

# LOMIKO METALS INC.

(An exploration stage company)

MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited – Expressed in Canadian Dollars)

For the six-month period ended January 31, 2024 and January 31, 2023

This Management Discussion and Analysis ("MD&A') of Lomiko Metals Inc. and its subsidiaries (referred to as "Issuer" or the "Company" or "Lomiko") was prepared by management as at March 29, 2024, and was reviewed and approved by the audit committee of the Board of Directors of Lomiko. The following discussion of performance, financial condition and future prospects should be read in conjunction with the Company's consolidated financial statements for the period ended January 31, 2024 and January 31, 2023, and notes thereto (the "Financial Statements") which have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board (IASB). The information provided herein supplements but does not form part of the Financial Statements. This discussion covers the six-month period ended January 31, 2024, and the subsequent period up to the date of issue of this MD&A. Additional information relating to the Company is available at www.sedar.com.

The MD&A is prepared in conformity with 51-102F1("NI-51-102"). These statements have been filed with the relevant authorities in Canada. All currency amounts are in Canadian dollars, unless otherwise indicated.

#### **Forward-Looking Statements**

Certain sections of this Management Discussion and Analysis may contain forward-looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from actual future results. The risks, uncertainties and other factors that could influence actual results are described in the "Risk and Uncertainties" section of this report. The forward-looking statements contained herein are based on information available as of March 29, 2024. Readers are cautioned not to put undue reliance on forward-looking statements.

## Cautionary statement regarding Forward-Looking Statements

Forward-looking statements can often be identified by forward-looking words such as "anticipate", "believe", "expect", "goal", plan", "intend", "estimate" "may" and "will" or similar words suggesting future outcomes, or other expectations, objectives or statements about future events or performance. These risks and uncertainties could cause or contribute to actual results that are materially different than those expressed or implied. Such factors include, among others: general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; fluctuations in currency exchange rates; changes in project parameters as plans continue to be defined; changes in labour costs or other costs of production; future prices of graphite or other mineral prices: possible variations of mineral grade or recovery rates: failure of equipment or processes to operate as anticipated: accidents, labour disputes and other risks of the mining industry, including but not limited to environmental hazards, caveins, pit-wall failures, flooding, rock bursts and other acts of God or unfavourable operating conditions and losses; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; actual results of reclamation activities, and the factors discussed in the section entitled "Risk Factors" in this MD&A. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this MD&A and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as may be required by applicable securities laws. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance of forward-looking statements.

#### **OVERVIEW**

Lomiko Metals Inc., along with its subsidiaries collectively referred to as the "Company" or "Lomiko", is engaged in the acquisition, exploration and development of mineral resource properties. The Company was incorporated on July 3, 1987, under the British Columbia Company Act. The Company is listed on the TSX Venture Exchange (TSX-V) having the symbol LMR.V as a Tier 2 mining issuer, on the Over-the-Counter Markets Exchange in the United States having the symbol LMRMF, and on the Frankfurt Stock Exchange having the symbol DH8C. The management and technical team have experience in mineral exploration, development and mining, public company management and operation and Canadian venture capital markets.

# **COMPANY DESCRIPTION**

The Company holds mineral interests in its La Loutre graphite development in southern Quebec. The La Loutre project site is located within the Kitigan Zibi Anishinabeg (KZA) First Nation territory. The KZA First Nation is part of the Algonquin Nation and the KZA traditional territory is situated within the Outaouais and Laurentides regions. Located 180 kilometres



northwest of Montreal, the property consists of 1 large, continuous block with 76 mineral claims totalling 4,528 hectares (45.3 km2). The Company has mineral interests in six regional graphite properties in the Laurentides region. The six graphite properties cover approximately 15,639 hectares of mineral claims and 264 claims in total. These mineral claims lie within a 100 km radius of the Company's flagship La Loutre graphite. The Company also acquired 100% of 17 mineral claims forming the Carmin project. The property covers 678 hectares and is located 40 km west of Mont Tremblant. The mineral interest as contiguous to the La Loutre property.

The Bourier Lithium project site is located near Nemaska Lithium and Critical Elements and south-east of the Eeyou Istchee James Bay territory in Quebec and within the traditional land of the Cree Eeyou Istchee Peoples. It consists of 203 claims, for a total ground position of 10,252.20 hectares (102.52 km²), in Canada's lithium triangle near the James Bay region of Quebec, that has historically housed lithium deposits and mineralization trends.

#### **Board of Directors**

Lomiko Metals Inc. is guided by the board of directors. The current Board of Directors is comprised of; Belinda Labatte, Interim Chair and CEO; Eric Levy, Director; Lee Arden Lewis, Director; Dominique Dionne, Director and Sagiv Shiv, Lead Independent Director. The Audit Committee comprises the following Directors: Sagiv Shiv, Lead Independent Director and Audit Chair; Dominique Dionne, Independent Director and Lee Arden Lewis, Independent Director. The Compensation Corporate Governance and Nominating Committee consists of the following directors: Eric Levy – Independent Director and Chair; Sagiv Shiv, Lead Independent Director and Dominique Dionne, Independent Director. The Environment, Social and Governance Committee consists of Dominique Dionne – Independent Director and Chair, Belinda Labatte, CEO and Interim Chair of the Board and Lee Arden Lewis, Independent Director.

# **CORPORATE HIGHLIGHTS**

The Company is pleased to provide the following highlights for the second financial quarter ending January 31, 2024. Please refer to press releases on the Company's website at <a href="https://www.lomiko.com">www.lomiko.com</a> for additional details.

# **Operational Achievements:**

On December 20, 2023, the Company announced the successful completion of 49% ownership of the Bourier lithium property in connection with its previously announced amended option agreement with Critical Elements Lithium Corporation ("CELC"). To earn its 49% interest in the Bourier project (the "First Option"), Lomiko Metals needed to incur or fund exploration expenditures aggregating not less than \$1,300,000 on the project.

On January 25, 2024, the Company announced that, in connection with its previously announced amended option agreement (the "Option Agreement") with Critical Elements Lithium Corporation ("CELC") on the Bourier project (see news release dated January 25, 2022 for more details) and the successful earn in of 49% announced on December 20, 2023, the parties have agreed to amend the terms of the second option under the Option Agreement (the "Second Option").

The amendment deferred milestone dates for the Second Option and is as follows: CELC grants to Lomiko the exclusive right and option to increase its undivided interest in and to the Bourier project from 49% to 70% by making an additional cash payment to CELC in an amount of two hundred fifty thousand dollars (\$250,000), by issuing to CELC an aggregate of two million five hundred thousand (2,500,000) common shares of Lomiko (the "Cash and Shares Commitment"), by incurring or funding additional exploration expenditures for an amount of two million dollars (\$2,000,000) (the "Expenditures Commitment") and by delivering a NI 43-101 compliant resource on the Property (the "Resource Estimate") prepared by a qualified person independent of Lomiko and CELC as follows (noting that the financial commitments of Lomiko and Resource Estimate deliverable under the original Option Agreement remain unchanged):

- no later than March 31st, 2024, completing the Cash and Shares Commitment (deferred from December 31, 2023):
- on or before December 31, 2025, incurring or funding the Expenditures Commitment (deferred from December 31, 2023); and
- on or before December 31, 2025, delivering the Resource Estimate (deferred from December 31, 2023).

## **Graphite and Downstream Market Update**

North American natural graphite production continues to be at deficit levels for all natural graphite grades, as battery manufacturers are currently dependent on China for graphite, as China extracts around 70% of the world's natural graphite and controls almost 100% of the refining process, according to the International Energy Agency. China itself is



experiencing massive domestic growth: of the 26 million EVs on the road, over 50% are currently in China, indicating a sustained and long-term supply chain issue (source: EIA EV Outlook 2023).

In 2023, progress towards global electrification continued at a measured pace as EV sales reached 4 million during the first 5 months of 2023. China sales are up 23% YoY to a 34% share despite the reduction and subsequent elimination of subsidies beginning in 2018 and ending on January 01, 2023. Europe is up 29% YoY to a 23% share, and demand for EV's / HEV's are showing signs of measured recovery supported by price discounts by Tesla, Ford, and GM in the first and second quarters of 2023. As a result, graphite demand is projected to grow at 30% to 40% per year according to Benchmark. Even with ongoing R&D and diversification in battery chemistry, graphite is needed in all battery types and remains lower cost and far less emissions-intensive than synthetic graphite.

#### PORTFOLIO OF EXPLORATION AND EVALUATION ASSETS

# La Loutre Graphite Property - Québec

On September 22, 2014, the Company obtained an option from Quebec Precious Metals Corporation to purchase a 40% interest in the La Loutre properties by paying \$12,500, funding \$500,000 in exploration expenditures and issuing 125,000 shares (\$93,750 - value at issuance). All terms have been met.

