Gemina Laboratories Ltd.

Management Discussion and Analysis
(in Canadian dollars)

For the three and six months ended July 31, 2024

This management discussion and analysis ("**MD&A**") should be read in conjunction with the unaudited condensed interim consolidated financial statements and notes of Gemina Laboratories Ltd. ("Gemina" or the "**Company**") for three and six months ended July 31, 2024. Our unaudited condensed interim consolidated financial statements are prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board ("**IASB**") and all dollar amounts are expressed in Canadian dollars unless otherwise noted. In this discussion, unless the context requires otherwise, references to "we" or "our" are references to Gemina. Additional information relating to our Company is available by accessing the SEDAR website at www.sedar.com.

All information contained in this MD&A is current as of September 27, 2024, unless otherwise stated.

Forward Looking Statements

Certain statements and information in this MD&A contain forward-looking statements or forward-looking information under applicable Canadian securities legislation that may not be based on historical fact, including, without limitation, statements containing the words "believe", "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "predict", "project", "potential", "continue", "ongoing", "could", "would", "seek", "target" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words and similar expressions.

Forward-looking statements are necessarily based on estimates and assumptions made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as factors that we believe are appropriate. Such forward-looking statements reflect our current views with respect to future events, are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Gemina as of the date of such statements, are inherently subject to significant scientific, business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance, achievements, prospects or opportunities to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. In making the forward-looking statements included in this MD&A, the Company has made various material assumptions, including, but not limited to: (i) obtaining any regulatory approvals; (ii) assumptions regarding general business and economic conditions; (iii) the Company's ability to successfully develop its products; (iv) that the Company's current positive relationships with third parties will be maintained; (v) the availability of financing on reasonable terms; (vi) the Company's ability to attract and retain skilled employees and consultants; (vii) assumptions regarding market competition; (viii) the products and technology offered by the Company's competitors and (ix) the Company's ability to protect patents and proprietary rights.

In evaluating forward-looking statements, current and prospective shareholders should specifically consider various factors,

- the Company's operations could be adversely affected by possible future government legislation, policies and controls or by changes in applicable laws and regulations;
- the volatility of global capital markets over the past several years has generally made the raising of capital more difficult;
- risks associated with political instability and changes to the regulations governing the Company's business operations;
- the success of the Company is largely dependent on the performance of its directors and officers;
- the Company and/or its directors and officers may be subject to a variety of legal proceedings, the results of which may have a material adverse effect on the Company's business;
- the Company may be adversely affected if potential conflicts of interests involving its directors and officers are not resolved in favour of the Company;

- if securities or industry analysts do not publish research or publish inaccurate or unfavourable research about the Company’s business, the price and trading volume of the Common Shares could decline;
- the Common Shares may be subject to significant price volatility and poor liquidity;
- dilution from future equity financing could negatively impact holders of Common Shares;
- internal controls cannot provide absolute assurance with respect to the reliability of financial reporting and financial statement preparation;
- the Company may be unable to implement its business strategy;
- the Company may be unable to manage its growth;
- risks associated with security breaches;
- the Company’s failure to maintain, promote and enhance its brand status;
- the Company’s business now or in the future may be adversely affected by risks outside the control of the Company;
- risks associated with the Company’s reliance on strategic partnerships;
- reputational risk; and
- risks associated with protection of intellectual property.

Should one or more of these risks or uncertainties, or a risk that is not currently known to us, materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this MD&A and we do not intend, and do not assume any obligation, to update these forward-looking statements except as required by applicable securities laws. Investors are cautioned that forward-looking statements are not guarantees of future performance and are inherently uncertain. Accordingly, investors are cautioned not to put undue reliance on forward-looking statements.

