CANADIAN MANGANESE

CANADIAN MANGANESE COMPANY INC.

ANNUAL INFORMATION FORM

FOR THE YEAR ENDED DECEMBER 31, 2022

March 27, 2023

Contents

GENERAL

Reference is made in this annual information form (the "**Annual Information Form**" or "**AIF**") to the audited annual consolidated financial statements (the "**Financial Statements**") together with the auditor's report thereon, and management's discussion and analysis ("**Management's Discussion and Analysis**") of Canadian Manganese Company Inc. ("**Canadian Manganese**" or the "**Company**"), for the years ended December 31, 2022 and December 31, 2021.

The Financial Statements and Management's Discussion and Analysis are available for review under the Company's profile on the SEDAR website located at www.sedar.com. All financial information in this Annual Information Form is prepared in accordance with International Financial Reporting Standards.

Unless otherwise noted herein, information in this Annual Information Form is presented as at December 31, 2022, and all currency references are to Canadian dollars.

STATEMENT REGARDING FORWARD LOOKING STATEMENTS

Except for statements of historical fact relating to the Company, certain information contained in this Annual Information Form constitutes "forward-looking information" under Canadian securities legislation. Forward-looking information includes, but is not limited to, statements with respect to the potential of the Company's mineral exploration properties; the level of working capital and cash-flow of the Company in the future, including expectations or anticipations regarding mineral exploration activities, the market and market participants; treatment of the Company under governmental regulatory regimes and tax laws, and the evolution of the regulatory environment and regime; requirements for additional capital and other statements relating to the financial and business prospects of the Company; and availability of permits.

Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "continue", "is expected", "budget", "scheduled", "project", "intends", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "should", "will", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to risks related to:

- *the efficiency and results of operations of the Company;*
- *the economy generally;*
- *market participants' interest in the Company's potential products;*
- *market and competitive conditions;*
- *current and future stock prices;*
- *future capital and other expenditures (including the amount, nature and sources of funding thereof);*
- *competitive advantages;*

- *fluctuations in foreign currency exchange rates;*
- *business prospects and opportunities;*
- *transportation delays, accidents, labour disputes and other risks of the industry;*
- *political developments, arbitrary changes in law and delays in obtaining governmental approvals;*
- *anticipated and unanticipated costs;*
- *management's outlook regarding future trends;*
- *uncertainty regarding the market; and*
- *governmental regulation.*

Forward-looking information is based on the reasonable assumptions, estimates, analyses and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made. In addition to other factors and assumptions which may be identified herein, assumptions have been made regarding, among other things: availability of financing and/or cash flow to fund current and future plans and expenditures; the impact of increasing competition; the general stability of the economic, market and political environment in Canada and other applicable regions; the general continuance of current industry conditions; the timely receipt of any required regulatory approvals; the ability of the Company to obtain qualified staff, equipment and/or services in a timely and cost efficient manner; currency, exchange and/or interest rates; the applicable regulatory framework, taxes and/or other regulatory matters in the jurisdictions in which the Company operates; and the ability of the Company to successfully develop its properties.

Forward-looking statements are inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: the accuracy of current estimates of the timing, cost, and results of exploration activities; commodity price assumptions; there being no significant disruptions affecting operations, whether due to labour disruptions, supply disruptions, damage to equipment or otherwise; the prices for energy and other key supplies remaining consistent with current levels; ; the economy generally; and/or certain other risks detailed from time-to-time in the Company's public disclosure documents (including, without limitation, those risks identified herein and in the Company's current management's discussion and analysis). Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such 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 on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

MINERAL EXPLORATION AND INFERRED MINERAL RESOURCES

The Company is a mineral exploration company and its properties are in the mineral exploration and project development stage only. The degree of risk is higher where properties are in the mineral exploration stage as opposed to the development or operational stage. An investment in the securities of the Company is speculative and involves a high degree of risk and should only be made by persons who can afford the total loss of their investment. Prospective investors should consider the risk factors in connection with an investment in the Company as set out under the heading "*Risk Factors*". Certain of the Company's Mineral Resources are in the Inferred category. Due to the uncertainty that may be attached to Inferred Mineral Resource estimates, it cannot be assumed that all or any part of an Inferred Mineral Resource estimate will be upgraded to an Indicated or Measured Mineral Resource estimate as a result of continued exploration. Confidence in an Inferred Mineral Resource estimate is insufficient to allow meaningful application of the technical and economic parameters to enable an evaluation of economic viability sufficient for public disclosure, except in certain limited circumstances set out in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*. There is no assurance that Mineral Resources will be converted into Mineral Reserves. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that these Inferred Mineral Resources will be converted to the Measured and Indicated Mineral Resource categories through further drilling, or into Mineral Reserves, once economic considerations are applied.

Forward-looking statements and other information contained herein concerning the mineral exploration industry and management's general expectations concerning the mineral exploration industry are based on estimates prepared by management using data from publicly available industry sources as well as from market research and industry analysis and on assumptions based on data and knowledge of this industry which management believes to be reasonable. However, this data is inherently imprecise, although generally indicative of relative market positions, market shares and performance characteristics. While management is not aware of any misstatements regarding any industry data presented herein, the mineral exploration industry involves risks and uncertainties and industry data is subject to change based on various factors.

CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated under the *Canada Business Corporations Act* (the "**CBCA**") on June 13, 2011.

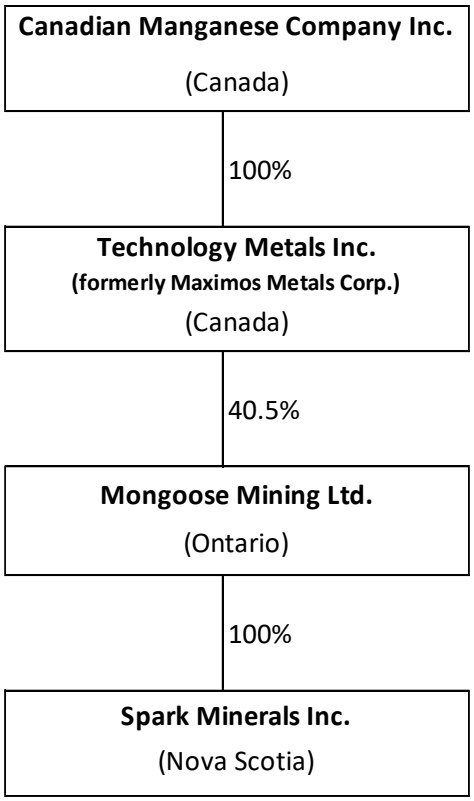
On June 13, 2014, the Company filed articles of amendment changing the jurisdiction of its registered office from Nova Scotia to Ontario. The registered office and principal business office of the Company is 55 University Ave., Suite 1805, Toronto, Ontario, M5J 2H7.

The Company is a reporting issuer under applicable securities legislation in each of the provinces of Ontario, British Columbia, Alberta, Nova Scotia and Newfoundland and Labrador.

The shares of the Company trade in Canadian dollars on the NEO Exchange ("**NEO**") under the symbol "**CDMN**". The shares of the Company also trade in U.S. dollars on the OTCQB Market under the symbol "**CDMNF**".

Inter-Corporate Relationships

The subsidiaries of the Company, at December 31, 2022 and the date hereof, and their respective jurisdictions of incorporation are set out below.



GENERAL DEVELOPMENT OF THE BUSINESS

Overview

The Company is focused on the environmentally responsible development of its wholly-owned manganese project in New Brunswick, Canada (the **"Woodstock Project"**), consisting of the adjacent Plymouth, North Hartford and South Hartford deposits, with a goal of becoming a global leader in sustainable long-term production of high purity manganese products, especially for the increasingly important North American energy storage manufacturing market. As a supplier of high purity manganese sulphate monohydrate (**"HPMSM"**), a critical component of rechargeable lithium-ion batteries used in electric vehicles, the Company's assets have the potential to support the forecast demand required to facilitate the proposed manufacturing in this market.

Manganese is most commonly used in alloys, such as steel, to increase strength, improve workability and resistance to wear. It is also a critical component in lithium-ion batteries. The global decarbonization initiatives, specifically the shift away from fossil fuels towards zero-emissions electricity has significantly increased the demand for batteries. Principal sources of global manganese supply are found in Africa, China and Australia and primarily used in the production of ferroalloys. The global production and supply of battery grade manganese is dominated by China (representing over 90%), where an overwhelming majority of the processing and refining methods are energy (carbon) intensive. The fundamental properties of the ores found in the Woodstock Project may provide significant improvements to the carbon footprint of manganese processed for the battery sector. Initiatives to create a sustainable battery production industry in North America are well underway, the success of which depend on the long-term and stable supply of key critical minerals.

The Woodstock Project is strategically located adjacent to the U.S. border in New Brunswick with established key infrastructure and multiple distribution access points to the expanding Canadian and U.S. energy storage manufacturing markets. The recent re-evaluation of the Plymouth Manganese-Iron deposit ("**Plymouth**") has outlined an unparalleled (size, grade and continuity) carbonate-hosted (rhodochrosite) manganese resource (56.7 million tonnes Measured and Indicated at 10.07% Mn). This upgraded resource supports the Company's view that Plymouth is a generational asset with potential to sustainably supply the North American market for decades.

Furthermore, the Woodstock Project additionally consists of the historically identified North and South Hartford deposits (previously estimated to contain ~90 million tonnes (historical, non 43-101 compliant) at 8% Mn), which may provide the Company with an industry leading growth profile. The Woodstock Project is believed to be the largest manganese carbonate resource in Canada, and a globally significant district.

The Company is positioned to become a major global producer of HPMSM, focused on addressing the jurisdictional supply imbalance and current environmentally harmful and energy inefficient production landscape of HPMSM by providing a new generation of HPMSM consumers with an alternative carbon conscious North America-based supply. The widespread adoption and rapid production growth of electric vehicles has demonstrated support for decarbonization, as well as the significant economic opportunities created by this industrial transition. North American governments have demonstrated a commitment to support this transition.

Manganese has been defined by the Canadian and U.S. governments as a strategic metal essential for national defense, aerospace, technology and energy that is highly susceptible to supply interruptions due to the lack of domestic production and concentration of current global production. Canada and the U.S. have both included manganese on their lists of critical minerals.

There is currently no manganese mine production in North America, with the majority of HPMSM production based in China, representing approximately 90% of global supply. The Company's goal is to address the jurisdictional supply imbalance and current environmentally harmful and energy inefficient production landscape of HPMSM by providing a new generation of HPMSM consumers with an alternative carbon conscious North America-based supply.

Three Year History

December 31, 2020

In 2020 the Company completed a reassessment of strategic focus of the Woodstock Project from the production of Electrolytic Manganese Metal ("**EMM**"), as originally contemplated in 2013 and 2014, to HPMSM, based on an analysis of the opportunity for the Woodstock Project to supply HPMSM to the emerging lithium-ion battery industry.

December 31, 2021

In early 2021, the Company engaged Mercator Geological Services Limited to update the Company's 2014 technical report in a revised National Instrument 43-101 Technical Report, including preparation of a revised resource estimate, assuming the production of HPMSM and updated economic assumptions.

On March 26, 2021, the Company announced that it had entered into an acquisition and amalgamation agreement with Maximos Metals Corp. ("**Maximos**") whereby Maximos and a newly created subsidiary of the Company would complete an amalgamation, resulting in Maximos becoming a wholly-owned subsidiary of the Company (the "**Amalgamation**").

On April 30, 2021, the Company completed the acquisition of Maximos by way of a three-cornered amalgamation between Maximos and a wholly owned subsidiary of the Company, to form the amalgamated entity "Technology Metals Inc." ("**Technology Metals**"), which resulted in Maximos becoming a wholly owned subsidiary of the Company (named Technology Metals post-amalgamation), and the shareholders of Maximos becoming shareholders of the Company.

Additionally, Maximos held an investment in Spark Minerals Inc. ("**Spark**"), a private company focused on the advanced exploration of previously identified IOCG (iron-oxide-copper-gold) mineralized breccias, located in Nova Scotia.

On March 17, 2021, prior to the Company indirectly acquiring its interest in Spark, Spark entered into a share exchange agreement with Mongoose Mining Ltd. ("**Mongoose**") which set out the intent of the parties for Spark to complete a reverse takeover of Mongoose, which was completed on November 10, 2021.

On May 5, 2021, the Company appointed Matthew Allas as President and Chief Executive Officer. Previously, Mr. Allas had been President and Chief Executive Officer of Maximos since 2018. On May 5, 2021, the Company appointed Richard Pinkerton as Chief Financial Officer.

During the year, the Company completed a non-brokered equity private placement of common shares and flow-through common shares. On April 29, 2021, the Company issued 17,544,447 common shares at a price of $0.225 per share for gross proceeds of $3,947,500 and 6,666,666 flow-through shares at a price of $0.30 per flow-through share for gross proceeds of $2,000,000. In a second closing on June 21, 2021, the Company issued an additional 1,136,339 common shares at a price of $0.225 per share for gross proceeds of $255,676.

