



## **ARIANNE PHOSPHATE INC.**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS**

**THREE-MONTH PERIOD ENDED MARCH 31, 2024**



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This Management's Discussion and Analysis ("MD&A") presents an analysis of the financial situation and operations of Arianne Phosphate Inc. ("Arianne" or the "Company") for the period of three-month ended March 31, 2024. This report was prepared in compliance with the provisions of Form 51-102, approved by the Board of Directors and dated May 24, 2024. It should be read in conjunction with the unaudited condensed interim consolidated financial statements for the three-month periods ended March 31, 2024, and 2023, (the "financial statements") and the consolidated audited financial statements for the years ended December 31, 2023, and 2022.

The Company's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS Accounting Standards applicable to the preparation of interim financial statements, including International Accounting Standard ("IAS") 34, *Interim Financial Reporting*. All monetary amounts included in this MD&A are expressed in Canadian dollars, the Company's reporting, and functional currency, unless otherwise noted.

The accounting policies followed in the financial statements are consistent with those applied in the Company's annual financial statements for the year ended December 31, 2023.

Raphael Gaudreault, mining engineer, chief operating officer of Arianne, qualified person under NI 43-101, has reviewed the following technical disclosure.

Further information regarding the Corporation and its operations are filed electronically on the System for Electronic Document Analysis and Retrieval (SEDAR+) in Canada and can be found on [www.sedarplus.ca](http://www.sedarplus.ca).

### **FORWARD-LOOKING INFORMATION**

Certain statements in this MD&A about our current and future plans, expectations and intentions, results, levels of activity, performance, goals or achievements, or any other future events or developments constitute forward-looking statements. The words "may", "will", "would", "should", "could", "expects", "plans", "intends", "trends", "indications", "anticipates", "believes", "likely", "predicts", "estimates" or "potential" or the negative or other variations of these words or other comparable words or phrases, are intended to identify forward-looking statements. Specific forward-looking statements in this MD&A include, but are not limited to, statements with respect to the general development of the business and the eventual start of commercial production and to the liquidity position of the Company. Forward-looking statements are based on information currently available to us and on estimates and assumptions made by us regarding, among other things, general economic conditions and the mining industry in general, in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors that we believe are appropriate and reasonable in the circumstances. Although reasonable, the statements can entail known and unknown risks and uncertainties and, accordingly, actual results and future events could differ materially from those anticipated in such statements.

Arianne ensures to comply with all relevant environmental and social laws, regulations and permits in all material respects.

### **DESCRIPTION OF THE BUSINESS**

Arianne is a company focused on the development of the Lac à Paul phosphate project (Lac à Paul) located in the Saguenay-Lac-St-Jean area, in the province of Quebec. The Company's shares are listed on the TSX Venture Exchange (symbol DAN), on the Frankfurt exchange (symbol JE9N) and on the OTCQX Market (OTCQX) (symbol DRRSF). The registered office of the Company is located at 901 Talbot Blvd., Suite 302, Chicoutimi, Québec, Canada G7H 6N7.

### HIGHLIGHTS IN DEVELOPMENT ACTIVITIES

- On January 30, 2024, the Company announced that it has commenced work on a prefeasibility study ("PFS") to construct a purified phosphoric acid ("PPA") plant in the region of Saguenay-Lac-Saint-Jean, capable of converting high-purity phosphate concentrate into a finished PPA product.

More details can be found in section **OPERATIONAL REVIEW AND HISTORY**.

### OTHER HIGHLIGHTS

- In May 2024, the Company attended the SME Current Trends in Mining Finance Conference in New York and, in February 2024, the CRU Phosphates 2024 conference in Poland.
- On May 1<sup>st</sup>, 2024, the Company granted 500,000 stock options to Jeffrey Beck in lieu of any salary or cash remuneration. These options are exercisable at a price of \$0.255 per share and expire on May 1<sup>st</sup>, 2034.
- On April 2, 2024, the Company announced it elected to issue 6,080,696 shares as its annual interests payment on the credit facility, at \$0.3229 per share. The credit facility was also amended to cap the maximum buy-back amount and additional production fees to \$6.75M and \$0.75/tonne of concentrate sold.

