



# Liberty Defense

## INNOVATIVE & REVOLUTIONARY THREAT DETECTION

### MANAGEMENT'S DISCUSSION AND ANALYSIS YEAR ENDED DECEMBER 31, 2023

*(Expressed in U.S. dollars, unless otherwise stated and per share amounts)*

*Dated: April 26, 2024*

Liberty Defense Holdings, Ltd., ("Liberty" or the "Company") has prepared this Management's Discussion and Analysis ("MD&A") as of April 26, 2024, and should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2023. Unless otherwise stated, all financial information has been prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board. All dollar amounts herein are expressed in U.S. dollars unless stated otherwise. References to \$ means U.S. dollars, and CAD\$ are to Canadian dollars.

This MD&A may contain forward looking statements based on assumptions and judgments of management regarding events or results that may prove to be inaccurate as a result of development or other risk factors beyond its control. Actual results may differ materially from the expected results.

Additional information on the Company is available at the Company's website [www.libertydefense.com](http://www.libertydefense.com) and under the Company's profile at [www.sedarplus.ca](http://www.sedarplus.ca).

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## 1) Overview

### (a) Description of Business

Liberty Defense Holdings, Ltd., is a public company (TSXV: SCAN, Frankfurt: L2D, OTCQB: LDDFF), that was incorporated under the Business Corporation Act of Ontario on June 8, 2012. The Company's registered and records office address is 1055 West Georgia Street, 1500 Royal Centre, P.O. Box 11117, Vancouver, British Columbia, V6E 4N7, Canada.

The Company, through its wholly owned subsidiary Liberty Defense Technologies Inc. ("LDT"), is principally engaged in the commercialization of an active 3D imaging technology system, HEXWAVE, to detect concealed threats.

### (b) License Agreements

License agreements values and descriptions:

	MIT licenses	Battelle license	Intellectual property	Total
Balance, December 31, 2021	\$ 366,280	\$ -	\$ 3,769,172	\$ 4,135,452
Additions	108,134	73,964	-	182,098
Amortization	(33,189)	(14,534)	(539,364)	(587,087)
Balance, December 31, 2022	\$ 441,225	\$ 59,430	\$ 3,229,808	\$ 3,730,463
Additions	-	231,805	-	231,805
Amortization	(34,108)	(67,985)	(593,372)	(695,465)
<b>Balance, December 31, 2023</b>	<b>\$ 407,117</b>	<b>\$ 223,250</b>	<b>\$ 2,636,436</b>	<b>\$ 3,266,803</b>

#### i) HEXWAVE Technology (intellectual property)

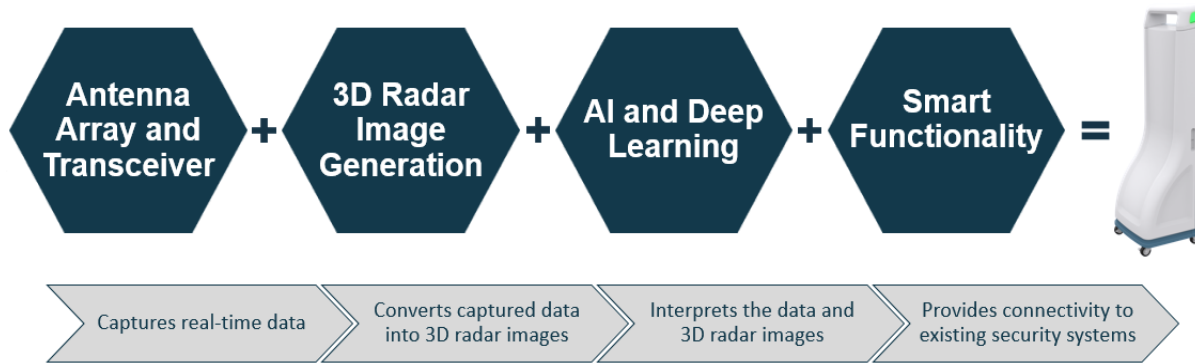
##### a. Active real-time 3D imaging technology licensed from MIT LL

Active video rate imaging technology was developed by the Massachusetts Institute of Technology Lincoln Labs ("MIT LL") and the technology has been in development since 2014. In October 2017, a concept demonstrator (pre-prototype) of the core technology was successfully tested under environmental conditions by MIT LL.

MIT LL undertook 4 years of research and development, including building a working prototype and testing the technology in both lab and real electromagnetic environments. LDT worked with MIT LL to transfer the active imaging technology starting in Q4 2018. In September 2019, Liberty and MIT LL were recognized by the FLC (Federal Laboratory Consortium) for the 2019 Excellence in Technology Transfer Northeast Region.

With the exclusive global license agreement (the "License Agreement") for the use of the active imaging technology, the Company has continued to develop HEXWAVE using the technology and concepts demonstrated by MIT LL. MIT LL, through the Technology Transfer Agreement ("TTA") has transferred the intellectual property and understanding to Liberty's Center of Excellence ("COE") in order for the technology to be further refined and developed. As part of the commercialization and go to market strategy, the Company had identified certain required changes and entered into a Cooperative Research and Development Agreement (CRADA) with MIT LL to leverage off their existing experience and accelerate the development of certain aspects of HEXWAVE. In addition to active imaging technology, the Company is also developing Automatic Threat Detection technology with the help of rich 3-dimension data and deep learning algorithms.

## HEXWAVE Overview:



Since acquiring the License Agreement from MIT LL, Liberty has significantly advanced HEXWAVE which includes the active imaging technology, automated threat detection (“ATD”) and smart IoT technologies. This culminated in the demonstration of the four principal subsystems in September 2019. This step represented a significant de-risking of the product development phase.

### b. Artificial intelligence and Deep Learning – Automatic Threat Recognition (“ATR”)

Automatic Threat Recognition utilizing deep learning algorithms was developed by Liberty to recognize person-borne concealed metal and non-metal threats. The 3-D data and images produced by the HEXWAVE are used to train and enhance the artificial intelligence engine using deep-learning algorithms.

At a frame capture rate of 20 images per second, the algorithms can exploit the changes in person’s positioning from frame-to-frame, thus maximizing the total coverage area and threat detection performance.

ATR improves detection accuracy, reduces resources required for screening, and allows the security personnel to take necessary action instantly. As additional field data and images are collected by the system over time, our goal will be to continuously improve HEXWAVE and its threat detection performance by receiving real time updates to its algorithms as new and emerging threats are identified.

### Global License Agreement – September 2018

The License Agreement for the use of the technology behind HEXWAVE with MIT is to be in effect until December 2035. Under the License Agreement, several milestones are required to be met to keep it in good standing. MIT continues to work closely with Liberty on developing this technology and amended the timeline to develop a beta prototype from on or before December 31, 2019, to removing the deadline entirely and replacing it with an in-plant inspection by MIT at regular intervals with at least six months between each such inspection. The amendment also included additional details in relation to changes on required commercial sales dates, required total net sales by year, and payment dates on its license agreement. Refer to [SEDAR+ \(www.sedarplus.ca\)](http://www.sedarplus.ca) for further details on the MIT amendment.

### HEXWAVE Key Discriminators

Central to positioning HEXWAVE is building on its key discriminators. These are enabled by the system architecture that aligns to key market needs. These include:

- Detects metal & non-metal threat objects
- Operates in both indoor and outdoor locations including both overt and covert applications
- Protects privacy (no personal data is collected or analyzed)
- ATD in real-time using rich 3D data and deep learning algorithms
- Smart functionality provides connectivity to existing security systems (VMS, door locks, networks)
- Routine software & artificial intelligence updates
- Operationally agile (mobile and deployable across detection space)

- High throughput (over 700 screens per hour) with precise secondary screening

#### About the Explosives and Weapon Detection Market

The aggregate markets associated with the explosives and weapon detection market are expected to total over \$11 billion by 2025. The verticals most relevant to the growing Urban Security Market (“USM”) are public venues, secured perimeters & buildings, land transportation, government, and others (schools, hotels, casinos, places of worship, malls, workplace & community screening).

The complexity of the urban security threat environment has dramatically changed over the last decade, requiring a more proactive approach to preventing violent attacks against communities. Since the 9/11 events, the air transportation community has effectively deployed a combination of detection technologies that are being consistently upgraded in an attempt to “stay ahead” of evolving threats. The array of detection tools has largely been protecting access to aircraft systems as gated or “point” solutions. The public is forced to tolerate the delays associated with such inspections due to the extreme risks that explosives or weapons can have on an aircraft and its passengers.

In contrast, urban communities are largely unprotected against random acts of violence or use systems that significantly impede the flow of customers into and within business facilities. While the occasional violent act was more often considered an anomaly, the frequency and magnitude of violent attacks is forcing both businesses and governments to rethink how to move to more proactive measures. Since 2015, there have been over 300 mass shootings per year in the United States (“US”) at a pace of nearly one per day. There is a market-driven need for security detection that can be broadly deployed across nearly all public and private facilities. The base requirements are that they be both highly accurate and nonintrusive to our daily lives.

#### Current Alternatives

The current alternatives in the United States market are typically restricted to:

- principally focusing on metal threats, therefore non-metal threats can potentially go undetected
- airport solutions which are not able to be used across other verticals and do not have the requisite throughput
- limited outdoor application and therefore hinder the capability of providing a layered defense for proactive threat detection
- requiring large, dedicated areas or space versus integration into existing infrastructure
- limited capability for integration into existing security systems command & control

#### About Liberty’s Management Team

Central to Liberty’s team is the technical and management expertise are: CEO and Director, Bill Frain, former Senior Vice President for L-3 Security & Detection Systems (NYSE – LHX), the world’s leading supplier of security inspection systems. In this role Bill led global sales, business development and key account management. President and CTO, Mike Lanzaro, former Vice President of Engineering and Technology at L-3 Security & Detection Systems. Vice President of Engineering, Jeffrey Gordon, who spent his last five years working at General Electric Global Research developing roadmaps for imaging and sensor technologies and over 35 years experience leading the development of ground-breaking sensing products for the military, medical, industrial, and commercial markets, including body scanners that can be seen deployed across most United States and European Union airport checkpoints.