1 Overview of the Company

Gemina Laboratories Ltd. (the "Company" or "Gemina") operates under the name "Gemina Labs." The Company was incorporated under the laws of British Columbia on October 10, 2017. On February 10, 2021, the Company changed its name from "D1 Capital Corp." to "Gemina Laboratories Ltd.". The Company's head office is located at Unit 313 - 3602 Gilmore Way, Burnaby, BC, Canada, V5G 4W9, and its registered office and records are located at 10th floor, 595 Howe Street, Vancouver, British Columbia. The Company is traded on the Canadian Securities Exchange under the symbol GLAB and as of June 24, 2024, on the OTCQB under the symbol GLABF.

The Company is a biotechnology company that currently operates in the *In Vitro* Diagnostics ("**IVD**") and human wellness monitoring markets under the name "Gemina Labs". The Company has developed novel surface functionalization chemistries for the detection of pathogens and biomarkers (the "**Gemina Surface Chemistry**") with a focus on respiratory diseases. The Company completed the development of its first lateral flow test, the Legio X™ COVID-19 Rapid Antigen Test ("Legio X™"), validating the Gemina Surface Chemistry on this platform. The Company is pursing extensions to its lateral flow test pipeline and is developing a solution to biotin interference, currently a significant issue for many marketed lateral flow tests. Additionally, Gemina is investigating a new platform that utilizes the Gemina Surface Chemistry for molecular diagnostic assays, the first target being Tuberculosis.

Given the broad, potential application of the Gemina Surface Chemistry, the Company plans to enter into strategic commercial partnerships in respect of applications outside its core respiratory diagnostic focus.

2 Recent developments

Overview

From the outset, Gemina has sought to identify and solve critical issues for specific diagnostics, an example being the need to improve the sensitivity of Covid-19 lateral flow tests. The next step was to develop specific technology solutions for these challenges - solutions that could be broadly applied to the diagnostic sector. We accomplished this, and have created unique binders that improve test sensitivity, reduce non-specific binding, and enable the replacement of nitrocellulose in rapid test design. These technology solutions are built into assay platforms such as our Legio-X covid test, and our Universal Test Architecture, which enable new and improved tests. We continue to identify and solve issues across respiratory applications, and we are now seeing growing opportunities to license our technologies into a diverse range of diagnostics in respiratory diagnostics and beyond.

Products in development

Lateral flow tests
Gemina's first breakthrough development, using Gemina's proprietary chemistries, improved the sensitivity of lateral flow testing using nasal swab sampling. Targeting potential customers, Gemina will continue to publish compelling evidence of how our technologies perform across a wide range of sample types, with a view to expanding our offerings and demonstrating the opportunities made available by Gemina's technology, beyond respiratory diagnostics. Returning to Gemina's mission to identify and solve critical issues in diagnostics, we have been investigating a specific issue of interference occurring with certain diagnostic tests. The potential for biotin interference in people taking biotin supplements has become a growing issue for regulators and diagnostics companies producing high sensitivity assays. This interference has been shown to affect the results of tests, which can lead to missed or improper diagnosis. Gemina has developed a number of novel solutions to this problem using our unique chemistry. In 2024 we plan to

further develop and deploy this solution set, allowing the Company to engage with affected companies as potential licensees.

Universal Test Architecture
A key differentiator for Gemina is the Company's ability to enable access to diagnostics where they are most needed. Covid-19 revenues fell dramatically for all diagnostic companies in 2023. Anticipating this, we held back our Legio-X Covid test from a full market launch, avoiding the increased marketing, manufacturing and distribution costs associated with it.

Access to diagnostics globally, remains a significant challenge, with current industry infrastructure for rapid development, manufacturing, and rollout of diagnostic tests far from optimal in many countries. Development of the Gemina Universal Test Architecture, utilizing the Company's proprietary technology platform, provides a compelling solution. Using traditional manufacturing processes for lateral flow assays, antibodies are sprayed directly onto the test line. Once the antibodies are deposited, the test has been functionalised and has a defined shelf life. Gemina's technology is able to obviate this manufacturing step, with antibodies contained in lyophilized (akin to freeze-dried) beads. This means that at the time of manufacture, the tests (test strip and plastic cartridge) are generic and only become a functional assay when the lyophilized bead is mixed with the test sample and buffer. This new way of making lateral flow tests is valuable given the generic tests can be stockpiled in-country and subsequently functionalised (at short notice) in response to public health needs. In 2024 we plan to explore flexible strategies to realise value from this asset.

