# MANAGEMENT'S DISCUSSION AND ANALYSIS

**For the year ended December 31, 2021**

**KARNALYTE.COM**
TSX: KRN

# TABLE OF CONTENTS

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis (**"MD&A")** is intended to provide a summary of the operational and financial results of Karnalyte Resources Inc. (**"Karnalyte"** or the **"Company")** for the year ended December 31, 2021 and 2020. This MD&A should be read in conjunction with the audited financial statements of the Company and the related notes thereto for the year ended December 31, 2021. This commentary is dated March 28, 2022. The financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board. These documents, the annual information form dated March 28, 2022 (the "**Annual Information Form**"), and additional information about the Company are available on SEDAR at www.sedar.com. Some of the statements made herein contain forward-looking information and accordingly please refer to the "Forward-Looking Information" section at the end of the MD&A.

# OVERVIEW

## GENERAL OVERVIEW

Karnalyte was incorporated under the Business Corporations Act (Alberta) on November 16, 2007 and is a Saskatchewan-headquartered company focused on the development of potash and magnesium operations in Saskatchewan. The Company's potash project in Wynyard, Saskatchewan (the **"Wynyard Potash Project"**) is a proposed 2.125 million tonnes per year (**"TPY")** potash mine utilizing conventional solution mining methods for potash production. The Company proposes to develop the Wynyard Potash Project in three phases using a modular approach, with a first phase **("Phase I"**) consisting of a potash production facility capable of producing 625,000 TPY of potash, increasing to 1,375,000 TPY of potash in the second phase, and ultimately to 2,125,000 TPY of potash in the third phase.

## 2021 – YEAR IN REVIEW

In 2021, Karnalyte completed a strategic review process with an external strategic advisor, took significant steps to improve the Company's financial position, and in light of the improvement of market conditions for potash, initiated an update the Company's NI 43-101 compliant technical report.

### STRATEGIC REVIEW

In 2020, as previously announced, Karnalyte's Board of Directors initiated a corporate strategic review process with MNP LLP to evaluate a broad range of potential strategic alternatives available to the Company, including evaluation of its existing and future projects, with a focus on determining what would be in the best interests of Karnalyte and maximising value for all its shareholders. This process was concluded in the second quarter of 2021 and an update was provided at that time including commentary on specific matters addressed in the report prepared by MNP LLP (the "**Strategic Review Report**"). This update included a review and analysis of the Company's proposed nitrogen fertilizer project, a review and analysis of market sounding activities for the potash project and suggestions for improvement of Karnalyte's financial position.

### POTASH – WYNYARD POTASH PROJECT

*Market Update* – The market conditions for potash continued to improve during the fourth quarter of 2021 and up to the writing of this commentary with Canadian potash suppliers announcing contract prices with India and China in February 2022 of $590 per tonne through to December 31, 2022. These prices were over double the contract prices that had been announced in the first quarter of 2021. Prices were increasing in 2021 due to the tightening of the supply demand gap for potash.

While sanctions on Belarus potash began in 2021, on February 1, 2022, Lithuania cancelled its rail contract with Belarus cutting off the landlocked country from Lithuania's ports, through which Belarus shipped an estimated 90% of its potash. The rail contract cancellation leaves Belarus with limited options to ship its potash to the market. The Russian invasion of Ukraine and resulting sanctions on potash and other trade from Russia have severely impacted Russia's ability to supply potash. Russia and Belarus normally supply approximately 40% of the world's potash. These developments have created significant uncertainty around the availability of potash supplies.

Additionally, the Russian invasion of Ukraine has created uncertainty around Ukraine's ability to plant a crop in 2022. Furthermore, sanctions are impacting Russia's ability to supply agricultural products. Such events are sending crop prices soaring giving farmers worldwide an incentive to utilize fertilizers to increase yields.

Higher potash prices may or may not be sustainable. Major potash producers in North America may increase production thus causing a decrease in prices. A resolution to the conflict in Ukraine might also result in reduced sanctions and increased supply of potash. That said, many analysts predict that all of the events causing the higher prices are not likely to change anytime soon (especially as buyers of potash products may be reluctant to trade with Russia and given that sanctions in Belarus predated the invasion of Ukraine). Therefore, uncertainty exists regarding when sanctions might lift and when prices may relax. Management believes that potash prices will remain high in 2022 and likely beyond.

These developments and their impact on market conditions along with the recommendations in the Strategic Review Report, and in support of continued efforts to seek out and attract investment and strategic partners to the Wynyard potash project, led the Company to a decision in the fourth quarter of 2021 to update its NI 43-101 technical report to update, amongst other things, the following:

- Update of capital cost summaries;
- Update of operating cost summaries;
- Review and application of Karnalyte's internal cost saving studies; and
- Updated market and economic analysis.

After a thorough procurement process, the Company selected Wood PLC, a leading global consulting and engineering company, as independent lead author of the Company's update to its NI 43-101 technical report.

In addition to Wood PLC, Karnalyte engaged the services of senior project advisor ProMine Project Management Ltd., and lead Brad Straub, to assist the Company in its oversight and evaluation of the update to the technical report. Mr. Straub has a long history of providing support to current and proposed potash industry projects in various capacities over the years. This includes over 25 years of project management experience with majors BHP Billiton Potash Canada, Nutrien (formerly PotashCorp) and Mosaic.

The project is progressing as planned and the Company hopes to complete the update by the end of the second quarter of 2022.

**NITROGEN – THE PROTEOS NITROGEN PROJECT**
*Market Update* – market conditions for nitrogen also improved significantly in 2021. At the date of this MD&A, prices of ammonia and urea have increased over 100% year over year. In part due to the market situation discussed in the "Potash – Wynyard Potash Project" section above and in part due to global supply issues as a result of the pandemic, increased oil and gas prices and increased crop prices leading to incentive among producers to utilize fertilizers to increase yields have resulted in significant demand for nitrogen fertilizers. The recent supply uncertainty related to Russian supplies is providing further support for high nitrogen prices.