On February 6, 2015 (amended December 30, 2016) the Company acquired an additional 40% interest in the La Loutre property and an 80% interest in the Lac-Des-Iles property by issuing 300,000 shares (\$210,000), and funding an additional \$2,750,000 in exploration costs. All terms have been met.

On May 13, 2016 (amended December 30, 2016 and April 16, 2020) the Company signed an additional option agreement allowing the Company to increase its interest in the Loutre and Lac-Des-lles properties from 80% to 100%, issuing 1,450,000 shares (\$193,000 – value at issuance), and funding an additional \$1,125,000 in additional expenditures. All the terms have been met.

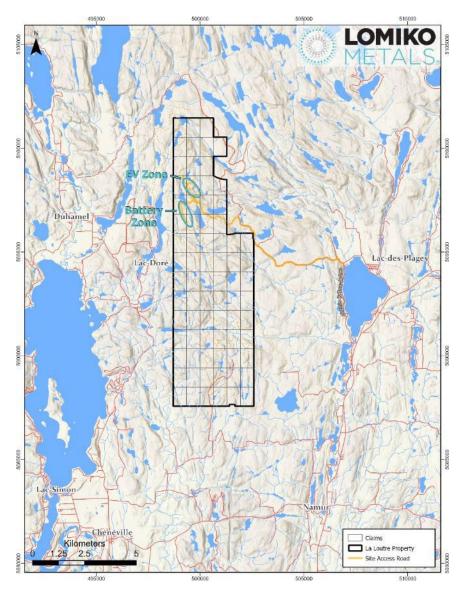
From Montreal, the property is accessible by driving north on Highway 15, then onto Highway 117 to St-Jovite and finally heading west onto Highway 323 for 40 km to Lac des Plages. Once there, a series of secondary roads and forestry roads lead to the property.





# **History**

The property was originally staked by SOQUEM in 1988 based on airborne magnetic and electromagnetic (REXHEM IV) surveys and a review of local graphite occurrences. In the summer of 1989, a geological reconnaissance program was carried out in the areas hosting the La Loutre A, B, and C REXHEM anomalies (Saindon and Dumont, 1989). From 1989 through 1992, exploration activities conducted by SOQUEM included airborne magnetic and electromagnetic (EM) surveys, ground EM surveys, outcrop mapping, geologic surveying, and trenching identified several areas. Two of these areas are the Battery Zone (BZ) and the Electric Vehicle (EV) Zone, which are the deposits included in the resource estimate.



# **Updated 2023 Mineral Resource Estimate**

The mineral resource estimate for the La Loutre Project (the "2023 MRE") was prepared by Marina lund, P.Geo. (InnovExplo), Martin Perron, P.Eng. (InnovExplo), Simon Boudreau, P.Eng. (InnovExplo) and Pierre Roy, P.Eng. (Soutex) using all available information. The study area covers two deposits known as EV and Battery. The effective date of the 2023 MRE is May 11, 2023. The QPs believe the current mineral resource estimate can be classified as Indicated and Inferred mineral resources based on geological and grade continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The authors also believe that the requirement of "reasonable prospects for eventual economic extraction" has been met by having a cut-off grade based on reasonable inputs amenable to a potential open-pit extraction scenario. The 2023 MRE is considered reliable and based on quality data and geological knowledge. The estimate follows



CIM Definition Standards. The following table displays the results of the 2023 MRE for the Project at a cut-off grade of 1.5% Cg.

La Loutre Resource Estimate (Effective Date: May 11, 2023)

#### 2023 La Loutre Project Mineral Resource Estimate for an open pit scenario

Deposit	Cut-off (%)	Indicated mineral resource			Inferred mineral resource		
		Tonnage (kt)	Graphite (%)	Graphite (kt)	Tonnage (kt)	Graphite (%)	Graphite (kt)
EV	1.5	24,267	5.80	1,407	3,067	4.29	132
Battery	1.5	40,429	3.86	1,562	14,384	3.60	518
TOTAL	1.5	64,696	4.59	2,969	17,452	3.72	650

#### Notes:

Notes to accompany the Mineral Resource Estimate:

- 1. The independent and qualified persons for the mineral resource estimate, as defined by NI 43-101, are Marina lund, P.Geo. (InnovExplo Inc.), Martin Perron, P.Eng. (InnovExplo Inc.)., Simon Boudreau, P.Eng. (InnovExplo Inc.) and Pierre Roy, P.Eng. (Soutex Inc.). The effective date of the estimate is May 11, 2023.
- 2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimate follows current CIM Definitions (2014) and CIM MRMR Best Practice Guidelines (2019).
- 3. The results are presented undiluted and are considered to have reasonable prospects of economic viability.
- 4. The estimate encompasses two mineralized deposits (EV and Battery) using the grade of the adjacent material when assayed or a value of zero when not assayed.
- 5. No capping was applied on 1.5-m composites.
- 6. The estimate was completed using a sub-block model in Leapfrog Edge 2022 with a user block size of 5m x 5m x 5m and a minimum block size of 2.5m x 2.5m x 2.5m. Grades interpolation was obtained by ID2 using hard boundaries.
- 7. Bulk density values were applied by lithology (g/cm3): mineralized domain = 2.82; paragneiss = 2.8; quartzite = 2.73; pegmatite = 2.63; marble = 2.75; and overburden ("OB") = 2.0.
- 8. The mineral resource estimate is classified as indicated and inferred. The Indicated mineral resource category is defined with a minimum of three (3) drill holes in areas where the drill spacing is less than 55 m and reasonable geological and grade continuity have been demonstrated. The Inferred category is defined with a minimum of two (2) drill holes in areas where the drill spacing is less than 100 m and reasonable geological and grade continuity has been demonstrated. Clipping boundaries were used for classification based on those criteria.
- 9. The mineral resource estimate is pit-constrained with a bedrock slope angle of 50° and an overburden slope angle of 30°. It is reported at a graphite cut-off grade of 1.5%. The cut-off grade was calculated using the following parameters: processing cost = C\$13.04; product transporting cost = C\$41.16; mining cost (rock) = C\$3.70; mining cost (OB) = C\$2.90; graphite price = US\$1,098/tonne of graphite; USD:CAD exchange rate = 1.32; graphite recovery to concentrate product = 94.7%. The cut-off grade should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).
- 10. The number of metric tons was rounded to the nearest thousand, following the recommendations in NI 43-101, and any discrepancies in the totals are due to rounding effects.
- 11. The authors are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue not reported in the Technical Report that could materially affect the Mineral Resource Estimate.

# 2021 Preliminary Economic Assessment

Ausenco was appointed as the lead Preliminary Economic Assessment ("PEA") consultant on February 22, 2021, in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Ausenco is the



lead consultant responsible for the overall development of the PEA, including processing, major infrastructure, hydrogeology, hydrology, environmental, co-disposal, mining and economic assessment. Ausenco's specialist ESG group, Hemmera Envirochem Inc., provided environmental support, and Moose Mountain Technical Services was responsible for the resource estimate and mine design. Metpro Management Inc. (Metpro) was responsible for metallurgy.

The Company completed a PEA on the La Loutre property on July 27, 2021, with positive results. The PEA was completed by Ausenco in accordance with National Instrument 43-101 ("NI 43-101"). The Company is progressing through various work initiatives with the objective to complete a Preliminary Feasibility Study (PFS) to advance its La Loutre Graphite Project towards production as part of a staged development strategy while continuing its drilling programs to maximize value creation.

The results of a La Loutre PEA project demonstrate the potential for the Company to become a North American graphite producer. The PEA supports an open-pit project with production spanning 14.7 years with robust economics at a US\$916/ton Cg sale price, with very attractive cash costs and All-In Sustaining Costs (AISC), and low capital intensity. The first eight years target production averaging 108 kt/a payable graphite concentrate peaking at 112 kt/a in year 4. The economic analysis was performed assuming an 8% discount rate. This analysis shows a projected pre-tax NPV 8% of \$133.6M, an internal rate of return (IRR) of 28.3%, and a payback period of 3.3 years. On an after-tax basis, an NPV 8% of \$186M, IRR of 21.5%, and a payback period of 4.2 years are expected.

For more information on the results of the La Loutre PEA, please refer to the Company's Press Release on July 27, 2021.

