GRAPHITE ONE INC.

ANNUAL INFORMATION FORM

For the Financial Year Ended December 31, 2024

December 23, 2025

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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 of when the Company makes a production decision regarding the intended construction and commissioning timeline of the Graphite One Project (as defined herein); 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 interest in locating 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 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 "US$" or "$" in this AIF are to U.S. dollars and all references to "CA$" or "C$" 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		
	2024	**2023**	**2022**
Low for the period	1.3316	1.2942	1.2451
High for the period	1.4416	1.3875	1.3856
Rate at the end of the period	1.4389	1.3226	1.3544
Average	1.3698	1.3497	1.3013

On December 22, 2025, the Bank of Canada daily exchange rate was CA$1.00 equaled US$1.3748.

Financial information is derived from consolidated financial statements that have been prepared in accordance with IFRS® Accounting Standards as issued by the International Accounting Standards Board.

Scientific and Technical Information

Unless otherwise indicated, scientific and technical information in this AIF has been reviewed and approved by Mr. Rob Retherford, P.Geo, with Alaska Earth Sciences Inc., who provided oversite to the 2022-2024 drilling, sampling and QA/QC programs. Mr. Retherford is an independent "Qualified Person" as defined in NI 43-101 and has reviewed and approved the technical content in this AIF.

Mr. Chotipong Somrit with Barr Engineering Co. prepared the Feasibility Study Mineral Reserve Estimate and inspected the Graphite Creek Project site on August 12, 13 and 14, 2024. Mr. Somrit is an independent Qualified Person as defined under NI 43-101.

For details of the Company's Graphite Creek Project, including the key assumptions, parameters and methods used to estimate the technical report, please refer to the independent technical report entitled "*Graphite Creek Project NI 43-101 Technical Report and Feasibility Study*" with an effective date of March 25, 2025 and signature date of April 22, 2025 (the "**Graphite One Technical Report**"). The Graphite One Technical Report was filed on SEDAR+ under the Company's profile on April 23, 2025.

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 under the *Business Corporations Act* (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 under the Company's profile 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 the following wholly-owned subsidiaries:

Wholly-owned Subsidiaries	Incorporated under the laws of:
Graphite One (Alaska) Inc.	Alaska
Graphite One Products Inc.	Delaware
Graphite One Holdings (USA) Inc.	Delaware
Graphite One Manufacturing (Ohio) Inc.	Delaware
Graphite One Manufacturing (Washington) Inc.	Delaware
Graphite One Holdings Inc.	British Columbia

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 subsidiaries.

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 interest in locating a manufacturing plant in the U.S., for production purposes the Company would provide a 100% U.S.-based advanced graphite materials supply chain.

Three Year History of the Company

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 and subsequently terminated.

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 $4,800,000 and accrued interest of $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 $1,079,139 loss on the Taiga Debt Settlement Transaction.

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.

Year Ended December 31, 2023

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 January 20, 2023, the Company's wholly-owned subsidiary, Graphite One (Alaska) Inc. ("**G1 Alaska**") entered into a Material Transfer Agreement ("**MTA**") with Pacific Northwest National Laboratory ("**PNNL**"), managed and operated in Richland, Washington by Battelle for the U.S. Department of Energy. Under the MTA, PNNL will test anode active and other materials to verify conformity to electric vehicle battery specifications. The first materials to be tested will be the anode active materials now being produced as samples by Sunrise New Energy Material Co. Ltd ("**Sunrise**") using graphite from the Company's Graphite Creek Property in Alaska. These samples will be sent to the American electric vehicle manufacturers for evaluation as a possible source of battery materials.

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 February 23, 2023, the Company announced that it had received total proceeds of CA$7,563,482 on the exercise of 11,354,766 warrants between January 1, 2023 and February 22, 2023. The warrants were issued pursuant to two private placements that closed on February 23, 2021.

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 20, 2023, the Company announced the agreement for digital marketing services entered into by the Company and Promethean Marketing Inc., was terminated effective March 16, 2023. Promethean provided digital marketing services to the Company from October 1, 2022 to March 16, 2023 to increase visibility with the institutional and retail investment community.

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 26, 2023, the Company received active anode material samples produced from the Graphite One Project by Sunrise. The sample material and the sample specification data were provided to the U.S. Department of Energy's PNNL for additional testing and sample material has been sent to a leading electric vehicle manufacturer for evaluation.

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 ($450,163). The transaction closed on June 21, 2023.

On June 19, 2023, the Company entered into a teaming agreement with Vorbeck Materials Corp. of Jessup, Maryland, a global leader in graphene production and advanced graphene applications to pursue developing new applications for graphite and graphene products.

On June 28, 2023, the Company announced the commencement of the Company's drilling program at its Graphite Creek Property. The drilling program is targeting 10,000 meters of drilling to (1) upgrade mineral resources from Inferred to Measured and Indication (2) Convert resources into mineral reserves (3) conduct geotechnical investigations for project infrastructure, such as the tailing facility, process plant foundation and access road (4) provide hydrogeological information for pit design.

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 $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 total amount covered under the TIA Grant was up to $75.0 million, of which the DoD's share was up to $37.5 million and G1 Alaska's share was up to $37.5 million. The drawdown of the TIA Grant was equal to each dollar of eligible feasibility study expenditures spent on the Feasibility Study until November 30, 2024 ("**TIA Grant Due Date**").

On July 19, 2023, G1 Alaska entered into an unsecured loan agreement dated for reference July 17, 2023 with advances of up to $5.0 million (the "**Taiga Loan**") with Taiga, a related party. The Taiga Loan had a maturity date of July 24, 2024 and interest on the Taiga Loan accrued 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 $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.

On September 5, 2023, the Company arranged a strategic investment from Bering Straits Native Corporation of up to $10.4 million comprising of an initial investment of $2.0 million by way of a non- brokered private placement and an option to invest a further $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 was 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 ($2.0 million) which was used to support the Feasibility Study, community investment and for general corporate purposes.

On September 11, 2023, the Company received a $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 meters (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 for 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 vested on December 27, 2023 and for 659,831 RSUs that vested 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 had 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 ($450,163) by issuing to the vendor 456,500 common shares of the Company at a price of CA$1.30 ($0.98) per share. The consideration paid for the sale of the NSR to Taiga is $5,220,274, which represents the outstanding Taiga loan balance and accrued interest.

The Company also announced it had granted 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 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 will expire on December 19, 2028.

Year Ended December 31, 2024

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 was 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.

On February 13, 2024, the Company announced amendments to the terms of the aggregate 11,955,677 outstanding common share purchase warrants due to expire on August 28, 2024, November 21, 2024 and September 17, 2024. Under the proposed amendments, the exercise price was reduced to CA$1.00 per common share commencing on the date of TSXV approval and expired 30 days from the date of such approval (the "**Reduced Term**"). The exercise price reverted to the original exercise price for any warrants that were not exercised during the Reduced Term. For those warrants that were exercised during the Reduced Term, the holder of such warrant received, at no additional cost, one common share purchase warrant (the "**Sweetener Warrant**"), whereby the Sweetener Warrant had an exercise price of CA$1.00 per common share and expired at the earlier of: (i) three (3) years from the date of issuance; and (ii) 30 days, at the Company's option, if for any ten (10) consecutive trading days the closing price of the Company's common shares on the TSXV equals or exceeds CA$1.20. On April 2, 2024, the Company closed its early warrant incentive program receiving aggregate gross proceeds of CA$5,130,873 from the exercise of 5,130,873 Warrants, which includes Taiga's exercise of 2,258,957 warrants.

On March 20, 2024, the Company announced that its wholly-owned subsidiary, G1 Alaska, had selected Ohio's "Voltage Valley" as the site of the Company's graphite anode manufacturing plant by entering into a land lease agreement for a 50 year term and an option to purchase (the "**Land Lease**").The significant terms of the Land Lease are: (i) a term of 50 years with an option to purchase; (ii) rent escalation begins in the fifth year; (iii)construction is to commence within thirty-six (36) months, subject to financing; (iv) 5-year right-of-first-refusal to lease or acquire up to thirty (30) contiguous acres; and (v) customary termination provisions.

On May 17, 2024, the Company announced that it had granted an aggregate of 900,000 incentive stock options to two individuals, who are both directors and officers of the Company with each option exercisable into one common share at an exercise price of $0.85 per common share and which expire five years following the date of grant. The options are subject to a three-year vesting period with 300,000 options vesting on the first, second and third anniversary from the grant date.

On June 3, 2024, the Company announced that the Company's board of directors has approved the repricing (the "**Repricing**") of an aggregate of 1,269,379 outstanding stock options issued to certain officers of the Company pursuant to the Company's stock option plan. The exercise price on these options was repriced from $1.00 to $1.08 per common share to reflect the market price on the date of grant and to qualify for a deduction under paragraph 110(1)(d) of the *Income Tax Act* (Canada). There were no amendments to the other terms of the options.

On June 24, 2024, the Company announced the revision to the cost-share ratio governing the Company's Defense Production Act grant in July 2023 to facilitate the accelerated completion of the Company's Feasibility Study. The revised cost-share agreement with the Department of Defense ("**DoD**") to adjust the DoD's share of expenditures related to the accelerated FS from 50% to 75% based on a revised contract value of US$49.8 million. The DoD's maximum share of the accelerated FS program has been reduced to US$37.3 million.

On July 25, 2024, the Company announced that it has entered into a non-binding supply agreement (the "**Supply Agreement**") with Lucid Group, Inc. (NASDAQ: LCID) ("**Lucid**"), for anode active materials. The Supply Agreement is non-binding providing for 5,000 tpa once Graphite One commences production of synthetic graphite. The initial term is for 5 years, subject to earlier termination. Sales are based on an agreed price formula linked to future market pricing as well as satisfying base case pricing agreeable to both parties. The Supply Agreement is subject to other terms, conditions and termination rights standard for an agreement of this nature.

On September 16, 2024, the Company announced that it had extended the expiry date of an aggregate 2,802,690 outstanding common share purchase warrants due to expire on September 17, 2024, all held by Bering Straits Native Corporation ("**BSNC**"). The warrants were issued in connection with a private placement transaction that closed on September 17, 2023 exercisable at CA$1.21 per common share. The Company extended the expiry date for a further one year to September 17, 2025, with all other terms of the warrants remaining the same.

On October 18, 2024, the Company received a non-binding Letter of Interest ("**LI**") from the Export-Import Bank of the United States ("**EXIM**") for potential debt financing of up to $325 million through EXIM's "Make More in America" and "China and Transformational Exports Program" (CTEP) initiatives. The Company expects to submit a formal application to EXIM in 2026 for the first phase of the AAM Manufacturing Facility. Upon receipt of an application for financing, EXIM will conduct all requisite due diligence necessary to determine if a Final Commitment may be issued for this transaction. Any Final Commitment will be dependent on meeting EXIM's underwriting criteria, authorization process, finalization and satisfaction of terms and conditions. All Final Commitments must comply with EXIM policies as well as program, legal and eligibility requirements.

On October 21, 2024, the Company announced that Graphite One Products Inc., an indirect, wholly owned subsidiary of the Company signed a technology license agreement and a consulting agreement (collectively, the "**Chenyu Agreements**") with Hunan Chenyu Fuji New Energy Technology Co. Ltd. ("**Chenyu**"), an anode active material ("**AAM**") manufacturer headquartered in Changsha City, China that currently supplies qualified AAM to lithium-ion battery producers. The Chenyu Agreements give the Company access to critical AAM technology from an experienced AAM supplier to major battery manufacturers on a commercial basis. AAM technology is evolving rapidly as battery makers require fast charging, high density, and long-life battery specifications and the Company expects to keep pace with this advancement. The Chenyu Agreements are strictly fee-for-services arrangement and provide no direct or indirect equity in the Company, no representation in the management or Boards of Directors of the Company or any of its affiliates, and no direct or indirect rights to control the projects of the Company or any of its affiliates. The Chenyu Agreements include: (i) a Technology License Agreement where Chenyu grants an exclusive license to certain AAM technologies in return for the payment of royalties applied to net revenues received by G1 Alaska from the sale in each calendar quarter of AAM products manufactured using the technology; and (ii) a Consulting Agreement where Chenyu will provide advice and guidance in designing, constructing, commissioning and operating the Ohio AAM plant in return for the payment by the Company of milestone fees which track events progressing from the commencement of work on the plant by hiring an engineering, procurement and construction management firm through ultimately to the Company successfully qualifying licensed products manufactured at the plant with a U.S. customer.

On December 16, 2024, the Company announced a non-brokered private placement financing of units at CA$0.75 per unit for aggregate gross proceeds of up to: (i) CA$4,125,000 to purchasers resident in Canada, except Quebec, in accordance with Part 5A of National Instrument 45-106 – *Prospectus Exemptions* ("**NI 45-106**") listed issuer financing exemption (the "**LIFE Financing**") and (ii) CA$3,375,000 to purchasers resident outside of Canada (the "**Concurrent Private Placement**" and together with the LIFE Financing, the "**Offering**"). Each unit consisted of one common share and one full warrant, with each warrant entitling the holder thereof to acquire one additional common share at a price of CA$1.00 per share expiring at the earlier of: (i) two (2) years from the closing date of the Offering; or (ii) at the Company's option, 30 days from the date of announcement to accelerate the expiry date, if for any ten (10) consecutive trading days the closing price of the Company's common shares on the TSXV is at or exceeds CA$1.50.

On December 27, 2024, the Company closed a total of 6,374,200 Units of a non-brokered private placement financing at CA$0.75 per unit for aggregate gross proceeds of CA$4,780,650. A total of 4,118,200 units for gross proceeds of CA$3,088,650 were to purchasers resident in Canada in accordance with Part 5A of NI-45-106 listed issuer financing exemption and a total of 2,256,000 units for gross proceeds of CA$1,692,000 were to purchasers resident outside of Canada. Finders' fees of CA$107,512 in cash were paid and 143,349 broker warrants were issued with respect to the offering.

Subsequent to December 31, 2024

On April 23, 2025, the Company released the results of the Graphite One Technical Report.

On June 3, 2025, the Company announced that its Graphite Creek Project has been accepted as a "covered project" onto the FAST-41 Permitting Dashboard, being the first Alaskan mining project to be listed on the FAST-41 Dashboard.

On June 4, 2025, the Company announced that it has entered into a second non-binding supply agreement ("**Supply Agreement**") for natural graphite anode active materials ("**NG AAM**") with Lucid Group Inc.

(NASDAQ: LCD) ("**Lucid**"). The Supply Agreement is non-binding and commences once the Company begins production of natural graphite. The initial term is for 5 years, subject to early termination. Sales are based on a price formula agreement to both parties. The Supply Agreement is subject to other terms, conditions, and termination rights standard for an agreement of this nature.

On June 16, 2025, the Company announced that its Graphite Creek Project has moved into the FAST-41 permitting process's 60-day period to develop Graphite Creek's Coordinated Project Plant and detailed permitting timetable. Administered by the Federal Permitting Improvements Steering Council. The FAST-41 timetable includes intermediate and final completion dates for each required federal environmental review and authorization.

On July 23, 2025, the Company announces that it had entered into a Memorandum of Understanding ("**MoU**") with Lucid Group Inc. for the formation of MINAC – Minerals for National Automotive Competitiveness – a collaborative aimed at fostering economic growth while reducing U.S. over-reliance on foreign supplies of critical minerals within the automotive supply chain.

On August 22, 2025, the Company announced that it had closed the "best efforts" brokered private placement financing, raising gross proceeds of CA$13,306,099. Under the Brokered Offering, 14,784,554 units of the Company, consisting of one Common Share of the Company and one full common share purchase warrant of the Company, at a price of CA$0.90 per unit were issued pursuant to NI 45-106 in accordance with Part 5A of NI 45-106, as amended by the Canadian Securities Administrators' Coordinated Blanket Order 45-935 *Exemptions from Certain Conditions of the Listed Issuer Financing Exemption*. Each warrant entitled the holder thereof to acquire one Common Share at a price of CA$1.10 per Common Share for a period of two (2) years from the date of closing. The Brokered Offering was conducted pursuant to the terms of an agency agreement entered into among the Company and BMO Capital Markets and Raymond James Ltd. As consideration for their services, the Company paid the agents a cash fee totaling CA$728,526. The Company also paid a corporate advisory fee of $266,122 to Canaccord Genuity Corp. The warrants were subsequently listed on the TSXV for trading under the symbol "GPH.WT".

On August 22, 2025, the Company also announced that the board of directors has approved a grant of long-term incentive awards for calendar 2025 to employees, officers, directors, and consultants consisting of 410,000 stock options, 3,024,730 restricted share units ("**RSU**"), and 2,441,716 performance share units ("**PSU**") pursuant to the terms of the Company's omnibus plan. The options have an exercise price of CA$0.81 per share, being the closing price of the Company's shares on the TSXV on August 22, 2025 and vest one-third (1/3) on the first anniversary from the date of grant, and one third on April 14, 2027 and April 14, 2028 and will expire on April 14, 2030. Each RSU and PSU will convert into one common share of the Company on each vest date. RSUs granted to management totaling 2,441,716 will vest one-third (1/3) on the first anniversary from the date of grant, and one-third (1/3) will vest on April 14, 2027 and April 14, 2028. One-half (1/2) of the 583,014 RSUs granted to directors will vest on the first anniversary from the date of grant, and the remaining one-half (1/2) will vest on September 30, 2026. The PSUs will vest on April 13, 2028 subject to the achievement of certain corporate performance criteria.

On September 2, 2025, the Company announced that the Export-Import Bank of the United States had extended a non-binding Letter of Interest to the Company for up to US$570,000,000 in financing to advance the development of the Company's Graphite One Project.

On October 6, 2025, the Company announced the closing of a strategic investment from Doyon Limited and Aleut, both Alaska Native corporations, for aggregate gross proceeds of US$5,000,000 (CA$7,000,000) by way of a non-brokered private placement (the "**2025 Private Placement**") of 8,514,024 units at a price of CA$0.82 per unit. Each unit consisted of one Common Share and one full common share purchase warrant. Each warrant entitles the warrant holder to acquire one Common Share of the Company at a price of CA$1.03 per Common Share expiring three (3) years from the closing of the 2025 Private Placement and included participation rights on future financings so long as the warrants remain outstanding.

On December 16, 2025, the Company announced the results from independent analysis of Graphite Creek garnet material confirmed the presence of Rare Earths in the Graphite Creek deposit, with elevated levels of the magnet and Heavy Rare Earths ("**HREE**"). The drill core samples were from the anticipated pit

outlined in G1's Feasibility Study completed in February 2025, suggesting that HREE recovery could potentially proceed alongside graphite extraction in the early years of mining operations.

On December 19, 2025, the Company announced that it has received amended, non-binding Letters of Interest ("**LOI**") from EXIM for potential debt financing. The The previously issued EXIM LOI to finance the Company's Graphite Creek Project north of Nome, Alaska, is upsized from US$570 million to US$670 million, while the EXIM LOI for G1's advanced graphite materials manufacturing plant planned for northeastern Ohio, is upsized from US$325 million to US$1.4 billion with a repayment tenor of 15 years under EXIM's Make More in America Initiative. The upsizing of the Ohio facility LOI will support a phased increase in production capacity in 25,000 metric ton increments to an annual production rate of 100,000 metric tons of anode active material. EXIM's combined LOIs for Graphite One's 100% U.S.-based supply chain solution now total US$2.07 billion.

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 and anode active material manufacturing plant ("**AAM Plant**") project.

The Company currently 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. Until such time as the Company completes construction and commissioning of the Graphite One or AAM Plant projects, the 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 investors and attracting 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, 2024, the Company and its subsidiaries employed thirteen (13) 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.

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 depend 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 Technology Investment Agreement (TIA) Grant

The Company drew down 100% of the US$37.3 million grant under the TIA Grant, which is subject to adherence to the terms and conditions therein, including only qualifying expenditures on the Feasibility Study ("**TIA Qualifying Expenditures**") which were reimbursable at a rate of $0.75 for every $1.00 spent. The Company may be subject to repayment of any amount of grant the DoD does not consider as 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 hedge foreign currency, 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.

