

**Gratomic Inc.**  
**MANAGEMENT DISCUSSION AND ANALYSIS**  
**(Form 51-102F1)**  
**For the six months ended June 30, 2021**



**This Management Discussion and Analysis is dated August 25, 2021.**

Gratomic Inc. (hereafter the “Company” or “Gratomic Inc.”), was incorporated under the Business Corporations Act (Ontario), R.S.O. 1990, on February 27, 2007 and is listed on the TSX Venture Exchange, OTCQX and Frankfurt exchanges (TSX-V: GRAT) (OTCQX:CBULF) (FRANKFURT:CB82). The Company’s corporate office is located at Bay Adelaide Centre - East Tower, 22 Adelaide Street West, Suite 3600, Toronto, Ontario M5H 4E3. The Company is a junior exploration company primarily engaged in the acquisition and exploration of exploration assets located in Canada and Namibia.

The following is the management discussion and analysis (“MD&A”) of the financial condition, changes in financial condition and results of operations of Gratomic Inc. for the six months ended June 30, 2021. The MD&A should be read in conjunction with the Company’s interim unaudited condensed consolidated financial statements for the six months ended June 30, 2021 ([www.sedar.com](http://www.sedar.com)) which have been prepared using accounting policies consistent with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

The Company’s ability to realize the costs it has incurred to date on its properties is dependent upon it being able to identify economically recoverable reserves; to finance their exploration and evaluation costs; to resolve any environmental, regulatory, or other constraints which may hinder the successful development of the reserves; and to attain profitable operations.

The business of mining and exploration for minerals involves a high degree of risk and there can be no assurance that current exploration programs will result in profitable mining operations. The recoverability of the carrying value of exploration and evaluation assets and the Company’s continued existence is dependent upon the preservation of its interest in the underlying properties, the discovery of economically recoverable reserves, the achievement of profitable operations, or the ability of the Company to raise alternative financing, if necessary, or alternatively upon the Company’s ability to dispose of its interests on an advantageous basis. These conditions indicate the existence of material uncertainties which cast significant doubt on the Company’s ability to continue as a going concern. Changes in future conditions could require material write downs of the carrying values.

Although the Company has taken steps to verify title to the properties on which it is conducting exploration and in which it has an interest, in accordance with industry standards for the current stage of exploration of such properties, these procedures do not guarantee the Company’s title. Property title may be subject to government licensing requirements or regulations, unregistered prior agreements, unregistered claims, aboriginal claims, and non-compliance with regulatory, environmental and social requirements.

The interim unaudited condensed consolidated financial statements have been prepared using accounting policies applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they become due. The Company has incurred a loss for the six months ended June 30, 2021 of \$15,932,383 (notably a non-cash expense was recorded during the quarter in the amount of \$13,124,500 for share based compensation) and has an accumulated deficit of \$36,474,498. The Company is a junior mining company and is subject to risks and challenges similar to other companies in a comparable stage. These risks include, but are not limited to, dependence on key individuals, investment risks, market risks, and the ability to maintain adequate cash flows, and continuing as a going concern. Cash

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on hand is currently not adequate to cover expected expenditures for the next 12 months and therefore the Company will be required to secure additional funding. These challenges and the continued cumulative operating losses cast significant doubt on the Company's ability to continue as a going concern. These interim unaudited condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts nor to the amounts or classification of liabilities that might be necessary should the Company not be able to continue as a going concern. Such adjustments can be material.

Unless otherwise specified, all dollar amounts herein are expressed in Canadian currency.

Additional information on the Company may be found on SEDAR on [www.sedar.com](http://www.sedar.com)

### **Forward-Looking Information**

In making and providing the forward-looking information included in this MD&A the Company's assumptions may include among other things: (i) assumptions about the price of metals; (ii) that there are no material delays in the optimisation of operations at the exploration and evaluation assets; (iii) assumptions about operating costs and expenditures; (iv) assumptions about future production and recovery; (v) that there is no unanticipated fluctuation in foreign exchange rates; and (vi) that there is no material deterioration in general economic conditions. Although management believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. By its nature, forward-looking information is based on assumptions and involves known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements, or results, to be materially different from future results, performance or achievements expressed or implied by such forward-looking information. Such risks, uncertainties and other factors include among other things the following: (i) decreases in the price of base metals; (ii) the risk that the Company will continue to have negative operating cash flow; (iii) the risk that additional financing will not be obtained as and when required; (iv) material increases in operating costs; (v) adverse fluctuations in foreign exchange rates; and (vi) environmental risks and changes in environmental legislation.

This MD&A (See "Risks and Uncertainties") contains information on risks, uncertainties and other factors relating to the forward-looking information. Although the Company has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in the forward-looking information, there may be other factors that cause actual results, performances, achievements or events not to be anticipated, estimated or intended. Also, many of the factors are beyond the Company's control. Accordingly, readers should not place undue reliance on forward-looking information. The Company undertakes no obligation to reissue or update forward looking information as a result of new information or events after the date of this MD&A except as may be required by law. All forward-looking information disclosed in this document is qualified by this cautionary statement.