The Company filed the Mineral Resource Estimate (MRE) Technical Report, on May 29, 2023, following National Instrument 43-101 – Disclosure Standards for Mining Projects on its La Loutre Project, where Lomiko has mineral rights. The technical report entitled "NI 43-101 Technical Report and Mineral Resource Estimate Update for the La Loutre Project, Quebec, Canada" was prepared for Lomiko by the firm InnovExplo of Val-d'Or. The independent technical report is available on SEDAR (www.sedar.com) under the Lomiko issuer profile.

During the final validation and completion of the Technical Report, adjustments were made to the mineral resource estimate statement disclosed in the April 13, 2023, news release and therefore the mineral resource tonnage in all categories has been amended. The adjustments now show an increase of 184% versus the previously published increase of 195% in tonnage for the Indicated Mineral Resource Category. See the news release dated April 13, 2023 entitled "Lomiko announces Updated Mineral Resource Estimate for La Loutre Natural Flake Graphite Property in Southern Quebec Achieving 195% Increase in Tonnage in the Indicated Mineral Resource Category") which summarized certain key results, assumptions and estimates contained in the Technical Report filed on SEDAR. The adjustments also contributed to increasing the overall grade from 4.50% to 4.59% which removed lower grade material from all categories. Mineral resources adjustments are presented in Table 1 for the updated 2023 MRE statement which was filed.

The Company has 100% of the La Loutre Graphite property mineral rights.

# 2022/23 Metallurgical testing at the PFS level

Lomiko Metals completed a pre-feasibility ("PFS") level flotation flowsheet optimization program that culminated in a flowsheet for the Company's PFS for its La Loutre property. The samples submitted for metallurgical testing were selected by InnovExplo in Val-d'Or, Quebec. Three different types of composites were generated, mine plan, domain, and grade composites. The mine plan composites represented the first several years of expected mine operations and were blended in the appropriate ratio into a master composite containing material from the EV Zone. This master composite was used in the flowsheet optimization program and produced consistent high-grade flotation concentrates. The total weight of the samples was approximately 640kg.

The flowsheet optimization program was carried out by SGS Lakefield Inc. (SGS) using the above samples and the final report was completed by Metpro Management Inc.

At the end of the optimization program, this master composite containing only material from the EV Zone was subjected to a locked-cycle flotation test ("LCT"). The LCT simulates the metallurgical performance of a continuous plant operation. The LCT produced a combined concentrate grade of 98.6% C(g) at a closed-circuit graphite recovery of 94.7%. Please refer to Table 1 for details.

The robustness of the flowsheet was verified in open-circuit tests with twelve variability composites, which represented different phases in the mine plan, domains, and head grades. The average concentrate grade of the 15 variability flotation tests, which included three repeat tests, was 97.9% C(t) with a low relative standard variation of 1.08%. Taking into account the standard deviation, the lowest value of 95.2% C(t) is considered an outlier. All other tests produced consistently high grades between 96.4% C(t) and 99.7% C(t) as shown in Table 2.



#### **Open-Circuit Tests**

A summary of pertinent results of the variability flotation program is presented in Table 2, including a basic statistical analysis.

The open-circuit graphite recovery displayed more variance with graphite recoveries between 78.0% and 92.6% with an average value of 87.2%. Open-circuit tests treat intermediate tailings streams as final tailings and, therefore, overstate losses that would be incurred during closed-circuit operation. In a commercial plant the circuit is closed and the intermediate tailings are cycled back to the previous flotation stage. This allows any graphite particles lost to the intermediate tailings to be recovered into the flotation concentrate. Hence, overall graphite recoveries are expected to increase noticeably during closed circuit operation as demonstrated by the LCT.

The robustness of the proposed flowsheet and conditions is further underlined by the fact that these very consistent metallurgical results were achieved for head grades ranging from as low as 1.39% C(g) to as high as 10.3% C(g). This range of head grade variation frequently requires significant adjustments to the process conditions, which was not required for the La Loutre mineralization since all tests employed identical flotation conditions.

Repeat tests conducted on three composites displayed very low test-to-test variance with regards to final concentrate grade and open circuit recovery.

Head Concentrate Recovery Composite **Composite ID** Grade Grade % C(g) % C(t) % C(g) MP\_FLOT\_EV2 98.1 92.6 9.37 Mine MP\_FLOT\_EV3 6.84 98.3 92.0 Plan 99.3 MP\_FLOT\_EV4 6.52 91.6 Composite MP\_FLOT\_EV5 99.5 90.8 5.02 DOM\_FLOT\_EV2 10.3 99.7 89.2 DOM\_FLOT\_EV3 97.9 91.2 9.86 Domain DOM\_FLOT\_BAT2 4.13 97.2 86.5 Composite DOM FLOT EV3 97.7 9.91 90.3 DOM FLOT BAT2 4.10 97.6 86.6 GRAD FLOT EV1 2.79 95.2 84.5 GRAD FLOT EV2 97.9 1.39 81.0 **GRAD FLOT EV3** 96.9 4.29 85.6 Grade **GRAD FLOT EV4** Composite 5.04 98.5 78.0 GRAD FLOT BAT1 5.17 96.4 84.6 GRAD FLOT BAT1 97.9 83.5 5.30 Average 97.9 87.2 Min 95.2 78.0 92.6 99.7 Max 1.17 StdDev 4.38 Rel. 1.20 5.02 StdDev

Table 2: Variability Flotation Results

# **LCT Size Fraction Analysis**

In the LCT test, the final concentrates of the EV master composite LCT were submitted for a size fraction analysis and the weighted combined concentrate grade and size distribution are presented in Table 3. A total of 24% of the concentrate mass reported to the +80 mesh size fractions at a grade of 98.6% C(t). Approximately 12.7% of the mass reported to the -325 mesh product at a very high grade of 99.0% C(t).

The EV zone is scheduled to be mined first and accounts for two-thirds of the graphite production as outlined in the July 2021 Preliminary Economic Assessment ("PEA").

The high flotation concentrate grades facilitate different marketing or process options. The study indicates it may be possible to sell the high-grade concentrates into specialty markets that require a 98-99% C(t) concentrate grade.

Table 3: EV Master Composite Flake Size Distribution



Flake Category	Size Fraction	Weight %	Assays % C(t)	Distribution % C(t)
Extra Large	+32 mesh	0.4	98.3	0.4
or Jumbo	+48 mesh	5.6	98.7	5.5
Lawas	+65 mesh	10.6	98.3	10.5
Large	+80 mesh	7.5	98.3	7.4
Medium	+100 mesh	9.5	98.8	9.4
Small	+150 mesh	17.0	99.4	17.1
Small	+200 mesh	18.6	99.6	18.7
	+325 mesh	18.2	99.5	18.2
Fine/Amorphous	+400 mesh	6.0	99.3	6.0
	-400 mesh	6.7	98.7	6.6
	Final Concentrate (SA)	100.0	99.1	100.0

The reconciled combined concentrate grade of 99.1% C(t) is slightly higher than the direct concentrate grade of 98.6% C(t) for the LCT. The reasons for the small discrepancies are sampling and analytical measurement uncertainties, which are inherent with any assay method.

## 2023 Value added studies, including battery material testing

The results of the spherical graphite ("SPG") lab scale testing for its La Loutre Natural flake Graphite property was announced on May 3, 2023. The testing was completed by ProGraphite in Germany on a 10.5 kg bulk flotation sample prepared by SGS Canada Inc. The 10.5 kg bulk flotation concentrate was generated during the preliminary feasibility study (PFS) metallurgical program and was dispatched to ProGraphite in Germany for micronization, spheroidization, and purification testing to produce spheroidized and purified graphite (SPG), which is the needed material for the anode in Electric Vehicles (EVs).

# Highlights of the La Loutre Project SPG lab scale testing:

- La Loutre material is suitable for the production of spherical graphite
- All physical characterization tests produced very good results such as narrow particle size distribution range and high tap density and meet the target values for Electric Vehicle and other lithium-ion based battery applications.
- Achieved continuous and reliable production of micronized products with homogenous properties suggesting a
  relatively low specific energy input to convert the La Loutre flotation concentrate to micronized material.
- The particle size distribution for both grades is typical for spherical
- In summary, independent bench scale micronization and spheronization tests have demonstrated that the La Loutre material is suitable for the production of spherical graphite. All physical data yielded very good results and meet the target values such as narrow particle size distribution and high tap density.

# La Loutre Project half coin battery lab scale testing

Polaris prepared La Loutre's coated spherical purified graphite (cSPG) material from flotation concentrate samples and subjected it to half-cell coin testing to determine its basic material electrochemical performance metrics. The total mass of cSPG used was approximately 160g and originated from coated purified samples from the Corem innovation centre in Quebec, Canada. These samples were micronized and spheronized by ProGraphite in Germany. The samples are deemed representative of the La Loutre deposit. Polaris will continue the test program in 2024.