Managing 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 cease 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 on 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 flow or prospects.

Mineral Resource and Mineral Reserve Estimates

There are numerous uncertainties inherent in estimating Mineral Resources and Mineral Reserves, including many factors beyond the Company's control. Such estimation is a subjective process, and the accuracy of any Mineral Resource estimate or Mineral Reserve 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 and reserve estimates may require revision (either up or down) based on actual production experience. Any future Mineral Resource and Mineral Reserve 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 or Mineral Reserve 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 FS and mineral resource estimates

The FS and the mineral resource and mineral reserve 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 and mineral reserve 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 and reserve estimates may have to be adjusted.

Estimated mineral reserves or mineral resources may have to be recalculated based on changes in mineral prices, further exploration or development activity or actual production experience. This could materially and adversely affect estimates of the volume or grade of mineralization, estimated recovery rates or other important factors that influence mineral reserve or resource estimates. The extent to which resources may ultimately be reclassified as proven or probable mineral reserves is dependent upon the demonstration of their profitable recovery. Any material changes in mineral resource estimates and grades of mineralization will affect the economic viability of placing a property into production and a property's return on capital. We cannot provide assurance that mineralization can be mined or processed profitably.

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. The failure to establish proven and probable mineral reserves 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.

Depletion of Mineral Reserves

Given that mines have limited lives based on proven and probable mineral reserves, the Company must continually replace and expand its mineral resources and mineral reserves at the Graphite One Project and discover, develop or acquire mineral reserves for production. The Company's ability to maintain or increase production of graphite will depend in significant part on the Company's ability to expand mineral reserves or develop or acquire new mineral reserves and mineral resources. Exploration is inherently speculative, is frequently unsuccessful and involves many risks. There is a risk that depletion of reserves will not be offset by discoveries or acquisitions.

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 in 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 have 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 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 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 about 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 people 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 government 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 flow or prospects.

Supply Chain

The Company may source graphite concentrate in the open market as feed stock for the STP while the Company completes the construction of the Graphite Creek Mine to produce graphite concentrate for the STP. Potential tariffs and countervailing duties because of protectionist measures and trade wars threatened by United States, China and other countries that could increase the capital cost of the Project and cost of feed stock, adversely impacting overall profitability.

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 share 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 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 damage 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 damage 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 "*Graphite Creek Project NI 43-101 Technical Report and Feasibility Study*" with an effective date of March 25, 2025 and signature date of April 22, 2025 (the "**Graphite One Technical Report**") and filed on SEDAR+ on April 23, 2025 regarding the Company's Graphite One Project consisting of the Graphite Creek Property near Nome, Alaska and a modelled secondary treatment plant located in Ohio State prepared for the Company by Jason N. Todd, QP; Chotipong Somrit, CP; Daniel R. Palo, P.Eng.; Jedediah D. Greenwood, PE; Scott A. Phillips, PE; Robert M. Retherford, CPG; Jon Godwin, P. Eng., Arlene P. Dixon, PE (collectively, the "**Authors**"). The Graphite One Technical Report was 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 Graphite Creek Property (the "**Property**") is on the Seward Peninsula, approximately 60 kilometers (km) (37 miles) north of Nome, Alaska (Figure 1). The Property comprises 9,583 hectares (ha) (23,680 acres (ac)) and consists of 176 active state of Alaska 65 ha (160 ac) (1/4 section) mining claims, with 28 of those claims overlying more senior claims within the claim block (Figure 2). The claims are on the Teller A2 and A1 quadrangles, and the deposit's plan projection is centered on Universal Transverse Mercator (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 closest significant port and industrial/population center is Nome, which is situated approximately 59 km to the south. There is currently no road access to the Property and 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.

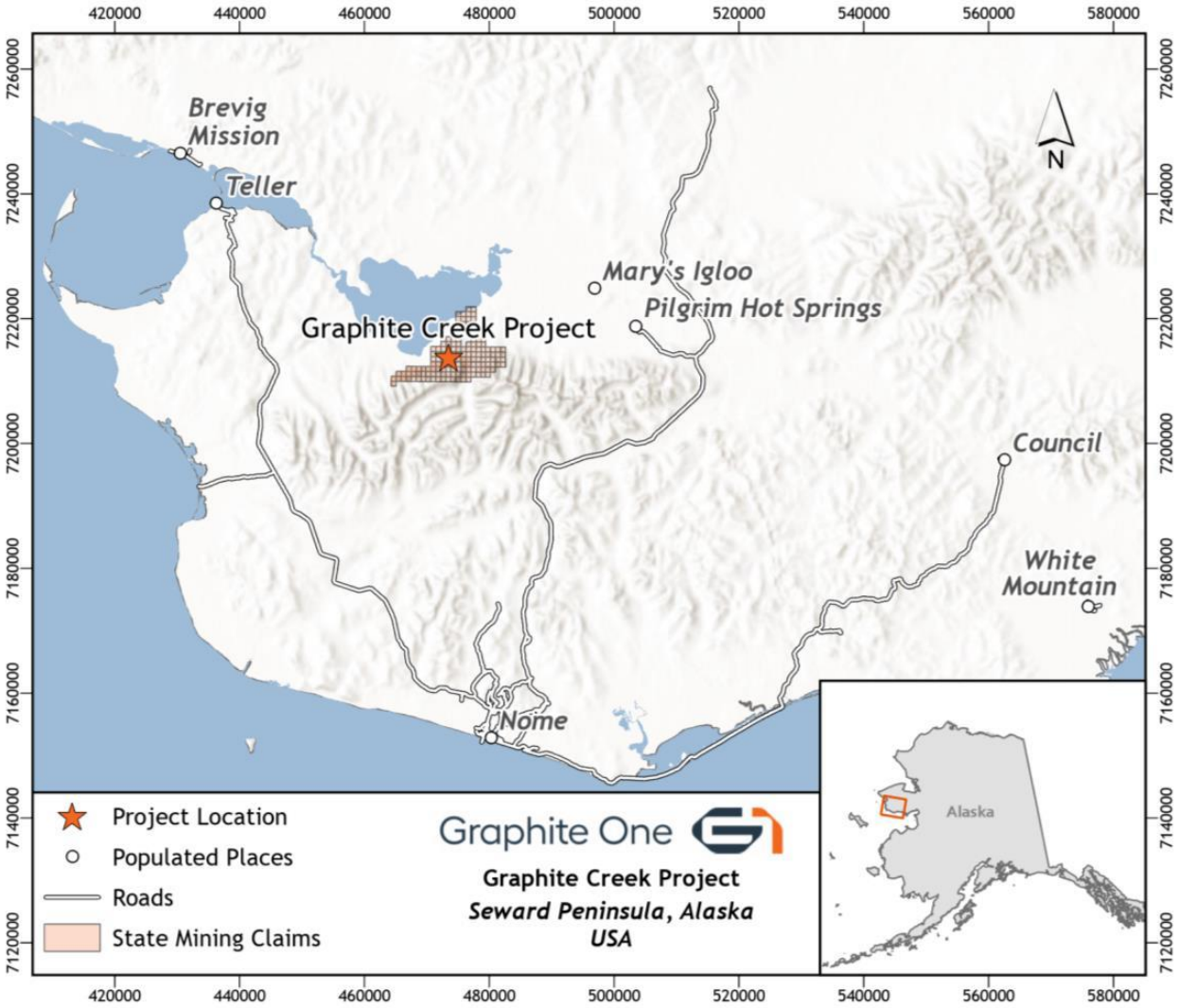
Prior to 2021, drilling efforts used camps on the road system and helicopters to support remote drill pads. Camps were established at Salmon Lake about 40 km from Nome on the Kougarok Road in 2012 and 2013; and at the Tisuk camp on the Teller Highway about 80 km from Nome in 2014, 2018, and 2019. In 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 $20,000 and a 2% production royalty on future production from the 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 $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 $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 $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 $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 $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 1 - Location of the Graphite One state claims on the Seward of 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:

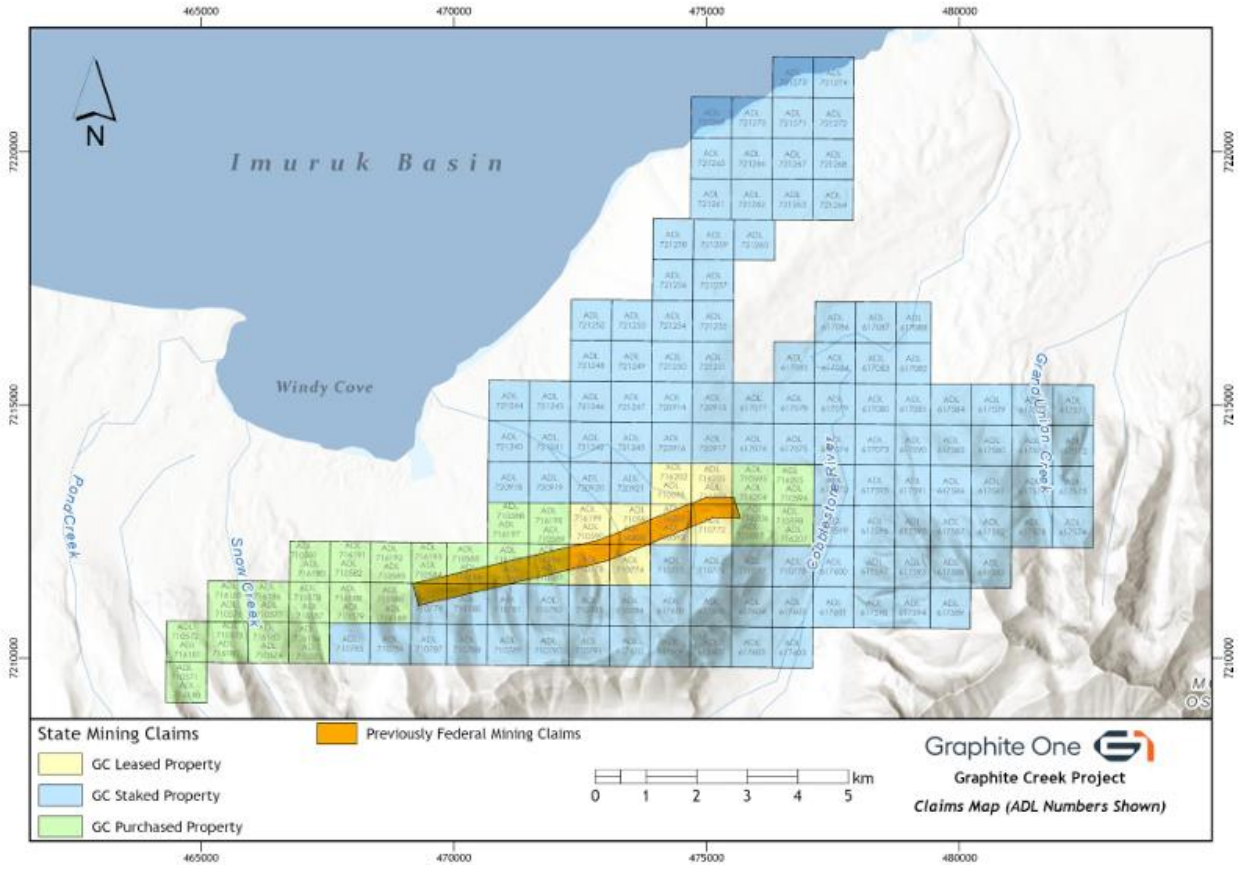
1. the GC Leased Property;

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 Figure 2 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 Figure 2 below to consist of eight separate mining claims. The second group, the GC Staked Property consists of 117 state mining claims shaded blue in Figure 2 below. And the third group, the GC Purchased Property, consists of 46 state mining claims, including 23 duplicate claims, shaded green in Figure 2 below. The three groups form a contiguous block of Alaska state mining claims.

Figure 2 – Claims map of the Graphite Creek Property (ADL Numbers Shown)



The GC Leased Property

Graphite One (Alaska) Inc. originally leased the former federal claims from Kougarok, LLC. When the federal claims were relinquished and the lands conveyed to the state of Alaska, the state mining claims that comprise the GC Leased Property were transferred to Kougarok, LLC and committed to the lease in place of the former federal claims via a quitclaim deed with confirmatory grant, recorded on May 8, 2015, in the Cape Nome Recording District. A restated version of the lease with Kougarok, LLC had been executed in 2015 with an initial term of twenty (20) years commencing January 1, 2014, and may be extended for so long as the production of minerals continues from anywhere on the GC Leased Property. Three of the state mining claims making up the GC Leased Property were originally staked by Graphite One (Alaska) Inc. The remaining ten state mining claims that comprise the GC Leased Property were purchased by Graphite One (Alaska) Inc. Those ten claims consist of two sets of five, duplicate, state mining claims which completely overlap one another. The payments and production royalties due under the lease are as follows:

1. An advance royalty of $30,000 was paid to the lessor (Kougarok, LLC) upon execution of the lease agreement

2. Annual advance royalty payments of $30,000 paid on January 1 of each year through 2019, then increasing by $10,000/yr until production begins

3. Production royalties:

    a) 5% from lands within the 4 former federal claims staked in 1943

    b) 2.5% from lands within the other 20 former federal claims

c) Except as provided in 3b above, 5% from lands within the claims staked by Graphite One (Alaska) Inc

d) Except as provided in 3a above, 2.5% from lands within the claims purchased by Graphite One (Alaska) Inc.

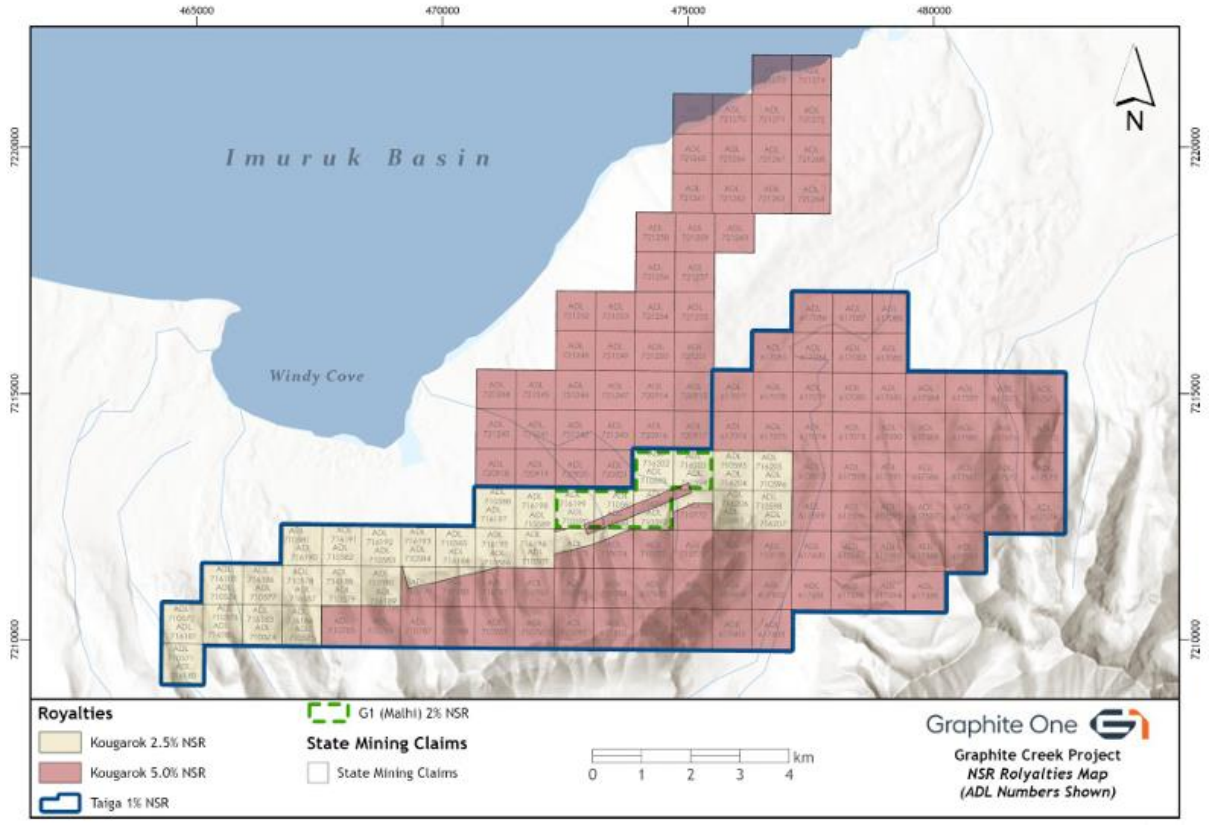
4. Graphite One (Alaska) Inc. has the option to reduce the Kougarok production royalties due under the lease by up to 2% by paying $2,000,000 for each 1% reduction of the royalties

5. All advance royalties may be recouped from production royalties

Figure 3 - Kougarok Leased Claims

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 710772	Kougarok LLC	GC 001	22-Nov-11	K 005S 034W 22SE
ADL 710773	Kougarok LLC	GC 002	22-Nov-11	K 005S 034W 28NW
ADL 710774	Kougarok LLC	GC 003	22-Nov-11	K 005S 034W 28NE
ADL 710590	Kougarok LLC	Graphite Creek 20	29-Oct-11	K 005S 034W 21SW
ADL 710591	Kougarok LLC	Graphite Creek 21	29-OCT-11	K 005S 034W 21SE
ADL 710592	Kougarok LLC	Graphite Creek 22	29-OCT-11	K 005S 034W 22SW
ADL 710593	Kougarok LLC	Graphite Creek 23	29-OCT-11	K 005S 034W 22NW
ADL 710594	Kougarok LLC	Graphite Creek 24	29-OCT-11	K 005S 034W 22NE
ADL 716199	Kougarok LLC	GPH 20	04-OCT-12	K 005S 034W 21SW
ADL 716200	Kougarok LLC	GPH 21	04-OCT-12	K 005S 034W 21SE
ADL 716201	Kougarok LLC	GPH 22	06-OCT-12	K 005S 034W 22SW
ADL 716202	Kougarok LLC	GPH 23	03-OCT-12	K 005S 034W 22NW
ADL 716203	Kougarok LLC	GPH 24	03-OCT-12	K 005S 034W 22NE

Figure 4 – Royalties Map



The GC Staked Properties

The GC Staked Properties consist of 117 Alaska state mining claims located by Graphite One (Alaska) Inc., a wholly owned subsidiary of Graphite One Inc.

