

**GRAPHANO ENERGY LTD. (THE “COMPANY”)  
MANAGEMENT’S DISCUSSION AND ANALYSIS (“MD&A”)  
FOR ITS FIRST QUARTER PERIOD ENDED OCTOBER 31, 2021**

Graphano Energy Ltd. (“Graphano” or the “Company”) was incorporated on October 6, 2020, as a newly formed, wholly owned subsidiary of Manganese X Energy Corp. (“MN”), a public company whose shares are listed on the TSX Venture Exchange (the “Exchange”) to hold MN’s Lac Aux Bouleaux (“LAB”) graphite property in the Province of Quebec, Canada. The intent was and is to serve as a vehicle for the separate listing on the Exchange (the “Listing”) of the shares of Graphano and the spin-out to MN’s shareholders of the LAB property providing greater focus to its further exploration and development as a separate operation. The spin-out has been accomplished by way of Plan of Arrangement (the “Plan”) and MN’s shareholders approved the Plan at a shareholders’ meeting held April 12, 2021. The Exchange provided its final approval for the Listing, and trading began on September 30, 2021, under the symbol of GEL.

Graphano is a British Columbia registered company with its Registered Office at 1000 - 595 Burrard Street Vancouver, British Columbia V7X 1S8, and it maintains a business office at 120 Carlton Street Suite 219, in Toronto, Ontario. Its public filings are available at [www.SEDAR.com](http://www.SEDAR.com) and on its own website at [www.graphano.com](http://www.graphano.com).

Graphano’s shares trade on the Exchange under the trading symbol GEL.

Private placements of units of the Company’s securities (the “Private Placements”) have been undertaken. Each unit consisted of one common share of the equity of the Company at a price of \$0.05 per share and one warrant to purchase a further common share at a price \$0.08 per share for a period of two years following Closing (the “Unit”). For technical reasons, the Exchange required that the shares of the company be consolidated on a one for 6.5 shares basis so that these placements were effectively done at a price of \$0.325 cents per unit with the warrants exercisable at \$0.525.

The Company’s initial Directors are Mr. Nathan Rotstein, Ms Luisa Moreno (Chief Executive Officer) and Mr. James Richardson (Chief Financial Officer). Mr. Roger Dahn and Mr. Martin Kepman have subsequently been added as Directors.

July 31<sup>st</sup> has been chosen as the year end date for the Company’s fiscal year to provide as much inclusion as possible into this first fiscal period and, as much as possible, have its initial operations commence as early as possible in its first full fiscal year, commencing August 1, 2021.

Wasserman Ramsay CPA’s have been named by the Board of Directors to be the Company’s Auditor and to report to the Company’s shareholders, accordingly. Wasserman Ramsay are a firm of Canadian Chartered Public Accounts and are qualified by the Canadian Public Accounting Board to conduct audits of public companies and has been for a number of years the Auditor of MN, the Company’s previous parent company.

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The functional and reporting currency of the Company is the Canadian Dollar (“CAD”) and all dollar amounts (“\$”) herein refer to Canadian Dollars unless otherwise identified.

**Forward Looking Statements:**

While the Company is not (and does not intend to become) in the practice of making forecasts, it is obliged by the nature and purpose of MD&A’s to make certain forward-looking statements. All such statements are qualified in their entirety by the Company’s claim of “Safe Harbour” for such statements made in good faith.

This MD&A, except for historical information, may contain “forward-looking statements” that reflect Graphano’s current expectations and projections about future results. When used in this MD&A, forward-looking statements can be identified by the use of words such as “estimate”, “consider”, “anticipate”, “expect”, “objective”, “potential”, “forecast”, “believe”, “project”, “plan” and similar expressions or variations of such words. Forward-looking statements are, by their very nature, not guarantees of the Company’s future operational or financial performance and these statements may involve known and unknown risks, uncertainties and other factors that may cause the actual level of activity, results, prospects and performance to differ materially from any future levels of activity, results, prospects and performance expressed in, or implied by, these forward looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guaranteeing of future performance and actual results or developments may differ materially from those in the forward-looking statements and there are no guarantees that any of Graphano’s projects will otherwise prove to be economic. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this MD&A or as of the date otherwise specifically indicated herein. Due to risks and uncertainties, including the risks and uncertainties referred to elsewhere in this MD&A, actual events may differ materially from current expectations. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

**Company Objective:**

It is the Company’s intention to be a significant entity in the graphite (and potentially other industrial minerals, especially those related to the rapidly expanding field of battery chemistry) resource exploration and development business and to assemble a significant resource for further development and potential future production by others or by the Company.