In addition, Arianne engaged Impaq Capital to provide investor relation services for a minimum period of 6 months and issued 150,000 stock options at an exercise price of \$0.275 and expiration in 2 years.

- On January 23, 2024, the Quebec Government has added apatite (phosphate) to its critical and strategic mineral list.

### OBJECTIVES

The strategic objectives that guide management and the Company's directors can be summarized as follows:

- Complete the PFS on the PPA plant announced in January 2024 and, with favorable results, start a feasibility study on a PPA plant project. Results for the PFS are expected mid 2024;
- Continue to optimize its Lac à Paul project and the direct application research ongoing, and maintain the mineral claims and permits in good standing;
- Secure financing for construction and development of the Lac à Paul project; and
- Sign an "Impact and Benefit Agreement ("IBA") with the First Nations.

The activities contemplated above are always subject to matters and timelines that are not within the exclusive control of Arianne. These factors include the ability to obtain, on terms acceptable to Arianne, financing, governmental and other third parties' approvals, licenses, rights of way and surface rights.

### OPERATIONAL REVIEW AND HISTORY

Although 85% of the world's phosphate production is used in fertilizer, there is a growing demand from other specialty applications. Due to the nature of Arianne Phosphate's deposit, it allows the Company to produce a very high-purity, low-contaminant phosphate concentrate that can be used for other

applications, as well as, for fertilizer. Arianne has been active in pursuing several opportunities that would allow its product a greater potential customer base.

### **LITHIUM-IRON-PHOSPHATE (LFP) BATTERY**

Over the last several years, the LFP battery has been gaining greater penetration among certain segments of the automotive industry with, several large companies increasing the number of vehicles using these batteries. Since the beginning of 2023, major automobile companies announced the construction of their LFP plants in the United States and Canada, while others are considering adopting LFP batteries. Also, a major foreign player in phosphoric acid has received a grant from a US government agency to build a cathode manufacturing facility in the US. A constraint on some of the current battery technologies has been the ability to source both an ample and safe supply of the necessary materials to produce these batteries, a challenge that is impacting the industry. In the case of LFP batteries, both iron and phosphate are easier to source and, should provide for the substantial growth that is expected to come over the next few years.

Purified phosphoric acid has gained considerable interest over the last few years as it is an important ingredient in the LFP battery. Currently, the supply of PPA is constrained, especially outside of China, as it has historically been used in food preservatives and other industrial applications, and now, the LFP is rapidly encroaching on existing supply.

Arianne's high-purity concentrate can work across a wide spectrum of needs, from fertilizer through to more advanced applications, and Arianne's location in a safe geopolitical environment provides security of supply for those looking to source their phosphate.

Arianne completed a pre-feasibility study with Prayon (see Press Release dated October 30, 2019) several years ago and, given the demand for purified phosphoric acid, the Company continues to look at opportunities to expand further downstream and be a producer for the LFP market. Arianne phosphate concentrate responded extremely well during the process in 2019. Further, because of the high-quality nature of the Arianne phosphate concentrate input, the gypsum by-product produced during the process appears to have commercial value, as opposed to the typical contaminated waste generated by using traditional phosphate rock sources.

Tests were performed during 2022, using phosphoric acid samples produced by Prayon Technologies, a division of PRAYON S.A. ("Prayon"), a world leader in the production of purified phosphoric acid and, a necessary ingredient in the production of LFP batteries. The report extensively details the full process of converting Arianne's phosphate concentrate into acid, reviewed various methods of doing so, optimized performance/recoveries and provided full specifications. Aside from the reports, Arianne also received samples of the purified phosphoric acid made from its phosphate concentrate and produced through the process. Both reports and samples are currently being made available to companies interested in having access to Arianne's phosphate concentrate or, products made from it.

