

For the year ended December 31, 2022



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# 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, 2022 and 2021. 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, 2022. This commentary is dated March 23, 2023. 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 23, 2023 (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 "Potash Project") is a proposed 2.125 million tonnes per year ("TPY") potash mine utilizing conventional solution mining methods for potash production, with a vision of ultimately becoming the next greenfield, environmentally innovative mine. The Company proposes that the Potash Project, key to Karnalyte's goal of becoming a low-cost, sustainable producer of high-quality product, be developed in three phases using a modular approach, with a first phase ("Phase I") consisting of a 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.

#### 2022 - YEAR IN REVIEW

In 2022, Karnalyte commenced an update to its NI 43-101 Compliant Technical Report, successfully raised capital by way of a rights offering, and prepared an ESG Strategy Report.

### **POTASH PROJECT**

Market Update - The market conditions for potash stayed strong in 2022 although softening slightly toward the end of the fourth quarter of 2022 and to date. Major geopolitical events including the Russian invasion of Ukraine resulted in unprecedented supply chain disruption for many commodities and especially for potash. It is expected that these conditions will persist into 2023 and likely beyond.

#### UPDATE TO THE NATIONAL INSTRUMENT 43-101 COMPLIANT TECHNICAL REPORT

In January of 2022, the Company announced the appointment of Wood PLC ("Wood"), a leading global consulting and engineering company, as lead author of an update to its NI 43-101 compliant technical report ("Technical Report") or "Report"). Wood was appointed after a significant improvement in the market conditions for potash which began in 2021 and continued through 2022.

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Karnalyte has made diligent progress on this important step toward construction of its Wynyard Potash Project, despite unforeseen challenges that have resulted in delays.

Wood provided Karnalyte with preliminary capital cost and operating cost estimates using budgetary pricing for mechanical equipment, mechanical bulks, and tanks that take into account the changes to Saskatchewan's tax regime, currency exchange rates and cost of labour. Karnalyte has been reviewing these capital and operating cost quotes, along with exploring various price assumptions while Wood works toward the finalization of a financial model and final compilation of the report, expected soon.

The recent increase in potash prices and other commodity prices has resulted in significant growth in Western Canada's economic activity, and this, in conjunction with supply chain constraints impacting suppliers worldwide is, among other factors, causing delays to the update to the Technical Report. In conjunction with the update Karnalyte is also investigating certain capital cost efficiencies, opportunities to enhance sustainability and working towards getting more comfort on the assumptions used given the current market and economic conditions. Karnalyte will provide a further update as appropriate once the Technical Report is finalized.

"Karnalyte continues to focus on advancing the update to the NI 43-101 Compliant Technical Report and has continued making steady progress, despite challenges the mining industry is facing beyond our control and the Company's desire to move forward in a responsible way." said Danielle Favreau, interim Chief Executive Officer of Karnalyte. "The Company remains committed to following best practices as we work through this critical step, which will serve as a strong foundation for our Wynyard Potash Project."

To date, Karnalyte has achieved a number of key milestones in relation to the update to the Report. This includes engaging industry leading solution mining and engineering firm ERCOSPLAN ingenieurgesellschaft Geotechnik und Bergbau mbH ("ERCOSPLAN"), which provided Karnalyte with a positive review of core samples, and confirmation from Saskatchewan's Ministry of Environment that Karnalyte's previous Environmental Impact Study approval from 2013 remains valid.

#### NITROGEN - THE PROTEOS NITROGEN PROJECT

The Proteos Nitrogen Project 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. There were no significant developments to report on this project in 2022.

## **RIGHTS OFFERING**

On June 22, 2022, the Company announced the launch of a rights offering (the "Rights Offering") as part of its capital raise strategy in order to provide a viable and attractive investment opportunity for existing shareholders. On August 3rd, the Company announced the successful completion of this Rights Offering, following its expiry on July 29, 2022, raising a total of \$3,862,000 in proceeds as additional capital for, among other things, the development of the Potash Project.