Molecular test for Tuberculosis
Beyond lateral flow, Gemina has devoted significant efforts to combat the endemic problem of Tuberculosis ("TB"). TB was the world's second leading cause of death from a single infectious agent, after corona-virus disease (COVID-19) and is therefore one of the great health threats facing the world (source, WHO). Ten million people fall ill with TB every year and 1.3 million die. Gemina's goal is to bring high-quality, rapid, low-cost screening capability to address unmet needs in this field. As part of our in-house focus on respiratory, we reported in early 2023 that we were beginning work on molecular testing for TB. In June 2023 we reported proof of concept feasibility of detecting TB in saliva. In 2024 Gemina and its partners plan to take our TB product forward to clinical validation as we explore potential partnerships for commercial exploitation.

Beyond respiratory, Gemina has identified the wellness area as a significant addressable market for our technologies, albeit a fairly nascent one that requires further market development. This market is beginning to evolve, and we see specialist pharmacies with a focus on wellness emerging that will provide appropriate channels to market. Gemina plans to develop relationships with key players in these channels, as a precursor to any specific product development.

Strategic partnerships

2023 was a challenging year in the diagnostics industry. The collapse of Covid-19 sales led to significant share price declines for many diagnostic companies. The regulatory environment has become less predictable, especially in Europe, making things challenging for smaller diagnostics companies.

Gemina navigated this period through a focus on achieving the validation of its technologies with external customers, resulting in the Company's initial licensing discussions. We see partnering as a major component of our future revenue, regulatory and IP strategies. In the longer term, we also see opportunities beyond point of care diagnostics in areas such as clinical diagnostics (e.g. surface plasmon resonance-based platforms) and veterinary diagnostics

On April 2, 2024, the Company announced its first strategic license deal.

Personnel

Dr. Robert Porter did not stand for re-election as a director at the Company's recent AGM on May 13, 2024 and no longer holds the position of president.

Financings

Short term loan
On October 10, 2023, and subsequently amended in May 2024, the Company entered into a short-term, secured, loan agreement with two creditors. Under the terms of the agreement the Company received aggregate proceeds of $200,000 (US$150,000) from the creditors, re-payable on the earlier of: the completion of a $2,000,000 equity financing and; June 30, 2024. If the loan is not re-paid by June 30, 2024, it accrues interest at 15% per annum until re-paid. The loan is secured by the assets of the Company.

As part of this loan agreement, the Company agreed to issue an aggregate 100,000 common shares to the creditors in lieu of finance-related expenses. Accordingly, the Company recognized an obligation to issue shares of $45,000 and a corresponding deferred financing expense based on the trading price of the Company's common shares on the date the funds were received. As at July 31, 2024, the Company had recognized $45,000 as a finance expense and $2,548 as an interest expense.

Private placement of convertible notes
On March 18, 2024, the Company raised gross proceeds of $910,000 under its non-brokered private placement of unsecured convertible notes ("Notes") of the Company. The Notes have a maturity date (the "Maturity Date") of 12 months from the date of issuance, unless earlier converted in accordance with the terms of the Notes. At the option of the Note holder, any principal amount (the "Principal") may be converted into common shares in the capital of the Company ("Common Shares") at a price per Common Share equal to:

(i) $0.50 (the "Standard Conversion Price"); or
(ii) in the event the Company completes an equity financing prior to the maturity date (the "Future Offering").

