grant of 906,639 RSUs and 768,880 performance share units ("**PSUs**") to its officers pursuant to the terms of the Company's Omnibus Plan. As previously announced on the January 20, 2023 news release, these RSUs and PSUs were the balance of the 2023 awards reserved for issuance in the second half of 2023 under the new compensation program and a new grant to one officer who joined the Company on April 1, 2023. Each RSU and PSU will convert into one common share of the Company on each vest date. The RSUs will vest in three tranches on the first, second and third anniversary date. The PSUs will vest on the third anniversary date from the date of grant subject to the achievement of certain corporate performance criteria.

The Company announced that the board of directors had also approved a grant of 47,250 stock options (the “**Options**”) to an officer who joined the Company on April 1, 2023, pursuant to the terms of the Company’s Option Plan. The Options have an exercise price of CA\$0.85 per share, being the closing price of the Company’s shares on the TSXV on December 19, 2023. The Options vest one-third (1/3) on the first, second, and third anniversary from the date of grant and expire on December 19, 2028.

On January 8, 2024, the Company reported the final set of graphite results from the summer 2023 drilling program. The assays which are disclosed under the heading “*Mineral Project Disclosure – The Graphite One Project – Exploration, Development and Production*” of this AIF were received following the Company’s October 23, 2023 news release announcing the initial assay results.

On January 17, 2024, the Company delivered a termination notice pursuant to the MOU entered into between the Company and Sunrise on January 7, 2022. Pursuant to the terms of the MOU, the MOU terminated effective January 27, 2024. Under the MOU, Sunrise was to provide its expertise and technology for the design, construction and operation of the Company’s proposed U.S.-based graphite anode active material facility to produce artificial and natural graphite anode materials.

DESCRIPTION OF THE BUSINESS

Summary

As described above under “*General Development of the Business*” and below under “*Mineral Project Disclosure*,” the principal business of the Company is mineral resource exploration and development. The Company has one 100% owned project, the Graphite One Project. The primary focus of the Company is the advancement of the Graphite One Project.

The Company does not own any producing properties and, consequently, has no current operating income or cash flow from the properties it holds, nor has it had any income from operations in the past three financial years. As a consequence, operations of the Company are funded solely from equity and debt financings.

Principal Products

The Company is in the mineral exploration and development business, does not have any marketable products at this time and is not distributing any products at this time. In addition, the Company does not know when or if the Graphite One Project will reach the development stage and if so, what the final estimated capital costs would be to reach commercial production.

Specialized Skills and Knowledge

The Company’s business requires specialized skills and knowledge in the areas of geology, drilling, planning, implementation of exploration programs and compliance, permitting, business negotiations, accounting and management. To date, the Company has been able to readily locate and retain such professionals in Canada and the United States and believes it will be able to continue to do so. See “*Risk Factors*” below.

Competitive Conditions

The natural resource exploration and mining business is competitive in all phases of exploration, development and production. Competition in the mineral exploration and production industry can be significant at times. The Company competes with a number of other companies that have resources significantly in excess of those of the Company, in the search for and the acquisition of attractive mineral properties, qualified service providers, labour, equipment and suppliers. The Company also competes with other mining companies for production from mineral concessions, claims, leases and other interests, as well as for the recruitment and retention of qualified employees and consultants. The ability of the Company to acquire mineral properties in the future will depend on its ability to develop its present properties and on its ability to select and acquire suitable producing properties or prospects for mineral development or

exploration in the future, and on its ability to retain qualified personnel and/or contractors, of which there is no assurance. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favorable to the Company. See “*Risk Factors*” below.

Business Cycles

The natural resource exploration and mining business is very volatile and cyclical. In addition to commodity and mineral price cycles and recessionary periods, exploration activity may also be affected by seasonal and irregular weather conditions in the areas where the Company operates. See “*Risk Factors*” below.

Environmental Protection

The Company’s operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for limitations, restrictions and prohibitions on accidental or intentional releases and emissions and impacts to cultural and biological resources from mining and exploration activities such as drilling. A breach of such legislation may result in imposition of fines and penalties. Certain types of operations, such as exploration drilling, may also require the submission and approval of environmental reviews and impact assessments.

Environmental legislation is evolving in a manner that means stricter standards, and enforcement, fines and penalties for non-compliance are more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies including its directors, officers and employees. New environmental laws and regulations, amendments to existing laws and regulations, or more stringent implementations of existing laws and regulations could have a material adverse effect on the Company by potentially increasing capital and/or operating costs. See “*Risk Factors*” below.

Employees

As at December 31, 2022, the Company and its sole subsidiary employed six (6) employees. The field program and drilling services are provided by contractors on a seasonal and as-needed basis. The Company also relies on and engages consultants on a contract basis to assist the Company in carrying on with its executive management, administrative and exploration activities. Subsequent to December 31, 2022, the Company and its subsidiary hired certain additional employees, and together employ ten employees as of the date of this AIF.

Economic Dependence

The Company’s business is not substantially dependent on any contract upon which its business depends. It is not expected that the Company’s business will be affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

Foreign Operations

The Graphite One Project is located in the United States. See “*Mineral Project Disclosure – The Graphite One Project*”. Natural resource exploration and mining activities in the United States may be affected in varying degrees by government regulations relating to the mining industry. Any changes in regulations or shifts in political conditions may adversely affect the Company’s business. Operations may be affected in varying degrees by government regulations or restrictions on permitting, production, price controls, income taxes, expropriation of property, environmental legislation and mine safety. Future development and operations may be affected in varying degrees by such factors as government regulations or changes thereto. See “*Risk Factors*” below.

Social or Environmental Policies

The Company is committed to carrying out all of its activities in an ethical manner that prioritizes health and safety, recognizes the concerns of communities, local stakeholders and preserves the natural environment. The Company ensures that all personnel are trained and instructed in their assigned tasks and that safety procedures are followed at all times. The importance of ethical behavior and preservation of the natural environment is stressed to all personnel, and all are charged with monitoring operations to ensure they are being carried out in an environmentally friendly manner. The Company ensures that it will work with and consult local communities and stakeholders, recognizing this practice as a benefit to all.

RISK FACTORS

The operations of the Company are subject to significant uncertainty due to the high-risk nature of its business, which is the acquisition, financing, exploration, development and operation of mining properties. The following risk factors could materially affect the Company's financial condition and/or future operating results and could cause actual events to differ materially from those described in forward-looking statements relating to the Company. If any of the Company's properties moves to a development stage, the Company would be subject to additional risks respecting any development and production activities. The risks and uncertainties described below are not the only risks and uncertainties that the Company faces. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business.

General Risks

The Company may not be able to obtain sufficient financing to pursue all of its intended exploration activities or continue on a going concern basis

The Company's primary sources of capital resources are comprised of cash and cash equivalents and the issuance of securities. The Company will continuously monitor its capital structure and, based on changes in operations and economic conditions, may adjust the structure by issuing new common shares of the Company as necessary. The recoverability of the carrying values of the Company's assets is dependent upon the ability of the Company to obtain the necessary financing to complete exploration activities.

While the Company has been successful in securing financing to date, there are no guarantees that it will be able to secure such financing in the future on terms acceptable to the Company. Any failure to secure future financing could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

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 One 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 One Project or require the Company to sell one or more of its properties (or an interest therein).

Reliance on management and key 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-person 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.

Reliance on independent contractors

The Company's success depends to a significant extent on the performance and continued service of independent contractors. The Company will contract the services of professional drillers and others for exploration, environmental, construction and engineering services. Poor performance by such contractors or the loss of such services could have a material and adverse effect on the Company and its business and results of operations and could result in failure to meet its business objectives.

Repayment of the TIA Grant

The drawdown of the grant under the TIA Grant is subject to adherence to the terms and conditions therein, including only qualifying expenditures on the Feasibility Study ("**TIA Qualifying Expenditures**") which are reimbursable at a rate of US\$0.50 for every US\$1.00 spent. The Company may be subject to repayment of any amount of grant the DoD does not consider are TIA Qualifying Expenditures.

Potential profitability depends upon factors beyond the control of the Company

The potential profitability of mineral properties is dependent upon many factors beyond the Company's control. For instance, world prices of and markets for graphite and other minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of mined ore may vary from the rate experienced in tests, and a reduction in the recovery rate will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, water, environmental compliance or other production inputs. Such costs will fluctuate in ways the Company cannot predict and are beyond the Company's control, and such fluctuations will impact profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for development and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of the Company.

Political and economic instability in foreign countries

The Company's Graphite One Project is located in the United States. Exploration in a foreign jurisdiction exposes the Company to risks that may not otherwise be experienced if all operations were domestic. The risks include but are not limited to extreme fluctuations in currency exchange rates, labour instability, socioeconomic conditions, mineral title irregularities and high rates of inflation. In addition, changes in mining or investment policies, or shifts in political attitude or policies in foreign countries in which the

Company operates may adversely affect its business. The distribution of earnings back to Canada would require United States dollars to be reconverted to foreign currency for repatriation. The effect of these factors cannot be accurately predicted. Political risks may adversely affect the Company's existing assets and operations. The Company does not maintain, and the Company does not intend to purchase political risk insurance. Real and perceived political risks in some countries may also affect the Company's ability to finance exploration programs and attract joint venture partners and may affect future mine development opportunities.

Political regulatory risks

The Company may be affected in varying degrees by government regulation with respect to restrictions on permitting and license risks, mineral exploration activities (as well as the potential for eventual mining, processing and development activities). The activities of the Company are subject to extensive laws and regulations governing prospecting, exploration, development, production, taxes, labour standards and occupational health, mine safety, toxic substances, land use, waste disposal, water use, land claims of local people, protection of historic and archaeological sites, mine development, protection of endangered and protected species and other matters.

Approval and permits from Government and Indigenous peoples are currently, and may in the future be, required in connection with the Company's exploration assets. To the extent such approvals are required and not obtained, the Company may be curtailed or prohibited from continuing its exploration or proceeding with planned exploration or development of mineral properties. Individuals in Government make interpretations and apply legislation and policies intended to benefit the mining industry while protecting flora, fauna and culturally significant areas. Accordingly, there is a risk that the Company and its business is impacted negatively by government regulation. Regulators in the United States have broad authority to shut down and/or levy fines against facilities that do not comply with regulations or standards.

The Company's mineral exploration activities in the United States may be adversely affected in varying degrees by changing government regulations related to the mining industry or shifts in political conditions may result in changes to laws affecting ownership of assets, mining policies, monetary policies, taxation, exchange rates, environmental regulations, labour relations, repatriation of income and return of capital. This may affect both the Company's ability to undertake exploration and development activities in respect of present and future properties in the manner currently contemplated, as well as its ability to continue to explore, develop and operate those properties in which it has an interest or in respect of which it has obtained exploration and development rights to date. The possibility that future governments may adopt substantially different policies, which might extend to expropriation of assets, cannot be ruled out.

Natural disasters, geopolitical instability or other unforeseen events

In addition to the outbreak of infectious disease or occurrence of pandemics, such as the outbreak of COVID-19, natural disasters, forest fires, terrorism or other unanticipated events, in any of the areas in which the Company operates could cause interruptions in the Company's operations. Natural disasters, forest fires, geopolitical tensions and instability (including terrorism) or other unforeseen events could negatively affect project development, operations, labour supply and financial markets, all or any of which could have a material adverse effect on the Company's business, financial condition, operational results or cash flows.

Public health crises

Global financial conditions and the global economy in general have, at various times in the past and may in the future, experienced extreme volatility in response to economic shocks or other events. Many industries, including the mining industry, are impacted by volatile market conditions in response to the widespread outbreak of epidemics, pandemics or other health crises. Some of the key impacts of these conditions include devaluations and high volatility in global equity, commodities, foreign exchange and mining markets and a lack of market confidence and liquidity. Financial institutions and large companies may be forced into bankruptcy or need to be rescued by government authorities. Access to financing may

also be negatively impacted by future liquidity crises throughout the world. These factors may impact the Company's ability to obtain equity or debt financing and, where available, to obtain such financing on terms favorable to the Company. Increased levels of volatility and market turmoil could have a material adverse impact on the Company's operations and planned growth and the trading price of the securities of the Company may be adversely affected.

The spread of infectious diseases could have a material adverse impact on the Company's workforce and the development of its Graphite One Project. The full extent and impact of potential outbreak of epidemics, pandemics or other health crises on the Company's operations cannot currently be ascertained, as it depends upon future developments which cannot be predicted, and includes among other matters: the duration of these outbreaks, the severity of these infectious diseases and the ability to treat them, the ability to collect sufficient data to track these infectious diseases and the collective actions taken to curb the spread of these infectious diseases.

Volatility of share prices

In recent years, the securities markets in Canada and the United States have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in price will not occur. The market for the common shares of the Company will be subject to market trends generally, notwithstanding any potential business of the Company. The value of the Company's common shares will be affected by such volatility.

Litigation

The Company may become party to litigation from time to time in the ordinary course of business, which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company, such decision could adversely affect the Company's ability to continue operating and the market price for its securities and could use significant financial and personnel resources of the Company. Even if the Company is involved in litigation and wins, litigation can redirect and consume significant resources.

In addition to being subject to litigation in the ordinary course of business, in the future, the Company may be subject to class actions, derivative actions and other securities litigation and investigations. This litigation may be time-consuming, expensive and may distract the Company from the conduct of its daily business. It is possible that the Company will be required to pay substantial judgments, settlements or other penalties and incur expenses that could have a material adverse effect on its operating results, liquidity or financial position. Expenses incurred in connection with these lawsuits, which would be expected to include substantial fees of lawyers and other professional advisors, and the Company's obligations to indemnify officers and directors who may be parties to such actions, could materially adversely affect the Company's reputation, operating results, liquidity or financial position. Further, it is not known with certainty if any of this type of litigation or any resulting expenses will be fully or even partially covered by the Company's insurance. In addition, these lawsuits may cause insurance premiums to increase in future periods.

Climate change

Climate change may negatively affect the Company's business and operations. There is concern that carbon dioxide and other greenhouse gases in the atmosphere may have an adverse impact on global temperatures, weather patterns and the frequency and severity of extreme weather and natural disasters.

Information technology

The Company relies on information technology systems and any inadequacy, failure, interruption or security breaches of those systems may harm its ability to effectively operate the business. The Company is

dependent on various information technology systems, including, but not limited to, networks, applications and outsourced services in connection with the operation of the business. A failure of the Company's information technology systems to perform as it anticipates could disrupt the business and cause the business to suffer. In addition, the Company's information technology systems may be vulnerable to damage or interruption from circumstances beyond its control, including fire, natural disasters, systems failures, viruses and security breaches. Any such damage or interruption could have a material adverse effect on the business and operations of the Company.

Failure or breach of information systems could adversely impact the Company's reputation and results of operations

The Company's information systems, and those of its third-party service providers and vendors, are vulnerable to an increasing threat of continually evolving cybersecurity risks. These risks may take the form of malware, computer viruses, security breaches, cyber threats, extortion, employee error, malfeasance, system errors or other types of risks, and may occur from inside or outside of the Company's organization. Cybersecurity risk is increasingly difficult to identify and quantify and cannot be fully mitigated because of the rapidly evolving nature of the threats, targets, and consequences. Additionally, unauthorized parties may attempt to gain access to these systems or the Company's information through fraud or other means of deceiving its third-party service providers, employees, or vendors. The Company's operations depend, in part, on how well it and its suppliers protect networks, equipment, information technology systems and software against damage from a number of threats. The Company's operations depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. However, if the Company is unable or delays in maintaining, upgrading, or replacing its IT systems and software, the risk of a cyber security incident could materially increase. Any of these and other events could result in information system failures, delays and/or increases in capital and operating expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation, ability to comply with regulatory reporting obligations and results of operations.

Management of growth

The Company may be subject to growth-related risks, including capacity constraints and pressure on its internal systems and controls. The ability of the Company to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Company to deal with this growth may have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

Credit and liquidity risk

Credit risk arises from cash and cash equivalents held with banks and financial institutions. The maximum exposure to credit risk is equal to the carrying value of the financial asset.

Liquidity risk arises through the excess of financial obligations due over available financial assets at any point in time. The Company's objective in managing liquidity risk will be to maintain sufficient readily available cash reserves and credit in order to meet its liquidity requirements at any point in time. The total cost and planned timing of acquisitions and/or other development or construction projects is not currently determinable, and it is not currently known precisely when the Company will require external financing in future periods.

Issuance of debt

From time to time, the Company may enter into transactions to acquire assets or the common shares of other companies. These transactions may be financed partially or wholly with debt, which may increase the Company's debt levels above industry standards. The Company's articles do not limit the amount of indebtedness that the Company may incur. The level of the Company's indebtedness from time to time

could impair the Company's ability to obtain additional financing in the future on a timely basis to take advantage of business opportunities that may arise.

Unlimited number of authorized but unissued common shares

The Company has an unlimited number of common shares that may be issued by its board of directors without further action or approval of the Company's shareholders. While the board of directors is required to fulfil its fiduciary obligations in connection with the issuance of such common shares, the common shares may be issued in transactions with which not all shareholders agree, and the issuance of such common shares will cause dilution to the ownership interests of the Company's shareholders.

The Company is not likely to pay dividends for an extended period of time

The Company has not, since the date of its incorporation, declared or paid any dividends or other distributions on its common shares. The Company anticipates that, for the foreseeable future, it will retain its cash resources for the operation and development of its business. The declaration and payment of any dividends in the future is at the discretion of the board of directors of the Company and will depend on a number of factors, including compliance with applicable laws, financial performance, working capital requirements of the Company and such other factors as its directors consider appropriate, and the Company may never pay dividends.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about the Company's business, the price and trading volume of the common shares could decline

The trading market for the common shares of the Company will depend on any research and reports that securities or industry analysts may publish about the Company and its business. The Company does not have any control over such analysts. The Company cannot ensure that analysts will cover it or provide favorable coverage. If one or more of the analysts who may cover the Company's downgrade of its stock or reduce their opinion of the value of the common shares, the price of common shares would likely decline. If one or more of any such analysts ceases coverage of the Company or fails to regularly publish reports, the Company could lose visibility in the financial markets, which could cause the price and trading volume of the common shares to decline.

The Company may expand into other geographic areas, which could increase the Company's operational, regulatory and other risks

The Company may in the future expand into other geographic areas, which could increase the Company's operational, regulatory, compliance, reputational and foreign exchange rate risks. The failure of the Company's operating infrastructure to support such expansion could result in operational failures and regulatory fines or sanctions. Any future international expansion could require the Company to incur a number of up-front expenses, including those associated with obtaining regulatory approvals, as well as additional ongoing expenses, including those associated with infrastructure, staff and regulatory compliance. The Company may not be able to successfully identify suitable acquisition and expansion opportunities or integrate such operations successfully with the Company's existing operations.

The Company will incur costs as a result of complying with the reporting requirements, rules and regulations affecting public issuers

As a public issuer, the Company is subject to the reporting requirements and rules and regulations under the applicable Canadian securities laws and rules of any stock exchange on which the Company's securities may be listed from time to time. Additional or new regulatory requirements may be adopted in the future. The requirements of existing and potential future rules and regulations will increase the Company's legal, accounting and financial compliance costs, make some activities more difficult, time-consuming or costly

and may also place undue strain on its personnel, systems and resources, which could adversely affect its business and financial condition.

Current global financial condition

Global financial conditions may be characterized by extreme volatility. Global financial conditions could suddenly and rapidly destabilize in response to future economic shocks, as government authorities may have limited resources to respond to future crises. Future economic shocks may be precipitated by a number of causes, such as geopolitical instability, natural disasters, future negative impacts as a result of a global pandemic and other unforeseen events. Any sudden or rapid destabilization of global economic conditions could impact the Company's ability to obtain equity or debt financing in the future on terms favorable to the Company. Additionally, any such occurrence could cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses and ultimately have a material adverse effect on the Company's business, operations and financial condition.