The Proteos Nitrogen Project therefore, remains under consideration as part of Karnalyte's future and may diversify our business by adding a second fertilizer product line. The Proteos Nitrogen Project is a proposed regional-scale nitrogen fertilizer plant to be located in central Saskatchewan, with a nameplate capacity of 700 metric tonnes per day ("**MTPD**") ammonia and 1,200 MTPD urea. Our primary target market is local, independent wholesalers within a ~400-kilometre radius of Saskatoon, Saskatchewan, with a secondary target market of Midwest USA wholesalers near the Canadian border.

In the Strategic Review Report, the opportunity of building a regional nitrogen production facility near Saskatoon, Saskatchewan (the "**Nitrogen Project**") was analyzed as one of the options to maximize value for Karnalyte's shareholders.

While MNP LLP noted that the economics of this project could be positive, the Strategic Review Report concluded that, given current market and competitive conditions, the Nitrogen Project is high-risk without both an offtake agreement and a joint or independent capital investment. Management and the Board are considering the various challenges identified in the Strategic Review Report including market risk and capital risk and are continuing to assess interest in an offtake agreement and capital investment.

Gujarat State Fertilizers and Chemicals Limited ("**GSFC**"), a 38.7% shareholder of Karnalyte, has indicated that, if requested by the Company, they would support the Nitrogen Project by bringing GSFC's significant experience operating nitrogen fertilizer production facilities to the project but only as technical advisor at the planning, design, and construction phases and as initial operator of the Nitrogen Project facility. However, GSFC has emphasized that Karnalyte will require a strategic partner to support the Nitrogen Project, as GSFC is not in a position to act as lead partner for the Nitrogen Project.

**IMPROVING KARNALYTE'S FINANCIAL POSITION**
The Strategic Review Report also recommended that the Board and management transition Karnalyte to a low-cost operation by developing and implementing a minimum cash flow budget to preserve available cash for investment in seeking out strategic investment. Specifically, the Strategic Review Report recommended that Karnalyte investigate alternative sources of funding to extend the operational runway, monetize existing assets to preserve a financial and liquidity foundation and maintain the minimum requirements to sustain an exchange listing. In response to these recommendations and given management's awareness of the Company's need to raise capital in order to continue to fund operations and project development activities, recent developments surrounding the market conditions for potash and significant interest from the financial community and prospective investors, management is considering and in discussions with investment bankers and others to raise interim capital. Options being considered include: a private placement, a short form prospectus offering and/or a rights offering. Updates on the Company's efforts to raise capital will be made when appropriate.

Also in 2021, in furtherance of improving Karnalyte's financing situation, the Company divested of certain assets not essential to the Wynyard Potash Project and took steps to reduce general and administration expenses. The steps taken to reduce general and administration expenses included some restructuring, downsizing the Company's headquarters by moving to a virtual corporate office model and, along with other measures, transitioning to a new transfer agent.

**CORPORATE & GOVERNANCE MATTERS**

The Board remains committed to good governance practices. Therefore, in 2021, in light of the opportunities and risks facing the Company, and in the interests of strengthening the Board and improving its independence, the Board decided to expand its composition to a board of five (5) directors. In doing so, the Board assessed the competencies, skills and personal qualities it requires in directors in order to provide the Board with the best opportunity to advance Karnalyte's projects to the next stage of development. After an extensive recruiting process, management nominated two additional directors in the Company's information circular dated May 31, 2021. At Karnalyte's annual general meeting on June 29, 2021, the shareholders elected these additional directors to the Board.

Derek Hoffman is a corporate/commercial lawyer with the Hoffman Group advising public and private entities in a range of industries including mining, energy, agriculture and technology. Derek brings significant mining experience to the board having previously served as a Partner and Leader of the Mining Group at Miller Thompson LLP, a leading Canadian law firm, and also as in-house counsel for the global mining company BHP where he advised on a broad range of matters involving mineral exploration, strategic transactions and mine and associated infrastructure development and construction.

Dilip V. Pathakjee, nominee of GSFC, is the Senior Vice President of Materials Management at GSFC. Mr. Pathakjee has over 30 years of experience in operations research and development, finance, marketing, materials management, and management of foreign projects. During the past 5 years Mr. Pathakjee has held other senior roles at GSFC including Vice President (Finance) and Senior Vice President (Finance). Mr. Pathakjee holds a master's degree in chemical engineering, a master's degree in business administration, a post-graduate diploma in treasury and risk management and a diploma in industrial psychology.

Also in furtherance of the Company's goal of advancing governance, Karnalyte announced that the Compensation and Corporate Governance Committee updated its Charter to include a nominating function. As such, the name of the committee was also changed to the "Compensation, Corporate Governance and Nominating Committee". This change will further assist the Board of Directors in fulfilling its obligations and responsibilities.

As a result of the new nominating function, the Committee will be responsible for:

- Considering the skills and competencies that should be possessed by the Board as a whole, as well as assessing those of each existing director;
- Identifying individuals who are qualified to become new directors based on outlined criteria; and
- Reviewing and recommending to the Board approval of any proposed candidate(s) for nomination for election or appointment.

### OUTLOOK FOR 2022

In 2022, the Company plans to complete the update to its NI 43-101 technical report, complete the raising of interim capital and increase business development activities to seek out and attract investment and strategic partners to move one or both of the Company's projects forward to development. For Management's beliefs regarding market conditions in 2022, see "Potash – Wynyard Potash Project", "Nitrogen – The Proteos Nitrogen Project", and "Improving Karnalyte's Financial Position" above.

## SELECTED ANNUAL INFORMATION

The information has been summarized from the Company's audited financial statements.

**Selected annual results**
**(CAD $ thousands)**

| | Year ended December 31 | | |
|---|---|---|---|
| | **2021** | **2020** | **2019** |
| Total revenue | - | - | - |
| Interest and other income | 19 | 65 | 183 |
| Net and comprehensive loss | (2,193) | (3,429) | (3,091) |
| Basic and diluted per share | (0.05) | (0.08) | (0.07) |
| Total current assets | 2,498 | 5,291 | 8,064 |
| Total assets | 8,393 | 11,241 | 13,875 |
| Total current liabilities | 884 | 1,499 | 903 |
| Total liabilities | 2,630 | 3,311 | 2,549 |
| Total shareholders' equity | 5,763 | 7,930 | 11,326 |

During the year ended December 31, 2021, the Company's focus was on the completion of the strategic review, continued preparation activities related to the development of the Wynyard Potash Project, improving the Company's financial position and investigating alternative sources of funding.