Commencing with the initial LAB graphite property (the “LAB Graphite Property”), it is the Company’s intention to explore the property (known to contain deposits of graphite bearing material) to establish the magnitude of resource it might contain and to review other potential acquisitions with the same objective in view.

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**Project:**

The LAB Graphite Property is comprised of 14 mineral claims in one contiguous block totalling 738.12 hectares near the town of Mont-Laurier in southern Québec. The property is subject to a 2% NSR half (1%) of which may be acquired for \$1,000,000. Subsequently, the Company has entered into an agreement with the original vendors of the property to MN to acquire the whole of the NSR for 153,846 post-consolidation Graphano common shares valued at \$50,000, thereby cancelling the NSR.

The LAB graphite mineralization was discovered in 1957 and passed through several hands prior to being held by TIMCAL until November 2014, but then allowed to lapse. Finally, in 2019, it was acquired by MN, the parent of the Company until the Closing of the Plan of Arrangement transaction.

The LAB Graphite Property is underlain by Precambrian age rocks of the Grenville Series comprised of quartzo feldspathic, garnetiferous paragneiss and limestone / marble beds. Quartzites are the least abundant of rocks in this Series. The igneous rocks which have invaded the metasedimentary sequence consist of gabbros, monzonites, anorthosites and diabase. Paragneiss is generally fine to medium grained with a variety of compositions such as, quartzo-feldspathic gneiss, biotite gneiss, biotite-garnet gneiss, biotite-garnet-silliminite gneiss and biotite-hornblende gneiss. All compositional varieties contain some graphite.

The LAB Graphite Property lies adjacent to the south of TIMCAL’s Lac des Iles graphite mine in Quebec which is a world class deposit and was producing 25,000 tonnes of graphite annually. There are several graphite showings and past producing mines in its vicinity. Graphite is commonly found in the Grenville Province rocks throughout this region and has been commercially mined from a number of deposits located between Mont-Laurier in the north to the Ottawa River in the south.

As indicated in the most recent National Instrument 43-101 technical report (dated June 8, 2021), in the Qualified Person’s opinion, the character of the LAB Graphite Property is enough to merit a follow-up work program, which can be accomplished through a two-phase exploration program as described below.

**Phase 1 – Trenching, Channel Sampling and Diamond Drilling**

Perform stripping and trenching work on target areas identified in airborne and ground geophysical surveys. Additionally, 1,200 metres diamond core drilling is recommended to test the geophysical survey conductors. This drilling, if successful, will help not only to add new exploration targets but also to expand the potential graphite resource target for the LAB Graphite Property. The estimated budget for this phase is \$417,000 and should take four to six months’ time to complete.

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**Phase 2 – Exploratory Drilling, Metallurgical Test work and Resource Estimation**

Contingent upon the success of the Phase 1 work, a 2,500 metre diamond core drilling is recommended on the historical graphite resource areas and new geophysical survey targets tested in Phase 1. Additional metallurgical test work is also recommended to improve upon the graphite recovery percentage and quality of the previous test work. Total estimated budget for this phase is \$473,000 and will take approximately five months’ time to complete.

**FIRST QUARTER HIGHLIGHTS**

- Achieved independence from former parent company MN
- Achieved Listing on TSX Venture Exchange
- Started Phase 1 exploration on LAB property
- Confirmed quality of graphite present on property

**First Quarter Exploration Achievements:**

The summer exploration work was carried out during July-September 2021 and included prospecting, mapping, trenching, ground geophysical surveying and sampling. Some of the key findings, included:

- Confirmation of large flake graphite showings on the property, with flake size in the range of 0.5 to 5 millimetres, typically present at the contact of gneisses and marbles where the graphite content usually ranges from 2% to 20%, as historically reported.
- Graphite mineralization and rock outcrops were exposed by digging trenches over geophysical survey conductors identified during airborne and ground geophysical surveys conducted by previous operators (2015-2019).
- A total of 83 grab and channel samples were collected during the summer program which identified three target areas in the eastern part of the LAB Graphite Property (LAB-1, LAB-2 and LAB-3). Each channel sample from the summer work was 15cm to 100cm long, 5 cm wide and 3-5 cm deep cut in bedrock.
- Target area LAB-1 has graphite mineralization associated with quartz feldspar gneisses with carbonaceous bands. Target area LAB-2 has association of extra-large flake up to 0.5 cm in marble; and LAB-3 has graphite mineralization associated with gneissic banding and folds.
- The sample assays were in the range of less than 0.05% to 23.2% graphitic carbon (Cg) with 12 samples over 10% Cg, three samples between 5% and 10% Cg, and the remaining samples with lower values.