The Note holder may elect to convert the outstanding principal into common shares at any time prior to the maturity date. If the Note holder elects not to convert the outstanding principal into common shares until after completion of the Future Offering, the conversion price will be equal to the Standard Conversion Price, subject to an 8% increase every 30-days up to a maximum price that is equal to the issue price (the "Future Issue Price") of the securities offered in the Future Offering. If at any time after completion of the Future Offering, the 10-day volume-weighted-average-price of the common shares is equal to or greater than the price which is 10% higher than the Future Issue Price, there will be a forced conversion of principal into common shares at the Future Issue Price.

Interest on the Notes will accrue at a rate of 10% per annum, payable in cash on the maturity date or in the case of conversion of the entire principal, at the time of conversion. The Note holder may elect to have the interest repaid in cash or converted into common shares at the applicable conversion price, in accordance with the terms of the Note and by providing the Company with written notice of such election.

The Company intends to use the proceeds from the Private Placement for general working capital and corporate purposes.

All securities issued in connection with the private placement will be subject to a four-month hold period from the date of issue under applicable Canadian securities laws, in addition to such other restrictions as may apply under applicable securities laws of jurisdictions outside Canada.

Exercise of warrants
On May 3, 2024, the Company received proceeds of $81,777 following the exercise of 181,727 warrants.

Related party promissory note
On May 27, 2024, the Company agreed a loan facility in the form of a promissory note for proceeds of $200,000 (US$150,000) from a related party. The unsecured loan is non-interest bearing, due on demand and may be repaid in cash or converted to equity at the option of the holder. The conversion to equity would be based on the share price of a future equity financing.

Exercise of warrants
In July 2024, 1,148,394 warrants were exercised for gross proceeds of $516,777.

3 Selected Financial Information

The financial information reported here-in has been derived from the consolidated financial statements prepared in accordance with IFRS as issued by the IASB. The Company uses the Canadian dollar as its functional and presentation currency. From time to time, the Company may deal with several research and development contractors, consultants and suppliers in other countries. Our financial results may be subject to fluctuations between the Canadian dollar and other international currencies.

The table below sets forth unaudited quarterly results prepared by management for the eight previous quarters to July 31, 2024:

	July 31, 2024	April 30, 2024	January 31, 2024	October 31, 2023
Research and development expenses	$396,415	$207,979	$534,174	$278,020
General and administration expenses	$506,943	$597,318	$504,370	$593,966
Finance-related expenses	$43,779	$19,942	($276,872)	$296,133
Loss on lease termination	$15,175	-	-	-
Loss and comprehensive loss	$962,312	$825,239	$761,672	$1,168,119
Basic and diluted loss per share	$0.01	$0.01	$0.01	$0.02

	July 31, 2023	April 30, 2023	January 31, 20233	October 31, 2022

Research and development expenses	$883,350	$896,644	$1,312,374	$691,794
General and administration expenses	$694,771	$812,233	$643,683	$559,784
Loss and comprehensive loss	$1,578,121	$1,708,877	$1,956,057	$1,251,578
Basic and diluted loss per share	$0.02	$0.02	$0.03	$0.02

The following table represents selected financial information for the Company's three and six months ended July 31, 2024 and 2023.

Selected Consolidated Statement of Loss and Comprehensive Loss:

	Quarter ended July 31, 2024	**Quarter ended July 31, 20233**	**Six months ended July 31, 2024**	**Six months ended July 31, 20233**
Loss and comprehensive loss for the period	$962,312	$1,578,121	$1,793,851	$3,287,010
Weighted average number of shares outstanding, basic and diluted	73,539,624	71,585,465	73,433,926	71,585,465
Loss per share, basic and diluted	$0.01	$0.02	$0.02	$0.05

The Company incurred a loss and comprehensive loss for the quarter ended July 31, 2024, of $962,312 (2023 - $1,578,121) reflecting net operating expenses for the period.