#### Liberty’s Advisors

Liberty has assembled a group of Advisors that can provide unprecedented market access to several of our identified market verticals including the National Football League, law enforcement, federal and state government facilities, and former airport executives. A key aspect to Liberty’s success will be gaining access and developing the market for HEXWAVE.

## ii) MIT License Agreement Description and Commitments

The Company, through its wholly owned subsidiary Liberty Defense Technologies Inc. (“LDT”), has entered into agreements with the Massachusetts Institute of Technology (“MIT”) and MIT’s Lincoln Laboratory (“MIT LL”), including an exclusive patent licence agreement between MIT and LDT dated September 10, 2018, as amended from time to time (the “Licence Agreement”), a technology transfer agreement between LDT and MIT LL, effective August 24, 2018 (the “Technology Transfer Agreement”), and a cooperative research and development agreement between LDT and MIT dated as of December 21, 2018 (“CRADA”), such agreements providing LDT with an exclusive licence for patents, design assets and MIT LL technical expertise related to active three-dimensional imaging technology that are the core technology behind the HEXWAVE product.

The obligations under the Technology Transfer Agreement and the CRADA have now been completed. Liberty may consider extending the CRADA (and therefore changing its scope) if it determines that additional MIT LL technical expertise related to active three-dimensional imaging technology is required. Pursuant to the License Agreement, LDT has been granted the exclusive rights to MIT’s patent in “multistatic sparse array topology for FFT-based field imaging” (MIT Case No. 1 8409L) (the “Patent”), which is being utilized in the development and application of the HEXWAVE product. The License Agreement is to be in effect until the expiration of the Patent, which is 12 years (December 2035). In granting LDT such patent rights, the Company shall pay MIT in addition to patent filing costs an annual maintenance fees as follows: 1) \$20,000 for 2019 (paid); \$50,000 for 2020 (paid); \$60,000 for 2021 (paid); \$100,000 for 2022 (paid); \$200,000 for 2023 (payable), and \$350,000 for 2024 and thereafter; and 2) a royalty of 5.7% of all future net sales of the Company. As at December 31, 2023, the Company had \$nil in royalty payments (December 31, 2022, \$nil). The Company shall also be required to achieve certain milestones.

## iii) Battelle Memorial Institute License Agreement Description and Commitments

On March 22, 2021, the Company, through its wholly owned subsidiary DrawDown Detection, Inc. has entered into an agreement (“Battelle License Agreement”) with Battelle Memorial Institute (“Battelle”), which operates the Pacific Northwest National Laboratory (“PNNL”), to license the millimeter wave-based, High-Definition Advanced Imaging Technology (HD-AIT) body scanner and shoe scanner technologies. The agreement, as amended from time to time, provides the Company with a three-year exclusive license for certain patents which will convert to a non-exclusive license for the remaining life of the patents. The agreement also provides the Company with non-exclusive license for certain patents for life.

As consideration for the Battelle License Agreement, the Company paid \$30,000 upon signing and \$30,000 six months after.

Under the Battelle License Agreement, the Company shall pay a five percent royalty on net sales and a twenty-five percent royalty on all sublicensing revenues if permitted under the contract guidelines. Any government entity that has revenues would not require a five percent royalty on the net sales. As at December 31, 2023, the Company had \$nil in royalty payments (December 31, 2022, \$nil). The Company is also required to pay a minimum royalty amount as follows, unless the agreement is terminated:

	<b>Amounts</b>
Year 2021 (paid)	\$ 50,000
Year 2022 (paid)	50,000
Year 2023 (payable)	100,000
Year 2024 and each year thereafter	200,000

The Company is obligated to achieve certain milestones in the next fifteen months and reimburse Battelle for ongoing patenting expenses, as well as past patenting expenses in the total amount of \$50,000, from which \$50,000 has been paid.

Intangible assets included as MIT and Battelle licenses include payments in connection to reimbursement of global patent filing costs and annual maintenance fees.

#### (d) Recent Developments

From inception, Liberty set itself an aggressive product development timeline by pursuing a concurrent engineering and development approach and prior to its financial constraints had managed to deliver upon this timeline.

As scheduled, Liberty performed several beta prototype trials of HEXWAVE with multiple well-respected organizations across its various market verticals. These include, University of Wisconsin Police Department, Greater Toronto Airport Authority, a major US airline for employee screening, a major US airport for employee screening, North Carolina State Legislature, Maryland Stadium Authority, a Hindu temple in Southeast United States, among others. Since the beta prototype trials, production has been underway and the first HEXWAVE unit was shipped to our first customer on September 29, 2023.

In addition to advancing HEXWAVE and the market for it, Liberty achieved several significant corporate milestones which include:

- [Liberty Defense announced the sale of its first HEXWAVE system \(January 2023\)](#)
- [Liberty Defense announced letter of intent form the Greater Toronto Airports to acquire the HEXWAVE for use in airport security programs \(February 2023\)](#)
- [Closing of a private placement for total gross proceeds of CAD\\$1.3M \(April 2023\)](#)
- [Liberty announces HEXWAVE to be evaluated by Port of Oakland for use in Airport Employee Screening \(April 2023\)](#)
- [Liberty Announces trial of HEXWAVE at Los Angeles International Airport for Aviation worker screening \(May 2023\)](#)
- [Closing of private placement for total gross proceeds of CAD\\$397,000K \(May 2023\)](#)
- [Closing of private placement for total gross proceeds of CAD\\$305,000 \(June 2023\)](#)
- [Liberty announces contract with the Greater Toronto Airport Authority to Provide Enhanced Screening with Hexwave \(June 2023\)](#)
- [Liberty Announces Factoring Agreement to Support Improved Working Capital Credit Facility \(June 2023\)](#)
- [Liberty Announces Sale of Hexwave to Indiana Courthouse for Enhanced Threat Detection \(July 2023\)](#)
- [Liberty Announces Distribution Agreement and Partnership with GRASP Innovations, Netherlands \(July 2023\)](#)
- [Liberty Announces K2 Security Screening Group as a Strategic Partnership and Increased Market Penetration](#)
- [Liberty Defense Receives Order for Multiple HEXWAVE Units from Los Alamos National Laboratory](#)
- [Liberty Defense Develops Walkthrough Configuration of HEXWAVE with New AI Algorithm to Support](#)
- [Liberty Defense Launces HEXWAVE Product for Commercial Applications](#)
- [Liberty Defense Announces the Testing and Operational Trial of the HEXWAVE at an upcoming NATO Scoping Trial](#)
- [Liberty Defense Announces Service Agreement with Native Ads Inc.](#)
- [Liberty Defense Announces Participation at the 2023 Kinvestor Days Virtual Conference Tech Day](#)
- [Closing of Financing Exemption \(LIFE\) private placement for a total gross proceeds of CAD\\$3.6M \(October 2023\)](#)
- [Liberty Defense Receives Contract Modification Award from Transportation Security Administration \(“TSA”\) for Development of AIT Screening Upgrades](#)
- [Liberty Defense Receives Contract Award from TSA for Open Architecture Application and Continued Development of AIT Screening Kits up to \\$3.8M \(November 2023\).](#)
- [Liberty Defense Receives Purchase Order from Rapiscan Systems and Signs Distribution Agreement for Expanded Reach to International Markets \(November 2023\)](#)
- [Liberty Defense completes successful U.S. Military and Government Agency Trial \(December 2023\)](#)
- [Liberty and Lexington North Carolina based Point Security Inc. entered into a non-exclusive Strategic Partnership \(January 2024\)](#)
- [Closing of private placement for total gross proceeds of CAD\\$886,000 \(January 2024\)](#)
- [Liberty to host Senior Delegates from Vietnam for Aviation Security Solutions \(January 2024\)](#)
- [Liberty Announces US\\$1 Million Investment by Viken Detection \(February 2024\)](#)

- [Liberty Receives Formal Federal Communications Commission \(FCC\) Approval for HEXWAVE \(March 2024\)](#)
- [Liberty Receives Formal Approval from Science and Economic Development Canada \(SED\) for HEXWAVE from Canadian Government \(April 2024\)](#)

### (e) Outlook and Going Concern

Expenditure in research and development activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding is recognized in the statement of loss as an expense when incurred.

The Company's expenditures in development activities where research results are used in planning and designing the production of new or substantially improved products and processes are recognized under intangible assets if the product or process is technically and commercially feasible, if there is an intention and ability to complete the project and then use or sell it and expect economic benefits from the project, if the Company has sufficient resources to complete development and if it is able to measure reliably the cost during development. The recognized research and development expenditures incurred are recognized in the statement of loss as an expense when incurred.

The Company incurred in a total loss during the year ended December 31, 2023, of \$9,369,043 and cash outflows from operating activities of \$5,537,021. In order to fully commercialize HEXWAVE, the Company will require additional funds to achieve its development timeline and bring HEXWAVE to market. The Company has certain committed development milestones over the next twelve months and based on the Company's current forecasted operational and development spend, the Company will require additional funds to meet these milestones. While the Company has been successful in arranging financing in the past, the success of such initiatives cannot be assured. This material uncertainty casts significant doubt upon the Company's ability to continue as a going concern.