Table 1: GC Staked Property: Alaska State Mining Claims

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 710775	Graphite One (Alaska) Inc.	GC 004	22-Nov-11	K 005S 034W 27NW
ADL 710776	Graphite One (Alaska) Inc.	GC 005	22-Nov-11	K 005S 034W 27NE
ADL 710777	Graphite One (Alaska) Inc.	GC 006	22-Nov-11	K 005S 034W 26NW
ADL 710778	Graphite One (Alaska) Inc.	GC 007	22-Nov-11	K 005S 034W 26NE
ADL 710779	Graphite One (Alaska) Inc.	GC 008	22-Nov-11	K 005S 034W 30SW
ADL 710780	Graphite One (Alaska) Inc.	GC 009	22-Nov-11	K 005S 034W 30SE
ADL 710781	Graphite One (Alaska) Inc.	GC 010	22-Nov-11	K 005S 034W 29SW
ADL 710782	Graphite One (Alaska) Inc.	GC 011	22-Nov-11	K 005S 034W 29SE
ADL 710783	Graphite One (Alaska) Inc.	GC 012	22-Nov-11	K 005S 034W 28SW
ADL 710784	Graphite One (Alaska) Inc.	GC 013	22-Nov-11	K 005S 034W 28SE
ADL 710785	Graphite One (Alaska) Inc.	GC 014	22-Nov-11	K 005S 035W 36NW
ADL 710786	Graphite One (Alaska) Inc.	GC 015	22-Nov-11	K 005S 035W 36NE
ADL 710787	Graphite One (Alaska) Inc.	GC 016	22-Nov-11	K 005S 034W 31NW
ADL 710788	Graphite One (Alaska) Inc.	GC 017	22-Nov-11	K 005S 034W 31NE
ADL 710789	Graphite One (Alaska) Inc.	GC 018	22-Nov-11	K 005S 034W 32NW
ADL 710790	Graphite One (Alaska) Inc.	GC 019	22-Nov-11	K 005S 034W 32NE
ADL 710791	Graphite One (Alaska) Inc.	GC 020	22-Nov-11	K 005S 034W 33NW
ADL 617072	Graphite One (Alaska) Inc.	GCX-01	04-Jun-12	K 005S 034W 24NW
ADL 617073	Graphite One (Alaska) Inc.	GCX-02	04-Jun-12	K 005S 034W 13SE
ADL 617074	Graphite One (Alaska) Inc.	GCX-03	04-Jun-12	K 005S 034W 13SW
ADL 617075	Graphite One (Alaska) Inc.	GCX-04	04-Jun-12	K 005S 034W 14SE
ADL 617076	Graphite One (Alaska) Inc.	GCX-05	04-Jun-12	K 005S 034W 14SW
ADL 617077	Graphite One (Alaska) Inc.	GCX-06	04-Jun-12	K 005S 034W 14NW
ADL 617078	Graphite One (Alaska) Inc.	GCX-07	04-Jun-12	K 005S 034W 14NE
ADL 617079	Graphite One (Alaska) Inc.	GCX-08	04-Jun-12	K 005S 034W 13NW
ADL 617080	Graphite One (Alaska) Inc.	GCX-09	04-Jun-12	K 005S 034W 13NE
ADL 617595	Graphite One (Alaska) Inc.	GCX-52	29-Aug-12	K 005S 034W 24NE
ADL 617596	Graphite One (Alaska) Inc.	GCX-53	29-Aug-12	K 005S 034W 24SE
ADL 617599	Graphite One (Alaska) Inc.	GCX-57	29-Aug-12	K 005S 034W 24SW
ADL 617602	Graphite One (Alaska) Inc.	GCX-61	29-Aug-12	K 005S 034W 26SE
ADL 617604	Graphite One (Alaska) Inc.	GCX-63	29-Aug-12	K 005S 034W 26SW
ADL 617606	Graphite One (Alaska) Inc.	GCX-65	29-Aug-12	K 005S 034W 27SE
ADL 617608	Graphite One (Alaska) Inc.	GCX-67	29-Aug-12	K 005S 034W 27SW
ADL 617081	Graphite One (Alaska) Inc.	GCX-10	04-Jun-12	K 005S 033W 18NW
ADL 617082	Graphite One (Alaska) Inc.	GCX-11	04-Jun-12	K 005S 033W 07SW
ADL 617083	Graphite One (Alaska) Inc.	GCX-12	04-Jun-12	K 005S 034W 12SE
ADL 617084	Graphite One (Alaska) Inc.	GCX-13	04-Jun-12	K 005S 034W 12SW
ADL 617085	Graphite One (Alaska) Inc.	GCX-14	04-Jun-12	K 005S 034W 11SE
ADL 617086	Graphite One (Alaska) Inc.	GCX-15	04-Jun-12	K 005S 034W 12NW
ADL 617087	Graphite One (Alaska) Inc.	GCX-16	04-Jun-12	K 005S 034W 12NE
ADL 617088	Graphite One (Alaska) Inc.	GCX-17	04-Jun-12	K 005S 033W 07NW
ADL 617571	Graphite One (Alaska) Inc.	GCX-18	29-Aug-12	K 005S 033W 16NW
ADL 617572	Graphite One (Alaska) Inc.	GCX-19	29-Aug-12	K 005S 033W 16SW
ADL 617573	Graphite One (Alaska) Inc.	GCX-20	29-Aug-12	K 005S 033W 21NW
ADL 617574	Graphite One (Alaska) Inc.	GCX-21	08-Sep-12	K 005S 033W 21SW

Table 1: GC Staked Property: Alaska State Mining Claims (Cont'd)

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 617575	Graphite One (Alaska) Inc.	GCX-25	29-Aug-12	K 005S 033W 17NE
ADL 617576	Graphite One (Alaska) Inc.	GCX-26	29-Aug-12	K 005S 033W 17SE
ADL 617577	Graphite One (Alaska) Inc.	GCX-27	29-Aug-12	K 005S 033W 20NE
ADL 617578	Graphite One (Alaska) Inc.	GCX-28	08-Sep-12	K 005S 033W 20SE
ADL 617579	Graphite One (Alaska) Inc.	GCX-32	29-Aug-12	K 005S 033W 17NW
ADL 617580	Graphite One (Alaska) Inc.	GCX-33	29-Aug-12	K 005S 033W 17SW
ADL 617581	Graphite One (Alaska) Inc.	GCX-34	29-Aug-12	K 005S 033W 20NW
ADL 617582	Graphite One (Alaska) Inc.	GCX-35	08-Sep-12	K 005S 033W 20SW
ADL 617583	Graphite One (Alaska) Inc.	GCX-36	08-Sep-12	K 005S 033W 29NW
ADL 617584	Graphite One (Alaska) Inc.	GCX-39	29-Aug-12	K 005S 033W 18NE
ADL 617585	Graphite One (Alaska) Inc.	GCX-40	29-Aug-12	K 005S 033W 18SE
ADL 617586	Graphite One (Alaska) Inc.	GCX-41	29-Aug-12	K 005S 033W 19NE
ADL 617587	Graphite One (Alaska) Inc.	GCX-42	08-Sep-12	K 005S 033W 19SE
ADL 617588	Graphite One (Alaska) Inc.	GCX-43	08-Sep-12	K 005S 033W 30NE
ADL 617589	Graphite One (Alaska) Inc.	GCX-44	08-Sep-12	K 005S 033W 30SE
ADL 617590	Graphite One (Alaska) Inc.	GCX-46	29-Aug-12	K 005S 033W 18SW
ADL 617591	Graphite One (Alaska) Inc.	GCX-47	29-Aug-12	K 005S 033W 19NW
ADL 617592	Graphite One (Alaska) Inc.	GCX-48	08-Sep-12	K 005S 033W 19SW
ADL 617593	Graphite One (Alaska) Inc.	GCX-49	08-Sep-12	K 005S 033W 30NW
ADL 617594	Graphite One (Alaska) Inc.	GCX-50	08-Sep-12	K 005S 033W 30SW
ADL 617597	Graphite One (Alaska) Inc.	GCX-54	29-Aug-12	K 005S 034W 25NE
ADL 617598	Graphite One (Alaska) Inc.	GCX-55	29-Aug-12	K 005S 034W 25SE
ADL 617600	Graphite One (Alaska) Inc.	GCX-58	29-Aug-12	K 005S 034W 25NW
ADL 617601	Graphite One (Alaska) Inc.	GCX-59	29-Aug-12	K 005S 034W 25SW
ADL 617603	Graphite One (Alaska) Inc.	GCX-62	29-Aug-12	K 005S 034W 35NE
ADL 617605	Graphite One (Alaska) Inc.	GCX-64	29-Aug-12	K 005S 034W 35NW
ADL 617607	Graphite One (Alaska) Inc.	GCX-66	29-Aug-12	K 005S 034W 34NE
ADL 617609	Graphite One (Alaska) Inc.	GCX-68	29-Aug-12	K 005S 034W 34NW
ADL 617610	Graphite One (Alaska) Inc.	GCX-69	29-Aug-12	K 005S 034W 33NE
ADL 720914	Graphite One (Alaska) Inc.	GCN 001	11-Jun-15	K 005S 034W 15NW
ADL 720915	Graphite One (Alaska) Inc.	GCN 002	11-Jun-15	K 005S 034W 15NE
ADL 720916	Graphite One (Alaska) Inc.	GCN 003	11-Jun-15	K 005S 034W 15SW
ADL 720917	Graphite One (Alaska) Inc.	GCN 004	11-Jun-15	K 005S 034W 15SE
ADL 720918	Graphite One (Alaska) Inc.	GCN 005	11-Jun-15	K 005S 034W 20NW
ADL 720919	Graphite One (Alaska) Inc.	GCN 006	11-Jun-15	K 005S 034W 20NE
ADL 720920	Graphite One (Alaska) Inc.	GCN 007	11-Jun-15	K 005S 034W 21NW
ADL 720921	Graphite One (Alaska) Inc.	GCN 008	11-Jun-15	K 005S 034W 21NE
ADL 721240	Graphite One (Alaska) Inc.	GCN 009	20-Nov-15	K 005S 034W 17SW
ADL 721241	Graphite One (Alaska) Inc.	GCN 010	20-Nov-15	K 005S 034W 17SE
ADL 721242	Graphite One (Alaska) Inc.	GCN 011	20-Nov-15	K 005S 034W 16SW
ADL 721243	Graphite One (Alaska) Inc.	GCN-012	20-Nov-15	K 005S 034W 16SE
ADL 721244	Graphite One (Alaska) Inc.	GCN 013	20-Nov-15	K 005S 034W 17NW
ADL 721245	Graphite One (Alaska) Inc.	GCN 014	20-Nov-15	K 005S 034W 17NE
ADL 721246	Graphite One (Alaska) Inc.	GCN 015	20-Nov-15	K 005S 034W 16NW
ADL 721247	Graphite One (Alaska) Inc.	GCN 016	20-Nov-15	K 005S 034W 16NE
ADL 721248	Graphite One (Alaska) Inc.	GCN 017	20-Nov-15	K 005S 034W 09SW
ADL 721249	Graphite One (Alaska) Inc.	GCN 018	20-Nov-15	K 005S 034W 09SE
ADL 721250	Graphite One (Alaska) Inc.	GCN 019	20-Nov-15	K 005S 034W 10SW
ADL 721251	Graphite One (Alaska) Inc.	GCN 020	20-Nov-15	K 005S 034W 10SE
ADL 721252	Graphite One (Alaska) Inc.	GCN 021	20-Nov-15	K 005S 034W 09NW
ADL 721253	Graphite One (Alaska) Inc.	GCN 022	20-Nov-15	K 005S 034W 09NE
ADL 721254	Graphite One (Alaska) Inc.	GCN 023	20-Nov-15	K 005S 034W 10NW

Table 1: GC Staked Property: Alaska State Mining Claims (Cont'd)

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 721255	Graphite One (Alaska) Inc.	GCN 024	20-Nov-15	K 005S 034W 10NE
ADL 721256	Graphite One (Alaska) Inc.	GCN 025	20-Nov-15	K 005S 034W 03SW
ADL 721257	Graphite One (Alaska) Inc.	GCN 026	20-Nov-15	K 005S 034W 03SE
ADL 721258	Graphite One (Alaska) Inc.	GCN 027	20-Nov-15	K 005S 034W 03NW
ADL 721259	Graphite One (Alaska) Inc.	GCN 028	20-Nov-15	K 005S 034W 03NE
ADL 721260	Graphite One (Alaska) Inc.	GCN 029	20-Nov-15	K 005S 034W 02NW
ADL 721261	Graphite One (Alaska) Inc.	GCN 030	20-Nov-15	K 004S 033W 31SW
ADL 721262	Graphite One (Alaska) Inc.	GCN 031	20-Nov-15	K 004S 033W 31SE
ADL 721263	Graphite One (Alaska) Inc.	GCN 032	20-Nov-15	K 004S 033W 32SW
ADL 721264	Graphite One (Alaska) Inc.	GCN 033	20-Nov-15	K 004S 033W 32SE
ADL 721265	Graphite One (Alaska) Inc.	GCN 034	20-Nov-15	K 004S 033W 31NW
ADL 721266	Graphite One (Alaska) Inc.	GCN 035	20-Nov-15	K 004S 033W 31NE
ADL 721267	Graphite One (Alaska) Inc.	GCN 036	20-Nov-15	K 004S 033W 32NW
ADL 721268	Graphite One (Alaska) Inc.	GCN 037	20-Nov-15	K 004S 033W 32NE
ADL 721269	Graphite One (Alaska) Inc.	GCN 038	20-Nov-15	K 004S 033W 30SW
ADL 721270	Graphite One (Alaska) Inc.	GCN 039	20-Nov-15	K 004S 033W 30SE
ADL 721271	Graphite One (Alaska) Inc.	GCN 040	20-Nov-15	K 004S 033W 29SW
ADL 721272	Graphite One (Alaska) Inc.	GCN 041	20-Nov-15	K 004S 033W 29SE
ADL 721273	Graphite One (Alaska) Inc.	GCN 042	20-Nov-15	K 004S 033W 29NW
ADL 721274	Graphite One (Alaska) Inc.	GCN 043	20-Nov-15	K 004S 033W 29NE

The GC Purchased Properties

Graphite One (Alaska) Inc. purchased the GC Purchased Property in two transactions. In each transaction, Graphite One (Alaska) Inc. acquired 28 Alaska state mining claims. Each set of 28 claims is classified into two of the nominal groups with five claims in each set included in GC Leased Properties and the other 23 claims in each set included in GC Purchased Properties. The two sets of 23 claims classified as GC Purchased Properties are duplicate claims which completely overlap one another and partially surround the GC Leased Property. The first group of 28 claims was purchased in 2012 for $20,000, and the seller was granted a 2% production royalty on future production from the particular claims. Graphite One (Alaska) Inc. purchased the 2% production royalty in 2020. The production royalty merged with Graphite One (Alaska) Inc.'s ownership of the claims such that the 23 claims are no longer burdened by the 2% production royalty. The five remaining claims to which the 2% Graphite One (formerly Malhi) royalty applies are listed in the table below.

Table 2: Graphite One 2% Royalty Claims

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 710590	Kougarok LLC	GRAPHITE CREEK 20	29-Oct-11	K 005S 034W SW21
ADL 710591	Kougarok LLC	GRAPHITE CREEK 21	29-Oct-11	K 005S 034W SE21
ADL 710592	Kougarok LLC	GRAPHITE CREEK 22	29-Oct-11	K 005S 034W SW22
ADL 710593	Kougarok LLC	GRAPHITE CREEK 23	29-Oct-11	K 005S 034W NW22
ADL 710594	Kougarok LLC	GRAPHITE CREEK 24	29-Oct-11	K 005S 034W NE22

The second group of 28 claims was purchased in 2015 for $50,000, the issuance of 3 million common shares of Graphite and a royalty interest equal to 1% of the Net Smelter Returns received by Graphite One (Alaska) Inc. on production from the acquired claims. Graphite One (Alaska) Inc. has the right to purchase the royalty for $500,000 on or before the earlier of (i) the third anniversary of the commencement of production of the particular claims or (ii) June 1, 2035. The royalty interest remains a burden on all 28 claims, 23 of which are part of the GC Purchased Property and five of which are part of the GC Leased Property. Graphite One (Alaska) Inc. later conveyed 10 claims, five from each of the two acquisitions to Kougarok, LLC, which 10 claims now comprise the GC Leased Property.

Table 3: GC Purchased Property – Alaska State Mining Claims

Claim Number	Claim Owner	Claim Name	Location Date	Township Location
ADL 710571	Graphite One (Alaska) Inc.	Graphite Creek 1	29-OCT-11	K 005S 035W 34SW
ADL 710572	Graphite One (Alaska) Inc.	Graphite Creek 2	29-OCT-11	K 005S 035W 34NW
ADL 710573	Graphite One (Alaska) Inc.	Graphite Creek 3	29-OCT-11	K 005S 035W 34NE
ADL 710574	Graphite One (Alaska) Inc.	Graphite Creek 4	29-OCT-11	K 005S 035W 35NW
ADL 710575	Graphite One (Alaska) Inc.	Graphite Creek 5	29-OCT-11	K 005S 035W 35NE
ADL 710576	Graphite One (Alaska) Inc.	Graphite Creek 6	29-OCT-11	K 005S 035W 27SE
ADL 710577	Graphite One (Alaska) Inc.	Graphite Creek 7	29-OCT-11	K 005S 035W 26SW
ADL 710578	Graphite One (Alaska) Inc.	Graphite Creek 8	29-OCT-11	K 005S 035W 26SE
ADL 710579	Graphite One (Alaska) Inc.	Graphite Creek 9	29-OCT-11	K 005S 035W 25SW
ADL 710580	Graphite One (Alaska) Inc.	Graphite Creek 10	29-OCT-11	K 005S 035W 25SE
ADL 710581	Graphite One (Alaska) Inc.	Graphite Creek 11	29-OCT-11	K 005S 035W 26NE
ADL 710582	Graphite One (Alaska) Inc.	Graphite Creek 12	29-OCT-11	K 005S 035W 25NW
ADL 710583	Graphite One (Alaska) Inc.	Graphite Creek 13	29-OCT-11	K 005S 035W 25NE
ADL 710584	Graphite One (Alaska) Inc.	Graphite Creek 14	29-OCT-11	K 005S 034W 30NW
ADL 710585	Graphite One (Alaska) Inc.	Graphite Creek 15	29-OCT-11	K 005S 034W 30NE
ADL 710586	Graphite One (Alaska) Inc.	Graphite Creek 16	29-OCT-11	K 005S 034W 29NW
ADL 710587	Graphite One (Alaska) Inc.	Graphite Creek 17	29-OCT-11	K 005S 034W 29NE
ADL 710588	Graphite One (Alaska) Inc.	Graphite Creek 18	29-OCT-11	K 005S 034W 20SW
ADL 710589	Graphite One (Alaska) Inc.	Graphite Creek 19	29-OCT-11	K 005S 034W 20SE
ADL 710595	Graphite One (Alaska) Inc.	Graphite Creek 25	29-OCT-11	K 005S 034W 23NW
ADL 710596	Graphite One (Alaska) Inc.	Graphite Creek 26	29-OCT-11	K 005S 034W 23NE
ADL 710597	Graphite One (Alaska) Inc.	Graphite Creek 27	29-OCT-11	K 005S 034W 23SW
ADL 710598	Graphite One (Alaska) Inc.	Graphite Creek 28	29-OCT-11	K 005S 034W 23SE
ADL 716180	Graphite One (Alaska) Inc.	GPH 01	08-OCT-12	K 005S 035W 34SW
ADL 716181	Graphite One (Alaska) Inc.	GPH 02	07-OCT-12	K 005S 035W 34NW
ADL 716182	Graphite One (Alaska) Inc.	GPH 03	07-OCT-12	K 005S 035W 34NE
ADL 716183	Graphite One (Alaska) Inc.	GPH 04	08-OCT-12	K 005S 035W 35NW
ADL 716184	Graphite One (Alaska) Inc.	GPH 05	08-OCT-12	K 005S 035W 35NE
ADL 716185	Graphite One (Alaska) Inc.	GPH 06	06-OCT-12	K 005S 035W 27SE
ADL 716186	Graphite One (Alaska) Inc.	GPH 07	06-OCT-12	K 005S 035W 26SW
ADL 716187	Graphite One (Alaska) Inc.	GPH 08	06-OCT-12	K 005S 035W 26SE
ADL 716188	Graphite One (Alaska) Inc.	GPH 09	07-OCT-12	K 005S 035W 25SW
ADL 716189	Graphite One (Alaska) Inc.	GPH 10	06-OCT-12	K 005S 035W 25SE
ADL 716190	Graphite One (Alaska) Inc.	GPH 11	06-OCT-12	K 005S 035W 26NE
ADL 716191	Graphite One (Alaska) Inc.	GPH 12	06-OCT-12	K 005S 035W 25NW
ADL 716192	Graphite One (Alaska) Inc.	GPH 13	06-OCT-12	K 005S 035W 25NE
ADL 716193	Graphite One (Alaska) Inc.	GPH 14	06-OCT-12	K 005S 034W 30NW
ADL 716194	Graphite One (Alaska) Inc.	GPH 15	06-OCT-12	K 005S 034W 30NE
ADL 716195	Graphite One (Alaska) Inc.	GPH 16	06-OCT-12	K 005S 034W 29NW
ADL 716196	Graphite One (Alaska) Inc.	GPH 17	06-OCT-12	K 005S 034W 29NE
ADL 716197	Graphite One (Alaska) Inc.	GPH 18	04-OCT-12	K 005S 034W 20SW
ADL 716198	Graphite One (Alaska) Inc.	GPH 19	04-OCT-12	K 005S 034W 20SE
ADL 716204	Graphite One (Alaska) Inc.	GPH 25	04-OCT-12	K 005S 034W 23NW
ADL 716205	Graphite One (Alaska) Inc.	GPH 26	04-OCT-12	K 005S 034W 23NE
ADL 716206	Graphite One (Alaska) Inc.	GPH 27	04-OCT-12	K 005S 034W 23SW
ADL 716207	Graphite One (Alaska) Inc.	GPH 28	03-OCT-12	K 005S 034W 23SE

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). 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 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 meter 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 from 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 meters (m) of the 2012 drill pattern, which is within the current proposed pit footprint. Inferred Resource: 6,196,160 metric tons (mt) of contained Cg @ 5.78% using a 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 mt of contained Cg@5.54% using a 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 contained Cg@~6% using a 3% cut-off, in 154.36 Mt. Indicated Resource: 1,132,000 mt of contained Cg@~6.3% using a 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 a 3% cut-off, in 154.44 Mt. Indicated Resource: 1,134,000 mt of contained Cg@6.3% using a 3% cut-off, in 17.97 Mt. Indicated Resource: 1,009,000 mt of contained Cg@6.7% using a 5% cut-off, in 15.10 Mt and the preferred, Inferred Resource: 4,969,000 mt of contained Cg@7.0% using a 6% cut-off in 71.24 Mt. Indicated Resource: 744,000 mt of contained Cg@7.2% using a 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 a 5% cut-off, in 91.89 Mt. Indicated Resource: 715,363 mt of contained Cg@7.7% using a 5% cut-off, in 9.26 Mt. Measured Resource: 135,171 mt of contained Cg@8.0% using a 5% cut-off, in 1.69 Mt.