### **Outlook and Performance Highlights**

#### Outlook

Gratomic Inc. is an advanced materials company focused on mine to market commercialization of graphite products most notably high value graphene based components for a range of mass market products. With its unique Aukam graphite asset the Company is poised to replace a large part of declining production capacity of vein graphite from Sri Lanka

#### **Aukam Graphite Asset**

Gratomic currently owns 63% of the historical Aukam graphite mine in Southern Namibia and has entered into a definitive agreement for the purchase of the remaining 37%. Aukam graphite has been tested in several high value applications including nano engineered graphenes. The Aukam graphite when converted to graphenes have proven suitable for inks & pastes for the printed electronics industry, super hydrophobic graphene variants for architectural and marine coatings, elastomers for cycle and passenger vehicle tires, and

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elements for resistive heaters. There is year round road access to the Aukam project from paved Highway B4 that runs between Luderitz and Keetmanshoop via district gravel roads south from the Highway. The infrastructure in the area is good with nearby power from the national grid, water from underground aquifers and a rail link to Luderitz and Keetmanshoop adjacent to Highway B4 approximately 70 km north of the project.

In addition to the underground workings on the Aukam property, there are five unprocessed stockpiles that remain from the historical mining. These stockpiles still contain significant graphite with assays of samples taken during detailed sampling on a 10m x 10m grid ranged between 3.98 and 57.07% Cg (carbon as graphite) and averaged 20.04% Cg (see Technical Report on the Aukam Graphite Deposit, Bethanie District, Karas Region, Namibia - September 12, 2016, gratomic.ca ). The stockpiles provide the company with a supply of high grade graphite that is ready to be processed.

**Performance highlights**

During the period ending June 30, 2021 –

- On January 12, 2021, Gratomic upgraded its pre-purchase agreement with TODAQ, to provide battery grade graphite SG16 for the EV Battery Market. The agreement provides that TODAQ will purchase an aggregate of graphite valued at US\$25,000,000 from Gratomic's Aukam Graphite Project in Namibia over a 36-month period in exchange for a non-cash digital asset created by TODAQ as a medium for exchange and store of value known as a TODA notes ("TDN").
- On January 15, 2021, Gratomic announced the following product marketing and sales strategy initiatives:
  - Planned upgrades at its laboratory facilities at Aukam will enable the characterization of the initial production batches generated during the commissioning process. Results will assist with process control defining parameters required to ensure repeatability and efficiency of the production.
  - As a supplement to Gratomic's main strategic focus on the battery industry and graphene, Gratomic will pursue the development of graphite grades commonly used in applications such as graphitic foil, lubricants, crucibles, refractories, friction materials and ceramics, among others. This will allow the Company to diversify its portfolio and optimize the output of the processing plant.
  - Gratomic's Product Marketing team shipped an additional 550 kg of graphite samples to Toronto for conversion to SG16 Battery Grade product specifications in addition to the initial shipment of 243Kg of graphite previously dispatched (see press release dated Oct 28,2020). Both samples are destined for distribution to Battery OEM Manufacturers.
- January 20, 2021 the Company appointed Karl Trudeau as a Director of the Company and Head of Namibian Operations. Karl brings to the Board his unique experiences in building and operating some of the most profitable graphite mines in the Western World. Working for Imerys Graphite et Carbonne, he operated and optimized the Lac-Des-Îles graphite mine to become the most profitable mining operation in Quebec in 2014. An additional significant milestone achieved with Imerys included the construction and development of the Okanjande Graphite Mine in Namibia, Africa.
- On March 2, 2021, Gratomic granted 8,850,000 options to Directors, officers, employees and consultants of the Company exercisable at \$1.54 per share for five (5) years.
- On February 22, 2021, Gratomic announced that all of the \$1,500,000 convertible debentures had been converted to common shares of the Company.
- On March 26, 2021, the Company's common shares were approved for trading on the OTCQX® in the United States under the symbol (OTCQX:CBULF). The OTCQX® Best Market is for established, investor-focused U.S. and international companies. To qualify for OTCQX, companies must meet high financial standards, follow best practice corporate governance, and demonstrate compliance with applicable securities laws. Graduating to the OTCQX Market from the OTCQB

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Market marks an important milestone for companies, enabling them to demonstrate their qualifications and build visibility among U.S. investors.

- On March 29, 2021, Gratomic officially started the commissioning phase of its processing plant in Aukam, Namibia.
- On March 31, 2021, plans were announced to build a pilot facility to internally process up to 1,000 tons of SG16 battery grade anode materials for the Electronic Vehicle ("EV") battery market in the second half of 2021. The initial pilot facility is expected to be followed by the construction of a demonstration facility, which will process up to 2,000 tons per annum beginning in 2022 and up to 20,000 tons per annum once the demonstration facility is converted into full final production phase. The facility will be located at the Company owned warehouse located at the Port of Luderitz Bay. While Gratomic completes the development of the pilot facility graphitic material will be shipped to Forge Nano, Inc. ("Forge Nano") for Atomic Layer Deposition ("ALD") coating in preparation for use as a battery anode material. This processing facility will enable the Company to take Aukam raw graphite material to the final stages required for use in battery anode applications. Forge Nano's ALD coating technology for use in lithium-ion battery anode applications, could result in significant gains in performance to Gratomic's SG16 battery graphite compounds.
- On April 8, 2021, Gratomic announced the intention to fully power its Aukam processing facility using solar energy by 2022, offering an even greener option to the global electric vehicle supply chain. This will enable the Company's Aukam processing plant to transition from traditional fuel generators to clean, renewable and sustainable solar power. Implementing solar into its already highly energy efficient operations will further reduce the Company's already nearly negligible carbon footprint, which was internally calculated at an estimated 0.8Kg/tonne.
- On April 19, 2022, Gratomic announced that it has secured DTC eligibility on the common shares of the Company, CUSIP 38900X 207 (ISIN CA38900X2077), which are now DTC eligible to facilitate trading, settlement and clearance in the US.
- On June 2, 2021, the Company has engaged Hybrid Financial Ltd. ("Hybrid") of Toronto, Ontario to provide marketing services to the Company. Hybrid has been engaged to heighten market and brand awareness for Gratomic and to broaden the Company's reach within the investment community.
- On June 29, 2021, the Company has finalized the terms of a definitive agreement with Next Graphite, Inc. for the acquisition of its 37% interest in Gazania Investments Two Hundred and Forty Two Limited, the Namibian company which holds the licenses on the Aukam property.
- On June 30, 2021, Gratomic became the first Canadian company to be listed on the world's first technology metals market, the platform Technology Metals Market ("TM2"). TM2 has just officially launched the world's first technology metals marketplace in partnership with NASDAQ, providing access to the high-value metals that power technology globally, in a secure and efficient venue with strict regulation and governance. In addition to increasing the asset classes available to investors, the platform brings transparency to scarce and illiquid metals, institutionalizing trading, pricing and volumes on the global metals market. The TM2 platform is open for institutional investors and also enables trading access for individual investors through broker partners. Technology metals are fundamentally irreplaceable inputs to 21st century supply chains and critical to the future of sustainable energy applications, electric vehicles, aerospace and robotics. Gratomic is currently developing and testing an exclusive product established for TM2. Product M97 is high quality vein graphite, ideal for various applications and can be adapted and customized by end users in Lithium-Ion battery applications based on specific OEM requirements. M97 is currently undergoing testing and will not be publicly traded until the metals exchange is satisfied with the final quality of the product, have accepted the product for exchange and has sufficient quantities of the product exist for trading. Gratomic is looking forward to the long-term benefits of this venture.