The LFP market represents an important opportunity for the Company, even more with apatite (phosphate) on the Quebec critical and strategic mineral list. In pursuing this market, Arianne will be able to move beyond being a producer and seller of concentrate, but also become a dominant player in the high-purity, battery, and specialty markets. As well, with the production of purified phosphoric acid from phosphate concentrates originating from the Saguenay-Lac-St-Jean region, the Company will benefit from significantly enhanced economics and allow the Saguenay region to establish itself within the global battery ecosystem.

The PFS is studying the construction of a PPA plant situated in the Saguenay region of Quebec and, with easy access to major North American battery hubs such as Bécancour, Quebec, the US "battery-belt" in the

southeast and the American automotive industry in Michigan and surrounding states. The project anticipates the production of 350,000 tonnes of battery-grade PPA, which would make Arianne one of the largest producers outside of China and capable of addressing a significant portion of Western battery requirements. Further, the facility would also produce over 200,000 tonnes of a secondary premium phosphoric acid used for animal feeds and specialty fertilizers. Due to projected closures both in North America and Europe, this secondary market will be greatly underserved and provide additional economic opportunity to Arianne.

#### **DIRECT APPLICATION**

Arianne is working with Rivière-du-Loup Cégep on the development of a new breed of fertilizers using organic waste and Arianne's high-purity, low-contaminant phosphate concentrate.

In October 2023, the Company and the CEGEP of Rivière-du-Loup's Environmental and Biotechnology Group ("GERB") received a \$727,500 three-year grant for the development of a promising organic fertilizer.

Arianne is also working with Northern Nutrients of Saskatchewan and has provided its phosphate concentrate to be combined into Northern Nutrient's proprietary fertilizer compositions to derive a multi-nutrient fertilizer that can be directly applied to the farmer's field. Testing of this new and proprietary fertilizer occurred over the summer 2022. The results received by Northern Nutrients were conclusive and more tests could be performed in the future, the next steps have not been established by them.

Currently, the industry practice is to take mined phosphate concentrate and ship it to a phosphoric acid facility. There, it is combined with sulphuric acid and other ingredients to make 'downstream' phosphate-based fertilizers such as MAP and DAP. By working with both research and commercial organizations, Arianne is looking at ways to alter the traditional process and combine its concentrate with organic waste or other bacteria that would allow its phosphate concentrate to effectively be used in farming without the requirement of traditional acidulated fertilizer products.

For the agricultural industry, it could allow the farmer the ability to move away from acid-based processes and, by integrating with organic waste, allow for a more circular and environmentally friendly process. Logistically, it would also allow Arianne to be less reliant on downstream facilities to purchase its phosphate and transform it into fertilizers.

#### **HYDROGEN-BASED TECHNOLOGY**

Currently, electrolyzers have three main challenges for mass production: performance, durability, and cost. The current research centers on the use of phosphate-based materials in the components of the electrolyser and would address these challenges. Phosphate does allow for greater ionic conductivity and will optimize hydrogen production.

Arianne Phosphate is working with the Université du Québec à Trois-Rivières ("UQTR") to assess the use of Arianne's high-purity phosphate concentrate in electrolyzers that produce hydrogen for use in hydrogen fuel cells. UQTR's work is focusing on designs around the proton exchange membrane ("PEM").

#### **OFF-TAKE AGREEMENTS**

In September and December 2018, the Company announced the formal execution of two off-take agreements. Under the terms of those agreements, the buyers have entered into long-term contracts to purchase Arianne's high-purity phosphate concentrate which will be shipped to the buyers' processing plant



for further processing into downstream phosphate products. The off-take agreements also have a mechanism whereby it can be extended beyond the initial contract period and applies pricing that accounts for the high quality of Arianne's concentrate. The Company is conducting ongoing discussion and negotiations with addition potential customers and off-takers.

At the end of 2021 and beginning of 2022, Arianne had extended the commencement date of commercial production in existing offtake agreements, which demonstrates the interest of the market in our rock and the support we receive from our future clients.

#### PAUL PROJECT RESERVES

Proven and Probable (P&P) reserves estimated in the Feasibility study published in October 2013 are presented in the next table.