Throughout 2021, the Company worked with its consultants in the preparation of the 2021 Technical Report (as defined herein) and expanded its engagement efforts with stakeholders of the Woodstock Project, both at the provincial and local Woodstock community level.

In December 2021 the Company filed its technical report prepared in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects, reporting a Mineral Resource Estimate for the Plymouth manganese-iron deposit (Plymouth deposit) in New Brunswick. The technical report is entitled "NI 43-101 Technical Report for the Woodstock Project (Plymouth Manganese-Iron Deposit) Woodstock Area, New Brunswick, Canada" (the"**2021 Technical Report**") and was prepared by Paul Ténière, M.Sc., P. Geo.; Matthew Harrington, P. Geo. (both of Mercator Geological Services Limited); Dean Thibault, P. Eng.; (Thibault and Associates Ltd) and Lawrence Elgert, P. Eng. (AGP Mining Consultants Inc) with an effective date of November 10, 2021. The 2021 Technical Report updated the previous Mineral Resource Estimate of the Plymouth deposit disclosed in the Woodstock Project Preliminary Economic Assessment dated July 10, 2014.

December 31, 2022

On January 31, 2022, the shares of the Company commenced trading in Canadian dollars on the NEO Exchange under the symbol "**CDMN**".

In May, 2022, the Company completed an extensive diamond drilling program at its wholly owned Plymouth deposit.

The 2022 Plymouth deposit drilling program (which began in late 2021) was specifically designed to infill previous drilling to maximize conversion of the previous 2021 Inferred resource to Measured and Indicated status. It also included several resource expansion drill holes that targeted down-dip extensions of the central deposit area, where the greatest modelled thicknesses of mineralization grading above 5% Mn occur.

The initially proposed drilling program was significantly expanded based on identification of resource expansion opportunities. In total, the program ultimately comprised 25 drill holes (7,098m) with 1,820 core samples collected for analysis. Mercator Geological Services Limited designed and oversaw the program and ALS Global provided sample preparation and analytical services.

The 2022 Plymouth deposit drilling program culminated in the release of an updated Mineral Resource Estimate ("**MRE**") on the Plymouth deposit in March 2023 (the "**2023 MRE**").

The 2023 MRE reported resources of 56.7 million tonnes in the Measured and Indicated category on the Plymouth deposit with a grade of 10.07% manganese (utilizing a cut-off grade of 4.75% Mn) and an

additional 17.7 million tonnes with a grade of 10.02% Mn in the Inferred category. Including all categories, the 2023 MRE represents a 73% increase in total MRE versus the 2021 MRE, with comparable Mn grades.

As well, the Company completed on-site feasibility level baseline environmental work at Plymouth during the summer of 2022, which will be a component of an Environmental Impact Statement.

In May, 2022, the shares of the Company commenced trading in U.S. dollars on the OTCQB Market under the symbol "**CDMNF"**.

In June, shareholders elected Janis Byrne and Labi Kousoulis to the Company's Board, joining six incumbent directors. Ms. Byrne is an accomplished lawyer and corporate director based in St. John's, Newfoundland. Mr. Kousoulis is a former Minister of Finance of Nova Scotia based in Halifax.

In July, 2022, the Company completed an initial core drilling campaign to test historically documented manganese-iron mineralization in the North Hartford deposit, located approximately 2.2 km northeast of the Plymouth deposit. Mineralization at North Hartford is hosted by the northeast extension of the same geological sequence that hosts the Plymouth deposit. The drilling program consisted of 4 drill holes (approximately 1,186 m) completed along one section line. While results of the 2022 drilling at North Hartford are under internal review, they are considered sufficient to warrant further drilling and will be disclosed in due course.

In November, 2022, the Company appointed David Alward as Vice President, New Brunswick, to lead and facilitate the Company's engagement within the province. Since June 2021, Mr. Alward has worked with the Company as a consultant, focused on advancing the Company's engagement with the local community to properly understand the various interests and concerns as work at Plymouth was re-initiated and future initiatives were planned. Additionally, Mr. Alward was key in the development and execution of a formalized engagement structure with both the municipal and provincial governments, both of which have been extremely beneficial in fostering regular communication and active dialogue. Mr. Alward previously served as Premier of New Brunswick from 2010 to 2014, following which he was appointed Canada's Consul General in Boston. Mr. Alward lives in the Woodstock area, and previously represented the riding as its Member of the Legislative Assembly.

During the year management commissioned certain studies of the HPMSM market to support its project development planning activities. A significant part of these studies was to provide a detailed understanding of all processing methodologies historically and currently employed in the global marketplace, specifically focused on the Chinese suppliers, and supported with historical empirical data from this primary market. This level of detailed understanding has provided the Company with a unique view of the benefits associated with appropriate processing methods and the practical employment of each based on the composition of ore inputs and processing location. Based on the foregoing, management is advancing its metallurgical planning, with a focus on pre-concentration flow-sheet optimization and unique jurisdictional impacts.

Throughout the year management carried out regular stakeholder engagement, both at the provincial and local Woodstock community level.

2023 INITIATIVES

Building on the success of the infill drilling program at Plymouth and initial drilling program at North Hartford in 2022, the Company plans to continue with an aggressive drilling program in 2023 with a goal of upgrading the Plymouth resource estimate to a feasibility level Reserve category and establishing a preliminary resource at North Hartford in the Measured and Indicated category. A drilling program at North Hartford was commenced in February as a first step in furtherance of this plan.

Building on the baseline environmental work performed in 2022, the Company, along with its consultants, will advance the environmental impact assessment process in 2023, including performing a required archaeological study at site in the summer.

The Company will continue its analysis of processing facility methodology, location and partnership in 2023, with an emphasis on product mix, process methodology and specific jurisdictional economic considerations. As part of this process, the Company is analyzing logistics, transportation costs, permitting considerations and various government programs to subsidize capital and operating costs.

Stakeholder engagement will continue to be a focus in 2023, both at the provincial level and at the local Woodstock community level. Proactive and continuous stakeholder communication to provide an awareness of potential impacts, underpins the Company's approach to all initiatives and activities.

DESCRIPTION OF BUSINESS

General

The Company is a natural resource company engaged in the business of acquiring, exploring, and evaluating mineral properties, with the intent of further developing them or disposing of them if considered advantageous. The shares trade in Canadian dollars on the NEO Exchange under the symbol "**CDMN**" and in U.S. dollars on the OTCQB Market under the symbol "**CDMNF**". The Company is a reporting issuer in the provinces of Ontario, British Columbia, Alberta, Nova Scotia, and Newfoundland and Labrador. The Company is in the exploration and evaluation stages with respect to each of its properties, the main project of which is the Woodstock Project.

MINERAL PROPERTIES

Woodstock Project Summary

The Woodstock Project is located in Carleton County, approximately five kilometres west of the town of Woodstock, in west-central New Brunswick. The property is ideally situated with access to all necessary infrastructure and located near the junction of the Trans-Canada and U.S. Interstate I-95 highways, and approximately nine kilometres from the U.S. border with the State of Maine. Access to the property is available by New Brunswick Provincial Government maintained paved roads extending from the main Trans-Canada Highway network.

The Woodstock Project comprises mineral claims covering 58 km^2 and encompasses the Plymouth deposit. Manganese at the Plymouth deposit predominately occurs as a manganese carbonate. Manganese carbonates are preferred, relative to higher-grade manganese oxide feed materials, for

production of high-purity manganese metals. The Woodstock Project is believed to be the largest manganese carbonate (rhodochrosite) resource in Canada.

In addition, the Woodstock Project hosts several historical undeveloped deposits including the North Hartford and South Hartford deposits located less than two (2) kilometres on strike to the north of the Plymouth deposit. Historical uncategorized resource estimates for the Hartford deposits include *45 million tonnes grading 8% Mn and 12% Fe in the North Hartford deposit and an additional *45 million tonnes grading 8% Mn and 12% Fe in the South Hartford deposit (Strategic Manganese Corporation; Sidwell, 1957).

Historical Estimates: Readers are cautioned that the estimates for the North Hartford and South Hartford deposits are historical and based on data obtained and prepared by previous operators and neither the Company nor its predecessors have located original assay sheets or details of the estimation methodology, nor the key assumptions or parameters, underlying the estimates. A qualified person has not done sufficient work to verify or classify the historical estimates as current mineral resources. The Company is not treating the historical estimates as current mineral resources, and these estimates should not be relied upon.

The Company maintains the Woodstock Project as mineral claims issued by the New Brunswick Department of Energy and Resource Development. The claims are held 100% by the Company as Claim Block 5472 comprised of 232 mineral claims maintained in good standing through payment of annual renewal fees and filing of assessment work credits derived from work undertaken by the Company and its predecessor companies. The Company currently retains surplus excess work credits sufficient to maintain the property for several years.

The Company owns the surface rights for a limited portion of the property (52.6 ha, 0.526 km^2), essentially covering the north half of the Plymouth deposit. That portion of the property is subject to a 1% gross sales royalty retained by the vendors and the Company retains buyback rights for half of this royalty.

Updated Mineral Resource Estimate (Plymouth)

The 2023 MRE, prepared by Mercator Geological Services Limited, includes results of the Company's 2022 deposit delineation drilling program (which began in late 2021) at the Plymouth deposit. This drilling program was specifically designed to infill on previous drilling to maximize conversion of 2021 Inferred Mineral Resources to Measured and Indicated status in the 2023 MRE. It also included several resource expansion drill holes that targeted down-dip extensions of the central deposit area, where greatest modelled thicknesses of mineralization grading above 5% Mn occur.

Drilling program results confirm the robust nature of the current MRE deposit model and support the high conversion percentage of 2021 Inferred Mineral Resources to Indicated and Measured categories in 2023. The associated resource expansion holes confirm the down-dip extension of the main mineralized zone's central area and account for most of the overall increase in total deposit tonnage seen in the 2023 MRE. Much of this new tonnage is classified in the Inferred category.

The 2023 MRE modifiers included a 4.75% Mn cutoff grade, 45° pit slopes in bedrock and 20° in overburden, US$1,760/t HP MSM pricing, and US$5.5/t mined, US$197.5/t processing and G&A + 2.5% NSR.

The updated 2023 MRE is presented in the table below.

Plymouth Manganese-Iron Deposit Mineral Resource Estimate – Effective Date March 1, 2023

Type	Mn % Cut-off	Category	Rounded Tonnes	Mn %	Fe %
Pit Constrained	4.75	Measured	28,800,000	10.38	14.45
		Indicated	27,900,000	9.74	13.55
		Measure and Indicated	56,700,000	10.07	14.01
		Inferred	17,700,000	10.02	13.62

Notes:

1) Mineral Resources were prepared in accordance with the CIM Standards (2014) and CIM MRMR Best Practice Guidelines (2019).
2) Mineral Resources are defined within an optimized conceptual pit shell with average pit slope angles of 45^{o} in bedrock and 20^{o} in overburden; a 3.78 :1 waste to mineralized material ratio applies
3) Pit optimization parameters include: pricing of US$1,760 (CA$2,288)/t Mn in High Purity Manganese Sulphate Monohydrate (HPMSM) containing 32% Mn, a currency exchange rate of CA$1.30 to US$1.00, mining at US$5.50 (CA$7.15)/t, a 2.5% gross metal royalty, combined processing and G&A cost (1,500 t/d process rate) at US$199.17 (CA$258.92)/t processed, and overall Mn recovery to HPMSM of 77%. Fe content did not contribute to the pit optimization process.
4) Mineral Resources are reported at a cut-off grade of 4.75% Mn within the optimized pit shell. This cut-off grade reflects the marginal cut-off grade used in pit optimization to define Reasonable Prospects for Eventual Economic Extraction using open pit mining methods.
5) Mineral Resources were estimated using GEOVIA Surpac® 2021 (Surpac) software and Ordinary Kriging methods applied to 3 m downhole assay composites. No grade capping was applied. Model block size is 10 m x 10 m x 10 m with partial percent volume estimation applied.
6) Bulk density was estimated using Ordinary Kriging methods applied to drill core specific gravity data; it is assumed that specific gravity approximates bulk density for the materials modelled. The average deposit bulk density for Mineral Resources is 3.13 g/cm^{3}.
7) Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues
8) Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
9) Mineral Resource tonnages are rounded to the nearest 10,000.

Sensitivity of the 2023 MRE to cut-off grade is tabulated below. Results show that deposit tonnages and grades do not vary dramatically within the cut-off range assessed. This is interpreted to be a reflection of both grade uniformity within the deposit and sharp grade boundaries at deposit limits.

Iron (Fe) content reflected in the MRE shows comparable contact and distribution characteristics to Mn and is reported due to potential for future by-product value additional to Mn production. It does not contribute to the current MRE pit optimization.