The application of the going concern concept is dependent upon the Company's ability to generate future profitable operations and receive continued financial support from its creditors and shareholders. These consolidated financial statements do not give effect to any adjustments that might be required should the Company be unable to continue as a going concern. If the company cannot generate positive future cashflows, this will delay the production timeline and shipments to backlogged orders, in addition to delaying necessary product cost reductions and improvements caused by the lack of funds to hire, produce, and execute the necessary product updates / revisions. Continued equity and/or debt financing is critical in order to ramp production up in order to become profitable.

Management plans to continue to pursue equity and/or debt financing to support operations. There can be no assurance that these financing efforts will be successful. Failure to maintain the support of creditors and obtain additional external financing will cause the Company to curtail operations and the Company's ability to continue as a going concern will be impaired. The outcome of these matters cannot be predicted at this time.

## 2) Results of Operations

Certain comparatives in prior periods may have been revised to conform to the current presentation.

During the three months ended and year ended December 31, 2023, the Company reported a total loss and comprehensive loss of \$2,875,056 and \$9,337,445 respectively (three months ended and year ended December 31, 2022 – \$3,670,331 and \$12,278,673 respectively), and basic and diluted loss per share of \$0.02 and \$0.07 respectively (three months ended and year ended December 31, 2022 – \$0.04 and \$0.13 respectively). Despite the accumulated losses, the Company's management is confident in scaling up production and commercialization of its primary technology, HEXWAVE, and is eager to advance the research and development of various potential technologies currently under review.

The net loss for the three months and year ended December 31, 2023, and 2022 is comprised of the following items:

Significant variances affecting the total loss for the period are discussed as follows:

- i) Revenue for the three months ended and year ended December 31, 2023, was \$145,641 and \$1,492,557, which was in connection to contract award revenues from the TSA and PNNL. Additionally, the Company also recorded the sale of its first HEXWAVE units. Revenue of \$120,000 was recognized as well as a deferred revenue of \$180,000. Cost of revenues as for the three months ended and year ended December 31, 2023, is \$1,739,030 and \$2,709,251. The large addition to cost of revenues in Q4 of 2023, is due to the reclassification of amortization of intangible assets of \$695,465, depreciation of \$66,483, salaries \$182,186, consulting \$307,950 as overhead allocations, and inventory impairment charge of \$344,158. The Company has received additional firm purchase orders that are being processed and revenues will be recognized in future periods as soon as performance obligations are met.

The Company recorded no revenues in the comparative period, however an amount of \$49,134 in connection to contract revenues were recorded in other income.

	Three months ended December 31,		Years ended December 31,	
	2023	2022	2023	2022
<b>Revenue (note 15 and 16)</b>	\$ 145,641	\$ -	\$ 1,492,557	\$ -
<b>Cost of revenue</b>	1,739,030	-	2,709,251	-
<b>Gross loss</b>	(1,593,389)	-	(1,216,694)	-
<b>Engineering and Research and Development Expenses:</b>				
Product development & Technology Costs	(60,390)	144,704	370,073	704,234
Salaries and consulting fees (note 18)	766,915	1,859,892	2,766,601	4,854,000
Stock-based compensation (note 13 and 18)	17,842	50,331	89,302	237,041
Depreciation (note 6)	73,275	114,223	526,686	537,016
Amortization (note 7)	(495,271)	151,090	-	587,087
Office, rent & administration, travel, miscellaneous	(622)	215,994	269,796	844,265
<b>General and Administration Expenses:</b>				
Salaries and consulting fees (note 18)	330,579	345,704	1,482,860	1,017,287
Legal and professional fees	48,797	248,811	299,011	478,168
Stock-based compensation (note 13 and 18)	88,290	369,705	511,699	1,749,805
Office, rent & administration, travel, miscellaneous	439,468	314,197	1,574,621	1,165,927
	1,208,883	3,814,651	7,890,649	12,174,830
<b>Other expense (income):</b>				
Other income, net of expenses	(1,947)	(1,653)	(3,078)	(42,993)
Interest expense	167,820	12,681	283,247	53,603
Accretion expense (note 10)	589	651	-	2,726
Foreign exchange loss (gain)	(19,035)	280,001	(18,469)	(28,752)
	147,427	291,680	261,700	(15,416)
<b>Net loss for the year</b>	\$ (2,949,699)	\$ (4,106,331)	\$ (9,369,043)	\$ (12,159,414)

- ii) Engineering and research and development expenses for the three months and year ended December 31, 2023, amounted to \$301,749 and \$4,022,458, respectively. This represents a decrease from the expenses incurred during the same periods in the prior year, which were \$2,536,234 for the three months ended and \$7,763,430 for the year ended December 31, 2022. The decrease is primarily related to the reclass of the year-to-date expenses reclassified to cost of revenue. These expenses were attributed to the ongoing research and development of the company's licensed technologies, with a focus on advancing various potential technologies under review. During the three months and year ended December 31, 2023, the Company incurred \$766,915 and \$2,766,601 in salaries and consulting fees that relate to HEXWAVE production development, software development and advancing the technologies under review such as HD-AIT. It also includes stock-based compensation in the amount of \$17,842 and \$89,302 in connection to the amortization of the fair value of stock options granted to directors, officers, employees, and consultants, as well as product development and technology costs of \$(60,390) and \$370,073. During the comparative period, three months ended and year ended December 31, 2022, the Company incurred \$144,704 and \$704,234 in product development and technology costs, \$50,331 and \$237,041 in stock-based compensation, and \$1,859,892 and \$4,854,000 in salaries and consulting fees that relate to software development and general R&D activities in connection to activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding of the licensed technologies. The



significant variance in salaries and consulting fees primarily stems from reallocating decreasing consulting during the year and moving production salaries and costs to cost of sales, as the Company commenced production, albeit not at full scale. We initiated production with some units with the intention to progressively increase production volumes in the near future.

- iii) During the three months and year ended December 31, 2023, the Company incurred in general expenses in the amount of \$907,134 and \$3,868,191 (three months and year ended December 31, 2022 – \$1,278,417 and \$4,411,187, respectively). Total expenses of \$818,844 and \$3,356,492 were incurred mainly in connection to consulting fees, salaries and payroll related benefits, legal and professional fees and travel promotion and investor relations. Stock based compensation expenses decreased from \$369,705 and \$1,749,805 to \$88,290 and \$511,699, respectively for the three months and year ended December 31, 2022, and 2023. This decrease year over year was in connection to less stock options, restricted share units, and performance shares granted.

Consulting fees, salaries, and benefits for the year ended December 31, 2023, rose from \$1,017,287 in 2022 to \$1,482,860 in 2023, reflecting the Company's expansion in headcount over the past twelve months. Similarly, office, rent, administration, travel, and miscellaneous expenses increased from \$1,165,927 to \$1,574,621 during the same period. The increase is mainly due to higher travel costs for trials and sales, as well as expanded office expenses to support the growing team.

- iv) During the three months and year ended December 31, 2023, the Company incurred net other expenses totalling \$147,427 and \$261,700, respectively, compared to a net loss of \$291,680 and income of \$15,416 in the same period of the previous year. A foreign exchange gain of \$19,035 and \$18,469 was recorded for the three months and year ended December 31, 2023, respectively, contrasting with a loss of \$280,001 and a gain of \$28,752 for the same periods in 2022. The decrease in foreign exchange losses compared to the previous year can be attributed to lower volatility in foreign exchange rates and reduced transactions affected by foreign exchange, significantly fewer than the prior year. The Company's functional currency is the Canadian dollar, and holding financial assets and liabilities in other currencies, mainly the U.S. dollar, leads to foreign exchange gains or losses.

### 3. Summary of Quarterly Results

Three months ended	Working capital (deficiency)	Total assets	Total loss and comprehensive income loss	Loss per share
	\$	\$	\$	\$
31-Dec-23	(4,435,968)	5,831,652	(2,875,056)	(0.02)
30-Sep-23	(2,889,077)	6,733,550	(1,708,096)	(0.01)
30-Jun-23	(2,851,771)	6,566,697	(2,609,460)	(0.02)
31-Mar-23	(2,032,132)	5,833,069	(2,144,833)	(0.02)
31-Dec-22	(133,516)	6,234,038	(3,670,331)	(0.03)
30-Sep-22	(227,687)	5,687,328	(3,157,109)	(0.03)
30-Jun-22	2,089,380	8,275,896	(2,818,554)	(0.03)
31-Mar-22	4,587,293	10,254,900	(2,632,679)	(0.04)

During the year ended December 31, 2023, the Company continued production of HEXWAVE while concurrently advancing research and development efforts on other licensed technologies. The commencement of HEXWAVE production led to the signing of multiple purchase orders and letters of intent, signaling promising market interest. Notably, sales, marketing, and operational endeavors were expanded in the third quarter of 2023 to bolster sales activities. The inaugural HEXWAVE unit was shipped to a customer on September 29, 2023, marking a significant milestone. Further orders for the product entered production in Q4 2023 and are slated for shipment in Q1 and Q2 of 2024. Over the preceding two quarters, the Company augmented its intellectual property portfolio by adding three NPI 0.5 prototypes, representing an investment of \$171,899. Meanwhile, progress on the Company's other technology, particularly HD-AIT, continued to advance during the research and development phase. Additionally, the Company

successfully closed private placements on April 14, 2023, May 9, 2023, June 8, 2023, and October 5, 2023, generating total gross proceeds of \$4,199,277.