RESERVE	PAUL ZONE	
	Cut-off grade ("COG"): 3.5% (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (MT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
PROVEN	313.71	6.92
PROBABLE	158.38	6.80
<b>TOTAL (P+P)</b>	<b>472.09</b>	<b>6.88</b>

#### Notes:

1. Mr. Alex Topalovic, Manager Mining, WorleyParsons Canada Services Ltd, Independent Qualified Person as per NI43-101, has prepared the mineral reserves with assistance of Amanda Fitch (P.Eng, Ing.) and John Cairns (P.Eng)
2. Effective: 2013-10-15
3. Fx (CAD:USD): 0.9524
4. Avg. operating costs: 93.7 USD
5. Concentrate Selling price: 213 USD/tonne.
6. Mineral Reserves are supported by a 43-101 compliant Technical Report "Feasibility Study to Produce 3Mtpy of High Purity Apatite Concentrate at the Lac a Paul Project, Québec, Canada."
7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.
8. Reference: Press release 2013-10-24
9. Supporting documentation is available on SEDAR+ under the Company's profile at [www.sedarplus.ca](http://www.sedarplus.ca).

## PAUL PROJECT RESOURCES

Through further exploration activities completed in 2014, additional resources were estimated on the project. All the up-to-date resources of the Lac à Paul project are presented in the next tables.

RESOURCE	PAUL ZONE + E EXT. + W EXT COG: 4.0% (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (MT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
MEASURED (M)	317,640	7.29
INDICATED (I)	385,060	7.05
<b>TOTAL (M+I)</b>	<b>702,700</b>	<b>7.16</b>
INFERRED	26,010	6.58

1. Mr. Claude Duplessis, Ing, GoldMinds Geoservices Inc., Independent Qualified Person as per NI43-101, has prepared the mineral resources with assistance of Mr. Merouane Rachidi PhD. Géo.
2. Effective: 2015-02-18. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions (2014), as required under 43-101.
3. Mineral Resources are inclusive of Mineral Reserves.
4. Numbers may not add due to rounding.
5. Mineral Resources reported demonstrate reasonable prospect of eventual economic extraction, as required under NI 43-101.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.
8. Supporting documentation is available on SEDAR+ under the Company's profile at [www.sedarplus.ca](http://www.sedarplus.ca).

RESOURCE	MANOUANE COG: 2.43% (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (MT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
MEASURED (M)	136.9	5.93
INDICATED (I)	26.9	5.64
<b>TOTAL (M+I)</b>	<b>163.8</b>	<b>5.88</b>
INFERRED	-	-

RESOURCE	SOUTH TRAMAN COG: 3.5% (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (KT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
MEASURED (M)	-	-
INDICATED (I)	-	-
<b>TOTAL (M+I)</b>	-	-
INFERRED	146,000	5.30

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| <ol style="list-style-type: none"> <li>1. Mr. Claude Duplessis, Ing, SGS Canada Inc., Independent Qualified Person as per NI43-101, has prepared the mineral resources.</li> <li>2. Effective: 2011-11-08. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions (2010), as required under 43-101.</li> <li>3. Mineral Resources are inclusive of Mineral Reserves.</li> <li>4. Numbers may not add due to rounding.</li> <li>5. Mineral Resources reported demonstrate reasonable prospect of eventual economic extraction, as required under NI 43-101.</li> <li>6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.</li> <li>7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.</li> <li>8. Supporting documentation is available on SEDAR+ under the Company's profile at <a href="http://www.sedarplus.ca">www.sedarplus.ca</a>.</li> </ol> | <ol style="list-style-type: none"> <li>1. Mr. Claude Duplessis, Ing, GoldMinds Geoservices Inc., Independent Qualified Person as per NI43-101, has prepared the mineral resources.</li> <li>2. Effective: 2014-07-16. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions (2014), as required under 43-101.</li> <li>3. Mineral Resources are inclusive of Mineral Reserves.</li> <li>4. Numbers may not add due to rounding.</li> <li>5. Mineral Resources reported demonstrate reasonable prospect of eventual economic extraction, as required under NI 43-101.</li> <li>6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.</li> <li>7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.</li> <li>8. Supporting documentation is available on SEDAR+ under the Company's profile at <a href="http://www.sedarplus.ca">www.sedarplus.ca</a>.</li> </ol> |
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RESOURCE	NICOLE COG: 3.5 % (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (KT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
MEASURED (M)	-	-
INDICATED (I)	-	-
<b>TOTAL (M+I)</b>	-	-
INFERRED	78,200	5.34

RESOURCE	TRAVERSE COG: 3.5 % (P <sub>2</sub> O <sub>5</sub> )	
	TONNAGE (KT)	GRADE (%P <sub>2</sub> O <sub>5</sub> )
MEASURED (M)	-	-
INDICATED (I)	-	-
<b>TOTAL (M+I)</b>	-	-
INFERRED	17,000	5.98

1. Mr. Claude Duplessis, Ing, GoldMinds Geoservices Inc., Independent Qualified Person as per NI43-101, has prepared the mineral resources.
2. Effective: 2014-05-15. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions (2014), as required under 43-101.
3. Mineral Resources are inclusive of Mineral Reserves.
4. Numbers may not add due to rounding.
5. Mineral Resources reported demonstrate reasonable prospect of eventual economic extraction, as required under NI 43-101.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.
8. Supporting documentation is available on SEDAR+ under the Company's profile at [www.sedarplus.ca](http://www.sedarplus.ca).

1. Mr. Claude Duplessis, Ing, GoldMinds Geoservices Inc., Independent Qualified Person as per NI43-101, has prepared the mineral resources.
2. Effective: 2014-07-16. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (CIM) definitions (2014), as required under 43-101.
3. Mineral Resources are inclusive of Mineral Reserves.
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6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
7. The Mineral Reserves would not be materially affected by environmental, permitting, legal, marketing, and other relevant issues based on information currently available.
8. Supporting documentation is available on SEDAR+ under the Company's profile at [www.sedarplus.ca](http://www.sedarplus.ca).

## METALLURGY

In 2020, the Company conducted metallurgical tests performed at COREM Labs in Quebec City, Canada. Arianne weighed the benefits of using a different collector agent sourced from NordChem, a Canadian-based company that provides tailor-made chemicals to the mining industry. Results from these tests demonstrated that Arianne could produce a phosphate concentrate averaging 40.25% P<sub>2</sub>O<sub>5</sub> with recoveries ranging between 91.1% and 93.2% and, combined with the rapidity with which this collector acts, would also produce cost savings in the production of our high purity concentrate.

In 2020, Arianne also received further results from tests designed to optimize its metallurgical process. The process was run at lower water temperatures to simulate the water temperatures available at site through most of the operating year. Using water at 4°C, as opposed to the originally tested 20°C, showed no adverse effect on the recoveries or quality of Arianne's phosphate concentrate and thus, will allow Arianne to produce the same quality product while reducing the time and costs associated with heating.

The tests conducted in 2013 for the feasibility study demonstrated the possibility of producing an apatite concentrate containing 38.6% P<sub>2</sub>O<sub>5</sub> with a recovery of 90%. Additional tests carried out at the request of potential clients have significantly improved the quality of the concentrate by lowering the content of certain contaminants, thus reducing the minor elements ratio (MER) from 0.089 to 0.030. These tests allowed us to produce more than one tonne of concentrate with a 40% P<sub>2</sub>O<sub>5</sub> content.

## PHOSPHATE INDUSTRY TRENDS

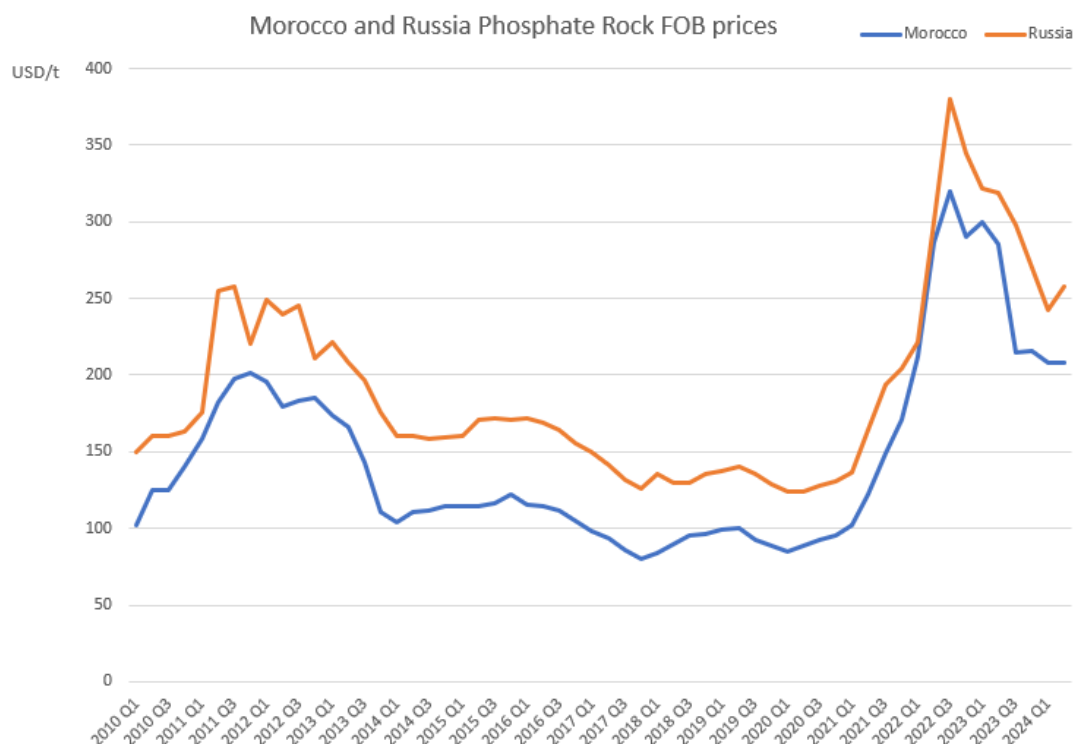
The ongoing conflict between Russia and Ukraine has disrupted the supply of many commodities from Russia and has created huge implications for the fertilizer market. Russia is a very large producer and

exporter of various fertilizers, including phosphate. They are also the main producers of high-purity rock, having an igneous deposit. The Lac à Paul project can offer a domestic supply for North America, as well as export to other areas globally. This continues to highlight the importance of a safe geopolitical jurisdiction.

Global demand for phosphate is expected to increase over the medium and long term due to global population growth and a shift in dietary habits towards more protein-rich foods, before taking into consideration the additional needs related to LFP batteries. Within this context, the Lac à Paul project can satisfy a portion of this growing demand and provide a reliable and secure supply of high-quality phosphate rock. Phosphate has no substitute in agriculture and is a key component essential to life. It helps root development and drought resistance in plants.

Phosphate purchasers (potential customers) are concerned with the security of supplies and are aware of the beneficial geopolitical situation regarding the region where the mine is located. The Lac à Paul project is located in a politically stable mining-friendly jurisdiction. As well, as a result of European legislation and environmental issues in North America, there has been a growing awareness surrounding the nature of the phosphate concentrate that is used in the production of fertilizer and other applications. Due to these growing concerns, the interest in higher purity phosphate rock, such as Arianne's, is projected to increase. Supply has also been constrained by China's export ban on phosphate fertilizers and now, the restriction on exports from Russia.

Since the beginning of 2021, the market of fertilizer had seen many disturbances. This is reflecting on the pricing of the phosphate rock which had been increasing significantly since then.



Source: CRU

### SELECTED FINANCIAL INFORMATION

DESCRIPTION	THREE-MONTH PERIOD ENDED MARCH 31, 2024	THREE-MONTH PERIOD ENDED MARCH 31, 2023
Cash and cash equivalents (a)	2,642,129	5,150,564
Total assets (a)	66,261,678	68,610,615
Total liabilities (b)	28,871,779	30,317,634
Net loss (c)	2,892,729	148,694
Basic and diluted loss per share	0.01	0.00

- (a) The variations in total assets and cash and cash equivalents are mostly related to the sale of the lithium royalty during the three-month period ended March 31, 2023 for \$2,350,000.
- (b) The decrease in the liabilities is due to the change in the expected repayment date of the credit line as of March 2023, partially offset by the accretion expense on the credit line for the three-month period ended March 31, 2024.
- (c) During the years ended December 31, 2023, and 2022, the expenses were detailed as follows:

	THREE-MONTH PERIOD ENDED MARCH 31, 2024	THREE-MONTH PERIOD ENDED MARCH 31, 2023
	\$	\$
<b>EXPENSES</b>		
Salaries and benefits	181,524	134,348
Share-based compensation	71,021	87,344
Professional and consultant fees	45,240	53,100
Management fees	-	10,375
Registration and listing fees	19,661	30,605
Communications and investors relation	54,504	59,595
Promotion, representation, and travel	29,490	19,910
Direct application projects and prefeasibility study (i)	440,776	-
Insurance	18,562	17,273
Rent and office expenses	17,963	21,301
Depreciation of property and equipment and right-of-use assets	9,974	22,041
Bank charges	1,007	1,089
Government grant	-	(550)
<b>OPERATING LOSS</b>	<b>889,722</b>	<b>456,431</b>
Finance costs	1,987,633	2,020,383
Foreign exchange loss	466	1,059
Proceeds from the sale of a lithium royalty (ii)	-	(2,350,000)
Net loss of investment property – Outfitters	20,446	20,821
Deferred income taxes expense (recovery)	(5,538)	-
<b>NET AND COMPREHENSIVE LOSS</b>	<b>2,892,729</b>	<b>148,694</b>

- (i) The Company expensed research work done on direct application for the rock concentrate, and the related salaries were therefore not capitalized. These projects had an impact on professional and consultant fees and include the PFS costs incurred to construct a PPA plant in the region of Saguenay-Lac-Saint-Jean.
- (ii) In March 2023 the Company sold a 1.5% NRS lithium royalty for \$2,350,000, having a cost of nil, disclosed as other gain in the statements of loss and comprehensive loss.

## CASHFLOWS, LIQUIDITY AND CAPITAL MANAGEMENT

As at March 31, 2024, the Company had a working capital of \$518,575, which included cash of \$2,642,129. Management of the Company believes that it has sufficient funds to maintain the status of its current obligations and keep its properties in good standing, to pay its ongoing general and administrative expenses and to meet its liabilities, obligations, and existing commitments beyond the ensuing 12 months as they fall due. In assessing whether the going concern assumption is appropriate, management considers all available information about the future. To continue the Company's future operations and fund its development expenditures, the Company will periodically need to raise additional funds, which may be completed in several ways, including, but not limited to, the issuance of new equity, debt financing or securing capital from potential partners. While management has been successful in securing financing in the past, there can be no assurance that it will be able to do so in the future or that these sources of funding or initiatives will be available to the Company or that they will be available on terms which are acceptable to the Company.

### WORKING CAPITAL

The working capital was \$518,575 as at March 31, 2024, compared to a working capital of \$1,379,271 as at December 31, 2023. The decrease is due to the work performed on direct application research projects and on the PFS, as well as other operating expenses.

CASH FLOWS PROVIDED BY (USED IN)	THREE-MONTH PERIOD ENDED MARCH 31, 2024	THREE-MONTH PERIOD ENDED MARCH 31, 2023
	\$	\$
Operating activities	(599,841)	(251,461)
Investment activities (a)	7,614	2,135,633
Financing activities	(11,147)	11,514
Increase in cash and cash equivalents	(603,374)	1,895,686

- (a) The difference between 2024 and 2023 is the receipt of \$2,350,000 from the sale of the lithium royalty in March 2023. The Company also invested in research activities related to the phosphate rock alternate usage and a PFS to construct a PPA plant, therefore less expenses were capitalized to the mineral property under development.

## SUMMARY OF QUARTERLY RESULTS

DESCRIPTION	Q1-2024	Q4-2023 (A)	Q3-2023	Q2-2023 (C)
Net (loss) income	(2,892,729)	2,485,117	(2,503,647)	(531,353)
Basic and diluted income (loss) per share	(0.01)	0.01	(0.01)	(0.00)

DESCRIPTION	Q1-2023 (B)	Q4-2022	Q3-2022	Q2-2022
Net loss	(148,694)	(2,214,960)	(2,149,098)	(2,431,834)
Basic and diluted loss per share	(0.00)	(0.01)	(0.01)	(0.02)

- (A) The Company had a net income for the fourth quarter of 2023 because the expected timeline and the expected cash flows of the credit line have been reviewed, which reduced the finance costs on the credit line.
- (B) The net loss for the first quarter of 2023 was lower than usual because in March 2023 the Company sold a 1.5% NRS lithium royalty for \$2,350,000, having a cost of nil.
- (C) The net loss for the second quarter of 2023 was lower because the expected timeline and the expected cash flows of the credit line have been reviewed, which reduced the finance costs on the credit line.

The information contained in the summary of quarterly results is presented in accordance with IFRS. Amounts in this table are presented in Canadian dollars which is also the functional currency.

### OFF BALANCE SHEET ARRANGEMENTS

As of the date of this MD&A, the Company does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company, including, and without limitation, such considerations as liquidity and capital resources.

### APPLICATION OF NEW IFRS AND CRITICAL ACCOUNTING ESTIMATES

The preparation of consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Refer to note 3 in the audited consolidated financial statements for the years ended December 31, 2023, and 2022. Also, there is a summary of significant accounting policies in notes 2 and 3 of the consolidated financial statements for the year ended December 31, 2023, and a summary of the critical accounting estimates and judgements in the note 4 of the audited financial statements for the year ended December 31, 2023.

### FINANCIAL INSTRUMENTS, FINANCIAL RISKS AND CAPITAL MANAGEMENT

The Company's financial instruments, financial risk and capital management are presented and described in the audited consolidated financial statements for the year ended December 31, 2023. Refer also to note 7 of the unaudited condensed interim consolidated financial statements for the three-month periods ended March 31, 2024 and 2023.

### RISK FACTORS

An investment in the Company's securities is subject to several risks and uncertainties. An investor should carefully consider the risks described in the MD&A and the other information filed with the Canadian securities regulators ([www.sedarplus.ca](http://www.sedarplus.ca)), before investing in the Company's shares. If any of the described risks occur, or if others occur, the Company's business, operating results and financial condition could be seriously harmed, and investors may lose a significant proportion of their investment.

Refer to the management's discussion and analysis as at December 31, 2023 for a complete list of the risk factors with an investment in Arianne or in connection with the business and operations of Arianne.

### INFORMATION ON SHARES OUTSTANDING

	AS AT MAY 24, 2024
Common shares	202,890,210
Stock options	8,624,667
Warrants	32,628,228

(s) Raphael Gaudreault  
Raphael Gaudreault  
Chief Operating Officer

(s) Geneviève Ayotte  
Geneviève Ayotte  
Chief Financial Officer

### BOARD OF DIRECTORS AND OFFICERS

**MARCO GAGNON**, Chairman of the Board of Directors

**JEFFREY BECK**, Chief Executive Officer and Director

**BRIAN OSTROFF**, President and Director

**JIM COWLEY**, Director

**STEVEN L. PINNEY**, Director

**SIVA J. PILLAY**, Director

**DOMINIQUE BOUCHARD**, Director

**CLAUDE LAFLEUR**, Director

**RAEF SULLY**, Director

**RAPHAEL GAUDREULT**, Chief Operating Officer

**GENEVIÈVE AYOTTE**, Chief Financial Officer

### TICKER SYMBOLS

DAN: TSX-V (Canada)

JE9N: FSE (Germany)

DRRSF: OTCQX (USA)

### HEAD OFFICE

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