Furthermore, general market, political and economic conditions, including, for example, inflation, interest and currency exchange rates, structural changes in the global mining industry, global supply and demand for commodities, political developments, legislative or regulatory changes, civil, political or labour unrest and stock market trends will affect the Company's operating environment and its operating costs, profit margins and share price. Any negative events in the global economy could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Wars in Ukraine and Middle East and corresponding events

While the Company does not have any material business, operations or assets in Russia, Belarus, Ukraine or the Middle East, and has not been materially adversely affected by Russia's invasion of Ukraine or the Israel-Hamas war at this time, the short and long-term implications of ongoing wars and corresponding events are difficult to predict. To the extent that Russia's invasion of Ukraine and the Israel-Hamas war and the corresponding events may adversely affect the Company's business, it may also have the effect of heightening many of the other risks described in this "Risk Factors" section, such as those relating to inflation, supply chain disruptions, information technology and market conditions, any of which could materially and adversely affect the Company's business, financial condition and results of operations.

Conflicts of interest

Certain of the directors and officers of the Company are also directors and officers of other resource companies involved in the mining industry and conflicts of interest may arise between their duties as officers and directors of the Company and as officers and directors of other companies. Such conflicts must be disclosed in accordance with and are subject to other procedures and remedies as applicable under the *Business Corporations Act* (British Columbia).

Risks Related to Mining, Exploration and Development

Mineral exploration and development involve a high degree of risk and few properties which are explored are ultimately developed into producing mines. In particular, exploration for minerals such as graphite is highly speculative in nature.

Mining operations are risky

The Company's current business, and any future development or mining operations, involve various types of risks and hazards typical of companies engaged in the mining industry. Such risks include, but are not limited to: industrial accidents; unusual or unexpected rock formations; structural cave-ins or slides and pitfall, ground or slope failures and accidental release of water from surface storage facilities; fire, flooding and earthquakes; ore losses in handling and transport; periodic interruptions due to inclement or hazardous weather conditions; environmental hazards; discharge of pollutants or hazardous materials; failure of

processing and mechanical equipment and other performance problems; geotechnical risks, including the stability of the excavations and unusual and unexpected geological conditions; unanticipated variations in grade and other geological problems, water, or surface conditions; labour disputes or slowdowns; work force health issues as a result of working conditions; and force majeure events, or other unfavorable operating conditions.

These risks, conditions and events could result in: damage to, or destruction of, the value of, the Graphite One Project; personal injury or death; permitting delays and legal challenges, environmental damage to the Graphite One Project, surrounding lands and waters, or the properties of others; delays or prohibitions on mining or the transportation of minerals; monetary losses; and potential legal liability and any of the foregoing could have a material adverse effect on the Company's business, financial condition, results of operation, cash flows or prospects. In particular, refurbishment and exploration activities present inherent risks of injury to people and damage to equipment. Significant accidents could occur, potentially resulting in a complete shutdown of the Company's operations at the Graphite One Project which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

There are also risks related to the reliance on the reliability of current and new or developing technology; the reliance on the work performance of outside consultants, contractors, and manufacturers; changes to labour or material costs; unknown or unanticipated or underestimated costs or expenses; unknown or unanticipated or underestimated additions to the scope of work due to changing or adverse conditions encountered; unexpected variances in the geometry or quality of ore zones; unexpected reclamation requirements or expenses; permitting time lines; unexpected or unknown ground conditions; unexpected changes to estimated parameters utilized to estimate past timelines, projections, or costs; and liquidity risks. An adverse change in any one of such factors, hazards and risks may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Competition

The mining industry is intensely competitive. The Company competes with other mining companies, many of which have greater resources and experience. Competition in the mining industry is primarily for: (a) properties which can be developed and can produce economically; (b) the technical expertise to find, develop, and operate such properties; (c) labour to operate such properties; and (d) capital to fund such properties. Such competition may result in the Company being unable to acquire or develop desired properties, to recruit or retain qualified employees and consultants or to acquire the capital necessary to fund its operations and develop its properties. The Company's inability to compete with other mining companies for these resources could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Mineral Resource Estimates

There are numerous uncertainties inherent in estimating Mineral Resources, including many factors beyond the Company's control. Such estimation is a subjective process, and the accuracy of any Mineral Resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. There can be no assurance that Mineral Recoveries in small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production. Resource estimates may require revision (either up or down) based on actual production experience. Any future Mineral Resource figures will be estimates and there can be no assurance that the minerals are present or will be recovered, or that the Company's projects can be brought into profitable production. Any material reductions in Mineral Resource estimates could have a material adverse effect on the Company's results of operations and financial condition. Inferred Mineral Resources do not have demonstrated economic viability and have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. A significant amount of exploration work must be completed in order to determine whether an inferred Mineral Resource may be upgraded to a higher confidence category.

Imprecision of PFS and mineral resource estimates

The PFS and the mineral resource figures are estimates, and such estimates are expressions of judgment based on knowledge, mining experience, analysis of drill 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 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.

Graphite demand and prices

Graphite is an industrial mineral and the sales prices are not public. Graphite is not a traded commodity like base and precious metals. Sales agreements are negotiated on an individual and private basis with each different end-user. Therefore, it is possible that the sales prices used in any assumptions made by the Company will be different than the actual prices at which the Company is able to sell its graphite. In addition, there are a limited number of producers of graphite, and it is possible that these existing producers will try to prevent new-comers from entering the chain of supply by increasing their production capacity and lowering sales prices. Factors such as foreign currency fluctuation, supply and demand, industrial disruption and actual graphite market sale prices could have an adverse impact on operating costs and stock market prices and on the Company's ability to fund its activities. In each case, the economics of the Graphite One Project could be materially adversely affected, even to the point of being rendered uneconomic.

Fluctuating mineral prices

The mining industry is heavily dependent upon the market price of the metals or minerals being mined. There is no assurance that a profitable market will exist for the sale of the same. There can be no assurance that mineral prices will be such that the Company's properties can be mined at a profit. The price of the common shares and the financial results of the Company, like its mining activities, could undergo in the future important negative effects because of the fall of the prices of minerals, resulting in an impact on the capacity of the Company to finance its activities. The prices of minerals fluctuate in an important way and are tributary to various factors which are independent of the will of the Company, such as the sale or the purchase of minerals by various brokers, central banks and financial institutions, the interest rates, the foreign exchange rates, the rates of inflation, of deflation, the fluctuations in the value of the Canadian and United States dollars, the regional and world offer and demand, the economic conjuncture and policy which prevails in the countries of the world which are large mineral producers, or countries where large customers and end users are located, and infectious diseases and global pandemic. The prices of minerals largely fluctuated these last years, and any serious fall could prevent the continuation of the exploration, construction and development activities of the Company.

Availability of drilling equipment and access restrictions

Mining exploration and development activities are dependent on the availability of drilling and related equipment in the particular areas where such activities will be conducted. Demand for such limited equipment or access restrictions may affect the availability of such equipment to the Company and may delay exploration and development activities.

Infrastructure

Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants which affect capital and operating costs. Unusual or infrequent weather phenomena, terrorism, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect the Company's financial condition and results of operations.

Operations during mining cycle peaks are more expensive

During times of increased demand for metals and minerals, price increases may encourage expanded mining exploration, development and construction activities. These increased activities may result in escalating demand for and cost of contract exploration, development and construction services and equipment. Increased demand for and cost of services and equipment could cause exploration, development and construction costs to increase materially, resulting in delays if services or equipment cannot be obtained in a timely manner due to inadequate availability, and increased potential for scheduling difficulties and cost increases due to the need to coordinate the availability of services or equipment, any of which could materially increase project exploration, development or construction costs, result in project delays or increase operating costs.

Title

There is no assurance that the Company's title to its properties will not be challenged. The acquisition of title to mineral exploration properties is a very detailed and time-consuming process. Title to and the area of mineral properties may be disputed. The Company cannot give any assurance that title to its properties or surface rights will not be challenged or impugned. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify. A successful claim that Company, as the case may be, does not have title to its properties could cause the Company to lose any rights to explore, develop and mine any minerals on that property, without compensation for its prior expenditures.

Surface rights

Permission for surface access must be negotiated with the owners of the surface rights to the areas covered by the mining concessions, and commonly involve leasing of the surface rights. The Company currently does not have any agreements in place regarding the Graphite Creek Property, and there is no guarantee the Company will be able to negotiate and enter into any such agreement as may be required to have access to do significant work. Further, there are potential risks with regard to the completion of a successful exploration program in that there is a possibility of not being able to enter into a surface access agreement over part of the area of interest, or problems with obtaining an environmental permit for road construction and drilling.

Permits, licenses and regulatory requirements

The Company's operations are subject to extensive laws and regulations governing, among other things, such matters as environmental protection, management and use of toxic substances and explosives, health, exploration and development of mines, commercial production and sale of by-products, ongoing and post-closure reclamation, construction and operation of tailings dams, safety and labour, taxation and royalties, maintenance of mineral tenure, and expropriation of property. The activities of the Company require licenses and permits from various governmental authorities.

The costs associated with compliance with these laws and regulations and of obtaining licenses and permits are substantial, and possible future laws and regulations, changes to existing laws and regulations and more stringent enforcement of current laws and regulations by governmental authorities, could cause additional expenses, capital expenditures, restrictions on or suspensions of the Company's operations and delays in the development of its properties. There is no assurance that future changes in such laws and

regulations, if any, will not adversely affect the Company's operations. Moreover, these laws and regulations may allow governmental authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety practices of the Company's past and current operations, or possibly even the actions of former property owners, and could lead to the imposition of substantial fines, penalties or other civil or criminal sanctions. The Company may fail to comply with current or future laws and regulations. Such non-compliance can lead to financial restatements, civil or criminal fines, penalties, and other material negative impacts on the Company.

The Company is required to obtain or renew further government permits and licenses for its current and contemplated operations. Obtaining, amending or renewing the necessary governmental permits and licenses can be a time-consuming process potentially involving a number of regulatory agencies, involving public hearings and costly undertakings on the Company's part. The duration and success of the Company's efforts to obtain, amend and renew permits and licenses are contingent upon many variables not within its control, including the interpretation of applicable requirements implemented by the relevant permitting or licensing authority. The Company may not be able to obtain, amend or renew permits or licenses that are necessary to its operations, or the cost to obtain, amend or renew permits or licenses may exceed what the Company believes it can ultimately recover from a given property once in production. Any unexpected delays or costs associated with the permitting and licensing process could impede operations at the Graphite One Project. To the extent necessary permits or licenses are not obtained, amended or renewed, or are subsequently suspended or revoked, the Company may be curtailed or prohibited from proceeding with planned development, commercialization, operation and exploration activities. Such curtailment or prohibition may result in a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

Uninsurable risks

Mining businesses 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, 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 of the Company. 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.

Acquisition of additional mineral properties

If the Company loses or abandons its interest in the Graphite Creek Property, there is no assurance that it will be able to acquire another mineral property of merit or that such an acquisition would be approved by the TSXV. There is also no guarantee that the TSXV will approve the acquisition of any additional properties by the Company, whether by way of option or otherwise, should the Company wish to acquire any additional properties.

Foreign currency fluctuations

The Company will continue to maintain its accounts and raise its capital funding through the sale of equity securities in Canadian and/or United States dollars. The Company's exploration operations in the United States are paid for in either Canadian dollars or United States dollars. The Company is, therefore, subject

to foreign currency exchange fluctuations relative to the United States dollar, which may materially affect the Company's financial position and operating results. Further, there is no guarantee that the governments of the United States, or any other foreign government in which the Company carries on business, will not impose restrictions on the convertibility of or obligations to remit and convert into the local currency in the future, which may also have a material adverse effect on the Company's financial position and operations. The Company does not currently have a formal hedging program to mitigate foreign currency exchange risks.

Current and future operations are subject to environmental, social and governance risks

There are evolving expectations related to environmental protection, human rights and Indigenous rights and an increasing level of public concern relating to the perceived effect of mining activities on communities, including certain environmental and social aspects such as water consumption and water quality, land use, noise and vibration, dust and air quality, mine closure, and employment and economic development opportunities. Increased global awareness for the impacts of climate change has contributed to this growing public concern. Further, sustained periods of stress on local economies may increase scrutiny of and pressure on mining operations over the long term. While the Company is dedicated to establishing mutually rewarding relationships with all of its stakeholders, there can be no assurance regarding the nature of the relationship with such stakeholders or that required key approvals, permits or licenses will be obtained when and as necessary.

Opposition to mining activities by communities or Indigenous groups may ultimately affect permitting or approval processes, current and future exploration, or further development or new development of projects, as well as the Company's reputation. Such opposition may be directed through legal or administrative proceedings or expressed in manifestations such as protests, roadblocks or other forms of public expression against the Company's activities and may have a negative impact on the Company's reputation and ability to execute planned exploration and development.

Opposition by any of the aforementioned groups to the Company's operations, partners, regulators or the industry generally may require modification, or preclude the exploration or development, of the Company's projects or may require it to enter into agreements with such groups or local governments with respect to the Company's projects, in some cases, causing increased cost and considerable delays to the advancement of its projects. While the Company is committed to operating in a socially responsible manner, there can be no assurance that its efforts, in this respect, will mitigate this potential risk.

Environmental, health and safety regulation of resource industry

The exploration activity of the Company requires permits from various levels of government. Such operations are subject to laws and regulations governing prospecting, development, mining, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. The Company believes it is in substantial compliance with all material laws and regulations that currently apply to its activities. There can be no assurance, however, that all permits which the Company may require for construction of mining facilities and conduct of mining operations, particularly environmental permits, will be obtainable on reasonable terms or that compliance with such laws and regulations would not have an adverse effect on the profitability of any mining project that the Company might undertake.

All phases of the Company's operations are subject to environmental regulations in various jurisdictions. If the Company's properties are proven to host economic reserves of minerals, mining operations will be subject to federal, state and local laws relating to the protection of the environment, including laws regulating removal of natural resources from the ground and the discharge of materials into the environment. Mining operations will be subject to federal, state and local laws and regulations which seek to maintain health and safety standards by regulating the design and use of mining methods and equipment. Various permits from government bodies are required for mining operations to be conducted; no assurance can be given that such permits will be received. No assurance can be given that environmental standards imposed by federal, state or local authorities will not be changed or that any such changes would not have

material adverse effects on the Company's activities. Moreover, compliance with such laws may cause substantial delays or require capital outlays in excess of those anticipated, thus causing an adverse effect on the Company. Additionally, the Company may be subject to liability for pollution or other environmental damage, which it may not be able to insure against.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations and, in particular, environmental laws.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

The Company may be negatively impacted by changes to mining laws and regulations

The Company's activities are subject to various laws governing prospecting, exploration, development, production, taxes, labour standards and occupational health, mine safety, toxic substances and other matters. Mining, exploration and development activities are also subject to various laws and regulations relating to the protection of the environment. Although the Company believes that its activities are currently carried out in accordance with all applicable rules and regulations, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner that could limit or curtail production or development of the Company's properties. Amendments to current laws and regulations governing the Company's operations and activities or more stringent implementation of such laws and regulations could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

The Graphite Creek Property is located in underdeveloped rural area

The Graphite Creek Property is located in an underdeveloped rural area, resulting in technical challenges for conducting mineral exploration and development and any potential mining activities at the Graphite Creek Property. The Company may sometimes be unable to overcome problems related to underdevelopment or unseasonable weather at a commercially reasonable cost, which could negatively affect the Company's mineral exploration and development and any potential mining activities at the Graphite Creek Property and have a material adverse effect on the Company. The rural location of the Graphite Creek Property will result in increased costs associated with land access and infrastructure, including power lines, water pipelines and transportation.

Stress in the global economy

The Company has experienced inflationary cost pressures. These pressures may persist longer than expected or worsen and the Company's business and financial condition may differ significantly from those it has anticipated. Reduction in credit, combined with reduced economic activity and the fluctuations in the United States dollar and the Canadian dollar, may adversely affect businesses and industries that purchase commodities, affecting commodity prices in more significant and unpredictable ways than the normal risks associated with commodity prices. The availability of services such as drilling contractors and geological service companies and/or the terms on which these services are provided may be adversely affected by the economic impact on the service providers. The adverse effects on the capital markets generally make the raising of capital by equity or debt financing much more difficult and the Company is dependent upon the capital markets to raise financing. Any of these events, or any other events caused by turmoil in world

financial markets, may have a material adverse effect on the Company's business, operating results, and financial condition.

Unknown environmental risks for past activities

Exploration and mining operations involve a potential risk of releases to soil, surface water and groundwater of metals, chemicals, fuels, liquids having acidic properties and other contaminants. In recent years, regulatory requirements and improved technology have significantly reduced those risks. However, those risks have not been eliminated and the risk of environmental contamination from present and past exploration or mining activities exists for mining companies. Companies may be liable for environmental contamination and natural resource damages relating to properties that they currently own or operate or at which environmental contamination occurred while or before they owned or operated the properties. No assurance can be given that potential liabilities for such contamination or damages caused by past activities at these properties do not exist.

MINERAL PROJECT DISCLOSURE – THE GRAPHITE ONE PROJECT

Current Technical Report

The bulk of the information in this section is derived from the technical report titled "*Preliminary Feasibility Study Technical Report, Graphite One Project, Alaska USA*" with an effective date of August 29, 2022 and signature date of October 13, 2022 (the "**Graphite One Technical Report**") and filed on SEDAR, the predecessor to SEDAR+, on October 14, 2022 regarding the Company's Graphite One Project consisting of the Graphite Creek Property near Nome, Alaska and a modelled secondary treatment plant located in Washington State prepared for the Company by Richard Goodwin, P.Eng.; Robert M. Retherford, CPG; Matt Bolu, P.Eng.; Tysen Hantelmann, P.Eng.; Les Galbraith, P. E.; Carly Church, P.Eng.; and Tom Sharp, P.Eng. (collectively, the "**Authors**"). The Graphite One Technical Report has been filed with Canadian securities regulatory authorities and prepared pursuant to NI 43-101 and is available for review under the Company's issuer profile on SEDAR+ at www.sedarplus.ca. The Authors are each a qualified person under NI 43-101.

Project Description, Location and Access

Project Description

The Graphite One Project is envisioned as a vertically integrated enterprise to mine, process, and manufacture anode materials for the electric vehicle lithium-ion battery market. Management's current plan is for graphite to be mined from the Graphite Creek Property. The resulting graphite concentrate would be shipped to the second link in the Company's proposed supply chain solution: a secondary treatment plant (the "**STP**") 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.

Location, Access and Ownership

The Property is on the Seward Peninsula, approximately 60-kilometers (km) north of Nome, Alaska. The Property comprises 23,680 acres and consists of 176 active State of Alaska 160-acre (1/4 section) mining claims with 28 of those claims overlying more senior claims within the claim block. The claims are on the Teller A2 and A1 quadrangles, and the plan projection of the deposit is centered on UTM coordinates 474,600 E and 7,212,200 N (NAD 83, Zone 3N). The corresponding geographic coordinates are - 165.540990W, 65.038424N. The proposed mining footprint is well within the Property boundaries.

Access is by helicopter, or overland by foot or snowmobile, or by water and foot. The Property is separated from the intertidal Imuruk Basin by three kilometers of tundra.

The Property is 23 km from the seasonal Kougarok Road (Nome-Taylor Highway), on an undeveloped route through the Kigluaik Mts. via Mosquito Pass. It is 30 km from the Property to the Teller Highway, along the northern flank of the Kigluaik Mts.