During the year ended December 31, 2022, the Company continued with the research and development of its different licensed technologies and hired additional key individuals that will help the Company to support the success of the beta prototype launch HEXWAVE product, along with the development of the product prototype for the Company's aviation checkpoint program and other security solutions. During the fourth quarter of 2022, a brokered private placement for gross proceeds of \$3,745,817 was closed, allowing the Company to continue moving towards commercialization in 2023. HEXWAVE beta prototype testing continued in 2022, and materials were purchased for HEXWAVE beta prototypes, as well as material to start the development of its next generation NPI 0.5 prototypes in early 2023. During the third quarter, Beta prototype trials began at various potential customer locations, allowing the Company to collect crucial data to improve the HEXWAVE and be able to move into full scale production in the first half of 2023. Beta prototype testing will continue through the beginning of 2023. Starting in the second quarter of 2022, the Company began capitalizing materials and labor costs associated with the production of four beta unit prototypes (the "Beta Units"), totaling \$584,859. These prototypes were capitalized as intellectual property and are currently utilized for demonstrations, promotion, and investor conferences. Additionally, in the first quarter of 2022, the Company successfully concluded a brokered private placement, yielding gross proceeds of \$6,816,237.

During the year ended December 31, 2023, the Company had contractual obligations in the amount of \$6,416,114. Contractual obligations less than one year are \$5,747,496 which included accounts payable and accrued liabilities of \$3,862,675, loans payable of \$530,062, factoring liability of \$1,107,347, and lease liabilities of \$247,412. Contractual obligations for one to three years are \$526,715 and include the CEBA loan of \$29,445 and lease liabilities of \$497,270. Contractual obligations for four to five years are solely lease liabilities in the amount of \$141,903. The Company had \$nil obligations past five years.

#### 4. Liquidity and Capital Transactions Resources

##### (a) Liquidity

As of December 31, 2023, the Company maintained a cash balance of \$963 and experienced a working capital deficiency of \$4,435,968. Current liabilities amounted to \$5,956,941 as of the same date, primarily attributed to expenses associated with commencing production, ongoing development of the Company's licensed technologies, and maintaining licenses and the Company's public registry in good standing.

	<b>Years ended December 31,</b>	
	<b>2023</b>	<b>2022</b>
<b>Cash (used in) provided by:</b>		
<b>Operating activities:</b>		
Loss and comprehensive loss for the period	\$ (9,369,043)	\$ (12,159,414)
Items not involving cash:	2,536,339	3,204,491
Changes in non-cash working capital:	1,295,683	98,983
<b>Cash used in operating activities</b>	<b>(5,537,021)</b>	<b>(8,855,940)</b>
<b>Cash used in investing activities</b>	<b>(221,095)</b>	<b>(925,479)</b>
<b>Cash provided by financing activities</b>	<b>5,069,546</b>	<b>9,301,640</b>
<b>Effect of foreign exchange rate changes on cash</b>	<b>12,060</b>	<b>(184,321)</b>
<b>Increase in cash</b>	<b>(676,510)</b>	<b>(664,100)</b>
<b>Cash, beginning of the year</b>	<b>677,473</b>	<b>1,341,573</b>
<b>Cash, end of the year</b>	<b>\$ 963</b>	<b>\$ 677,473</b>

During the year ended December 31, 2023, the Company used cash in operating activities of \$5,537,021, primarily attributed to cost of revenue of \$783,864 and inventory impairment of \$344,158. Operating activities also included an increase in factoring fees of \$192,185. Operating activities involving non-cash working capital was inventory of (\$1,200,199) and accounts payable and accrued liabilities of \$2,259,074. Additionally, a generated gross loss, incurred engineering and research and development expenditures, as well as general and administrative expenses such as salaries and consulting fees, along with promotional and investor relations activities. Additionally, the Company incurred \$221,095 in investing activities, which pertains to additions to intangible assets from the MIT & PNNL patents and additions to property and equipment regarding NPI 0.5 prototypes. Finally, net cash amounting to \$5,069,546 was provided by financing activities, which is associated mainly with the issuance of common shares through private placements proceeds of \$3,880,996, proceeds from factoring \$1,265,132, and proceeds from loans \$1,713,716.

In comparison, during the year ended December 31, 2022, the Company used net cash in operating activities in the amount of \$8,855,940 mainly due to the expenses related to research and development, salaries and consulting fees, promotional and investor relations activities. The Company incurred \$925,479 in investing activities which relates to additions to intangible assets from the MIT patents and additions to the property and office equipment. Also, provided cash in financing activities in the net amount of \$9,301,640 which mainly relates to proceeds from issuance of common shares and warrants exercised during the period.

The Company has not issued dividends to date and has no plans to pay dividends in the foreseeable future.

## **(b) Capital Transactions and Resources**

### **Common share transactions for the year ended December 31, 2023**

- i) On March 11, 2023, a total of 1,098,125 finder warrants expired with an exercise price of CAD\$0.40. These broker warrants had a fair value at \$188,021 and the reserve value was reclassified to share capital.
- ii) On April 14, 2023, the Company closed the first tranche of a non-brokered private placement for gross proceeds of \$1,007,249 (CAD\$1,341,212). The Company issued 6,706,061 units (each a “Unit”) of the Company at a price of CAD\$0.20 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD\$0.30 within a period of 24 months. The warrants were allocated a residual value of \$100,725. The Company paid the agents 215,250 broker warrants with a fair value of \$5,498. Each broker warrant will be exercisable to purchase one common share for a period of 24 months at an exercise price of CAD\$0.30. Additionally, the Company also incurred cash costs in connection to private placement in the amount of \$39,594. All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.
- iii) On May 9, 2023, the Company closed the second tranche of a non-brokered private placement for gross proceeds of \$296,116 (CAD\$397,000). The Company issued 1,985,000 units (each a “Unit”) of the Company at a price of CAD\$0.20 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD\$0.30 within a period of 24 months. The warrants were allocated a residual value of \$22,712. The Company paid the agents 138,950 broker warrants with a fair valued at \$3,816. Each broker warrant will be exercisable to purchase one common share for a period of 24 months at an exercise price of CAD\$0.30. Additionally, the Company also incurred cash costs in connection to private placement in the amount of \$20,803. The Company also issued 45,000 units for gross proceeds of \$6,713, which were issued in order to offset invoices due to a vendor. All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.
- iv) On June 8, 2023, the Company closed the third and final tranche of a non-brokered private placement for gross proceeds of \$228,547 (CAD\$305,000). The Company issued 1,525,000 units (each a “Unit”) of the Company at a price of CAD\$0.20 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD\$0.30 within a period of 24 months. The warrants were allocated a residual value of \$57,137. The Company paid the agents 92,750 broker warrants with a fair valued of \$1,893. Each broker warrant will be exercisable to purchase one common share for a period of 24 months at an exercise price of CAD\$0.30. Additionally, the

Company also incurred cash costs in connection to filing and legal expenses in the amount of \$66,900. All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.

- v) On June 17, 2023, a total of 1,056,900 broker warrants expired with an exercise price of CAD\$0.50. These broker warrants had a fair value of \$208,264, and the reverse value was reclassified to share capital.
- vi) On October 5, 2023, the Company closed a non-brokered private placement for gross proceeds of \$2,588,066 (CAD\$3,565,527). The Company issued 17,827,635 units (each a “Unit”) of the Company at a price of CAD\$0.20 per Unit. Each Unit comprised of one common share and one common share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD\$0.30 for a period of 36 months. The warrants were allocated a residual value of \$194,105. The Company paid the agents 607,229 broker warrants with a fair value of \$37,523. Each broker warrant will be exercisable to purchase one common share for a period of 36 months at an exercise price of CAD\$0.20. Additionally, the Company also incurred cash costs in connection to filing and legal expenses in the amount of \$336,600, as well as the Company issued 500,000 shares as corporate finance fee with a fair value of \$72,586. All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.
- vii) On December 6, 2023, and subsequently amended on December 29, 2023, the Company announced a non-brokered private placement, intending to sell up to 7,866,666 units at CAD\$0.15 per unit, aiming for gross proceeds of CAD\$1,180,000. Each unit comprises one common share and one purchase warrant, with each warrant allowing the holder to purchase one share at an exercise price of CAD\$0.20 for 36 months. As of December 31, 2023, the Company received proceeds of \$224,915 (CAD\$305,000) for share subscriptions, net of share issuance costs, ahead of closing the private placement (note 23).

#### **Common share transactions during the year ended December 31, 2022**

- i) On March 3, 2022, a total of 123,300 share purchase warrants were exercised at CAD\$0.40 per share for total proceeds of \$39,101 (CAD\$49,320). The fair value of the exercised warrants was \$21,476 (CAD\$27,126) and was transferred from the equity reserves and recorded against share capital. Also, an additional 123,300 common shares were issued for total proceeds of \$19,479 (CAD\$24,600).
- ii) On March 17, 2022, the Company closed a brokered private placement for gross proceeds of \$6,816,237 (CAD\$8,624,994). The Company issued 26,136,345 units (each a “Unit”) of the Company at a price of CAD\$0.33 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD\$0.50 within a period of 24 months. The Company issued the agents 1,996,363 warrants (“broker warrants”) with a fair value of \$312,816 and paid cash commission of \$520,642. Each broker warrant will be exercisable to purchase one common share for a period of 24 months at an exercise price of CAD\$0.33. Additionally, the Company also incurred cash costs in connection to filling and legal expenses in the amount of \$274,581 and paid a corporate finance fee of CAD\$100,000 with common shares of the Company (303,030 common shares issued with a fair value of \$79,029). All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.
- iii) On May 25, 2022, the Company released from escrow a total of 4,386,500 common shares in connection to capital performance shares’ milestones reached. The estimated fair value of these capital performance shares was \$1,377,886 (CAD\$1,754,600) which was transferred from equity reserves.
- iv) On September 14, 2022, a total of 50,000 common shares were issued in connection with the settlement of restricted shares units. The estimated fair value of these instruments was \$20,894 (CAD\$27,500) which was transferred from equity reserves.
- v) On October 27, 2022, the Company closed a brokered private placement for gross proceeds of \$3,745,817 (CAD\$5,140,218). The Company issued 18,691,700 units (each a “Unit”) of the Company at a price of CAD\$0.275 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of

CAD\$0.50 within a period 60 months. The Company paid the agents 1,446,736 broker warrants with a fair value of \$150,348 and cash commissions of \$289,926. Each whole broker warrant will be exercisable to purchase one common share for a period of 60 months at an exercise price of CAD\$0.275. Additionally, the Company also incurred in other cash issuing costs such as filing, legal and other in the amount of \$190,792 and paid a corporate finance fee of CAD\$100,000 by issuance of common shares of the Company (363,636 common shares issued with a fair value of \$72,873). Concurrent with the brokered private placement, the Company also completed a private placement offering of 475,000 Units of the Company under the same terms and conditions at the price of \$0.275 for gross proceeds of \$95,120 (CAD\$130,625). Bill Frain, the Company's Chief Executive Officer, subscribed for 400,000 Units for an aggregate amount of CAD\$110,000. Mr. Frain is a related party of the Company. Additionally, all securities issued under these financings are subject to a hold period expiring four months and one day after the closing date.