All sampling was completed by and under the supervision of Mr. Martin Ethier, Géo (#1520) who is a Member of the Order of Geologists of Québec and a “Qualified Person” under National Instrument 43-101, and Afzaal Pirzada, who is a member of the

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Association of Professional Engineers and Geoscientists of British Columbia with license No. 28657. Senior management also attended the site visit.

The Company’s Chief Executive Officer and Geologist/Qualified Person went to the property together in September 2021 to meet the exploration team in person, visit the key target exploration zones, assess the progress of the work being performed by the exploration team on the ground, and plan future work.

**Operations During the First Quarter Period ending October 31, 2021:**

Upon closing of the Private Placements, the Company commenced its initial exploration activities but these are not directly comparable to the prior period which was a less active initial formative period.

As a result, the Company’s Statement of Financial Position as at October 31, 2021 (the “Statement”) consists of a comparison of that statement of financial position to the earlier initial period end position at July 31, 2021, which consisted simply of the value of the LAB Graphite Property which was transferred to the Company by its parent in exchange for shares which were dividended out to MN’s shareholders on a one-for-eight basis pursuant to the Plan, and certain minor accruals (which shares were then consolidated on a one for 6.5 share basis as referred to above). This opening property value has now been written off along with subsequent additions thereto pursuant to the exploration undertaken subsequently as a result of the decision by the Company to write off all such property values to expense. This represents a change in accounting policy which is expected to continue into the indefinite future. The Company believes that this will bring its statements of profit and loss more into line with its actual cash expenditures period by period and avoid the sometimes difficult decisions of whether to continue to carry a property as an asset or write it off.

In keeping with the announced intent of certain regulatory bodies to simplify future regulatory filings and avoid repetition by combining financial statements and MD&A, this document will not repeat the material contained in the Audited Financial Statements for the period under review including the comprehensive Notes regarding Accounting policies and others which appear in those Statements.

**Operations in the First Quarter period ended October 31, 2021**

As discussed above, this represents the first period of independent operation by the Company outside the umbrella of its former parent MN. This being the first quarter of operations, there are no meaningful comparisons to be identified. Being the quarter in which the Closing of the spin-out Transaction took place and operations were commenced, fee expenses are unusually high. These expenses comprised the great majority of all expenses during the quarter under review and totalled \$721K. When the one time write of the acquisition cost of the LAB Graphite Property is added, the total Comprehensive loss recorded was \$1,548K during the quarter

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**Statement of Financial Position as at October 31, 2021**

The most notable feature of the Statement of Financial Position at October 31, 2021, and its comparison to the prior (audited) year end is the change in accounting policy previously referred to, above, by which all prior exploration property costs and additions thereto are now being written off immediately upon being incurred. Such costs will continue to be tracked property by property in the appropriate Note to the financial statements each reporting period.

The next most notable item and comparison is that the Completion of the original acquisition and financing Transactions has resulted in what had been stated as a liability being transferred to Equity / Share Capital.

The Cash has been reduced as a result of the cash expenditures identified in the Statement of Comprehensive Income (Loss) but continues to be sufficient for the necessary operations of the next 18 months.

There were no Prepaid Expenses nor Sales Taxes recoverable at the previous yearend as operations had not yet commenced. These will now be a continuing element in future statements.

**Outlook for remainder of 2021/22 Fiscal Year**

The fall exploration program started on October 12, 2021 and went on for 10 weeks. The program concentrated on the promising targets worked on during the summer and expanded prospecting work towards the west of the property to explore new areas identified by the geophysics survey. The totality of the assays and the observations from the exploration team and the Company’s Geologists/Qualified Persons will be gathered and analysed to determine the initial drilling areas.

The Company plans to start exploration drilling in January of 2022. Depending on the success of the initial exploratory drilling the company may expand ground geophysical survey and trenching to other areas of the property, or expand drilling in one of the zones to estimate an initial resource.

**Capital Resources:**

The Private Placements referred to and described above resulted in Subscriptions for 81,845,660 Units at a price of \$0.05 (\$0.325 adjusted for the consolidation) per Unit for a total of \$4,096,979. This amount is more than sufficient for the recommended initial exploration program and the sustaining of all of the Company’s operations for at least 18 months into the future. As such, the Company is in compliance with the Rules of the Exchange.

It is the intention of the Company to manage its Capital (Shareholders’ Equity including Share Capital, Reserves and Deficit) to ensure that it has sufficient resources and liquidity to meet its obligations as they fall due and provide for its future operations for a

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reasonable time into the future. As such, and given that the Company’s prospective revenues amount to only the modest amount that it may be able to earn on cash deposits, the Company is carefully monitoring its resources by comparison to the costs of its exploration plans to establish the extent and quality of its resource on its LAB Graphite Property.