The first study ("The ProGraphite Characterization Study") was performed on concentrate that was produced from 640kg core samples that were homogenized and processed at SGS Lakefield to produce a graphite flotation concentrate. Various pre-feasibility ("PFS") level metallurgical tests and a study were completed, including optimization of the flotation circuit, resulting in achieving 94.7% recovery and reconciled LCT (Locked Cycle Testing) testing grades at 99.1%Cg. For detailed results, please see the press release dated February 6, 2023. The work was directed by Metpro Management Inc.

In the second study, "The ProGraphite SPG Study", testing was completed on a 10.5 kg bulk flotation sample prepared by SGS Canada Inc. ProGraphite, Germany, used this sample for micronization, spheroidization, and purification testing to produce spheroidized and purified graphite (SPG), which is the material required for the anode in Electric Vehicles (EVs). All physical characterization tests produced very good results, such as narrow particle size distribution range and high tap density and meet the target values for Electric Vehicle and other lithium-ion based battery applications. Two



purification methods were investigated on the La Loutre SPG, namely alkaline and acid purification. A total of 100 g of the SPG20 spherical graphite was subjected to intensive alkaline purification. For detailed results, please see the press release dated May 3, 2023.

The micronized and spheronized graphite was then purified and carbon coated by Corem to produce coated 20g of spherical graphite cSPG16 & cSPG20 for the Polaris Study.

Reversible delithiation capacity at C/10 of ~356 mAh/g and ~358mA/h respectively, which is above the commercial reference graphite material testing at an average 345mA/h. C-rating describes the current the battery will deliver over the specific period, with C/10 being 10 hours. The testing showed that our graphite is more stable and efficient than the commercial reference graphite.

All half-cell coin batteries were constructed using 20g of cSPG and 304SS CR2032 coin cell can components. Both SPG16 and SPG20 outperform the commercial reference in achievable gravimetric capacity which means that with the electrochemical performance results produced by Polaris, Lomiko has now successfully demonstrated the full value chain from ore to battery anode material on samples from the La Loutre project.

Next Steps: In Phase 2, cathode and prepared anodes will be combined into a single-layer pouch cell format to undergo a basic testing regime with possible extended testing, which will allow Lomiko to demonstrate the technical specs needed to meet battery manufacturing requirements.

#### **Laurentide Graphite Exploration Program**

On May 16, 2022, the Company announced it staked approximately 15,639 hectares of mineral claims, 264 claims in total, on six projects in the Laurentide region of Quebec and within First Nations territory. These claims lie within a 100 km radius of the Company's flagship La Loutre graphite project. The highest graphite grades are commonly associated with rock contacts between marble and paragneiss or quartzite which is the host rock present in the Grenville Province and at La Loutre. Large, disseminated natural flake graphite mineralization occurs at a number of places in the Grenville Province metamorphic belt, located in Canada's Quebec and southeastern Ontario jurisdictions, and the conglomeration of this mineralization in close proximity in the region presents opportunities for responsible and low-impact mining or quarry activities.

This regional exploration program covered numerous under-explored graphite showings primarily occurring within paragneiss units of the Grenville geological belt. The claims staked are largely accessible and situated close to road access and qualify as early-stage greenfield exploration. The Company intends to initiate exploration of these prospective graphite targets with high-definition airborne magnetic, and time-domain electromagnetic surveys. This work will be followed by geological, prospecting, and sampling surveys based on ground targets generated by the airborne surveys. Lomiko will engage with communities and the KZA as this work evolves.

The 2023 Regional Field Program Highlights

- 10 new high-grade graphite showings discovered;
- 37 of 57 grab samples greater than 5.00% graphite;
- Maximum value of 22.90% graphite found on Ruisseau block;
- Graphite zones traced up to lengths of 1000 metres on the surface.

The field program consisted of ground-testing 15 of the 55 high-priority targets identified as prospective for graphite mineralization by the 1518-line kilometre, heliborne, magnetic and time-domain electromagnetic survey completed by the Company over the Grenville project in 2022. Work was completed on the Boyd, Dieppe, Meloche, Ruisseau, and Tremblant blocks (Figure 1). The North Low block was not investigated due to its relative isolation with respect to the other five blocks.

The Beep-Mat is an electromagnetic survey instrument designed and manufactured by Instrumentation GDD Inc. in Quebec City, Quebec. The unit is pulled on the ground and takes continuous readings while the operator walks. It makes a distinctive audible "Beep" when detecting a conductive object within a radius of three metres. The Beep-Mat was found to be very effective at locating graphite mineralization, which is inherently highly conductive, on the Grenville project. A total of 10 new surface graphite showings were discovered with the Beep-Mat. Many of these showings returned very strong graphite values from selective grab samples, as outlined in Table 4 and several new graphite zones were traced up to 1000 metres on the surface.

The Ruisseau block returned strong results with values ranging from 0.16 to 22.90 percent graphite ("% Cg") with 19 of 26 values greater than 5.00% Cq. Six new graphite showings were discovered in the western and southern parts of the block.



Five of these showings consistently returned graphite values greater than 10.00% Cg. Eleven targets in the eastern half of the block were not prospected or sampled.

At Boyd, only one of eight targets was visited but at this target a new zone of strong graphite mineralization was demonstrated with values from 5.61 to 17.10% Cg for almost 1,000 metres on surface. At Meloche, strong graphite values from 5.62 to 12.00% Cg were obtained from the previously known Lac Pimoden-NE showing. A new showing in the south-central part of the block returned 6.02% Cg from a single grab sample. Three targets in the northwest part and one target in the southeast part were not prospected or sampled.

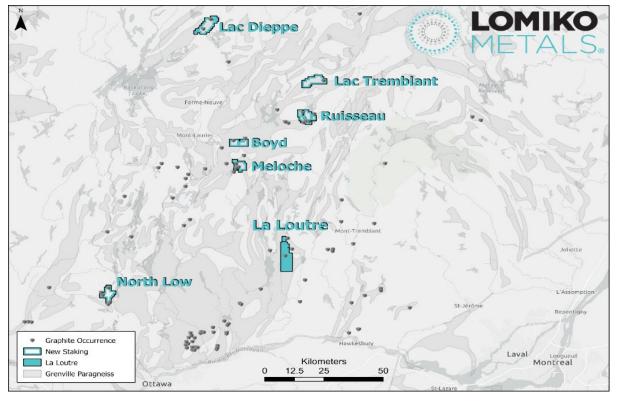
At Tremblant, four new showings were discovered, with three of these showings returning graphite values greater than 5.00% Cg with a maximum value of 13.90% Cg. At Dieppe, two graphite zones were discovered, but both returned relatively low graphite values. Prospecting at Dieppe was hampered by very rough terrain with many steep cliffs. Seven targets remain to be prospected.

The methodology developed by Lomiko for examining targets on the Grenville project has proven to be very successful for discovering graphite mineralization on surface. Forty high-priority graphite targets remain to be prospected and sampled.

Block	# samples	Min %Cg	Max %Cg	Comments
Boyd	8	5.61	17.10	8/8 > 5.00% Cg
Dieppe	11	0.15	1.47	
Meloche	6	5.62	12.00	6/6 > 5.00% Cg
Ruisseau	26	0.16	22.90	19/26 > 5.00% Cg
Tremblant	6	<0.05	13.90	4/6 > 5.00% Cg
Total	57			

Table 4: Surface grab samples Grenville project May 2023





**Bourier Lithium Property, Quebec** 



On April 27, 2021, the Company entered into an option agreement with Critical Elements Lithium Corporation (TSX-V: CRE) ("Critical Elements") to acquire up to a 70% undivided interest in the Bourier property ("Bourier') located in Quebec. The property is subject to a 1.4% NSR on 88 claims.

Under the terms of the agreement, the Company will earn 49% interest by way of a joint venture arrangement by making cash payments totalling \$50,000 (paid), issuing 5,000,000 common shares (valued at \$700,000) (issued), funding exploration expenditures in the amount of \$1,300,000 by December 31, 2023.

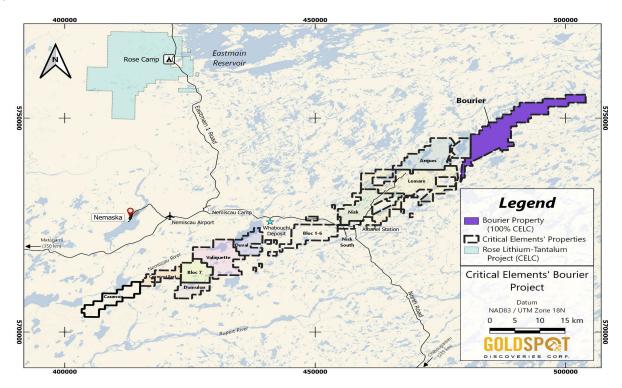
The Company has completed its obligations for 49% earn-in ownership in the Bourier Lithium property by incurring \$1.3 million in exploration work and/or funding of this project.