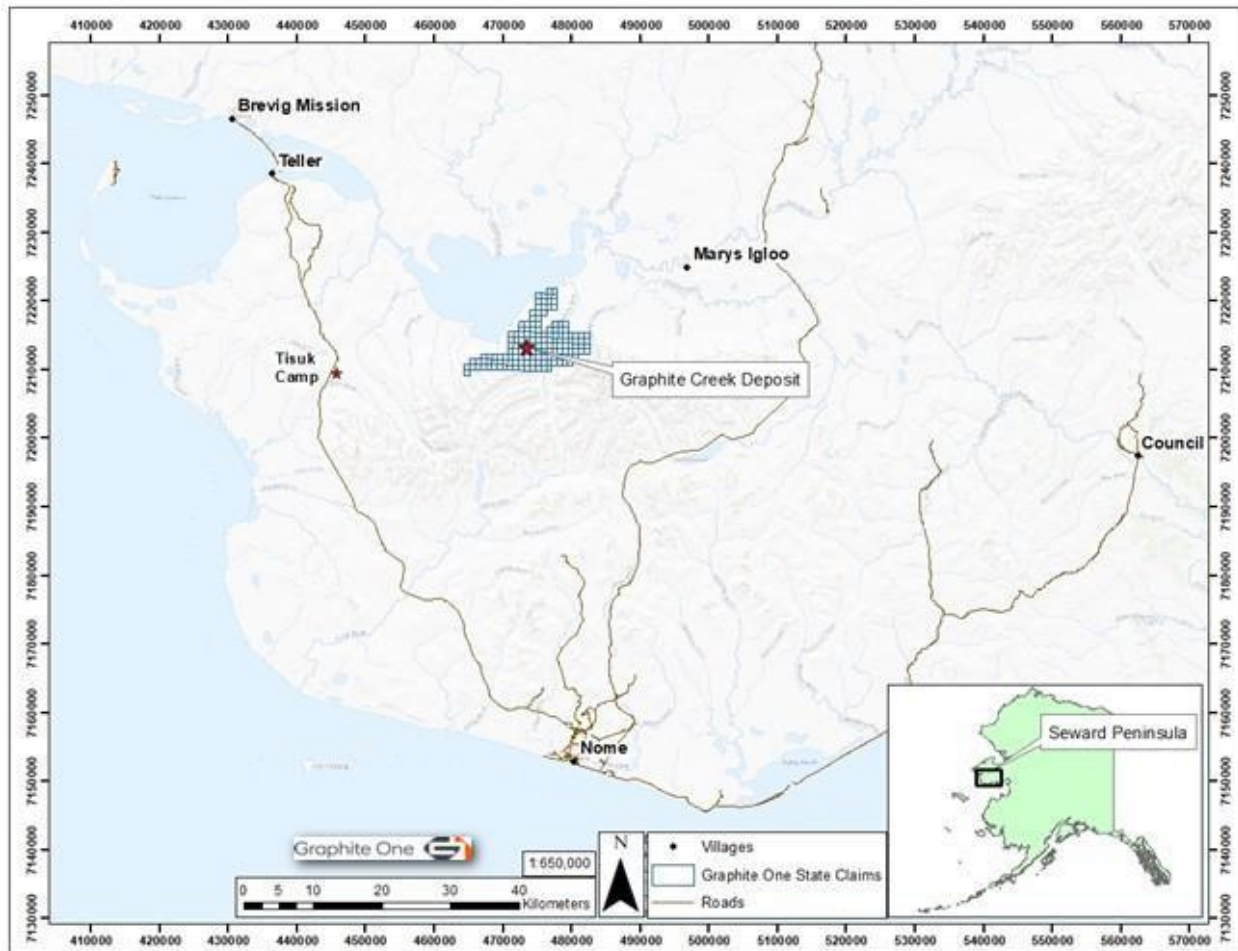
Prior to 2021, drilling efforts used camps on the road system and helicopters to support remote drill pads. Camps were established at Salmon Lake about 40 km from Nome on the Kougarok Road in 2012 and 2013; and at the Tisuk camp on the Teller Highway about 80 km from Nome in 2014, 2018, and 2019. In 2021 a remote helicopter-access camp was established at Graphite Creek, about a kilometer north of the proposed pit.

Graphite One gained control of senior federal claims on the Property, via a long-term lease with Kougarok LLC, executed in 2015 (the “**Lease**”). Production royalties, timelines and buyouts were part of the Lease. Graphite One also staked 120 Alaska State mining claims, each a full 160 acres.

Graphite One purchased additional claims in two transactions, each acquiring 28 Alaska state mining claims covering the same lands and representing the junior and senior state mining claims that overlap and surround the leased property. The first group of 28 claims was purchased in 2012 for US\$20,000 and a 2% production royalty on future production from the particular claims. In 2020, the Company acquired the 2% production royalty in return for 2,500,000 common shares and 2,500,000 warrants. The Warrants were exercised in 2021. The second group of 28 claims was purchased in 2015 for US\$50,000, the issuance of 3 million common shares of the Company and a royalty interest equal to 1% of the net smelter returns (“**Sheardown Royalty**”) received on production from the particular claims. Graphite One has the right to purchase the Sheardown Royalty for US\$500,000 at any time within 36 months following the start of mine production. On June 21, 2023, the Company bought back the 1% net smelter production royalty in return by the Company issuing 456,500 common shares at a price of CA\$1.30 per share. On July 19, 2023, pursuant to the Taiga Loan with advances of up to US\$5.0 million entered into by Graphite One and Taiga, a related party, the Company granted Taiga an option to purchase up to 1% of the Sheardown Royalty in 0.25% increments for every US\$1.25 million advanced up to a maximum of one (1) percent. The full amount of the Taiga Loan was drawn. On December 27, 2023, Taiga exercised its option to acquire the 1% Sheardown Royalty for consideration of US\$5.22 million, which represents the outstanding Taiga Loan balance and accrued interest. See “*General Development of the Business – Three Year History of the Company – Year Ended December 31, 2023*”.

In 2018 under the Lease terms, Kougarok converted its Federal mining claims to State of Alaska mining claims. Graphite One in turn transferred to Kougarok ownership of thirteen of its Alaska state mining claims that overlapped with the lands of 4 of Kougarok’s former Federal claims and simultaneously leased them back from Kougarok. This conversion put the State of Alaska in the lead regulatory role for the mine development.

Figure – Location of the Graphite One state claims on the Seward Peninsula, Alaska

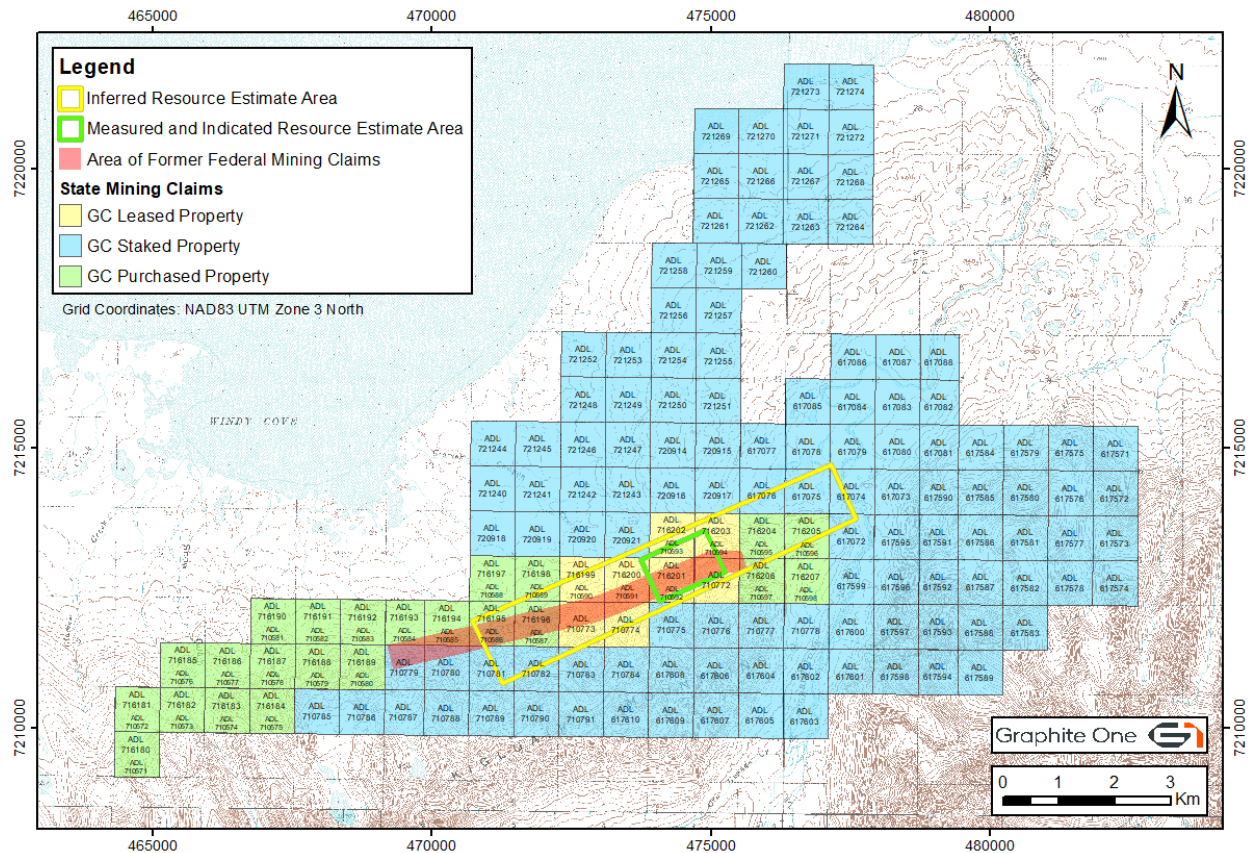


The Project's mineral tenure consists of 176 state mining claims categorized as three groups based primarily upon the way the interests in the claims were acquired by the Company. The three groups are nominally referred to as:

1. the GC Leased Property;
2. the GC Staked Property; and
3. the GC Purchased Property.

The first group, the GC Leased Property, consists of 13 state mining claims, shaded yellow in the figure below which partially overlap the 24 former federal mining claims shaded red. Five of the claims in the GC Leased Property are duplicate claims such that the GC Leased Property appears in the figure below to consist of eight separate mining claims. The second group, the GC Staked Property consists of 117 state mining claims shaded blue in the figure below. And the third group, the GC Purchased Property, consists of 46 state mining claims, including 23 duplicate claims, shaded green in the figure below. The three groups form a contiguous block of Alaska state mining claims.

Figure – Claims map of the Property



Surface Rights and Permitting

For Alaska State mining claims, surface rights remain with the State, while surface uses that are necessary for the prospecting for, extraction of, or basic processing of minerals are allowed, subject to reasonable concurrent uses. The permits required for mining are, at minimum:

1. A Regional General Permit (“**RGP**”) 2006-1944 or an RGP 2007 or an Individual Permit; and
2. An Alaska Pollutant Discharge Elimination System (“**APDES**”) Permit.

There are no outstanding environmental liabilities to which any portion of the Graphite One Project is subject.

History

During the early 1900s, at least two companies mined in the area. The first known claims were staked in 1900 by Uncle Sam Alaska Mining Syndicate (“**USAMS**”) near Graphite Bay, now known as Windy Cove (Harrington, 1919)². In 1912, USAMS shipped 120 tonnes (“**t**”) of graphite to Seattle and the San Francisco Bay area, and by 1916 had stockpiled another 275 t (Mertie, 1918). The Alaska Graphite Mining Co. staked

² See the Graphite One Technical Report filed on the Company’s profile on SEDAR+ for all citations under the heading “Mineral Project Disclosure – The Graphite One Project” that are not otherwise defined in this AIF.

claims in 1905 and added additional claims in 1915 and 1916 (Mertie, 1918; Harrington, 1919). A total of 32 t of graphite was mined from talus in 1907 (Coats, 1944). Employing about seven people, 90 t of graphite was mined in 1916 (Mertie, 1918). This production was hauled a short distance overland to Windy Cove, from there to Teller by boat, and then shipped to Seattle and San Francisco (Harrington, 1919).

After initial early 1900s production, the Graphite Creek deposits lay dormant until 1943 when USGS geologist Robert Coats visited the area. His field crew sampled material from several sorted piles of previously mined graphite, and from several high-grade graphitic lenses on the Property (Coats, 1944). Three specific areas underwent surface excavation work and were named by Coats as Christophosen Creek, Ruby Creek, and Graphite Creek. Coats (1944) reported that exposed high-grade lenses in these three areas varied from a few centimeters to a metre in thickness with lengths that are ten to fifteen times their width and contained up to 60% graphite.

The last known previous exploration interest in the area was in 1981 when a brief field examination of the showings was conducted by the Anaconda Copper Company when several samples were taken for analysis during a one-day visit (Hudson, 1981; Wolgemuth, 1982).

Graphite One Exploration

Exploration work done for Graphite One in 2011, commissioned by Graphite One and performed by APEX Geosciences during 2012 to 2014, and Alaska Earth Sciences Inc. in 2018 and 2019, and performed by Graphite One in 2021 consisted of a variety of programs. A series of resource estimations have been made as exploration has progressed.

A maiden inferred resource estimate was calculated in 2013 using 17 diamond drill holes arrayed over 2.2 km strike length, (Duplessis, et al., 2013). Seven of those holes were in the southwestern 900 metres (m) of the 2012 drill pattern, which is within the current proposed pit footprint. Inferred Resource: 6,196,160 metric tons (mt) of in situ Cg @ 5.78% using 3% cut off, in 107.2 Mt.

After the 2013 drilling campaign (which extended the resource along strike about 400 m northeast and about 2.3 km southwest), a new inferred resource using 28 holes was calculated for the expanded 4.7 km strike length, (Eccles and Nicolls, 2014). Inferred Resource: 10,346,400 metric tons ("**Mt**") of in situ Cg@5.54% using 3% cut-off, in 186.9 Mt.

After the 2014 drilling program, an indicated resource estimate was prepared for a 730-m strike length segment of the drill-tested trend, as well as an inferred resource for the 4000 m of strike outside of the indicated resource area. Inferred Resource: 8,763,000 Mt of in situ Cg@~6% using 3% cut-off, in 154.36 Mt. Indicated Resource: 1,132,000 Mt of in situ Cg@~6.3% using 3% cut-off, in 17.93 Mt. (Eccles, et al, 2015).

A revised restatement of resources was done in a Preliminary Economic Assessment ("**PEA**") in 2016 (Robinson et al., 2017).

Inferred Resource: 8,769,000 Mt of contained Cg@5.7% using 3% cut-off, in 154.44 Mt. Indicated Resource: 1,134,000 Mt of contained Cg@6.3% using 3% cut-off, in 17.97 Mt and Indicated Resource: 1,009,000 Mt of contained Cg@6.7% using 5% cut-off, in 15.10 Mt and the preferred, Inferred Resource: 4,969,000 Mt of contained Cg@7.0% using 6% cut-off in 71.24 Mt. Indicated Resource: 744,000 Mt of contained Cg@7.2% using 6% cut-off in 17.97 Mt.

A statement of resources in the 2017 NI 43-101 Preliminary Economic Analysis reported the same resource as the 2016 PEA (Robinson, et al, 2017).

After 2018 drilling a new inferred, indicated, and measured resource was calculated (King, et al., 2019). Inferred Resource: 7,342,883 Mt of contained Cg@8.0% using 5% cut-off, in 91.89 Mt. Indicated Resource:

715,363 Mt of contained Cg@7.7% using 5% cut-off, in 9.26 Mt. Measured Resource: 135,171 Mt of contained Cg@8.0% using 5% cut-off, in 1.69 Mt Cg@8.0% using 5% cut-off, in 1.69 Mt.

Geological Setting, Mineralization and Deposit Types

Regional Geology

The Kigluaik Mountains are a gneiss dome composed of Kigluaik Group amphibolite and granulite facies metamorphic rocks and are one of a group of Cretaceous gneiss domes on the southern Seward Peninsula and in eastern Chukotka, Russia.

The Kigluaik dome comprises a 15 km-thick structural section of metasedimentary rocks and orthogneisses, with an undeformed 90 ± 1 Ma granite core derived from mantle magmatism (Amato and Miler, 2004). A 91 ± 1 Ma upper-amphibolite-to-granulite facies metamorphic event that was syntectonic with gneiss dome fabrics overprints a pre-120 million years ("Ma") blueschist-to-greenschist facies event. High-temperature, granulite-grade, metamorphism of the Kigluaik gneiss dome likely took place around 90 Ma. A protracted metamorphic history prior to that event is indicated by the structural complexity of garnet porphyroblasts but the timing and character are unknown (Case, et al., 2019).

Metamorphic isograds in the Kigluaik Group are unusually steep, transitioning from the biotite zone to the sillimanite + K-spar zone in less than 10 km.

The basal Kigluaik Group contains granulite grade schist and gneiss and is exposed on north flank of the mountains. These rocks have no direct counterparts in the adjacent mountain ranges and are believed to represent the deepest crustal rocks exposed in northwestern Alaska (Miller, 1994). The lower Kigluaik Group comprises coarse marble, quartzo- feldspathic gneiss, schist and gneiss of mafic and ultramafic composition, graphite-rich schist, and garnet lherzolite.

Amphibolite grade upper Kigluaik Group schist is exposed on the southern flanks of the Kigluaik Mountains. The Kigluaik Group is in fault contact with the lower metamorphic grade Nome Complex to the south and may correlate to those rocks, and to parts of the western Brooks Range. (Case, et al, 2019).

The metamorphic rocks of the Kigluaik Group are composed of continental crustal material of Proterozoic to middle Paleozoic age that were subjected to crustal imbrication and thickening in middle Mesozoic time and widespread plutonic activity in mid-Cretaceous to late Cretaceous time (Sainsbury, 1972, 1975; Bunker et al., 1979; Miller, 1994; Till and Dumoulin, 1994; Armstrong et al., 1986; Amato and Wright, 1998; Till et al., 2011). However, some authors have proposed that at least part, and perhaps a significant part, of high-grade metasedimentary and metaigneous rocks of the Kigluaik Group was originally blueschist-facies rocks of the Nome Complex subsequent to a high-grade metamorphic overprinting (Hannula and McWilliams, 1995; Till et al., 2011).

All the formations of the Kigluaik Group are cut by intrusive rocks, the most common of which is granite. These intrusions are more abundant in the lower part of the group. Besides granite intrusions, dykes and sills of diorite, diabase and pegmatite are present.

Peak metamorphic grade in the Kigluaik Group is thought to have occurred in the Cretaceous (91 Ma), immediately preceding or coincident with the intrusion of the Kigluaik Pluton, based on U-Pb analyses of monazite from orthogneiss and metapelite and from pegmatite derived from partial melting of metasedimentary rocks. Extensive detailed U-Pb dating of zircon from the mafic root of the Kigluaik pluton using conventional and step-wise HF dissolution techniques yielded a 90 ± 1 Ma intrusive age, suggesting that mantle-derived magmatism was the heat source for high-temperature metamorphism. (Amato and Wright, 1998). Other dating methods have yielded younger ages. K-Ar dates of biotite and hornblende from paragneiss, orthogneiss, and amphibolite reported by Turner and Swanson (1981) range from 81 ± 2 Ma to 87 ± 3 Ma. K-Ar analyses of "mafic gneiss" by Sturrock (1984) yielded 84-85 Ma dates. Calvert (1992) dated hornblende from an amphibolite within the Kigluaik Group using $^{40}\text{Ar}/^{39}\text{Ar}$ techniques. He obtained

a plateau date of 86 ± 1 Ma (Calvert, 1992). Because the closure temperature of hornblende to Ar diffusion is thought to be 550°C and the peak metamorphic temperatures were about $700\text{--}800^{\circ}\text{C}$, this date must be a minimum for peak metamorphism (Amato and Wright, 1998). Dating of $40\text{K}/40\text{Ar}$ and $40\text{Ar}/39\text{Ar}$ dating have yielded ages of $\sim 95\text{--}81$ Ma. The younger ages likely date the onset of high-grade regional metamorphism of the Kigluaik Group (Adler and Bundtzen, 2011).