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## Exploration and Evaluation Expenditures

Exploration and evaluation expenditures for the six months ended June 30, 2021 are summarized as follows:

Outlays by expenditure category, by project, for the three months ended June 30, 2021 and 2020 are as follows:

	Aukam Namibia project		Montpellier Quebec project		Buckingham Quebec project		Total	
	2021	2020	2021	2020	2021	2020	2021	2020
	\$	\$	\$	\$	\$	\$	\$	\$
Drilling and related costs	441,846	-	-	-	-	-	441,846	-
Geological and other consulting	-	2,928	-	-	-	-	-	2,928
	441,846	2,928	-	-	-	-	441,846	2,928

Outlays by expenditure category, by project, for the six months ended June 30, 2021 and 2020 are as follows:

	Aukam Namibia project		Montpellier Quebec project		Buckingham Quebec project		Total	
	2021	2020	2021	2020	2021	2020	2021	2020
	\$	\$	\$	\$	\$	\$	\$	\$
Drilling	441,846	-	-	-	-	-	441,846	-
Geological and other consulting	166,792	13,573	-	933	-	7,744	166,792	22,250
	608,638	13,573	-	933	-	7,744	608,638	22,250

## Results of Operations

The following table provides selected financial information for the six months ended June 30, 2021 and 2020.

	For the three months ended		For the six months ended	
	June 30,		June 30,	
	\$	\$	2020	2019
	2021	2020	\$	\$
Operating expenses	(2,559,205)	(413,840)	(15,932,383)	(602,194)
Net loss	(2,559,205)	(921,263)	(15,932,383)	(1,109,617)
Net loss per share	(0.02)	(0.02)	(0.12)	(0.02)
Exploration and evaluation assets	6,321,924	5,641,361	6,321,924	5,641,361
Total assets	17,565,634	10,082,587	17,565,634	10,082,587

## Revenues

At this time, the Company has no sales or revenues.

## Expenses

The major expense items for the three and six months ended June 30, 2021 and 2020 are summarized as follows:

	For the three months ended		For the six months ended	
	June 30,		June 30,	
	\$	\$	\$	\$
	2021	2020	2021	2020
Consulting	310,773	79,591	507,698	82,591
Filing fees and permits	52,959	30,926	113,276	38,480
Investor relations	30,532	-	316,605	4,725
Management fees	357,501	51,000	490,002	109,237
Marketing	268,448	68,553	598,957	80,927
Office and other	214,485	169,152	305,869	249,648
Professional fees	110,928	14,618	238,099	36,586
Share-based compensation	1,200,000	-	13,324,500	-
Travel, meals and accomodation	13,579	-	37,377	-
	2,559,205	413,840	15,932,383	602,194

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Comments on the six months ended June 30, 2021:

The 2021 results include share based compensation (a non-cash item) of \$13,324,500 (2020 – Nil), and higher operating costs reflecting the ramp-up of activities in Aukam and increased marketing and investor relations efforts.

### **Exploration and Evaluation Assets**

The technical content of the mineral property disclosure in this MD&A has been reviewed and approved by Steven Gray, B.Sc., P. Geo, Gratomic's QP and a qualified person as defined by National Instrument 43-101. Except where noted the property disclosure in this MD&A has not been the subject of a National Instrument 43-101 report.

### **Description of properties:**

#### **Aukam Graphite Project, Namibia**

The Aukam Graphite project is a property located in Namibia's Karas Region in Africa. The Aukam property is comprised of Exclusive Prospecting Licences EPL 3895, EPL 6710, EPL 7512, EPL 7513, in respect of base and rare metals, industrial minerals, and precious metals. Located in the district of Bethanie, Karas region of southern Namibia, the licence areas total 137,473 hectares, are contiguous and include the farm Aukam104 and Harichab121.