Plymouth Deposit Cut-off Grade Sensitivity Analysis for 2023 Mineral Resources

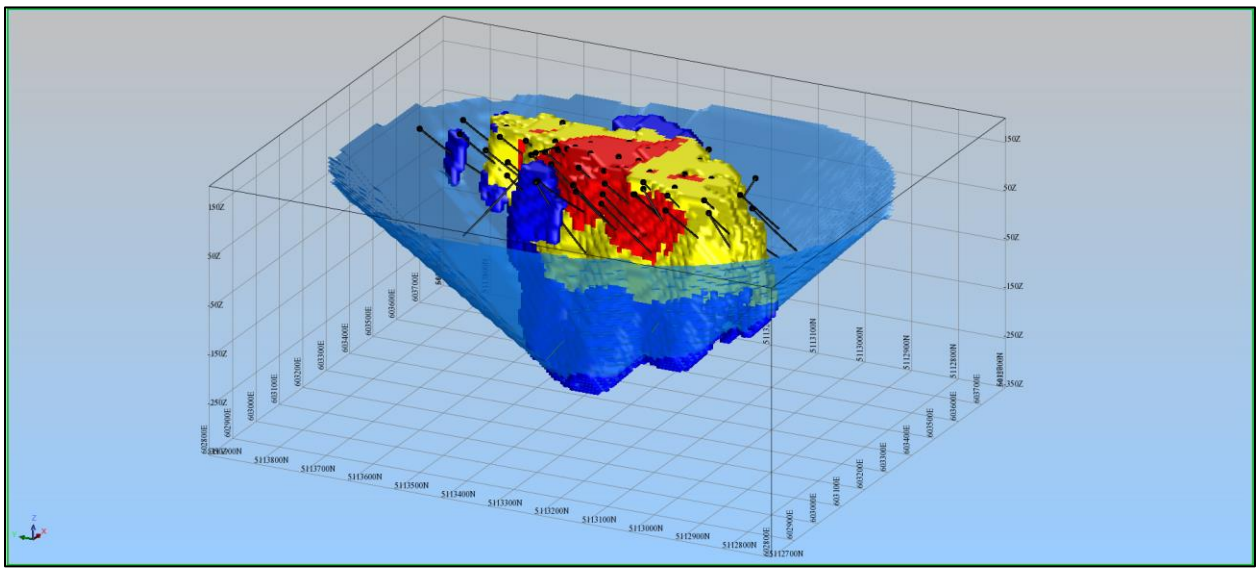
Type	Mn % Cut-off	Category	Rounded Tonnes	Mn %	Fe %
***Pit Constrained**	**4.75**	**Measured**	**28,800,000**	**10.38**	**14.45**
		Indicated	**27,900,000**	**9.74**	**13.55**
		Measured and Indicated	**56,700,000**	**10.07**	**14.01**
		Inferred	**17,700,000**	**10.02**	**13.62**
Pit Constrained	6.00	Measured	28,300,000	10.48	14.56
		Indicated	26,600,000	9.95	13.74
		Measured and Indicated	54,900,000	10.22	14.16
		Inferred	17,300,000	10.13	13.72
Pit Constrained	7.25	Measured	27,000,000	10.66	14.78
		Indicated	24,200,000	10.28	14.07
		Measured and Indicated	51,200,000	10.48	14.44
		Inferred	14,600,000	10.78	14.41
Pit Constrained	8.50	Measured	24,300,000	10.96	15.15
		Indicated	20,500,000	10.70	14.47
		Measured and Indicated	44,800,000	10.84	14.84
		Inferred	13,400,000	11.04	14.69

*Notes:

This table shows sensitivity of the March 1, 2023 MRE to cut-off grade. The base cut-off value of 4.75% Mn is bolded for reference and defines the 2023 MRE reporting cut-off grade.

Figure 1 below presents an isometric view looking northeast of the deposit block model showing color-coded resource categories within the MRE pit shell.

Figure 1: Isometric view to northeast showing 2023 MRE block model with constraining pit shell, drill hole traces, and color-coded MRE categories (Red=Measured, Yellow=Indicated, Blue=Inferred)



2021 TECHNICAL REPORT (PLYMOUTH)

As at the date of this AIF, the most recently published technical report of the Company is entitled "NI 43-101 Technical Report for the Woodstock Project (Plymouth Manganese-Iron Deposit) Woodstock Area, New Brunswick, Canada" (the"**2021 Technical Report**") and was prepared by Paul Ténière, M.Sc., P. Geo.; Matthew Harrington, P. Geo. (both of Mercator Geological Services Limited); Dean Thibault, P. Eng.; (Thibault and Associates Ltd) and Lawrence Elgert, P. Eng. (AGP Mining Consultants Inc) with an effective date of November 10, 2021. The 2021 Technical Report updated the previous Mineral Resource Estimate of the Plymouth deposit disclosed in the Woodstock Project Preliminary Economic Assessment dated July 10, 2014.

A summary of the 2021 Technical Report is contained in Schedule A of this AIF.

The 2021 Technical Report and its assumptions are no longer current, should not be relied upon, and are provided in Schedule A of this AIF for general information purposes. The resource estimate associated with the 2021 Technical Report has been superseded by the 2023 MRE (effective date March 1, 2023) as disclosed in the Company's news release dated March 3, 2023 and summarized in this AIF. A Technical Report for the 2023 MRE will be available in April 2023 and will be filed under the Company's profile on SEDAR.

RISK FACTORS

The following discussion summarizes the principal risk factors that apply to the Company's business and that may have material adverse effects on the Company's business, financial condition and results of operations and/or the trading price of its Common Shares.

Failure to Obtain Additional Funding

There can be no assurance that the Company will be successful in obtaining any additional required funding necessary to conduct additional exploration or evaluation, if warranted, on the Company's current exploration properties, or any properties that may be acquired, or to develop mineral resources on such properties, if commercially mineable quantities of such resources are located thereon. Failure to obtain additional financing on a timely basis could cause the Company to forfeit its interest in such properties. If additional financing is raised through the issuance of equity or convertible debt securities of the Company, the interests of shareholders in the net assets of the Company may be diluted.

Exploration, Development and Operating Risk

Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but also from finding mineral deposits that, though present, are insufficient in quantity and quality to return a profit from production. The marketability of minerals acquired or discovered by the Company may be affected by numerous factors that are beyond the control of the Company and that cannot be accurately predicted, such as market fluctuations, the proximity and capacity of milling facilities, mineral markets and processing equipment, and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting minerals and environmental protection, the combination of which factors may result in the Company not receiving an

adequate return of investment capital. Many of the properties in which the Company holds an interest are in the exploration stage only and are without a known body of commercial ore. Development of the subject mineral properties would follow only if favourable exploration results were obtained, and a positive feasibility study is completed.

The business of exploration for minerals and mining involves a high degree of risk. Few properties that are explored are ultimately developed into producing mines. There is no assurance that the Company's mineral exploration and development activities will result in any discoveries of commercial bodies of ore. The long-term profitability of the Company's operations will in part be directly related to the costs and success of its exploration and development programs, which may be affected by a number of factors.

Substantial expenditures are required to establish reserves through drilling and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis and at an acceptable cost.

In addition to the above, there can be no assurance that current exploration programs will result in profitable mining operations. The recoverability of the carrying value of interests in mineral properties and the Company's continued existence is dependent upon the preservation of its interests in the underlying properties, the discovery of economically recoverable reserves, the achievement of profitable operations, or the ability of the Company to raise additional financing, if necessary, or alternatively upon the Company's ability to dispose of its interests on an advantageous basis. Changes in future conditions could require material write- downs of the carrying values.

No Assurance of Production

The Company has limited experience in placing resource properties into production, and its ability to do so will be dependent upon using the services of appropriately experienced personnel, consultants or contractors, or entering into agreements with other major resource companies that can provide such expertise. There can be no assurance that the Company will have available to it the necessary expertise when and if the Company places its resource properties into production and whether it will produce revenue, operate profitably or provide a return on investment in the future.

Fluctuating Mineral Prices

Metal prices are subject to significant fluctuations and are affected by a number of factors which are beyond the control of the Company. The principal factors include: diminished demand, which may arise if economic growth in China, North America, and/or Europe is not sustained, or if the expected growth in electric battery demand does not occur; increases in supply resulting from the discovery and the development of new sources of metals; and supply interruptions, due to changes in government policies, war, or international trade disputes or embargos. The effect of these factors on the future price of manganese and its effect on the Company's operations cannot be predicted.

Factors beyond the Company's Control

The exploration and development of mineral properties and the marketability of any minerals contained in such properties will be affected by numerous factors beyond the control of the Company. These factors include government regulation, high levels of volatility in market prices, availability of markets, availability of adequate transportation and refining facilities and the imposition of new or amendments to existing taxes and royalties. The effect of these factors cannot be accurately predicted.

Environmental Risks and Hazards

The Company's operations are subject to environmental regulations in the jurisdiction in which it operates. Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving in a manner that means standards are stricter, and enforcement, fines and penalties for non-compliance are more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations.

Property Interests

There is no guarantee the Company will be able to raise sufficient funding in the future to explore and develop the Woodstock Project so as to maintain its interests therein. If the Company loses or abandons its interest in the Woodstock Project, there is no assurance that it will be able to acquire another mineral property of merit. There is also no guarantee that a stock exchange will approve the acquisition of any additional properties by the Company, whether by way of option or otherwise, should the Company wish to acquire any additional properties. The Company's mineral property interests may be subject to prior unregistered agreements or transfers or aboriginal or indigenous land claims or title may be affected by undetected defects. Until competing interests in the mineral lands have been determined, the Company can give no assurance as to the validity of title of the Company to those lands or the size of such mineral lands.

Nature of Mineral Exploration and Mining

The Company's future is dependent on its exploration and development programs. The exploration and development of mineral deposits involves significant financial risks over a prolonged period of time, which may not be eliminated even through a combination of careful evaluation, experience and knowledge. Few properties that are explored are ultimately developed into economically viable operating mines. Major expenditures on the Company's exploration properties may be required to construct or repair mining and processing facilities at a site, and it is possible that even preliminary due diligence will show adverse results, leading to the abandonment of the property. It is impossible to ensure that preliminary or full feasibility studies on the Company's projects, or the current or proposed exploration programs on any of the properties in which the Company has exploration rights, will result in any profitable commercial mining operations. The Company cannot give any assurance that its current and future exploration activities will result in a discovery of mineral deposits containing mineral reserves.

Estimates of mineral resources and any potential determination as to whether a mineral deposit will be commercially viable can also be affected by such factors as: the particular attributes of the deposit, such as its size and grade; unusual or unexpected geological formations and metallurgy; proximity to infrastructure; financing costs; precious metal prices, which are highly volatile; and governmental regulations, including those relating to prices, taxes, royalties, infrastructure, land use, importing and exporting of metal concentrates, exchange controls and environmental protection. The effect of these factors cannot be accurately predicted, but the combination of any or all of these factors may result in the Company not receiving an adequate return on its invested capital or suffering material adverse effects to its business and financial condition. Exploration and development projects also face significant operational risks including but not limited to an inability to obtain access rights to properties, accidents, equipment breakdowns, labour disputes (including work stoppages and strikes), and other unanticipated interruptions.

The Company's properties are located in New Brunswick and Labrador, and are subject to seasonal climatic conditions, with a winter season extending from December to March during which working conditions and transportation to the projects can be more challenging.

No Earnings and History of Losses

The business of developing and exploring resource properties involves a high degree of risk and, therefore, there is no assurance that current exploration programs will result in profitable operations. The Company has not determined whether any of its properties contain economically recoverable reserves of mineralized material and currently has not earned any revenue from its property; therefore, the Company does not generate cash flow from its operations. There can be no assurance that significant additional losses will not occur in the future. The Company's operating expenses and capital expenditures may increase in future years with advancing exploration, development and/or production from the Company's properties. The Company does not expect to receive revenues from operations in the foreseeable future and expects to incur losses until such time as one or more of its properties enters into commercial production and generates sufficient revenue to fund continuing operations. There is no assurance that any of the projects will eventually enter commercial operation. There is also no assurance that new capital will become available, and if it does not, the Company may be forced to substantially curtail or cease operations.

The Company has no history of earnings or of a return on investment in this sector, and there is no assurance that any of its property interests or other assets will be economically viable or will be advanced to generate earnings, operate profitably or provide a return on investment in the future. No operating revenues are anticipated until one of the Company's projects comes into production, which may or may not occur. The Company will continue to experience losses unless and until it can successfully develop and begin profitable commercial production at one of its properties. There can be no assurance that the Company will be able to do so.

The Company is an early exploration and development stage issuer with no history of revenues or profitability in the mineral resource sector. There can be no assurance that the activities of the Company will be economically viable or profitable in the future. The Company will require additional financing to further explore, develop, acquire, and achieve commercial production on its property interests and, if

financing is unavailable for any reason, the Company may become unable to acquire and retain its property interests and carry out its business plan.