The Company incurred losses and comprehensive losses for the three and six months ended July 31, 2024, of $962,312 and $1,793,851 compared to a losses and comprehensive losses of $1,578,121 and $3,287,010 in the corresponding periods of the prior year**.** The change in the losses reflects changes in net operating expenses as described below.

Selected Consolidated Statements of Financial Position:

	July 31, 2024 $	January 31, 2024 $
Cash	206,845	990
Current assets	377,979	92,667
Total assets	1,497,862	1,456,288
Current liabilities	4,116,667	2,835,500
Total liabilities	4,153,112	3,041,482
Total shareholders' equity (deficiency)	(2,655,250)	(1,585,194)

During the six months ended July 31, 2024, cash increased to $206,845 (January 31, 2024 - 990) primarily due to the net funds received from the exercise of warrants offset by operating expenses during the period.

Results of Operations:

	Quarter ended July 31, 2024	Quarter ended July 31, 2023	Six months ended July 31, 2024	Six months ended July 31, 2023
	$	$	$	$
Research and development	(396,415)	(883,350)	(604,394)	(1,780,002)
General and administrative	(506,943)	(694,771)	(1,094,931)	(1,507,008)
Finance-related expenses	(43,779)	-	(79,351)	-
Loss on termination of lease	(15,175)	-	(15,175)	-
Loss and comprehensive loss	(962,312)	(1,578,121)	(1,793,851)	(3,287,010)

Operating expenses - Research and Development

Our research and development expenses consist primarily of personnel compensation, research and development contractors, materials and supplies, and intellectual property expenses net of grant funding.

Research and development expenses were $396,415 for the three months ended July 31, 2024 compared to $883,350 for the corresponding period last year**.** The decrease in research and development expenses reflects the Company conserving its cash while it seeks additional financing.

Research and development expenses were $604,394 for the six-month period ended July 31, 2024, compared to $1,780,002 in the prior year period. The decrease in research and development expenses related primarily to reduced spending as above.

The Company expects to continue pursuing the following activities as funding allows:

- development of our first molecular assay in TB
- investigation of potential wellness applications utilizing Gemina Surface Chemistry

- investigation of Gemina Surface Chemistry in conjunction with affimers as an alternative to antibody-based tests.
- development of protein production technologies and manufacturing processes.

Operating expenses - General and Administrative

Our general and administration expenses consist primarily of personnel expenses, professional fees, office related expenses and share-based compensation.

General and administration expenses for the three months ended July 31, 2024, were $506,943 compared with $694,771 for the prior year. The decrease in the current period reflects reduced investor outreach costs and share-based compensation partially offset by professional fees.

General and administration expenses for the six-month period ended July 31, 2024, were $1,094,931 compared with $1,507,008 for same period last year. The decrease in the current six-month period reflects reduced contractor fees, share-based compensation, professional fees and investor outreach costs.

4 Liquidity, Capital Resources and Outlook

	July 31, 2024 $	January 31, 2024 $
Cash	206,845	990
Working capital (deficit)	(3,738,688)	(2,742,833)
Shareholders' equity (deficiency)	(2,655,250)	(1,585,194)

As at July 31, 2024, the Company had cash of $206,745 and net working capital deficit of ($3,738,688) compared to cash of $990 and a net working capital deficit of ($2,742,833) at January 31, 2024. The increase in the cash balance and working capital deficit reflects the cash from financing activities offset by cash used in operations.

Management of Cash Resources

The Company uses cash flow forecasts to estimate cash requirements for the ensuing twelve-month period. Based on these requirements, we seek to raise equity capital as required to provide the necessary financial resources for operations, ideally for a minimum of twelve months. The timing of equity financings will depend on market conditions and the Company's cash requirements. The Company's cash flow forecasts are updated on a regular basis to reflect actual cash inflows and outflows so as to monitor the requirements and timing for additional financial resources.