Additionally, the Company allocated a residual value of \$384,101 to the investor warrants issued on this private placement.

- vi) On October 28, 2022, the Company released from escrow a total of 2,193,250 common shares in connection to the capital market performance shares' milestone reached. The estimated fair value of these capital performance shares was \$639,312 (CAD\$877,300) which was transferred from equity reserves.

Other sources of funds:

Other sources of funds potentially available to the Company are through the exercise of outstanding stock options, and share purchase warrants with the following terms:

As at December 31, 2023, the number of stock options outstanding and exercisable was:

Expiry date	Outstanding		Exercisable	
	Number of stock options	Exercise price	Remaining contractual life (years)	Number of stock options
1-May-24	50,000	CAD\$ 0.50	0.33	50,000
15-Jun-24	37,500	CAD\$ 0.50	0.46	37,500
1-Jul-24	75,000	CAD\$ 0.50	0.50	75,000
8-Jul-24	75,000	CAD\$ 0.50	0.52	75,000
31-Jul-24	50,000	CAD\$ 0.50	0.58	50,000
23-Aug-24	37,500	CAD\$ 0.50	0.65	37,500
25-Sep-24	37,500	CAD\$ 0.50	0.74	37,500
29-Sep-24	75,000	CAD\$ 0.50	0.75	75,000
Apr 9 and Jul 2, 2024	137,097	CAD\$ 4.96	0.50	137,097 <sup>1</sup>
7-Apr-26	1,550,000	CAD\$ 0.50	2.27	1,550,000
10-Jun-26	100,000	CAD\$ 0.50	2.44	100,000
28-Jul-26	125,000	CAD\$ 0.55	2.58	125,000
28-Jul-26	90,000	CAD\$ 0.65	2.58	90,000
1-Nov-26	465,000	CAD\$ 0.46	2.84	465,000
14-Jan-27	100,000	CAD\$ 0.36	3.04	87,500
26-Apr-27	1,820,000	CAD\$ 0.41	3.32	1,383,750
26-May-24	250,000	CAD\$ 0.50	0.40	250,000
26-May-27	125,000	CAD\$ 0.38	3.40	93,750
16-Aug-27	185,000	CAD\$ 0.29	3.63	115,625
21-Nov-27	60,000	CAD\$ 0.22	3.89	30,000
26-Apr-28	110,000	CAD \$0.18	4.32	27,500
16-Oct-28	1,135,000	CAD \$0.19	4.80	-
<b>December 31, 2023</b>	<b>6,689,597</b>			<b>4,892,722</b>

Total stock-based compensation expense as a result of options granted and vested during the three months and year ended December 31, 2023, was \$46,408 and \$226,360 respectively (three months and year ended December 31, 2022 – \$129,834 and \$558,556, respectively).

As at December 31, 2023, the number of restricted share units (“RSU”) outstanding and exercisable are as follows:

	Number of equity settled RSUs	Deemed Grant Price
Outstanding, December 31, 2021	1,000,000	CAD\$ 0.58
Granted	1,522,155	0.45
Redeemed	(50,000)	0.32
Outstanding, December 31, 2022	<b>2,472,155</b>	<b>CAD\$ 0.50</b>
Granted	3,456,975	0.17
<b>Outstanding, December 31, 2023</b>	<b>5,929,130</b>	<b>CAD\$ 0.31</b>

The estimated fair value of the equity settled RSUs granted for the year ended December 31, 2023, was \$435,444 (year ended December 31, 2022 – \$531,310) and will be recognized as an expense over the vesting period of the RSUs. The fair value of the equity settled RSUs as at the grant date was determined with reference to the market value of the common shares of the Company at the grant date.

On September 14, 2022, a total of 50,000 common shares of the Company with a fair value of \$20,894 were issued in connection with the settlement of 50,000 RSUs.

During the three months and year ended December 31, 2023, the Company recognized stock-based compensation related to RSUs in the amount of \$159,697 and \$385,869 respectively (three months and year ended December 31, 2022, – \$87,968 and \$486,888 respectively).

**During the year ended December 31, 2023, the following transactions occurred in connection to restricted share units:**

- i) On September 1, 2023, the Company granted 200,000 RSUs to a consultant of the Company; these RSUs shall be settled with common shares of the Company, are restricted until September 1, 2028, and vest 100% on September 1, 2024.
- ii) On October 16, 2023, the Company granted 3,256,975 RSUs to directors, officers, employees, and consultants of the Company; these RSUs shall be settled with common shares of the Company, are restricted until October 16, 2028, and vest 100% on October 16, 2024.

**During the year ended December 31, 2022, the following transactions occurred in connection to restricted share units:**

- i) On January 14, 2022, the Company granted 150,000 RSUs to an ex-employee; this RSUs shall be settled with common shares of the Company, are restricted until January 15, 2027, and vest at 100% on January 14, 2023.
- ii) On April 25, 2022, the Company granted 408,750 RSUs to directors, officers, and consultants; these RSUs shall be settled with common shares of the Company, are restricted until April 26, 2027, and vested at 100% on June 10, 2022.
- iii) On April 26, 2022, the Company granted 800,000 RSUs to directors and officers; these RSUs shall be settled with common shares of the Company, are restricted until April 26, 2027, and vest at 100% on April 26, 2024.
- iv) On May 26, 2022, the Company granted 113,405 RSUs to an officer of the Company; these RSUs shall be settled with common shares of the Company, are restricted until May 27, 2027, and these RSUs vest 100% on May 26, 2023.
- vii) On November 21, 2022, the Company granted 50,000 RSUs to a consultant; these RSUs shall be settled with common shares of the Company, are restricted until November 21, 2027, and these RSUs vest 100% on November 21, 2023.

**As at December 31, 2023, the outstanding number of share purchase warrants are as follows:**

Expiry date	Number of warrants	Exercise price	Remaining contractual life (years)
17-Mar-24	2,912,734	CAD\$0.50	0.21
17-Mar-24	13,068,172	CAD\$0.50	0.21
17-Mar-24	1,996,363	CAD\$0.33	0.21
13-Apr-25	3,353,030	CAD\$0.30	1.28
13-Apr-25	215,250	CAD\$0.30	1.28
9-May-25	1,015,000	CAD\$0.30	1.36
9-May-25	138,950	CAD\$0.30	1.36
8-Jun-25	762,500	CAD\$0.30	1.44
8-Jun-25	92,750	CAD\$0.30	1.44
5-Oct-26	17,827,635	CAD\$0.30	2.76
5-Oct-26	607,229	CAD\$0.20	2.76
27-Oct-27	1,446,736	CAD\$0.28	3.82
27-Oct-27	9,345,850	CAD\$0.50	3.82
27-Oct-27	237,500	CAD\$0.50	3.82
	53,019,699		

(1) Subsequent to the year ended December 31, 2023, 17,977,269 share purchase warrants with an expiry date of March 17, 2024, expired.

**During the year ended December 31, 2023, the following transactions occurred in connection to share purchase warrants:**

- i) On March 11, 2023, a total of 9,723,125 share purchase warrants expired without being exercised.
- ii) On April 14, 2023, as part of the brokered private placement the Company issued a total of 3,568,280 shares purchase warrants to brokers and investor with an exercise price of CAD\$0.30.
- iii) On May 9, 2023, as part of the brokered private placement the Company issued a total of 1,153,950 shares purchase warrants to brokers and investors with an exercise price of CAD\$0.30.
- iv) On June 8, 2023, as part of the brokered private placement the Company issued a total of 855,250 shares purchase warrants to brokers and investors with an exercise price of CAD\$0.30.
- v) On June 17, 2023, a total of 8,186,900 share purchase warrants expired without being exercised.
- vi) On October 5, 2023, as part of the brokered private placement the Company issued a total of 18,434,864 shares purchase warrants to brokers and investors with an exercise price of CAD\$0.30.

**During the year ended December 31, 2022, the following transactions occurred in connection to share purchase warrants:**

- i) On January 9, 2022, the Company cancelled 314,516 share purchase warrants without being exercised.
- ii) On March 3, 2022, a total of 123,300 share purchase warrants were exercised at a price of CAD\$0.40.
- iii) On March 17, 2022, as part of the brokered private placement the Company issued a total of 15,064,535 shares purchase warrants at an exercise between CAD\$0.33 and CAD\$0.50.
- iv) On May 29, 2022, the Company cancelled 84,986 share purchase warrants without being exercised.
- v) On October 27, 2022, as part of the brokered private placement the Company issued a total of 11,030,086 shares purchase warrants at an exercise between CAD\$0.28 and CAD\$0.50.