Exploration, Development and Operations

Mining operations generally involve a high degree of risk. The Company's operations will be subject to all the hazards and risks normally encountered in the exploration, development and production of manganese, precious and base metals and other minerals, including unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. The financing, exploration, development and mining of any of the Company's exploration properties will furthermore be subject to a number of macroeconomic, legal and social factors, including the price of manganese and other metals, laws and regulations, political conditions, currency fluctuations, the ability to hire and retain qualified people, the inability to obtain suitable adequate machinery, equipment or labour and obtaining necessary services in jurisdictions in which the Company operates. Unfavourable changes to these and other factors have the potential to negatively affect the Company's business, plans, prospects, strategies, financial performance and condition and results.

The exploration for and development of mineral deposits is a speculative venture involving significant risks which even a combination of careful evaluation, experience and knowledge may not eliminate or even mitigate. While the discovery of a commercially viable ore body may result in an increase in value for shareholders, few mineral properties which are explored are ultimately developed into producing mines. At present, none of the Company's properties have a known body of bankable commercial ore and the proposed exploration programs are exploratory. There is no certainty that the expenditures made by the Company towards the exploration and evaluation of mineral deposits on its properties will result in discoveries or production of commercial quantities of manganese or other minerals.

Substantial expenditures may be required to locate, evaluate and establish mineral reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site, and substantial additional financing will be required. It is impossible to ensure that the Company will be able to secure the necessary financing needed to pursue the exploration or development activities planned by the Company or that its activities will result in an economically viable or profitable commercial mining operation. The decision as to whether a particular property contains a commercial mineral deposit and should or could be brought into production will depend on the results of exploration programs and/or geological and other studies, and the recommendations of duly qualified engineers and geologists. Several significant factors will be considered, including, but not limited to: (i) the particular attributes of the deposit, such as size, grade, metallurgical characteristics, and proximity to infrastructure; (ii) mineral prices, which are highly cyclical; (iii) government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, permitting, importing and exporting of minerals and environmental protection; (iv) available working capital and ongoing costs of exploration and development; (v) availability, terms and cost of additional funding; and (vi) local community and landowner opposition to access mineral rights. The exact effect of these factors cannot be accurately predicted, but one or any combination of these factors may result in the Company not being able to pursue its business plans or strategy or its shareholders not receiving an adequate return on invested capital.

Early Stage Status and Nature of Exploration

Few properties that are explored are ultimately developed into producing mines. Substantial expenditures are required to establish ore reserves through drilling, to develop metallurgical processes to extract the metal from the ore and, in the case of new properties, to develop the mining and processing facilities and infrastructure at any site chosen for mining.

The economics of exploring and developing mineral properties is affected by many factors including the cost of operations, variations in the grade of ore mined, fluctuations in metal markets, fluctuations in the concentrate sales markets, which may be independent of metals prices, costs of mining and processing equipment and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals and environmental protection. Major expenses may be required to establish reserves by drilling and to construct mining and processing facilities at a particular site. It is impossible to ensure that the current planned exploration and development programs of the Company will result in economically viable or profitable commercial mining operations. The profitability of the Company's operations will be, in part, directly related to the costs and success of its exploration and development programs, which may be affected by a number of factors. Substantial expenditures are required to establish mineral reserves that are sufficient to support commercial mining operations and to construct, complete and install mining and processing facilities on those properties that are actually developed.

No assurance can be given that any particular level of recovery of minerals will be realized or that any potential quantities and/or grade will ever qualify as a resource, or that any such mineral resource will ever qualify as a commercially viable (or mineable) deposit which can be legally and economically exploited. Where expenditures on a property have not led to the discovery of mineral reserves, incurred expenditures will generally not be recoverable.

Liquidity and Additional Financing

The Company's ability to continue its business operations is dependent on management's ability to secure additional financing. The Company's only source of liquidity is its cash and cash equivalent balances. Liquidity requirements are managed based upon forecasted cash flows to ensure that there is sufficient working capital to meet the Company's obligations.

The advancement, exploration and development of the Company's properties, including continuing exploration and development projects, and, if warranted, construction or repair of mining facilities and the commencement of mining operations, will require substantial additional financing. As a result, the Company will be required to seek additional sources of equity financing in the near future. The Company's ability to raise additional equity financing may be affected by numerous factors beyond its control including, but not limited to, adverse market conditions, commodity price changes and economic downturns. There can be no assurance that the Company will be successful in obtaining any additional financing required to continue its business operations and/or to maintain its property interests, or that such financing will be sufficient to meet the Company's objectives or obtained on terms favourable to the Company. Failure to obtain sufficient financing as and when required may result in the delay or indefinite postponement of exploration and/or development on any or all of the Company's properties, or even a

loss of its property interests, which would have a material adverse effect on the Company's business, financial condition and results of operations.

Commodity Prices

The profitability of the Company's operations will be dependent upon the market price of mineral commodities. Mineral prices fluctuate widely and are affected by numerous factors beyond the control of the Company. These factors include interest rates, the rate of inflation or deflation, global and regional supply and demand, consumption patterns, forward sales by producers, currency exchange fluctuations, speculative activities and increased production due to improved mining and production methods. Such external economic factors are in turn influenced by changes in international investment patterns, monetary systems and political and economic developments in major mineral-producing countries throughout the world. The prices of mineral commodities have fluctuated widely in recent years. Current and future price declines could cause commercial production to be impracticable.

The Company's future revenues and earnings also could be affected by the prices of other commodities such as fuel and other consumable items. The prices of these commodities are affected by numerous factors beyond the Company's control.

Title Matters

The acquisition of title to mineral properties is a very detailed and time-consuming process. The Company may not be the registered holder of some or all of the claims, concessions and leases comprising the properties or any of the mineral property of the Company. These claims, concessions or leases may currently be registered in the names of other individuals or entities, which may make it difficult for the Company to enforce its rights with respect to such claims, concessions or leases. There can be no assurance that proposed or pending transfers will be effected as contemplated. Failure to acquire title to any of the claims, concessions or leases at one or more of the Company's projects may have a material adverse impact on the financial condition and results of operations of the Company.

Once acquired, title to, and the area of, mineral properties may be disputed. There is no guarantee that title to one or more claims, concessions or leases at the Company's properties will not be challenged or impugned. There may be challenges to any of the Company's titles which, if successful, could result in the loss or reduction of the Company's interest in such titles. The Company's properties may be subject to prior unregistered liens, agreements, transfers or claims, and title may be affected by, among other things, undetected defects. In addition, the Company may be unable to operate its properties as permitted or to enforce its rights with respect to its properties. The failure to comply with all applicable laws and regulations, including a failure to pay taxes or to carry out and file assessment work, can lead to the unilateral termination of concessions by mining authorities or other governmental entities.

Insurance and Uninsured Risks

The Company's business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, catastrophic equipment failures, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods and earthquakes. Such occurrences could result in damage to mineral properties or production facilities, personal injury or

death, environmental damage to the Company's properties or the properties of others, delays in mining, monetary losses and possible legal liability.

Although the Company will maintain insurance to protect against certain risks in such amounts as it considers to be reasonable, its insurance will not cover all the potential risks associated with a mining company's operations. The Company may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to the Company or to other companies in the mining industry on acceptable terms. The Company might also become subject to liability for pollution or other hazards that may not be insured against or that the Company may elect not to insure against because of premium costs or other reasons. Losses from these events may cause the Company to incur significant costs that could have a material adverse effect upon its financial performance and results of operations.

Environmental Protection and Risks

All phases of the Company's operations are subject to environmental regulation in the jurisdictions in which it operates. All phases of the Company's operations are subject to environmental regulation in the jurisdictions in which it operates. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste. To date, applicable environmental legislation has had no material financial or operational effects upon the capital expenditures or operations of the Company.

Environmental legislation provides for restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact assessments. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that existing or future environmental regulation will not materially adversely affect the Company's business, financial condition and results of operations.

Government environmental approvals and permits are currently, or may in the future be, required in connection with the Company's operations. To the extent such approvals are required and not obtained, the Company may be curtailed or prohibited from proceeding with planned exploration, development or operation of mineral properties.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations, including the Company, may be required to compensate those suffering loss or damage by reason of the mining

activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of companies in the mining industry, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs, reduction in levels of production at producing properties, or abandonment or delays in development of new mining properties.

Infrastructure

Mining, processing, development and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants, which affect capital and operating costs. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect the Company's business, financial condition and results of operations.

Competition for Exploration, Development and Operation Rights

The mining industry is intensely competitive in all of its phases, and the Company will compete with other exploration companies which have greater financial resources and technical facilities for the acquisition of mineral concessions, claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees and other persons to carry out its mineral exploration and development activities.

Recent increases in metal prices have encouraged increases in mining exploration, development and construction activities, which have resulted in increased demand for, and cost of, exploration, development and construction services and equipment. Increased demand for services and equipment could cause project costs to increase materially, resulting in delays if services or equipment cannot be obtained in a timely manner due to inadequate availability, and increase potential scheduling difficulties and cost increases due to the need to coordinate the availability of services or equipment, any of which could materially increase project exploration, development or construction costs, result in project delays or both.

Uncertainty and Inherent Sample Variability

No assurance can be given that any tonnages and grades will be achieved or that any level of recovery will be realized. The grade of mineralization recovered may differ materially and adversely from the estimated average grades in any current or future resource estimates. Future production could differ dramatically from resource estimates for, among others, the following reasons:

- mineralization or formations could be different from those predicted by drilling, sampling and similar examinations;
- increases in operating mining costs and processing costs could adversely affect mineral resources;
- the grade of any mineral resources may vary significantly from time to time and there is no assurance that any particular grade may be recovered from the mineral resources; and
- declines in the market price of minerals may render the mining of some or all the mineral resources uneconomic.

Any of these factors may require the Company to reduce its mineral resource estimates or increase its cost estimates. Short-term factors, such as the need for the additional development of a deposit or the processing of new different grades, may impair the Company's profitability. Should the market price of minerals fall, the Company could be required to materially write down its investment in mining properties or delay or discontinue the development of new projects.

Governmental Regulation

The mineral exploration and development activities of the Company are subject to various laws governing prospecting, exploration, development, production, taxes, labour standards and occupational health, mine safety, toxic substances, land use, water use, land claims of local people and other matters in local areas of operation. Although the Company's exploration and development activities are currently carried out in accordance with all applicable rules and regulations, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could limit or curtail exploration, development or production. Amendments to current laws and regulations governing the Company's operations, or more stringent implementation thereof, could have an adverse impact on the Company's business and financial condition.

Attracting and Retaining Talented Personnel

The Company's success will depend in large measure on the abilities, expertise, judgment, discretion, integrity and good faith of management and other personnel in conducting the business of the Company. The Company has a small management team and the loss of any of these individuals or the inability to attract suitably qualified staff could materially adversely impact the business. The Company's ability to manage its operating, development, exploration and financing activities will depend in large part on the efforts of these individuals. As at the date hereof, the Company had one full-time employee, the CEO and President. The Company is dependent on the services of key executives, including the CEO and President, and CFO of the Company.

The Company may also experience difficulties in efforts to obtain suitably qualified staff and retaining staff. The Company's success will depend on the ability of management and employees to interpret market and geological data successfully and to interpret and respond to economic, market and other business conditions in order to locate and adopt appropriate investment opportunities, monitor such investments and ultimately, if required, successfully divest such investments.

Further, key personnel may not continue their association or employment with the Company, which may not be able to find replacement personnel with comparable skills. The Company has sought to and will continue to ensure that management and any key employees are appropriately compensated; however, their services cannot be guaranteed. If the Company is unable to attract and retain key personnel, business may be adversely affected. The Company faces intense competition for qualified personnel, and there can be no assurance that the Company will be able to attract and retain such personnel.

Possible Conflicts of Interest of Directors and Officers of the Company

Certain of the directors and officers of the Company also serve as directors and/or officers of other companies involved in mineral resource exploration and development and, consequently, there exists the possibility for such directors and officers to be in a position of conflict. The Company expects that any decision made by any of such directors and officers involving the Company will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Company and its shareholders, but there can be no assurance in this regard.

Permitting Risk

The Company's operations are subject to receiving and maintaining permits from appropriate governmental authorities. There is no assurance that delays will not occur in connection with obtaining all necessary renewals of permits for the existing operations, additional permits for any possible future changes to operations, or additional permits associated with new legislation. Prior to any development or operations on any of its properties, the Company must receive permits from appropriate governmental authorities. There can be no assurance that the Company will continue to hold all permits necessary to develop or continue operating at any particular property.

First Nations Land Claims

The legal nature of aboriginal land claims is a matter of considerable complexity. Various international and national laws, codes, resolutions, conventions, guidelines, and other directives relate to the rights of indigenous peoples. The Company owns or options property in some areas presently or previously inhabited or used by indigenous peoples. The impact of any such claim on the Company's ownership interest in the properties cannot be predicted with any degree of certainty and no assurance can be given that a broad recognition of aboriginal rights in the area in which the Company's properties are located, by way of a negotiated settlement or judicial pronouncement, would not have an adverse effect on the Company's activities. Even in the absence of such recognition, the Company may at some point be required to negotiate with First Nations in order to facilitate exploration work on the properties owned by the Company. Pursuant to section 35 of *The Constitution Act of 1982*, the Federal and Provincial Crowns have a duty to consult Aboriginal peoples and, in some circumstances, a duty to accommodate them. When development is proposed in an area to which an Aboriginal group asserts Aboriginal rights and titles, and a credible claim to such rights and titles has been made, a developer may be required by the Crown to conduct consultations with Aboriginal groups which may be affected by the project and, in some circumstances, accommodate them. The duty to consult and accommodate may adversely impact the Company's development costs and schedule for its exploration and development projects.