Graphite in the Aukam area is hosted by altered Garub Sequence granite that is exposed in an erosional window in the Nama cover. Graphite mineralization at Aukam occurs as massive lenses and veins, and as disseminated patches mostly associated with strong alteration. It is hosted by an east-west trending shear zone traceable on surface for about 400 metres along with mapping indicating the mineralization may extend for four kilometres.

The rights to explore and develop parts of the property, which are of primary interest, are owned by Gazania Investments Two Hundred and Forty Two (Pty) Ltd ("Gazania"). The Company owns a 63% interest in Gazania and the remaining 37% is owned by a company called Next Graphite, Inc. ("NextG").

On November 19th, 2020 the Company entered into a definitive agreement with NextG, for the acquisition of NextG's 37% interest in Gazania 242 Pty Ltd. The acquisition is still in process. In consideration for the interest, Gratomic will, upon closing of the acquisition, issue a total of 25,758,915 common shares in the capital of Gratomic and a cash payment of \$100,000. The shares will be subject to an 18-month escrow subject to the release of 1/3 of the original balance every 6 months.

A 2% revenue royalty is payable to the individual who farms the property.

Under Namibian laws royalties are payable in connection with the Aukam Graphite Project as follows:

- a) A 3% revenue royalty is payable the Namibian government.
- b) A 6% net profit incentive, required under the Namibian Economic Empowerment Framework, is payable to employees working on the project.

#### **Montpellier Graphite Property, Quebec**

The Montpellier property consists of claims located in the Hartwell Township, Casse Laurentides Region in Quebec. The property hosts graphite mineralization in a zone 15 meters wide, and has been delineated over a strike length of 250 meters by historical drilling and trenching. Graphite occurs disseminated in marble and paragneiss and within veins hosted in pegmatite, diopside skarn, marble and gneiss.

The historical drilling at Montpellier included one drill hole with a weighted average of 10.47% Cg (Carbon as graphite) over 44.97 meters and 12.33% Cg over 21.64 meters. (1984, Ministère de l'Énergie et de Ressources Québec, Report Nos. GM42965, 80p; GM41744, 41p.). Note that estimates of true thickness were not determined in the historical drilling. Two other graphite zones occur 575 meters east of the main zone of mineralization.

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During 2016 an airborne electromagnetic and magnetic survey was carried out over the property to determine possible extensions to the graphite mineralization. Results of the survey indicate a single, wide, prospective area defined by electromagnetic conductors and associated magnetic anomalies that appear to be folded into a “C” shape about an east-west trending axis. The strike length of the folded conductors and associated magnetic anomalies is more than 2.2 kilometres.

The vendors have been granted a 2% net smelter royalty (“NSR”). The Company has the right to repurchase a 1% NSR from the vendors for \$1,000,000.

**Buckingham Property, Quebec**

The 100%-owned Buckingham Graphite Property is located 7 kilometres northwest of the town of Buckingham, Quebec, Canada and 82 km north of Imerys Graphite & Carbon’s operating Lac des Iles graphite mine. The property consists of eight claim blocks totaling 480 hectares and is accessed by well maintained bush roads.

The property is located within the Central Metasedimentary Belt of the Grenville Geologic Province. It is underlain by paragneiss and marble, with associated pegmatite, and amphibolite. Graphite occurs disseminated in marble and paragneiss and within veins hosted in pegmatite, diopside skarn, marble and gneiss. Two graphitic zones, the Uncle Zone and the Case Zone have been discovered to date, with both zones showing high grade occurrences of disseminated flake and vein type graphite and yielding assay values as high as 81.1% Cg. Initial crushing and flotation of two samples from the Uncle Zone has achieved purity of up to 99.4% Cg from a single flotation test without process optimization (see news release dated February 17, 2015).

Airborne time domain electromagnetic (TDEM) survey flown over the Buckingham project in 2016 outlined several anomalies. The largest conductor stretches over 1.54 kilometres in a northeast-southwest direction. The northeastern portion of this conductor is coincident with graphite mineralization in the Case Zone from which 35 grab samples collected in 2015, yielded values ranging from 1.6% Cg to 28.7% Cg (See news releases dated May 22, 2015 and November 4, 2015). The length of the conductor suggests that the Case Zone may be longer than previously thought.

Trenching during Q4-2016 along the TDEM conductor uncovered zones of graphite mineralization hosted primarily by paragneiss. Highlights of the trench sampling include 8.33% Cg over 11.3 metres, 2.76% Cg over 15 metres, 2.23% Cg over 27 metres and 1.52% Cg over 65.5 metres. Individual samples assayed between 0.02% Cg and 17.3% Cg, with an average of 1.92% Cg for the 158 samples.

In 2017 additional trenching and diamond drilling were executed to follow up on the successful results of the 2016 trenching program. Highlights of the work included trench results of 15.0% Cg over 8.0 metres, and diamond drill results of 7.4% Cg over 12.0 metres, in hole CK17-01, and 6.1% Cg over 88.0 metres beginning at nine metres, included a higher-grade interval of 20.7% Cg over 8.0 metres in hole CK17-02

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**Summary of Quarterly Results**

The following table sets out selected consolidated quarterly information for the last eight quarters.