Property Geology

The Property deposit is on the north slope of the Kigluaik Mountains gneiss dome in granulite facies metamorphic rocks. Graphite occurs as high-grade massive to semi-massive segregations and disseminations within amphibolite facies metasedimentary rocks, primarily quartz-biotite schist with zones of quartz-biotite-garnet-sillimanite schist (Sainsbury, 1972). The graphite-bearing schist units strike subparallel to the mountain front and dip north between 40° and 75° . Locally, the attitude of the Kigluaik fault and the geologic dip of the metasediments is coincident, or nearly so.

The deposit is on the footwall, south, side of the Kigluaik fault. The Kigluaik fault generally strikes at approximately azimuth 250° and dips from 35° to 75° to the north over a strike length of approximately 35 km. Contemporary movement on this fault has uplifted the rugged and youthful Kigluaik Mountains to the south and down thrown the lowlands of the Imuruk Basin to the north (Hudson and Plafker, 1978). The fault is a boundary between bedrock mineralization and overburden. Surficial Quaternary deposits cover the area to the north of the Kigluaik Fault on the Graphite Creek Property. The surficial deposits include glacially deposited sand, gravel, and boulders; fluvial gravel and sand; marine and fluvial terrace deposits; and wetlands (Till et al., 2011).

Bedrock is either exposed or covered minimally by surficial overburden material throughout most of the Property area south of the Kigluaik Fault, particularly in the incised creek valleys and/or relatively steep slopes adjacent to the Kigluaik Fault.

The 2012 geological mapping program confirmed historical observations of distinct geological layers comprising high-grade massive to semi-massive segregated and disseminated graphite in quartz-biotite-garnet-sillimanite schist and disseminated graphite in quartz-biotite schist ($\pm$ garnet). Based on strike/dip measurements, the layers consistently dip northwards such that these layers appear to represent continuous geological units and are not overly distorted by complex regional or large-scale fold belts. Small, localized folding does exist on the <1 m scale but is more or less confined within the high-grade graphite schist layers.

The map pattern of the EM anomaly suggests a low angle northeast-plunging fold geometry. Interpretation of the oriented core data by Oriented Targeting Solutions (“OTS”) included suggestions of an F1 low angle NE plunging fold pattern (Burtner, et, al 2022).

Mineralization

Of the four schist lithologies logged at Graphite Creek, two main graphite-bearing lithologies are identified. One is quartz-biotite-garnet-sillimanite k-spar schist (“**QBGSS**”) that contains disseminations of graphite and very high-grade lenses (up to 60% graphite) of coarse grained, semi-massive and massive graphite segregations. The other is quartz-biotite schist (“**QBS**”) that typically contains disseminated, and occasionally massive, graphite. The QBGSS is the principal host to higher grade graphite and appears in outcrop as two distinctive layers in the metasedimentary sequence along the north flank of the Kigluaik Mountains. A third horizon observable in outcrop occurs as ‘pods’ of quartz-biotite-garnet-sillimanite schist. These layers are most likely structurally controlled, i.e., a folded unit with the third pod-like layer occurring as a remnant erosional feature (T. Hudson, personal communication, 2012). The quartz-biotite- garnet-sillimanite schist layers strike obliquely to the mountain front and dip northwards at 40° to 80° .

Figure – Examples of graphite mineralization in different schists



Photo on left is semi-massive graphite, center photo is quartz-biotite-garnet-sillimanite schist, far right photo is quartz-biotite schist. The QBGSS typically is fine to coarse grained, weathers grey, has a wavy and crenulated schistosity, has garnet porphyroblasts (up to 2 cm across) and has augen-shaped quartz grains. Discontinuous segregations (lenses and streaks) of high-grade graphite, from centimeters to a few meters thick, are common. These high-grade graphite lenses in the QBGSS have up to 60% coarse crystalline graphite at 1 m scale sample lengths in drill core. Disseminated flakes of graphite, up to 1 mm or more across, make up several percent of the rock.

The QBS is fine-grained, weathers a rusty ochre color and has regular layering with individual layers commonly 3 to 10 cm thick. Graphite occurs as disseminated flakes up to about 1 mm across and can make up several percent of the rock. Higher grade graphite-rich layers, varying from 3 to 25 cm in width are present, but are not as common as in the QBGSS.

Exploration

For a general summary of Graphite One's 2011 to 2021 exploration work at the Property see *Mineral Project Disclosure – The Graphite One Project – History*. This summary includes the general results of the 2012, 2013 2014, 2018, 2019, and 2021 exploration programs that involved:

- A time-domain, helicopter-borne electromagnetic survey;
- Geological mapping; surface grab, channel and bulk pit sampling;
- Diamond drilling programs in 2012, 2013, 2014, 2018, 2019, and 2021;
- Flake-size distribution analysis; and
- Graphite beneficiation tests.

Drilling

Summary of Drill Collar Locations and Downhole Surveys

The 2012, 2013 and 2014 drill hole collars were surveyed using a Topcon static GPS system. Drill hole collar elevations were determined using a differential GPS and then cross-checked with the recently acquired IfSAR bare-earth DEM (DTM) data, which has a 5 m cell size resolution. Due to the vast topographic relief in places at Graphite Creek, differences between the differential GPS and the IfSAR bare-earth DEM (DTM) data is to be expected. No major concerns were identified (Robinson et al., 2017)

The 2018 and 2019 drill collars were surveyed using Topcon and Javad high precision GPS equipment using typical RTK (Real Time Kinematic) surveying methods to accurately locate 2018 collars in the same coordinate system used in previous exploration campaigns.

The 2021 drill hole collars were surveyed by Recon LLC (“**RECON**”) surveyors, with the exception of holes 21GCT070, 21GTW001, and 21GTW007; these three holes, with a total of zero samples, are so far located only with a Garmin64 handheld GPS. RECON utilized Leica GS16 multi-frequency Global Navigation Satellite System (GNSS) receivers to perform the 2021 drill hole collar survey by standard RTK GPS methods. Positions of all survey points were reported in UTM Zone 3 North metres, North American Datum of 1983 (NAD83) CORS 2011 (Epoch 2010.0000) datum. Elevations were reported on the North American Vertical Datum of 1988 (NAVD88) by applying the Geoid12B separation values to ellipsoid heights using Leica Infinity software version 3.3. Graphite One Project control monuments as described in the RECON report “Graphite One; Graphite Creek Project Access Route; Survey Report” dated August 1-7, 2018 were used for all RTK base station set ups and checks.

Of the 50 drill holes completed during 2012-2014, 42 drill holes were drilled at an azimuth of approximately 160°, with the holes being drilled from the northwest to the southeast. The drill hole inclination of these holes varied from -49° to -78° with 40 drill holes (80%) having inclinations of between -49° to -65°. The remaining 8 drill holes were drilled vertically (-90°). Regular down hole easy shot surveys were routinely collected every 30 m down the drill hole while the drilling was in progress, after which a follow up multi-shot survey was completed for each hole at regular 1 to 10 m intervals. The exception to this was drill holes: 12GC001; 12GC004; 12GCH006; 13GCH009; 13GCH010 13GCH012; 13GCH013; 14GCH003; 14GCH010; 14GCH012; 14GCH013; 14GCH017 to 14GCH020, where only 5 to 30 m interval easy shot surveys were completed. All spurious surveys were removed from the database.

The down hole surveys for the 2018 drill holes used the Reflex EZ-Trac multi-shot survey collecting a reading every 30 m coming out of the hole. Survey results were evaluated for validity and results that were deemed not good were not imported into the drilling database. Drill holes 18GC021 and 18GC022 did not have downhole surveys completed due to complications with tooling in the hole. The survey for 18GC025 was not good due to a rock stuck in the drill bit preventing the survey tool from going out into the open hole for good readings.

Downhole surveys for the 2019 drill holes used the Reflex multi-shot tool collecting a shot every 25 m coming out of the hole.

Downhole surveys for the 2021 drill holes used the Reflex EZ-Trac multi-shot tool. Collar shots were collected 30 feet into bedrock to ensure the hole was progressing as planned. The completed drill holes were surveyed at 50-foot intervals while tripping out. All 2021 core holes were downhole surveyed. Survey results were evaluated for validity and results that were deemed not good were not imported into the drilling database.

Summary of 2012 Drilling

APEX Geoscience Ltd, on behalf of Graphite One, completed 18 core drill holes totaling 4,248 m. Drilling took place between June 12, 2012 and August 22, 2012. Drill tested graphite zone is 2.2 km long.

Summary of 2013 Drilling

APEX Geoscience Ltd drilled ten core drill holes totaling 1023.84 m were drilled between September 13, 2013 and October 13, 2013. Drill tested graphite zone is 5 km long.

Summary of 2014 Drilling

APEX Geoscience Ltd drilled twenty core holes totaling about 2,221 m for resource assessment and two core holes totaling 91.6 m were drilled to obtain metallurgical samples. Drilling took place between September 18, 2014 and November 14, 2014. Part of inferred resource is upgraded to indicated.

Summary of 2018 Drilling

Six core holes totaling 800.87 m were drilled between August 2, 2018 and October 5, 2018. All of the 2018 drill holes were within the indicated resource area proposed pit.

The 2018 and 2019 drill collars were surveyed using Topcon and Javad high precision GPS equipment using typical RTK surveying methods to accurately locate 2018 collars in the same coordinate system used in previous exploration campaigns.

Summary of 2019 Drilling

Three core holes for a total of 356 m were drilled in 2019, between September 19, 2019 and mid-November, 2019. Two were geotechnical/resource holes within the planned pit, 19GT001 was a geotechnical hole outside of the planned pit.

Summary of 2021 Drilling

Resource area core drilling began on July 17, 2021 with a AR60 drill operated by T&J Drilling and concluded on October 7, 2021. All resource area core drilled in 2021 was oriented using the Reflex ACT III oriented core system. Chris Brown of OTS trained drillers and geologists in the collection of oriented core at the start of the first 2021 core hole. A total of 10 HQ3-size core drill holes were drilled in the inferred resource area in 2021, comprising 5084 ft (1550 m) of drilling. One of those holes was lost at 171 ft (52 m) in overburden and fault material, before reaching bedrock; another is only 66 ft (20 m) deep, in overburden. An additional 476 ft (145 m) of DDH core was drilled in geotechnical and condemnation hole 21GT006 outside the resource area.

The 2021 drill core was sampled on an approximate metre by metre basis but was not sampled across geological contacts; in such instances the sample start depth was reset, and one-metre increments were sampled to the next contact or geological feature. The minimum sample interval was 0.22 m and the average sample interval of 1391 drill core samples collected was 0.91 m.

In 2021, within the indicated resource area/proposed pit 1550 m were drilled, and 1,391 core samples were analyzed.

The 2021 drill core analytical results not including condemnation hole 21GT006 (n=1,391 total samples, not including duplicates and blanks) includes: 11 samples yielding >30% Cg; 57 samples with >10% Cg; 299 samples containing >3% Cg; and 874 samples > 0.5% Cg. Every drill hole intersected graphite mineralization and significant intersections of continuously mineralized core were observed. For example, drill hole 21GC064 contained 5.7 % Cg over 59 m (apparent thickness) between depths of 77.3 m and 131.25 m.

Sampling Analysis and Data Verification

Sample Preparation

During all seasons of sample collection and analysis, Graphite One contracted Activation Laboratories Ltd. in Ancaster, ON, Canada ("**ActLabs**") to maintain a sample preparation facility in Nome. This preparation laboratory was set up and crewed by employees of the main analytical laboratory used during the work

programs ActLabs. The prep lab in Nome, Alaska was used to dry, crush and package all rock and drill core samples for shipping, via commercial carrier, from Nome to ActLabs for analysis.

The prep lab dried the split core at a nominal 60°C, then crushed all half-core samples in a Rocklabs Boyd Jaw Crusher to 85% passing 2 mm (10 mesh). The crushed material was riffle split to obtain a 250 grams (“g”) subsample, which was pulverized in an ESSA LM2 miller ring and puck pulverizer to at least 95% passing 105µ (150 mesh). Cleaning sand was run in between every pulverized sample for about 20 seconds. Cleaning rock was run through the crusher in between suspected high-grade samples identified by the technician and compressed air was used between each sample on the crusher and pulverization stage. Crush rejects were stored in sealed polyurethane bags, placed into rice bags, palletized, and stored with the processed core.

Sample Analyses

The laboratory used for the majority of the Cg analyses, and all of the analyses used in the resource estimate, was ActLabs, which is ISO 17025 accredited and/or certified to 9001: 2008. The core samples were subjected to the following analytical procedure prior to determination of total graphitic carbon using a LECO CR-412 Carbon Analyzer. A 0.5 g pulp sample is either digested with hydrochloric and perchloric acids or subjected to a multistage furnace treatment to remove all forms of carbon with the exception of graphitic carbon. The residue is vacuum-filtered and dried. Accelerator material is added to the dried filter. The inductive elements of the sample and accelerator couple with the high frequency field of the induction furnace. The pure oxygen environment and the heat generated by this coupling cause the sample to combust.

During combustion, carbon-bearing elements are reduced, releasing the carbon, which immediately binds with the oxygen to form carbon monoxide (CO) and carbon dioxide (“CO₂”), the majority being CO₂. Carbon is measured as CO₂ in the infra-red (IR) cell as gases flow through the IR cells. CO₂ absorbs IR energy at a precise wavelength within the IR spectrum. Energy from the IR source is absorbed as the gas passes through the cell, preventing it from reaching the IR detector. All other IR energy is prevented from reaching the IR detector by a narrow bandpass filter. Because of the filter, the absorption of IR energy can be attributed only to CO₂. The concentration of CO₂ is detected as a reduction in the level of energy at the detector.

Data Verification Procedures

Sample handling, preparation procedures and equipment, and analytical procedures have been fairly consistent for all drilling campaigns. A sample preparation lab in Nome, established by Graphite One but managed and operated by technicians and managers from Activation Labs, was used in all years. The prep lab crushed, and pulverized core samples provided by Graphite One. Prep lab procedures were consistent over the years, although the pulp aliquot prepared was a nominal 30 g in 2012 to 2014, unrecorded in 2018 and 2019, and a nominal 100 g in 2021.

Core splitting was by wheel-operated splitter in 2012 through 2014. All core from 2018, almost all core from 2019, and all core from 2021 was split with a saw. Frequency and type of standards, blanks, and duplicates varied somewhat over the years.

Quality Control Measures

In 2012, 2013, 2014, 2018, and 2019 core and rock samples were transported from the field to camp by helicopter, where they were palletized, loaded onto a flatbed truck, and driven to Graphite One’s warehouse in Nome for processing. In 2021 core samples were transported from the field to the Nome core logging and processing facilities. Geotechnical logging, geological core logging, core photography, core splitting and core sampling were conducted at the Nome facility. All measurements and core logging observations were recorded directly into a digital format that included a predetermined set of codes to describe characteristics including rock type, lithology, mineralization, texture and competency over the entire length

of the drill core. Digital photographs were taken of each individual core box by using a stationary camera and lighting.

Shipping of the pulp samples from Graphite One's sample preparation lab in Nome was conducted by ActLabs personnel. Security tags, which had bag identifiers other than drill hole names and/or sample coordinates, were used to seal the sample bags. To complete the chain of custody, individual samples with same sample numbers originally recorded in the field were continued all the way to ActLabs. Similarly, metallurgical samples for flake-size testing were sent to Hazen Golden, CO and/or ActLabs in Thunder Bay, ON, and/or SGS Mineral Services, Lakefield, ON. Once the samples arrived at the laboratories, they remained in the custody of the independent lab until final processing was completed. ActLabs has achieved the ultimate accreditation to international standards, the ISO 17025 standard. Hazen also holds several professional accreditations.

Mineral Processing and Metallurgical Testing

SGS Minerals Services conducted a series of metallurgical tests in support of the PFS for the Company's Graphite One Project in Alaska. The samples, totaling 3,720 kilogram (kg), were grouped into five composites representing yearly periods in the expected mine life. They were received by SGS in February 2020, and the testing was completed by June 2021. The primary objective of the metallurgical testing was to develop a flowsheet that would produce a flotation concentrate grading of at least 95% C(t) with minimal flake degradation and maximum graphite recovery using conventional unit operations.

The following tests were conducted:

- ICP analysis;
- Whole rock analysis;
- Comminution testwork;
- Heavy liquid separation;
- Flotation testwork, including rougher, cleaner, variance, and locked cycle tests;
- Solid / liquid separation for both tailings and concentrate; and
- A large-scale pilot plant program was conducted using surface outcrop samples to generate approximately 400 kg of ~ 95% C graphite concentrate for market testing.

Plant design capacity is based on processing 1,000,000 tonnes per year (t/a) or 2,740 t/d of ROM material containing 6.18% Cg. An operating schedule of 365 days per year, 2 x 12-hour shifts per day was assumed for the grinding circuit and downstream operations. Crushing plant operation is based on 1 x 12-hour shift per day.

Plant design consists of the following major processing steps:

- The comminution circuit will include a single-stage crushing, coarse ore stockpiling and SAG milling in closed circuit with cyclones targeting 80% passing 320 µm grind;
- The grinding circuit will include a flash flotation step while the comminution circuit product will proceed to rougher flotation;
- Rougher and flash flotation concentrates will be combined for open circuit polishing grind and the subsequent seven stages of cleaning with stirred media milling after the second and fourth cleaner stages;

- The graphite concentrate will be dewatered with a filter press followed by drying through a diesel-fired indirect dryer before cooling and packing in 1 t bulk bags before shipment; and
- Overall plant tailings will be dewatered with a thickener and disc filter to produce sufficiently dry filter cake before haulage for storage to a surface Dry Stack Tailings Storage Facility.

Based on 900,000 t/a throughput at 6.18% C feed grade, 92% carbon recovery and 95% C concentrate grade were predicted.

Mineral Resources Estimate

The Graphite Creek Resource estimate has been classified in accordance with guidelines established by the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 23, 2003 and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated November 27, 2010.

The Graphite Creek Resource estimate has been classified as 'Indicated' and 'Inferred' according to the CIM definition standards. The classification was based on geological confidence, data quality and grade continuity. The most relevant factors used in the classification process were:

- Drill hole spacing; density;
- Level of confidence in the geological interpretation where the observed stratigraphic horizons are easily identifiable along strike and across the deposit, which provides confidence in the geological and mineralization continuity; and
- Estimation parameters (i.e., continuity of mineralization).

The parameters of each estimation pass were determined by the factors listed above and thus the classification of resources was guided by the estimation pass (Table 1-1 below). The single box search pass and pass 1 are considered to have a high level of confidence. Thus, they are unlikely to be drilled again and are placed within the 'Measured' category. Pass 2 used a range within 80% of the maximum sill variance, with at least two drill holes and are considered to be the next highest level of confidence, the 'Indicated' category. All remaining blocks estimated are considered within the 'Inferred' category which includes blocks estimated in passes 3-7. The updated Graphite Creek resource numbers for inferred, indicated and measured resources are summarized in Table 1-2 below.