During the year ended December 31, 2020, the Company's focus was on the completion of a pre-feasibility study for the Proteos Nitrogen Project, initiation of the strategic review, continued preparation activities related to the development of the Wynyard Potash Project and on responding to the dissident shareholders' requisition for a special meeting (and related dissident shareholders' activities).

## RESULTS OF OPERATIONS

### GENERAL AND ADMINISTRATIVE EXPENSES

General and administrative (**"G&A"**) costs for the year ended December 31, 2021 amounted to $1,865,000 which is a decrease of $500,000 from the comparative 2020 amount.

The key components of the G&A costs are as follows:

**G&A Expenditures**
**(CAD $ thousands)**

| | Year ended December 31, | |
|---|---|---|
| | **2021** | **2020** |
| Salaries, wages and benefits | 298 | 329 |
| Business development, investor relations, regulatory fees | 70 | 215 |
| Accounting and legal | 497 | 905 |
| Consulting | 328 | 354 |
| Directors Fees | 232 | 197 |
| Office and general | 440 | 365 |
| Total general and administrative | 1,865 | 2,365 |

**Salaries, wages and benefits** for the year ended December 31, 2021 were $298,000 compared to $329,000 in 2020 which is a decrease of $31,000. Salaries, wages and benefits decreased as the Company implemented some restructuring at the end of the second quarter of 2021. The Company currently does not have plans to significantly increase the number of full-time equivalent employees.

**Business development, investor relations and regulatory fees** for the year ended December 31, 2021 amounted to $70,000 compared to $215,000 for the year ended December 31, 2020, which is a decrease of $145,000. Additional expenditures incurred in 2020 were required to respond to the receipt of a requisition for a special meeting by a group of dissident shareholders. This category also includes recurring expenses incurred each year to conduct the Company's annual general meeting ("**AGM**").

**Accounting and legal** expenses for the year ended December 31, 2021 were $497,000 compared to $905,000 in the comparative year which is a decrease of $408,000. Additional expenditures incurred in 2020 were required to respond to the receipt of a requisition for a special meeting by a group of dissident shareholders.

In the first quarter of 2021, the Company received an originating application filed by Messrs. Peter Matson and Gregory George Szabo against the Company. The applicants seek a declaration that the Company oppressed its shareholders; the removal of all current directors; fixing the size of the Company's board at six; appointing Messrs. Joe Vidal, Neil Yelland, Joe Clavelle, Todd Rowan, and two GSFC nominees; reimbursing all costs incurred by the applicants and Mr. Mark Zachanowich in connection with requisitioning the special meeting of shareholders held on December 15, 2020; and damages in the amount of $3.25 million. The Company has filed a claim for insurance coverage under its directors and officers insurance policy for this matter, which is subject to certain limits and a $50,000 deductible per claim. The Company is working with its legal counsel and insurer to respond to the application.

In the first quarter of 2021, the Company received a statement of claim filed by Mr. Dan Brown against the Company, Frank Wheatley, Mark Zachanowich, Peter Matson, Todd Rowan, Gregory Szabo, Sanjeev Varma and Vishvesh Nanavaty (collectively, the "**Defendants**"). Mr. Brown seeks a declaration that certain statements made by the Defendants' about him are false and defamatory; a written apology; a declaration that the

Defendants have harassed, intimidated, and threatened him; damages in the amount of $180,000 for breach of contract; general damages of $500,000; punitive, exemplary and aggravated damages of $200,000; that the Defendants pay Mr. Brown for those monies paid by Mr. Brown for his shares in the Company; and an award of special damages, past and future loss of income, and cost of future care. The Company has filed a claim for insurance coverage under its directors and officers insurance policy for this matter, which is subject to certain limits and a $50,000 deductible per claim. The Company is working with its legal counsel and insurer to defend the claim.

In the fourth quarter of 2021, the Company reached a final settlement with the Company's former Chief Executive Officer, for which the Company had received a statement of claim filed at the Court of Queen's Bench of Saskatchewan in the fourth quarter of 2019. The settlement amount had been fully accrued and expensed by the Company in prior years.

**Consulting** expenses for the year ended December 31, 2021 amounted to $328,000 compared to $354,000 in 2020, which is a decrease of $26,000. The expenses in this category for both 2021 and 2020 were largely due to the strategic review and a consulting contract with the interim CFO.

**Director fees** for the year ended December 31, 2021 amounted to $232,000 compared to $197,000 for the 2020 comparative year, representing an increase of $35,000. At the Company's Annual General Meeting, the board of directors expanded from three members in the first two quarters of 2021 to five members effective June 29, 2021 in order to strengthen the Board's independence and assist with the opportunities and risks facing the Company. The addition of two directors will increase future expenditures in this category.

**Office and general** expenses for the year ended December 31, 2021 amounted to $440,000 compared to $365,000 for the comparative year representing an increase of $75,000. The majority of this increase is due to a significant increase in premiums for the Company's directors and officers insurance policy.

## OTHER COSTS IMPACTING COMPREHENSIVE LOSS

**Depreciation** for the year ended December 31, 2021 was $53,000 compared to $74,000 in 2020. Depreciation decreased as it relates to the application of IFRS 16 to the Company's office lease. The application of IFRS 16 resulted in a right of use asset being recorded in 2019 and depreciation throughout 2020 which was then fully depreciated by the third quarter of 2021 as the office lease expired on August 31, 2021.