	<b>June 30 2021 \$</b>	<b>March 31 2021 \$</b>	<b>December 31 2020 \$</b>	<b>September 30 2020 \$</b>
Exploration and evaluation assets	6,321,924	5,880,077	5,713,285	5,651,999
Deficit	36,474,498	33,915,292	20,542,115	19,239,617
Total Assets	17,565,634	17,439,337	9,961,823	9,545,496
Net and Comprehensive Loss	2,559,205	13,373,177	1,302,498	1,231,524
Basic and Diluted Loss Per Share	0.02	0.10	0.02	0.02

	<b>June 30 2020 \$</b>	<b>March 31 2020 \$</b>	<b>December 31 2019 \$</b>	<b>September 30 2019 \$</b>
Exploration and evaluation assets	5,641,361	5,630,716	5,619,111	5,616,296
Deficit	18,008,093	17,086,830	16,898,476	16,168,593
Total Assets	10,082,587	8,516,915	8,641,626	8,591,572
Net and Comprehensive Loss	921,263	188,354	729,882	542,275
Basic and Diluted Loss Per Share	0.02	0.01	0.01	0.02

**Q2 2021**

The 2021 Q2 loss of \$2,559,205 (2020 - \$921,263) includes a non-cash charge for share based compensation of \$1,200,000 (2020 - \$Nil), and higher operating and investor relations costs commensurate with increased activity during the quarter.

**Q1 2021**

The 2021 Q1 loss of \$13,373,177 (2020 - \$188,354) includes a non-cash charge for share based compensation of \$12,124,500 (2020 - \$Nil), and higher operating and investor relations costs commensurate with increased activity during the quarter.

**Q4 2020**

The 2020 Q4 loss of \$1,302,498 (2019 - \$729,882) includes an impairment loss of \$541,470 (2019 - \$Nil), interest expense \$83,391 (2019 - Nil), shareholder indemnification \$150,000 (2019 - Nil) and operating expenses \$610,651 (2019 - \$729,882).

**Q3 2020**

The 2020 Q3 loss of \$1,231,524 (2019 - \$542,275) includes share based compensation \$624,000 (2019 \$8,492) and interest expense \$99,045 (2019 - Nil).

**Liquidity**

Presently the Company has a working capital of \$ 5,657,835 and will need funding to meet its operating plans over the next 12 months.

Future exploration and development programs will depend on the Company's ongoing ability to raise funds. Gratomic Inc. is an exploration stage company and continues to rely on equity offerings and other partnership arrangements to fund its activities. There can be no assurance that funds will be available.

**Capital Resources**

Unusual factors that favourably affected the Company's capital resources during the six months ended June 30, 2021 were the exercises of warrants and options and conversion of the convertible debentures into common shares as noted herein.

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**Off Balance Sheet Arrangements**

The Company is not a party to any off balance sheet arrangements or transactions.

**Transactions With Related Parties**

The Company has determined that key management consists of the Company's Board of Directors and corporate officers, including the Company's Chief Executive Officer and Chief Financial Officer. The Company paid or accrued the following amounts to key management, and private corporations owned by them:

	For the three months ended		For the six months ended	
	June 30,		June 30,	
	2021	2020	2021	2020
	\$	\$	\$	\$
Fees charged to:				
Management fees	585,731	51,000	887,317	109,237
Professional and other expenses	82,087	7,230	194,590	27,000
Share-based payments	888,000	-	5,957,000	-
	1,555,818	58,230	7,038,907	136,237

During the three months ended June 30, 2021, legal fees in the amount of \$194,590 (2020 – \$72,403) were paid or payable to a law firm whose partner is an officer of the Company.

Included in accounts payable and accrued liabilities at June 30, 2021, was \$2,000 (2020 – \$266,817) owing for services to directors, and officers, companies owned by directors and officers, and a law firm whose partner is a director and an officer of the Company.

**Events Affecting the Company's Financial Condition**

Unusual factors that favourably affected the Company's financial condition during the six months ended June 30, 2021 were the exercises of warrants and options and conversion of the convertible debentures into common shares as noted herein.

**Critical Accounting Judgements and Key Sources of Estimation Uncertainty**

Critical judgements exercised in applying accounting policies that have the most significant effect on the amounts recognized in the interim unaudited condensed consolidated financial statements are as follows:

i) Determination of functional currency

The Company determines the functional currency through an analysis of several indicators such as expenses and cash flows, financing activities, retention of operating cash flows, and frequency of transactions with the reporting entity.

ii) Capitalization of deferred exploration costs

Minority interest and equity are adjusted to reflect the ownership interest of consolidated subsidiaries in which a minority interest shareholder has a carried interest.

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Management is required to assess impairment of intangible exploration and evaluation assets and property and equipment. The triggering events are defined in IFRS 6 and IAS 36 respectively. In making the assessment, management is required to make judgments on the status of each project and the future plans toward finding commercial reserves to which the exploration and evaluation assets and property and equipment relate to.

Management has determined that there were no triggering events present as at June 30, 2021 and 2020, as defined in IFRS 6 and IAS 36, as such, no impairment test was performed.

Critical estimates exercised are as follows:

i) Valuation of share-based compensation

The Company uses the Black-Scholes Option Pricing Model for valuation of share-based compensation. Option pricing models require the input of subjective assumptions including expected price volatility, interest rates, and forfeiture rate. Changes in the input assumptions can materially affect the fair value estimate and the Company's earnings and equity settled benefits.

ii) Income taxes

In assessing the probability of realizing income tax assets, management makes estimates related to expectations of future taxable income, applicable tax opportunities, expected timing of reversals of existing temporary differences and the likelihood that tax positions taken will be sustained upon examination by applicable tax authorities. In making its assessments, management gives additional weight to positive and negative evidence that can be objectively verified.