Karnalyte was pleased to announce the participation of Gujarat State Fertilizers and Chemicals Limited ("GSFC") in the Rights Offering, a major agriculture sector business in India, providing additional investment in Karnalyte and further demonstrating its ongoing commitment and support for the Company and the Potash Project.

#### **ESG STRATEGY DEVELOPMENT**

In line with Karnalyte's environmental advantages and governance advancements, the Company engaged with Karri Howlett Consulting Inc. ("Karri Howlett Consulting" or "KHCI") in the year to prepare an Environmental, Social and Governance ("ESG") strategy report. In October 2022, Karnalyte received a first draft of the report analyzing key focus areas per Karnalyte stakeholders, with practical recommendations under each of the Environmental, Social and Governance categories.

Karnalyte is in the process of reviewing the recommendations as it seeks to enhance its existing policies and practices, ensuring the Company is up to date and in line with current and peer ESG trends. Karnalyte maintains its ultimate goal of operating the business in the best interests of shareholders and relevant stakeholders to further strengthen its strategic position in the potash sector.

### **OUTLOOK FOR 2023**

In 2023, the Company plans to complete the update to its NI 43-101 technical report, to continue to work on identifying cost efficiencies, optimizing construction and operation plans, and enhancing project sustainability, and to increase business development activities to seek out and attract investment and strategic partners to move one or both Company's projects forward to development.

# SELECTED ANNUAL INFORMATION

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

### Selected annual results (CAD \$ thousands)

|                             | Year ended December 31 |         |         |  |
|-----------------------------|------------------------|---------|---------|--|
|                             | 2022                   | 2021    | 2020    |  |
| Total revenue               |                        | -       | -       |  |
| Interest and other income   | 62                     | 19      | 65      |  |
| Net and comprehensive loss  | (1,728)                | (2,193) | (3,429) |  |
| Basic and diluted per share | (0.04)                 | (0.05)  | (80.0)  |  |
| Total current assets        | 4,209                  | 2,498   | 5,291   |  |
| Total assets                | 9,883                  | 8,393   | 11,241  |  |
| Total current liabilities   | 628                    | 884     | 1,499   |  |
| Total liabilities           | 2,006                  | 2,630   | 3,311   |  |
| Total shareholders' equity  | 7,877                  | 5,763   | 7,930   |  |

During the year ended December 31, 2022, the Company's focus was on the updating the NI 43-101 compliant technical report, successfully raising capital through the Rights Offering and the preparation of an ESG strategy report.

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 Potash Project, improving the Company's financial position and investigating alternative sources of funding.

## RESULTS OF OPERATIONS

#### **GENERAL AND ADMINISTRATIVE EXPENSES**

General and administrative ("G&A") costs for the year ended December 31, 2022 amounted to \$1,339,000 which is a decrease of \$526,000 from the comparative 2021 amount.

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

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

|                                                           | Year ended December 31, |       |  |
|-----------------------------------------------------------|-------------------------|-------|--|
|                                                           | 2022                    | 2021  |  |
| Salaries, wages and benefits                              | 257                     | 298   |  |
| Business development, investor relations, regulatory fees | 101                     | 70    |  |
| Accounting and legal                                      | 246                     | 497   |  |
| Consulting                                                | 143                     | 328   |  |
| Directors Fees                                            | 237                     | 232   |  |
| Office and general                                        | 355                     | 440   |  |
| Total general and administrative                          | 1,339                   | 1,865 |  |

Salaries, wages and benefits for the year ended December 31, 2022 were \$257,000 compared to \$298,000 in 2021 which is a decrease of \$41,000. Salaries, wages and benefits decreased as the Company implemented some restructuring at the end of the second quarter of 2021. The resulting cost savings are reflected here and in future quarters. 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, 2022 amounted to \$101,000 compared to \$70,000 for the year ended December 31, 2021, which is an increase of \$31,000 largely relating to press releases and website and brand update efforts.