**Share-based compensation expense** for the year ended December 31, 2021 was $26,000 compared to $33,000 in the 2020 comparative year. Share-based compensation expenses in the first two quarters of 2020 related to the granting of 850,000 stock options to officers and employees in June 2018. In the third quarter of 2020 and the entire 2021 year, share-based compensation related to 460,000 stock options granted in July 2020. In November 2021, 300,000 stock options were granted and also contributed to the share-based compensation expense for the fourth quarter of 2021. These expenses are all non-cash in nature and stock options are expensed over a two-year vesting period using a declining balance method. During the year 2021, 30,000 options expired and 275,000 options were cancelled.

**Restructuring costs** for the year December 31, 2021 were $81,000 compared to $63,000 in the 2020 comparative year. In 2021, the Company incurred a $124,000 expense related to the costs of restructuring that took place during the second quarter of 2021, which was slightly offset by insurance proceeds received for the settlement of the former Chief Executive Officer's claim as discussed below.

In the fourth quarter of 2019, the Company received a statement of claim filed at the Court of Queen's Bench of Saskatchewan by the Company's former Chief Executive Officer, in the amount of $450,000. The former Chief Executive Officer's claim was for an alleged breach of contract, wrongful dismissal, egregious conduct on termination, and defamation relating to the termination of his employment on September 11, 2019. The Company denied the former Chief Executive Officer's allegations and filed a statement of defence and had recorded an estimate of all amounts payable to the former Chief Executive Officer under his contract. The expense recorded in 2020 related to the revised estimate for restructuring that took place in 2019 based on mediation discussions. In the fourth quarter of 2021, the Company reached a settlement with the former Chief Executive Officer for amounts fully accrued and expensed in prior years.

**Impairment expenses** for the year ended December 31, 2021 were $524,000 compared to the year ending December 31, 2020 of $1,028,000. In 2014, previous management determined assets with a carrying amount of $63,165,000 were no longer recoverable. At December 31, 2021, the Company determined that those impairment indicators continue to exist. Therefore, the incremental expenditures incurred on intangible and mine development assets in 2021 were determined not to impact the previously determined recoverable amount. For additional information, refer to the notes to the financial statements dated December 31, 2015 available on SEDAR at www.sedar.com.

**Other income** for the year ended December 31, 2021 were $264,000 compared to $95,000 in the 2020 comparative year. The major item making up this amount in both years was rental income from leasing some of the Company's land holdings to local Wynyard area farmers. In 2021, there was also a $93,000 recovery recorded as a result of a change in estimate of the Company's decommissioning liability.

**Gain on disposal of capital assets** for the year ended December 31, 2021 was $99,000 compared to $nil in the 2020 comparative period. In the third quarter of 2021, the Company sold some non-strategic assets for proceeds of $101,000, resulting in a $99,000 gain on disposal of capital assets.

**Gain on disposal of mineral properties and intangible assets** for the year ended December 31, 2021 was $1,000 compared to $nil in the 2020 comparative period. In the third quarter of 2021, the Company sold some non-strategic assets for proceeds of $1,000, resulting in a $1,000 gain on disposal of mineral properties and intangible assets.

**Net finance expense** for the year ended December 31, 2021 was $8,000 compared to net finance income of $39,000 in the 2020 comparative year. The amounts recorded as net finance expense (income) are mostly the result of the amount of cash and cash equivalents that the Company is holding at a given time and the corresponding interest income the cash and cash equivalents generates. Interest income decreased by $46,000 from 2020 to 2021 as a result of the Company's declining cash balance and lower interest rates.

# SUMMARY OF QUARTERLY RESULTS

The following table provides selected financial information of the Company for each of the last eight quarters ended at December 31, 2021:

| | 2021 | | | | 2020 | | | |
|---|---|---|---|---|---|---|---|---|
| | Dec 31 | Sep 30 | Jun 30 | Mar 31 | Dec 31 | Sep 30 | Jun 30 | Mar 31 |
| Total revenue | - | - | - | - | - | - | - | - |
| Comprehensive loss | (498) | (279) | (839) | (577) | (1,290) | (914) | (742) | (483) |
| Basic and diluted loss per share | (0.01) | (0.01) | (0.02) | (0.01) | (0.03) | (0.02) | (0.02) | (0.01) |
| Total current assets | 2,498 | 2,793 | 3,388 | 4,177 | 5,291 | 6,444 | 6,944 | 7,647 |
| Total assets | 8,393 | 8,695 | 9,305 | 10,110 | 11,241 | 12,198 | 12,722 | 13,442 |
| Total liabilities | 2,630 | 2,438 | 2,774 | 2,748 | 3,311 | 2,992 | 2,615 | 2,595 |
| Total shareholders’ equity | 5,763 | 6,257 | 6,531 | 7,362 | 7,930 | 9,206 | 10,107 | 10,847 |

*Expressed in thousands except loss per share

The comprehensive losses in all of the quarters were driven primarily by G&A expenses and particularly accounting and legal expenses, consulting expenses, salaries and wages, and office and general expenses.

The first two quarters of 2020 were positively impacted by a reduction in salaries, legal expenses and travel expenses as compared to the comparative quarters of 2019; however, they were negatively impacted by the accrual of additional restructuring expenses in the second quarter of 2020, the timing of the receipt of land rental income and a change in estimate to the Company’s decommissioning liability resulting in a much less significant recovery as compared to the fourth quarter of 2019.  In the third quarter of 2020, a continued reduction of salaries and travel expenses as compared to the comparative prior year quarters was offset by increased legal expenses and consulting expenses, as compared to the first two quarters of 2020. The fourth quarter of 2020 was negatively impacted by an increase in legal expenses, investor relations and consulting fees largely due to the December 15, 2020 special meeting, as well as increased accounting fees relating to the year end audit. These negative impacts were slightly offset by the receipt of land rental income in the fourth quarter of 2020.  The first quarter of 2021 was negatively impacted by legal, accounting and consulting expenses as compared to the first quarter of 2020.  In the second quarter of 2021, consulting, office and general and restructuring expenses negatively impacted comprehensive loss as compared to the second quarter of 2020. The third quarter of 2021 was positively impacted by a reduction in salaries, a reduction in legal expenses, reduction in consulting, and the gains from selling non-strategic assets as compared to the comparative quarter of 2020.  The loss in the fourth quarter of 2021 largely relates to expenditures in the normal course of business relating to mineral leases, directors fees, audit accrual, legal fees, consulting fees, salaries, and insurance.