iii) Property and equipment

Management reviews the carrying value of long lived assets including plant and equipment and amortizable intangible assets for impairment to determine if the carrying value of an asset may not be recoverable due to changes in the current and expected future use of the asset, external valuations of the asset, and the obsolescence or physical damage to the asset. If such indicators of impairment exist, the asset's recoverable amount is estimated. An impairment loss is recognized if the carrying amount of an asset or its related cash generating unit exceeds its estimated recoverable amount.

iv) Flow-through shares

Canadian Income Tax legislation permits an enterprise to issue securities, referred to as flow-through shares, whereby the investor can claim the tax deductions arising from the renunciation of the related resource expenditures. The Company accounts for flow-through shares whereby any premium paid for the flow through shares in excess of the market value of the shares without flow-through features at the time of issue is credited to flow-through premium liability and included in profit or loss at the same time the qualifying expenditures are made.

v) Valuation of convertible debentures

The Company allocates the total proceeds received from the issuance of convertible debentures, net of issuance costs, to debt and equity. The fair value of the debt is estimated using discounted cash flows using an estimated cost of borrowing. The estimated cost of borrowing represents what the Company may borrow secured debt at without a conversion option. The residual was allocated to equity.

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## **Risk Management**

### **Credit Risk**

The Company's credit risk is primarily attributable to amounts receivable. The Company has no significant concentration of credit risk arising from operations. Management believes that the credit risk concentration with respect to the financial instrument included in amounts receivable is remote.

### **Liquidity Risk**

The Company's main source of liquidity is derived from common stock issuances. As at June 30, 2021, the Company had current assets of \$6,119,148 (December 31, 2020 - \$1,732,126) to settle current liabilities of \$461,313 (December 31, 2020 - \$1,294,927). All of the Company's accounts payable and accrued liabilities have contractual maturities that are subject to normal trade terms.

### **Interest Rate Risk**

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company has cash balances and no interest-bearing debt. The Company's current policy is to invest excess cash in investment grade short term deposit certificates issued by its banking institutions. The Company monitors its cash balances and is satisfied with the creditworthiness of its banks. As a result, the Company's exposure to interest rate risk is minimal.

### **Market Risk**

#### **Foreign Currency Risk**

The Company's functional and reporting currency is the Canadian dollar and all expenditures are transacted in Canadian dollars. As a result, the Company's exposure to foreign currency risk is minimal.

### **Price Risk**

The Company is exposed to price risk with respect to commodity prices. The Company closely monitors commodity prices to determine the appropriate course of action to be taken by the Company. As the Company's properties are in the exploration stage and to date do not contain any identified mineral resources or reserves, the Company does not hedge against commodity price risk.

### **Sensitivity Analysis**

Based on management's knowledge and experience of the financial markets, the Company believes the following movements are reasonably possible over a twelve-month period:

- (i) The Company receives low interest rates on its cash and cash equivalent balances and, as such, the Company does not have significant interest rate risk.
- (ii) The Company holds balances in foreign currencies that give rise to exposure to foreign exchange risk, however at any point in time the balances are not significant. The Company estimates that a 10% increase or decrease in the foreign currency would give rise to a gain or loss of approximately \$20,000 respectively.

## **Mining License Update**

On May 6, 2020, Gratomic received confirmation from the Ministry of Mines and Energy of Namibia that the Minister has issued Mining Licence 215 (ML215) for the Company's Aukam Graphite Property in Namibia.

We would like to thank the Ministry for their co-operation and hard work to assist Gratomic's progression into a mining company from a junior exploration company.

## **Operations Update**

On January 14, 2020, Gratomic announced that it has completed the settling reservoir on the mine site and has begun the commissioning process on the settling and water filtration tanks.

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On March 12, 2021, Gratomic assigned Metalla Tutum Engineering as a key procurement agent in South Africa. Metalla's role is to identify equipment suppliers, used equipment available in the market, and engineering services, in order to support Gratomic's needs during the final stage of the processing plant construction.

On March 29, 2021, Gratomic announced that it has officially started the commissioning phase of its processing plant in Aukam, Namibia. Commissioning will begin with the crushing circuit and progress throughout the other areas of the plant systematically in order of progression.

Commissioning of a mining processing plant is usually divided into 6 progressive stages:

- C0 - Constructed to Design including Factory Acceptance
- C1 - Pre-commissioning
- C2 - Direction Testing
- C3 - No Load / Dry Commissioning
- C4 - Load / Wet Commissioning
- C5 - Project Completion

Gratomic entered into Direction Testing (C2 phase) of the equipment composed of the crushing circuit of the plant. This stage consists of energizing the equipment and ensuring it rotates in the right direction, stroking the control systems, calibrating instruments and verifying protections.

On April 13<sup>th</sup>, 2021, the Company announced that the filter press and rotary dryer were lifted into position, which brought to completion the equipment assembly phase and brought the project into the C1 (pre-commissioning) stage for this section of the plant.

Following the fitting of the filter press and dryer, Gratomic's on-site team began working on the critical dewatering circuit, complementing previously completed construction with additional civil and framing work on the newly refurbished material thickener.

Local South African firms Metalla Tutum, in partnership with Zimpro Engineering, have started modifying and conditioning the material thickener, to optimize its function as a critical piece of the dewatering circuit.