Accounting and legal expenses for the year ended December 31, 2022 were \$246,000 compared to \$497,000 in the comparative year which is a decrease of \$251,000. In 2021, accounting and legal efforts were required as a result of the originating application filed by Messrs. Peter Matson and Gregory George Szabo and the statement of claim filed by Mr. Dan Brown. While the originating application filed by Messrs. Matson and

Szabo remains outstanding, fewer costs were incurred in 2022 as compared to 2021. Also, an insurance reimbursement was received in the third quarter of 2022 related to these matters. During the fourth quarter of 2022, the Company reached a final settlement with Mr. Dan Brown, for which the Company had received a statement of claim filed against the Company, Frank Wheatley, Mark Zachanowich, Peter Matson, Todd Rowan, Gregory Szabo, Sanjeev Varma and Vishvesh Nanavaty in the first quarter of 2021. The Company has recognized the amount paid to Mr. Dan Brown and a related insurance recovery in the current year.

Consulting expenses for the year ended December 31, 2022 amounted to \$143,000 compared to \$328,000 in 2021, which is a decrease of \$185,000. In 2021, the expenses in this category related to the completion of the strategic review and a consulting contract with the interim CFO. Since the strategic review concluded in 2021, the costs in this category in 2022 are lower than the comparative period. Also, with one-time projects such as the Saskatoon office closure being completed in 2021, the interim CFO's cost in this category was also reduced in 2022.

Director fees for the year ended December 31, 2022 amounted to \$237,000 compared to \$232,000 for the 2021 comparative year, representing an increase of \$5,000. Expenses have slightly increased as the number of directors increased from three in the first two quarters of 2021 to five in the third quarter of 2021. The number of directors remains at five throughout 2022. The cost increase due to the number of directors was mostly offset by a reduction in the number of meetings in 2022 versus the prior year.

Office and general expenses for the year ended December 31, 2022 amounted to \$355,000 compared to \$440,000 for the comparative year representing a decrease of \$85,000. The majority of this decrease is due to the expiration of the Saskatoon office lease in the third quarter of 2021, which also decreased the utilities and other office related expenses in 2022.

#### OTHER COSTS IMPACTING COMPREHENSIVE LOSS

Depreciation for the year ended December 31, 2022 was \$13,000 compared to \$53,000 in 2021. Since the Saskatoon office lease expired on August 31, 2021, expenses in this category decreased as there is no longer a right of use asset to depreciate.

Share-based compensation expense for the year ended December 31, 2022 was \$38,000 compared to \$26,000 in the 2021 comparative year. Share-based compensation expenses in 2021 and the first three quarters of 2022 related to the granting of 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 and the entire 2022 year. 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 2022, 30,000 options expired and 75,000 options were exercised.

Restructuring costs for the year December 31, 2022 were \$nil compared to \$81,000 in the 2021 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.

Impairment expenses for the year ended December 31, 2022 were \$1,029,000 compared to the year ending December 31, 2021 of \$524,000. In 2014, previous management determined assets with a carrying amount of

\$63,165,000 were no longer recoverable. At December 31, 2022, the Company determined that those impairment indicators continue to exist. Therefore, the incremental expenditures incurred on intangible and mine development assets in 2022 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, 2022 was \$607,000 compared to \$264,000 in the 2021 comparative year. While there is some rental income in this category from leasing the Company's land holdings to local Wynyard area farmers, the majority relates to a \$406,000 recovery recorded as a result of a change in estimate of the Company's decommissioning liability, as compared to the \$93,000 recovery recorded in 2021.

Gain on disposal of capital assets for the year ended December 31, 2022 was \$nil compared to \$99,000 in the 2021 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, 2022 was \$66,000 compared to \$1,000 in the 2021 comparative period. During the second quarter of 2022, the Company disposed of a mineral properties and intangible asset for net proceeds of \$275,000 which had a net book value of \$209,000 at the time of sale. In the third quarter of 2021, the Company sold some nonstrategic assets for proceeds of \$1,000, resulting in a \$1,000 gain on disposal of mineral properties and intangible assets.