Past performance is not a guarantee of future performance and the information in this MD&A is not necessarily indicative of results for any future period. Factors expected to impact general and administrative expenses in future periods have been described throughout this MD&A.

**Current assets** principally reflect activity in the cash and cash equivalents account. Cash outlays vary over the quarters depending on the Company's activities.

**Total assets** on a quarterly basis reflect two main components, cash from financings still available to the Company and capitalized expenditures on capital assets and mineral properties for moving the Wynyard Potash Project forward. Total assets remained relatively constant for most of the periods above.

**Total liabilities** for the periods above relate primarily to trade and other payables. These balances vary in the analysis due to the timing of the payments required relative to the work performed in bringing the Wynyard Potash Project to its current level. Balances in all the quarters presented include the accrual of an estimate of the costs of restructuring that took place in the second and third quarters of 2017. The accrual of the costs estimated for the restructuring that took place in the third quarter of 2019 is included in all of the quarters presented, with the exception of the fourth quarter of 2021. The increase in the third quarter of 2020 relates to consulting fees for the strategic review initiated with MNP LLP, as well as, in the third and fourth quarters of 2020 increased legal, consulting and investor relation activities in response to the receipt of the requisition of a special meeting by the dissident shareholder group. Balances in the first quarter of 2021 decreased as compared to the fourth quarter of 2020 as the 2018 originating application was fully resolved and awarded costs were paid, which was partially offset by increased liabilities resulting from the 2021 originating application and statement of claim filed against the Company. Balances in the second quarter of 2021 increased slightly due to the restructuring that took place during that quarter. This restructuring was paid in the third quarter of 2021, reducing the total liabilities from the prior quarter end balance. In the fourth quarter of 2021, the balance increased due to the advancement of the technical report update.

**Total shareholders' equity** is impacted by the quarterly comprehensive losses and the share-based compensation expense as the number of shares outstanding remains unchanged.

## INVESTING

The Company capitalizes costs that are determined to provide future benefits and charges other costs to comprehensive loss including salaries, support and office costs, community relations programs and other administrative related expenditures. Costs directly related to capital assets are capitalized to appropriate categories and depreciated over their useful lives.

Expenditures to date were focused on the completion of the Company's resource reports, including updating the Company's prior technical reports, and 2013 environmental impact statement, confirming the resources and reserves through drilling wells on the initial focus area and preparing the Company for construction by advancing detailed engineering and completing initial site preparation.

## INTANGIBLE ASSETS

During the year ended December 31, 2021, all of the 2021 additions to intangible assets were impaired. The additions to intangible assets all related to the Wynyard Potash Project. The net balances classified as intangible assets are as follows:

**Intangible Assets**
**(CAD $ thousands)**

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Mineral property | | |
| Surface land | 4,804 | 4,804 |
| Drilling | 453 | 453 |
| Balance, end of period | 5,257 | 5,257 |

## CAPITAL ASSETS

The net balances classified as capital assets are as follows:

**Capital Assets**
**(CAD $ thousands)**

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Machinery and equipment | 2 | 15 |
| Buildings | 115 | 129 |
| Land | 125 | 125 |
| Land improvements | 21 | 23 |
| Vehicles | - | - |
| Furniture and equipment | - | - |
| Computer hardware | - | 1 |
| Right of use asset | - | 25 |
| Assets under construction | - | - |
| Balance, end of period | 263 | 318 |

There were no additions to capital assets in 2021. The net proceeds on disposal of capital assets in the third quarter of 2021 was $101,000. The capital assets sold had a total net book value of $2,000 at the time of sale. The decrease in capital assets is a result of depreciation expenses of $53,000 recognized during the year.

The Company’s ability to secure adequate financing for the development of the Wynyard Potash Project on economic terms could result in a material difference from the Company’s estimate of the recoverable asset.

## LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2021, the Company had net working capital of $1.6 million compared to $3.8 million at December 31, 2020 including $1.8 million and $4.8 million, respectively, in cash and cash equivalents.

As at December 31, 2021 and 2020, the Company also had $0.4 million in restricted cash that was set up as a requirement from the Government of Saskatchewan with respect to reclamation obligations regarding the Wynyard Potash Project. The Company has updated its reclamation program for the Wynyard Potash Project in accordance with Government of Saskatchewan regulations. This update may result in the requirement to increase the amount held as restricted cash in order to satisfy the financial assurance requirements of the Government of Saskatchewan in future periods.

The Company maintains cash in bank accounts for day-to-day operations and invests the excess in overnight financial instruments in high interest saving accounts that are highly liquid.

The Company is in its pre-development phase and therefore there is material uncertainty regarding the Company's ability to raise additional funds to maintain sufficient financial resources to fund ongoing operating and required exploration expenditures and to move forward to the production stage. There is also material uncertainty with respect to various legal matters which may result in additional liabilities to the Company. As at December 31, 2021, the Company had incurred an accumulated deficit of $136,071,000 and expects to incur further expenditures on the exploration and future development of its mineral exploration projects. As at December 31, 2021, the Company had working capital (current assets less current liabilities) of $1,614,000 which is expected to be insufficient to fund operations in the upcoming year. In addition to ongoing operating expenses, the Company is committed to expenditures in 2022 and subsequent years on its regulatory spending requirements and mineral properties to keep the Company in good standing. The Company also expects to provide funding to settle the decommissioning liability. The ability of the Company to continue as a going concern is dependent upon obtaining further equity issuances or other forms of financing.

## CONTRACTUAL OBLIGATIONS

The following table summarizes the commitments of the Company as at December 31, 2021:

**Contractual Obligations**
**(CAD $ thousands)**

| | | Payments due by period | | | |
|---|---|---|---|---|---|
| | Total | Less than one year | Two - three years | Four - five years | More than five years |
| Trade and other payables | 884 | 884 | - | - | - |
| Leases on mineral property | 5,102 | 367 | 735 | 735 | 3,265 |
| Project contracts | 52 | 52 | - | - | - |
| Total | 6,038 | 1,303 | 735 | 735 | 3,265 |

**Trade and other payables** relate to operating and investing expenditures that were payable at the period ended December 31, 2021.