### (c) Performance Shares

On March 17, 2021, Liberty deposited into escrow, and held in escrow, Operational Performance Shares (“OPS”) and Capital Market Performance Shares (“CMPS”) for certain directors, officers, and consultants of the Company upon the Company achieving certain performance milestones. Once these milestones were achieved the shares would be released. These performance shares included 2,000,000 of OPS and 8,773,000 of CMPS. In order to fair value these performance shares, management estimated the probability that the Company would issue the performance shares.

#### Operational Performance Shares

During the year ended December 31, 2023, and December 31, 2022, none of the 2,000,000 OPS have been issued as neither of the two milestones have been met. The estimated fair value of the OPS is CAD\$800,000 which had an estimated vesting period between March 2023 and September 2023. During the year ended December 31, 2023, the Company recorded a recovery of stock-based compensation in connection to OPS in the amounts of \$(11,226). During the year ended December 31, 2022, the Company recorded stock-based compensation in connection to OPS in the amounts of \$222,652.

#### Capital Market Performance Shares (“CMPS”)

During the year ended December 31, 2021, the Company issued 2,193,250 from the total of 8,773,000 CMPS as one of the established milestones was met. During the year ended December 31, 2022, an additional 6,579,750 CMPS were issued as the final three milestones were met. The Company set a total of four milestones with an equal number of CMPS to be issued when the Company achieves such milestones. The Company estimated a probability of the number of CMPS it will issue in addition to an estimated vesting period between June 2021, and September 2022. The total estimated fair value of the CMPS was \$2,696,688. At the year ended December 31, 2022, the CMPS were fully accrued for. During the year ended December 31, 2023, the Company recorded stock-based compensation in connection to CMPS in the amount of \$nil (December 31, 2022, – \$718,750).

	Number of equity settled performance	Weighted average price
Outstanding, December 31, 2021	8,579,750	CAD\$ 0.40
Released from escrow	(6,579,750)	0.40
<b>Outstanding, December 31, 2022 and 2023</b>	<b>2,000,000</b>	<b>CAD\$ 0.40</b>

### (d) Reconciliation of use of proceeds from March 2022 brokered private placement

On March 17, 2022, the Company undertook an offering of approximately \$6,816,237 (CAD\$8,625,000) of units. The following table sets out a comparison of how the Company used the proceeds during the seven-month period following the closing date in March 2022, an explanation of variances and the impact of variances on the ability of the Company to achieve its business objectives and milestones.



Intended use of proceeds of March 17, 2022 brokered private placement		Actual use of proceeds from March 17, 2022 brokered private placement	(Over)/under expenditure	Explanation of Variance and impact on business objectives
Agent's cash commission	\$618,243	\$520,642	\$97,601	Lower cost than anticipated
Agent's legal fees, expenses and disbursements	\$58,086	\$58,086	\$ -	N/A
Cash portion of Agent's corporate finance fee	\$39,514	\$39,514	\$ -	N/A
Research, development, implementation and enhancement <sup>(1)</sup>	\$6,100,394	\$6,197,995	\$(97,601)	The Company has used substantially all of the proceeds
<b>Total</b>	<b>\$6,816,237</b>	<b>\$6,816,237</b>	<b>\$ -</b>	

Notes:

- (1) Such expenses include costs related to funding the further enhancement, development and testing to get ready for future commercialization of the Company's HEXWAVE technology as well as further development of the latest technologies exclusively licensed to the Company for aviation checkpoints.

**(e) Reconciliation of use of proceeds from October 2022 brokered private placement**

On October 27, 2022, the Company undertook an offering of approximately \$3,745,817 (CAD\$5,140,218) of units. The following table sets out a comparison of how the Company used the proceeds during the three-month period following the closing date in October 2022, an explanation of variances and the impact of variances on the ability of the Company to achieve its business objectives and milestones.

Intended Use of Proceeds of October 27, 2022 brokered private placement		Actual Use of Proceeds from October 27, 2022 brokered private placement	(Over)/under expenditure	Explanation of Variance and impact on business objectives
Agent's cash commission	\$289,926	\$289,926	\$ -	N/A
Agent's legal fees, expenses and disbursements	\$86,280	\$86,280	\$ -	N/A
Cash portion of Agent's corporate finance fee	\$36,436	\$36,436	\$ -	N/A
Research, development, implementation and enhancement <sup>(1)</sup>	\$3,333,175	\$3,333,175	\$ -	N/A
<b>Total</b>	<b>\$3,745,817</b>	<b>\$3,745,817</b>	<b>\$ -</b>	

Notes:

- (1) Such expenses include costs related to funding the further enhancement, development and testing to achieve future commercialization of the Company's HEXWAVE technology as well as development of the latest technologies exclusively licensed to the Company for aviation checkpoints.

**(f) Reconciliation of use of proceeds from the non-brokered private placement closed in three tranches – April 14, May 9, and June 8, 2023 (“PP Q2 2023”).**

Intended use of proceeds of PP Q2 2023 non-brokered private placement		Actual use of proceeds from PP Q2 2023 non-brokered private placement	(Over)/under expenditure	Explanation of Variance and impact on business objectives
Agent's legal fees, expenses and disbursements	\$66,938	\$66,938	\$ -	N/A
Cash portion of Agent's corporate finance fee	\$77,172	\$77,172	\$ -	N/A
Research, development, implementation and enhancement <sup>(1)</sup>	\$1,395,357	\$1,395,357	\$ -	N/A
<b>Total</b>	<b>\$1,539,467</b>	<b>\$1,539,467</b>	<b>\$ -</b>	

Notes:

- (1) Such expenses include costs related to funding the further enhancement, development and testing to achieve future commercialization of the Company's HEXWAVE technology as well as development of the latest technologies exclusively licensed to the Company for aviation checkpoints.

**(g) Reconciliation of use of proceeds from October 5, 2023 brokered private placement**

Intended use of proceeds of Oct 5, 2023 non-brokered private placement		Actual use of proceeds from Oct 5, 2023 non-brokered private placement	(Over)/under expenditure	Explanation of Variance and impact on business objectives
Agent's commissions	\$91,312	\$91,312	\$ -	N/A
Agent's legal fees, expenses and disbursements	\$58,647	\$58,647	\$ -	N/A
Cash portion of Agent's corporate finance fee	\$37,594	\$37,594	\$ -	N/A
Research, development, implementation and enhancement <sup>(1)</sup>	\$2,486,593	\$2,485,593	\$ -	N/A
<b>Total</b>	<b>\$2,674,146</b>	<b>\$2,673,146</b>	<b>\$ -</b>	N/A

Notes:

- (2) Such expenses include costs related to funding the further enhancement, development and testing to achieve future commercialization of the Company's HEXWAVE technology as well as development of the latest technologies exclusively licensed to the Company for aviation checkpoints.

## 5. Commitments

- i) As at December 31, 2023 and 2022, the minimum lease payments are as follows:

	December 31, 2023	December 31, 2022
Maturity analysis - contractual undiscounted cash flows		
One year or less	\$ 247,412	\$ 123,911
Two to five years	815,820	617,743
Six and thereafter	-	38,881
Total lease liabilities	\$ 1,063,232	\$ 780,535
Effect of discounting	(176,647)	(142,229)
<b>Lease liabilities included in the statement of financial position</b>	<b>\$ 886,585</b>	<b>\$ 638,306</b>
Current	\$ 247,412	\$ 123,911
Non-current	\$ 639,173	\$ 514,395

As a result of the completion of the RTO and under the new management's vision, the corporate office is now located in Wilmington, MA. (Boston area). As a result, the Company subleased until the expiry of the headlease (April 2024) the office space located in Vancouver, BC., as it was no longer required. The Company fair valued the lease receivable by present valuing the expected lease receivable payments over the life of the lease. The Company used an interest rate of 5.55%, the interest rate implicit in the lease. Minimum undiscounted sublease payments receivable is: \$7,129 for the next 12 months and \$nil thereafter.

## 6. Revenue

Revenue recognition during the year ended December 31, 2023, relates to the contract revenue (note 16) from the Transportation Security Administration ("TSA") and PNNL, as well as HEXWAVE sales.

As at December 31, 2023, accounts receivable for work completed on contract awards was \$nil (December 31, 2022, – \$47,253). As at December 31, 2023, the Company has recognized \$180,000 in deferred revenue (December 31, 2022 – \$nil). As at December 31, 2023, the Company has recognized \$120,000 as revenue (December 31, 2022, – \$nil) related to HEXWAVE sales and \$1,372,557 related to contract sales (December 31, 2022 - \$49,134):

Revenue	Year ended December 31,	
	2023	2022
Battelle Contract Award	\$ 32,557	\$ 49,134
TSA Contract Award HD-AIT	1,265,000	-
TSA OA Development	75,000	-
HEXWAVE	120,000	-
<b>Total Revenue</b>	<b>\$ 1,492,557</b>	<b>\$ 49,134</b>

## 7. Contract Awards

During the year ended December 31, 2023, the Company recognized total contract revenue of \$1,372,557 recorded in revenue (December 31, 2022, – \$49,134, recorded in other income). Future revenues in connection with these contracts will be recognized as performance obligations are met. It is estimated that future revenues will be recognized under the same basis following these timelines:

Contract Award Revenue	Year ended December 31,	
	2024	2025
Battelle Contract Award	\$ -	\$ -
TSA Contract Award HD-AIT	657,905	-
TSA OA Development	1,041,944	-
HD-AIT Phase II	133,056	-
<b>Total estimated contract revenues</b>	<b>\$ 1,832,905</b>	<b>\$ -</b>

### i) Battelle (PNNL) HD-AIT Shoe Screener

On May 12, 2022, the Company received a contract award for \$212,697 from Battelle, Pacific Northwest Division's Contract. The contract award is to work hand in hand with PNNL to develop the High Definition – Advanced Imaging Technology ("HD-AIT") Retrofit Kits. On July 31, 2023, there was a contract modification decreasing the total allotment from \$212,697 to \$100,000. With developing the HD-AIT Retrofit Kits, the Battelle Memorial License and patent will be utilized in the HD-AIT technology development. During the year ended December 31, 2023, as part of the contract award the Company received \$32,557 and had a receivable of \$nil (December 31, 2022, – \$35,194 and \$13,940). The balance remaining on the contract as of December 31, 2023, was \$nil (December 31, 2022, - \$163,563).