Net finance income for the year ended December 31, 2022 was \$18,000 compared to net finance expense of \$8,000 in the 2021 comparative year. The amounts recorded as net finance (income) expense 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 increased by \$43,000 from 2021 to 2022 as a result of the Company's increased cash balance and higher 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, 2022:

|                                  | 2022   |        |        | 2021   |        |        |        |        |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                  | Dec 31 | Sep 30 | Jun 30 | Mar 31 | Dec 31 | Sep 30 | Jun 30 | Mar 31 |
| Total revenue                    | -      | -      | -      | -      | ı      | -      | -      | -      |
| Comprehensive loss               | (453)  | (432)  | (424)  | (419)  | (498)  | (279)  | (839)  | (577)  |
| Basic and diluted loss per share | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.02) | (0.01) |
| Total current assets             | 4,209  | 4,628  | 1,504  | 1,934  | 2,498  | 2,793  | 3,388  | 4,177  |
| Total assets                     | 9,883  | 10,306 | 7,185  | 7,826  | 8,393  | 8,695  | 9,305  | 10,110 |

| Total liabilities          | 2,006 | 1,976 | 2,225 | 2,468 | 2,630 | 2,438 | 2,774 | 2,748 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total shareholders' equity | 7,877 | 8,330 | 4,960 | 5,358 | 5,763 | 6,257 | 6,531 | 7,362 |

<sup>\*</sup>Expressed in thousands except loss per share

The comprehensive losses in all of the 2022 quarters were driven primarily by both impairment and G&A expenses, particularly office and general expenses, accounting and legal expenses, salaries and wages and directors fees. The comprehensive losses in all of the 2021 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 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. During the four quarters of 2022, impairment expenditures increased due to the update of the NI 43-101 technical report.

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. On August 3, 2022, the Company's Rights Offering was completed which resulted in an issuance of 11,034,135 common shares at a price of \$0.35 per share for gross proceeds of \$3,862,000.

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 Potash Project forward. Total assets remained relatively constant for most of the periods above, with the exception of the increase in the third quarter of 2022 due to the Rights Offering.

**Total liabilities** for the periods above relate to trade and other payables and the decommissioning liability. These balances vary in the analysis due to the timing of the payments required relative to the work performed in bringing the Potash Project to its current level, as well as adjustments to the decommissioning liability due to changes in the average bond and inflation rates. 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.

**Total shareholders' equity** is impacted by the quarterly comprehensive losses and the share-based compensation expense as the number of shares outstanding remains unchanged. However, in the second quarter of 2022, share options were exercised and, as a result, the Company issued 75,000 common shares

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for proceeds of \$14,000. Also, on August 3, 2022, the Company's Rights Offering was completed which resulted in an issuance of 11,034,135 common shares at a price of \$0.35 per share for gross proceeds of \$3,862,000. The Company did not pay any commission on the Rights Offering. The Company paid \$72,000 in legal, regulatory and printing costs in relations to the Rights Offering. As at December 31, 2022, the Company had 53.28 million common shares outstanding.

# 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, 2022, all of the 2022 additions to intangible assets were impaired. The additions to intangible assets mostly related to the Potash Project. The net balances classified as intangible assets are as follows:

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

|                        | December 31, 2022 | December 31, 2021 |
|------------------------|-------------------|-------------------|
| Mineral property       |                   |                   |
| Surface land           | 4,804             | 4,804             |
| Drilling               | 245               | 453               |
| Balance, end of period | 5,049             | 5,257             |

### **CAPITAL ASSETS**

The net balances classified as capital assets are as follows:

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

|                         | December 31, 2022 | December 31, 2021 |
|-------------------------|-------------------|-------------------|
| Machinery and equipment | -                 | 2                 |
| Buildings               | 106               | 115               |
| Land                    | 125               | 125               |
| Land improvements       | 19                | 21                |

| Furniture and equipment   | -   | -   |
|---------------------------|-----|-----|
| Computer hardware         | -   | -   |
| Assets under construction | -   | -   |
| Balance, end of period    | 250 | 263 |

There were no additions to capital assets in 2022. The decrease in capital assets is a result of depreciation expenses of \$13,000 recognized during the year.