**Leases on mineral property** refer to the annual fees which are required to maintain the mineral leases related to the Wynyard Potash Project. The Wynyard Potash Project comprises of three mineral leases. KLSA 010 has a term of 21 years and expires on September 7, 2031. KL246 and KL247A also have terms of 21 years and both expire on April 24, 2037. The Company is required to pay annual lease payments of $10.00 per hectare on any area held under lease for the term of the lease for a total cost of $367,300 per year. The Company is also required to expend not less than $3,000,000 for work during the first three years of the term of the lease. Expenditures made to date on the property have satisfied this requirement.

**Project contracts** are in place for various investor relations and consulting services.

## RELATED PARTY TRANSACTIONS

The aggregate payroll expense of key management personnel and directors was as follows:

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Salaries, benefits and other compensation arrangements | $685 | $502 |
| Restructuring | | |
| Severance | - | 63 |
| Share-based compensation | 21 | 23 |
| Total | 706 | 588 |

The Company entered into a consulting agreement with GSFC, the Company's largest shareholder and strategic partner, to assist with the evaluation of the Proteos Nitrogen Project and to further the Company's engineering activities respecting the Wynyard Potash Project. During 2021, $nil expenses were incurred under this agreement which expired on July 2, 2021. GSFC is a 38.7% shareholder of the Company.

There were no material changes to management compensation arrangements and no other related party transactions for the year ended December 31, 2021.

## RESTRICTIONS ON DISPOSITION OF THE WYNYARD POTASH PROJECT

Pursuant to the terms of the subscription agreement (the **"Subscription Agreement"**) and the offtake agreement (the **"Offtake Agreement"**) between the Company and GSFC, each dated January 10, 2013, the Company must not divest, sell, assign, transfer or otherwise dispose of any part of its interests in the Wynyard Potash Project without the prior written consent of GSFC until the third anniversary of the date on which the first shipment for delivery of products is dispatched by the Company in accordance with the terms of the Offtake Agreement (the **"Project Lock In Period"**). After the expiry of the Project Lock In Period, a person may acquire an interest in the Wynyard Potash Project subject to GSFC's right to terminate the Offtake Agreement at that time. The Subscription Agreement provides that, subject to certain conditions, the above-described restrictions on disposition do not apply to a creation or grant of a security interest to a lender providing financing for the Wynyard Potash Project (including for an expansion thereof). The Offtake Agreement provides that following the expiry of the Project Lock In Period, the Company may dispose of any part of the Wynyard Potash Project that is not part of the Company's subsurface mineral lease KLSA 010 or that is not intended or reasonably required for the three phases of the Wynyard Potash Project.

## CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in accordance with International Financial Reporting Standards **("IFRS")** requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amount of assets, liabilities, income and expenses. The Company evaluates judgments and estimates periodically based on historical experience and various assumptions that are considered reasonable in the circumstances. Actual results may differ from those reported. The Company reviews significant areas subject to judgment and estimation with the Audit Committee and independent auditors. Significant areas requiring judgment and estimates include:

### STAGE OF DEVELOPMENT

The Company is in the development stage of its history and at this stage of the Company's growth, it is subject to the risks associated with early stage companies, including uncertainty of future revenues, developing acceptable markets and growth into established markets, profitability and the need to raise additional financing to continue to progress its Wynyard Potash Project.

Continued exploration and development of the property is dependent on the Company's ability to obtain necessary financing. As the Company is not currently producing from its property, it will be necessary for the Company to seek additional equity or debt to finance its programs.

### INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

The Company's exploration and evaluation expenditures relating to the acquisition of mineral properties, leases, and the exploration and development thereon are recorded at cost and include direct and indirect acquisition and exploration costs associated with specific mineral properties. These costs are capitalized on the basis of the potential realization from the underlying asset and will be amortized over the shorter of estimates of reserves or service life following the commencement of production or written off, if the properties are sold or abandoned.

Assets under construction, machinery and equipment, buildings, vehicles, furniture, land improvements and leasehold improvements are recorded at cost. Capital assets are depreciated over their estimated useful lives.

The Company reviews exploration and evaluation assets, capital assets and other non-financial assets for indicators of impairment at each reporting period. Impairment indicators are used to determine whether carrying values of assets should be assessed for impairment or whether a reversal of impairment may be required.

Internal and external indicators of impairment for capital and other non-financial assets are considered, including significant changes in the extent or manner in which an asset is expected to be used. The use of a significant portion of the Company's capital assets is related to exploration and evaluation activity.

Indicators of impairment for exploration and evaluation assets include the period for which the Company has the right to explore, expected renewals of exploration rights, whether substantive exploration and evaluation expenditures on mineral properties are budgeted, and results of exploration and evaluation activities on the exploration and evaluation assets. Management also considers whether sufficient data exists to indicate that the carrying amount of capital assets and exploration and evaluation and other assets is unlikely to be recovered in full from successful development or by sale.

In measuring impairment, estimates of future cash flows require assumptions about future business conditions and other developments. Significant, unanticipated changes to these assumptions could require a provision for impairment in the future.

### DECOMMISSIONING PROVISIONS

Amounts are recorded for decommissioning provisions that will be incurred by the Company at the end of the operating life of the facilities and properties, and upon retirement of its mining assets. Estimates of these costs are subject to uncertainty associated with the method, timing and extent of future decommissioning activities. The provision and related asset and expense are impacted by estimates with respect to the costs and timing of decommissioning.

### SHARE-BASED PAYMENTS

The Company has share-based payments expenses for stock option awards to employees, directors, officers and consultants, as explained in the Company's financial statements. IFRS requires that all share-based awards be accounted for using the fair value method. Under this method, the Black-Scholes option pricing model requires estimates of the expected life of the option, forfeiture rates, stock volatility and the risk-free interest rate expected over the life of the option. A change in these assumptions could materially change the amount of share-based payments expenses recorded.