From the 2021 to 2023 drilling programs, 92 holes were completed in the resource area for a total of 13,007 meters of drilling. A new inferred, indicated, and measured resource was calculated (Somrit, et al., 2025). Inferred Resources: 11,567,844 mt of contained Cg@4.31% using a 2.0% cut-off in 268.1 Mt. Indicated

Resource: 4,523,443 mt of contained Cg @4.54% using a 2% cut-off in 99.57 Mt. Measured Resource: 272,249 mt of contained Cg @5.33% using a 2% cut-off in 5.11 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 Sturnick (1984) yielded 84-85 Ma dates. Calvert (1992) dated hornblende from an amphibolite within the Kigluaik Group using 40Ar/39Ar 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 700-800°C, this date must be a minimum for peak metamorphism (Amato and Wright, 1998). Dating of 40K/40Ar and 40Ar/39Ar dating

have yielded ages of ~95-81 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 downthrown 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 (±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 shist 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 5 – 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, Development and Production

Exploration

For a general summary of Graphite One's 2011 to 2024 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, 2022, 2023, 2024 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 meters, 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 meter by meter basis but was not sampled across geological contacts; in such instances the sample start depth was reset, and one-meter 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.

Summary of 2022 Drilling

The 2022 drilling program comprised oriented core infill drilling in the proposed pit area, step-out drilling along the electromagnetic anomaly, and core and sonic geotechnical drilling were completed for geotechnical data collection at the proposed mill site, planned dry tailings/waste rock storage areas and the access route. A total of 1,940 m were drilled in the infill and exploration holes for resource definition as well as 210 m of geotechnical drilling. Graphite has been observed in resource drilling spanning 6.8 km (4.2 miles) along the geophysical anomaly.

Summary of 2023 Drilling

The 2023 drilling program consisted of 57 holes for a total of 8,736 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 consistency of a shallow, high-grade graphite deposit that remains open both to the east and west of the existing mineral resource estimate.

Summary of 2024 Drilling

The 2024 program converted a portion of Inferred resource within the proposed pit to Measured and Indicated, collected geotechnical and hydrogeologic data, updated surface geologic maps, updated the geologic model, and updated the resource estimation.

A total of 23 drillholes were logged and assayed within the proposed pit to infill the resource at 50 m spacing. Of these, nine resource holes that intersected the proposed pit wall were surveyed using down hole geophysical instruments by DGI Geoscience. The down hole instruments were selected to measure structural features and hydrologic parameters, and they comprised an optical televiewer (OTV), acoustic televiewer (ATV), fluid temperature conductivity probe, spinner flowmeter probe, and borehole magnetic resonance (BMR). Structural measurements from the OTV and ATV instruments were used to inform the geologic model and pit wall engineering. An additional seven geotechnical holes drilled in overburden in the lowlands under the proposed WMF and mill did not intersect bedrock.

A four-day bedrock mapping program was completed in August along the drill trail roadcuts in the proposed pit area and one day was spent mapping the ridges straddling Graphite Creek. Structural measurements of bedding and rock unit contacts demonstrate units dipping N to NE, resulting in an interpreted map pattern of alternating units striking NW-SE in the proposed pit area.

Sampling Analysis and Data Verification

Sample Preparation

During all seasons of sample collection and analysis, Graphite One contracted Activation Laboratory 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 60ºC, 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

Graphitic carbon analyses were conducted at ActLabs, who is ISO 17025 and ISO 9001 certified. Pulp samples that arrived at ActLabs in Ancaster were visually inspected for sample integrity and cross-checked with the shipping manifest for accuracy. All samples were analyzed with a LECO CR-412 carbon analyzer following standard procedures. A representative 0.5 g sample was removed from each Graphite Creek Project NI 43-101 Technical Report and Feasibility Study Page 104 Chapter 11 Sample Preparation, Analyses, and Security Effective Date: March 25, 2025 sample packet, digested with hydrochloric and perchloric acids, and treated in a multi-stage furnace to eliminate all forms of carbon other than graphite. The remaining material was combusted and quantified in a LECO analyzer to determine % Cg.

During combustion, carbon-bearing elements are reduced, releasing the carbon, which immediately binds with the oxygen to form carbon monoxide (CO) and carbon dioxide ("**CO_2**"), the majority being CO_2. Carbon is measured as CO_2 in the infra-red (IR) cell as gases flow through the IR cells. CO_2 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 CO_2. The concentration of CO_2 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 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 2024 was split with a core saw. Frequency and type of standards, blanks, and duplicates varied somewhat over the years.

Quality Control Measures

In 2012, 2013, 2014, 2018, 2019, and 2021-2024 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. 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 drill core length. Digital photographs of each core box were taken using a stationary camera and lighting.

Shipping of the pulp samples from Graphite One's sample preparation lab in Nome to the ActLabs analysis facility in Ancaster, ON was conducted by ActLabs personnel through 2021 and by Graphite One personnel 2022-2024. Samples were shipped via a commercial carrier with package tracking. To complete the chain of custody, individual samples with the 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 in Golden, Colorado, and/or ActLabs in Thunder Bay, ON, and/or SGS Mineral Services, Lakefield, ON. After the samples arrived at the laboratory, they remained in the custody of the independent lab until final processing was completed. ActLabs has achieved the ultimate accreditation to international standards, which is the ISO 17025 standard. Hazen also holds several professional accreditations.

Mineral Processing and Metallurgical Testing

Multiple metallurgical testing programs have demonstrated that the Graphite Creek ore will produce a 95% Cg concentrate at 90% recovery. This testing included a pilot plant test that produced 385 kg of concentrate.

Further testing is required to increase ore characteristic understanding. Cold weather additives to diesel fuel should be further tested to determine the impact on flotation kinetics. Regrind power requirements should be quantified and the impact to concentrate grade determined. Mineralogical analysis of regrind mill feed and product should be conducted to determine the graphite liberation.

Three of the eighteen variability samples showed poor flotation response. These areas of the pit should be modeled to determine the volume of ore that could be impacted. Additional testing on these ore types should be conducted to determine the cause of the poor flotation performance and remedies to improve the performance. Due to the wide range of ore harnesses determined in the variability samples, additional comminution testing on variability samples is also warranted.

Ore blending based on hardness and flotation performance may be a viable option to achieve consistent mill production. Additional variability testing could include compositing select samples to determine the overall impact.

Laboratory Flotation Testing

Throughout the test program, fractional size analyses were conducted on stage and rougher concentrates. It was observed that the fines fractions (<38 µm) reporting to the concentrate streams carried lower total-carbon grades. Entrainment of gangue particles in the smaller size fractions may account for this effect. It is recommended that a split flowsheet processing coarse and fine fractions be tested separately in a larger-scale program. Additionally, testwork that includes froth washing may further illuminate the extent of the entrainment effect and how much it can be mitigated.

LCT revealed the deleterious effect of recirculating load on the final concentrate grade. Reconfigured middlings product recirculation and increased grinding and abrasion times were applied and showed improvement. Two of the three cycles of LCT4 achieved the target total carbon grade of 95%, although conditions were adjusted to maintain the targeted concentrate P80 (SGS Canada Inc., 2024a). Further refinement of the recirculating load conditions is required for full optimization. However, the ability to achieve the target total-carbon grade while maintaining >90% recovery was confirmed.

Increased polishing and stirred media milling led to increased final concentrate grades in the open-circuit primary and secondary cleaner tests. Additionally, using ceramic media in place of denser stainless steel in the stirred media mills yielded improved final concentrate grade (e.g., 95.2% C(t) in F23), indicating that light abrasion is key to achieving the target total carbon grade. It is recommended in future test programs to mineralogically examine the liberation and association properties of graphite in both the stirred media mill feed and discharge to identify where and how breakage is occurring.

Lowered flash/rougher flotation density provided positive results, with a total carbon recovery of 98.3%, slightly higher than that of standard density tests. It is recommended to examine reduced flash/rougher flotation pulp density in larger scale operations if optimization is required. It should be noted that because of the quick-floating and persistent frothing nature of graphite concentrates, lower-than-average pulp densities were applied in the laboratory relative to cleaner stages in all tests.

Variable Flotation Testing

The samples' performance showed a high degree of variability with respect to hardness, abrasion, concentrate grade, and recovery; however, the overall performance of the samples was satisfactory and demonstrated the durability and versatility of the flowsheet. In general, tests with finer grind size generally performed better than the coarser grind size tests.

Most of the variant samples performed well in the rougher tests with reasonable recoveries and grades. VAR-001, VAR-002, and VAR-004 were exceptions showing poor recoveries in the rougher tests. This is likely because the samples were not well-liberated, as revealed in TIMA-X mineralogical analysis performed on the rougher tails of test V36 of the VAR-002 sample. Further, the significant performance difference of VAR-004 between tests V3 and V20 with primary grinds of 579 µm and 328 µm, respectively, indicates that liberation as a function of grind size is highly important.

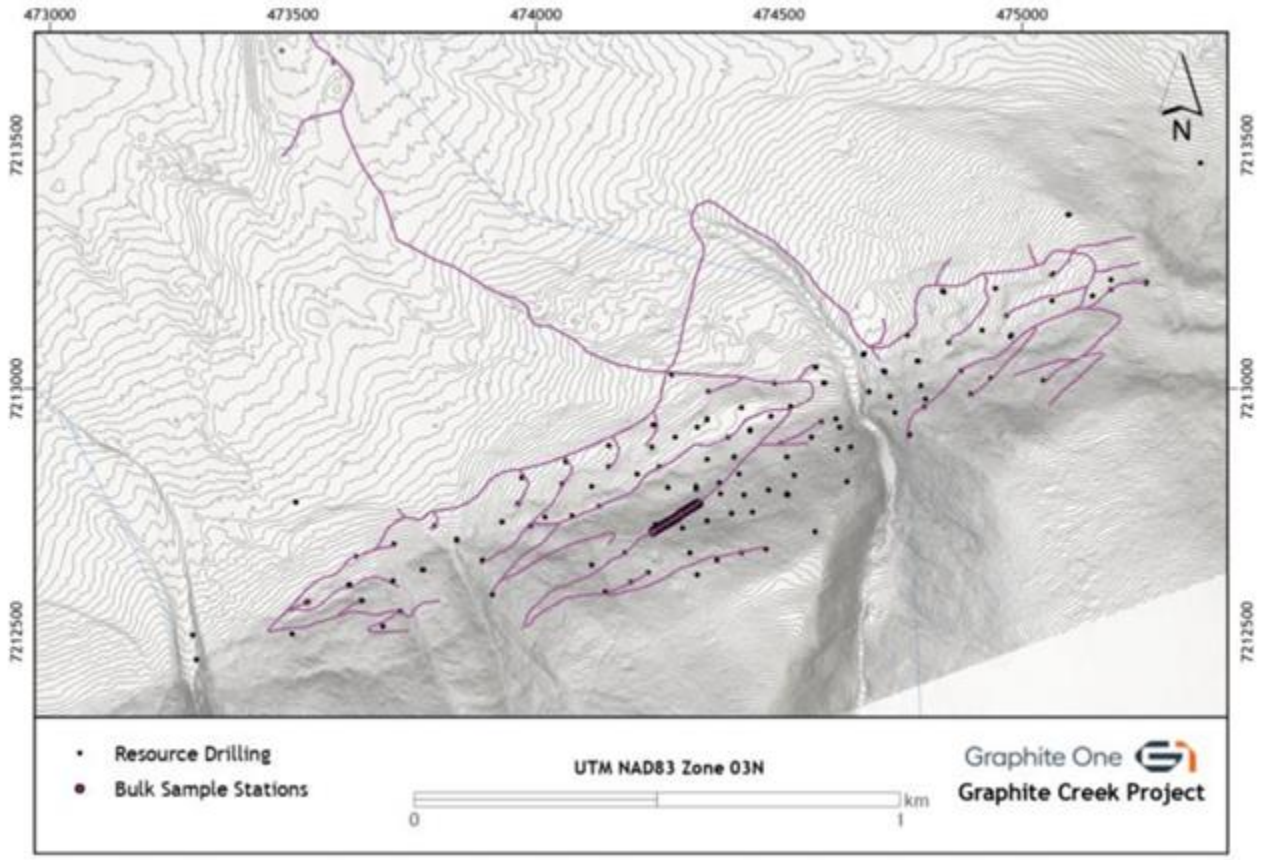
Under the tested conditions, the high-grade variability samples with head grade > 15% C(t), VAR-003 and VAR-004, did not produce a 95% C(t) grade; this was likely due to poor liberation or insufficient polishing or cleaning-stage dilution.

Pilot Flotation Plant

As part of a parallel test program, approximately 9.2 t of Graphite Creek ore was processed through a flowsheet aimed at producing a final concentrate grading of 95.0% C(t) or greater. The as-received material was stage-crushed to minus ¼-inch and composited to prepare a pilot plant composite feed with a head grade of 6.2% C(t).

The sample for this testwork was obtained from surface material at the Graphite Creek site. A bulk sample site was selected in a high-grade zone with surface exposure near the center of the Graphite Creek deposit. Sample sites were located approximately 5 m apart along a 110-m length, as presented in map below. Material was sampled along the roadcut of a drill trail using an excavator during the 2023 field season.

Figure 5: Map of Bulk Sample Location Relative to Resource Drillholes Near the Center of the Graphite Creek Deposit



Flotation Testing

The pilot plant campaign was operated in two phases: Phase 1, which included primary and secondary grinding circuits followed by flash/rougher flotation and four cleaning stages; and Phase 2, which involved regrinding the fourth cleaner concentrate, followed by three additional cleaning stages.

Phase 2 was set up to clean and upgrade the fourth cleaner concentrate generated in Phase 1. Based on bench-scale laboratory tests, it was decided that the final concentrate would be produced in separate campaigns processing coarse and fine fractions of the fourth cleaner concentrate. The fine and coarse fractions were separated using wet screening at 80M (180 µm).

The full mass balances for Phase 1 and Phase 2, including combined tailings and concentrate, are shown in Table 13-7. Results suggested that 95.0% of the total carbon could be recovered in the combined flash and rougher concentrate at a grade of 25.6% C(t). The first four cleaners, together with regrind circuits, upgraded the concentrate to 80.3% C(t) in the fourth cleaner concentrate with a recovery of 92.3%. The further upgrading that occurred in the separate Phase 2 flotation processes achieved seventh cleaner concentrates of 95.9% C(t) at 19% recovery in the coarse fraction and 94.7% C(t) at 68.7% recovery in the fine fraction. The combined concentrate graded 94.9% C(t) at a recovery of 87.8%.

The pilot plant operation produced a total of ~385 kg of graphite concentrates, grading very close to 95% C(t) on average. The P80 of the combined concentrate was 166 µm. Grade-by-size analysis showed that only the -400M (-38 µm) concentrate was off-spec with a grade of 92.6% C(t). The grades of coarser concentrates met or exceeded the desired 95% C(t) grade.

The pilot test results were considered indicative of operations under locked-cycle operation but were not used directly for flowsheet development. The results also demonstrated the flowsheet's adaptability to accommodate specific ore conditions at the deposit's surface (more weathering, finer tails).

Due to the larger available samples of tailings from this test, the pilot tailings were used to provide the geotechnical testwork material. This testwork was conducted in support of the waste management facility. Because the pilot sample was obtained from the surface, it exhibits a significantly larger fines fraction. This is expected to provide a more conservative result when used for the geotechnical stability analysis.

Comminution and High Pressure Grinding Roll Testing

Several comminution tests, including SAG mill comminution (SMC), Bond rod grindability (RWI), Bond ball grindability (BWI), and Bond abrasion index (Ai) tests were carried out on the Master Comp sample (SGS Canada Inc., 2024a). A summary of the results is presented in Table 13-8. Grinding indices indicated that the master composite was generally softer but slightly more abrasive as compared to the SGS database.

Summary of Grindability Testing of the Master Comp

Composite	SMC Test® Parameters			Bond Indices		
	A x B	t_a	SCSE (kWh/t)	RWI (kWh/t)	BWI (kWh/t)	Ai (g)
Master Composite	85.5	0.81	7.24	9.7	13.0	0.373

High-Pressure Grinding Roll Testing (HPGR)

Due to the high cost of energy at the Graphite Creek site, an investigation was conducted to evaluate the suitability of HPGR grinding on the Graphite Creek ore in hopes of reducing the energy intensity of the comminution circuit. Testing was conducted at SGS Lakefield on a single sample labeled HPGR Comp. The testwork included open- and closed-circuit HPGR grinding tests and flotation tests comparing material reduced via HPGR versus material processed through a standard crushing circuit.

Flotation testing showed that the HPGR process demonstrated a distinct advantage over standard sample preparation in flotation kinetics and grind-size consistency, resulting in faster flotation and higher, more stable recovery rates at the optimal grind size. However, a high-level study comparing the HPGR and SAG mill circuit energy consumption, capital costs, and operational costs concluded that the HPGR circuit would not be advantageous with respect to overall costs.

Mineral Resources Estimate

The maiden Graphite Creek mineral resource was released in 2013. As drilling has progressed, numerous updates have been released since then in 43-101 reports. Notable major updates were in the 2016 PEA, 2022 PFS and 2025 FS.

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 project area is based in the UTM coordinate system, North American Datum (NAD) 1983, and UTM Zone 3. Multiple drill programs have been completed in 2012-2014, 2018-2019, and 2021-2024. A total of 94 holes drilled in 2022, 2023, and 2024 were added to the drillhole database since writing the 2022 PFS. The drill data within the resource area was provided in a series of .csv files exported from an acQuire database. A total of 157 drillholes have assay data available. All collar coordinates, down hole surveys, assays, and geologic data were compared to original logs and assay certificates, and no significant discrepancies were found.

Results from previous resource estimations and geologic modeling were provided and used as a basis for future modeling. Lithologic units, overburden, and faults were provided as updated wireframes or were updated using the new data. Mineral resource modeling, estimation, and statistics were carried out using the commercial mine planning software Vulcan.

The Graphite Creek Resource estimate has been classified as ‘measured’, ‘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 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 through 7. The updated Graphite Creek resource numbers for inferred, indicated and measured resources are summarized in Table 4 below.