Table 1.1 – Classification Criteria

	Pass	Nominal Search Distance	Min. Number of Composites	Min. # of Drill Holes
Measured	BOX	1 x 1 x 1	1	1
	1	45 x 22 x 8	2	2
Indicated	2	100 x 50 x 20	2	2
Inferred	3	160 x 65 x 22	2	2
	4	80 x 32 x 11	1	1
	5	250 x 100 x 40	2	2
	6	125 x 50 x 20	1	1
	7	1500 x 500 x 500	1	1

Table 1.2 – June 2022 Graphite Creek updated inferred, indicated and measured resources

Graphite Creek Resource Estimate Update: June 2022				
Mineral Resource Classification	Cut-Off Grade (% Cg)	Tonnage (Million Tonnes)	Graphite Grade (% Cg)	Contained Graphite (Tonnes)
Inferred	1	328.57	4.30%	14,116,795
	2	254.87	5.11%	13,004,017
	3	198.41	5.89%	11,568,233
	4	142.75	6.79%	9,886,980
	5	103.99	7.65%	7,950,985
Indicated	1	36.38	4.30%	1,562,806
	2	27.87	5.15%	1,435,135
	3	21.35	5.97%	1,273,779
	4	16.29	6.73%	1,096,952
	5	11.67	7.63%	889,914
Measured	1	5.43	5.22%	283,577
	2	4.67	5.83%	272,205
	3	3.99	6.40%	255,456
	4	3.22	7.08%	228,079
	5	2.44	7.92%	192,858
Measured + Indicated	1	41.81	4.42%	1,846,382
	2	32.54	5.25%	1,707,340
	3	25.34	6.03%	1,529,235
	4	19.51	6.79%	1,325,031
	5	14.10	7.68%	1,082,772

It should be noted the dip and location of the Kigluaik Fault that trends parallel and is adjacent to the mineralization of the deposit is a controlling factor of the graphite resource. The fault surface has been updated in 2019, 2020 and in 2022. The updates in 2018 and 2019 resulted in resource truncated by the fault surface. New 2021 drilling indicated a shallow dip to the fault, resulting in minimal to no truncation of resource. Continued drilling is required to confirm the fault interpretation, particularly down dip. Outside of the central resource area (the area of 2018-2021 drilling), the fault has been interpreted as being vertical and thus will likely change significantly as additional drilling confirms the dip of the fault plane. Observed stratigraphic horizons continue to show remarkable consistency along strike with little deviation along strike which provides confidence in the geological and mineralization continuity.

Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve. Based on these early stages of exploration, the above resource analysis indicates that the Graphite Creek Property currently contains sufficient grade and tonnage to continue feasibility studies. The Property includes excellent potential to increase the size of the resource.

Mineral Reserve Estimates

To convert mineral resources into a mineral reserve, estimates of commodity prices, mining dilution, process recovery, refining/transport costs, royalties, mining costs, processing, and general and administration costs were used to estimate cut-off grades (“COG”). These input parameters, along with geotechnical slope recommendations formed the basis for the selection of economic mining blocks.

The economic mining blocks were identified using the Lerchs-Grossmann algorithm in the NPVS software package which produced a series of optimized open pit shapes. The QP selected one of these shapes for detailed design and then quantified the mineral reserves at the determined COG within the final pit design.

A summary of the Mineral Reserves for the Graphite One Project is shown in Table 1-3 within the designed final pit for the Graphite Creek deposit. In the detailed mine production schedule, the cut-off grade has been raised variably over the life of the Graphite One Project to 2.0% Cg for the first 12 years and then increased to 3.0% Cg beyond year 12 in order to maximize production at the STP. Any resources below the raised cut-off grades have been wasted. The effective date of the Mineral Reserve stated in this report is August 29, 2022.

The Company has not identified any known legal, political, environmental, or other risks that would materially affect the potential development of the mineral reserves, except for the risk of not being able to secure the necessary permits from the government for development and operation of the Graphite One Project; however, the Company is not aware of any unique characteristics of the Graphite One Project that would prevent permitting.

Table 1-3: Proven and probable mineral reserve estimates

Class	Diluted Tonnes (k tonnes)	Diluted Grade (% Cg)	Contained Graphite (k tonnes)
Proven	3,812	6.0	230
Probable	18,678	5.5	1,028
Total Proven and Probable	22,490	5.6	1,258

Notes:

1. Mineral Reserves follow CIM definitions and are effective as of August 29, 2022.
2. Mineral Reserves are estimated using a raised variable cut-off of 2.0% Cg – 3.0% Cg which is required to maximize secondary treatment production. The economic cut-off grade is 0.7% Cg based on a net average Graphite Price of US\$7,677/t (including transport & treatment charges) and a mill recovery of 90%.
3. The final pit design contains an additional 7.6 Mt of Measured and Indicated resources between the raised cut-off grade (2% Cg - 3% Cg) and the economic cut-off grade (0.7% Cg) at an average grade of 1.7% Cg. These resources have been treated as waste in the final mine production schedule.
4. The final pit design contains an additional 14.0 Mt of Inferred resources above the economic cut-off grade (0.7% Cg) at an average grade of 5.2% Cg. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that any part of the Inferred Resources could be converted into Mineral Reserves.
5. Tonnages are rounded to the nearest 1,000t, graphite grades are rounded to one decimal place. Tonnage measurements are in metric units.

Mining Operations

The Graphite Creek Deposit is near surface containing several graphite zones which dip generally to the north at 40° to 78°. The strike length of the deposit is several kilometers long; however, the current defined resources of the deposit are approximately 1 km long. The thickness of the modeled graphite zones within the pit area varies widely from 4 m to 60 m and where mineralized zones run parallel to each other, the distance between the host rock hanging wall and footwall can exceed 180 m. The Kigluaik fault runs parallel to the strike of the deposit and the current assumption is that all material north of this fault is overburden or loose rock type material.

The Graphite Creek deposit has been planned to be developed as an open pit mine. Material will be drilled and blasted on 8 m benches and then excavated using 7 cubic metre (“m³”) front-end loaders, and 55 t trucks. Ore will be processed at a nominal production rate of 1 Mt/a or 2,740 t/d. Over the life- of-mine (“LOM”), the mine will produce 22.5 Mt of ore at an average graphite grade of 5.6% Cg, along with 50 Mt of waste. Ore material is to be sent directly to the primary crusher or a temporary stockpile, located 2 km to the East of the pit. Waste material will be co-mingled with tailings in the Tailings Management Facility (TMF) located 1.5 km north of the pit.

The open pit (the “**Open Pit**”) was optimized in software using the Lerchs-Grossmann algorithm in combination with the input parameters shown Table 1-4. A pitshell was selected based on both mitigating risk (waste stripping requirements) and maximizing potential revenues. The selected shell formed the basis for detailed design, final reserves and production scheduling.

Processing and Recovery Operations

Primary Processing Plan (Alaska)

Plant design capacity is based on processing 900,000 t/a or 2,465 t/d of ROM material containing 6.18% Cg. An operating schedule of 365 days per year, 2 x 12-hour shifts per day was assumed for the grinding circuit and downstream operations. Crushing plant operation is based on 1 x 12- hour shift per day.

Plant design consists of the following major processing steps:

- The comminution circuit will include a single-stage crushing, coarse ore stockpiling and SAG milling in closed circuit with cyclones targeting 80% passing 320 µm grind;
- The grinding circuit will include a flash flotation step while the comminution circuit product will proceed to rougher flotation;
- Rougher and flash flotation concentrates will be combined for open circuit polishing grind and the subsequent seven stages of cleaning with stirred media milling after the second and fourth cleaner stages;
- The graphite concentrate will be dewatered with a filter press followed by drying through a diesel-fired indirect dryer before cooling and packing in 1 t bulk bags before shipment; and
- Overall plant tailings will be dewatered with a thickener and disc filter to produce sufficiently dry filter cake before haulage for storage to a surface Dry Stack Tailings Storage Facility.

Based on 900,000 t/a throughput at 6.18% C feed grade, 92% carbon recovery and 95% C concentrate grade were predicted.

Secondary Treatment Plant (Washington)

The STP is to be designed to produce lithium-ion battery anode materials on a commercial scale for the U.S. domestic market using natural graphite and other materials. It would start operation and continue for an estimated period of four years by processing purchased graphite while the Graphite Creek mine is progressing through permitting and construction. Alaska graphite would be phased in as soon as it is available.

The STP would be constructed in two Phases, with Phase 1 representing 50% construction and production capability. At full capacity (Phase 2), the STP requires about 34.5 ha (85 acres) of land, consists of 17 buildings, and would annually produce about 77,000 t of manufactured graphite products.

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 both its relatively lower power rates from hydro generated electricity and its skilled workforce.

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, Phase 1 has two. Phase 1 is assumed to operate at 90% capacity for the first year to allow for startup adjustments. Thereafter it would operate at full capacity. Phase 2 would come on stream in Year 2 and the STP would operate at full capacity. Phase 1 requires a workforce of 123 and Phase 2, 155.

The STP, at full capacity, is designed to produce 51,167 t/a of anode materials for the electric vehicle and energy storage battery markets; 7,585 t/a of purified, sized material for the specialty graphite market; and 18,622 t/a for the unpurified, traditional graphite market. Total annual production would be 77,374 t based on the expected annual production capacity. The average annual production over 26 years in the PFS is 75,026 t.

The STP product manufacturing process has been designed by Graphite One and provided to Hatch to produce process drawings, process mass balances and building designs. The process layout and buildings were engineered by Hatch Ltd. based on the process requirements provided by Andrew Tan, Vice-President, Advanced Materials of Graphite One.

Infrastructure

The Mine site is located approximately 60 km north of Nome, Alaska near the Imuruk Basin, on the Seward Peninsula. There is no current road access to the Property, with the Nome-Teller highway as the closest seasonal road to the southeast.

Site Facilities

Infrastructure facilities at the Alaska mine site include:

- Primary crusher, coarse ore stockpile, process plant site pad and buildings;
- Tailings and concentrate filtration;
- Tailings management facility for dry stack and mine waste rock storage;
- Covered tailings stockpile;
- Concentrate storage area;
- Water management facilities including diversion ditches, seepage collection pond, water management pond, overland piping, and pumping;
- Water treatment plant;
- Onsite haul and access roads and various laydowns;
- Explosive and cap magazines;
- Assay Lab;
- Truck shop;
- Cold storage and heated warehouse;
- Bulk fuel storage and distribution; and
- Camp buildings and supporting infrastructure.

General Site Arrangement

The site layout has been designed to minimize environmental and community impacts, provide security-controlled site access, minimize construction costs and optimize operational efficiency. Primary buildings have been located to allow easy access for construction and utilize existing topography to minimize bulk earthworks volumes.

Access to Site

A 27.8 km long, two lane, gravel site access road will connect the mine to the Kougarok Road, which will provide year-round road access to the city of Nome. The new 27.8 km section of road will include an 8 m driving width, and six bridge crossings designed for 80 t capacity. The proposed mill site and road terminus is located on a low ridge immediately east of Cobblestone River at the north flank of the Kigluaik Mountains.

Waste Storage

The principal objectives for the waste management facility (“**WMF**”) and associated infrastructure are to provide safe and secure storage of tailings and waste rock, to protect regional groundwater and surface water during operations and in closure, and to achieve effective reclamation. The filtered tailings and waste rock are assumed to be potentially acid generating (“**PAG**”) and will be co-disposed in a single facility. There is no storage of water at the WMF. The primary water storage facility on site is the water management pond (“**WMP**”).

The WMF is located north of the Open Pit on a western facing slope. The facility is designed to store approximately 63 Mt of filtered tailings and waste rock and includes a HDPE basin liner and a stabilizing buttress constructed with non-PAG earthfill and rockfill materials. The tailings and waste rock will be co-mingled to create a blended, compacted, low permeability material. The WMF will be constructed in three stages, progressing further north with each stage. Contact water will be managed in the contact water pond (“**MP**”) located west of and downstream of the WMF, and the WMP located adjacent to the Open Pit. Overburden and topsoil removed during Open Pit stripping activities and the development of the WMF and the WMP will be stored to the west of the WMF with the materials used in construction throughout the Graphite One Project life or reclamation activities.

The WMF will be constructed with slope graded at 4H:1V and a relatively flat crest surface (nominal 1% grade). The staging plan allows for progressive reclamation from the southern extent progressing towards the north as tailings and waste rock are placed within the facility.

The closure cover includes a 1.0 m thick layer of low permeability overburden material placed above the co-mingled tailings and waste rock material and an 80 mil HDPE geomembrane to form a composite liner. The top liner will be welded to the basin liner to completely encapsulate the tailings and waste rock. The facility will be capped with a nominal 2.0 m thick layer of non- PAG material to improve long-term geotechnical stability. The capping layer may be tapered at the base of the facility and increase in thickness towards the crest to optimize geotechnical stability. Overburden and topsoil will be spread above the capping material and the facility will be revegetated as part of reclamation activities.

Water Management

The water management plan includes separate management of non-contact and contact water. Non-contact water will be collected and diverted around facilities to the maximum extent practical. This includes diverting flows from Graphite Creek above the Open Pit around the Open Pit. Contact water will be managed via diversion ditches, spillways, ponds, sumps, pipes, and pumps and treated as required prior to release in a controlled manner to Graphite Creek and ultimately Imuruk Basin.

The site will be in a water surplus condition water balance due to increasing rates of groundwater inflows into the Open Pit as the mine expands. It is estimated the water treatment plant will need to treat up to approximately 8,000 m³/day through the non-winter months.

The WMP will be the primary water storage facility on site and will collect all site contact water prior to being treated and discharged to the environment. Water will be pumped from the WMP to the Plant Site for use in the mill process, or to the WTP for treatment prior to discharge to the environment. Non-contact water will be diverted around the WMP to the maximum extent practical. The WMP will be a fully lined facility.

The closure and reclamation plan for the WMP includes breaching the dams and removing the HDPE geomembrane prior to reclaiming the basin footprint. The surface area of the pond footprint will be covered with topsoil and revegetated to resemble natural terrain at the Graphite One Project site.

Water Treatment

A pit lake water quality model was developed to estimate closure water quality. The results of the pit lake model were used to inform the treatment design and costing. The water model will continue to be refined as additional HCT test results are received.

Water treatment will be required to discharge excess water during operations and closure. During operations, excess water from the water management pond is anticipated to be acidic (pH ~4) and to have elevated metal concentrations (SRK 2022a). Contact water collected in the pit will also need to be treated during closure. The primary constituent of concern is iron. Other constituents predicted to exceed Alaska Freshwater Aquatic Life Standards include:

- Aluminum;
- Antimony;
- Arsenic;
- Cobalt;
- Copper;
- Manganese;
- Nickel;
- Selenium; and
- Zinc.

A high-density sludge water treatment plant will be constructed to treat excess WMP water during operations. Water treatment will continue from construction through the demolition of the site infrastructure and closure of the mine waste facilities. After the mine closes, contact will be conveyed to the pit. The pit will fill with pit wall runoff, groundwater inflows, direct precipitation and other sources of contact water as needed. Flooding the pit will take approximately 10 years.

Operation Phase Water Treatment

The water management system is anticipated to have sufficient storage capacity to attenuate seasonal variations in flow. The water treatment plant design flow rate is 1520 g/m. The water treatment plant will operate for seven months a year from April through October. The operational water treatment plant is anticipated to be decommissioned one year after the site is closed.

Closure Phase Water Treatment

A second water treatment plant will be constructed after the pit floods to manage the pit water level and treat the contact water that fills the pit. On average, approximately 277,350 m³ of water will need to be treated annually and discharged from the pit. The design flow rate of the water treatment plant is 900 g/m. The water treatment plant will operate two months per year, likely during July and August. Operation of the water treatment plant during closure will require logistical support and planning for a remote camp on site. The costs to maintain the camp are not included in the closure water treatment cost estimate. Water treatment in perpetuity is expected because of the exposed pit high wall.

Environment

The Graphite One Project has initiated a series of studies to characterize the major environmental resources in the Graphite One Project area which are necessary to collect the data necessary for permitting and *National Environmental Policy Act* (United States) (“**NEPA**”) analysis. The most critical studies are underway, and include the following:

Wetlands

A complete delineation of the wetlands types in the Graphite One Project area is necessary to obtain the US Army Corps of Engineers (“**ACOE**”) permit under Section 404 of the *Clean Water Act* (United States) (wetlands permit). This is a critical authorization, as it is the only major federal authorization necessary for this Graphite One Project and will trigger the NEPA review. Field mapping was initiated in 2019 and was completed in 2021. This mapping is at a detail required for the Preliminary Jurisdictional Determination, which will be necessary for the ACOE to make its decisions on the Section 404 permit.

Water Quality

Understanding the baseline hydrology and water quality, and the potential impacts of the proposed activity to water in the Graphite One Project area are fundamental parts of the NEPA analysis. Baseline water quality sampling of streams in the Graphite One Project area began in 2014.

Groundwater studies (hydrogeology) quantify baseline conditions, predict impacts to surface water resources during mining and post-mining, and provide input to operational considerations such as water handling and treatment. A minimal program was accomplished in 2019 with more comprehensive ongoing studies. Hydrogeologic investigations, begun in 2021, will lead to a hydrogeologic conceptual model.

Air Quality

Most likely, the major issue with respect to air quality will be power plant emissions and control of fugitive dust. An air quality permit requires baseline data, and a meteorological tower was installed in the Graphite One Project area in October of 2019. The instrument package on the tower will continue to measure a number of parameters necessary for modelling.

Aquatic Resources

In 2019, Graphite One initiated an aquatic baseline data collection program in anticipation of Graphite One Project planning and environmental evaluation. Data collection was designed to establish baseline conditions of aquatic communities and water quality while quantifying natural variability of both, and to evaluate the overall health and productivity of the drainage. The goal of the aquatic baseline study is to collect data to support the NEPA evaluation and ADFG Fish Habitat Permit review and issuance.

Marine Environment

A characterization of Imuruk Basin will be necessary, and should include bathymetry, current flow analysis, water and sediment quality, and aquatic life. This characterization will be necessary for APDES permitting,

should the Graphite One Project pursue discharge of treated water into the basin. All the rivers and streams proximal to the mine site flow into Imuruk Basin.

Permitting

The major state and U.S. federal authorizations for the Graphite One Project include:

- Plan of Operations, Reclamation Plan & Bond, Millsite Lease (Alaska Department of Natural Resources);
- Air Quality Control Permit (Alaska Department of Environmental Conservation);
- Alaska Pollutant Discharge Elimination System Permit (Alaska Department of Environmental Conservation);
- Solid Waste Management Permit (Alaska Department of Environmental Conservation);
- Section 404 Wetlands Permit (U.S. Army Corps of Engineers);
- Right-of-Way Permit and Material Sites (Alaska Department of Natural Resources);
- Tidelands Lease (Alaska Department of Natural Resources);
- Temporary Water Use Authorizations (Alaska Department of Natural Resources);
- Stormwater Plan (Alaska Department of Environmental Conservation);
- Fish Passage Permits (Alaska Department of Fish and Game);
- Essential Fish Habitat Authorization (US Fish and Wildlife Service);
- Eagle, Migratory Bird, Threatened and Endangered Species clearance (National Oceanic and Atmospheric Administration);
- Cultural Clearance (U.S. Army Corps of Engineers & Alaska Department of Natural Resources); and
- Dam Safety Permit (Alaska Department of Natural Resources).