On May 14, 2021, Gratomic advised that an employee at its Aukam site, working in the sanitary department, tested positive for Covid-19. The employee and all employees with whom she came in contact have been required to self-isolate in their homes, with pay. All staff was required to present a negative Covid-19 test result before returning. The Company thoroughly disinfected all facilities on the mine site. The Company had implemented all necessary precautionary measures recommended by worldwide and local health authorities in order to minimize the transmission of Covid-19 when activities resumed at the Aukam site in mid-2020. All employees are required to wear masks, protective eyewear, maintain social distancing and practice proper cleaning habits and comply with all local government protocols relating to Covid-19. The Company had also implemented a system whereby employees worked within designated limited groups, departments or bubbles further limiting potential exposure to its workforce. Due to the extraordinary steps the Company has taken to limit the spread of COVID, several other departments at the Aukam site continued to operate. The employee who tested positive for Covid-19 recovered at home in isolation, without further complications to her health condition, and returned to her duties after testing negative. Further PCR tests identified three additional employees with positive results, none of whom showed symptoms of the disease. They remained in self-isolation until testing negative and returning to duty.

### **Engineering Update**

The final layout for the processing plant has been completed. The plant was designed in a east-north-east direction 220m linear distance from the main adit.

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The grinding circuit equipment;

Jaw crusher – to reduce the material size for the horizontal impact crusher. Completed  
8m conveyer – Transport material to the horizontal impact crusher. Completed  
Horizontal Impact crusher – reduce material size to below 2.2mm for the mill. Completed  
8m conveyer – transport crushed material to the vibrating screen. Completed  
3 Layer vibrating screen – split the material in under and oversize. Completed  
2× 12m Conveyers transporting the oversize material to the horizontal impact crusher. Completed  
3m conveyer – transport the undersize material to storage.  
87ton capacity material storage – catchment area for the undersize material  
6.6m screw conveyer - to transport material from storage to the rod mill  
Rod mill – grind the material to optimal flotation size. Completed  
3× Cyclone – sorts the mill discharge in under and oversize, under size will be transported to the thickner and oversize regrinded in the mill.

The flotation circuit;

9m Thickner – the undersize material from the cyclone will settle in the thickner before entering the flotation circuit.  
3× mixing tanks – one for each flotation step, each including its own chemicals dosing system  
2× rougher columns 6475mm high × Ø1377 – initial flotation  
2× cleaner columns 6475mm high × Ø1377 – final flotation  
2× scavenger columns 6475mm high × Ø1377 – recover graphite missed by the rougher and cleaner columns.  
6m thickner – the cleaner columns feed into the thickner for the final concentrate to settle.

The drying circuit;

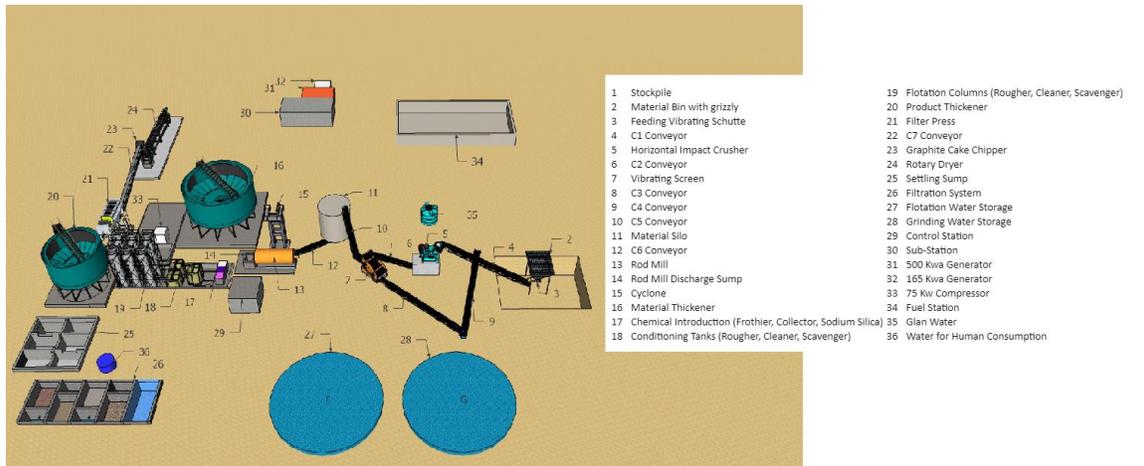
Filter press – the 6m thickner feeds the filter press to remove 90-95% of the liquids from the concentrate.  
Chipper – the filter press produces a 1000 × 1000 graphite concentrate cake. The chipper breaks the cake for efficient drying.  
Rotating dryer – Dries the final product to less than 0.5% moisture content.

Filtration station;

Three Settling pond are employed to settle out all the material in the water:  
7200 × 7200 × 2500 settling pond  
7200 × 7200 × 2000 settling pond  
7200 × 7200 × 1500 settling pond

8 brick wall water tanks will act as the sand-based filtration system to recover most of the water for re-use in the plant.

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The Company has assembled an Engineering team in order to support the final steps of the project execution, This team is comprised of Danie Mostert as Head of Engineering, Klippies Kotze as Procurement Consultant, Malano Hein as Draughtsman, and Adriaan Badenhorst as Civil Engineer

### Management Update

On January 20, 2021, Gratomic announced the appointment of Karl Trudeau as a Director of the Company and Head of Namibian Operations. Previously in a consultant's position, Karl now brings to the Executive Team and to the Board his unique experiences in building and operating some of the most profitable graphite mines in the Western World. The strength of established working relationships on previous projects with Armando Farhate and Andre Bennet and having a strong track record of delivering to plan will be a key contributing factor to the success of the Aukam Graphite Project.

On March 2, 2021, Stephen Woodhead joined the Gratomic Namibia team as Senior Vice President of Finance. Mr. Woodhead has extensive experience in other African and Canadian mining companies as Chief Financial Officer. Stephen will implement the finance structure necessary to transition the Company from an exploration company to a producing mine.