The Company's ability to secure adequate financing for the development of the 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, 2022, the Company had net working capital of \$3.6 million compared to \$1.6 million at December 31, 2021 including \$3.7 million and \$1.8 million, respectively, in cash and cash equivalents.

As at December 31, 2022 and 2021, 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 Potash Project. The Company has updated its reclamation program for the 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 as well as treasury bills and guaranteed investment certificates that are highly liquid.

On August 3, 2022, the Company's Rights Offering was completed which resulted in an issuance of 11,034,135 common shares at a price of \$0.35 per share for gross proceeds of \$3,862,000. The Company did not pay any commission on the Rights Offering. The Company paid \$72,000 in legal, regulatory and printing costs in relations to the Rights Offering. The total number of issued and outstanding common shares upon completion of the Rights Offering is 53,283,982 common shares.

The Company has sufficient cash to meet its short-term corporate operating and capital requirements but does not currently have adequate funds to proceed with full-scale development of the solution mining facility. Please refer to the Liquidity Risk and Going Concern section under the Financial Risk Factors heading below.

## CONTRACTUAL OBLIGATIONS

The following are the commitments of the Company as at December 31, 2022:

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

|                            |       | Payme              | nts due by perio     | od                   |                      |
|----------------------------|-------|--------------------|----------------------|----------------------|----------------------|
|                            | Total | Less than one year | Two - three<br>years | Four - five<br>years | More than five years |
| Trade and other payables   | 628   | 628                | -                    | -                    | -                    |
| Leases on mineral property | 4,734 | 367                | 735                  | 735                  | 2,897                |
| Project contracts          | 37    | 37                 | -                    | -                    | -                    |
| Total                      | 5,399 | 1,032              | 735                  | 735                  | 2,897                |

Trade and other payables relate to operating and investing expenditures that were payable at the period ended December 31, 2022.

Leases on mineral property refer to the annual fees which are required to maintain the mineral leases related to the Potash Project. The 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, 2022 | December 31, 2021 |
|--|-------------------|-------------------|
| Salaries, benefits and other compensation arrangements | \$616             | \$685             |
| Share-based compensation                               | 38                | 21                |
| Total  | 654               | 706               |

There were no material changes to management compensation arrangements and no other related party transactions for the year ended December 31, 2022.

#### RESTRICTIONS ON DISPOSITION OF THE 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 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 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 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 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 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 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 riskfree 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, 2022, the Company had cash totalling \$3,681,000 (2021 - \$1,799,000) to settle trade and other payables of \$628,000 (2021 - \$884,000). As at December 31, 2022 and December 31, 2021 the Company's trade and other receivables are subject to normal trade terms.

Management is aware, in making its going concern assessment, 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 move forward to the production stage. As at December 31, 2022, the Company had working capital (current assets less current liabilities) of \$3,581,000. In addition to ongoing operating expenses, the Company is committed to expenditures in 2023 and subsequent years on its regulatory spending requirements and mineral properties to keep the Company in good standing. The Company's cash position may also be impacted by a requirement to fund the decommissioning liability (notes 5 and 8) and resolve the legal matters disclosed in note 17. The Company has sufficient cash to meet its short-term corporate operating and capital requirements but does not currently have adequate funds to proceed with full-scale development of the solution mining facility. The ability of the Company to continue as a going concern is dependent upon the resolution of the above matters and obtaining further equity issuances or other forms of financings. There is no assurance that the Company will be successful in obtaining required funding at an acceptable cost as and when needed or at all. 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, 2022, 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, 2022, the Company's only interest bearing asset is cash in high interest saving accounts and guaranteed investment certificates. Cash and cash equivalents earn interest at prevailing short-term interest rates. During the year ended December 31, 2022, the Company earned interest income of \$62,000 (2021 - \$19,000) 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.

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.

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# 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 53,283,982 Common Shares and 840,000 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 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 Potash Project or the Proteos Nitrogen Project; expectations regarding the production capacity of the 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 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 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 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, 2022, which have been filed with Canadian provincial securities commissions and are available on SEDAR at www.sedar.com.