The Company's future operations are subject to a risk that one or more groups of indigenous people may oppose the exploration or development of a candidate project. Such opposition may be directed through legal or administrative proceedings or expressed in manifestations such as protests, roadblocks or other forms of public expression against the Company's activities and may have a negative impact on the Company's reputation and its business. Opposition by aboriginal people to the Company's future operations may require modification of or preclude development of the projects.

No History of Operations

The Company is an early-stage exploration and development issuer and has no history of exploration, development, mining or refining mineral products. As such, the Company is subject to many risks common to such enterprises, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources and lack of revenues. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of its early stage of operations.

Reliance on a Limited Number of Properties

The only material property interest of the Company is its interest in the Woodstock Project. As a result, unless the Company acquires additional property interests, any adverse developments affecting the Woodstock Project would likely have an adverse effect upon the Company and would adversely affect the potential mineral resource development, profitability, financial performance and condition and results of the Company and its strategies and plans. While the Company may seek to acquire additional mineral properties that are consistent with its business objectives, there can be no assurance that the Company will be able to identify suitable additional mineral properties or, if it does identify suitable properties, that it will have sufficient financial resources to acquire such properties or that such properties will be available on terms acceptable to the Company or at all.

Volatility of Market for Common Shares

The market price of the Common Shares may be highly volatile and could be subject to wide fluctuations in response to a number of factors that are beyond the Company's control, including: (i) dilution caused by issuance of additional Common Shares and other forms of equity securities, which the Company expects to make in connection with future financings to fund operations and growth, to attract and retain qualified personnel and in connection with future strategic partnerships with other companies, (ii) announcements of new acquisitions, reserve discoveries or other business initiatives by competitors, (iii) fluctuations in revenue from operations as new reserves come to market, (iv) changes in the market for manganese and/or in the capital markets generally, (v) changes in the demand for minerals and metals; and (vi) changes in the social, political and/or legal climate in the regions in which the Company operates. In addition, the market price of the Common Shares could be subject to wide fluctuations in response to: (a) quarterly variations in operating expenses, (b) changes in the valuation of similarly situated companies, both in the mining industry and in other industries, (c) changes in analysts' estimates affecting the Company, competitors and/or the industry, (d) changes in the accounting methods used in or otherwise affecting the industry, (e) additions and departures of key personnel, (f) fluctuations in interest rates, exchange rates and the availability of capital in the capital markets, and (g) significant sales of the Common Shares, including sales by future investors in future offerings which may be made to raise additional capital. These and other factors will be largely beyond the Company's control, and the impact of these risks, singularly or in the aggregate, may result in material adverse changes to the market price of the Common Shares and/or the Company's results of operations and financial condition.

Acquisitions and Integration

From time to time, the Company may examine opportunities to acquire additional exploration and/or mining assets and businesses. Any acquisition that the Company may choose to complete may be of a

significant size relative to the size of the Company, may change the nature or scale of the Company's business and activities, and may expose the Company to new geographic, political, operating, financial and geological risks. The Company's success in its acquisition activities, if any, depends upon its ability to obtain additional sources of financing, identify suitable acquisition candidates, negotiate acceptable terms for any such acquisition, and integrate any acquired operations successfully with those of the Company. Any acquisitions would be accompanied by risks. In the event that the Company chooses to raise debt capital to finance any such acquisitions, the Company's leverage will be increased. If the Company chooses to use equity as consideration for such acquisitions, existing shareholders may suffer significant dilution. There can be no assurance that the Company would be successful in obtaining additional sources of financing or in overcoming these risks or any other problems encountered in connection with such acquisitions.

Dilution Risk

In order to finance future operations and development efforts, the Company may raise funds through the issue of Common Shares or securities convertible into Common Shares. The constating documents of the Company allow it to issue, among other things, an unlimited number of Common Shares for such consideration and on such terms and conditions as may be established by the directors of the Company, in many cases, without the approval of shareholders. The size of future issues of Common Shares or securities convertible into Common Shares or the effect, if any, that future issues and sales of the Common Shares will have on the price of the Common Shares cannot be predicted at this time. Any transaction involving the issue of previously authorized but unissued Common Shares or securities convertible into Common Shares would result in dilution, possibly substantial, to present and prospective shareholders of the Company.

Risk of Litigation

The Company may become involved in disputes with other parties in the future which may result in litigation or other legal proceedings. The results of legal proceedings cannot be predicted with certainty. If the Company is unable to resolve these disputes favourably, it may have a material adverse impact on the ability of the Company to carry out its business plan.

Internal Controls

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. A control system, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance with respect to the reliability of financial reporting and financial statement preparation.

Dividends

The Company does not intend to declare dividends for the foreseeable future, as the Company anticipates that any future earnings will be re-invested in the development and growth of the business. Therefore, investors will not receive any funds unless they sell their Common Shares, and shareholders may be unable to sell their shares on favorable terms or at all. Investors cannot be assured of a positive return on investment or that they will not lose the entire amount of their investment in Common Shares.

DIVIDENDS AND DISTRIBUTIONS

The Company has never declared or paid cash dividends on the Common Shares. Any future dividend payment will be made at the discretion of the board of directors of the Company (the "**Board**"), and will depend on the Company's financial needs to fund its exploration programs and its future growth, and any other factor that the Board deems necessary to consider in the circumstances.

DESCRIPTION OF CAPITAL STRUCTURE

Common Shares

The Company is authorized to issue an unlimited number of Common Shares without par value. All of the Common Shares are of the same class and, once issued, rank equally as to entitlement to dividends, voting powers (one vote per Common Share) and participation in assets upon dissolution or winding up. No Common Shares have been issued subject to call or assessment.

There are no pre-emptive rights, no conversion or exchange rights, no redemption, retraction, purchase for cancellation or surrender provisions. There are no sinking or purchase fund provisions, no provisions permitting or restricting the issuance of additional securities or any other material restrictions, and there are no provisions which are capable of requiring a securityholder to contribute additional capital.

There are no other pre-emptive rights attached to the Company's securities.

Warrants

As of December 31, 2022 and the date hereof, the Company has 333,333 warrants outstanding exercisable at $0.27 per share until April 29, 2024, and 4,445,003 warrants outstanding exercisable at $0.18 per share until March 17, 2024.

Options

The Company maintains a stock option plan (the "**Stock Option Plan**"). The Stock Option Plan is considered a "rolling" stock option plan, which reserves a maximum of 10% of the Company's total outstanding Common Shares at the time of grant for issuance pursuant to the Stock Option Plan. As at December 31, 2022 and the date hereof, there are 8,228,440 options of the Company outstanding exercisable into Common Shares. 5,278,440 options are exercisable at $0.18 per share until June 30, 2025, and 2,950,000 options are exercisable at $0.25 per share until June 30, 2026.

Restricted Share Units

The Company maintains a restricted share unit ("**RSU**") plan pursuant to which it may issue RSUs to directors and employees of the Company. As at December 31, 2022 and the date hereof, the Company has 2,840,878 RSUs outstanding.

Each RSU entitles the participant to receive one Common Share (or the cash equivalent, at the Company's discretion) upon attainment of the RSU vesting criteria. The Company may impose additional conditions to any particular RSU award.

Deferred Share Units

The Company also maintains a deferred share unit ("**DSU**") plan, pursuant to which it may issue DSUs to non-executive directors of the Company. As at December 31, 2022 and the date hereof, the Company has no DSUs outstanding.

A participant in the DSU Plan is entitled to redeem his or her DSUs during the period commencing on the business day immediately following the date upon which the non-executive director ceases to hold any position as a director of the Company. Redemptions under the DSU Plan may be in Common Shares (or the cash equivalent, at the Company's discretion).

MARKET FOR SECURITIES

Trading Prices and Volumes

The Common Shares were listed for trading in Canadian dollars on the NEO Exchange on January 31, 2022 under the symbol "**CDMN**". The following tables set forth the market price ranges and the aggregate volume of trading of the Common Shares on the NEO Exchange for the months indicated.

Month/Year	NEO Exchange - CDMN		
	High	Low	Volume
January 2022	$0.50	$0.225	105,007
February 2022	$0.25	$0.155	1,846,471
March 2022	$0.17	$0.125	1,603,491
April 2022	$0.35	$0.135	11,927,395
May 2022	$0.38	$0.23	3,596,151
June 2022	$0.28	$0.185	2,497,853
July 2022	$0.25	$0.15	376,554
August 2022	$0.22	$.013	814,291
September 2022	$0.26	$0.13	725,424
October 2022	$0.22	$0.13	266,005
November 2022	$0.19	$0.11	1,048,139
December 2022	$0.22	$0.145	1,129,926

PRIOR SALES

As at December 31, 2022 and the date hereof, there are 145,029,580 Common Shares issued and outstanding.

The following table sets forth securities issued by the Company during the year ended December 31, 2022.

Date Issued	Number and Type of Security Issued	Issue/ Exercise Price
June 30, 2022	300,000 Stock Options	$0.25
June 30, 2022	845,000 Restricted Share Units	Not applicable
September 30, 2022	178,572 Restricted Share Units	Not applicable
December 31, 2022	192,306 Restricted Share Units	Not applicable

ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTIONS ON TRANSFER

Certain former shareholders of Maximos entered into voluntary escrow agreements in 2021 with Fogler, Rubinoff LLP acting as escrow agent. As at the date hereof, 17,329,792 Common Shares are subject to escrow, with half to be released on July 31, 2023 and half to be released on January 31, 2024.

Designation of Class	Number of securities held in escrow or that are subject to a contractual restriction on transfer	Percentage of Class[(1)]
Common Shares	17,329,792	11.9%

Note:

(1) Based on 145,029,580 Common Shares outstanding as at the date hereof.

DIRECTORS AND OFFICERS

The following table sets forth the name and province and country of residence of each director and executive officer of the Company, in alphabetical order, as well as such individual's position with the Company, principal occupation within the five preceding years and periods of service as a director (if applicable). Each of the directors of the Company holds office until the next annual meeting of shareholders and until such director's successor is elected and qualified, or until the director's earlier death, resignation or removal. As of the date hereof, an aggregate of 14,077,759 Common Shares (representing approximately 9.7% of all issued and outstanding Common Shares) are beneficially owned or controlled or directed (directly or indirectly) by all of the directors and officers of the Company, as a group.

Name, place of residence and position with the Company	Principal occupation during past five years	Director or Officer of Issuer since:	Number of Common Shares beneficially owned, directly or indirectly, or controlled or directed at present[(1)]:	Percentage of Common Shares (undiluted)[(2)]:
John Allan[(3)(4)(5)] Director *St. John's, Newfoundland and Labrador, Canada*	Independent Businessman	June 24, 2021	309,615	0.21%
Matthew Allas Director, President, and Chief Executive Officer *Toronto, Ontario, Canada*	President and CEO of Maximos; Investment Banker	April 30, 2021	6,344,517	4.37%
David Alward Vice President, New Brunswick, *Riceville, New Brunswick, Canada*	Former Consul General of Canada in Boston	Nov. 1, 2022	Nil	Nil

Janis Byrne K.C.[6] *St. John's, Newfoundland and Labrador, Canada*	Lawyer and Corporate Director	June 15, 2022	Nil	Nil
Aiden F. Carey[6] Director *Whitby, Ontario, Canada*	Mining Consultant, Senior Vice President Operations of Labrador Iron Mines Holdings Limited	June 26, 2020	Nil	Nil
John Hurley[3] Director *Conception Bay South, Newfoundland and Labrador, Canada*	President & CEO, Trinity Resources Ltd.	June 26, 2020	Nil	Nil
John F. Kearney[4][5] Chairman and Director *Toronto, Ontario, Canada*	Mining Executive Chairman and CEO of Buchans Resources Limited, Labrador Iron Mines Holdings Limited and Anglesey Mining plc	Dec. 31, 2017	3,658,079	2.52%
Labi Kousoulis[3][6] *Halifax, Nova Scotia, Canada*	President Nichent Health Inc., Former Member of Legislative Assembly of Nova Scotia	June 15, 2022	50,000	0.01%
Richard Pinkerton Chief Financial Officer & Secretary *Toronto, Ontario, Canada*	Chartered Professional Accountant, CFO of Labrador Iron Mines Holdings Limited	May 5, 2021	10,000	0.01%
Danesh Varma Director *Kingston, United Kingdom*	Chartered Professional Accountant, CFO of Buchans Resources Limited and Anglesey Mining plc	July 16, 2013	3,705,548	2.55%

Notes:

(1) The information as to voting securities beneficially owned, controlled or directed, not being within the knowledge of the Company, has been furnished by the respective nominees individually.
(2) Based on 145,029,580 Common Shares issued and outstanding
(3) Member of the Audit Committee
(4) Member of the Compensation Committee
(5) Member of the Nominating and Corporate Governance Committee
(6) Member of the ESG Committee

John Allan – Age 63 – *Director*

Mr. Allan has been involved in private business for over 40 years in Atlantic Canada, with ownership in numerous companies ranging from heavy civil construction, equipment parts, protective clothing for mining and offshore personnel as well as commercial and residential real estate development. Over the past decade Mr. Allan has developed solid relationships with federal, provincial and municipal governments.