The Company monitors opportunities to raise equity capital and/or secure additional funding through non-dilutive sources such as government grants and additional license agreements. However, it is possible that our cash and working capital position may not be enough to meet our business objectives in the event of unforeseen circumstances such as a delay in funding.

Cash Flows for the six months ended July 31, 2024

Cash flows from financing activities

Cash from financing activities was $1,290,327 for the six months ended July 31, 2024, compared to $3,056,389 cash provided in the prior year period. In the current period, the cash from financing activities relates primarily to the net proceeds of from the non-brokered private placement of convertible notes and exercise of warrants. See “Recent Developments - Financing”.

Cash flows from investing activities

Cash flow used in investing activities was $nil, compared to cash used in investing activities in the prior year of $45,553 for the purchase of capital assets.

Cash flows used in operations

Cash flows used in operations for the six months ended July 31, 2024 was $1,089,072 compared to $2,978,875 in the corresponding period of the prior year. In the current period, cash flow used in operations primarily reflect the net loss and comprehensive loss discussed above, adjusted for non-cash items, primarily the add back of share-based compensation and the increase in non-cash working capital components primarily driven by the increase of accounts payable and accrued liabilities balances from January 31, 2024.

5 Going Concern

These condensed interim consolidated financial statements have been prepared on a going concern basis, which assumes that the Company will be able to continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations.

The ability of the Company to continue as a going concern is dependent on its ability to generate future cash flows from operations and obtain additional financing. As at July 31, 2024, the Company had net working capital deficit of $3,738,688 (January 31, 2024 – net working capital deficit $1,585,194), had not yet achieved profitable operations and had accumulated a deficit of $18,558,733 since its inception and will require additional funding to maintain its operations. These conditions indicate the existence of a material uncertainty that may cast significant doubt regarding the Company’s ability to continue as a going concern.

These condensed interim consolidated financial statements do not give effect to any adjustments, which would be necessary should the Company be unable to continue as a going concern and, therefore, be required to realize its assets and discharge its liabilities in other than the normal course of business and at amounts different from those reflected in the accompanying condensed interim consolidated financial statements. These adjustments could be material.

6 Long-Term Obligations and Other Contractual Commitments

Contractual Commitments

The Company has entered into a lease agreement with Thermo Fisher Financial Services Inc., with respect to laboratory equipment. The lease commenced on September 1, 2021, with monthly lease payments of $307 until August 1, 2024.

The Company entered into a sublease agreement with Anodyne Chemistries Inc, a related party (see Note 11), with respect to its laboratory in Burnaby, British Columbia. The lease commenced on October 1, 2022, with monthly lease payments of $4,956 until September 30, 2024, $5,116 from October 1, 2024 to September 30, 2026 and $5,277 from October 1, 2026 to September 30, 2027.

This lease was terminated without penalty on July 31, 2024 and the Company leased a new laboratory premises effective August 1, 2024. The carrying values of the right-of-use asset, related leasehold improvement and lease liability were derecognized as of July 31, 2024 resulting in a net charge of $15,175 reported in the consolidated statement of loss and comprehensive loss as a result of the lease termination.

The Company has entered into a lease agreement with Omnimar Enterprises Inc, to provide additional space for its laboratory in Burnaby, British Columbia. The lease commenced on July 1, 2023, with monthly lease payments of $3,414 until June 30, 2025 and $3,517 from July 1, 2025 to June 30, 2026. The Company modified this lease to add additional laboratory space for a protein production facility in Burnaby, British Columbia. The modified lease commences on August 1, 2024, with monthly lease payments of $10,911 until July 31, 2026, and $11,244 from August 1, 2026 to July 31, 2027.

7 Transactions with Related Parties

Key management personnel are the persons responsible for the planning, directing and controlling the activities of the Company and include both executive and non-executive directors, and entities controlled by such persons. The Company considers all directors and officers of the Company to be key management personnel.