Federal requirements under the *National Environmental Policy Act* (“**NEPA**”) provide the structure for Alaska’s Large Mine Permit Process. The NEPA requires federal agencies to incorporate environmental considerations into decision-making. All major federal actions require a NEPA analysis, and the wetlands permit from the ACOE constitutes a major federal action under the law. Consequently, Graphite Creek will require a NEPA analysis: either an Environmental Assessment or the longer, more expensive Environmental Impact Statement.

Alaska state agencies use the Alaska Large Mine Permitting Process to work with the federal agencies under NEPA and to issue state decisions on a mine.

The Graphite One Project has an active consultation program with the communities of Brevig Mission, Mary’s Igloo and Teller, which are closest to the Graphite One Project area. Graphite One Project staff have also maintained communication with various regional entities and organizations and entities based in Nome such as: The City of Nome, Bering Straits Native Corporation, Nome Eskimo Community, Nome Chamber

of Commerce, Kawerak, and the Norton Sound Economic Development Corporation. Graphite One staff have also conducted preliminary consultations with state and federal agencies.

Environmental, Social and Community Factors for Consideration

Subsistence

One of the biggest concerns for the residents of the communities near the Graphite One Project is their ability to access fish, game, and other resources necessary for their subsistence way of life. The Graphite One Project has developed a Subsistence Advisory Council, with representatives from the communities, to provide advice on how to avoid subsistence impacts.

Geochemistry, Acid-Rock Drainage, and Metals Leaching

The permitting issue which takes up the most agency time, and which most influences mine design and costs is usually the mine's ability to control and discharge water. And water quality is, in turn, a function of the mine's water budget and geochemistry: specifically, the potential for acid-rock drainage and metal leaching. Studies are ongoing to characterize the geochemistry of the waste rock and tailings.

Groundwater

A substantial percentage of the water that must be controlled and discharged is a result of pit dewatering. The factors that may control water flow into the pit and consequently the geochemistry of the water to be treated are poorly understood and the subject of ongoing studies. Studies are ongoing to characterize the groundwater of the Graphite One Project area.

Closure

At the end of the mine life, the mine will be closed and reclaimed in accordance with state laws and regulations. The primary authorities that set closure requirements are 1) DNR Reclamation Plan Approval, 2) ADEC Waste Management Permit, and 3) DNR Dam Safety Certification for any jurisdictional dam structures.

Operating and Capital Cost Estimates

The capital cost estimate was prepared using first principles, applying project experience and avoiding the use of general industry factors. The estimate is derived from engineers, contractors, and suppliers who have provided similar services to existing operations and have demonstrated success in executing the plans set forth in the study. Given that assumptions have been made due to a lack of available engineering information, the accuracy of the estimate and/or ultimate construction costs arising from the engineering work cannot be guaranteed. The estimate meets an AACE Class 4 estimate, with a target accuracy of -15 to -30% on the low side, and +20 to 50% on the high side.

Costs are expressed in US\$ with no escalation unless stated otherwise. The estimate assumes that contractors would mobilize only once to carry out their work and are not already mobilized on site performing other work. LOM Project capital costs total US\$1,484.9 million, consisting of the following distinct phases and sites. A summary of the capital cost estimates can be found in the table below:

Table 1.4 – Summary of Capital Cost Estimates

Capital Costs	Pre-Production (M\$)	Sustaining / Closure (M\$)	Total (M\$)
Open Pit Mining	51.9	19.5	71.3
On-Site Development	112.4	60.9	173.2
Process Plant	119.6		119.6
Alaska Infrastructure	95.5		95.5
Alaska Indirect Costs	119.9		119.9
Secondary Treatment Plant (STP) WA	490.0		490
STP Indirect Costs - WA	81.1		81.1
Subtotal	1,070.4	80.4	1,275.7
Contingency	170.1	39.1	209.2
Closure		125.0	125.0
Total Capital Costs	1,240.5	244.4	1,484.9

The operating cost estimate was prepared using first principles, applying project experience and avoiding the use of general industry factors. Inputs are derived from engineers, contractors and suppliers who have provided similar services to other projects.

The operating cost estimate is broken into five major sections:

- Mining;
- Alaska Processing;
- Secondary Treatment Plant Processing;
- Transportation; and
- General & Administrative.

Certain items within the operating costs begin during the construction phase and continue through the life of the mine. Some of the costs incurred during the pre-production period relate to the costs to purchase items such as consumables required for the following year of production. The timing of these costs has been accounted for in the economic analysis.

Operating costs are presented in 2022 US dollars on a calendar year basis. No escalation or inflation is included.

The total operating unit cost is US\$71.07/t processed for the site in Alaska, and US\$3,908.7/t concentrate processed for the Secondary Treatment Plant, and exclusive of ocean transportation. Summaries of the operating costs are provided in Table 1-5 and Table 1-6.

Table 1-5: Breakdown of estimated operating costs – Alaska

Operating Costs - Alaska	\$/t Milled	LOM M\$
Mining	23.08	519.1
Processing	29.97	674.1
G&A	18.01	405.1
Total	71.07	1,598.3

Table 1-6: Breakdown of estimated operating costs – Transport and STP

Operating Costs	\$/t Concentrate	LOM M\$
Transport	314.4	374.7
Secondary Treatment Plant	3,308.7	3,942.9
Total	3,623.1	4,317.6

The Alaska Mine and Processing Plant

Pre-production capital costs

Includes all costs to develop the Property to operations. Initial capital costs total US\$579.7 million and are expended over a 36-month pre-production period on engineering, construction, and commissioning activities.

Sustaining capital costs

Includes all costs related to the acquisition, replacement, or major overhaul of assets during the mine life required to sustain operations. Sustaining capital costs total US\$244.4 million and is expended in the first year of operations at the Alaska mine site and carry through 24 years of operations.

Closure Costs

Includes all costs related to the closure, reclamation, and salvage value, post operations. Closure costs total US\$125.0 million and is expected to be incurred in Years 24 and 25. Closure costs which occur for an extended period in the post closure phase have been included in Year 25.

Secondary Treatment Plant

Pre-production capital costs

Includes all costs to develop the Property to an operating treatment plant facility. Initial capital costs total US\$660.8 million and is spent over a 24-month pre-production period for engineering, construction, and commissioning activities. Due to the lag between startup of the STP and production of concentrate from the mine site, the pre-production cost period for the STP ends one year in advance of the pre-production period at the mine site.

Exploration, Development and Production

The Company completed the 2022 Field Program at its 100%-owned Graphite One Project in Alaska which was conducted from June 2022 to September 2022 and included 1,940 m of infill and step-out core drilling for resource definition as well as 210 m of core and sonic drilling for geotechnical data collection at the proposed mill site, planned dry tailings/waste rock storage areas and the access route.

The core drilling in the deposit area continued to encounter visible graphitic mineralization over wide intervals consistent with previous drilling results as reported in 2021 and the PFS which was released on October 13, 2022. The 2022 summer drilling program data will be incorporated into the Feasibility Study.

The 2022 Field Program activities included:

- Completion of geotechnical drilling on the proposed access route
- Ongoing 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
- Increasing the Graphite Creek field camp capacity from 24 to 60 persons

Select Drill Results Included:

- 22GC071 returned 18.5m of 4.7% Cg, 22.2m of 6.8% and 20m of 6.7% Cg starting from 19m downhole.
- 22GC072 returned 31.7m of 5.6% Cg, and 37.6m of 5.2% Cg starting from 62m downhole.
- 22GC073 returned 3.8m of 7.6% Cg, 27.6m of 5.1%, 26.4m of 6.2%Cg and 17.3m of 4.3% Cg starting from 13m downhole.
- 22GC075 returned 10.5m of 7.7% Cg, 32.9m of 6.4% Cg and 2.1m of 12.0% Cg starting from 3m downhole.
- 22GC076 returned 53.1m of 7.5% including 12.3m of 11.5% Cg including 2.8m of 25.6% Cg starting from 72m downhole.
- 22GC079 located 2 km west of previous closest drilling returned 31.8m of 3.4% Cg, including 6.3m of 6.7% Cg, 21.5m of 2.6% Cg, 10.7m of 2.6%Cg, and 13m of 5.4%Cg starting 5m below the surface.

Interpretation of Results:

- Core drilling in the deposit area continued to encounter visible graphite mineralization over wide intervals, consistent with previous drilling.
- Hole 22GC079, drilled 2 km west of previous resource drilling and 4 km west of the PFS pit boundary, showed significant intervals above mill cut-off grade. Selected intervals totaled 58.2 m of 4.18% graphite.
- The deposit remains open to the West, East, and down dip
- 2022 drilling targeted extending inferred resource to the west and upgrading inferred resources to measured and indicated around the PFS pit area.
- All holes drilled in the proposed North pit wall encountered significant zones of graphite which will likely expand the pit to the North.

Table 1-7: 2022 Drill Results³

HOLE ID	Section	Azimuth	Dip	Total Depth (m)	From (m)	To (m)	Width (m)	%Cg
22GC071	4600	175	-50	191.72	19.27	25.42	6.15	4.67
					54.64	67.00	12.36	4.77
				Including:	55	64	9	5.14
					68.00	90.16	22.16	6.76
				Including:	78.61	88.16	9.55	10.60

³ Table of select intervals from 2022 drill results. Intervals are composites with a minimum of 2-meter length, maximum internal dilution of 2 meters, and a cutoff grade of 2% Drill orientation is nominally orthogonal to mineralization; however, drill results may not be representative of true width of mineralization.

HOLE ID	Section	Azimuth	Dip	Total Depth (m)	From (m)	To (m)	Width (m)	%Cg
22GC072	4650	131	-45	195.99	157.40	177.37	19.97	6.69
					Including: 158.40	164.40	6.00	10.02
					62.37	94.04	31.67	5.60
					Including: 90.29	94.04	3.75	8.81
22GC073	4200	160	-50	151.91	138.57	176.17	37.60	5.21
					Including: 152.37	158.71	6.34	16.02
					13.19	17.03	3.84	7.63
					27	54.64	27.64	5.08
22GC074	4300	160	-50	170.69	Including: 27	36	9	7.59
					74.07	100.50	26.43	6.21
					Including: 90	92	2	10.24
					103.16	120.5	17.34	4.29
22GC075	4200	160	-50	150.00	Including: 108	110	2	11.97
					55.98	77.35	21.37	4.79
					Including: 57.91	67.91	10	6.87
					134.85	146.85	12	6.86
22GC076	4550	144	-50	235.31	Including: 134.85	138.85	4	13.29
					2.60	13.10	10.50	7.72
					Including: 2.6	9.1	6.5	10.5
					41.36	74.30	32.94	6.36
22GC077	4350	160	-50	196.90	Including: 65.88	67.88	2	12.55
					And 72.18	74.3	2.12	12.05
					72.73	125.88	53.15	7.47
					Including: 81.73	94.05	12.32	11.52
22GC078	4100	160	-50	173.74	And 98.72	101.53	2.81	25.59
					161.6	175.6	14	3.17
					179.60	214.88	35.28	3.76
					Including: 188.75	195.75	7	6.61
22GC079	-100	160	-50	218.93	33.83	42.29	8.46	6.72
					49.66	107.56	57.90	4.71
					Including: 57.65	63.65	6	7.54
					136.5	143	6.5	6.17
22GC072	4650	131	-45	195.99	151.82	159.91	8.09	6.82
					35.05	48.77	13.72	4.00
					71.10	101.01	29.91	5.02
					Including: 77.1	88.83	11.73	7.45
22GC073	4200	160	-50	151.91	104.20	140.68	36.48	3.47
					Including: 123.62	128.57	4.95	8.12
					5.40	37.20	31.80	3.43
					Including: 11.4	17.7	6.3	6.73
22GC074	4300	160	-50	170.69	45.85	67.39	21.54	2.55

HOLE ID	Section	Azimuth	Dip	Total Depth (m)	From (m)	To (m)	Width (m)	%Cg
					104.33	115	10.67	2.55
					125.92	138.86	12.94	5.36
				Including:	131.43	137.86	6.43	7.02
					143.86	163.4	19.54	2.53
					179.77	190.5	10.73	2.43
22GC080	3900	160	-50	152.40	15.24	38.50	23.26	5.19
				Including:	26.24	29.34	3.1	8.64

Figure 1: Graphite Creek Geophysical Anomaly with Resource Drilling to Date

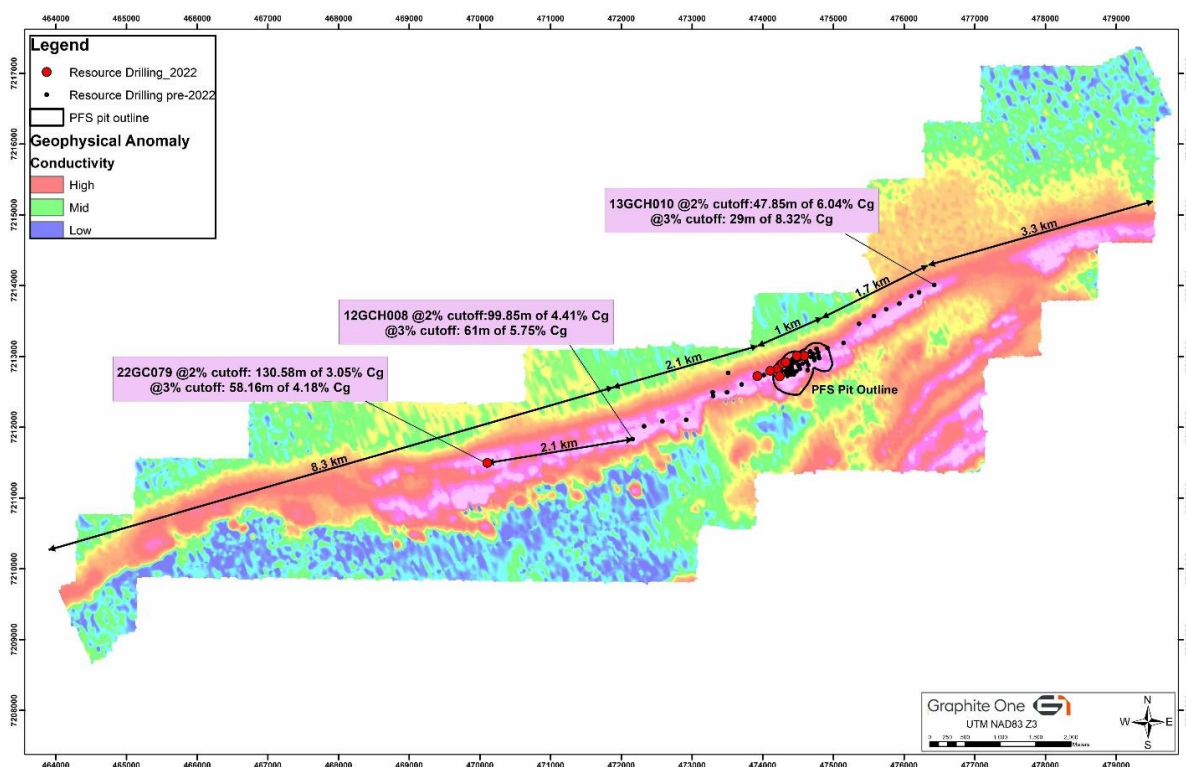
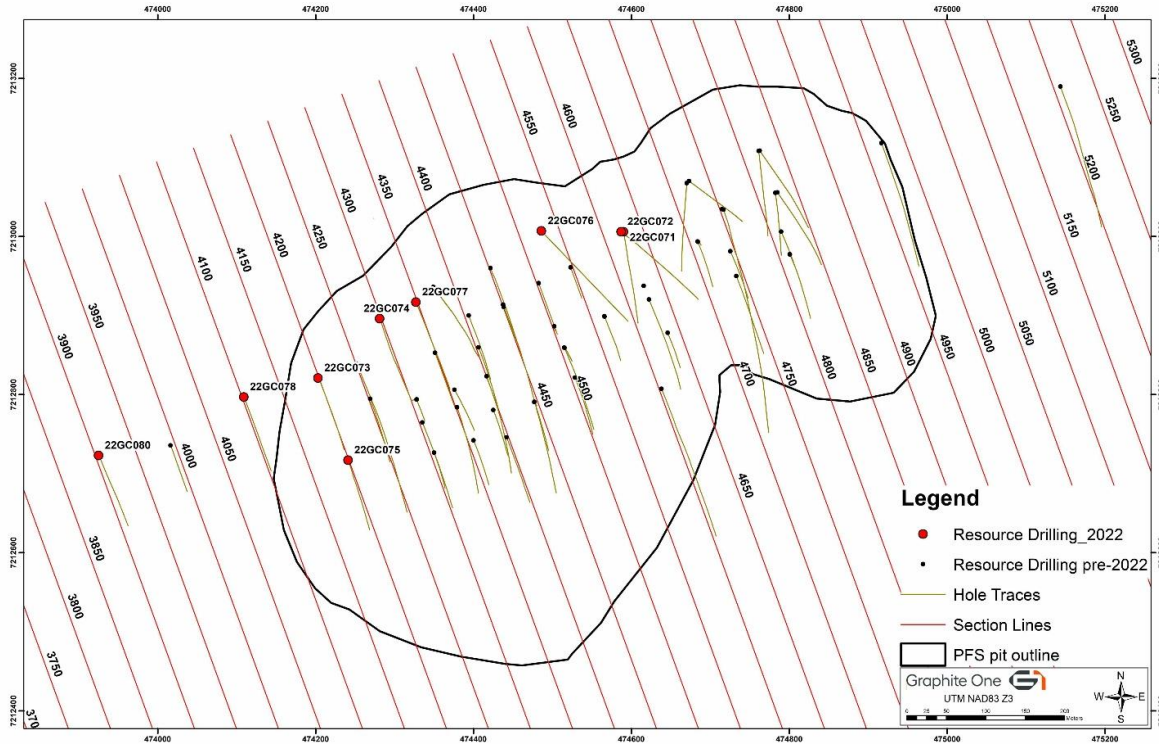


Figure 2: Graphite Creek Resource Drilling to Date with PFS Pit Outline⁴



In addition, Graphite One representatives conducted community engagement meetings and subsistence advisory committee meetings.

On October 23, 2023, the Company announced the completion of the Company's 2023 summer drilling program, marking the largest exploration program in the Company's history and allowing the Company to accelerate completion of the Feasibility Study, anticipated to be released in the fourth quarter of 2024.

The Company completed 57 holes for a total of 8,736 m (28,661 feet) of drilling, including 5 geotechnical holes for the primary purpose of evaluating construction sites or hydrology conditions.

The remaining 52 resource holes all intersected visual graphite mineralization and continued to demonstrate exceptional consistency of a shallow, high-grade graphite deposit that remains open both to the east and west of the existing mineral resource estimate ("MRE"). See Figure 1 for more details.

The Company released an initial set of 2023 select drill holes with significant graphite mineralization which includes:

- 23GC088 returns **9.63 m of 13.19% Cg** from 70.60 m;
- 23GC092 returns **9.0 m of 14.89% Cg** from 35.0 m;
- 23GC099 returns **15.02 m of 10.75% Cg** from 20.0 m;
- 23GC102 returns **10.88 m of 11.14% Cg** from surface AND **8.03 m of 10.56% Cg** from 66.14 m further down hole.