Matthew Allas – Age 42 – *Director, President and Chief Executive Officer*

Mr. Allas has been the President and Chief Executive Officer of the Company since April 2021, Prior thereto Mr. Allas was President of Maximos since and 2018 and previously was an investment banker in the natural resource industry where he advised numerous companies on growth and financing strategies. Mr. Allas holds a Bachelor of Arts (Economics, Physics) degree from Mount Allison University.

David Alward – Age 63 - *Vice President, New Brunswick*

Mr. Alward is Vice President, New Brunswick, of the Company and will lead and facilitate the Company's engagement within the province. In this position, Mr. Alward will play a key role in the Company's senior management team. Mr. Alward served as Premier of New Brunswick from 2010 to 2014, following which he was appointed Canada's Consul General in Boston. Mr. Alward lives in the Woodstock area, and previously represented the riding as its Member of the Legislative Assembly.

Janis Byrne K.C., ICD.D – Age 54 – *Director*

Ms. Byrne is a Lawyer and Corporate Director. Ms. Byrne, throughout her career, has served on numerous corporate, crown corporation and not-for-profit boards and committees. Ms. Byrne is currently a member of the Board of Directors of the Atlantic Lottery Corporation where she is Chair of the People & Culture Committee and a member of the Governance Committee. Ms. Byrne also serves on the Board of the Newfoundland and Labrador Liquor Corporation as Chair of the Regulatory Committee and a member of the Governance and Human Resources Committee. Ms. Byrne is actively engaged in her community, currently serving as a Director of Junior Achievement Newfoundland and Labrador and Cabinet Member, The SPCA Way Home Capital Campaign. She recently served as Chair of the St. John's Board of Trade and is a member of the International Women's Forum of Canada and has been a speaker at leadership and legal conferences throughout Canada. Ms. Byrne was awarded the Queen's Counsel (now King's Counsel) in 2020 and is a member in good standing with the Law Society of Newfoundland and Labrador and the Canadian Bar Association.

Aiden Carey – Age 55 – *Director*

Mr. Carey is a Mining Consultant. Previously, he was Senior Vice President, Operations of Labrador Iron Mines Holdings Limited where he was responsible for LIM's operating functions, including mining and processing, operations and transportation. Prior to 2011, he held senior operating roles with Barrick Gold, Cliffs Natural Resources' Wabush Mines and Cliffs' Michigan operations.

John Hurley – Age 53 – *Director*

Mr. Hurley is President and Chief Executive of Trinity Resources, a private company operating a world-class pyrophyllite mine in which supplies aluminum silicate products to various industries worldwide. With over 25 years of experience in the mining and industrial minerals industry, Mr. Hurley's business development initiatives have spanned 14 countries. He holds a Bachelor of Science degree with a major in Chemistry from Memorial University, Newfoundland and Labrador.

John F. Kearney – Age 73 – *Chairman, Director*

Mr. Kearney is Chairman of the Company and a number of public companies, including Labrador Iron Mines Holdings Limited, Buchans Resources Limited and Conquest Resources Limited, and until 2019 was Chairman of Canadian Zinc Corporation. Over the course of his career, he has served as a senior officer (usually Chairman and/or Chief Executive) of more than thirty public companies incorporated in Canada; Ireland; United Kingdom; United States; Australia and elsewhere, the shares of which were listed on various stock exchanges (including London Stock Exchange; AIM Market; Toronto Stock Exchange; New York Stock Exchange; American Stock Exchange; NASDAQ; Australian Stock Exchange).

He was formerly the Chairman or President and Chief Executive Officer of several public companies which developed various mineral properties and projects and which were subsequently acquired by or sold in major transactions including: Scandinavian Minerals Inc., which explored and developed the Kevista nickel /copper project in Finland and was acquired by First Quantum in 2008; Sulliden Exploration Inc., which discovered and explored the Shahuindo gold deposit in Peru, which was subsequently acquired by Rio Alto Mining Limited in August 2014. He was previously the Chairman (and previously President and Chief Executive and previously Executive Vice President and Secretary) of Northgate Exploration Limited (1979 to 1996) which operated two copper/gold mines near Chibougamau, Quebec, and which were sold to Western Mining of Australia in 1987, and earlier through its subsidiaries operated two lead/zinc mines in Ireland.

Mr. Kearney also served as a director and member of the Executive Committee of the Mining Association of Canada and as a director and President of the Northwest Territories and Nunavut Chamber of Mines. Mr. Kearney is a member of the Prospectors and Developers Association of Canada, Canadian Institute of Mining and Metallurgy and the Law Society of Ireland. He holds degrees in law and economics from University College Dublin and an M.B.A. degree from Trinity College Dublin and the Osgoode Certificate in Mining Law from Osgoode Hall Law School, York University, Toronto. He qualified as a solicitor in Ireland and as a chartered secretary with the Institute of Chartered Secretaries and Administrators in London.

Labi Kousoulis, FCPA-FCMA – Age 52 – *Director*

Mr. Kousoulis is President of Nichent Health Inc. From 2013 to 2021, Mr. Kousoulis served as a Member of the Legislative Assembly of Nova Scotia and served in various Ministerial roles. His most recent roles were Minister of Finance and Treasury Board, Minister of Business and Minister of Trade. Mr. Kousoulis graduated from Saint Mary's University with Bachelor of Commerce and Master of Business Administration degrees and is a Certified Management Accountant.

Richard Pinkerton – Age 54 – *Chief Financial Officer*

Mr. Pinkerton is a financial executive, with over 25 years of experience in public companies in the mining and financial services industries. He currently also serves as Chief Financial Officer of Labrador Iron Mines Holdings Limited and was previously an investment banker (10 years) and chartered professional accountant (5 years). He received his Bachelor of Arts degree (Economics) from Harvard University and holds Chartered Professional Accountant (CPA) and Chartered Financial Analyst (CFA) designations.

Danesh Varma – Age 73 – *Director*

Mr. Varma is a chartered accountant in England and Wales, with over 40 years of experience in financial management. He is currently a director of Anglesey Mining plc, Brookfield Investment Corp and Labrador Iron Mines Holdings Limited. Mr. Varma serves as the Chief Financial Officer of Anglesey Mining plc, Buchans Resources Limited and Xtierra Inc. Previously, he was President of Westfield Minerals Limited and a director of Northgate Exploration Limited and American Resource Corporation.

Cease Trade Orders, Bankruptcies, Penalties, or Sanctions

To the knowledge of the Company, except as disclosed hereinafter, as of the date hereof:

(a) no director or executive officer of the Company is, or has been, within 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including the Company) that:

  (i) was subject to an order that was issued while the proposed director was acting in the capacity as director, chief executive officer or chief financial officer, or

  (ii) was subject to an order that was issued after the proposed director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;

(b) no director or executive officer of the Company or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

  (i) is, or has been, within 10 years before the date hereof, a director or executive officer of any company (including the Company) that, while such director or executive officer was acting in that capacity, or within a year of such director or executive officer ceased to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or

  (ii) has, within ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangements or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of such director, executive officer or shareholder.

For the purposes of the above section (a), the term "order" means

(a) a cease trade order;

(b) an order similar to a cease trade order; or

(c) an order that denied the relevant company access to any exemption under securities legislation,

that was in effect for a period of more than 30 consecutive days.

To the knowledge of the Company, as of the date hereof, no director, executive officer or shareholder holding a sufficient number of securities of the Company to materially affect the control of the Company has been subject to:

(a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

(b) any other penalties or sanctions imposed by a court or regulatory body.

John F. Kearney, Danesh Varma, Aiden Carey and Richard Pinkerton are directors and/or officers of Labrador Iron Mines Holdings Limited, which on April 2, 2015 instituted proceedings in the Ontario Superior Court of Justice for a financial restructuring by means of a plan of arrangement under the *Companies' Creditors Arrangement Act,* which plan was approved on December 6, 2016 and sanctioned by the court on December 14, 2016.

Conflicts of Interest

To the best of the Company's knowledge, there are no known existing or potential conflicts of interest among the Company, directors, executive officers or other members of management of the Company as a result of their outside business interests except that certain directors and officers also serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to the Company and their duties as a director or officer of such other companies. See "*Risk Factors*".

The directors and officers of the Company are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest in respect of the Company and are required to comply with such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers.

The directors of the Company are required by law to act honestly and in good faith with a view to the best interests of the Company and to disclose any interests, which they may have in any project or opportunity of the Company. If a conflict of interest arises at a meeting of the Board, any director in a conflict will disclose his or her interest and abstain from voting on such matter.

LEGAL PROCEEDINGS

There are not currently and were not within the most recently completed year of the Company, any material legal proceedings or regulatory actions to which the Company is or was a party or of which any of the Company's properties are or were subject, nor are any such proceedings or actions currently known by the Company to be contemplated.

REGULATORY ACTIONS

There have been no penalties or sanctions imposed against the Company by a court relating to provincial and territorial securities legislation or by a securities regulatory authority within the three years immediately preceding the date hereof.

There have been no other penalties or sanctions imposed by a court or regulatory body against the Company necessary to contain full, true and plain disclosure of all material facts relating to the securities being listed.

There have been no settlement agreements entered into by the Company before a court relating to provincial and territorial securities legislation or with a securities regulatory authority within the three years immediately preceding the date hereof.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than in respect of the acquisition of Maximos and the April 2021 financing, to the knowledge of management, no director or executive officer of the Company or any person or company that is the direct or indirect beneficial owners of, or who exercises control or direction over, more than 10 percent of any class of the Company's outstanding voting securities, or an associate or affiliate of any persons or companies referred to in this paragraph, has any material interest, direct or indirect, in any transaction within the three years before the date of this AIF, or in any proposed transaction, that has materially affected or will materially affect the Company or a subsidiary of the Company. Mr. Matthew Allas, President, Chief Executive Officer and director of the Company, was the Chief Executive Officer and President of Maximos prior to the Company's acquisition of Maximos.

TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar is Odyssey Trust Company, Stock Exchange Tower, 1230 - 300 5th Avenue SW, Calgary, Alberta, Canada T2P 3C4.

MATERIAL CONTRACTS

Aside from contracts entered into in the ordinary course of business and not required to be filed under section 12.2 of NI 51-102, as of December 31, 2022, the Company was not party to any material contracts within the most recently completed fiscal year or before the most recently completed fiscal year, in either case that are still in effect.

INTERESTS OF EXPERTS

There is no person or company whose profession or business gives authority to a statement made by such person or company and who is named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under NI 51-102 by the Company during, or related to, the Company's most recently completed financial year other than McGovern Hurley LLP, the Independent Auditor of the Company for the most recently completed financial year. McGovern Hurley LLP are independent in accordance with the ethical requirements that are relevant to audits of financial statements in Canada. Neither McGovern Hurley LLP nor its partners or associates beneficially own, directly or indirectly, any of the outstanding Common Shares of the Company.

The independent authors of the 2021 Technical Report are Paul Ténière, M.Sc., P. Geo, Matthew Harrington P. Geo., Dean Thibault P. Eng. and Lawrence Elgert P. Eng. To the knowledge of the Company, each of these experts holds less than 1% of the outstanding securities of the Company or of any associate or affiliate thereof as of the date hereof. None of the aforementioned firms or persons received, or will receive, any direct or indirect interest in any securities of the Company or of any associate or affiliate thereof in connection with the preparation of the report prepared by such person.

In addition, none of the aforementioned persons or companies, nor any director, officer or employee of any of the aforementioned persons or companies, is or is expected to be elected, appointed or employed as a director, officer or employee of the Company or of any associate or affiliate of the Company.

ADDITIONAL INFORMATION

Additional information including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, if applicable, is contained in the Management Information Circular dated April 29, 2022 filed on SEDAR with respect to the most recent annual meeting of security holders of the Company that involved the election of directors, which was held on June 15, 2022. Additional financial information is provided in the Financial Statements and Management's Discussion and Analysis of the Company for the year ended December 31, 2022, which are available on SEDAR. A copy of the Management Information Circular, Financial Statements and Management's Discussion and Analysis may be obtained upon request from the Company, and are also available on SEDAR at www.sedar.com.