On March 4, 2021, Andre Bennet was appointed Aukam Site Manager and retains his role as maintenance manager.

On April 6, 2021, Gratomic announced that Walter Luke had stepped down as a director. On May 7<sup>th</sup>, the company announced that Steven Grey was being replaced at the Board of Directors by Lynne Brand, in the capacity of Interim Director. On May 12, 2021, the Company announced that Alex Hemmel stepped down as an Independent Board Director, and was replaced in the same function by Daniel Baard. On May 19<sup>th</sup>, Gratomic announced Bruno Baillavone as Independent Board Director.

On April 7, 2021, Gratomic announced Nico Scholtz Pr. Sci. Nat. (Reg. No. 400299/07) as Qualified Person (QP) for the Aukam resource drilling. Nico is a Qualified Person (QP) under the JORC, SAMREC and National Instrument (NI) 43-101 legislation.

On April 8, 2021, the Company announced that Dean Esau had started her new position as HR Officer & Administrative Assistant, Namibia. She is a highly resourceful, results and compliance oriented professional with experience in Human Resources and Office Administration. Dean possesses strong interpersonal skills and is very much a team oriented individual. She has excellent time management skills, strong organizational skills, strong ethics and reliability. Esau's skillset has been refined over her career.

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**TODA Notes Update**

On January 12, 2020, Gratomic announced that it has upgraded its pre purchase agreement with technology company, TODAQ Star Program Phase 1 Corp. (“TODAQ”), a subsidiary of TODAQ Holdings Inc., pursuant to the terms of a new agreement dated January 7, 2020 between the Company and TODAQ (the “Supply Agreement”) to provide battery grade graphite SG16 for the EV Battery Market. Under the agreement TODAQ will purchase graphite valued at US\$25,000,000 from Gratomic’s Aukam Graphite Project in Namibia over a 36-month period in exchange for a non-cash digital asset created by TODAQ as a medium for exchange and store of value known as a TODA note (“TDN”). The Supply Agreement fulfillment has been negotiated at an exchange rate of USD\$0.30 per TDN note.

The Supply Agreement contemplates that Gratomic will deliver to TODAQ 5,000 tonnes of SG16 product valued at USD\$25 million under the terms of the agreement, over a 36-month period. TODAQ will put in an initial order of 1,800 tonnes, valued at USD \$9 million, in exchange for 30,000,000 TDN, over the first 90-day period of the contract.

The Supply Agreement now fixes the value of the TDN notes at USD\$0.30 for the purchase of the entire 5000 tonnes providing a fixed value and certainty for the Company. The first delivery date has not yet been established and will depend upon when the Company completes the construction of its processing plant at the Aukam Project in Namibia (see Press Release dated December 31, 2020 for an update on the status of the processing facility). When the Company is ready to deliver the SG16 product to TODAQ, it will inform TODAQ. TODAQ will then submit a purchase order for an initial 600 tonnes of product valued at \$3 million and TODAQ will issue 10 million TDN to the Company. The Company will have 90 days thereafter to deliver the product to an on-site warehouse at the Aukam Property under the control of TODAQ which will constitute good delivery for the product. The Company intends to hold onto any TDN received for a minimum six months after which it will start liquidating the TDN into cash. See “Risk Factors” below.

As part of the Supply Agreement, both TODAQ and Gratomic will also be establishing a jointly owned entity, Q Corp, to hold an initial reserve of 60 million TDN to be used to build a treasury of commodities including graphite. As well, Q Corp will be provided with digital supply chain, custody, wallet and trading solutions by TODAQ USA, the digital solution provider of TODAQ, so Gratomic customers and graphite owners can own verifiably authentic and clean graphite which can be traded peer-to-peer and brought to exchange markets. Q Corp offers the option to Gratomic to trade excess production coming from its Aukam Processing facility to Q Corp.

**Subsequent Events**

Subsequent to June 30, 2021, 1,351,950 shares have been issued with an approximate value of \$1,261,475 as a result of exercises of 1,251,950 warrants and 100,000 options.

Subsequent to June 30, 2021, the Company purchased an office and real estate in Namibia, both to support operations. The total purchase price is the equivalent of \$1,436,500 and was satisfied by the issuance of 1,072,015 common shares of the Company. Closing of the share purchase agreement is subject to the fulfillment of standard closing conditions and the approval of the TSX Venture Exchange.

On July 29, 2021 the Company announced that it has acquired the remaining 37% interest in Gazania Investments Two Hundred and Forty Two (Proprietary) Limited, the Namibian company which holds the licenses on the Aukam property. The interest was acquired in exchange for 25,758,915 common shares of the Company, a cash payment of \$100,000, and future consideration of US \$250,000. See Note 4 in the Company’s June 30, 2021 interim unaudited condensed consolidated financial statements for further details.

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**Other Disclosures**

Share Capital

Common Shares -

As at June 30, 2021, and the date hereof, there were 139,415,563 and 167,598,443 common shares respectively of the Company issued and outstanding.

Warrants -

At June 30, 2021 and the date hereof there were a total of 2,479,100 and 1,077,450 warrants respectively outstanding.

Options -

At June 30, 2021, and the date hereof, there were a total of 13,045,000 and 11,885,000 stock options respectively outstanding.

Additional Information -

Additional information about the Company including the financial statements, press releases and other filings are available on the internet at [www.sedar.com](http://www.sedar.com) and additional supplemental information is available on the Company website at [www.gratomic.ca](http://www.gratomic.ca).