During the six-months ended July 31, 2024, and 2023, the Company entered into the following transactions with related parties:

- Paid or accrued salaries and benefits of $125,000 (2023 - $125,000) to the Chief Executive Officer ("CEO") of the Company and recognized share-based compensation of $102,133 (2023 - $253,618) in relation to stock options granted to the CEO.
- Paid or accrued professional fees of $33,481 (2023 - $41,533) to a company controlled by the Chief Financial Officer ("CFO") of the Company.
- Paid or accrued salaries and benefits of $78,037 (2023 - $78,037) to the Chief Technology Officer ("CTO") and director of the Company and recognized share-based compensation of $3,130 (2023 - $7,786) in relation to stock options granted to the CTO and director.
- Paid or accrued contractor fees of $37,500 (2023 - $60,375) to a company controlled by a director of the Company.
- Recognized share-based compensation of $72,768 (2023 - $128,233) in relation to stock options granted to directors of the Company.

As at July 31, 2024, $9,922 (January 31, 2024 - $6,343) was included in accounts payable and accrued liabilities owing to the CTO and director of the Company in relation to reimbursement of expenses.

As at July 31, 2024, $68,976 (January 31, 2024 - $66,512) was included in accounts payable and accrued liabilities owing to the CEO of the Company in relation to accrued wages ($52,060) and reimbursement of expenses ($16,916).

As at July 31, 2024, $19,916 (January 31, 2024 - $48,479) was included in accounts payable and accrued liabilities owing to the company controlled by the CFO of the Company in relation to professional fees.

As at July 31, 2024, $76,667 was included in accounts payable and accrued liabilities owing to a director of the Company in relation to reimbursement of expenses $1,542 (January 31, 2024 - $1,542) and director compensation $75,125 (January 31, 2024 - $55,875).

As at July 31, 2024, $90,451 (January 31, 2024 - $91,765) was included in accounts payable and accrued liabilities in relation to advisory fees owed to a company controlled by a director of the Company.

As at July 31, 2024, $56,875 was included in accounts payable and accrued liabilities owing to directors of the Company in relation to director compensation (January 31, 2024 - $63,750) and reimbursement of expenses $nil (January 31, 2024 - $7,759).

As at July 31, 2024, $32,262 was included in accounts payable and accrued liabilities (January 31, 2024 - $32,222) due to EcoMine, a majority shareholder of the Company.

As at July 31, 2024, $504 was included in accounts payable and accrued liabilities (January 31, 2024 – receivable $14,299) due to Brokkr Mineral Resources Corporation (formerly 3R Circuits Solutions Corp.), a company controlled by directors of the Company.

As at July 31, 2024, $69,761 was included in accounts payable and accrued liabilities (January 31, 2024 - $15,898) due to Anodyne Chemistries Inc., a company controlled by directors of the Company. The Company terminated its sublease with Anodyne Chemistries Inc. on July 31, 2024, resulting in a net charge of $15,175 to the consolidated statement of loss and comprehensive loss for the quarter.

8 Off Balance Sheet Arrangements

The Company has no material undisclosed off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on our results of operations or financial condition.

9 Critical Accounting Estimates and Judgments

The preparation of financial statements in compliance with IFRS requires the Company's management to make certain estimates and assumptions that they consider reasonable and realistic. Despite regular reviews of these estimates and assumptions, based in particular on past achievements or anticipations, facts and circumstances may lead to changes in these estimates and assumptions which could impact the reported amount of the Company's assets, liabilities, income and expenses. Actual results may differ from those estimates.

Significant judgements

Research versus development expenses – The accounting for research and development expenses differs with research expenses recognized in the statement of loss during the period incurred, whereas development expenses are recognized as an intangible asset in the statement of financial position when incurred. The Company's operations, from time to time, may include both research and development activities. Management has used judgement to determine whether activities should be recognized as research expenses or as an intangible asset for development expenses. To date, management has determined that its activities are research activities and has not incurred any expenses that would qualify as recognition as an intangible asset in the statement of financial position.