Table 4: Classification Criteria

	Pass	Nominal Search Distance	Min. Number of Composites	Min. # Of Drillholes
Measured	BOX	1 x 1 x 1	1	1
	1	30 x 20 x 8	3	2
Indicated	2	92 x 63 x 8	3	2
Inferred	3	175 x 125 x 8	3	2
	4	87 x 62.5 x 8	2	1
	5	300 x 150 x 8	3	2
	6	150 x 75 x 8	2	1
	7	1500 x 500 x 500	2	1

The updated resource estimates for Graphite Creek, categorized as Measured, Indicated, Measured Plus Indicated, and Inferred resources, are presented in Table 5 and Table 6.

Table 5: Graphite Creek Updated Resource with Measured, Indicated, and Inferred Resources with Various COG

Graphite Creek Resource Estimate: March 2025				
Mineral Resource Classification	**Cut-Off Grade (% Cg)**	**Tonnage (Mt)**	**Graphite Grade (% Cg)**	**Contained Graphite (t)**
Measured	1	6.35	4.58%	290,830
	2	5.11	5.33%	272,249
	3	4.10	6.03%	246,995
	4	3.21	6.72%	215,795
	5	2.36	7.53%	177,521
Indicated	1	145.02	3.58%	5,198,904
	2	99.57	4.54%	4,523,443
	3	69.50	5.44%	3,783,614
	4	49.85	6.22%	3,099,243
	5	34.09	7.02%	2,393,982
Measured + Indicated	1	151.38	3.63%	5,489,734
	2	104.68	4.58%	4,795,692
	3	73.60	5.48%	4,030,609
	4	53.06	6.25%	3,315,038
	5	36.44	7.06%	2,571,503
Inferred	1	454.59	3.15%	14,316,710
	2	268.10	4.31%	11,567,844
	3	169.86	5.40%	9,165,919
	4	111.78	6.40%	7,154,166
	5	78.56	7.22%	5,668,987

The dip and location of the Kigluaik Fault that trends parallel and is adjacent to the deposit's mineralization is a controlling factor of the graphite resource. The fault surface was updated in 2019, 2020, 2022, and 2024. The updates in 2018 and 2019 resulted in the resource being truncated by the fault surface. New drilling in 2021 indicated a shallow dip to the fault, resulting in minimal to no truncation of the resource. Further drilling since 2021 confirms the shallow dip; however, drill intercepts outside of the main resource area are minimal. Continued drilling is required to confirm the fault interpretation to the SW and NE. Observed graphite mineralization continues to show remarkable consistency along the strike with little deviation, which provides confidence in the geological and mineralization continuity.

It should also be noted that as additional drilling occurs, the variogram ranges are updated, potentially creating variations in resource classification. The variations have minimal impact on total resources but rather the category to which they are applied. Further domain refinement based on geologic units or more dynamic grade shells can help mitigate this effect.

Table 6: Graphite Creek Updated Resources with Measured, Indicated, and Inferred Resources with 2% Cg COG

Graphite Creek Resource Estimate: March 2025				
Mineral Resource Classification	**Cut-Off Grade (% Cg)**	**Tonnage (Mt)**	**Graphite Grade (% Cg)**	**Contained Graphite (t)**
Measured	2	5.11	5.33%	272,249
Indicated	2	99.57	4.54%	4,523,443
Measured + Indicated	2	104.68	4.58%	4,795,692
Inferred	2	268.10	4.31%	11,567,844

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

A summary of the mineral reserves for the project is shown in the Table 7 below within the designed final pit for the Graphite Creek deposit. In the detailed mine production schedule, the COG has been raised variably over the life of the project to 3.0 % Cg. Any resources below the raised COGs have been wasted. The effective date of the mineral reserve stated in this report is 25 March 2025.

The QPs have 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 the development and operation of the project; however, the Company is not aware of any unique characteristics of the project that would prevent permitting.

Table 7: Proven and probable mineral reserve estimates

Class	Diluted Tonnes (kt)	Diluted Grade (% Cg)	Contained Graphite (kt)
Proven	4,099	5.80	238
Probable	67,120	5.18	3,480
Total Proven and Probable	**71,219**	**5.22**	**3,717**

Notes:
1. Mineral reserves follow CIM definitions and are effective as of 25 March 2025.
2. The mineral reserves are inclusive of mining dilution and ore loss.
3. 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 value is calculated based on a net average Graphite Price of $1,200/t (including transport and treatment charges), 3.5% - 8.0% royalty, and a mill recovery of 90%.
4. The final pit design contains an additional 17.4 Mt of Measured and Indicated resources between the raised COG (3.0% Cg) and the economic COG (2.0% Cg) at an average grade of 2.4% Cg. These resources have been treated as waste in the final mine production schedule.
5. The final pit design contains an additional 40.4 Mt of Inferred resources above the economic COG (2.0% Cg) at an average grade of 3.9% 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.
6. Tonnages are rounded to the nearest 1,000 t, and graphite grades are rounded to two decimal places. Tonnage measurements are in metric units.
7. Totals may not add up due to rounding.

Mining Method

Open-pit mining has been selected as the mining method for the Graphite Creek deposit due to its relatively low cost (versus underground mining methods) and the near-surface nature of the deposit. Ore production has been restricted based on the STP target of 175,000 tpa of concentrate, which results in an on-site mill throughput of 3.6 Mtpa.

The material will be drilled and blasted on 8-m benches and excavated using a hydraulic mining shovel and a front-end loader. A fleet of 141-t haul trucks will haul material to the crusher or waste dump. Ore material is to be sent directly to the primary crusher or a temporary stockpile located roughly 1 km east of the pit. Waste material will be co-mingled with filtered tailings in the waste management facility ("**WMF**").

The mine COG is 2% Cg, which results in 88.7 Mt of ore at an average graphite grade of 4.7% Cg. To maximize the secondary treatment production, the variable COG has been optimized to be higher than 2% and up to 3%. Due to these raised COGs, 17.4 Mt of Measured and Indicated resources between the raised COG (3.0% Cg) and the economic COG (2.0% Cg) at an average grade of 2.4% Cg, are treated as waste. Over the LOM, the mine will produce 71.2 Mt of ore at an average graphite grade of 5.2% Cg, along with 229.8 Mt of waste, which includes an additional 40.4 Mt of Inferred resources above the economic COG (2.0% Cg) at an average grade of 3.9% Cg.

Production Schedule

The basic criteria used to develop the LOM production schedule are:

- Graphite concentrate production of approximately 175,000 tpa

- The mine operates 365 days per year, allowing for 13 non-operating days due to weather delays

The mining sequence focuses on achieving required concentrate production by mining higher-value material early in the mine life while balancing grade and strip ratio. The mine production plan has been prepared using Minemax Scheduler software from Datamine. The software creates optimal and practical LOM plans that meet project constraints such as mining rate, mill capacity, phase sequencing, maximum bench sink rates, and concentrate production requirements.

Ore production rate was determined based on STP capacity of 175,000 tpa. To achieve this, the mill production capacity was set to be at 3,600 ktpa over the LOM, and the mine COG was raised to be between 2% and 3%. Due to these raised COGs, approximately 17.4 Mt of low-grade resources with an average grade of 2.4% are considered waste. Stockpiling and reclaiming strategies are used to optimize the production schedule. After finishing the first mining phase in Year 7, stockpile inventory reaches 2.6 Mt. Stockpile reclaim begins in Year 9 and continues throughout the end-of-mine life.

The deposit is mined in five phases. The mine schedule is developed and reported monthly for the pre-production period and the first two years of production, quarterly from Year 3 to Year 5, and annually thereafter. The scheduling constraints utilize a maximum mining capacity of 17 Mt per year and the maximum number of benches mined yearly at ten in each phase.

The production schedule includes the mill ramp-up. The mill ramp-up considers the normal inefficiencies related to the start of operations. It includes the tonnage processed as well as the associated recoveries, which increases the design capacity during the second quarter of operation. The mine requires one year of pre-production before starting operations in the mill. After the pre-production period and the first year, mining is expected to be able to maintain a relatively low strip ratio that is approximately 2:1 (waste:ore) for the next five years. Stripping requirements will increase after the first phase is mined. The current expected mine life is 21 years. The tables below summarize the material movement and mill schedule by year over the LOM.

Table 8: Annual Mine Production Schedule

Mine Production	Ore	Cg Grade	Contained Cg	Waste	Strip Ratio	Total Mined
Unit	(t)	Cg%	(t)	(t)	W:O	(t)
-1	37,405	4.43	1,659	5,421,125	144.9	5,458,530
1	2,500,893	4.54	113,491	9,499,107	3.8	12,000,000
2	3,720,699	5.40	200,796	7,558,684	2.0	11,279,383
3	3,483,711	5.83	202,984	7,424,111	2.1	10,907,821
4	3,771,914	5.65	213,022	7,028,086	1.9	10,800,000
5	3,616,599	5.43	196,430	7,321,792	2.0	10,938,391
6	3,930,662	5.53	217,497	8,069,338	2.1	12,000,000
7	3,515,467	5.48	192,526	10,484,533	3.0	14,000,000
8	3,374,372	5.63	190,079	10,625,628	3.2	14,000,000
9	3,172,022	5.53	175,427	11,764,693	3.7	14,936,715
10	2,793,138	5.55	155,108	11,700,331	4.2	14,493,469
11	3,520,176	5.07	178,563	13,479,824	3.8	17,000,000
12	3,600,000	5.05	181,652	13,400,000	3.7	17,000,000
13	3,591,042	5.03	180,565	13,408,958	3.7	17,000,000
14	3,325,731	5.16	171,638	13,674,269	4.1	17,000,000
15	2,849,782	5.45	155,344	14,150,218	5.0	17,000,000
16	3,467,453	5.09	176,490	13,532,547	3.9	17,000,000
17	3,499,741	5.07	177,595	13,500,259	3.9	17,000,000
18	3,912,038	4.92	192,570	12,926,246	3.3	16,838,284
19	4,193,919	4.80	201,123	12,806,081	3.1	17,000,000
20	4,019,140	4.86	195,237	10,320,912	2.6	14,340,052
21	1,322,958	3.60	47,691	1,667,148	1.3	2,990,106
Totals	**71,218,862**	**5.22**	**3,717,488**	**229,763,889**	**3.2**	**300,982,751**

Table 9: Annual Mill and Concentrate Production

Mine & Concentrate Production	Total Feed	-Cg Grade	-Contained Cg	-Cg Recovered	Concentrate Produced
Unit	(t)	Cg%	(t)	(t)	(t)
-1	-	-	-	-	-
1	2,500,893	4.54	113,491	102,142	107,518
2	3,284,206	5.66	185,815	167,234	176,036
3	3,102,827	6.13	190,048	171,043	180,046
4	3,102,827	6.13	190,048	171,043	180,046
5	3,427,191	5.55	190,048	171,043	180,046
6	3,131,727	6.07	190,079	171,071	180,075
7	3,442,027	5.52	190,079	171,071	180,075
8	3,374,372	5.63	190,079	171,071	180,075
9	3,600,000	5.28	190,079	171,071	180,075
10	3,600,000	5.08	182,732	164,458	173,114
11	3,600,000	5.04	181,414	163,273	171,866
12	3,600,000	5.05	181,652	163,487	172,092
13	3,600,000	5.03	181,028	162,925	171,500
14	3,600,000	5.03	181,028	162,925	171,500
15	3,600,000	5.03	181,028	162,925	171,500
16	3,600,000	5.03	181,028	162,925	171,500
17	3,600,000	5.03	181,028	162,925	171,500
18	3,600,000	5.06	182,022	163,819	172,442
19	3,600,000	5.03	181,028	162,925	171,500
20	3,600,000	5.03	181,028	162,925	171,500
21	2,652,793	3.49	92,706	83,435	87,827
Total	**71,218,862**	**5.22**	**3,717,488**	**3,345,739**	**3,521,830**

Mining Labour Requirement

The mine's staffing plan is designed for continuous operations—24 hours a day, 365 days a year—and includes salaried and hourly personnel. The staffing level is determined by total equipment hours, with an estimated total of 124 mine personnel in a full production year, consisting of 20 salaried employees and 104 hourly workers. The mine's functional areas are mine operations, mine maintenance, technical services, and administration.

To provide full coverage, mine and maintenance operations personnel will work a schedule of rotating shifts operating 24 hours a day, seven days a week. The technical services department will provide professional technical support to mine operations and mine management and will consist of geologists, mining engineers, surveyors, and other employees.

Processing and Recovery Operations

Primary Processing Plan (Alaska)

A 10,000 tpd mill was designed to process graphitic ore mined from the Graphite Creek open-pit mine. The majority of the ore will be direct truck dumped into the crusher, but stockpiles will be used at times to control the feed grade to the mill. The mill will operate two shifts per day, 365 days a year, with an overall availability of 90%. The process plant will produce 175,000 tpa of a 95% graphitic concentrate that will be filtered, dried, and shipped to the STP. The design basis further assumes 90% graphite recovery in the mill with a final concentrate moisture content of ~1.0 wt.% or less.

Plant processing plant will consist of the following unit operations:

- Crushing
  - Primary (jaw) crushing
  - Stockpile and reclaim system
  - Associated conveying and dust collection systems

- Grinding
  - Primary grinding using a single-stage SAG mill in closed circuit
  - Flash flotation prior to cycloning
  - Cyclone separator (underflow to the SAG mill, overflow to rougher flotation)

- Graphite flotation
  - Rougher flotation using tank cells
  - Seven stages of cleaner flotation using tank cells
  - Three stages of regrind (ball mill followed by two Metso Vertimills)

- Concentrate filtration, drying and load-out
  - Concentrate thickener (high rate)
  - Concentrate pressure filter (horizontal plat-and-frame)
  - Concentrate dryer (fluid/moving bed)
  - Concentrate storage silos and loadout

- Tailings
  - Tailings thickener
  - Tailings filters (horizontal vacuum belt)
  - Tailings loadout to WMF

Mill Labour

The staffing plan for the mill assumes continuous operations—24 hours a day, 365 days a year—and is inclusive of salaried and hourly personnel. The staffing level was determined by mill size and complexity, operations (power plant, WTP, etc.), and expected level of maintenance required. Mill staffing was estimated at a total of 77 personnel in a full production year, consisting of 11 salaried employees and 66 hourly workers.

To provide full coverage, mill operations and maintenance personnel will work a schedule of rotating shifts operating 24 hours per day, seven days per week.

Infrastructure

The Mine site is located approximately 60 km north of Nome, Alaska near the Imuruk Basin, on the Seward Peninsula. No road access currently exists to the site with the Kougarok Road as the closest seasonal road to the southeast. Planned infrastructure located near or at the Alaska project site includes:

Site Facilities

Infrastructure facilities at the Alaska mine site include:

- Site access road
- Primary crusher and covered crush ore stockpile
- Mill and support buildings;
- Concentrate thickening, filtration, and drying;
- Tailings thickening, filtration, and loading stockpile;

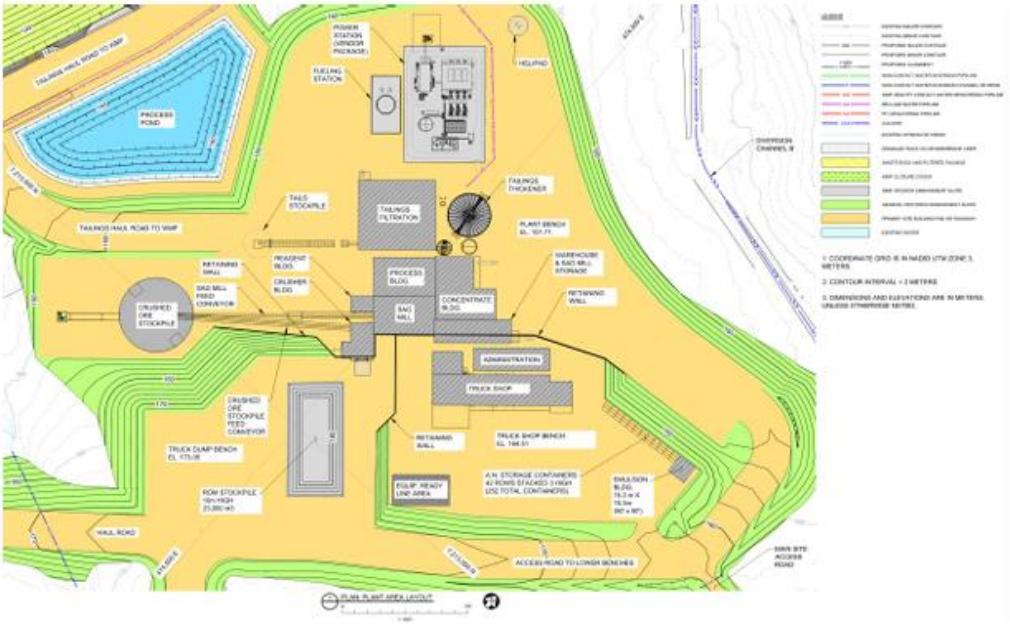
- Mine WMF for dry stack tailings and mine waste rock storage;
- Concentrate loading facility and shipping containers storage area
- Water management facilities, including diversion ditches, seepage collection pond, WMP, overland piping, and pumping;
- Mine (WTP)
- Onsite haul and access roads and various laydown areas
- Explosives emulsion mixing facility and explosive magazines
- Metallurgical lab/assay Lab;
- Truck shop;
- Enclosed warehousing with both cold and heated storage;
- Bulk fuel storage and distribution;
- Site electric power generation facilities; and
- Nome-based camp facilities for both construction workers and permanent operations workforce

General Site Arrangement

The site layout has been designed to minimize environmental 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 to utilize existing topography to minimize bulk earthwork volumes.

Figure 6: Graphite Creek Site Layout

Figure 7: Graphite Creek Plant and Other Buildings Layout



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.

Energy Supply

There are presently no large, interconnected grids of power transmission and distribution lines in the Seward Peninsula. The only intra-state grid network is found in the more populated areas of eastern Alaska, running the corridor from Fairbanks to Anchorage.

Most power in the Seward Peninsula is generated by consumer-owned electric cooperatives near the serviced communities. Teller, Brevig Mission, and Nome generate electricity via diesel-fired power plants with respective electrical generating capacities of 1,050 kilowatt (kW) (approximately 1 megawatt (MW)) and 20.4 MW.

The electrical power supply will be generated on site with no utility interconnection. The total connected load for the mill and all supporting facilities is 15.6 MW, and the nominal operating load (80% utilization factor) is expected to be 12.5 MW. A total of three diesel generator sets will be installed to operate in parallel with two operating and one on standby (N+1 arrangement).

Power Distribution

A 4160 VAC electrical distribution system will be utilized with localized transformers at each area of the plant to provide the appropriate operating voltage for equipment and facilities. Main electrical distribution cables will be routed underground from the site power station. The selected distribution will be 4160 VAC for large drives and 480 VAC for smaller drives. The distribution system will employ area substations and motor control centers to distribute power for each individual use.

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**").

A total of 230 Mt of waste material will be mined over the mine life. It has been assumed that all non-overburden waste materials will be PAG and will be contained in the WMF along with tailings material. The WMF is located north of the open pit, approximately 100 m away from the pit crest. The facility is designed to store approximately 307 Mt of filtered tailings and waste rock, equivalent to a storage volume of approximately 139 Mm^3.

The WMF includes a HDPE basin liner and a stabilizing buttress. The buttress will be constructed with waste material from the pit. The tailings and waste rock will then be co-mingled and placed in the WMF. The objective of the co-mingling strategy is to create a blended, compacted, low-permeability material. Waste rock or processed material may also be placed in select locations in the WMF to promote internal drainage of the filtered tailings. The WMF will be constructed in three stages to accelerate contemporaneous closure activities. Stage one begins in the northeast portion of the facility.

Water Management

Water management facilities will be built on the northern slope of the Kigluaik Mountains and extend into the lowlands toward the Imuruk Basin, with all facilities (except the access road) located within the Graphite Creek watershed. The project's primary infrastructure includes an open mine pit, mill and related facilities, and a WMF; stormwater is designed to minimize contact with infrastructure, and any water that contacts operations will be collected, tested, and treated before release. A progressive, minimum-footprint development with sequential closure means only one-third of the WMF footprint operates at any time, reducing contact water generation over the project life, though brief periods of exposed liner may occur during phase transitions.

The key non-contact water management infrastructure will include upstream Graphite Creek diversion (around mining activities) and stormwater run-on intercept channels for all active ground disturbances. Contact water collection will be established for the pit, the WMF, and all roads and hardened surfaces. The contact water storage system will include a process water pond adjacent to the process plant and a large WMP downstream of all mine-related activities. The ponds will be sized to contain all contact water on site until treatment and discharge back to the watershed downstream of all facilities.

Water Management Pond

The water management system is developed to provide enough storage capacity to contain runoff from all operations (pit, mill, WMF, and all site roads) for treatment. The storage facilities are split into two separate ponds— a process pond ("**PP**") primarily to feed operational needs and a WNP to collect all contact water before treatment.

The PP is located adjacent to the mill and has sufficient capacity (80,000 m^3) to provide all source water needed to operate the mill facility. The PP is also sized to maintain the freeboard necessary to receive all runoff from the mill area and drain the entire mill facility's capacity during a full shutdown.

The WMP is the larger of the two contact water containment facilities and is located near the toe of the WMF, downstream of all operational facilities. Its total capacity is 1,300,000 m^3. The WMP is sized to receive contact runoff flow from the facility during the 100-year 24-hour storm event, including a 1.0 m freeboard, sized according to water balance calculations for a seven-month treatment and discharge period. Future studies will confirm WTP operating months and adjust storage requirements accordingly. An emergency spillway will be constructed in the natural ground at the pond's southern end.

Graphite Creek Diversion

The open pit will eventually extend across Graphite Creek's existing flow path. To mitigate flooding risks and reduce dewatering requirements within the pit, the creek will be diverted around the open pit after the footprint begins to encroach on the creek's natural watercourse (expected around Year 4 of mining). The diversion will be accomplished using a concrete headwall structure and two buried 1.2 m (48 in) HDPE pipelines. The diversion pipes on a design safety bench, which will also have an adjacent open overflow ditch to manage extreme storm flows that may temporarily exceed the pipe capacity. To maintain its capacity and preserve slope integrity, the overflow ditch will remain empty except during extreme weather events. At the downstream terminus of the diversion pipeline, the flow will receive energy dissipation prior to discharge into an undisturbed portion of Glacier Canyon Creek.

Long-Term Water Management Approach

During operation, all contact water will be collected and held in lined ponds until treatment, prior to discharge to the Glacier Canyon Creek watershed downstream of the treatment plant. At closure, all mill facilities and site infrastructure will be removed and reclaimed. The surface area of the pond footprint will be covered with topsoil and revegetated to resemble the natural terrain at the project site. The WMF will be progressively covered and reclaimed throughout the mine life such that its surface runoff will no longer be considered contact water or require treatment by the time of closure. Seepage collected from the WMF will be captured and treated during operation and will continue to collect at diminishing levels for several years after mine closure. During this time, the water treatment system will continue to be maintained and operated to treat the reduced flows.

Water Treatment

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 m^3 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.

Transportation

Port

The nearest port is the Port of Nome which is located 60 km south of the project. Shipments in and out of the port are limited to the ice-free portions of the year, typically between early June and early October each year. The port is currently serviced by four scheduled freight barges annually during this season. These barges originate their northbound journeys in Seattle, Washington, before stopping in Anchorage, Alaska, and several coastal Alaskan villages before reaching Nome. Fuels such as diesel, gasoline, and jet-A fuel are delivered by separate dedicated barges during the same season. The existing, regularly scheduled services do not have the capacity to serve the Graphite Creek project, so dedicated barges and/or ships will be required to support the project.

Air Transportation and Railroads

Air travel and freight transportation to the project area is via the Nome Airport, a state-owned public-use airport. The Nome Airport is currently serviced by two commercial jet flights to and from Anchorage daily. Several carriers also fly freight between Anchorage and Nome in 737 and C-130 model aircraft. A small local carrier offers regular service between Nome and the surrounding villages. No runway is planned for Graphite Creek project, but a local helicopter charter provider is available, if needed.

The is no rail service near the project. The only rail line in the state is owned by the Alaska Railroad, a state of Alaska-owned Class II line that operates freight and seasonal passenger service linking Seward, Whittier, Anchorage, and Fairbanks.

It was determined that drying the concentrates at the mine site before shipping would be more economical than drying at the STP after shipping. Therefore, a drying system using diesel as fuel (potentially augmented with waste heat from power generation) is proposed for the graphite concentrates. After drying, the graphite concentrate is loaded in containers before being transported by truck to Nome and shipped to Prince Rupert harbour in British Columbia (23-day round trip) for unloading, storage, and transfers to train for the final leg of the supply chain to the STP in Niles, Ohio.

Unit trains from Prince Rupert will pull a maximum of 75 well cars with a capacity of three concentrate containers per car. This limit of 225 concentrate containers per train will require a minimum of 36 rail trips each season from Prince Rupert to Niles, Ohio. Each train will return from Ohio with an equal number of empty concentrate containers returned from the STP. These empty containers will be temporarily stored in Prince Rupert until a full shipment (1,650 containers) can be accumulated and loaded for return to Nome, where they will remain in storage through the winter freeze.

Environment and Permitting

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 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.

Reclamation and Closure

After mining operations conclude, the site will transition into final reclamation and closure activities. Due to the site's remote location, all reclamation activities will be self-performed utilizing the equipment fleet that supported the mining operation. Given the relatively small size of the operation and concurrent reclamation

activities of the WMF throughout the LOM, it is assumed that the demolition and most reclamation activities will be completed in approximately one year.

The mill, all facilities, foundations, etc., will be demolished and removed. The debris will be disposed of in the final pit and covered in accordance with Alaska mining regulations. The haul roads, access roads, and facility pads will be dismantled and regraded to approximate original contours. Topsoil material that was salvaged during operations will be spread on the regraded areas where suitable and reseeded according to permit requirements. The last phase of the WMF will also be regraded and closed at this time. Final reclamation monitoring and maintenance are assumed to be required and have been factored into the operating cost estimate for a ten-year period following the completion of reclamation activities.

Secondary Treatment Plant (Ohio, USA)

The Company is planning to construct a greenfield STP located in Niles, Turnbull County, Ohio, and has access to railroad tracks and paved roadways.

The STP aims to process natural graphite (NG) sourced from the Graphite Creek Property in Alaska to produce active anode materials (AAM) for the Li-ion battery market and other graphite products. The key products from the plant are listed in Table 10 (25 ktpa) and Table 11 (175 ktpa) below.

The STP will be constructed over five years, building seven modules during that time. Each module is expected to process approximately 25,000 tpa of graphite concentrate, along with other additives such as coke, pitch, and anode precursor material to produce a total estimated 36,850 tpa of products including 24,371 tpa of anode material products for the Li-ion battery application along with 3,608 tpa of purified and 8,871 tpa of unpurified products for the graphite market.

The STP is expected to require approximately 89 ha (220 ac) of land and consists of 88 buildings.

The manufacturing processes are envisioned to utilize electrically heated, high-temperature furnaces for the purification and graphitization processes.

Graphite One appointed Hatch to perform the required preliminary engineering activities for the chosen site, including process drawings and process mass balances based on the manufacturing process design by Graphite One. The process layout and buildings were based on the process requirements provided by Andrew Tan of Graphite One. The facility has been designed for 25,000 tpa modules with seven modules required for 175,000 tpa of NG capacity.

After the STP is designed and permitted, construction of the first two 25,000 tpa modules is expected to take approximately 22 months before being turned over to pre-operational testing and commissioning, and it will take an additional 40 months to reach 175,000 tpa of NG capacity.

Products

Table 10: STP Products and Production Rate for 25 ktpa

Category	Description	Purity (% Cg)	Nominal Flowrate (tpa)	Total (tpa)
Anode Material	Secondary Particle NG Anode 'A'	99.95	1,749	24,372
	Secondary Particle Composite Anode 'A'	99.95	6,024	
	Single Particle Pure NG Anode 'B'	99.95	5,714	
	Single Particle Blended Anode 'B'	99.95	10,884	
Purified	+32 Mesh Purified Graphite Product	>99	55	3,608
	+50 Mesh Purified Graphite Product	>99	502	
	+80 Mesh Purified Graphite Product	>99	557	
	+100 Mesh Purified Graphite Product	>99	929	
	Battery Conductor Product	99.9	660	
	Synthetic Diamond Product	99.99	905	
Unpurified	+32 Mesh Unpurified Graphite Flake	>95	90	8,872
	+50 Mesh Unpurified Graphite Flake	>95	810	
	+80 Mesh Unpurified Graphite Flake	>95	900	
	+100 Mesh Unpurified Graphite Flake	>95	1,500	
	Rejected Coke	>95	1,149	
	Carbon Raisers Lubricants Product	>95	4,423	
Total				**36,852**

Table 11: STP Products and Production Rate for 175 ktpa

Category	Description	Purity (% Ct)	Nominal Flowrate (tpa)	Total (tpa)
Anode Material	Secondary Particle NG Anode 'A'	99.95	12,160	169,386
	Secondary Particle Composite Anode 'A'	99.95	42,085	
	Single Particle Pure NG Anode 'B'	99.95	39,639	
	Single Particle Blended Anode 'B'	99.95	75,502	
Purified	+32 Mesh Purified Graphite Product	>99	386	25,035
	+50 Mesh Purified Graphite Product	>99	3,480	
	+80 Mesh Purified Graphite Product	>99	3,866	
	+100 Mesh Purified Graphite Product	>99	6,446	
	Battery Conductor Product	99.9	4,579	
	Synthetic Diamond Product	99.99	6,278	
Unpurified	+32 Mesh Unpurified Graphite Flake	>95	630	62,090
	+50 Mesh Unpurified Graphite Flake	>95	5,670	
	+80 Mesh Unpurified Graphite Flake	>95	6,297	
	+100 Mesh Unpurified Graphite Flake	>95	10,502	
	Rejected Coke	>95	8,043	
	Carbon Raisers Lubricants Product	>95	30,949	
Total				**256,510**

Table 11.1 Product Pricing for Varied Refined Productions

Product	Sale Price ($/t)
CPN: Coated, Spherical NG	8,424
BAN: Blended AG and NG	11,563
SPN: Secondary Particle NG	10,971
SPC: Secondary Particle Composite	10,971
+'32 Mesh Purified 99%	4,569
+'50 Mesh Purified 99%	3,884
+'80 Mesh Purified 99%	3,066
+'100 Mesh Purified 99%	2,547
Battery Conductor, -320 Mesh 99%	5,357
Synthetic Diamond RM, -320 Mesh 99%	5,974
+32 Mesh Unpurified	1,683
+50 Mesh Unpurified	1,683
+80 Mesh Unpurified	1,564
+'100 Mesh Unpurified	1,256
Carbon Raisers Lubricants	2,122
Rejected Coke Product	610
Weighted Average	**7,843**

Location

The STP is expected to be located in Niles, Trumbull County, Ohio, approximately 7 miles SSE of the city of Warren. The site is located at 1590 Warren Avenue, Niles, Ohio, at approximately 41º 11' North and 80º 47' West, as shown below. The Ohio site is approximately 34.4 ha (85 ac). Initially, two 25 ktpa modules are planned to be built at the Ohio site and is expected to occupy 34.4 ha (85 ac) and consist of 18 buildings. At the full 175 ktpa capacity, seven (7) 25 ktpa modules are planned to be built and expected to occupy 89.8 ha (222 ac) (which exceeds the current allocated plot) and consist of 88 buildings.

Power Supply and Distribution

The STP will be connected to Ohio's state power grid. The STP is expected to have an onsite substation with a 115 kV switchgear for onsite distribution. The power is expected to be distributed across the plant site and reduced using localized switchgear. Incoming power characteristics were provided by CJL Engineering, a third-party consultant onboarded by Graphite One to interface with the local utility.

Waste and Water Management

The STP is expected to be connected to the municipality's water source. Water is expected to be purchased from a water utility company and used as required. Meander Water Supply, the local water utility, confirmed municipal water quality. There will be an onsite WTP for treatment, monitoring, and discharge from the local municipality. In addition, sewage will be connected to the local municipal sanitary sewer system.

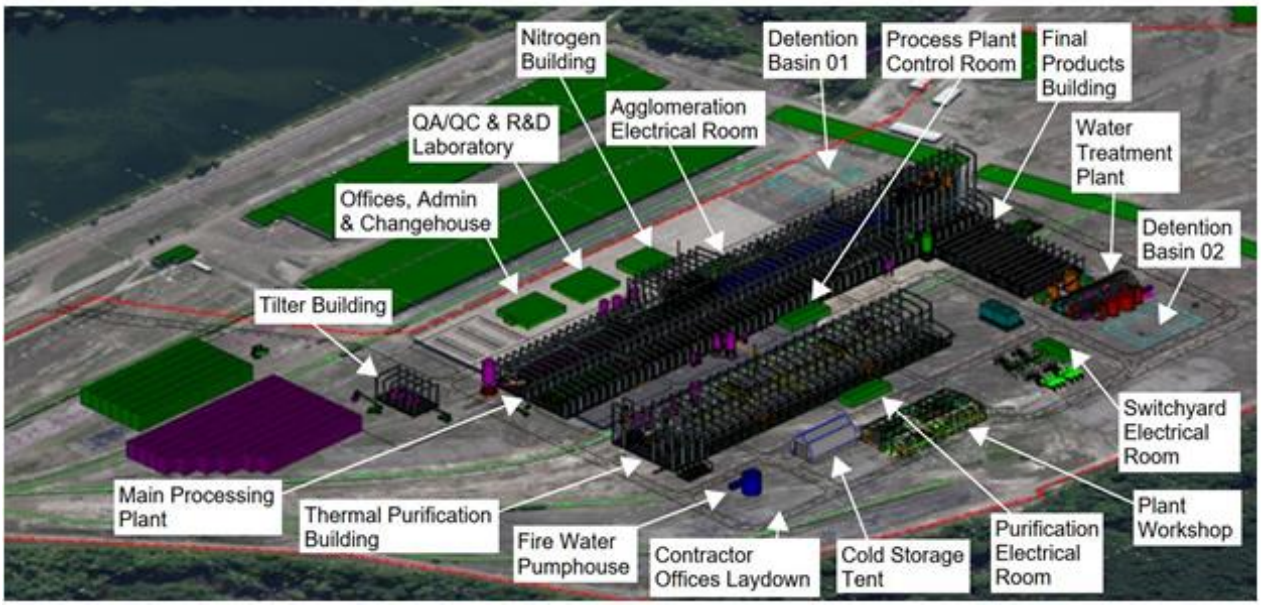
Natural *Gas*

Natural gas will be received by pipeline and distributed to afterburners for carbonization and agglomeration off-gas treatment. The layout ensures proper routing and connections of the natural gas pipelines, adhering to safety standards and facilitating efficient heating of the respective equipment.

STP General Layout

The STP was initially developed for a 25K ktpa module with the concept of scaling up production in 25 ktpa modules to match the mine production of 175 ktpa.

Figure 8: STP Site Layout



Description of Major Buildings and Facilities

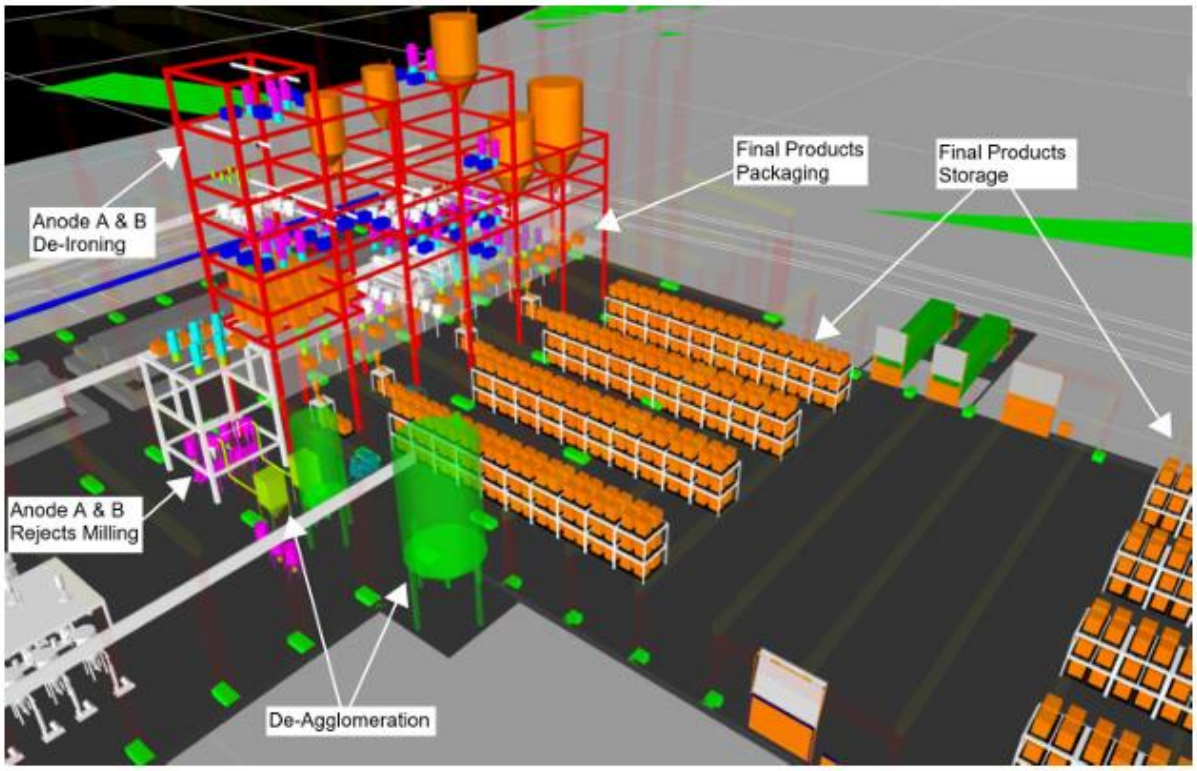
Main Processing Plant

The main processing plant building is expected to be a single-story steel frame, metal-clad, pre-engineered structure constructed on a concrete pad. It will be equipped with three 5-ton and one 10-ton overhead cranes.

The following facilities are expected to reside within the main processing plant:

- Concentrate receiving and storage
- Micronizing, shaping and carbonization
- Agglomeration
- Final product packaging, storage and loadout
- Environmental protection facilities

Figure 9: Main Processing Plant - Isometric



Process Control Room

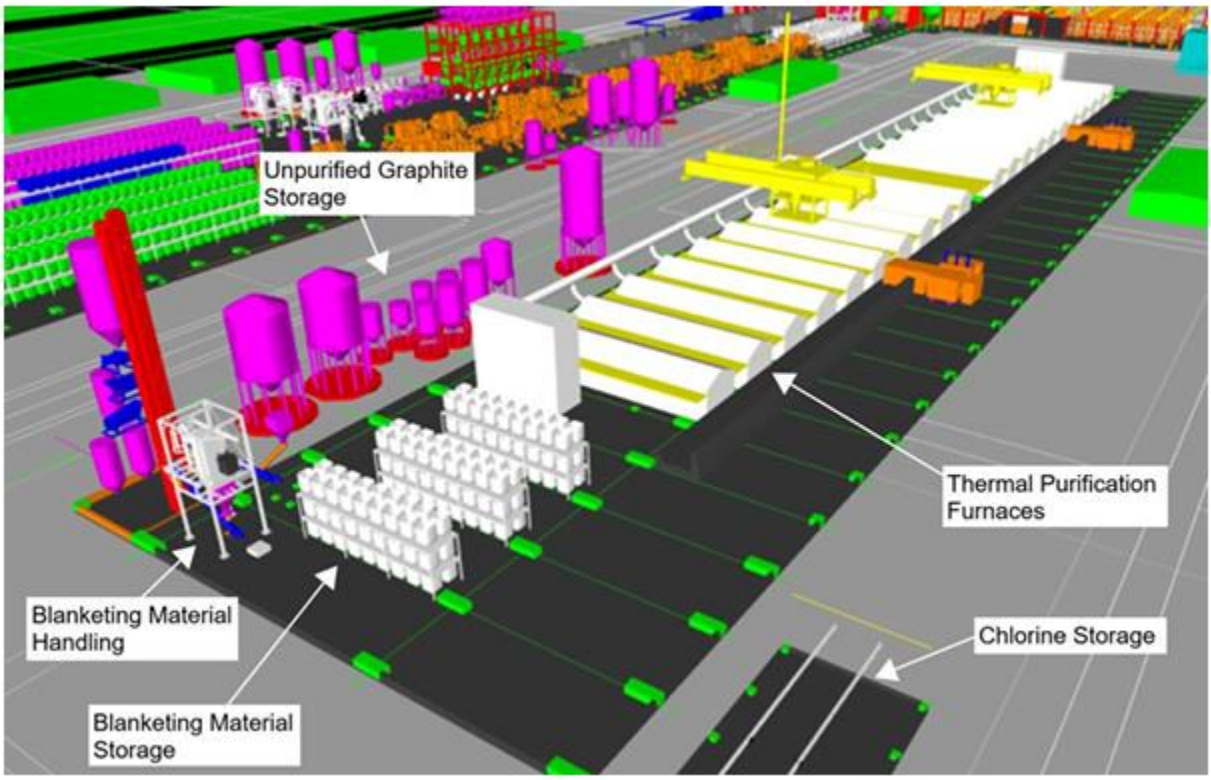
The process control room building is expected to be a single-story, prefabricated modular structure constructed on piers.

Thermal Purification Building

The thermal purification building is expected to be a single-story, steel-frame, metal-clad, pre-engineered structure constructed on a concrete pad. The building will be equipped with three 100-ton multifunction cranes and two 5-ton overhead cranes. The building will also be equipped with a bay containing rails to support the two Acheson furnace traveling rectifiers.

The Purification and graphitization, and environmental protection facilities are expected to reside within the thermal purification building.

Figure 10: Thermal Purification Building – Isometric



Final Product Packaging and Storage Building

The final product packaging and storage building is expected to be a single-story, steel-framed, metal clad, pre-engineered structure constructed on a concrete pad. The main purpose of this building is for ultrasonic screening, de-ironing, anode A&B de-agglomeration, A&B rejects milling, rack storage area with capacity for 14,500 22.7 kg bags and 530 1t bags of final products, trucking loading bay and rail car loading bay.

Chlorine Building

The chlorine building is expected to be a single-story, steel-frame, metal-clad, pre-engineered structure constructed on a concrete pad. The building will be equipped with two 2-ton overhead monorails and include a chlorine gas storage and distribution facility.

Tilter Building

The tilter building is expected to be a single-story, steel-frame, metal-clad, pre-engineered structure constructed on a concrete pad and include a concentrate receiving and storage facility.

Laboratory, QA/QC, and R&D Building

The laboratory, QA/QC, and research and development (R&D) building are expected to be a single-story, modular structure housing the staff and equipment to conduct product quality assurance, product quality control, and research and development work.

Nitrogen Building

The nitrogen building is expected to be a single-story, steel frame, metal-clad, pre-engineered structure constructed on a concrete pad and include a nitrogen gas generation, storage, and distribution facility.

Plant Workshop, Maintenance, and Warehouse

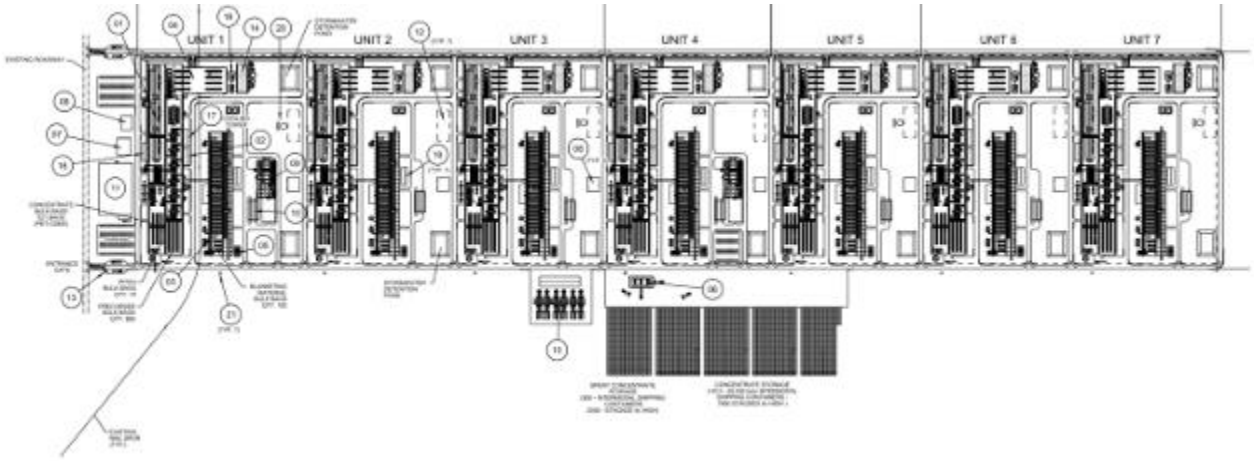
This plant workshop, maintenance, and warehouse building is expected to be a two-story, steel-frame, metal-clad, pre-engineered structure constructed on a concrete pad. The building is expected to be equipped with one 2-ton overhead crane, one 10-ton overhead crane, and two 5-ton jib cranes.

Secondary Treatment Plant Expansion to 175 ktpa

The Ohio location was used as the basis (assuming the same existing 'brownfield' infrastructure) with expansion from the 25 ktpa module to a 175 ktpa, 7-module facility. The layout performed was limited in scope to establishing the quantities of commodities and was not specifically adopted or optimized to fit the plot space.

Figure 11 depicts the plot plan of STP expansion to a 175 ktpa, 7-module facility. The site is expected to comprise multiple process buildings dedicated to anode material production and reagent and utility service buildings. The STP is expected to occupy approximately 89.8 ha (222 ac) of land. Generally, the 25 ktpa module design was assumed to be 'fixed' (i.e., scaled by 7) while site-wide infrastructure and utilities were optimized (i.e., 'factored').

Figure 11: STP Module Plan Layout



Description of Major Building and Facilities

The 175 ktpa STP facility is expected to be comprised of multiple buildings, which are tabulated in Table 12 with preliminary sizing.

Table 12: STP 175 ktpa Major Buildings

No.	Building Description	Estimated Length (ft)	Estimated Width (ft)	Estimated Height (ft)	Building Quantity
01	Main Processing Plant	1140' Agglomeration High-bay: 181'6" De-Ironing High-bay: 201'6"	197' Agglomeration High-bay: 93'6" De-Ironing High-bay: 56'6"	55' Agglomeration High-bay: 96'6" De-Ironing High-bay: 128'	7
02	Process Plant Control Room	110'	40'	12'	7
03	Thermal Purification Building	725'	Furnaces Area: 78' Rectifier Area: 52' Blanketing Storage Area: 130' Blanketing Material Handling: 30'	Furnaces Area: 72'6" Rectifier Area: 34'6" Blanketing Storage Area: 75' Blanketing Material Handling: 85'	7
04	Final Product Packaging, Storage Building	257'	159'	26'	7
05	Chlorine Building	61'6"	32'6"	19'	7
06	Tilter Building	135'	60'	47'	1
07	Laboratory, QA/QC, and R&D	98'6"	82'	12'	1
08	Nitrogen Building	85'	69'	15'	7
09	Plant Workshop, Maintenance, and Warehouse	217'6"	110'	34'6"	2
10	Cold Storage Tent	116'6"	60'	49'	7
11	Offices, Administration, and Change House	336' Second story length: 140'	200' Second story width: 115'	14' Second story height: 24'	1
12	Contractor Offices and Laydown	120"	60'	50'	7
13	Security Gatehouse	36'	36'	10'	1
14	Water Treatment Plant	172'	67'	29'	7
15	Switchyard Electrical Room	240'	60'	12'	1
16	Agglomeration/Anode Precursor/Carbonization Electrical Room	110'	34'3"	12'	7
17	Micronizing/Final Products Electrical Room	100'	40'	12'	7
18	Water Treatment Plant Electrical Room	40'	8'	9'6"	7
19	Purification/Graphitization Electrical Room	100'	40'	12'	7
20	Fire Water Pumphouse	28'	12'	12'	4

Capital and Operating Costs

Capital and operating costs were developed for the full Project to mine and mill natural graphite (175,000 tpa graphite concentrate), transport concentrate to the STP, and ultimately produce 256,510 tpa of value-added graphite products (battery anodes, purified flake, un-purified flake, etc.).

These capital costs are expressed in U.S. dollars with no escalation or inflation, unless stated otherwise.

Capital Costs

Capital cost estimates were prepared for initial, sustaining, and closure capital at Graphite Creek as well as a capital program for the STP bringing seven 25 ktpa trains online in quick succession over the course of seven years.

The total estimated initial capital cost for the design, construction, installation, and commissioning of all facilities and equipment for the Graphite Creek mine is $949.4 M, including a contingency of $94.4 M (11.0%). After the initial capital phase, sustaining capital costs will be expended on the order of $176.1 M, including $74.5 M of closure costs for closure, reclamation, and post-operations. Closure costs start in Year 21, the final year of operations, and include costs that will occur for an extended period in the post-closure phase. Costs occurring for the extended period have been included at the current value in Year 22.

The initial capital for the phased construction of the STP (175,000 tpa total production capacity) is estimated at $3,919.4 M, including a 25% contingency of $783.9 M. Sustaining capital is included as 5% of the operating maintenance costs. No closure capital costs are called out.

Table 13: Summary of Capital Cost Estimates

Capital Costs	Initial Capital ($M)	Sustaining and Closure ($M)	Total ($M)
Mining	128.0	33.2	161.2
Milling	221.1	0.0	221.1
Waste Management Facility	72.2	133.2	205.3
Infrastructure	211.5	9.7	221.2
Indirects	136.7	0.0	136.7
Owners Costs	85.5	0.0	85.5
Contingency	94.4	0.0	94.4
Subtotal Graphite Creek	**949.4**	**176.1**	**1,125.6**
Secondary Treatment Plant (STP)	2,389.7	0.0	2,389.7
STP Indirects	745.8	0.0	745.8
STP Contingency	783.9	0.0	783.9
Subtotal STP	**3,919.4**	**0.0**	**3,919.4**
Total Capital	**4,868.8**	**176.1**	**5,044.9**

Alaska Capital Cost Summary

Table 14: Estimated Mining Capital Costs

Description	Initial Capital ($M)	Sustaining and Closure ($M)	Total Capital ($M)
Pre-stripping & Pre-production	27.7		27.7
Mine Pit Development	4.8		4.8
Mine Stockpiling	3.9		3.9
Subtotal Open Pit Mine Development	**36.4**		**36.4**
Drilling Equipment	6.2		6.2
Loading Equipment	10.4	4.4	14.8
Hauling Equipment	24.8		24.8
Support Equipment	5.9	0.4	6.3
Mine Maintenance Equipment	2.0		2.0
Subtotal Mine Equipment	**49.3**	**4.8**	**54.1**
Mine Roads and Access	7.9		7.9
Dewatering	0.7	7.0	7.7
Mine Maintenance Facilities	32.2		32.2
Emulsion Facility and Explosive Magazine	1.5		1.5
Subtotal Mine Infrastructure	**42.3**	**7.0**	**49.3**
Demolition, Reclamation and Closure		**21.5**	**21.5**
Capital Costs – Mine	**128.0**	**33.2**	**161.2**

Table 15: Estimated Milling Capital Costs

Area	Initial Capital ($M)	Sustaining and Closure ($M)	Total Capital ($M)
Primary Crushing	10.9		10.9
Crushed Ore Stockpile and Reclaim Systems	18.9		18.9
Crusher Building	20.1		20.1
Subtotal ROM Handling, Crushing, and Storage	**49.9**		**49.9**
Primary Grinding (Closed Circuit)	19.2		19.2
Secondary Grinding and Classification	3.2		3.2
Flash Flotation	2.4		2.4
Cyclonic Classification	0.4		0.4
SAG Mill Building	11.5		11.5
Subtotal Primary Grinding and Classification	**36.7**		**36.7**
Rougher Flotation	3.9		3.9
Polishing Mill	2.9		2.9
Cleaner Flotation and Regrind	13.7		13.7
Concentrator Process Building	17.2		17.2
Subtotal Flotation Separation	**37.7**		**37.7**
Tailings Thickening and Filtration	20.4		20.4
Dewatered Tailings Storage and Loadout	5.6		5.6
Tailings Thickening, Filtering, Storage and Transport	12.5		12.5
Subtotal Tailings Thickening and Filtration	**38.5**		**38.5**
Concentrate Thickening, Filtration, Drying	12.4		12.4
Concentrate Storage and Loadout	11.6		11.6
Dryer Building	14.4		14.4
Subtotal Concentrate Thickening, Filtration, Drying, and Loadout	**38.4**		**38.4**
Reagents and Grinding Media	**6.1**		**6.1**
Mill Utilities	**13.9**		**13.9**
Total Milling Capital Costs	**221.1**		**221.1**

Table 16: Estimated Waste Management Facility Capital Costs

Area	Initial Capital ($M)	Sustaining and Closure ($M)	Total Capital ($M)
Waste Management Facility (WMF)	13.4	0.3	13.7
WMF Drainage System	7.6		7.6
WMF Liner	43.5	58.4	101.9
WMF Area Development	**64.5**	**58.7**	**123.2**
Initial Tailings Deposition	7.6	1.4	9.0
WMF Reclamation and Closure		73.1	73.1
Total Waste Management Facility	**72.2**	**133.2**	**205.3**

Table 17: Estimated Infrastructure Capital Costs

Area	Initial Capital ($M)	Sustaining and Closure ($M)	Total Capital ($M)
Power Generation (3 Diesel 7.5 MW Gensets)	37.7		37.7
Drainage And Wastewater Treatment	50.2		50.2
Other Utilities	9.8		9.8
Subtotal Utilities	**97.7**		**97.7**
Ancillary Buildings (Office, Warehouse, Lab, Etc.)	**8.5**		**8.5**
Transportation (Access Road, Guard Shack, Helipad)	**22.5**		**22.5**
Control, Communications and Monitoring System	**14.2**		**14.2**
Plant Site Preparation	**11.0**	**8.3**	**19.3**
Road Maintenance Equipment	1.9		1.9
Small Fleet	6.0	1.5	7.5
Initial Construction Equipment Fleet	20.6		20.6
Concentrate Transport Containers	25.7		25.7
Subtotal Non-Fixed Plant and Equipment	**54.2**	**1.5**	**55.7**
Total On-Site Infrastructure	**208.2**	**9.7**	**217.9**
Off-Site Infrastructure	**3.3**		**3.3**
Total Off-Site and On-Site Infrastructure	**211.5**	**9.7**	**221.2**

Table 18: Indirect Capital Costs

Area	Initial Capital ($M)	Sustaining and Closure ($M)	Total Capital ($M)
Temporary Site Facilities	2.7		2.7
Temporary Utilities	14.1		14.1
On-Site Services	2.6		2.6
Pre-Commissioning & Check-Out	2.1		2.1
Vendor Reps Construct/ Pre-Comm	1.4		1.4
Vendor Reps Commissioning	1.1		1.1
Construction & (Start-Up) Spares	1.6		1.6
Air Travel Transportation	7.2		7.2
Ground Transportation	3.4		3.4
Camp Operation and Maintenance	27.9		27.9
Pre-Mob Medicals, Recruitment	0.2		0.2
EPCM Services - Home Office	28.0		28.0
EPCM Services - Field Office	22.6		22.6
EPCM Services - Fee	4.3		4.3
EPCM Services - Basic Engineering	3.2		3.2
T&L Services, Warehousing, Freight Forwarding	11.1		11.1
Third Party Consultants	3.2		3.2
Total Indirect Costs	**136.7**		**136.7**

Table 19: Owner's Costs

Area	Initial Capital ($M)	Sustaining Capital ($M)	Total Capital ($M)
Owners Team	2.8		2.8
Legal, Permits, Licenses & Fees	2.8		2.8
Insurance	8.5		8.5
Financing Costs and Interest	1.0		1.0
Land Purchases – Off-Site	5.0		5.0
Preproduction Team	21.2		21.2
Wet Commissioning & Ramp-Up	1.0		1.0
Capital Spares	6.4		6.4
Two Years Operating Spares	5.1		5.1
First Fills	0.8		0.8
Operational Readiness	0.5		0.5
Operator Training	0.3		0.3
Precommercial Production Operations and Maintenance	30.0		30.0
Total Owners Costs	**85.5**		**85.5**

Contingency

For the total estimated value to represent the most likely outcome, a contingency has been provided in the estimate to cover anticipated variances between the specific items allowed in the estimate and the final actual project cost. The contingency sum is not intended to cover changes from the stated design, performance base, or the assumptions and exclusions list as outlined on pages 361 to 363 of the 43-101 Technical Report.

Contingency has been included at the aggregate rate of 11.2% of the total base estimate. This was arrived at by considering the level of development for quantity derivation, from definitive (highest definition) to allowance (lowest definition). A weighted average of these levels across the disciplines was calculated to arrive at the applied aggregate contingency.

TP (Ohio) Treatment Plant Capital Cost Summary

Capital cost estimate represents the costs estimated to construct the facility in the state of Ohio, which upgrades the natural graphite concentrate into final products for distribution. The cost estimate is primarily based on material and equipment costs from MTOs and detailed equipment lists for one 25 ktpa module. For the full-scale facility, this 25 ktpa module cost is then scaled/factored to a full capacity of 175 ktpa (7 x 25 ktpa module). Pricing for key equipment was primarily determined from quoted sources. Bulk material costs are based on historical pricing and in-house data. The total capital cost estimate is expected to be $3,919.4 M, including a contingency of $784 M. The capital cost estimate is consistent with the definition of a standard quality Association for the Advancement of Cost Engineering (AACE) Class 4 estimate. The anticipated accuracy of the estimate is +25%/-15%.

Table 20: STP Direct Capital Cost Estimate – 175 ktpa

Area	Estimated Cost ($M)
Main Processing Plant	376.1
Storage Area	23.8
Feed Preparation, Sorting & Micronizing	401.0
Graphite Purification & Carbonization	550.5
Anode A & B	181.9
Final Product Packaging and Storage	70.2
Off-Gas Handling and Scrubbing	23.0
Reagents	29.2
Plant Services	734.2
Estimated Sub-Total	**2,389.7**

Table 21: STP Indirect Capital Cost Estimate – 175 ktpa

Area	Estimated Cost ($M)
EPCM	358.5
Spare Parts	32.0
Vendor Assistance	8.0
Commissioning	71.7
Freight	40.0
Site Services and Facilities	119.5
First Fills	32.0
Construction Indirects	Included in labor rates.
Owners Costs	Excluded
Scaffolding	53.5
Third-Party Services and Consulting	23.9
Construction Equipment	Included in labor rates.
Heavy Cranes	6.8
Subtotal Indirects	**745.8**
Contingency	783.9
Total Indirects and Contingency	**1,529.7**

Assumptions and Exclusions for the 175 ktpa STP are outlined on pages 365 to 367 of the 43-101 Technical Report.

Operating Costs

Alaska Operating Cost Summary

The total and average operating costs over the LOM for the Alaska facilities include civil development and earthwork, mine operations and reclamation, mill operations, general and administrative costs, tailings handling and management, water treatment, road construction and maintenance, and other operational support services. The estimates for these costs were developed from various assumptions, vendor/supplier sources, and experience, which are described in the sections below.