⁴ Hole 22GC079 is not shown on Figure 2 and is located 4 km west of the western PFS pit boundary

On January 8, 2024, the Company released a more complete set of significant assay results from the 2023 summer drilling program as follows:

Hole ID	Intercept	From (m)	To (m)	Length (m)	Length (ft)	C- Graphite (%)	Containing
23GC101	1	96.47	104.00	7.53	24.7	9.67	2.00 m @ 12.55%
23GC103	1	0.10	10.00	9.90	32.5	7.70	
23GC105	1	62.97	72.00	9.03	29.6	6.64	
23GC105	2	107.00	113.00	6.00	19.7	12.54	3.00 m @ 15.30%
23GC106	1	23.00	29.00	6.00	19.7	7.47	
23GC106	2	84.00	91.00	7.00	23.0	9.53	2.00 m @ 12.15%
23GC109	1	21.64	28.00	6.36	20.9	7.75	
23GC110	1	10.36	19.76	9.40	30.8	13.87	3.51 m @ 25.16%
23GC110	2	52.15	58.97	6.82	22.4	9.69	2.85 m @ 14.45%
23GC114	1	83.82	90.00	6.18	20.3	9.71	
23GC115	1	53.00	64.92	11.92	39.1	7.07	
23GC122	1	84.00	90.00	6.00	19.7	7.67	
23GC127	1	47.40	53.88	6.48	21.3	19.02	3.59 m @ 29.92%
23GC127	2	61.56	71.70	10.14	33.3	12.30	6.95 m @ 13.50%

Parameters: Notable interval defined as > 6% Graphite, Minimum interval = 6 m, maximum length of internal dilution = 1.5 m

Mr. Robert M. Retherford, CPG, with Alaska Earth Sciences, Inc. provided oversight to the 2023 drilling and sampling program. Mr. Retherford is a Qualified Person as defined under NI 43-101 and has reviewed and approved the geologic, reserves and resources information.

QA/QC Program

Graphite One maintains a rigorous QA/QC program with respect to the preparation, shipping, analysis and checking of all samples and data from the Property. Quality control for drill programs at the Graphite One Project covers the complete chain of custody of samples, including verification of drill hole locations (collar surveys and down-hole directional surveys), core handling procedures (logging, sampling, sample shipping) and analytical-related work, including duplicate sampling, “check analyses” at other laboratories and the insertion of standard and blank materials. The QA/QC program also includes data verification procedures.

Mineral Resource Update

On March 13, 2023, the Company announced an updated resource estimate which included the results of the 2022 drilling program. The resource estimate increased 15.5% in Measured and Indicated tonnage with a corresponding increase of 13.1% in contained tonnes of graphite. The Measured and Indicated Resource now stands at 37.6 million tonnes at 5.14% graphite, with an Inferred Resource of 243.7 million tonnes at 5.07% graphite.

Comparison of Graphite Creek's 2023 Resources to 2022 Resources⁵

Category	Cg% Cutoff	2023 Resources			2022 Resources			YOY Change Tonnes Cg	YOY Change Tonnes
		Millions Tonnes	Cg%	Million Tonnes Cg	Millions Tonnes	Cg%	Millions Tonnes Cg		
Measured	2%	5.63	5.75%	0.32	4.67	5.83%	0.27	19.00%	20.60%
Indicated	2%	31.96	5.03%	1.61	27.87	5.15%	1.44	12.00%	14.70%
Inferred	2%	243.70	5.07%	12.34	254.67	5.11%	13.00	-5.10%	-4.30%
Measured and Indicated	2%	37.59	5.14%	1.93	32.54	5.25%	1.71	13.10%	15.50%

The updated resource did not include Hole 22GC079, drilled 2.1 km west of the current block model, which encountered 58 meters of 4.18% graphite, due to distance constraints used in the block model. The 2023 drilling program targeted doubling the measured and indicated resources and increasing the inferred resource by infill drilling along trend to Hole 22GC079.

Graphite One's PFS was based on a proven and probable reserve that utilized 7% of the anomaly's strike length. This updated Measured, Indicated and Inferred resource is based on drilling 26% of the surface area of the anomaly. The 2023 drilling program continued to delineate the scope and size of the resource, as the Graphite Creek deposit remains open to the West, East, and down dip.

DIVIDENDS

The Company has not paid any dividends on the common shares of the Company since incorporation. The Company currently intends to retain future earnings, if any, to finance further business development. The declaration of dividends on common shares will be dependent on a number of factors, including earnings, capital requirements, operating and financial condition and a number of other factors that the Board considers to be appropriate.

There are no restrictions in the Company's articles on the ability of the Company to pay dividends in the future.

DESCRIPTION OF CAPITAL STRUCTURE

As of the date of this AIF, the Company's authorized share capital consists of an unlimited number of common shares without par value, of which 132,283,348 common shares are issued and outstanding. All of the issued common shares rank equally as to voting rights, participation and a distribution of the Company's assets on liquidation, dissolution or winding-up and the entitlement to dividends. Holders of common shares are entitled to receive notice of, attend and vote at all meetings of shareholders of the Company. Each common share carries one vote at such meetings. Holders of common shares are entitled to dividends if and when declared by the board of directors of the Company and, upon liquidation, to receive such portion of the assets of the Company as may be distributable to such holders. There are currently no other series or class of shares which rank senior, in priority to, or *pari passu* with the common shares. The common shares do not carry any pre-emptive, subscription, redemption or conversion rights, nor do they contain any sinking or purchase fund provisions.

⁵ Mineral Resources are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves have not demonstrated economic viability. There is no certainty that any part of a Mineral Resource will ever be converted into Reserves. Inferred Mineral Resources represent material that is considered too speculative to be included in economic evaluations. Additional trenching and/or drilling will be required to convert Inferred Mineral Resources to Indicated or Measured Mineral Resources. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher resource category.

MARKET FOR SECURITIES

Trading Price and Volume

The common shares are listed and posted for trading on the TSXV under the symbol “GPH”. The following table sets forth trading information for the common shares on the TSXV during the years ended December 31, 2023 and 2022:

Month	Price Range		Monthly Trading Volume
	High (CA\$)	Low (CA\$)	
January 2022	2.05	1.57	889,494
February 2022	1.97	1.44	903,129
March 2022	1.93	1.57	1,088,048
April 2022	2.00	1.60	1,871,129
May 2022	1.63	1.3	1,013,958
June 2022	1.63	1.16	960,552
July 2022	1.45	1.24	1,026,640
August 2022	1.39	1.13	781,821
September 2022	1.35	0.93	650,931
October 2022	1.20	1.04	795,627
November 2022	1.31	1.03	892,660
December 2022	1.25	1.04	812,194
January 2023	1.24	0.95	3,097,891
February 2023	1.97	1.13	4,564,354
March 2023	1.97	1.38	2,396,475
April 2023	1.63	1.38	937,366
May 2023	1.71	1.35	1,193,472
June 2023	1.45	1.09	612,568
July 2023	1.73	1.20	1,484,243
August 2023	1.42	1.11	1,127,305
September 2023	1.33	1.06	513,584
October 2023	1.29	0.98	1,461,385
November 2023	1.04	0.91	824,790
December 2023	0.96	0.77	1,531,851

The closing price of the common shares of the Company on the TSXV on December 30, 2022, being the last day of trading in 2022, was CA\$1.06.

Prior Sales

The following table summarizes details of securities issued by the Company during the years ended December 31, 2023 and 2022.

Date of Issuance	Security	Price per Security	Number of Securities
January 19, 2022	Exercise of Warrants	CA\$1.50	50,000

Date of Issuance	Security	Price per Security	Number of Securities
January 21, 2022	Exercise of Warrants	CA\$1.50	100,000
February 2, 2022	Exercise of Warrants	CA\$0.61	16,000
	Exercise of Warrants	CA\$0.98	2,565
February 8, 2022	Exercise of Warrants	CA\$1.50	15,000
February 11, 2022	Exercise of Warrants	CA\$0.61	75,180
	Exercise of Warrants	CA\$0.98	10,512
February 18, 2022	Exercise of Warrants	CA\$1.50	7,000
March 1, 2022	Exercise of Warrants	CA\$0.61	10,000
March 11, 2022	Exercise of Warrants	CA\$0.61	15,000
March 18, 2022	Exercise of Warrants	CA\$0.61	30,000
March 25, 2022	Exercise of Warrants	CA\$0.61	12,820
March 28, 2022	Exercise of Warrants	CA\$0.98	128,205
March 30, 2022	Exercise of Warrants	CA\$1.50	104,600
March 30, 2022	Exercise of Warrants	CA\$0.61	10,000
April 1, 2022	Exercise of Warrants	CA\$1.50	100,000
April 6, 2022	Exercise of Warrants	CA\$0.61	418,000
	Exercise of Warrants	CA\$0.98	66,666
April 6, 2022	Exercise of Warrants	CA\$1.50	270,000
April 7, 2022	Exercise of Warrants	CA\$1.50	100,000
April 8, 2022	Exercise of Warrants	CA\$1.50	50,000
April 8, 2022	Exercise of Warrants	CA\$0.61	38,461
April 22, 2022	Exercise of Warrants	CA\$1.00	84,620
April 28, 2022	Exercise of Warrants	CA\$0.61	10,000
May 4, 2022	Exercise of Warrants	CA\$0.61	20,000
May 9, 2022	Exercise of Warrants	CA\$0.61	10,000
June 14, 2022	Exercise of Warrants	CA\$0.61	16,000
	Exercise of Warrants	CA\$0.98	2,565
August 3, 2022	Exercise of Warrants	CA\$1.00	17,640
August 8, 2022	Exercise of Warrants	CA\$1.00	506,490
August 8, 2022	Exercise of Warrants	CA\$1.00	2,000
August 24, 2022	Exercise of Warrants	CA\$0.61	30,000
August 29, 2022	Private Placement ⁽¹⁾	CA\$1.15	8,762,071
August 30, 2022	Exercise of Warrants	CA\$0.61	32,000
	Exercise of Warrants	CA\$0.98	5,128
September 19, 2022	Shares for Debt Settlement	CA\$1.12	9,296,328
October 11, 2022	Exercise of Warrants	CA\$0.61	116,000
	Exercise of Warrants	CA\$0.98	52,564
October 12, 2022	Exercise of Warrants	CA\$0.61	75,000
October 13, 2022	Exercise of Warrants	CA\$0.61	64,000
October 14, 2022	Exercise of Warrants	CA\$0.61	6,000
October 17, 2022	Exercise of Warrants	CA\$0.61	259,200
October 26, 2022	Exercise of Warrants	CA\$0.61	129,600
November 14, 2022	Exercise of Warrants	CA\$0.61	7,000
	Exercise of Warrants	CA\$0.98	4,000

Date of Issuance	Security	Price per Security	Number of Securities
November 16, 2022	Exercise of Warrants	CA\$0.61	105,900
	Exercise of Warrants	CA\$0.98	4,600
November 16, 2022	Exercise of Warrants	CA\$0.61	104,800
November 21, 2022	Non-Brokered private placement ⁽¹⁾	CA\$1.15	560,915
November 21, 2022	Exercise of Warrants	CA\$1.00	127,944
November 22, 2022	Exercise of Warrants	CA\$0.98	41,538
November 24, 2022	Exercise of Warrants	CA\$0.61	59,000
November 29, 2022	Exercise of Options	CA\$0.30	520,000
	Exercise of Options	CA\$0.35	10,000
	Exercise of Options	CA\$1.02	50,000
December 8, 2022	Exercise of Options	CA\$0.30	50,000
December 13, 2022	Exercise of Warrants	CA\$0.61	157,000
December 14, 2022	Exercise of Warrants	CA\$0.98	104,000
	Exercise of Warrants	CA\$0.61	37,180
December 19, 2022	Exercise of Warrants	CA\$0.61	7,500
December 21, 2022	Exercise of Options	CA\$0.30	50,000
December 21, 2022	Exercise of Options	CA\$0.30	10,000
December 22, 2022	Exercise of Warrants	CA\$0.61	10,800
December 22, 2022	Exercise of Warrants	CA\$1.20	450,000
December 23, 2022	Exercise of Warrants	CA\$0.61	98,200
December 28, 2022	Exercise of Options	CA\$0.30	225,000
	Exercise of Options	CA\$0.60	30,000
January 18, 2023	Exercise of Warrants	CA\$0.61	351,200
January 19, 2023	Exercise of Warrants	CA\$0.61	946,500
	Exercise of Warrants	CA\$0.98	3,846
January 23, 2023	Exercise of Warrants	CA\$0.61	109,340
	Exercise of Warrants	CA\$0.98	12,820
January 24, 2023	Exercise of Warrants	CA\$0.61	24,000
	Exercise of Warrants	CA\$0.98	4,375
January 27, 2023	Exercise of Warrants	CA\$0.61	80,000
	Exercise of Warrants	CA\$0.98	33,590
January 30, 2023	Exercise of Warrants	CA\$0.61	277,383
	Exercise of Warrants	CA\$0.98	27,948
January 31, 2023	Exercise of Warrants	CA\$0.61	259,200
	Exercise of Warrants	CA\$0.98	41,539
February 3, 2023	Exercise of Warrants	CA\$0.61	1,590,765
	Exercise of Warrants	CA\$0.98	231,023
February 6, 2023	Exercise of Warrants	CA\$0.61	139,000
	Exercise of Warrants	CA\$0.98	16,666
February 8, 2023	Exercise of Warrants	CA\$0.61	480,400
	Exercise of Warrants	CA\$0.98	72,307
February 9, 2023	Exercise of Warrants	CA\$0.61	270,560
	Exercise of Warrants	CA\$0.98	50,127
February 10, 2023	Exercise of Warrants	CA\$0.61	308,800
	Exercise of Warrants	CA\$0.98	39,743

Date of Issuance	Security	Price per Security	Number of Securities
February 13, 2023	Exercise of Warrants	CA\$0.61	352,000
	Exercise of Warrants	CA\$0.98	65,384
February 14, 2023	Exercise of Warrants	CA\$0.61	957,687
	Exercise of Warrants	CA\$0.98	392,073
February 15, 2023	Exercise of Warrants	CA\$0.61	1,126,510
	Exercise of Warrants	CA\$0.98	178,781
February 16, 2023	Exercise of Warrants	CA\$0.98	174,846
	Exercise of Warrants	CA\$0.61	886,855
February 17, 2023	Exercise of Warrants	CA\$0.61	856,400
	Exercise of Warrants	CA\$0.98	172,820
	Exercise of Broker Warrants	CA\$0.61	134,543
	Exercise of Broker Warrants	CA\$0.98	109,702
February 21, 2023	Exercise of Warrants	CA\$0.61	469,700
	Exercise of Warrants	CA\$0.98	90,702
February 22, 2023	Exercise of Warrants	CA\$0.61	12,100
	Exercise of Warrants	CA\$0.98	2,505
February 23, 2023	Exercise of Warrants	CA\$0.98	59
	Exercise of Warrants	CA\$1.50	144,500
February 24, 2023	Exercise of Warrants	CA\$1.50	30,000
March 3, 2023	Exercise of Warrants	CA\$1.20	100,000
	Exercise of Warrants	CA\$1.50	2,500
March 6, 2023	Exercise of Warrants	CA\$1.50	12,500
March 9, 2023	Exercise of Warrants	CA\$1.50	60,000
March 10, 2023	Exercise of Warrants	CA\$1.20	169,999
March 13, 2023	Exercise of Warrants	CA\$1.50	12,500
March 29, 2023	Exercise of Warrants	CA\$1.20	200,000
April 17, 2023	Exercise of Warrants	CA\$1.20	1,327,021
	Exercise of Warrants	CA\$1.50	2,501,581
April 28, 2023	Exercise of Warrants	CA\$1.20	40,000
	Exercise of Warrants	CA\$1.50	25,000
May 8, 2023	Exercise of Warrants	CA\$1.20	52,000
May 9, 2023	Exercise of Warrants	CA\$1.20	100,000
May 10, 2023	Exercise of Warrants	CA\$1.50	200,000
May 11, 2023	Exercise of Warrants	CA\$1.50	47,160
May 12, 2023	Exercise of Warrants	CA\$1.50	250,000
May 18, 2023	Exercise of Warrants	CA\$1.20	125,720
June 21, 2023	NSR Royalty Purchase	CA\$1.30	456,500
June 28, 2023	Exercise of Warrants	CA\$1.20	2,260,628
July 19, 2023	Exercise of Warrants	CA\$1.20	100,000
September 6, 2023	Private Placement ⁽¹⁾	CA\$0.97	2,802,690
December 27, 2023	Vesting of Restricted Share Units	CA\$0.83	432,371

⁽¹⁾ Non-brokered private placement consisting of one common share and one common share purchase warrant

DIRECTORS AND OFFICERS

Name, Occupation and Security Holdings

The following table sets out the names, province or state and country of residence of each of the directors and executive officers of the Company and the executive officers of G1 Alaska, their present position(s) and office(s) within the Company and G1 Alaska, their principal occupations during the last five years and, for the directors, their date of appointment.

All directors of the Company have been elected to serve until the next annual meeting of shareholders of the Company, subject to earlier resignation.

As at the date of this AIF, the Company's directors and executive officers beneficially owned, or controlled or directed, directly or indirectly, an aggregate of 1,318,421 common shares of the Company, representing approximately 1.00% of the issued and outstanding common shares.

Name and Residence	Current Office(s) with the Company	Principal Occupation During the Preceding Five Years ⁽¹⁾	Date of Appointment as Director ⁽²⁾	Common Shares beneficially owned directly or indirectly	Percentage of Common Shares owned
Anthony Huston British Columbia, Canada	President, Chief Executive Officer and Director	President, Chief Executive Officer, and Director of the Company; President of Huston & Huston Holdings Corp.	April 27, 2011	548,000	0.41%
Douglas H. Smith British Columbia, Canada	Executive Chairman and Director	Executive Chairman and Director of the Company and a professional engineer	January 29, 2014	275,000	0.21%
Scott S. Packman, J.D. ⁽³⁾⁽⁴⁾ New York, United States	Director	Director of the Company and a lawyer. Principal, SSP Partners LLC during 2016 to 2020 and November 2021 to present.	May 10, 2022	161,219	0.12%
Bedi A. Singh, FCA ⁽³⁾⁽⁴⁾ California, United States	Director	Director of the Company and a Chartered Accountant. Principal, BAS Consulting from 2018 to present.	June 29, 2022	138,175	0.10%
Patrick Smith ⁽³⁾⁽⁴⁾ Washington, United States	Director	Director of the Company and a professional geologist.	December 11, 2014	55,000	0.04%
Brian Budd ⁽³⁾⁽⁴⁾ British Columbia, Canada	Director	Director of the Company and Real Estate Broker with REMAX Real Estate Group.	March 22, 2012	139,527	0.11%

Name and Residence	Current Office(s) with the Company	Principal Occupation During the Preceding Five Years ⁽¹⁾	Date of Appointment as Director ⁽²⁾	Common Shares beneficially owned directly or indirectly	Percentage of Common Shares owned
Gordon Jang British Columbia, Canada	Chief Financial Officer and Corporate Secretary	Vice-President, Finance and Accounting From April 2017 to March 2021 – Fortuna Silver Corp. Chief Financial Officer – Sensible Meats Inc. from March 2021 to April 2022.	N/A	Nil	Nil%
Mike Schaffner Alaska, USA	Senior Vice President, Operations ⁽⁵⁾	Study Director - Ambler Metals LLC from June 2021 to June 2022. General Manager – Newmont Mining from March 2005 to February 2020.	N/A	Nil	Nil%
Kevin Torpy Alaska, USA	Vice-President, Mining ⁽⁵⁾	Vice President, Operations – Ambler Metals LLC from November 2020 to February 2023. Vice President, Operations at Titan Mining Corp. from November 2018 to October 2020.	N/A	Nil	Nil%
Andrew Tan British Columbia, Canada	Vice-President, Advanced Materials	Graphite Materials Consultant from March 2013 to March 2021.	N/A	1,500	0.001%

(1) The information as to principal occupation, business or employment may not be within the knowledge of the management of the Company and has been furnished by the respective directors and executive officers.

(2) Includes the period prior to continuation into British Columbia on September 12, 2014. See “Corporate Structure – Name, Address and Incorporation”.

(3) Member of the Audit Committee.

(4) Member of the Compensation Committee.

(5) Executive officer of G1 Alaska.

Director and Executive Officer Biographies

The following are brief biographies of the directors and executive officers of the Company:

Anthony Huston, CEO & Director

Anthony Huston is a successful entrepreneur with a background in the tech sector, business development and finance. Having served as Managing Partner in both public and private companies, Mr. Huston played an integral role in raising more than CA\$150 million in his career. Mr. Huston has also served as an advisor

on financial and acquisition transactions in industries ranging from the resource sector, real estate development, biotechnology and information technology.

Douglas H. Smith, Executive Chairman & Director

Douglas Smith has over 35 years of experience in the international coal industry as a senior executive and corporate director. Mr. Smith was the General Manager of Xstrata Coal Canada from mid-2011 to mid-2013 following Xstrata Coal's purchase of First Coal Corporation in 2011. As President, CEO and Director of First Coal, Mr. Smith raised over CA\$50 million in equity prior to its sale to Xstrata. For the preceding twelve years, Mr. Smith served as President and Director of Andalex Resources Inc., a private U.S. coal company, until its sale in 2006.

Scott Packman, Independent Director

Scott Packman is a highly regarded corporate strategist, successful operator, trusted advisor, pre-eminent negotiator and attorney. Prior to joining Graphite One's Board of Directors, Mr. Packman was the General Counsel and Executive Vice-President of Madison Square Garden Entertainment Corp. Mr. Packman also served as the General Counsel of MGM Holdings Inc., the owner of the iconic MGM movie and television studio, for over 11 years. Mr. Packman is currently the Managing Member of SSP Partners Inc., which identifies, evaluates and advises on strategic acquisitions for financiers and provides services as a director to Moonraker Holdco LLC, the owner of Talent Systems, and Instant Web Holdings, LLC, owner of IWCO Direct.

Mr. Packman was admitted to the California, Florida and New York state bars, and graduated from the New York University School of Law and holds a B.B.A and an M.B.A. from the University of Texas.

Bedi A. Singh, Independent Director

Bedi A. Singh is a seasoned senior executive with deep financial experience with decades of public company service primarily in the media, entertainment and technology sectors. Mr. Singh served on the Board of The Meet Group, previously a Nasdaq listed technology company and currently serves on the North American Advisory Board of The London School of Economics. Mr. Singh is also the managing partner at BAS Consulting providing advisory, Board and management consulting services.

Mr. Singh served as the Chief Financial Officer of News Corporation from 2012 to 2017, Co-CEO, President & Chief Financial Officer for MGM Studios, as Chief Financial Officer at Gemstar-TV Guide and as Executive Vice-President and Chief Financial Officer of Sony Pictures Entertainment.

Mr. Singh is a graduate of London School of Economics and Political Science, a Fellow of the UK Institute of Chartered Accountants and a graduate of the Program for Management Development at Harvard Business School.

Patrick Smith, Independent Director

Patrick Smith is a senior mining executive with 40 years of executive management experience in the international mining exploration and mining industry, including 20 years in Alaska. Mr. Smith held the position of Alaskan Exploration Manager for Kennecott Exploration Company as well as other senior management positions with Rio Tinto PLC over the course of 32 years, culminating in his role as Managing Director of Exploration, Australasia Region based in Perth, Australia. Mr. Smith was President and CEO of Heatherdale Resources Ltd. with a focus on advance stage Niblack polymetallic deposit in Alaska.

Mr. Smith is a Fellow of the Society of Economic Geologists, member of Society of Mining Engineers, the American Exploration and Mining Association.

Mr. Smith holds Professional Geologist licenses in Utah, Wyoming, and Washington.

Brian Budd, Independent Director

Brian Budd has an extensive management and corporate development background with over 25 years of entrepreneurial and sales leadership experience in the resource and high-tech industries. Mr. Budd's business acumen includes the development and execution of comprehensive business and financing plans, corporate communication programs as well as strategic planning for both domestic and international markets. Mr. Budd has held the position of President & Chief Executive Officer and directorships for several public companies since 2010.

Gordon Jang, Chief Financial Officer and Corporate Secretary

Gordon Jang, CPA, CMA has 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, external financial reporting, corporate restructuring, cost analysis and process improvements. Mr. Jang was previously the Vice-President of Finance and Accounting at Fortuna Silver Mines, and prior to that, has held senior positions at Augusta Resources, Lundin Mining and Pan American Silver.

Mike Schaffner, Senior Vice-President, Operations (G1 Alaska)

Mike Schaffner has over 35 years of experience in mining operations. Prior to Mr. Schaffner joining the Company, Mr. Schaffner worked at Ambler Metals LLC overseeing engineering work, and prior to that at Newmont Mining as General Manager at the Carlin Gold Mine, Cripple Creek and Victor Mines.

Mr. Schaffner's operations are 3-time winners of the National Mining Association's Sentinels of Safety award, recognizing the U.S.'s safest mines for continuous injury-free operations. He holds two patents related to bio-oxidation heap leaching.

Kevin Torpy, Vice-President, Mining (G1 Alaska)

Kevin Torpy is a mining engineer with twenty-six years of experience developing, building, and operating mines, primarily in remote northern locations. Prior to joining Graphite One, Mr. Torpy was Vice President, Operations at Ambler Metals LLC, another Arctic exploration project in Alaska. Mr. Torpy was Vice President, Operations at Titan Mining Corp. where he oversaw the restructuring and operational turnaround of the Empire State Mine in Northern New York State. Mr. Torpy held several positions of increasing responsibility including General Manager at Pretium Resources' Brucejack Mine in British Columbia during the advanced exploration, construction, and startup phases of the project.

Andrew Tan, Vice-President, Advanced Materials

Andrew Tan joined the Company in April 2021 as Director – Graphite Products Manufacturing and has been instrumental in planning the Company's advanced graphite materials manufacturing facility. He has over thirty years industry experience including as an independent consultant to the carbon and graphite materials industry with particular emphasis on manufacturing graphite anode materials and other advanced graphite products, three years academic research in nano carbon materials, three years as General Manager of SGL Carbon Group's graphite foil manufacturing plant in China. Mr. Tan also led the successful development of a non-HF natural graphite thermal chemical purification commercial process.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the knowledge of management, no director or executive officer of the Company is, as at the date of this AIF, or was, within the 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including Graphite One), that was the subject of a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial

officer, or after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

To the knowledge of management, no director or executive officer of the Company, or shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, is, as of the date of this AIF, or has been within the 10 years before the date of this AIF, a director or executive officer of any company (including Graphite One) that, while the person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

To the knowledge of management, no director or executive officer of the Company, or shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, is, as of the date of this AIF, or has been within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

To the knowledge of management, no director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company, has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority or has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Conflicts of Interest

To the best of the Company's knowledge, information and belief, and other than as disclosed herein, there are no known existing or potential conflicts of interest among the Company and its directors, officers or other members of management as a result of their outside business interests except that certain of the Company's directors and officers serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to the Company and their duties as a director or officer of such other companies. As required by law, each of the directors of the Company is required to act honestly, in good faith and in the best interests of the Company. In the event of a conflict of interest, the Company will follow the requirements and procedures of applicable corporate and securities legislation and applicable exchange policies, including the relevant provisions of the *Business Corporations Act* (British Columbia).

AUDIT COMMITTEE

The primary function of the audit committee of the Board (the "**Audit Committee**") is to assist the Board in fulfilling its financial reporting and controls responsibilities to the shareholders of the Company. In accordance with National Instrument 52-110 – *Audit Committees* ("**NI 52-110**"), information with respect to the Audit Committee is contained below. The full text of the Audit Committee Charter, as passed unanimously by the Board, is attached to this AIF as Schedule "A".

Composition of the Audit Committee

As of the date of this AIF, the Audit Committee is composed of Bedi Singh (Chair), Scott Packman, Brian Budd and Patrick Smith. Each member is independent within the meaning of NI 52-110. All members of the Audit Committee are financially literate within the meaning of NI 52-110.

Relevant Education and Experience

For details regarding the relevant education and experience of each member of the Audit Committee relevant to the performance of his duties as a member of the Audit Committee, see “*Directors and Officers – Director and Executive Officer Biographies*”.

Audit Committee Oversight

At no time since the commencement of the Company’s most recently completed financial year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the Board.

Reliance on Certain Exemptions

At no time since the commencement of the Company’s most recently completed financial year has the Company relied on:

- (a) the exemption in section 2.4 (*De Minimis Non-audit Services*);
- (b) the exemption in subsection 6.1.1(4) (*Circumstance Affecting the Business or Operations of the Venture Issuer*);
- (c) the exemption in subsection 6.1.1(5) (*Events Outside Control of Member*);
- (d) the exemption in subsection 6.1.1(6) (*Death, Incapacity or Resignation*); or
- (e) an exemption from NI 52-110, in whole or in part, granted under Part 8 (*Exemptions*).

Pre-Approval Policies and Procedures for Non-Audit Services

If non-audit services to be performed by the external auditor are expected to exceed 5% in aggregate of the total fees that are expected to be paid to the external auditor during the fiscal year, they must be pre-approved by the Audit Committee or by an independent member of the Audit Committee to whom the Audit Committee has delegated authority to grant such pre-approval.

All non-audit services to be performed by the external auditor that are not reasonably expected to exceed 5% in aggregate of the total fees expected to be paid to the external auditor during the fiscal year are deemed by the Audit Committee to have been pre-approved.

All non-audit services that were not recognized as non-audit services at the time of engagement, must be brought to the attention of the Audit Committee, or an independent member of the Audit Committee to whom the Audit Committee has delegated authority to grant such pre-approvals, for approval prior to the completion of the audit.

External Auditor Service Fees (By Category)

The following table sets out, by category, the fees billed by PricewaterhouseCoopers LLP, Chartered Professional Accountants, the Company’s current external auditor, for the financial years ended December 31, 2022 and 2021.

Financial Year Ended	Audit Fees ⁽¹⁾	Audit Related Fees ⁽²⁾	Tax Fees ⁽³⁾	All Other Fees ⁽⁴⁾
December 31, 2022	CA\$73,900	-	CA\$32,000	CA\$2,500

Financial Year Ended	Audit Fees ⁽¹⁾	Audit Related Fees ⁽²⁾	Tax Fees ⁽³⁾	All Other Fees ⁽⁴⁾
December 31, 2021	CA\$34,800	-	CA\$20,116	-

- (1) The aggregate fees billed by the Company's auditor for audit fees, including quarterly reviews.
(2) The aggregate fees billed for assurance and related services by the Company's auditor that are reasonably related to the performance of the audit or review of the Company's financial statements and are not disclosed in the "Audit Fees" column.
(3) The aggregate fees billed for professional services rendered by the Company's auditor for tax compliance, tax advice and tax planning.
(4) The aggregate fees billed for professional services other than those listed in the other three columns.

Exemption

The Company is a "venture issuer" as defined in NI 52-110 and is relying upon the exemption in section 6.1 of NI 52-110 relating to Parts 3 (*Composition of Audit Committee*) and 5 (*Reporting Obligations*).

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Since the beginning of the most recently completed financial year ended December 31, 2022, there have been no legal proceedings to which the Company is or was a party or of which any of its projects is or was the subject of, nor are any such proceedings known by the Company to be contemplated.

Since the beginning of the most recently completed financial year ended December 31, 2022, the Company has not had any penalties or sanctions imposed on it by, or entered into any settlement agreements with, a court or a securities regulatory authority relating to securities laws, nor has the Company been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as disclosed below, no (a) director or executive officer, (b) person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the common shares of the Company, or (c) associate or affiliate of any of the persons or companies referred to in (a) or (b) has, or has had within the three most recently completed financial years ended December 31, 2022, any material interest, direct or indirect, in any transaction that has materially affected or is reasonably expected to materially affect the Company.

On September 19, 2022, the Company completed the Taiga Debt Settlement Transaction. See "*General Development of the Business – Three Year History of the Company – Year Ended December 31, 2022*".

On July 19, 2023, G1 Alaska entered into the Taiga Loan. On December 27, 2023, Taiga exercised its option to purchase an NSR pursuant to the Taiga Loan. See "*General Development of the Business – Three Year History of the Company – Year Ended December 31, 2023*".

TRANSFER AGENT AND REGISTRAR

Computershare Trust Company of Canada acts as the transfer agent and registrar for the common shares of the Company at its offices in Vancouver located at 510 Burrard Street, 3rd Floor, Vancouver, British Columbia, V6C 3B9.

MATERIAL CONTRACTS

The Company and its sole subsidiary entered into no material contracts within the financial year ended December 31, 2022, or before such time that are still in effect, other than in the ordinary course of business.

INTERESTS OF EXPERTS

Information of a scientific or technical nature regarding the Graphite One Project in this AIF has been derived from the Graphite One Technical Report prepared by the Authors.

The Graphite One Technical Report has been filed with Canadian securities regulatory authorities and prepared pursuant to NI 43-101 and is available for review under the Company's issuer profile on SEDAR+ at www.sedarplus.ca. The Authors are each a Qualified Person under NI 43-101 and this information has been included in reliance on such persons' expertise. The Authors own, directly or indirectly, no common shares or other equity securities in the Company.

All technical information related to the PFS in this AIF has been reviewed and approved by Richard Goodwin, P. Eng., and all the technical information related to geology and resource estimation, including the 2022 and 2023 drilling and sampling program have been reviewed and approved by Robert M. Retherford, CPG, each of whom is a qualified person under NI 43-101. As of the date hereof, Mr. Goodwin and Mr. Retherford do not directly or indirectly own any common shares or other equity securities in the Company.

The Company's auditor is PricewaterhouseCoopers LLP, Chartered Professional Accountants. PricewaterhouseCoopers LLP has prepared an independent auditor's report dated April 21, 2023 with respect to the Company's consolidated financial statements as at and for the years ended December 31, 2022 and December 31, 2021. PricewaterhouseCoopers LLP has informed the Company that it is independent with respect to the Company within the meaning of the Chartered Professional Accountants of British Columbia Code of Professional Conduct.

ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR+ at www.sedarplus.ca.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, is contained in the management information circular dated May 20, 2023 prepared in connection with the annual general and special meeting of the Company held on June 29, 2023, which is available on SEDAR+ at www.sedarplus.ca. Additional financial information about the Company can be found in the Company's financial statements and management's discussion and analysis for the financial year ended December 31, 2022.

SCHEDULE “A” AUDIT COMMITTEE CHARTER

1. Mandate

The primary function of the audit committee (the “**Committee**”) is to assist the Board of Directors in fulfilling its financial oversight responsibilities by reviewing the financial reports and other financial information provided by the Company to regulatory authorities and shareholders, the Company’s systems of internal controls regarding finance and accounting, and the Company’s auditing, accounting and financial reporting processes. Consistent with this function, the Committee will encourage continuous improvement of, and should foster adherence to, the Company’s policies, procedures and practices at all levels. The Committee’s primary duties and responsibilities are to:

- Serve as an independent and objective party to monitor the Company’s financial reporting and internal control system and review the Company’s financial statements.
- Review and appraise the performance of the Company’s external auditors.
- Provide an open avenue of communication among the Company’s auditors, financial and senior management and the Board of Directors.

2. Composition

The Committee shall be comprised of three directors as determined by the Board of Directors, the majority of whom shall be independent directors, pursuant to the policies of the TSX Venture Exchange.

All members of the Committee must be financially literate (having the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can presumably be expected to be raised by the Company’s financial statements).

The members of the Committee shall be appointed by the Board of Directors at its first meeting following the annual shareholders’ meeting. Unless a Chair is appointed by the full Board of Directors, the members of the Committee may designate a Chair by a majority vote of the full Committee membership. The quorum for a meeting of the Committee is a majority of the Members.

3. Meetings

The Committee shall meet as circumstances dictate. As part of its job to foster open communication, the Committee will meet at least annually with management and the external auditors in separate sessions.

The minutes of Committee meetings shall accurately record the decisions reached and shall be distributed to the Committee members with copies to the Board of Directors, the Chief Financial Officer or such other officer acting in such capacity and the external auditor.

4. Responsibilities and Duties

To fulfill its responsibilities and duties, the Committee shall:

5. Documents/Reports Review

- (a) Review and update this Charter annually.

- (b) Review the Company's financial statements, MD&A and any financial information contained in a media release before the Company publicly discloses this information and any reports or other financial information (including quarterly financial statements), which are submitted to any governmental body, or to the public, including any certification, report, opinion, or review rendered by the external auditors.

6. External Auditors

- (a) Require the external auditors to report directly to the Committee.
- (b) Review annually the performance of the external auditors who shall be ultimately accountable to the Board of Directors and the Committee as representatives of the shareholders of the Company.
- (c) Review annually the relationships between the external auditors and the Company, and the external auditor status as a participating audit firm as defined in National Instrument 52-108 Auditor Oversight.
- (d) Review and discuss with the external auditors any disclosed relationships or services that may impact the objectivity and independence of the external auditors.
- (e) Take, or recommend that the full Board of Directors take, appropriate action to oversee the independence of the external auditors.
- (f) Recommend to the Board of Directors the selection and, where applicable, the replacement of the external auditors nominated annually for shareholder approval and the compensation of the external auditors.
- (g) Review with management and the external auditors the terms of the external auditors' engagement letter.
- (h) Consult with the external auditors, without the presence of management, about the quality of the Company's accounting principles, internal controls and the completeness and accuracy of the Company's financial statements.
- (i) Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Company.
- (j) Review with management and the external auditors the audit plan for the year-end financial statements and intended template for such statements.
- (k) Review and pre-approve all audit and audit-related services and the fees and other compensation related thereto, and any non-audit services, provided by the Company's external auditors. The pre-approval requirement is waived with respect to the provision of non-audit services if:
 - (i) the aggregate amount of all such non-audit services provided to the Company constitutes not more than five percent of the total amount paid by the Company to its external auditors during the fiscal year in which the non-audit services are provided;
 - (ii) such services were not recognized by the Company at the time of the engagement to be non-audit services; and
 - (iii) such services are promptly brought to the attention of the Committee by the Company and approved prior to the completion of the audit by the Committee or by one or more members of the Committee who are members of the Board of Directors to whom authority to grant such approvals has been delegated by the Committee.

Provided the pre-approval of the non-audit services is presented to the Committee's first scheduled meeting following such approval such authority may be delegated by the Committee to one or more independent members of the Committee.

7. Financial Reporting Processes

- (a) In consultation with the external auditors, review with management the integrity of the Company's financial reporting process, both internal and external.
- (b) Consider the external auditors' judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.
- (c) Consider and approve, if appropriate, changes to the Company's auditing and accounting principles and practices as suggested by the external auditors and management.
- (d) Review significant judgments made by management in the preparation of the financial statements and the view of the external auditors as to appropriateness of such judgments.
- (e) Following completion of the annual audit, review separately with management and the external auditors any significant difficulties encountered during the course of the audit, including any restrictions on the scope of work or access to required information.
- (f) Review any significant disagreement among management and the external auditors regarding financial reporting.
- (g) Review with the external auditors and management the extent to which changes and improvements in financial or accounting practices have been implemented.
- (h) Review certification process.
- (i) Establish procedures for:
 - (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
 - (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

8. Other

Review any material related-party transactions.

9. Authority

The Committee may:

- (a) engage independent outside counsel and other advisors as it determines necessary to carry out its duties;
- (b) set and pay the compensation for any advisors employed by the Committee; and
- (c) communicate directly with the internal and external auditors.

The Committee shall have unrestricted access to the Company's personnel and documents and will be provided with the resources necessary to carry out its responsibilities.