SCHEDULE A – 2021 TECHNICAL REPORT (PLYMOUTH)

[see attached]

2021 TECHNICAL REPORT (PLYMOUTH)

As at the date of this AIF, the most recently published technical report of the Company is entitled "NI 43-101 Technical Report for the Woodstock Project (Plymouth Manganese-Iron Deposit) Woodstock Area, New Brunswick, Canada" (the"**2021 Technical Report**") and was prepared by Paul Ténière, M.Sc., P. Geo.; Matthew Harrington, P. Geo. (both of Mercator Geological Services Limited); Dean Thibault, P. Eng.; (Thibault and Associates Ltd) and Lawrence Elgert, P. Eng. (AGP Mining Consultants Inc) with an effective date of November 10, 2021. The 2021 Technical Report updated the previous Mineral Resource Estimate of the Plymouth deposit disclosed in the Woodstock Project Preliminary Economic Assessment dated July 10, 2014.

A summary of the 2021 Technical Report is below.

The 2021 Technical Report and its assumptions are no longer current, should not be relied upon, and are provided below for general information purposes. The resource estimate associated with the 2021 Technical Report has been superseded by the 2023 MRE (effective date March 1, 2023) as disclosed in the Company's news release dated March 3, 2023 and summarized in this AIF. A Technical Report for the 2023 MRE will be available in April 2023 and will be filed under the Company's profile on SEDAR.

Readers are cautioned that the summary of technical information contained below should be read in the context of the qualifying statements, procedures and accompanying discussion within the complete 2021 Technical Report and the summary provided herein is qualified in its entirety by the 2021 Technical Report. Capitalized and abbreviated terms appearing in the following summary and not otherwise defined herein shall have the meaning ascribed to such terms in the 2021 Technical Report.

Summary of 2021 Technical Report

Introduction

The Company retained Mercator Geological Services Limited ("**Mercator**") with respect to completing an updated Mineral Resource Estimate ("**MRE**") for the Plymouth manganese-iron deposit (Plymouth Deposit) that comprises the Woodstock Project ("**Project**") located in New Brunswick, Canada. This Technical Report documents the MRE, which was prepared in accordance with the CIM Definition Standards for Mineral Resources and Reserves as amended in 2014 (CIM Standards 2014). The Technical Report was prepared in accordance with National Instrument 43-101 ("**NI 43-101**") Form F-1. The Company is a public company reporting issuer not listed on an Exchange and is based in Toronto, Ontario, Canada. This technical report may be used to support a public listing of the Company on a Canadian stock exchange.

Property Description and Ownership

The Project is located in western New Brunswick, Canada, approximately 5 km west of the town of Woodstock (pop. 5,200) and 100 km north of the city of Fredericton (pop. 58,220). The Project is comprised of Mineral Claim Number 5472, that contains 232 mineral claim units (5,875 ha) located in Carleton County, New Brunswick, approximately 5 km west of the town of Woodstock. It includes the Plymouth Deposit and is 100% owned by the Company. The Company is also the owner of surface rights covering an area of 53 ha within Mineral Claim 5472 that cover a portion of the Plymouth Deposit.

Geology and Mineralization

The Project area is underlain by a belt of Ordovician and Silurian siltstones and slates, collectively referred to as the Aroostook-Perce belt. Late Ordovician to Early Silurian sediments of the Matapedia Group's Whitehead Falls Formation are overlain by Early Silurian sediments of the Perham Group's Smyrna Mills Formation, which are laterally extensive over much of western and northwestern New Brunswick and Maine, including the Project area. These sequences in the Project area were affected by upright folding during the mid-Devonian Acadian Orogeny.

The Woodstock area iron-manganese deposits are interpreted to represent a series of Early Silurian manganiferous banded iron formations (BIFs) that are hosted by the Smyrna Mills Formation. The Smyrna Mills Formation is composed of dark grey, non-calcareous, silty shale with minor layers of green and red mudstone, and associated ferro-manganiferous siltstone. Six main iron-manganese deposits have been identified in the Woodstock area to date and are interpreted to have formed in the shallow marine basin in which the Smyrna Mills Formation was deposited. Sharp contacts between basin-fill units of red or green shale characterise the stratigraphic succession and both lensing and compositional variation of the manganiferous BIFs has been interpreted to indicate that the deposits are stratigraphically separated and not one continuous unit. The Plymouth Deposit that is the focus of this report is interpreted to consist of an assemblage of iron and manganese oxide and carbonate-silicate-oxide facies rocks that comprise a sub-unit of the Smyrna Mills Formation.

The steeply dipping, northeast trend of bedrock units in the Project area is a function of two folding generations (F1 and F2) associated with the mid-Devonian Acadian Orogeny, which is also marked in this area by a sub-greenschist facies regional metamorphic imprint.

Historical interpretations of the mineralization of the Plymouth Deposit indicated that the iron-manganese mineralization can be subdivided into oxide, silicate-carbonate-oxide, and carbonate facies. The iron-manganese oxide facies that comprises the deposit stratigraphy is represented by red to maroon siltstone and red chert and characterized by the mineral assemblage magnetite, hematite, braunite ($Mn^{+2}Mn^{+3}{}_6[O_8SiO_4]$) and bixbyite ($[Mn,Fe]_2O_3$) and ranges between 30% and 80% iron-manganese oxides. Work by the Company since 2011 has shown that the manganese mineralization of economic interest in both the red and grey siltstones is dominated by manganese carbonate in the form of rhodochrosite ($MnCO_3$). The iron mineralization in these lithologies was found to be different, with the dominant iron minerals in red siltstone being oxides in the form of hematite, magnetite, and ilmenite. The dominant iron mineral in the grey siltstone was found to be carbonate, in the form of siderite. Layers of iron-manganese mineralization are crosscut by minor veins of quartz, quartz-carbonate, chlorite, and sulfide.

Exploration and Drilling

After acquiring the Project in 2010, the Company engaged Tetra Tech (formerly Wardrop Engineering Inc.) to review and update the two processes that had generated positive operating margins in the earlier work carried out by Witteck. Results of the Tetra Tech study were for internal working purposes only but were succeeded by more comprehensive economic and hydrometallurgical reviews undertaken by Thibault and Associates Ltd. (Thibault) for the Company.

In 2011, the Company completed a five-hole (1,040 m) core drilling program on the Property and further work by Thibault was focused on bench scale hydrometallurgical testing to confirm and optimize the process for leaching manganese from typical Plymouth deposit mineralization. In 2013, 15 additional diamond drill holes were completed (4,082 m) along 7 section lines separated by intervals of approximately 100 m along the length of the deposit. Site supervision, logging, sampling, and project record keeping were the responsibility of BMC personnel in accordance with that company's field operations and Quality Assurance and Quality Control (QA/QC) protocols.

The BMC drilling programs account for the majority of drill hole and analytical data used in the current mineral resource estimate. However, Mercator also included validated results for 6 surface historical diamond drill holes completed in 1985 and 1987 (1,040 m) and two trenches competed in 1987 by a previous operator that were incorporated as horizontal drill holes.

Results of the 2011 and 2013 drilling programs demonstrated continuity of deposit extent and grade consistency across significant mineralized widths. Examples of representative intercepts from different deposit areas include 11.41% Mn over 45.0 m in hole PL-11-006, 11.43% Mn over 89.0 m in hole PL-11-007, 11.28% Mn 217.4 m in hole PL-13-022A , and 9.32% over 202.0 m in PL-13-020. Shorter mineralized interval occur locally, such as 7.41% Mn over 29.5 m in PL-13-018. True widths of the mineralized intercepts are estimated to be between 75% and 90% of the reported intervals. No substantial issues with respect to core loss were reported. Mercator is of the opinion that validated core drilling and trenching results from the BMC and MMR programs are acceptable for use in mineral resource estimation programs.

Mercator prepared a mineral resource estimate based on the validated drilling and trenching results in 2013 and subsequently updated this estimate in 2014 to support a Preliminary Economic Assessment (PEA) of the Plymouth Deposit that was prepared by Tetra Tech. Tetra Tech, Thibault and Associates Inc. (Thibault) and Mercator contributed to this assessment and the associated NI 43-101 Technical Report. Results of the PEA (Kesavanathan et al., 2014) were positive with respect to production and marketing of Electrolytic Manganese Metal (EMM) from the deposit at a processing rate of 3000 tonnes per day.

Data Verification

The data verification program carried out by Mercator for the Project consisted of two main components:

(1) Review of public record and internal source documents cited by previous operators plus BMC and the Company with respect to key geological interpretations, previously identified geochemical or geophysical anomalies, and historical and current diamond drilling results that support the current mineral resource estimate for the Project; and

(2) Completion of a site visit to the Project between March 30 and March 31, 2021, by report author Paul Ténière, which included visual inspection of the Plymouth Deposit from the roadside and independent witness (IW) check sampling of quarter core samples from the 2011 and 2013 the Company drilling programs. Mercator staff were responsible for data compilation, designing, and assisting BMC and the Company with the 2011 and 2013 drilling programs and interpreting data sets for future exploration targeting using mining industry standards and CIM Mineral Exploration Best Practice Guidelines. Mercator staff completed data verification procedures throughout the entire process, including review of QAQC procedures and results.

The report authors are of the opinion that results of the data validation program indicate that industry standard levels of technical documentation and detail are evident in the 2011 and 2013 drilling and other exploration program results for the Project, and that the associated drilling digital database is acceptable for mineral resource estimation use.

Mineral Processing and Metallurgical Testing

Since 2011, several phases of process development test programs have been completed. Bench scale metallurgical and hydrometallurgical test programs were conducted by Thibault from 2011 to 2015 using core samples obtained from the 2011 drilling of the Plymouth Deposit. The bench scale testing and process development program was based on the development of process technology to produce high purity electrolytic manganese metal (EMM). Blending of the core samples was defined by the Company to represent typical processing feedstocks relative to run-of-mine mineralization characteristics.

Preliminary testing and an assessment of alternative technologies relative to the characterization of the core samples indicated that direct sulphuric acid leaching of the feedstock and subsequent solution purification unit operations can produce a high purity manganese sulphate to produce high purity manganese chemicals and metal. To improve on hydrometallurgical operations, metallurgical unit operations were developed to remove acid consuming minerals prior to leaching unit operations.

Conceptual design of a fully integrated flowsheet to include metallurgical and hydrometallurgical operating was defined for the treatment of the various types of feedstocks of the Plymouth Deposit. Semi-continuous bench scale electrowinning tests over an eight-hour duration consistently produced EMM with a metallic manganese content (based on trace metal impurity analysis) of greater than 99.99% (greater than 4N grade) and with a total manganese content (based on trace metal and non-metallic trace element analysis) ranging from 99.70% to 99.76% manganese. Typical specifications for commercially produced EMM state the minimum total manganese content as 99.70%. A technical and economic assessment of EMM production was completed and reported in the NI 43-101 Preliminary Economic Analysis (PEA) Technical Report prepared by Tetra Tech for the Company dated July 10, 2014.

Subsequent to the 2014 PEA, the Company shifted focus from evaluating the production of EMM to evaluating the production of MSM and HPMSM products to address battery market opportunities. Process development studies and preliminary bench scale studies were completed from 2014 to 2015 to assess alternative process technologies to produce high purity manganese sulphate monohydrate (MSM) from solution phase manganese sulphate used to produce EMM. A flowsheet was developed to include precipitation of calcium and magnesium prior to the crystallization of MSM, based on co-production of MSM with EMM or sole production of MSM.

A high purity MSM (HPMSM - greater than 99% Mn) produced by sulfuric acid dissolution of EMM with subsequent purification of manganese sulfate solution and crystallization was not tested. Production of MSM from EMM is considered to have a high production cost with high energy consumption and is not considered competitive for the production HPMSM for battery end use - based on MSM purity ranging from 31.8% to 32.0% Mn.

Evaporation and crystallization tests were conducted on manganese sulfate solution produced from flowsheet simulation tests. Precipitation methods to remove calcium and magnesium have been tested

and MSM grades of 31.3% Mn were achieved. Bench scale studies on product purity and yield had not been completed as of the current date.

Optimization or intensification of MSM processing technology, including solution purification and crystallization unit operations for battery grade end use, was not yet conducted and is the subject of ongoing and future development programs in progress based on the work completed to date.

Based on an assessment of HPMSM production technologies, process optimization to improve on Plymouth Deposit MSM purity and yield can be achieved by defining the optimum operating parameters such as crystallization temperature, manganese sulfate concentration, solution acidity and the use of proprietary reagents to improve on calcium and magnesium removal. Additional research and laboratory studies are recommended to optimize processing approaches for production of MSM and HPMSM from Plymouth Deposit mineralization.

The results of bench scale testing for development of a hydrometallurgical process for the production of a market grade EMM product from the Plymouth Deposit indicate that the process is technically viable and EMM with a metallic manganese content of greater than 99.99% and with a total manganese content ranging from 99.70% to 99.76% manganese. Further bench scale testing is recommended to constrain production of MSM and HPMSM to a similar level of confidence.