Table 22: Overall Operating Cost Summary

Cost Area Description	LOM Total Cost ($M)	LOM Average ($M/yr)	Unit Operating Cost ($/t Concentrate)	Operating Percent (%)
Mining	840.1	41.7	238.5	39.1
Milling	1,014.0	50.4	287.9	47.2
General and Admin	294.4	14.6	83.6	13.7
Operating Cost	**2,148.5**	**106.8**	**610.0**	**100**

The operating cost breakdown for the Alaska site is based on a mill design ore feed rate of roughly 3.6 Mtpa and concentrate production of 175,000 tpa. Ore feed rate and concentrate production rate vary year-by-year based on the mine's production schedule. The resulting total LOM ore mill feed is 71.2 Mt, producing a total of 3.5 Mt of concentrate. The average total LOM mine production (ore and waste) is 14.1 Mtpa with a total LOM material movement of approximately 301 Mt (ore and waste).

Mining Operating Cost Estimate

The mine operating cost is presented below in Table 23, which includes costs related to mine production (drill, blast, load, haul), mine maintenance, technical services, labor, and other direct mining overhead costs.

Table 23: Mining Operating Costs by Cost Activity

Cost Activity	Total LOM Operating Cost ($M)	Operating Cost Mined[1] ($/t mined)	Operating Cost Moved[2] ($/t moved)
Drilling Cost	28.0	0.09	0.07
Blasting Cost	140.2	0.46	0.37
Loading Cost	61.5	0.20	0.16
Hauling Cost	112.8	0.37	0.30
Support Cost	112.5	0.37	0.30
Mine Operations Labor	341.6	1.12	0.90
Pit Dewatering	0.8	0.00	0.00
Stockpile Rehandling	2.4	0.01	0.01
Tails Handling	40.4	0.13	0.11
Mining Operating Costs	**840.1**	**2.75**	**2.23**

Table 24: Milling Operating Cost Estimate

Cost Activity	Total LOM Operating Cost		
	($M)	($/t Ore)	($/t Concentrate)
Utilities	620.3	8.71	176.12
Consumables	131.8	1.85	37.43
Fixed Costs	261.9	3.68	74.36
Total Milling	**1,014.0**	**14.24**	**287.91**

Utilities

Site power will be supplied by onsite diesel-fueled generators so the operating costs for site power are based on fuel consumption and regular maintenance of the power generators. Maintenance materials are accounted for in the maintenance materials line item in the mill operating cost, and maintenance labor for the power system is included in the staffing estimate for the site. Site power consumption is estimated at 12.5 MW, amounting to roughly 25.7 million liters (6.8 million gallons) of diesel fuel per year. A lower heating value (LHV) of 35,816 kJ/l (128,488 BTU/gal) for low-sulfur diesel was used throughout this study.

Table 25: Milling Consumables Costs

Cost Activity	Total LOM Operating Cost		
	($M)	($/t Ore)	($/t Concentrate)
Flot Agent (Fuel Oil)	11.7	0.16	3.31
Frother (MIBC)	5.3	0.07	1.50
Flocculant (Dry)	8.0	0.11	2.28
Lime (Dry)	8.0	0.11	2.26
Sulfuric Acid (95%)	0.0	0.00	0.01
SAG Media	59.9	0.84	17.01
Ball Mill Media (Regrind #1)	13.9	0.20	3.96
SMM Media (Regrind #2)	10.5	0.15	2.99
SMM Media (Regrind #3)	6.6	0.09	1.87
Freight on Consumables	7.9	0.11	2.25
Total Consumables	**123.9**	**1.74**	**35.18**

Fixed Costs

Fixed costs for the Alaska milling operations consist of mill labor, mobile equipment, and maintenance materials, as shown in Table 26.

Table 26: Fixed Costs

Cost Activity	Total LOM Operating Cost		
	($M)	($/t Ore)	($/t Concentrate)
Mill Labor	202.0	2.84	57.35
Mobile Equipment	3.8	0.05	1.06
Maintenance Materials	56.2	0.79	15.95
Total Milling Fixed Costs	**261.9**	**3.68**	**74.36**

General and Administrative Cost Estimate

The G&A operating costs include all materials, services, and personnel costs associated with site administration, which include bussing and transport, employee housing costs, Kougarok Road maintenance costs, Nome office costs, office supplies, software, training, light vehicle expense, miscellaneous expense, mobile equipment, and labor costs. A summary of the G&A operating cost over the LOM is outlined in Table 27 below.

Table 27: G&A Summary

Cost Activity	Total LOM Operating Cost	
	($M)	($/t Concentrate)
Personnel Logistics	67.0	19.01
G&A Labor Costs	120.5	34.20
G&A Miscellaneous	107.0	30.38
Total G&A	**294.4**	**83.60**

STP (Ohio) Operating Cost Estimate

An operating cost estimate was developed as part of the current study for the STP. The operating cost estimate has been prepared to a level of definition appropriate for an intended level of accuracy of approximately +25/-15%.

Operating Cost Estimate Summary

An overall summary of the operating cost estimate for the 25 ktpa scenario is shown in Table 28 and Figure 12. The operating cost estimate for the 175 ktpa scenario is also presented in Table 29 and Figure 13.

Table 28: Overall Operating Cost Estimate Summary – 25 ktpa

Cost Component	Total Operating Cost Estimate	
	Annual Operating Cost Estimate ($M/yr)	Unit Cost Estimate ($/t of Graphite Concentrate)[1]
Consumables	46.58	1,863.15
Feed Materials	15.24	609.43
Reagents	4.54	181.74
Utilities	18.41	736.36
Other Consumables	8.39	335.61
Labor	15.01	600.55
Maintenance Materials	14.45	578.01
Waste Handling	1.79	71.50
General and Administrative Expenses	1.88	75.11
Miscellaneous Allowances	6.45	257.89
Total Operating Cost Estimate	86.16	3,446.21

[1] Based on 25,000 t natural graphite feed

Figure 12: Overall Operating Cost Estimate Breakdown – 25 ktpa

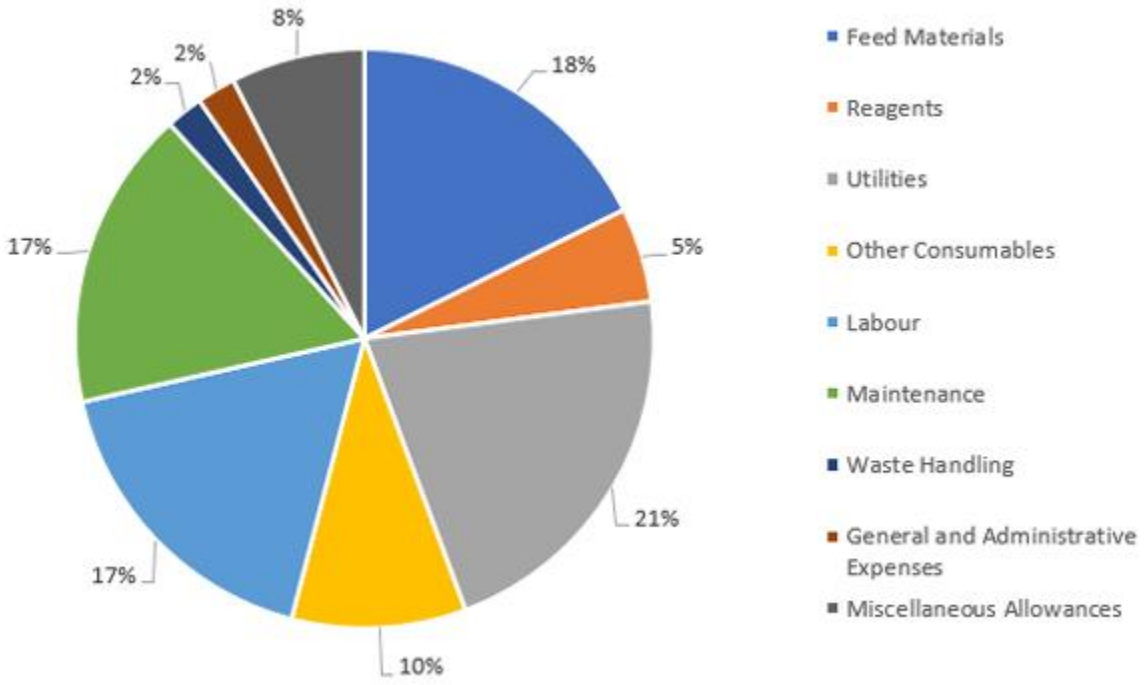
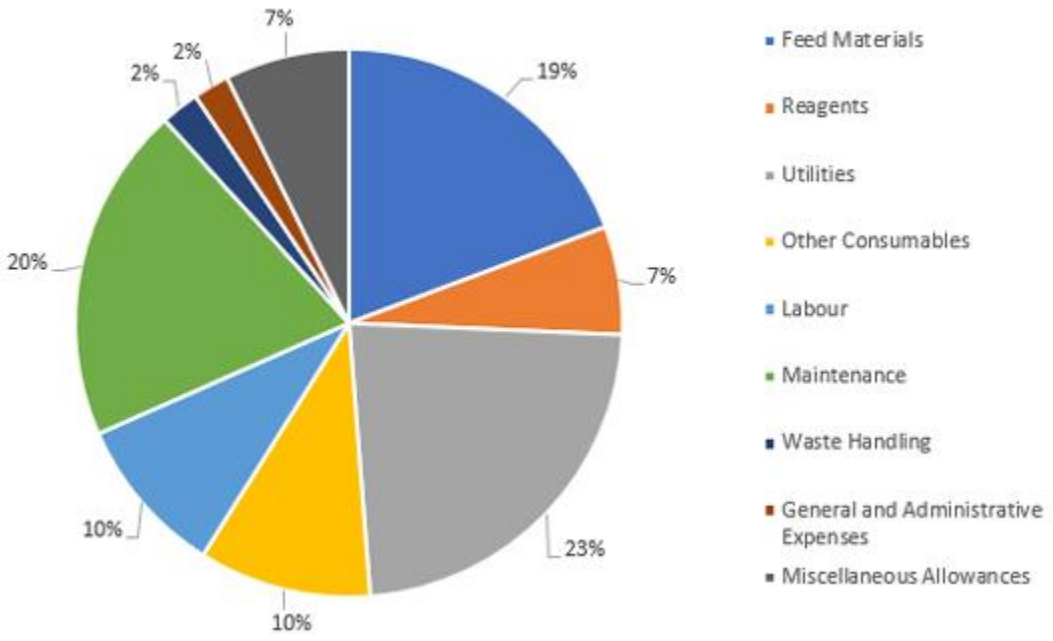


Table 29: Overall Operating Cost Summary – 175 ktpa

Cost Component	Total Operating Cost Estimate	
	Annual Operating Cost Estimate ($M/yr)	Unit Cost Estimate ($/t of Graphite Concentrate)[1]
Consumables	325.87	1,862.11
Feed Materials	106.65	609.42
Reagents	35.30	201.72
Utilities	127.60	729.13
Other Consumables	56.32	321.84
Labor	52.20	298.31
Maintenance Materials	109.83	627.61
Waste Handling	12.51	71.50
General and Administrative Expenses	11.81	67.50
Miscellaneous Allowances	40.56	231.76
Total Operating Cost Estimate	**552.79**	**3,158.78**

[1] Based on 175,000 t natural graphite feedstock

Figure 13: Overall Operating Cost Estimate Breakdown – 175 ktpa



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 177,942,645 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.

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 most recent completed financial year ended December 31, 2024 and up until the date of this AIF:

	Price Range		
Month	**High (CA$)**	**Low (CA$)**	**Monthly Trading Volume**
January 2024	1.08	0.76	1,564,800
February 2024	1.03	0.78	1,199,500
March 2024	0.96	0.77	1,000,000
April 2024	0.85	0.68	1,125,900
May 2024	0.94	0.65	663,800
June 2024	0.85	0.64	637,100
July 2024	1.01	0.55	1,560,800
August 2024	1.02	0.70	945,000
September 2024	0.79	0.72	476,700
October 2024	0.92	0.72	686,400
November 2024	0.91	0.67	829,100
December 2024	0.82	0.64	1,359,600
January 2025	1.04	0.66	1,403,800
February 2025	1.07	0.83	1,183,100
March 2025	1.01	0.81	1,074,900
April 2025	1.00	0.81	1,346,500
May 2025	1.01	0.71	1,572,800
June 2025	0.96	0.68	2,470,800
July 2025	1.14	0.65	3,668,600
August 2025	1.07	0.71	4,805,500
September 2025	1.08	0.67	6,576,200
October 2025	2.26	0.94	22,003,000
November 2025	1.84	1.03	10,284,500
December 1 - 22, 2025	2.02	1.38	5,795,971

The closing price of the common shares of the Company on the TSXV on December 31, 2024, being the last day of trading in 2024, was CA$0.68.

Prior Sales

The following table summarizes details of securities issued by the Company during the most recent completed financial year ended December 31, 2024 and up until the date of this AIF.

Date of Issuance	Security	Price per Security	Number of Securities
April 1, 2024	Exercise of Warrants	CA$1.00	5,130,873
April 8, 2024	Vesting of Restricted Share Units	CA$0.84	199,121
May 13, 2024	Exercise of Stock Options	CA$0.30	200,000
June 14, 2024	Vesting of Restricted Share Units[(2)]	CA$0.70	765,964
July 8, 2024	Vesting of Restricted Share Units	CA$0.68	194,984
October 7, 2024	Vesting of Restricted Share Units	CA$0.74	195,004
December 24, 2024	Private Placement	CA$0.75	6,374,200
December 27, 2024	Vesting of Restricted Share Units	CA$0.73	231,544
January 28, 2025	Vesting of Restricted Share Units	CA$0.78	151,093
March 19, 2025	Vesting of Restricted Share Units	CA$0.96	371,584
March 31, 2025	Vesting of Restricted Share Units	CA$0.93	171,661
May 27, 2025	Vesting of Restricted Share Units	CA$0.78	80,799
June 17, 2025	Exercise of Stock Options	CA$0.35	241,363
June 30, 2025	Vesting of Restricted Share Units	CA$0.71	171,661
August 22, 2025	Private Placement	CA$0.90	14,784,554
September 30, 2025	Vesting of Restricted Share Units	CA$0.98	171,662
October 3, 2025	Private Placement	CA$0.82	8,514,024
October 8, 2025	Exercise of Warrants	CA$1.00	22,000
October 9, 2025	Exercise of Warrants	CA$1.10	145,000
October 14, 2025	Exercise of Warrants	CA$1.00	288,000
	Exercise of Warrants	CA$1.10	1,500
	Exercise of broker warrants	CA$1.00	32,016
October 15, 2025	Exercise of Warrants	CA$1.00	1,500,000
October 20, 2025	Exercise of Warrants	CA$1.00	200,000
October 21, 2025	Exercise of Warrants	CA$1.00	100,000
November 14, 2025	Exercise of Warrants	CA$1.00	135,000
November 19, 2025	Exercise of Warrants	CA$1.10	32,800
	Exercise of Warrants	CA$1.00	330,200
November 20, 2025	Exercise of Warrants	CA$1.10	1,000,000
November 25, 2025	Exercise of Warrants	CA$1.00	30,000
	Exercise of Warrants	CA$1.10	1,000,000

Date of Issuance	Security	Price per Security	Number of Securities
November 27, 2025	Exercise of Warrants	CA$1.00	40,000
December 19, 2025	Exercise of Warrants	CA$1.21	2,802,690

Notes:
(1) Non-brokered private placement consisting of one common share and one common share purchase warrant.
(2) Pursuant to Board resolution dated December 26, 2023, the vesting dates of certain of the restricted shares units granted to employees and directors on December 27, 2022 and January 19, 2023 were being extended to June 14, 2024

ESCROWED SECURITIES

No Securities of the company are subject to escrow or to a contractual restriction on transfer.

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 4,267,331 common shares of the Company, representing approximately 2.40% 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	1,092,214	0.61%
Douglas H. Smith British Columbia, Canada	Executive Chairman and Director	Executive Chairman and Director of the Company and a professional engineer	January 29, 2014	553,201	0.31%
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	534,317	0.30%

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
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	515.491	0.29%
Patrick Smith[3][4] Arizona, United States	Director	Director of the Company and a professional geologist.	December 11, 2014	808,135	0.45%
Brian Budd[3][4] British Columbia, Canada	Director	Director of the Company and Real Estate Broker with REMAX Real Estate Group.	March 22, 2012	489,501	0.28%
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	84,176	0.05%
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	93,985	0.05%
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	30,762	0.02%
Andrew Tan British Columbia, Canada	Vice- President, Advanced Materials	Graphite Materials Consultant from March 2013 to March 2021.	N/A	65,549	0.04%

Notes:
(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 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 from 2007 to 2011, Mr. Smith raised over CA$50 million in equity and managed 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. Prior to that, he held in various positions with Luscar Ltd., a private Canadian coal company.

Mr. Smith holds B.Sc. degrees in biology and electrical engineering from the University of Alberta and is a graduate of the Program for Management Development at Harvard Business School. He has also received the ICD.D designation from the Institute of Corporate Directors in Canada.

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 or a manager to Voyager Global Mobility LLC, BLST TopCo LLC, previously, owner of Fingerhut and Orchard Brands, Big Sky Readywise Acquisition Corporation, owner of Readywise, 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.

Except as disclosed below, 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.

Mr. Packman has been appointed to the boards of several private companies that are in default under credit arrangements with their lenders. Frequently his appointment is by, or at the recommendation of, a lender to whom such defaulting debt is due. In those circumstances, the lenders are routinely making compromises with the debtor companies. In at least one of those circumstances a debtor company has ultimately made an assignment for the benefit of creditors.

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, 2024 and 2023.

Financial Year Ended	Audit Fees (1)	Audit Related Fees (2)	Tax Fees (3)	All Other Fees (4)
December 31, 2024	CA$161,763	-	CA$49,369	CA$25,506
December 31, 2023	CA$148,353	-	CA$47,426	CA$15,404

Notes:
(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, 2024, 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, 2024, 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, 2024, any material interest, direct or indirect, in any transaction that has materially affected or is reasonably expected to materially affect the Company.

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*".

On April 1, 2024, Taiga exercised all of its 2,258,957 common share purchase warrants under the Company's Warrant Incentive Program at a reduced exercise price of CA$1.00 for gross proceeds of CA$2,258,957 and received 2,258,957 Sweetener Warrants. Each Sweetener Warrant is exercisable at a price of CA$1.00 per share and expires on April 2027.

On December 24, 2024, Taiga purchased 1,880,000 units of a non-brokered private placement offering that closed on December 24, 2024 at CA$0.75 per unit for gross proceeds of CA$1,410,000. Each Unit consists of one common share of the Company and one common share purchase warrant exercisable at CA$1.00 per share and expires on December 24, 2026.

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

On October 17, 2024, the Company and its subsidiaries entered into the Chenyu Agreements which gives the Company access to critical anode active material technology to commercialize synthetic anode battery materials in the United States.

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.

The Company's independent auditor is PricewaterhouseCoopers LLP, Chartered Professional Accountants, who has prepared an independent auditor's report dated April 10, 2025 with respect to the Company's consolidated financial statements as at December 31, 2024 and 2023 and for the years then ended. PricewaterhouseCoopers LLP has informed the Company that it is independent with respect to the Company within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada, including the Chartered Professional Accountants of British Columbia Code of Professional Conduct, and any applicable legislation or regulations.

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 14, 2025 prepared in connection with the annual general and special meeting of the Company held on June 27, 2025, 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, 2024.

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

(c) Require the external auditors to report directly to the Committee.

(d) 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.

(e) 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.

(f) Review and discuss with the external auditors any disclosed relationships or services that may impact the objectivity and independence of the external auditors.

(g) Take, or recommend that the full Board of Directors take, appropriate action to oversee the independence of the external auditors.

(h) 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.

(i) Review with management and the external auditors the terms of the external auditors' engagement letter.

(j) 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.

(k) 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.

(l) Review with management and the external auditors the audit plan for the year-end financial statements and intended template for such statements.

(m) 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.