### CONTINGENT LIABILITIES

Contingent liabilities are reviewed continuously to assess whether an outflow of cash has become probable. If the recognition criteria are met, then a provision is recorded in the period in which the change in probability occurs. Assessing whether a contingent liability is probable requires the Company to make judgments about the existence of past events and the application of applicable laws, contractual or constructive obligations.

## FINANCIAL RISK FACTORS

### CREDIT RISK

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its commercial obligations. The Company has no significant concentration of credit risk arising from operations. The Company's cash and restricted cash is held with large Canadian financial institutions and management believes the risk of loss to be remote.

### LIQUIDITY RISK AND GOING CONCERN

The Company manages liquidity risk by maintaining sufficient cash balances to meet liabilities when due. As at December 31, 2021, the Company had cash totalling $1,799,000 (2020 – $4,821,000) to settle trade and other payables of $884,000 (2020 - $1,460,000). As at December 31, 2021 and December 31, 2020 the Company's trade and other receivables are subject to normal trade terms.

Management is aware of material uncertainties related to events and conditions that may cast significant doubt upon the Company's ability to continue as a going concern. The Company is in its pre-development phase and therefore there is material uncertainty regarding the Company's ability to raise additional funds to maintain sufficient financial resources to fund ongoing operating and required exploration expenditures and to move forward to the production stage. There is also material uncertainty with respect to various legal matters which may result in additional liabilities to the Company. As at December 31, 2021, the Company had incurred an accumulated deficit of $136,071,000 and expects to incur further expenditures on the exploration and future development of its mineral exploration projects. As at December 31, 2021, the Company had working capital (current assets less current liabilities) of $1,614,000 which is expected to be insufficient to fund operations in the upcoming year. In addition to ongoing operating expenses, the Company is committed to expenditures in 2022 and subsequent years on its regulatory spending requirements and mineral properties to keep the Company in good standing. The Company also expects to provide funding to settle the decommissioning liability. The ability of the Company to continue as a going concern is dependent upon obtaining further equity issuances or other forms of financings. The Company is pursuing additional capital. Failure to obtain additional funding on a timely basis may cause the Company to postpone development plans, forfeit rights in its properties or reduce or terminate its operations.

The financial statements do not include any adjustments to carrying values of asset amounts and liabilities, or reported expenses that may be necessary if the going concern assumption were not appropriate.

## MARKET RISK

Market risk is the risk that the value of a financial instrument will fluctuate as a result of changes in market prices, whether those changes are caused by factors specific to the individual instrument or its issuer or factors affecting all instruments traded in the market. The Company's future potash sales are exposed to price risk with respect to North American and international potash prices.

## CURRENCY RISK

The Company's functional currency is the Canadian dollar with the majority of transactions denominated in Canadian dollars. At this time management believes the foreign exchange risk derived from currency conversions is not significant and therefore does not hedge its foreign exchange risk. At December 31, 2021, the Company held the majority of its cash in Canadian dollars.

## INTEREST RATE RISK

The Company's trade and other payables are non-interest bearing and have contractual maturities of less than 45 days. As at December 31, 2021, the Company's only interest bearing asset is cash in high interest saving accounts and a small amount of cash equivalents held in Guaranteed Investment Certificates. Cash and cash equivalents earn interest at prevailing short-term interest rates. During the year ended December 31, 2021, the Company earned interest income of $19,000 (2020 - $65,000) from its cash and cash equivalents.

# INTERNAL CONTROLS

## DISCLOSURE CONTROLS AND PROCEDURES

The Company has established disclosure controls and procedures for the timely and accurate preparation of financial and other reports. Such disclosure controls and procedures are designed to provide reasonable assurance that material information required to be disclosed is recorded, processed, summarized and reported within the periods specified by applicable securities regulations. In addition, the disclosure controls ensure that information required to be disclosed is accumulated and communicated to the appropriate members of management and properly reflected in the Company's continuous disclosure filings.

As with most small or developing companies and consistent with the concept of reasonable assurance, the Company recognizes that the relative cost of maintaining these disclosure controls and procedures should not exceed their expected benefits. As a result, the Company's disclosure controls and procedures can only provide reasonable assurance, and not absolute assurance, that the objectives of such controls and procedures are met.

The Interim Chief Executive Officer and Interim Chief Financial Officer are responsible for evaluating the disclosure controls and procedures. They have concluded that the design and operation of these disclosure controls and procedures were not effective due to the existence of material weaknesses in the internal controls over financial reporting noted in the following section.

The Company mitigates these weaknesses by using external consultants as appropriate; however, such mitigating procedures do not constitute compensating controls for the purposes of National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings (**"NI 52-109"**).

## INTERNAL CONTROLS OVER FINANCIAL REPORTING (ICFR)

The Interim Chief Executive Officer and Interim Chief Financial Officer of the Company are responsible for designing and ensuring the operating effectiveness of internal controls over financial reporting. They are also responsible for causing the internal controls to be designed and operated effectively under their supervision. They are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. It is management's belief that any control system, no matter how well conceived or operated, can provide only reasonable, but not absolute, assurance that the objectives of the control system are met. An internal control system cannot prevent all errors or fraud.

The Company does not have adequate in-house personnel to properly implement segregation of duties with respect to day-to-day accounting, complex accounting and non-routine transactions that may arise and also to prevent and monitor the potential for management override. It is not deemed economically feasible at this time to have such personnel. The volume of transactions and reporting requirements puts significant strain on the limited accounting personnel such that the Company relies on external experts and assistance to complete these activities on time.

These material weaknesses may increase the risk of material misstatements in the financial statements; the Company mitigates these weaknesses by using external consultants as appropriate; however, such mitigating procedures do not constitute compensating controls for the purposes of NI 52-109.

## OFF BALANCE SHEET ARRANGEMENTS

The Company has no off balance sheet arrangements at the time of this MD&A.

## OUTSTANDING SHARES

As of the date of this MD&A, the Company has 42,174,847 Common Shares and 945,000 stock options issued and outstanding.

## FORWARD-LOOKING INFORMATION

Certain statements in this MD&A may constitute “forward-looking” statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Forward-looking information is often, but not always, identified by the use of words such as “anticipate”, “believe”, “could”, “estimate”, “expect”, “plan”, “intend”, “forecast”, “future”, “guidance”, “may”, “predict”, “project”, “should”, “strategy”, “target”, “will” or the negative or similar words or phrases suggesting future outcomes or language suggesting an outlook.

Forward-looking statements may include, but are not limited to, management’s expectations, intentions, and beliefs concerning: the development and operation of the Wynyard Potash Project or the Proteos Nitrogen Project; future extraction and exploitation of mineral deposits; capital expenditure requirements; future commodity prices; expectations regarding prices and costs; expectations regarding the Company’s ability to obtain additional financing necessary to develop the Wynyard Potash Project or the Proteos Nitrogen Project; expectations regarding the production capacity of the Wynyard Potash Project and the Proteos Nitrogen Project; expectations regarding markets for potash in North America and globally; expectations regarding markets for nitrogen fertilizer products; expectations regarding the distinction between standard-grade and high-grade potash; expectations regarding markets for magnesium; the effectiveness of the Company’s anticipated solution mining methods; expenditures to be made by the Company to meet certain work commitments; work plans to be conducted by the Company; reclamation and rehabilitation obligation and liabilities; treatment under governmental regulatory regimes with respect to environmental matters; treatment under governmental taxation regimes; impact of foreign governments and regulation on the Company’s operations; future development of infrastructure; government regulation of mining operations; dependence on key personnel; and competitive conditions.

Forward-looking statements in this MD&A include statements regarding: the Company’s ability to commence and increase production from 625,000 TPY, to 1.375 million TPY, and thereafter to 2.125 million TPY of potash; the production of potash, nitrogen fertilizer products, or magnesium; the costs related to the operation of the plant and facilities will be consistent with other solution mining operations subject to differences in the Company’s mineral body and processing; the implementation and ongoing use of solution mining process; further seismic exploration and drilling; global fertilizer demand and consumption; capital expenditure and operational expenditure estimates; anticipated results of development and extraction activities and estimated future developments; the Company’s ability to produce sufficient potash to meet its obligations under the Offtake Agreement; the Company's ability to obtain additional financing on satisfactory terms; the market prices for potash, nitrogen fertilizer products, and magnesium; the Company's ability to pump the waste underground to eliminate surface salt tail piles; the Company's ability to economically extract and process mineralized material into potash; and the improvements that the Company has developed for the solution mining process are as effective as expected by the Company.

Such forward-looking statements are based on a number of material factors and assumptions, including: the stabilization of the global potash industry and market; the Company obtains additional financing in the future; the Company executes its project development plans in a manner consistent with the Company's technical report filed on July 15, 2016 (the "**2016 Technical Report**"); the Company executes its discounted cash flow model assumptions as described in the 2016 Technical Report; estimates of mineral resources and mineral reserves in the 2016 Technical Report are accurate; full potash production is reached; that the Company continues to have rights to the property subject to subsurface mineral leases KL 246, KL 247A and KLSA 010, and such rights are not challenged or impacted in any material manner; that the Company is able to obtain required approvals, licences and permits, in a timely manner; the Company is able to successfully develop and market nitrogen fertilizer products; the Company is able to successfully develop and market magnesium products; the Company's key senior management continue in their respective roles with the Company; the Company's intellectual property is not challenged; the Company does not become subject to litigation; the Company's ability to meet its obligations under the Offtake Agreement; environmental and other applicable law and other regulations are not amended, repealed or applied in a manner that impacts the development and operation of the Wynyard Potash Project or the Proteos Nitrogen Project as currently anticipated; there are no adverse changes to the price of potash, nitrogen fertilizer products, or magnesium that would adversely affect the prospects for developing and operating the Wynyard Potash Project or the Proteos Nitrogen Project, or making it inadvisable or uneconomic to proceed with development; the future mining operations operate as anticipated; the Company's ability to maintain and develop positive relationships with foreign governments and future business partners; the Company is able to develop and maintain the infrastructure required to export, store and transport its potash, nitrogen fertilizers, or magnesium production; there are no comparable mining companies targeting carnallite in North America; and the continued existence and operation of the primary potash production facility.

Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors discussed under "Financial Risk Factors" elsewhere in this MD&A and the following factors, which are discussed in greater detail under the "Risk Factors" section of the Annual Information Form: exploration, development and operation risks related to the Wynyard Potash Project and the Proteos Nitrogen Project; the ability to secure adequate financing to implement the Company's strategic and development objectives; the ability to maintain adequate capital to meet the Company's financial commitments; the successful execution of the Company's project plans; the uncertainty regarding the estimation of mineral resources and mineral reserves in the 2016 Technical Report; the lack of current revenues and uncertainty about future revenues; the risks associated with the limited operating history of the Company; the lack of developed markets for the Company's magnesium products; the unproven nature of solution mining of carnallite in Saskatchewan; no assurance of titles, leases, or maintenance of existing permits; permit and licensing requirements related to exploration and development activities; the Company's ability to satisfy its material agreements, including the Offtake Agreement; the risks associated with the enforcement of the Company's material agreements, including the Offtake Agreement; the potential loss of key employees, technical experts or key suppliers; the potential for a volatile market for the Common Shares of the Company; the potential dilution of shareholders through future financings; failure to protect the Company's intellectual property rights; litigation and tax matters; adequacy of the Company's insurance coverage; adequacy of the Company's internal controls over financial reporting; environmental and regulatory risks; the volatility of potash and magnesium prices; the cyclical nature of the potash and magnesium industries; availability and cost of labour and materials required for the construction of Phase I; competition; and currency exchange rate fluctuations.

Although the forward-looking statements contained in this MD&A are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this MD&A and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company assumes no obligation to update or revise them to reflect new events or circumstances.

Further information about the factors affecting forward-looking statements is available in Karnalyte's Annual Information Form and the audited annual financial statements for the year ended December 31, 2021, which have been filed with Canadian provincial securities commissions and are available on SEDAR at www.sedar.com.