In accordance with the Amending Agreement announced on January 25, 2024, Lomiko has the option to increase its interests in the property from 49% to 70% by making a cash payment of \$250,000, issuing 2,500,000 common shares incurring a further \$2,000,000 in exploration expenditures and delivering to Critical the Resource Estimate based on the following dates:

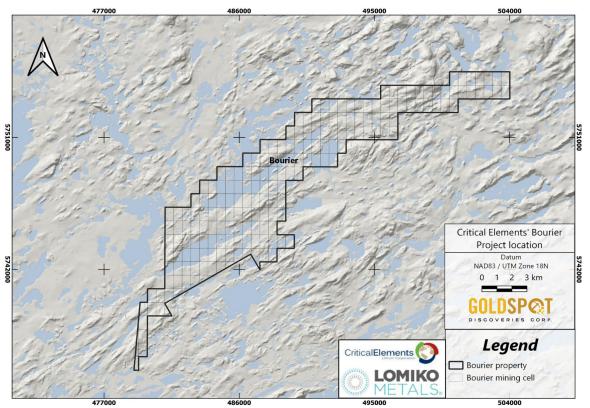
- no later than March 31st, 2024, completing the Cash and Shares Commitment (deferred from December 31, 2023):
- on or before December 31, 2025, incurring or funding the Expenditures Commitment (deferred from December 31, 2023); and
- on or before December 31, 2025, delivering the Resource Estimate (deferred from December 31, 2023).

Bourier is composed of one block totalling 203 claims covering 10,252.20 hectares for some 30 kilometres in length. The property is located 240 km northwest of Chibougamau. It falls within latitude 479315 mE and 504190 mE and longitude 5755416 mN and 5735026 mN (UTM NAD83 Zone 18). The claims fall within the Eeyou Istchee Territory, which is governed jointly by the Grand Council of the Cree and the Quebec government. The CELC land package is in the Lac des Montagnes area and is not far from the Cree community of Nemaska (formerly Nemiscau).

The local physiography consists of boreal forest and Canadian Shield rock terrain; the climate is humid continental with warm summers. Average daily summer highs are 22°C and average daily winter lows are -24°C, with a deep snowpack. Ice roads exist for approximately four months each winter for access. Many lakes, rivers and swamps occur in the area, allowing easy access to water for exploration activities. Bourier is approximately 62 km east of the Nemiscau Airport and 30 km northeast of the Albanel Power Station.







# Geology

The Bourier Property is located within the eastern part of the Lac des Montagnes volcano-sedimentary group, which is comprised of amphibolitized basaltic, intermediate and felsic volcanic rocks and minor iron formation. Late white pegmatite dikes, containing biotite, garnet, muscovite and tourmaline, crosscut the older units (Bandyayera and Daoudene, 2017). An ENE-trending fold has deformed all volcanic and sedimentary units. These rocks have also been impacted by an intense ENE-trending dextral shear with reverse components and by late sinistral NE-trending brittle faults.

Several styles of ore deposits have been suggested and/or recognized in the Bourier area (cf.Lalancette and Michaud, 2012b). They include:

- Lithium pegmatite. In the area, lithium pegmatites are white pegmatites similar in composition and age to the Whabouchi Pegmatites. These pegmatites tend to occur on the Bourier Property as swarms intruding paragneiss and migmatized sedimentary units.
- Volcano-sedimentary (SEDEX) zinc, lead and silver mineralization associated with the Lac des Montagnes Group.
   The most relevant example exposed on this property is a zinc showing named Lapointe. Grab samples in the area returned up to 0.3 % Zn and up to 1.1 ppm Ag. Two other showings, Opera and Cesar, have a SEDEX affiliation.
- Shear-hosted gold mineralization. The potential would be related to the ENE-trending structural corridors.

#### Carmin Graphite Property, Quebec

The Property is located 40 km west of Mont Tremblant, situated north-east and contiguous to the La Loutre property where the Company has mineral rights. The Property is accessible by road and forest road from Lac-des-Plages and the northern end of the claims are partially contiguous to the Papineau-Labelle Wildlife Reserve. The Company commits to not exploring or developing close to the park boundaries. The La Loutre and Carmin project site are located within the Kitigan Zibi Anishinabeg (KZA) First Nation's territory and the KZA First Nation is part of the Algonquin Nation. KZA territory is situated within the Outaouais and Laurentides region.

On June 01, 2023 the Company completed a purchase agreement with SOQUEM Inc. (SOQUEM) and a private company, to acquire 100% of 17 mineral claims in Southern Quebec, forming the Carmin project. The terms of the acquisition are as follows:

- \$50,000 payable in cash, to SOQUEM, (paid June 1, 2023)
- Issue of 1,250,000 common shares to SOQUEM (issued May 31, 2023)
- Issue of 1,250,000 common shares to the private company (issued May 31,2023)
- Granting of a royalty of 0.75% NSR to SOQUEM and the private company. The Company has the right to redeem one-third of the Royalties from both parties, reducing the royalty to 0.50%, for a cash payment of 250,000 to each party. The NSR will then be limited to \$1,000,000 per party.

# Summary of Exploration and Evaluation Assets

	La	a Loutre	Bourier	L	aurentide Region	Carmin	Total
		Louis				-	Total
Balance, July 31, 2022	\$ 7,	974,537	\$ 1,123,012	\$	252,177	\$ -	\$ 9,349,726
Assays, staking, and mapping Contractors/consultants	1,	90,656 699,345	- 504,433		55,990 2,083	- 5,098	146,646 2,210,959 21.873
Field storage Acquisition of property Quebec mining tax credit		21,873 - (26,637)	- - -		- - -	125,000 -	125,000 (26,637)
Balance, July 31, 2023	\$ 9	9,759,774	\$ 1,627,445	\$	310,250	\$ 130,098	\$ 11,827,567
Assays, staking and mapping Claim renewal Materials		- - 46	- -		758 -	20,656	21,414 337 46
Contractors/consultants Field storage		152,813 8,188	605,282 -		8,043 -	2,759 -	768,897 8,188
Quebec mining tax  Balance, October 31, 2023	\$	(17,768) 9,903,053	\$ - 2,232,727	\$	- 319,051	\$ - 153,850	\$ (17,768) 12,608,681

The Company defers the cost of acquiring, maintaining its interest, exploring, and developing mineral properties until such time as the properties are placed into production, abandoned, sold, or considered to be impaired in value.

A summary of capitalized acquisition and exploration expenditures on the Company's properties is reported below:

La Loutre Graphite Property Acquisition Cost	Cash	Shares	i	Price	Amount \$
9/25/2014	\$ 12,500				\$ 12,500
9/25/2014		125,000	\$	0.700	87,500
4/15/2015		100,000	\$	0.700	70,000
4/15/2015	\$ 3,333				3,333
7/31/2015					238,367
10/31/2015					-
5/3/2017		125,000	\$	0.500	62,500
5/3/2017		100,000	\$	0.205	20,500
7/31/2017					11,098
1/31/2018					115,036
6/23/2020		1,000,000	\$	0.050	50,000
7/31/2020					(20,000)
1/29/2021	\$ 1,125,000				1,125,000
Total Acquisition Costs	\$ 1,140,833	1,450,000			\$ 1,775,834



		•	•	Oct	. 31, 2023	Ja	n. 31, 2024
Balance Forward -	July 31, 2023			\$	7,983,937	 \$	8,109,040
Consulting, site visits	& reports				29,146		26,960
Misc. charges					4,500		15,405
Metallurgy					55,503		110,882
Storage					9,317		762
Mining Tax Refund					26,637		(44,505)
CRITM grant					-		(91,328)
Total				\$	8,109,040	 \$	8,127,216
	perty – Acquisit	ion Costs Cash	Shares		Price		Amount
Bourier Lithium Pro	perty – Acquisit		<b>Shares</b> 5,000,000		<b>Price</b> \$0.16	\$ 	800,000
Acct. Date 5-5-2021 5-5-2021	perty – Acquisit	Cash - -				\$	800,000 (100,000
Acct. Date 5-5-2021	perty – Acquisit					\$ 	800,000
Acct. Date 5-5-2021 5-5-2021 5-31-2021	\$ perty – Capitaliz	Cash 50,000 50,000	5,000,000 - - - <b>5,000,000</b>	Oct		 Ja \$	800,000 (100,000 50,000
Acct. Date 5-5-2021 5-5-2021 5-31-2021 Total  Bourier Lithium Pro	\$ perty – Capitaliz	Cash 50,000 50,000	5,000,000 - - - <b>5,000,000</b>		\$0.16 - - - :. 31, 2023		800,000 (100,000 50,000 <b>750,000</b> n. <b>31, 2024</b>
Acct. Date 5-5-2021 5-5-2021 5-31-2021 Total  Bourier Lithium Pro	\$ perty – Capitaliz	Cash 50,000 50,000	5,000,000 - - - <b>5,000,000</b>		\$0.16 - - - :. 31, 2023		800,000 (100,000 50,000 <b>750,000</b> n. <b>31, 2024</b>

# Laurentides Region – Acquisition Costs

Acct. Date	Cash	Shares	Price	1	Amount \$
3-22-2022	\$ 21,054	-	-	\$	21,054
Total	\$ 21,054	-	•	\$	21,054

Laurentides Region – Capitalized Exploration Expenditures				
	Oc	t. 31, 2023	Jar	n. 31, 2024
Balance Forward – July 31, 2023	\$	289,197	\$	289,197
Mapping & sampling		-		6,043
Exploration		-		2,758
Total	\$	289,197	\$	297,998
	•			

# Carmin Property - Acquisition Costs

Acct. Date	Cash	Shares	Price	Amount \$
5-31-2023	\$ 50,000			\$ 50,000
5-31-2023		2,500,000	0.05	125,000
7-31-2023				(50,000)
Total	\$ 50,000	2,500,000		\$ 125,000



Carmin Property – Capitalized Exploration Expenditures				
	Oct. 3	1, 2023	Jan.	31, 2024
Balance Forward – July 31, 2023	\$	5,098	\$	5,098
Prospecting & Sampling		-		23,753
Total	\$	5,098	\$	28,851

#### SHARE CAPITAL AND RESERVES

# a) Share Capital

Authorized

The Company's authorized share capital consists of an unlimited number of common shares without par value.

Issued

Period ended January 31, 2024

On September 14, 2023, 833,333 were issued for vested RSU's. \$62,500 was transferred from reserves to share capital on issuance of the RSU shares.

On December 6, 2023, the Company completed a private placement by issuing 16,666,666 common share units of the Company at \$0.03 per unit for total gross proceeds of \$500,000. Each unit consists of one common share and one common share purchase warrant. Each full warrant is exercisable into one common share at an exercise price of \$0.05 per share for a period of 60 months. The warrants had a fair value of \$283,405 calculated using the Black Scholes Option Pricing Model, of which \$180,880 was allocated to reserves on a relative fair value basis. Legal fees of \$6,932 and filing fees of \$2,587 were paid. In addition, 583,333 common shares with a fair value of \$11,667 were issued to brokers.

Year ended July 31, 2023

On December 9, 2022, the Company completed a private placement, by issuing 40,520,497 common share units of the Company at \$0.03 per unit for total gross proceeds of \$1,215,615. Each unit consists of one common share and one common share purchase warrant. Each full warrant is exercisable into one common share at an exercise price of \$0.05 per share for a period of 60 months. The warrants had a fair value of \$1,025,122 calculated using the Black Scholes Option Pricing Model, of which \$556,136 was allocated to reserves on a relative fair value basis. Finders' fees and brokers commission of \$36,211, legal fees of \$18,050, and filing fees of \$14,379 were paid. In addition, 50,000 share purchase warrants exercisable for 60 months at an exercise price of \$0.05, with a fair value of \$1,265 calculated using the Black Scholes Option Pricing Model was recorded to share issue costs, were issued to brokers.

Three officers participated in the placement by purchasing 4,499,999 units in the amount of \$135,000.

On December 19, 2022, the Company completed a private placement, by issuing 18,625,000 of flow- through units of the Company at \$0.04 per unit for total gross proceeds of \$745,000. Each unit consists of one flow-through common share and one common share purchase warrant. Each full warrant is exercisable into one common share at an exercise price of \$0.06 per share for a period of 24 months. The warrants had a fair value of \$245,120 calculated using the Black Scholes Option Pricing Model, of which \$184,436 was allocated to reserves on a relative fair value basis. The Company recognized a flow-through premium liability of \$186,250 in connection with the flow-through private placement based on an estimated premium of approximately \$0.01 per flow-through common share issued (Note 9). Finders' fees and brokers commission of \$7,500, and legal fees of \$8,940 were paid. In addition, 187,500 share purchase warrants exercisable for 24 months at an exercise price of \$0.06, with a fair value of \$2,468 calculated using the Black Scholes Option Pricing Model was recorded to share issue costs, were issued to brokers.

A director participated in the flow-through placement by purchasing 1,875,000 units in the amount of \$75,000.

On February 22, 2023, April 18, 2023, and May 5, 2023, 2,041,667 common shares were issued for vested RSU's. \$153,125 was reclassified from reserves to share capital on the issuance of RSU shares.

On May 31, 2023, 2,500,000 common shares valued at \$75,000 were issued to acquire the Carmin property.

On July 19, 2023, the Company completed a private placement by issuing 13,366,666 common share units of the Company



at \$0.03 per unit for gross proceeds of \$401,000. Each unit is comprised of one common share and one common share purchase warrant. Each warrant is exercisable into one common share at a price of \$0.05 for a period of 60 months. The warrants had a fair value of \$349,643 calculated using the Black Scholes Option Pricing Model, of which \$186,783 was allocated to reserves on a relative fair value basis. Finders' fees and commissions of \$2,550, legal fees of \$7,900, and filing fees of \$2,755 were paid. In addition, 416,667 common shares, with a value of \$12,500 were issued to brokers. 85,000 share purchase warrants exercisable for 60 months at an exercise price of \$0.05, with a fair value of \$2,223 measured using the Black Scholes Option Pricing Model was recorded to share issue cost, were issued to brokers.

On July 24, 2023, the Company completed a private placement by issuing 17,700,000 of flow-through units of the Company at \$0.03 per unit for gross proceeds of \$531,000. Each unit is comprised of one flow-through common share and one common share purchase warrant. Each warrant is exercisable into one common share at a price of \$0.06 for a period of 60 months. The warrants had a fair value of \$223,197 calculated using the Black Scholes Option Pricing Model, of which \$157,144 was allocated to reserves on a relative fair value basis. The Company recognized a flow-through premium liability of \$88,500 in connection with the flow-through private placement based on an estimated premium of approximately \$0.005 per flow-through common share issued (Note 9). Finders' fees and brokers commission of \$26,550, legal fees of \$12,716 and filing fees of \$1,912 were paid. In addition, 885,000 share purchase warrants exercisable for 24 months at an exercise price of \$0.06, with a fair value of \$11,160 calculated using the Black Scholes Option Pricing Model was recorded to share issue costs, were issued to brokers.

# Share purchase warrants

A continuity of the Company's share purchase warrant transactions for the period ended January 31, 2024 and July 31, 2023 is as follows:

	Number of Warrants	Weighted Average Exercise Price
Balance, July 31, 2022	96,770,721	\$0.17
Issued for financing	91,419,663	\$0.05
Expired	(61,855,959)	\$0.18
Balance, July 31, 2023	126,334,425	\$0.09
Issued for financing	16,666,666	\$0.05
Expired	(10,501,880)	\$0.18
Balance, January 31, 2024	132,499,211	\$0.09

The following table summarizes information relating to share purchase warrants outstanding and exercisable at October 31, 2023.

Number of	Exercise	Expiry	
5,462,882	\$0.10	July 25, 2024	
18,812,500	\$0.06	December 19, 2024	
18,585,000	\$0.06	July 24, 2025	
18,950,000	\$0.11	January 19, 2027	
40,570,497	\$0.05	December 9, 2027	
13,451,666	\$0.05	July 19, 2028	
16,666,666	\$0.05	December 6, 2028	
132,499,211		•	

The weighted average remaining contractual life of the warrants as at January 31, 2024 was 3.02 years (July 31, 2023 – 3.03 years).



The following weighted average assumptions were used for the Black-Scholes Option Pricing Model for warrants granted:

	January 31, 2024	July 31, 2023
Risk free interest rate	3.32%	3.51%
Expected life of warrants	5 years	3.77 years
Annualized stock price volatility	145.10%	131.08%
Expected dividend yield	0%	0%

# **Share-based payments**

On December 6, 2021, the Company adopted an Omnibus Equity Incentive Plan ("Omnibus Plan") to amend and restate the Company's stock option plan ("Predecessor Plan"). Under the terms of the plan the Company may grant share-based compensation to Employees, Consultants, Persons performing Investor Relations Activities and Directors.

The maximum aggregate number of Shares issuable under this plan in respect of Options shall not exceed ten (10%) percent of the Company's issued and outstanding Shares at any point in time. The number of common shares reserved for issuance to consultants or persons performing Investor Relations activities will not exceed two (2%) of the issued and common shares in any twelve-month period. All outstanding stock options granted under the predecessor plan shall continue to be outstanding as stock options granted under and subject to the terms of this Omnibus Plan.

The maximum aggregate number of Shares issuable under this plan in respect of Deferred Share Units (DSU's), Restricted Share Units (RSUs) and Performance Share Units (PSUs) shall not exceed 23,810,154 at any point in time, representing 10% of the issued and outstanding shares of the Company as at the date of adoption of the Omnibus Plan. The total number of DSU's RSUs, and PSUs issuable to any participant under this plan shall not exceed (1%) of the issued and outstanding shares at the time of the award.

The outstanding share purchase options as of January 31, 2024 are summarized as follows:

			Number of Options Outstanding	Number of Options
Date of Grant	Expiry Date	Exercise Price		Exercisable
August 26, 2019	August 26, 2024	\$ 0.05	400,000	400,000
December 18, 2020	December 18, 2025	\$ 0.05	2,550,000	2,550,000
August 4, 2019	August 4, 2026	\$ 0.12	3,900,000	3,900,000
October 25, 2021	October 25, 2026	\$ 0.12	3,850,000	3,850,000
February 7, 2023	February 7, 2027	\$ 0.07	2,000,001	1,333,333
February 21, 2023	February 22, 2027	\$ 0.07	350,000	233,334
April 5, 2023	April 5, 2027	\$ 0.085	350,000	233,334
February 22, 2023	February 22, 2028	\$ 0.05	10,940,000	-
			24,340,001	12,500,002

The weighted average share price of the Company on exercise of options was \$0.07 (July 31, 2022 - \$0.07).



The following table reflects the share purchase options that could be exercisable for an equal number of common shares:

	Janu	ary 31, 2024	July 31	, 2023
	Number of options	Weighted Average Exercise Price	Number of options	Weighted Average Exercise Price
Balance, beginning of year	24,340,001	\$ 0.07	13,400,001	\$ 0.09
Granted	-	-	10,940,000	\$ 0.05
Balance, end of year	24,340,001	\$ 0.07	24,340,001	\$ 0.07
Exercisable	12,500,002	\$ 0.05	12,500,000	\$ 0.05

On February 22, 2023, the Company granted 10,940,00 stock options, with an exercise price of \$0.05, to management and consultants of the Company. The stock options vest 1/3 on the first anniversary date of the grant, 1/3 on the second anniversary and 1/3 on the third-anniversary date of the grant. The options expire on February 22, 2028.

During the year ended January 31, 2024, the Company recorded \$69,748 (2022 - \$22,027) in share-based compensation based on the vesting provisions of the granted options.

The following weighted-average assumptions were used for the Black-Scholes Option Pricing Model of stock options granted:

	January 31, 2024	July 31, 2023
Risk free interest rate	-	3.40%
Expected life of options	-	5 years
Annualized stock price volatility	-	134.42%
Expected dividend yield	-	0%

The weighted average remaining contractual life of options outstanding as of January 31, 2024 was 2.56 years (July 31, 2023 – 3.70 years).

# Long-term Incentive Plan

# RSU's

On February 22, 2023, the Company granted an additional 3,000,000 RSU's to certain directors. Under the RSU plan, the directors will receive the Company's common shares at no cost at the end of the vesting period, which is one year. The RSU's issued to directors' vest based on achieving annual performance milestones. At October 31, 2023, no RSU's had vested. The RSU value is determined based on the fair value of the Company's common shares at the grant date and amortized over the vesting period.

On October 31, 2023, 833,333 RSU's, valued at \$62,500 were converted into shares. All RSUs expire 10 years after being granted.



The number of RSU's outstanding at October 31, 2023 and July 31, 2023, is as follows:

	Number of RSU Awards
Balance, July 31, 2022	4,666,667
Granted	3,000,000
Redeemed	(2,041,667)
Balance, July 31, 2023	5,625,000
Redeemed	(833,333)
Balance January 31, 2024	4,791,667
Redeemable	1,791,667

For the period ended January 31, 2024, the Company recorded \$37,808 (2023- \$176,439), respectively as a share-based compensation expense relating to RSUs

#### PSU's

	Number of PSU Awards
Balance, July 31, 2022	800,000
Canceled	(800,000)
Balance, January 31, 2024 and July 31, 2023	-

For the period ended January 31, 2024, the Company recorded \$0.00 (2022 - \$15,123) respectively, as share-based compensation expense relating to PSU's.

# DSU's

On February 22, 2023, the Company granted an additional 4,000,000 DSU's to non-executive directors. Under the DSU plan those directors granted DSU's will receive common shares at no cost at the end of the vesting period, which is one year. The DSU value is based on the fair value of the Company's common shares at the grant date and amortized over the vesting period.

The number of DSU's outstanding at October 31, 2023 and July 31, 2023, is as follows:

	Number of DSU Awards
Balance, July 31, 2022	3,428,574
Granted	4,000,000
Balance, October 31, 2023 and July 31, 2023	7,428,574
Redeemable	3,428,574

For the period ended January 31, 2024, the Company recorded \$50,411 (2023 - \$129,628) as share-based compensation.



#### Reserves

Equity reserve records items recognized as share-based compensation and allocation of the value of stock options and warrants until such time that the stock options and warrants are exercised, at which time the corresponding amount will be transferred to share capital.

The values recorded to reserves for stock options and warrants are transferred to deficit on expiration or cancellation of such stock options and warrants.

#### **ACCOUNTS PAYABLE AND ACCRUED LIABILITIES**

January 31, 2		July 31, 2023
Accounts payables	\$ 146,497	\$ 134,546
Accrued liabilities	214,450	235,939
Wages payable	86,042	-
	\$ 446,989	\$ 370,485

#### FLOW THROUGH PREMIUM LIABILITY

	Oc	tober 31, 2023	July 3	31, 2023
Balance, beginning of year	\$	202,727	\$	366,780
Added:				
July 24, 2023, private placement		-		88,500
December 19, 2022 private placement		-		186,250
Amortization of flow through premium liability		(150,820)		(438,803)
Balance, end of year	\$	51,907	\$	202,727

As at January 31, 2024, the Company is required to incur further Canadian exploration expenditures of \$311,446 no later than December 31, 2024 pursuant to the terms of the subscription agreements.

The flow-through premium liability is to be amortized to the statement of loss and comprehensive loss pro-rata with the amount of qualifying flow-through expenditures incurred.

# Flow through expenditures

The Company is able to continue to incur exploration expenses beyond the deadlines. However, it could be subject to an interest charge of 4-5% per annum on the balance required to be spent on its exploration work relating to Par XII.6 tax. The Company intends to fulfill its flow-through commitments within the given time constraints. During the year the Company recorded an expense of \$14,779 (July 31, 2023 - \$16,164) in Part XII.6 interest.



# **FINANCIAL PERFORMANCE**

# **Operating Expenses**

Results of operating expenses for the six-month period ended January 31, 2024 and 2023:

		Three Months Ended January 31		Six Months Ended January 31	
	2024	•	2023	2024	2023
Expenses					
Advertising and promotion	14,144	\$	44,004	38,252 \$	126,593
Insurance	8,442		5,124	15,577	9,358
Management and consulting fees	170,128		60,861	216,659	127,486
Office, general and administration	16,436		23,157	29,666	40,069
Professional fees	51,399		98,682	59,742	121,342
Regulatory and filing fees	14,768		25,733	16,792	34,188
Salaries and benefits	165,737		181,215	332,143	354,283
Shareholder communications	51,987		79,144	71,587	105.045
Share based payments (Note 6)	78,947		175,061	157,895	365,245
Travel	5,417		12,660	19,930	26,896
Loss from operations	(577,405)		(705,641)	(958,243)	(1,310,505

During the six-month period ended January 31, 2024, operational expenses decreased by 27% from the same period last year. All expenses were incurred in the normal course of business operations. Management fees increased due to management service contract requirements following the resignation of the Executive Chair from the Board.

The Company had a total net loss of (\$821,555) for the six-month period (2023 - (\$842,790)). The loss per share, basic and diluted, was (\$0.00) (2023 - (\$0.00)).

# **Balance Sheet Review**

As of the financial period ended October 31, 2023, the Company had total assets of \$13,865,669 (July 31, 2022 – \$14,203,848), of which \$1,476,329 from cash and cash equivalents; \$22,297 in receivables; \$40,129 in pre-paid expenses; \$11,952,670 in mineral exploration and acquisition costs; and \$374,244 from exploration advances.

	January 31, 2024	July 31, 2023
Total Assets	\$ 13,956,352	\$ 14,203,848
Total Liabilities	\$ 498,896	\$ 573,212
Shareholders' Equity	\$ 13,457,455	\$ 13,630,636

The Company's working capital for the first quarter ended January 31, 2024, was \$774,531.

# **Cash Flow Review**

	Six months ended	Six months ended
	January 31, 2024	January 31, 2023
Cash Flow from Operating Activities	(\$814,480)	(\$868,152)
Cash Flow from Financing Activities	490,480	1,875,535
Cash Flow from Investing Activities	(\$731,115)	(\$1,003,662)



# Summary of Quarterly Results (Expressed in thousands of Canadian dollars, except per share amounts)

The following table presents a summary of quarterly results on a year-to-date basis.

(000's)	January 2024	October 2023	July 2023	April 2023	January 2023	October 2022	July 2022	April 2022
Total Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income (Loss)	(\$822)	(\$380)	(\$629)	(\$487)	(\$605)	(\$238)	(\$721)	(\$518)
Loss per Share	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)	(\$0.00)

#### FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company is exposed through its operations to the following financial risks:

- Market Risk
- Credit Risk
- Liquidity Risk

The Company is exposed to risks that arise from its use of financial instruments. This note describes the Company's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements.

There have been no substantive changes in the Company's exposure to financial instrument risks, except as noted under equity risk. Its objectives, policies and processes for managing those risks or the methods used to measure them from the previous year have not changed.

# **General Objectives, Policies and Processes:**

The Board of Directors has overall responsibility for the determination of the Company's risk management objectives and policies and, whilst retaining ultimate responsibility for them, it has delegated the authority for designing and operating processes that ensure the effective implementation of the objectives and policies to the Company's finance function. The Board of Directors receive regular quarterly reports as well as other reports as necessary from the Company's Chief Financial Officer through which it reviews the effectiveness of the processes put in place and the appropriateness of the objectives and policies it sets.

## a) Market Risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices are comprised of four types of risk: foreign currency risk, interest rate risk, commodity price risk and equity price risk.

# Foreign Currency Risk:

Foreign currency risk is the risk that a variation in exchange rates between the Canadian dollar and US dollar or other foreign currencies will affect the Company's operations and financial results. The Company does not have significant exposure to foreign exchange rate fluctuation.

#### Interest Rate Risk:

Interest rate risk is the risk that future cash flows will fluctuate due to changes in market interest rates. The Company does not have any borrowings. Interest rate risk is limited to potential decreases on the interest rate offered on cash and cash equivalents held with chartered Canadian financial institutions. As part of the quarter ending on October 31, 2023, the Company held \$1,476,329 in cash and equivalent deposits. Interest rates also affect warrant and option values.

#### Equity Price Risk:

Equity risk is the uncertainty associated with the valuation of assets arising from changes in equity markets.



# b) Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Financial instruments which are potentially subject to credit risk for the Company consist primarily of cash and cash equivalents and due from associate. The majority of cash and cash equivalents are maintained with financial institutions of reputable credit and may be redeemed upon demand. The carrying amount of financial assets represents the maximum credit exposure. The Company has gross credit exposure at January 31, 2024 relating to cash of \$1,083,877 and other receivables of \$239,236. All cash, cash equivalents and short-term deposits are held at the Royal Bank of Canada.

# c) Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company ensures that it has sufficient cash on demand to meet short-term business requirements. The Company considers liquidity risk to be high.

The Company's cash is invested in business accounts and is available on demand. Funding risk is the risk that the Company may not be able to raise equity financing in a timely manner and on terms acceptable to management. There are no assurances that equity financing will be available when, and if, the Company requires additional financing. The Company considers liquidity risk to be high.

The following table summarizes the Company's significant remaining contractual maturities for financial liabilities as at January 31, 2024 and July 31, 2023.

	Less	than 3 month	s 3-1	12 months	Total
<b>January 31 2024</b> Trade payables	\$	146,353	\$	-	\$ 146,353
July 31, 2023 Trade payables	\$	134,546	\$	-	\$ 134,546

#### d) Fair value of financial instruments

The Company classifies its financial instruments measured at fair value at one of three levels according to the relative reliability of the inputs used to estimate fair value:

		Level 1	Level 2	L	evel 3	Total
January 31, 2024 Cash and Cash equivalents	\$	1,083,877	\$ -	\$	-	\$ 1,083,877
July 31, 2023 Cash and Cash equivalents	ç	\$ 2,098,532	\$ <u>-</u>	\$	-	\$ 2,098,532

Level 1 - quoted prices (unadjusted) in active markets

Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e., derived from prices); and

Level 3 - inputs that are not based on observable market data (unobservable inputs)

The carrying value of the Company's financial instruments approximates fair value.

# **Capital Risk Management**

It is the Company's objective when managing capital to safeguard its ability to continue as a going concern in order that it may continue to explore and develop its mineral properties and investment in power supply products companies and continue its operations for the benefit of its shareholders.

The Company intends to expend existing working capital by carrying out its planned acquisition, exploration and development activities and continuing to incur administrative costs.



The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristic of the underlying assets. The Company may issue new shares. In order to facilitate analysis and management of its capital requirements, the Company prepares and updates budgets (as needed) to ensure that its acquisition and exploration operations can continue to progress. Budgets, once finalized, are approved by the Board of Directors.

There have not been any changes to the Company's capital management objective, policies and processes compared to the prior year. The Company is not subject to any externally imposed capital requirements.

# Other MD&A Requirements

As of this reporting period, the Company will need to raise funds through new financings to support its operations and ongoing exploration commitments.

#### **Off-Balance Sheet Arrangements**

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

#### Additional Disclosure for Venture Issuers without Significant Revenue

The required disclosure for general and administrative expenses is presented in the "Financial Performance" section of this MD&A.

# **Related Party Transactions**

Key management personnel are the persons responsible for planning, directing and controlling the activities of the Company and include both executive and non-executive directors, and entities controlled by such persons. The Company considers all executive employees, directors and officers of the Company to be key management personnel. The following are related party transactions not disclosed elsewhere in the financial statements.

	January 31, 2024	Jan	nuary 31, 2023	
Management Fees paid to directors or companies related to directors and key management	\$ 214,839	\$	90,000	
Compensation to key management personnel	332,143		354,583	
Share-based compensation	154,585		376,345	
	\$ 701,567	\$	820,628	

Management fees were paid to M & M Corporation, a company controlled by Jacqueline Michaels, the Company's Controller and AJS Management Corporation, a company controlled by Paul Gill, the Company's Executive Chair. On December 20, 2023, Paul Gill resigned from the board of directors and his management services contract was terminated. As outlined in the management contract, the Company is required to pay 18 months of fees totalling \$135,000 upon the termination of the contract. Paul Gill has agreed to payment terms of \$7,500 per month.

Included in accounts payable is \$9,539 (July 31, 2023 - \$6,847) owing to executive employees, directors, companies controlled by directors, or key management for expenses incurred in the normal course of business.

# SUPPLEMENTAL DISCLOSURE WITH RESPECT TO CASH FLOWS

	Janı	uary 31, 2024	Janu	ary 31, 2023
Flow through premium liability	\$	-	\$	186,250
Issuance of shares to brokers	\$	11,667	\$	
Exercise of RSU	\$	62,500	\$	-
Exploration and evaluation assets in accounts payable	\$	51,112	\$	84,310
Exploration and evaluation advances applied to exploration and evaluation assets	\$	250,000	\$	-



#### SUBSEQUENT EVENTS

On February 15, 2024, The Company announced the start of a collaboration with Femina Collective ("Femina") to build on and provide momentum for a more strategic approach to responsible critical minerals development and energy security in North America.

On April 1, 2024, the Company announced it completed Phase 2 of the single-layer pouch cell battery testing of its La Loutre graphite material with Polaris Battery Labs, LLC ("Polaris"). In Phase 1, Polaris completed half-cell coin battery testing, confirming good material electrochemical performance metrics compared to industry standards.

# **DISCLOSURE OF INTERNAL CONTROLS**

Management has established processes to provide sufficient knowledge to support representations that reasonable due diligence has been exercised to ensure that.

- i) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized, and reported within the periods specified in securities legislation; and
- ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's generally accepted accounting principles (GAAP).

The issuer's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in this certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost-effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

On behalf of the Board,

"Sagiv Shiv"
Chair of the Audit Committee

"Belinda Labatte"
Chief Executive Officer and Interim Chair