Significant estimates

Share-based compensation - The Company generally utilizes the Black-Scholes option pricing model to determine the fair values of the share-based payments and warrants issued in unit offerings. The Company uses significant estimate in the evaluation of the input variables in the Black-Scholes calculation which includes: risk free interest rate, expected stock price volatility, expected life and expected dividend yield.

Fair value of RAPIvD investment - The Company has elected to classify its investment in RAPIvD as FVOCI. In determining the fair value, the Company utilizes unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Accordingly, management uses significant estimates in the evaluation of RAPIvD's fair value.

10 Financial Instruments and Financial Risk Management

Fair value

Financial instrument disclosures establish a fair value hierarchy that requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company primarily applies the market approach for recurring fair value measurements. This section describes three input levels that may be used to measure fair value:

Level 1 – unadjusted quoted prices in active markets for identical assets or liabilities. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide information on an ongoing basis.

Level 2 – quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The carrying values of cash, receivables, net investment in sublease and accounts payable and accrued liabilities approximate their fair values due to their short-term maturity. The carrying value of lease liabilities approximate its fair value due to being discounted with a rate of interest that approximates market rates.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Company's income or valuation of its financial instruments.

a) Foreign exchange risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company's foreign exchange risk is not considered significant.

b) Interest rate risk

The Company has cash balances and no interest-bearing debt. The interest rate risk on cash is not considered significant.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in raising funds to meet cash flow requirements associated with financial instruments. As indicated in Note 1, a material uncertainty exists that may cast significant doubt regarding the Company's ability to continue as a going concern.

The Company continues to manage its liquidity risk by monitoring its cash flows regularly, comparing actual results with budgets and future cash requirements.

The following table summarizes the relative maturities of the financial liabilities of the Company:

	Maturity less than one year	Maturity greater than one year
	$	$
Accounts payable and accrued liabilities	2,965,466	-
Convertible debt	914,000	-
Short-term loan	202,548	-
Lease liabilities	34,653	36,445
Total	4,116,667	36,445

Credit risk

Credit risk is risk of financial loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company's cash is held in large Canadian financial institutions and its receivables mostly consist of amounts due from the Canadian government. As such, the Company determined that it is not exposed to significant credit risk.

11 Risks and Uncertainties

The primary risk factors affecting the Company are set forth in our Annual Information Form. A copy of our Annual Information Form is available on SEDAR at www.sedar.com.

12 Outstanding Share Capital

As at the date of this MD&A, the Company had the following common shares, warrants and stock options outstanding:

Common shares

There were 74,574,272 common shares issued and outstanding.

Warrants

Number of Warrants	Exercise Price	Expiry Date
5,626,735	$0.80	June 30, 2027*
393,871	$0.60	June 30, 2027*
1,536,200	$0.80	July 11, 2027*
51,356	$0.60	July 11, 2027*
7,608,162		

* The share purchase warrants are subject to an acceleration clause that allows the Company to accelerate the expiry date of the share purchase warrants in the event that the volume weighted average trading price of the common shares on the Canadian Securities Exchange exceeds $1.20 for 10 consecutive trading days.

Stock options

A summary of the stock options outstanding and exercisable at July 31, 2024, is as follows:

Exercise Price	Number Outstanding	Number Exercisable	Expiry Date
$			
0.30	1,850,000	1,850,000	February 19, 2031
0.45	440,000	293,304	September 10, 2026
0.45	200,000	200,000	September 10, 2026
0.45	200,000	200,000	September 14, 2026
0.45	100,000	100,000	November 17, 2026
0.45	250,000	166,667	March 9, 2027
0.60	2,000,000	1,000,000	September 6, 2032
0.54	50,000	50,000	January 25, 2028
0.60	285,000	272,500	July 4, 2028
0.46	300,000	75,000	April 5, 2029
	5,675,000	4,207,471	