<b>Battelle HD-AIT Shoe Scanner</b>	<b>Amounts</b>	
<b>Year 2022</b>		
Quarter 2 Award payments received	\$	3,686
Quarter 3 Award payments received		18,742
Quarter 4 Award payments received		26,706
<b>Year 2023</b>		
Quarter 1		-
Quarter 2 Award payments received		2,034
Quarter 3 Award payments received		8,969
Quarter 3 Award payments received		21,555
Quarter 4		-
<b>Total</b>	<b>\$</b>	<b>81,692</b>

ii) Transportation Security Administration's ("TSA") HD-AIT Upgrade

On September 30, 2022, the Company received a contract award for \$1,747,905 from Transportation Security Administration ("TSA") for the HD-AIT Wide Band Upgrade Kit. On September 28, 2023, the contract was modified adding an additional milestone. The new contract award with the modification is \$1,922,905. The contract award is to develop a series of millimeter-wave imaging system prototypes to advance and upgrade the current state-of-the-art imaging technology for the current passenger security screening applications. The project will be performed over a period of eighteen months, and invoices will be issued once the milestones are reached based on the agreed upon timeline. During the year ended December 31, 2023, the Company received \$1,265,000 and had a receivable of \$nil (December 31, 2022, – \$nil and \$nil). The balance remaining on the contract as of December 31, 2023, was \$657,905 (December 31, 2022, – \$1,747,905). The Company is required to submit quarterly invoices as follows:

<b>TSA HD-AIT Upgrade</b>	<b>Amounts</b>	
<b>Year 2023</b>		
Milestone 1 (Q1 2023) (payment received)	\$	240,000
Milestone 2 (Q2 2023) (payment received)		250,000
Milestone 2 (Q2 2023) (payment received)		250,000
Milestone 4a (Q2 2023) (payment received)		175,000
Milestone 4b (Q3 2023) (payment received)		175,000
Milestone 4c (Q3 2023) (payment received)		175,000
<b>Year 2024</b>		
Milestone 5 (Q1 2024) (payment received Q1 2024)		300,000
Milestone 6 (Q2 2024)		357,905
<b>Total</b>	<b>\$</b>	<b>1,922,905</b>

iii) TSA Open Architecture

On September 29, 2023, the Company received a contract award for \$1,116,944 from TSA for the Open Architecture Development. The contract award is to develop a system-level approach that addresses TSA's request for implementation of a Checkpoint Open Architecture for On-Person Screening (OPS) systems that enable modularity and enhances security effectiveness. The project will be performed over a period of thirteen months, and invoices will be issued once the milestones are reached based on the agreed upon timeline. During the year ended December 31, 2023, the Company received \$75,000 and had a receivable of \$nil (December 31, 2022, – \$nil and \$nil). The balance remaining on the contract as of December 31, 2023, was \$1,041,944 (December 31, 2022, – \$nil). The Company is required to submit quarterly invoices as follows:

<b>TSA Open Architecture</b>	<b>Amounts</b>	
<b>Year 2023</b>		
Milestone 1 (Q4 2023) (payment received)	\$	75,000
<b>Year 2024</b>		
Milestone 2 (Q1 2024) (payment received Q1 2024)		200,000
Milestone 3 (Q2 2024)		250,000
Milestone 4 (Q2 2024)		170,000
Milestone 5 (Q3 2024)		175,000
Milestone 6 (Q4 2024)		175,000
Milestone 7 (Q4 2024)		71,944
<b>Total</b>	<b>\$</b>	<b>1,116,944</b>

iv) TSA HD-AIT Phase I

On September 29, 2023, the Company received a contract award for \$133,056 from TSA for the HD-AIT Phase II. The contract award is a follow-on option to the current HD-AIT development program to execute phase II to drive to a final hardware design capable of supporting future compliance efforts. The project will be performed over a period of three months, and invoices will be issued once the milestones are reached based on the agreed upon timeline. During the year ended December 31, 2023, the Company received \$nil and had a receivable of \$nil (December 31, 2022, – \$nil and \$nil). The balance remaining on the contract as of December 31, 2023, was \$133,056 (December 31, 2022, – \$nil). The Company is required to submit quarterly invoices as follows:

<b>TSA HD-AIT Phase II</b>	<b>Amounts</b>	
<b>Year 2024</b>		
Milestone 1 (Q1 2024) (payment received Q1 2024)	\$	133,056
<b>Total</b>	<b>\$</b>	<b>133,056</b>

## 8. Collaboration Agreements

i) Transportation Security Administration's (TSA) On-Person Screening Capability Program

On October 20, 2021, the Company received a contract award for \$500,000 from TSA as part of the TSA On-Person Screening Capability Program. The contract award is for the demonstration and evaluation of the Company's HEXWAVE technology and its expanded capabilities for screening aviation workers to enhance detection and throughput performance. In order for the Company to draw down on this award, Liberty is required to have its HEXWAVE technology working at certain locations to collect and share data with TSA on identified threats to further develop algorithms to improve the recognition of threats with desire probability of detection. During the year ended December 31, 2023, the Company received \$272,834 in connection with this award and had a receivable of \$nil (December 31, 2022, – \$193,790 and \$33,313). As part of the terms of the contract award the Company is required to submit quarterly invoices as follows:

<b>TSA On-Person Screening Capability Program Contract Award</b>	<b>Amounts</b>	
<b>Year 2022</b>		
Quarter 1 (payment received)	\$	64,528
Quarter 2 (payment received)		119,082
Quarter 3 (payment received)		10,180
Quarter 4 (payment received)		33,313
<b>Year 2023</b>		
Quarter 1 (payment received)		21,571
Quarter 2 (payment received)		5,374
Quarter 3 (payment received)		22,414
Quarter 4 (payment received)		223,475
<b>Total</b>	<b>\$</b>	<b>499,937</b>

The balance remaining on the contract as of December 31, 2023, was \$nil (December 31, 2022, – \$272,897), as the agreement was completed on November 30, 2023.

## 9. Off-balance Sheet Arrangements

The Company does not utilize off-balance sheet arrangements.

## 10. Transactions Between Related Parties

### Compensation of key management personnel:

Key management personnel include persons having the authority and responsibility for planning, directing, and controlling the activities of the Company as a whole. The key management personnel of the Company are the members of the Company's executive management team and Board of Directors. Compensation provided to key management personnel is as follows:

	Year ended December 31, 2023,	
	2023	2022
G&A Salaries	\$ 1,033,320	\$ 1,267,582
G&A Stock-based compensation	418,318	1,508,108
G&A Consulting fees (1)	97,805	101,422
	<b>\$ 1,549,443</b>	<b>\$ 2,877,112</b>

(1) Consulting fees were paid or payable to 1214852 B.C. LTD

As of December 31, 2023, the Company had a balance payable of \$614,547 to key management personnel (December 31, 2022, – \$275,773). This payable balance includes accounts payable and accrued liabilities relating to compensation to directors, officers, or their related companies, included in compensation of key management personnel. These related party balances are unsecured, non-interest bearing and have no specific terms of settlement.

During the year ended December 31, 2023, and 2022, the Company paid Nicole Ridgedale Communications, a related party to the Company and amount of \$59,583 (year ended December 31, 2022 - \$140,498) for consulting services and stock-based compensation. As at December 31, 2023 the balance owing to Nicole Ridgedale Communications is \$23,340 (December 31, 2022 - \$nil). This related party balance is unsecured, non-interest bearing and have no specific terms of settlement.

During the year ended December 31, 2023, the Company received working capital loans (Note 8) in the amount of \$1,381,120 (December 31, 2022 – \$438,117) from directors, officers, or their related parties. During the year ended December 31, 2023, the outstanding balance is \$328,694 (December 31, 2022 – \$nil).

## 11. Subsequent Events

i) On January 15, 2024, the Company closed the initial tranche of a non-brokered private placement, raising gross proceeds of CAD\$886,000 (CAD\$305,000 received as at December 31, 2023, note 12). This tranche involved the issuance of 5,900,663 units at a price of CAD\$0.15 per unit. Each unit consisted of one common share and one purchase warrant, allowing the holder to purchase an additional common share at CAD\$0.20 per share within 36 months. Additionally, the Company issued 151,713 broker warrants to agents under identical terms and conditions. Agent commissions totaling CAD\$22,756 were paid. All securities issued are subject to a hold period expiring four months and one day after the closing date of the private placement.

Subsequently, on February 7, 2024, the Company closed the final tranche of the same non-brokered private placement, raising an additional CAD\$150,000. This tranche involved the issuance of 1,000,000 units under the same terms and conditions as the initial tranche.