Mineral Resource Estimate

The mineral resource estimate described in this report is presented in Table 1.1 and is based on validated results of the 2011 and 2013 drilling programs carried out by the Company, plus validated results of five drillholes and two trenches completed by MRR in 1987. The mineralized zone was modeled as a folded, stratiform manganese-iron deposit occurring within a northeast striking, steeply dipping host sequence of red and grey siliciclastic sedimentary rocks using GEOVIA (formerly Gemcom) Surpac™ (Surpac™) version 6.4.1 deposit modeling software.

Drilling-defined mineralization within the resource estimate block model occurs along a 700 m strike length and reaches a maximum width of approximately 200 m in the central deposit area. Inverse Distance Squared (ID2) interpolation methods and 3 m downhole assay composites were used to assign manganese, iron, and specific gravity values within the block model, with block dimensions of 10 m (x) by 10 m (y) by 10 m (z). Capping of metal grades was not deemed necessary. Metal grade assignment was peripherally constrained by two separate wire-framed solid models based on sectional geological interpretations for the deposit and a minimum included grade of 5% manganese over 12 m in the respective downhole direction of each drillhole. The predominant manganese mineral in the deposit is manganese carbonate ($MnCO_3$).

To meet the requirement of reasonable prospects for eventual economic extraction an optimized pit shell was generated to constrain definition of mineral resources. AGP Mining Consultants Inc. (“AGP”) provided pit optimization services that defined a cut-off value of 5% manganese for definition of mineral resources within the pit shell. This reflects conceptual production of 50% MSM and 50% HPMSM at a manganese total recovery factor of 85% and long-term prices of $1500/tonne and $935/tonne for HPMSM and MSM, respectively. Additional optimization parameters are presented in the notes that accompany Table 1.1. Iron content was not considered in the pit optimization but has potential future value that requires assessment through further metallurgical studies. The current mineral resource estimate reflects

reasonable prospects for eventual economic extraction using conventional open pit mining methods. Table 1.2 presents a cut-off grade sensitivity analysis for within-pit mineral resources.

Classification of mineral resources in the Inferred Mineral Resource category reflects broad spacing of supporting drill holes. It is reasonable to assume that infill drilling between existing holes will support future definition of Indicated and Measured category mineral resources. Mineral resources were prepared in accordance with the CIM Standards (2014) and CIM MRMR Best Practice Guidelines (2019).

Table 1.1: Plymouth Manganese-Iron Deposit Resource Estimate – Effective November 10, 2021

Type	Mn % Cut-off	Category	Rounded Tonnes	Mn %	Fe %
Pit Constrained	5.00	Inferred	43,070,000	10.01	14.32

Notes:

1) Mineral resources were prepared in accordance with the CIM Standards (2014) and CIM MRMR Best Practice Guidelines (2019).
2) Mineral resources are defined within an optimized conceptual pit shell with average pit slope angles of 45^{o} in bedrock, 20^{o} in overburden, and a 1.7:1 strip ratio (waste: mineralized material).
3) Pit optimization parameters include: pricing of US$1500 /tonne for High Purity Manganese Sulphate Monohydrate - 32% Mn (HPMSM – 32 % Mn), US$ 935/tonne for Manganese Sulphate Monohydrate – 32% Mn (MSM–32%Mn), exchange rate of CDN$1.30 to US$ 1.00, mining at CDN $6.50/t, combined processing, and G&A (1000 tpd) at CDN $193.22/t processed and a process recovery of manganese to MSM and HPMSM of 85%. Iron was not considered in the pit optimization but has potential for future commercial value.
4) Mineral resources are reported at a cut-off grade of 5 % manganese within the optimized conceptual pit shell. This cut-off grade reflects total operating costs used in pit optimization and is used to define “reasonable prospects for eventual economic extraction” by open pit mining methods.
5) Mineral resources were estimated using Inverse Distance Squared methods applied to 3 m downhole assay composites. No grade capping was applied. Model block size is 10 m (x) by 10 m (y) by 10 m (z).
6) Bulk density was estimated using Inverse Distance Squared methods applied to core specific gravity determinations.
7) Mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues
8) Mineral resources are not mineral reserves and do not have demonstrated economic viability.
9) Mineral resource tonnages are rounded to the nearest 10,000.

Table 1.2: Plymouth Manganese-Iron Deposit Cut-off Grade Sensitivity Analysis Within Resources

Type	Mn % Cut-off	Category	Rounded Tonnes	Mn %	Fe %
Pit Constrained	**5.00**	**Inferred**	**43,070,000**	**10.01**	**14.32**
Pit Constrained	6.00	Inferred	41,120,000	10.22	14.57
Pit Constrained	7.00	Inferred	37,950,000	10.53	14.92
Pit Constrained	8.00	Inferred	33,560,000	10.93	15.36
Pit Constrained	9.00	Inferred	28,640,000	11.34	15.83
Pit Constrained	10.00	Inferred	22,330,000	11.86	16.42

Note: This table shows sensitivity of the November 10, 2021, mineral resource estimate to cut-off grade. The base case at a cut-off value of 5.00% manganese is bolded for reference.

Interpretations and Conclusions

Manganese has been used primarily as an additive in steel products, with a proportionately small amount going to electronic equipment, battery manufacture and chemical processing applications. Approximately 89% of the current EMM production is marketed as alloyed manganese and foundry products such as ferromanganese (high, medium, and low carbon types) and silicomanganese. The remainder is produced as high-purity metallurgical and chemical manganese products and as manganese chemicals.

Since 2014, the importance of high purity manganese applications in the emerging battery metals market has increasingly driven industry efforts to define and develop opportunities for production of high-quality manganese products such as EMM, HPEMM and HPMSM. Based on analysis of world supply and demand trends for battery metals carried out for the Company, the market analysis and forecasting firm Benchmark Mineral Intelligence (Benchmark) concluded that opportunities for new producers of HPMSM in particular will begin to appear as early as 2021 and continue to rise gradually through 2040.

Subsequent to the 2014 PEA, the Company has shifted its focus from EMM to MSM and HPMSM products to better address the significant forecast growth in battery market opportunities. This prompted the Company to update the Plymouth Deposit mineral resource estimate to reflect preliminary estimates of MSM and HPMSM processing costs developed by Thibault in June 2021. The report authors applied these costs in the 2021 pit optimization process carried out by AGP to define mineral resources having reasonable prospects for eventual economic extraction using conventional open pit mining methods.

Preliminary operating cost estimates developed by Thibault for combined (50% : 50%) production of MSM and HPMSM reflect an estimated manganese recovery of 85%. Production of EMM is not included in the updated processing flow sheet, which is a different approach from the 2014 PEA that specifically addressed EMM. Conservative processing cost estimates that apply for combined MSM and HPMSM production are in part offset significantly by corresponding higher metal prices of the HPMSM market. The revised processing model resulted in a mineral resource estimate cut-off grade of 5.0% manganese. This is higher than the 3.5% manganese cut-off grade defined in the 2014 PEA and produces a slight reduction in mineral resource tonnage and increase in average grade in comparison with the 2014 estimate. Observed grade and tonnage variations between the current resource estimate and 2014 estimate reflect combined influence of very sharp natural grade boundaries and the maximum solid-model spatial extents of the deposit, which were developed using a 5% manganese over 12 m minimum qualifying parameter for drill hole intercepts.

All 2021 mineral resources have been assigned to the Inferred Mineral Resource category. This is a result of the spacing of drill holes used to define the current deposit model, which is in the order of 100 m or more. It is anticipated that future infill drilling at 50 m or less hole separation would support the definition of mineral resources into the Indicated and Measured resource categories. Such resource categorization will be required to support future evaluation of the Project through a Pre-feasibility study (PFS) or a Feasibility study (FS).

Processing cost assessments for MSM and HPMSM were applied in the 2021 pit optimization and Thibault has identified the need for refinement of MSM and HPMSM processing details and associated cost projections through completion of further metallurgical studies.

Completion of infill drilling to upgrade mineral resource categorization to levels necessary for PFS or FS programs is required to move the Project forward, in combination with completion of new metallurgical studies focused specifically on optimization of MSM and HPMSM production.

Well-defined opportunities to expand current mineral resources exist in the immediate strike and dip extension areas of the mineralized zones that comprise the currently defined deposit. These are highest in resource expansion priority. The historically explored Hartford manganese-iron occurrence that is located on Canadian Manganese holding a short distance from the main deposit has not been drilled by

the Company to date but has good potential for definition of mineral resources. Systematic core drilling in this area will be required to define mineral resources.

The Project is subject to various project risks. Prominent among these are: (1) metal price fluctuations, (2) potential regulatory challenges with respect to future environmental permitting of any future operating site, (3) identification of unforeseen geotechnical issues that may affect mine development, (4) inconsistency between actual bedrock tonnages and metal grades with respect to the mineral resource estimate and its supporting mode, and (5) successful development of a cost-effective processing flow-sheet for MSM and HPMSM. All of these must be addressed on an ongoing basis to minimize and manage their potential impact on the Project. Notwithstanding the above assessment, the report authors have not identified any significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the drilling information and mineral resource estimate disclosed in this technical report.

Recommendations

The following recommendations with respect to further evaluation of the Project (Plymouth Deposit) are based on work completed to date by Mercator, AGP and Thibault. The premise underlying the recommendations is that the Project should proceed in a timely manner to the point at which all information necessary to support and complete a PFS is in place. Expenditure estimates for completion of the recommended Phase I and II work programs.

Mercator Recommendations

- Infill drilling at a 50 m section spacing should be carried out to upgrade Inferred Mineral Resources to the Indicated and Measured mineral resource categories. Timely delineation of a sufficient quantity of such mineral resources to support a PFS study would be the focus of this work program. At least 5,000 m of infill drilling will be required to upgrade Plymouth Deposit mineral resources from Inferred to Indicated and Measured categories.

- A geotechnical assessment of the deposit area should be undertaken to establish data required for future open pit design programs. This will require dedicated core drilling support plus assessment of existing archived drill core. An initial core drilling allocation of 1,000 m is recommended.

- Baseline environmental permitting and community consultation studies should be initiated to expedite transition of the project to the PFS stage of evaluation.

- Initial drilling assessment of the North and South Hartford prospects should be undertaken to determine their potential to provide future mineral resources. An initial core drilling program of 1,000 m is recommended.

Thibault Recommendations

- The results of bench scale testing for development of a hydrometallurgical process to produce a market grade EMM product from the Plymouth Deposit indicate that the process is technically viable and EMM with a metallic manganese content of greater than 99.99% and with a total manganese content ranging from 99.70% to 99.76% manganese. Further bench scale testing is

recommended to constrain production of MSM and HPMSM to a similar level of confidence. This must be carried out to support any future PFS or FS.

- It is recommended that future process development test programs move towards continuous simulation of the hydrometallurgical flowsheet, including incorporation of all proposed recycle streams, using small scale pilot test equipment to simulate the metallurgical performance of the integrated flowsheet. Optimization of the hydrometallurgical process during the pilot testing phase should be based on the use of a bulk sample containing an appropriate blend of "red" and "grey" mineralization types as defined by a suitable mine plan.

- In addition to small scale continuous pilot testing of the hydrometallurgical process for processing of the run-of-mine Plymouth Deposit mineralized material, it is recommended that optimization of an integrated flowsheet for pre-concentration of the "run of mine" mineralized material by High Gradient Magnetic Separation (HGMS) methods be completed and that satellite bench scale studies be conducted to assess hydrometallurgical processing of the upgraded HGMS feed material for the hydrometallurgical process.

Phase I and II Budget

Implementation of the above recommendations should proceed as a two-phase program. Phase I consists of completion of infill drilling required to upgrade Inferred mineral resources to Indicated and Measured category mineral resources to support a subsequent PFS in Phase II. Phase I also includes completion of additional metallurgical testing preparatory to a substantial metallurgical program to be carried out to support the PFS included in Phase II. Completion of Phase II is contingent on results from the Phase I program. Estimated expenditures for Phase I and II programs appear in Table 1.3 below.

Table 1.3: Budget for Recommended Phase I and Phase II Programs

Item	Phase	Program Component	Estimated Cost (CAD)
1	Phase I	Infill core drilling to upgrade Inferred mineral resources to Indicated and Measured categories, including support costs (minimum 5,000 metres)	$1,000,000
2	Phase I	Preparation of updated mineral resource estimate based on expanded drilling database	$75,000
3	Phase I	Metallurgical testing to better constrain processes and costs associated with MSM and HPMSM production	$250,000
	Subtotal		$1,325,000
		Contingency	$132,000
	Total Phase I		**$1,457,000**

Item	Phase	Program Component	Estimated Cost (CAD)
1	Phase II	Preparation of a Pre-Feasibility Study based on the updated mineral resource estimate from Phase I and further optimized metallurgical and mine planning studies; includes geotechnical, metallurgical, and exploratory drilling components plus environmental permitting and community consultation programs	$1,500,000
	Subtotal		$1,500,000
		Contingency	$150,000
	Total Phase II		**$1,650,000**

Note: Phase II is contingent on the results of Phase I