**Table of Quarterly Comparisons:**

<b>Quarters Ended (\$000’s except /share)</b>	<b>Oct. 31, 2021</b>	<b>July 31, 2021</b>	<b>April 30, 2021</b>	<b>Jan.31, 2021</b>
<b>Revenues</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>
<b>Net Loss</b>	<b>1,548</b>	<b>6</b>	<b>nil</b>	<b>nil</b>
<b>Per Share</b>	<b>0.103</b>	<b>0.00</b>	<b>Not Applicable as Only Qualifying Share Outstanding</b>	

**Annual Remuneration of Named Executive Officers (“NEO”s)**

Following an initial period immediately after incorporation and up to listing by the Exchange during which no remuneration was paid, senior management/NEOs of the Company are now being paid at the following annual rates on a regular monthly basis.

<b>(\$000’s)</b>	<b>Cash Fees paid or accrued</b>	<b>Pension Benefits and Other Awards</b>
<b>Dr. Luisa Moreno (Chief Executive Officer)</b>	<b>90</b>	<b>nil</b>
<b>James A. Richardson (Chief Financial Officer)</b>	<b>72</b>	<b>nil</b>
<b>Nathan Rotstein (Director)</b>	<b>72</b>	<b>nil</b>

The above amounts are for the annual rate now being paid. Future tables will provide information with respect to multiple years, as and when appropriate. The Named Executive Officers (“NEOs”) are now being remunerated at the rate of \$7,500 per month for the CEO and \$6,000 per month for each of the other two NEOs.

**Environmental, Social and Governance (“ESG”) Responsibilities:**

The Company is vitally aware of its responsibilities to its communities and publics, especially those to its indigenous and other neighbours in its communities of operation. It will strive in all ways practicable to foster good relations with its neighbours, take their

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needs into account in its operations (especially their need for responsible employment) and operate in a context of social responsibility. More detailed statements in these regards will be included in future MD&A’s. It is the intention of the Company to establish a formal policy of community support, especially with respect to local indigenous peoples and of diversity (with respect to which, the Company is proud to identify its current achievements) in the near future. As it does not propose immediately to have Board Committees either for ESG or for Corporate Governance, it intends to delegate these functions to its Audit Committee as it is best representative of its Independent constituencies.

As a potential future supplier of graphite to the industrial world, the Company is immediately aware of the growing need for graphite in the battery industry and the role that will be played in the rapidly growing electrical vehicle market among others. The world’s rapidly growing acknowledgement of the realities of global warming and the impacts on climate change suggest that the growth in demand for graphite is likely to exceed population or other normal growth rates long into the future. There is a very significant element of catch up which needs to be addressed and achieved. The Company expects to benefit from this in higher price levels for its graphite needed to encourage the additional supply required.

The LAB Graphite Property project is located in a forested area and the growing incidence of major forest fires may have an adverse impact on future operations. The Company does not expect to be adversely impacted by rising sea water levels, but local flooding may be of increasing concern and the Company will be monitoring carefully for such potential adverse impacts.

**Statement of Compliance and Exemption**

As a Venture Issuer, the Company conforms to the lesser standard of internal controls expected of Venture Issuers.

The accompanying financial statements have not been audited nor subjected to Review by the Company’s auditor except to the limited extent that certain information as of July 31, 2021 was audited by Wasserman Ramsay, the Company’s auditor and is included here and in the accompanying financial statements for comparative and other purposes.. The next set of financial statements that will be subjected to audit will be those for the full year ending July 31, 2022. In the meantime, quarterly financial statements will be prepared and presented without audit and will be posted on SEDAR within 60 days of each quarter end (April 1<sup>st</sup> and June 29<sup>th</sup> for January 31, 2022, and April 30, 2022, respectively).

**Subsequent Events:**

Subsequent material or noteworthy events to report are as have been detailed in the Notes to the Company’s financial statements in Note 18 (and as have been press released):

- i. The granting of 1,500,000 options to pursuant to the Company’s Incentive Option Plan, and

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- ii. The Closing of an Issue of Flow Through shares to fund facilitate at least a good portion of the Company’s Canadian Exploration Expenditures in 2022.

The Company has now launched its website at [www.graphano.com](http://www.graphano.com) and will maintain there exhibitions of its primary SEDAR filings, corporate and investor presentations and other useful information.

Management welcomes comments and questions from investors and other members of the public and suggestions for improvement in its communications, presentations and this document.

On behalf of the Board of Directors:

Dr. Luisa Moreno  
December 29, 2021