- ii) On January 18, 2024, the CEBA loan matured, requiring full repayment. However, the Company failed to repay the loan in full, resulting in the conversion of the CEBA loan into a term loan. The term loan carries a yearly interest rate of 5% and has a two-year term.
- iii) On February 28, 2024, the Company closed an investment by Viken Detection Corp. (“Viken”) pursuant to which Viken purchased 9,090,909 units of the Company at an issue price of CAD\$0.15 per unit for total gross proceeds of CAD\$1,363,636. Each unit comprised one common share and one purchase warrant. Each warrant entitles Viken to purchase one additional common share of the Company at a exercise price of CAD\$0.20 for a period of 36 months. These warrants will contain blocker language restricting the exercise of the warrants in the event such exercise results in Viken holding more than 9.9% of the outstanding voting securities of the Company.
- iv) On February 28, 2024, the Company granted 1,475,000 RSUs to employees; these RSUs shall be settled with common shares of the Company, are restricted until February 28, 2029, and vest at 100% on February 28, 2025.
- v) On March 25, 2024, 50,000 common shares were issued pursuant to the exercise of RSUs.

## 12. Material Accounting Policies and Accounting Estimates and Judgements

Full disclosure of the Company’s accounting policies and significant accounting estimates and judgments in accordance with IFRS can be found in note 2 and 3 of its audited consolidated financial statements for the year ended December 31, 2023, and have remained substantially unchanged and are still applicable to the Company unless otherwise indicated.

## 13. Changes in Accounting Policies Including Initial Adoption

The following new standards and amendments to standards and interpretations, which become effective for current periods.

- Amendments to IAS 1 – Require companies to disclose their material accounting policies rather than their significant accounting policies. With the corresponding amendments to IFRS Practice Statement 2, provide further guidance and examples on how to apply the materiality process to identify material accounting policy information that should be disclosed compared to policies that do not. The amendment is effective for annual periods beginning on or after January 1, 2023.
- Amendments to IAS 12 – Requires companies to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences, and will require the recognition of additional deferred tax assets and liabilities. The amendment should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, entities should recognize deferred tax assets (to the extent that it is probable that they can be utilized) and deferred tax liabilities at the beginning of the earliest comparative period for all deductible and taxable temporary differences associated with: right-of-use assets and lease liabilities, and decommissioning, restoration and similar liabilities, and the corresponding amounts recognized as part of the cost of the related assets. This amendment is effective for annual periods beginning on or after January 1, 2023.

The Company did not encounter any material effects from the implementation of new standards or amendments in 2023.

## 14. Financial Instruments

As of December 31, 2023, the Company’s financial instruments comprise cash, accounts receivables, accounts payable and accrued liabilities, loans payable, factoring liability and the CEBA loan. The fair values of the Company’s financial instruments approximate their carrying values due to their short-term maturity.

The Company’s financial instruments are exposed to certain financial risks including, credit risk, liquidity risk, foreign currency risks, equity price risk and capital risk management. Details of each risk are laid out in the notes to the Company’s audited consolidated financial statements as at December 31, 2023. Details of each risk are summarized below:

- a) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk through the management of its capital structure. To mitigate this risk, the Company has a planning and budgeting process in place to determine the funds required to support its ongoing operations and capital expenditures. The Company ensures that sufficient funds are raised from equity offerings or debt financings to meet its operating requirements, after considering existing cash balances, expected exercise of share purchase warrants, and stock options. The Company's ability to continue as a going concern involves significant judgements and estimates while determining forecasted cashflows and is dependent on the Company's ability to obtain financing (Note 1). As at December 31, 2023, the Company had cash of \$963 (December 31, 2022 – \$677,473) to settle current liabilities of \$5,956,941 (December 31, 2022 – \$1,628,657). Most of the Company's financial liabilities have contractual maturities of 30 days or less and are subject to normal trade term.

b) Credit risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations, including accounts receivable terms. The Company's cash are held through large Canadian, international, and foreign national financial institutions.

c) Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

i. Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to varying interest rates on cash. The Company has no amounts receivable or debt bearing variable interest rate.

ii. Foreign currency risk

The Company is exposed to currency risk by having balances and transactions in currencies that are different from its functional currency. The Company operates in foreign jurisdictions, which uses the U.S. dollar. The Company does not use derivative instruments to reduce upward, and downward risk associated with foreign currency fluctuations.

	<b>Amounts</b>
	<b>US dollars</b>
Financial assets denominated in foreign currencies	\$ 4,650
Financial liabilities denominated in foreign currencies	(1,279,266)
<b>Net exposure</b>	<b>\$ (1,274,616)</b>

A 10% change in the U.S. dollar exchange rate relative to the Canadian dollar would change the Company's profit or loss by \$127,462.

d) Price risk

The Company is exposed to price risk with respect to equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors individual equity movements, and the stock market to determine the appropriate course of action to be taken by the Company.

Capital Risk Management

The Company manages common shares and share purchase warrants as capital. The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the



development of its products and to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk.

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue debt, acquire or dispose of assets, or adjust the amount of cash on hand.

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions.

In order to maximize ongoing development efforts, the Company does not pay out dividends. The Company's investment policy is to keep its cash treasury on deposit in an interest-bearing chartered bank account. Cash consists of cash on held with banks.

The Company expects its current capital resources will be sufficient to carry its operations, and product development plans for the foreseeable future. The Company is not subject to externally imposed capital requirements.

There has been no change to the Company's approach to capital management during the year ended December 31, 2023.

## 15. Other requirements

Outstanding common share data:

Authorized: Unlimited number of common shares

Number of common shares issued and outstanding as at December 31, 2023: 145,428,102

Number of common shares issued and outstanding as at April 26, 2024: 161,469,674

Number of stock options outstanding and exercisable as at April 26, 2024:

Expiry date	Outstanding		Exercisable	
	Number of stock options	Exercise price	Remaining contractual life (years)	Number of stock options
1-May-24	50,000	CAD\$ 0.50	0.02	50,000
15-Jun-24	37,500	CAD\$ 0.50	0.14	37,500
1-Jul-24	75,000	CAD\$ 0.50	0.18	75,000
8-Jul-24	75,000	CAD\$ 0.50	0.20	75,000
31-Jul-24	50,000	CAD\$ 0.50	0.27	50,000
23-Aug-24	37,500	CAD\$ 0.50	0.33	37,500
25-Sep-24	37,500	CAD\$ 0.50	0.42	37,500
29-Sep-24	75,000	CAD\$ 0.50	0.43	75,000
Apr 9 and Jul 2, 2024	137,097	CAD\$ 4.96	0.19	137,097
7-Apr-26	1,550,000	CAD\$ 0.50	1.95	1,550,000
10-Jun-26	100,000	CAD\$ 0.50	2.13	100,000
28-Jul-26	125,000	CAD\$ 0.55	2.26	125,000
28-Jul-26	90,000	CAD\$ 0.65	2.26	90,000
1-Nov-26	465,000	CAD\$ 0.46	2.52	465,000
14-Jan-27	100,000	CAD\$ 0.36	2.72	100,000
26-Apr-27	1,795,000	CAD\$ 0.41	3.00	1,770,000
26-May-24	250,000	CAD\$ 0.50	0.08	250,000
26-May-27	125,000	CAD\$ 0.38	3.08	109,375
16-Aug-27	185,000	CAD\$ 0.29	3.31	138,750
21-Nov-27	60,000	CAD\$ 0.22	3.58	37,500
26-Apr-28	110,000	CAD \$0.18	4.01	55,000
16-Oct-28	1,135,000	CAD\$0.19	4.48	283,750
	<b>6,664,597</b>			<b>5,648,972</b>

Number of share purchase warrants as at April 26, 2024:

	Warrants outstanding	Exercise Price
<b>Outstanding, December 31, 2021</b>	21,345,561	CAD\$ 0.68
Issued	26,094,621	0.47
Expired	(399,502)	3.97
Exercised	(123,300)	0.60
<b>Outstanding, December 31, 2022</b>	46,917,380	CAD\$ 0.54
Issued	24,012,344	0.30
Expired	(17,910,025)	0.64
<b>Outstanding, December 31, 2023</b>	53,019,699	CAD\$ 0.40
Issued	16,143,285	0.20
Expired	(17,977,269)	0.48
<b>Outstanding, April 26, 2024</b>	51,185,715	CAD\$ 0.31

Number of restricted share units as at April 26, 2024:

	Number of equity settled restricted share units	Weighted average market price
<b>Outstanding, December 31, 2021</b>	1,000,000	CAD\$ 0.58
Granted	1,522,155	0.45
Issued	(50,000)	0.32
<b>Outstanding, December 31, 2022</b>	<b>2,472,155</b>	<b>CAD\$ 0.50</b>
Granted	3,456,975	0.17
Exercised	-	0.00
<b>Outstanding, December 31, 2023</b>	<b>5,929,130</b>	<b>CAD\$ 0.21</b>
Granted	1,475,000	0.13
Exercised	(50,000)	0.22
<b>Outstanding, April 26, 2024</b>	<b>7,354,130</b>	<b>CAD\$ 0.27</b>

There are 1,622,155 restricted share units that are exercisable. The remaining share units are not exercisable since they vest in the future.

Number of performance share as at April 26, 2024:

	Number of equity settled performance share units	Weighted average price
Outstanding, December 31, 2021	8,579,750	CAD\$ 0.40
Released from escrow	(6,579,750)	0.40
<b>Outstanding, December 31, 2022 and 2023</b>	<b>2,000,000</b>	<b>CAD\$ 0.40</b>
Released from escrow	-	0.00
<b>Outstanding, April 26, 2024</b>	<b>2,000,000</b>	<b>CAD\$ 0.40</b>

## 16. Disclosure Controls and Procedures and Internal Controls over Financial Reporting

Disclosure controls and procedures are intended to provide reasonable assurance that information required to be disclosed is recorded, processed, summarized, and reported within the time periods specified by securities regulations and that the information required to be disclosed is accumulated and communicated to management. Internal controls over financial reporting are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the audited consolidated financial statements for the years ended December 31, 2023 and 2022, and this accompanying MD&A (together, the "Annual Filings").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information, the reader should refer to the Venture Issuer Basic Certificates filed by the Company on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca).