

This Management's Discussion and Analysis ("MD&A") is intended to help the reader understand the Global Helium Corp.'s ("Global" or the "Company") consolidated financial statements. The information provided herein should be read in conjunction with the Company's audited consolidated financial statements for the years-ended December 31, 2023 and 2022 and related notes attached thereto, which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Except as otherwise disclosed, all dollar figures in this report are stated in Canadian dollars ("CAD"). The effective date of this report is February 29, 2024.

Management is responsible for the preparation and integrity of the financial statements, including the maintenance of appropriate information systems, procedures and internal controls and to ensure that information used internally or disclosed externally, including the financial statements and MD&A, is complete and reliable. The Company's board of directors follows recommended corporate governance guidelines for public companies to ensure transparency and accountability to shareholders. The board's audit committee reviews with management, the financial statements including the MD&A as well as other financial, operating and internal control matters.

Statements in this report that are not historical facts are forward-looking statements involving known and unknown risks and uncertainties, which could cause actual results to vary considerably from these statements. Readers are cautioned not to put undue reliance on forward-looking statements. See "Forward-Looking Statements" that are subject to risk factors set out in a cautionary note contained herein.

The reader is encouraged to review Company statutory filings on [www.sedar.com](http://www.sedar.com).

## **DESCRIPTION OF BUSINESS AND OVERVIEW**

Global is an advanced stage helium development company focused on the exploration, acquisition, development, and production of helium, done right. The Company has carved out a differentiated position through a unique Farm-In Agreement with industry veteran, Perpetual Energy Inc., through which the Company can access approximately 369,000 acres in Alberta's Manyberries helium trend via joint venture. The Company has also captured 100%-owned permits encompassing over 660,000 acres prospective for helium in Saskatchewan's well-established helium fairway and has acquired three significant assets with proven helium tests in the state of Montana. The Company brings a seasoned team of industry professionals and technical experts who have established connections with North American and international helium buyers.

The Company is listed on the Canadian Securities Exchange ("CSE") under the symbol "HECO" and the over-the-counter (OTC) market in the United States under the symbol "HECOF."

## **OUTLOOK**

Building on the Company's drilling success exiting 2023, the Company remains committed to ongoing asset development, value creation and prudent capital allocation through 2024. The Company's near-term focus will be on facilities planning for the Medicine Hat area based on the Company's results achieved to date in Alberta, along with pursuing potential offtake partners.

### **Alberta**

In 2023, the Company drilled, logged and cased its first two wells in the Manyberries helium trend in Southeast Alberta. The wells targeted the Beaverhill Lake zone and are situated on the farm-in land block of Perpetual Energy Inc. The first of which is located at 09-04-12-04W4 and reported an absolute open flow test of 11.6 MMcf/d and a stabilized flow test of 2.8 MMcf/d with 1.1% helium. The second well at 10-08-012-04W4 sustained reasonable high near-wellbore damage as a result of drilling and could not be tested from the same zone although helium concentrations of 0.65% were confirmed from a thinner, stratigraphically lower porosity streak.

With the drilling and testing of both wells now complete, the Company has satisfied the terms of the farm-in and option agreements and the Company now has a 75% lease interest in 22 sections of helium prospective land in the Manyberries area.

The results and learnings gained from the Company's first two exploration wells have exceeded expectations. The geologic data and helium concentrations encountered support the viability of further development in the Medicine Hat area and the Company is proceeding with the necessary steps for expanded operations along with the planning of future production facilities.

**Montana**

The Company continues to assess land holdings in helium-proven geological structures in Montana. The Company's Montana assets, specifically in Rudyard, Montana, represent potential for near-term production as the Company owns a standing well capable of producing natural gas with a commercial helium concentration.

During 2023, the Company engaged a third-party consultant to assist in developing a pre-FEED ("Front End Engineering and Design") study for a helium purification facility at Global's Rudyard Montana helium asset. The pre-FEED study has been completed providing a basis of design, including a process flow diagram, equipment list, and cost estimate; thereby, allowing Global to model future drilling plans and plans for a future facilities construction. The Company is currently working on plans to finance a production facility or find a joint venture partner to move the project forward.

**Saskatchewan**

In the fourth quarter of 2023, the Company has undertaken a review of its acreage portfolio to ensure resources are allocated to the highest potential return projects. Due to increasing helium activity by peers in Saskatchewan, there is a meaningful amount of seismic and geological data available. After extensive review of this data, the Company will be prioritizing its Saskatchewan landholdings, with this process allowing management to focus on the high-graded Saskatchewan acreage, which offers greater prospectivity and value potential. As a result of this undertaking, the Company successfully streamlined its land holdings from approximately 1.8 million acres to approximately 660,000 acres. This enables the Company to eliminate approximately \$550,000 in permit leasehold obligations over the next two years, while still maintaining a majority of the land that the Company deems prospective for helium development.

The management team of the Company continues to evaluate helium prospects throughout Canada and the United States to build a top tier inventory of helium opportunities within North America. Global has a portfolio of assets that balance near, medium and long-term prospectivity with short-term production ability.

**OPERATING AND FINANCIAL SUMMARY**
**For the year ended December 31, 2023:**

- Incurred a net loss of \$4.8 million compared to \$4.7 million in the previous comparable period. Lower cash expenses due to reduced salaries, consulting fees and marketing expenses were offset by an unrealized loss associated with the preferred share financing and non-cash charges for surrendered permits in Saskatchewan and a land expiry in Montana.
- Cash used in operations decreased to \$1.6 million from \$4.1 million as the Company significantly scaled back spending to conserve cash
- Net cash used in investing activities increased to \$2.9 million in 2023 from \$2.7 million in the previous year as the company:
  - Drilled and completed two wells in Southeast Alberta for approximately \$2.8 million
  - Expanded its land position in Alberta
  - Incurred seismic and other geological related costs on the Company's permit lands in Saskatchewan
- Proceeds from financing activities increased to \$4.1 million in 2023 from \$0.9 million in 2022, as the Company completed a financing of preferred shares in the fourth quarter of 2023 for proceeds of approximately \$4.0 million.

**For the three-months ended December 31, 2023:**

- Incurred a net loss of \$3.5 million compared to \$0.8 million in the previous comparable period as the Company incurred a \$2.0 unrealized loss associated with the preferred share financing and \$1.0 million for surrendered permits in Saskatchewan and a land expiry in Montana.
- Cash used in operations was \$0.5 million in the fourth quarter of 2023, up from \$0.3 million in the previous comparable period
- Net cash used in investing activities was \$2.0 million compared to only \$0.1 million in the previous comparable period as the company drilled its two wells in the fourth quarter of 2023:
  - The Company drilled, logged and cased two helium wells in Southeast Alberta along the Manyberries Helium trend.
- Proceeds from financing activities increased to \$4.0 million from \$0.1 million in the previous comparable period in 2022, as the Company completed a financing of preferred shares in the fourth quarter of 2023 for proceeds of approximately \$4.0 million.

**SUMMARY OF SELECTED RESULTS**

	Three-months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Loss	\$ 3,473,914	\$ 795,516	\$ 4,781,092	\$ 4,705,000
Per share - basic and diluted	0.07	0.02	0.10	0.10
Cash used in operating activities	492,468	311,756	1,640,200	4,111,776
Per share - basic and diluted <sup>(1)</sup>	0.01	0.01	0.03	0.09
Cash used in investing activities	2,006,973	130,724	2,854,818	2,650,169
Working capital (deficit)			(3,595,197)	3,241,041
Shareholders' equity (deficit)			2,627,796	7,061,593
Total assets			9,424,002	7,218,524

<sup>(1)</sup> Based on the same weighted average number of common shares outstanding used to calculate net loss per share.

**EXPENSES**

Cash Expenses

Cash expenses for the applicable comparative periods are as follows:

	Three-months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Total expenses	\$ 1,482,297	\$ 803,391	\$ 2,813,100	\$ 4,733,250
Less non-cash expenses (depreciation, exploration & evaluation, finance, stock-based compensation, foreign exchange)	(1,077,075)	(126,049)	(1,252,015)	(600,429)
Total cash expenses	405,222	677,342	1,561,085	4,132,821

For the three-months ended December 31, 2023, as compared to the three-months ended December 31, 2022, total cash expenses have changed primarily due to the following significant items:

	Three-months ended December 31,	
	2023	2022
Consulting fees and salaries <sup>(1)</sup>	\$ 109,126	\$ 412,790
Professional fees <sup>(2)</sup>	66,261	19,039
Management fees, salaries, & benefits <sup>(3)</sup>	94,171	120,813
All Other	135,664	124,700
Total	405,222	677,342

<sup>(1)</sup> The decrease in the current period is due to reduced consulting for land services in Montana as the Company has transitioned from building land positions to executing on its drilling program. The Company’s contract for European corporate services has ended and has not been renewed at the current time.

<sup>(2)</sup> Professional fees were higher in the current period on account of the contingent resource report that was prepared for Global

<sup>(3)</sup> In the current period, the company is keeping its management compensation expenses reduced in order to conserve cash

For the year ended December 31, 2023, as compared to the previous year, total cash expenses have changed primarily due to the following significant items:

	Year ended December 31,	
	2023	2022
Consulting fees and salaries <sup>(1)</sup>	\$ 387,182	\$ 1,149,064
Professional fees <sup>(2)</sup>	217,686	142,198
Investor Relations <sup>(3)</sup>	100,056	140,000
Management fees, salaries, & benefits <sup>(4)</sup>	457,575	920,556
Marketing <sup>(5)</sup>	-	1,392,960
All Other	398,586	388,043
<b>Total</b>	<b>1,561,085</b>	<b>4,132,821</b>

<sup>(1)</sup> Reduced consulting for land services in Montana as the Company has transitioned from building land positions to executing on its drilling program. The Company's contract for European corporate services has ended and has not been renewed at the current time.

<sup>(2)</sup> Professional fees are higher in the current year due to the preparation of the pre-FEED study for Montana, contingent reserve report for Alberta and legal fees associated with corporate personnel changes.

<sup>(3)</sup> Investor relations costs have been reduced relative to prior year to conserve cash while the Company focuses on developing its asset base

<sup>(4)</sup> Prior year amounts include a bonus that was paid to the new President of the Company and overall management compensation has been reduced to conserve cash

<sup>(5)</sup> The Company discontinued the corporate marketing campaign in the second quarter of 2022

#### Stock-based compensation

During the year ended December 31, 2023, the Company incurred \$214,950 of non-cash stock-based compensation expense related to stock options that vested during the period (December 31, 2022 – \$579,705).

#### **NET LOSS**

Net loss for the applicable comparative periods are as follows:

	Three-months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Loss	\$ 3,473,914	\$ 795,516	\$ 4,781,092	\$ 4,705,000
Loss per share - basic and diluted	0.07	0.02	0.10	0.10

For the three-month period December 31, 2023, the Company incurred a loss of \$3.5 million compared to \$0.8 million for the same period in 2022. The current quarter includes an unrealized loss on the derivative (conversion feature) of the Company's preferred shares of \$2.0 million and non-cash write-downs of exploration and evaluation assets: \$702,946 pertaining to surrendered Saskatchewan permits and \$284,344 relating to a farmin agreement in Montana that has not been renewed.

For the year ended December 31, 2023, the Company incurred a net loss of \$4.8 million compared to \$4.7 million in the prior year. Despite the unrealized loss on the preferred share derivative, and the exploration and evaluation expense recognized in the last quarter of the year, the Company's loss was significantly lower as consulting fees, marketing and management compensation were much lower, as described in the "Expenses" section.

The Company expects to incur losses in the near term as it is still in the exploration phase.

**CASH USED IN OPERATING ACTIVITIES**

Cash used in operating activities for the applicable comparative periods are as follows:

	Three-months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Cash used in operating activities	\$ 492,468	\$ 311,756	\$ 1,640,200	\$ 4,111,776
Cash used in operating activities per share - basic and diluted <sup>(1)</sup>	0.01	0.01	0.03	0.09

For the three months ended December 31, 2023, cash used in operating activities was \$492,468, increased slightly from the same period in the last year due to timing of expenses. For the year ended December 31, 2023 cash used in operating activities was \$1.6 million, down significantly from \$4.1 million in the prior year due to reduced spend on marketing, reduced consulting and reduced management compensation expenses.

**INVESTING EXPENDITURES**

The following table summarizes capital expenditures for the applicable comparative periods as follows:

	Three-months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Exploration and evaluation assets	\$ 2,162,919	\$ 92,209	\$ 3,481,229	\$ 2,417,243
Property and equipment	-	9,734	-	19,757

During the three months and year ended December 31, 2023, the Company incurred \$2.2 million and \$3.5 million in exploration costs respectively, most of which pertain to drilling and completing the Company's first wells in Alberta. Two exploratory wells were drilled on the Manyberries helium trend, the first of which is located at 09-04-12-04W4 ("09-04"), with the second located at 10-08-012-04W4/00 ("10-08"). With the drilling and testing of both wells now complete, the Company has satisfied the terms of the farm-in and option agreements and the Company now has a 75% lease interest in 22 sections of helium prospective land in the Manyberries area.

The remainder of spending in 2023 pertained to additional land acquisitions in Alberta and geological and geophysical costs incurred in Saskatchewan that were applied to the Company's permit obligations.

During the three months and year ended December 31, 2022, the Company incurred \$92,209 and \$2.4 million in exploration costs respectively in which spending was concentrated primarily in Montana and Saskatchewan. In Montana, the Company acquired significant positions in helium-proven geological structures, including one non-producing well that tested for potentially commercial percentages of helium in the past. In Saskatchewan, the Company incurred seismic and other geological related costs

**SUMMARY OF SELECTED QUARTERLY RESULTS**

The following table sets forth certain quarterly financial information of the Company's previous quarters:

<i>\$000 (except per share amounts)</i>	<b>Q4 2023</b>	<b>Q3 2023</b>	<b>Q2 2023</b>	<b>Q1 2023</b>	<b>Q4 2022</b>	<b>Q3 2022</b>	<b>Q2 2022</b>	<b>Q1 2022</b>
Net loss	3,474	354	488	466	796	847	1,472	1,590
per share	0.07	0.01	0.01	0.01	0.02	0.02	0.03	0.04
Cash used in operating activities	492	405	418	325	312	823	1,465	1,513
per share	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03
Cash used in investing activities	2,007	625	122	101	131	376	833	1,310
Working capital	(3,595)	964	2,364	2,910	3,241	3,964	4,887	6,250
Total assets	9,424	6,750	6,561	7,035	7,219	7,857	8,212	9,191
Weighted average basic shares	47,736	47,736	47,736	47,336	46,175	46,136	44,176	44,071

After raising capital in 2021 and acquiring its initial helium exploration permits in Saskatchewan, the Company continued to add to its land base in 2022 by acquiring additional permits in Saskatchewan and mineral leases in Montana. In 2023, Global entered into agreements with the option to lease lands in Alberta and has drilled its first wells to earn the rights on those lands. The Company tested those wells in late 2023 and confirmed discovery of material quantities of helium.

**SUMMARY OF SELECTED ANNUAL RESULTS**

<i>\$</i>	<b>Year-ended December 31, 2023</b>	<b>Year-ended December 31, 2022</b>	<b>Year-ended December 31, 2021</b>
Net loss	4,781,092	4,705,000	3,407,904
Per share - basic and diluted	0.10	0.10	0.11
Cash used in operating activities	1,640,200	4,111,776	3,097,119
Per share - basic and diluted <sup>(1)</sup>	0.03	0.09	0.10
Cash used in investing activities	2,854,818	2,650,169	690,673
Working capital (deficit)	(3,595,197)	3,241,041	8,929,594
Non-current liabilities	95,315	32,138	46,983
Shareholders' equity	2,627,796	7,061,593	9,983,178
Weighted average shares - basic and diluted	47,637,430	45,316,400	31,787,888
Total assets	9,424,002	7,218,524	10,332,729

<sup>(1)</sup> Based on the same weighted average number of common shares outstanding used to calculate net loss per share

**LIQUIDITY AND CAPITAL RESOURCES**

The financial statements have been prepared on the assumption that the Company will continue as a going concern, meaning it will continue in operation for the foreseeable future and will be able to realize assets and discharge liabilities in the ordinary course of operations. Management uses judgment to assess the Company's ability to continue as a going concern and the conditions that cast doubt upon the use of the going concern assumption. Different bases of measurement may be appropriate if the Company is not expected to continue operations for the foreseeable future.

For the year ended December 31, 2023, the Company recorded a net loss of \$4.8 million (December 31, 2022 – \$4.7 million) and has an accumulated deficit of \$13.8 million since inception. The Company has not yet reached production from its exploration activities.

Due to the factors mentioned above, there is material uncertainty that may cast significant doubt on the Company's ability to continue as a going concern. These financial statements do not include the necessary adjustments to reflect the recoverability and classification of recorded assets and liabilities and related expenses that may 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 such adjustments could be material.

The Company does not have self-sustaining revenues at this time and must rely on equity or debt financing to fund working capital and to carry out its business goals.

The primary capital management objective of the Company is to ensure adequate working capital is available to fund both its helium exploration and development projects and its working capital requirements, while also seeking to minimize the risk-adjusted cost of capital.

Capital is raised and retained for the purposes and to the extent necessary to fund exploration and corporate overhead costs, subject to the availability of financing on acceptable terms. Given its objectives, the Company determines the amount of capital to be raised and retained based on the scope of its planned exploration activities and management's assessment of the expected availability of acceptably priced capital in future periods.

The Company defines capital as Shareholders' equity and the preferred shares that are currently classified as a liability until such time they are converted into common shares or redeemed. The Company's targeted capital structure at December 31, 2023 is 100% shareholders' equity.

The chief source of working capital is equity financing obtained through the sale of common and preferred shares and any related warrants. The Company from time to time may receive loans from related parties and trade credit, but such financial instruments are typically only supplementary to equity financings. In any case, the Company does not consider debt to be a sustainable source of capital, as in the absence of positive cash flows from operations; any debt obtained must be retired with funds raised through equity financing.

A significant measure used in assessing capital adequacy is the expected number of days of operations that can be funded from current working capital. Capital levels are deemed sufficient if they can fund the balance of the annual exploration and development goals and fund corporate overhead expenses in the near term. Considering the capital raised, management believes that there is sufficient capital to carry out its planned activities over the next twelve months, however the Company may raise additional capital in the future if terms are acceptable.

Equity financings will generally be limited to the extent that capital is available on acceptable terms. The acceptability of financing terms is generally determined by reference to the prevailing market price of the Company's shares. The terms on which the Company obtains financings are furthermore subject to the guidelines of the CSE.

There were no changes in the Company's approach to capital management during the years-ended December 31, 2023, or 2022 other than the addition of the preferred shares in 2023.



**RELATED PARTY TRANSACTIONS AND KEY MANAGEMENT COMPENSATION**

(a) Related party transactions

- i. For the year-ended December 31, 2023, the Company incurred \$45,000 of chief executive officer consulting fees (December 31, 2022 - \$100,000) from a private company in which a former director and former officer was the private company’s principal shareholder. These fees are included in management fees in the consolidated statement of loss. This relationship is no longer active as of September 2023.
- ii. For the year-ended December 31, 2023, the Company incurred \$55,130 (December 31, 2022 - \$48,867) of salaries for non-management personnel that had employment contracts with companies that previously shared senior management of the Company under a former organizational structure. This relationship is no longer active as of September 2023.
- iii. For the year-ended December 31, 2023, the Company received \$31,500 of rent income (December 31, 2022 - \$28,250) from companies that previously shared senior management of the Company. The rent income results from office space expenses that the entities shared, and the amount is included in rent income in the consolidated statement of loss. The Company also owed \$2,773 to companies that shared senior management of the Company related to the shared office space expense and is included in accounts payable on the consolidated statement of financial position as at December 31, 2022. These relationships are no longer active as of September 2023.

(b) Key management compensation

The remuneration of directors and management of the Company is set out below:

	December 31, 2023	December 31, 2022
Officer consulting fees, salaries, and benefits	\$ 457,575	\$ 920,556
Stock-based compensation	106,741	347,871
<b>Total</b>	<b>\$ 564,316</b>	<b>\$ 1,268,427</b>

**SHARE CAPITAL**

(a) Authorized

- Unlimited number of Class A voting common shares
- Unlimited number of Class B non-voting common shares
- Unlimited number of Preferred Shares, issuable in series, with rights and privileges to be set by the board of directors

## (b) Issued and outstanding

<b>Class A common shares</b>	<b>Number of Shares</b>	<b>\$</b>
Balance, December 31, 2021	43,766,540	\$ 10,324,677
Issue of common shares pursuant to a private placement <sup>(1)</sup>	1,562,500	296,875
Issue of common shares on royalty reduction exercise <sup>(2)</sup>	397,520	172,921
Issue of common shares on warrant exercises	309,500	361,465
Issue of common shares on option exercises	500,000	82,000
Balance, December 31, 2022	46,536,060	\$ 11,237,938
Issue of common shares on option exercises	1,200,000	196,800
Balance, December 31, 2023	47,736,060	11,434,738

- <sup>(1)</sup> On May 31, 2022, the Company issued 1,562,500 units at \$0.32 per unit for gross proceeds of \$500,000. Each unit consisted of one common share and one common share purchase warrant exercisable at \$0.42 per share until May 31, 2025.

The total gross proceeds for this private placement have been split to share capital and warrants as to \$296,875 and \$203,125, respectively, based on the relative fair values of each instrument on the date of issuance. The fair value of the warrants issued was estimated on the date of issuance using the Black-Scholes option pricing model with the following weighted average assumptions: risk-free interest rate – 2.58%, expected life – 3 years, expected dividend yield – 0%, expected volatility – 136%, and forfeiture rate – 0%. The expected volatility was calculated using a weighted average volatility of similar public companies in the junior resource industry and the Company's own volatility after it began trading.

- <sup>(2)</sup> On May 20, 2022, a royalty holder exercised their option to reduce their gross overriding royalty percentage on certain undeveloped lands, in exchange for 397,520 common shares of the Company. The issuance was recorded at \$0.435 per share, being the price of the common shares on the date of the exercise, with a corresponding increase to exploration and evaluation assets.

## (c) Warrants

The following table outlines the Company's warrants outstanding at December 31, 2023:

	Number	\$	Weighted average exercise price
Balance, December 31, 2021	36,938,170	\$ 3,434,108	\$ 0.66
Issued pursuant to a private placement	1,562,500	203,125	0.42
Exercised <sup>(1)</sup>	(309,500)	(51,965)	1.00
Balance, December 31, 2022	38,191,170	\$ 3,585,268	\$ 0.64
Expired <sup>(2),(3)</sup>	(24,830,490)	(1,555,958)	0.25
Balance, December 31, 2023	13,360,680	2,029,310	0.93

<sup>(1)</sup> During the year ended December 31, 2022, 309,500 warrants were exercised for cash proceeds of \$309,500. The original value of \$51,965 ascribed to these warrants when issued was adjusted to share capital on exercise.

<sup>(2)</sup> On May 19, 2023, 16,915,600 warrants expired with an exercise price of \$0.25. A further 11,798,180 warrants with an exercise price of \$1.00 were also set to expire on May 19, 2023 but were extended to May 19, 2025.

<sup>(3)</sup> On October 4<sup>th</sup> and 5<sup>th</sup> 2023, a total of 7,914,890 warrants expired with an exercise price of \$1.00.

Information about the warrants at December 31, 2023 is as follows:

Number of warrants – outstanding and exercisable	Exercise price	Expiry date
1,562,500	\$ 0.42	May 31, 2025
11,798,180	\$1.00	May 19, 2025
13,360,680		

## (d) Per share amounts

	Year-ended December 31, 2023	Year-ended December 31, 2022
Net loss for the year	\$ (4,781,092)	\$ (4,705,000)
Comprehensive loss for the year	(4,828,747)	(4,558,711)
Weighted average number of common shares outstanding – basic and diluted <sup>(1)</sup>	47,637,430	45,316,400
Net loss and comprehensive loss per share – basic and diluted	\$ (0.10)	\$ (0.10)

<sup>(a)</sup> All stock options, convertible preferred shares and warrants have been excluded from the calculation of diluted loss per share as they would be anti-dilutive due to the Company being in a loss position for the years-ended December 31, 2023 and 2022.

## (e) Stock-based compensation

## i. Stock option plan

The Company has a rolling stock option plan (the "Plan") consistent with the guidelines of the Canadian Securities Exchange ("CSE"), to provide incentive for the directors, officers, employees, and consultants of the Company. The maximum number of shares which may be set aside for issuance under the Plan is 10% of the issued and outstanding common shares of the Company at the time of grant.

The exercise price of options granted under the Plan will be fixed by the Board at the time of grant, provided that such exercise price may not be less than the market price of the common shares as outlined in the Policies of the CSE. The options granted under the Plan will vest and be exercisable on a basis determined by the Board at the time of the grant and will be exercisable for a period not exceeding ten years.

Stock option transactions are summarized as follows:

	Number	Weighted average exercise price
Balance, December 31, 2021	2,600,000	\$ 0.31
Granted <sup>(1)</sup>	2,160,000	0.39
Exercised <sup>(2)</sup>	(500,000)	0.15
Forfeited	(50,000)	0.61
Balance, December 31, 2022	4,210,000	\$ 0.37
Granted <sup>(3)</sup>	1,425,000	0.27
Exercised <sup>(4)</sup>	(1,200,000)	0.15
Expired	(850,000)	0.61
Forfeited	(550,000)	0.41
Balance, December 31, 2023	3,035,000	\$ 0.33

<sup>(1)</sup> Options vest as to; one quarter of 1,300,000 every 3 months from May 16, 2022, one quarter of 40,000 every 3 months from June 1, 2022, one quarter of 250,000 every 6 months from August 10, 2022, one quarter of 70,000 every 6 months from May 5, 2024 and 500,000 vested immediately on August 15, 2022.

<sup>(2)</sup> During the year ended December 31, 2022, 500,000 options were exercised for cash proceeds of \$75,000. \$7,000 of related stock-based compensation recognized on vested options before the exercises has been added to share capital and removed from contributed surplus.

<sup>(3)</sup> 375,000 options were granted February 28, 2023 and vest as to; one quarter every 6 months from August 28, 2024. 1,050,000 options were granted September 22, 2023 and vest as to; one quarter every 6 months from March 22, 2024.

<sup>(4)</sup> During the nine-months ended September 30, 2023, 1,200,000 options were exercised for cash proceeds of \$180,000. \$16,800 of related stock-based compensation recognized on vested options before the exercises has been added to share capital and removed from contributed surplus.

Information about the stock options outstanding and exercisable on December 31, 2023, are as follows:

Number of options – outstanding	Number of options - exercisable	Weighted average exercise price	Expiry date
750,000	750,000	\$0.41	May 16, 2027
40,000	40,000	\$0.62	June 1, 2025
250,000	125,000	\$0.33	August 10, 2027
500,000	500,000	\$0.34	August 15, 2027
70,000	-	\$0.41	December 5, 2027
375,000	-	\$0.33	February 28, 2028
1,050,000	-	\$0.25	September 22, 2028
3,035,000	1,415,000	\$0.33	

ii. Stock-based compensation expense

Compensation expense of \$214,950 for the year ended December 31, 2022 (December 31, 2022 - \$579,705) has been recorded in the consolidated statement of loss with a corresponding increase in contributed surplus.

The weighted average fair value of options granted during the year ended December 31, 2022 was estimated on the dates of grant to be \$0.23 (December 31, 2022 - \$0.33) using the Black-Scholes option pricing model with the following weighted average assumptions for grants as follows:

	December 31, 2023	December 31, 2022
Risk-free interest rate	4.1%	2.8%
Expected life of option	5.0 years	5.0 years
Expected dividend yield	0%	0%
Expected volatility <sup>(a)</sup>	123%	128%
Forfeiture rate	0%	0%
Exercise price	\$0.27	\$0.39
Share price at grant date	\$0.27	\$0.39

<sup>(a)</sup> The expected volatility was calculated using the Company's historic volatility and a weighted average volatility of similar public companies in the junior resource industry when applicable.

(f) As at February 29, 2024, the Company had 47,736,060 common shares, 15,753,776 preferred shares, 3,035,000 stock options, and 13,360,680 warrants outstanding.

## FINANCIAL RISK MANAGEMENT

The Company's activities expose it to certain financial risks, including credit risk, liquidity risk, and market risk. This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for managing risk. There were no changes to the Company's risk management policies or procedures during the year-ended December 31, 2023.

a. Credit risk

Credit risk is the risk that a counterparty will fail to discharge an obligation and cause the Company to incur a financial loss. The Company's primary exposure to credit risk relates to its cash held with a major financial institution and its amounts receivable which primarily consist of amounts to be received from the Government of Canada.

Cash and cash equivalents consists of cash bank balances and term deposits. In order to manage credit risk, the Company holds cash balances and term deposits with a financial institution with a high credit rating.

The Company has determined the credit risk associated with amounts receivable is minimal as the amounts are due from the Government of Canada.

The Company's receivables are aged as follows:

Aging	December 31, 2023	December 31, 2022
Current (less than 90 days)	\$ 168,122	\$ 62,256
Past due (more than 90 days)	-	-
	\$ 168,122	\$ 62,256

Since the Company's receivables consist primarily of amounts due from the Government of Canada, the Company does not have an allowance for doubtful accounts as at December 31, 2023 and December 31, 2022, and believes all amounts will be collected in due course. The Company's historical expected credit loss is \$Nil. At December 31, 2023, the amount subject to credit risk relating to amounts receivable equates to their carrying value.

b. 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 ensures that there are sufficient funds to meet its short-term business requirements, taking into account its anticipated cash flows and its holdings of cash.

The following is an analysis of the contractual maturities of the Company's financial liabilities as at December 31, 2023:

	Within one year	Between one and five years	More than five years	Total
Accounts payable and accrued liabilities	\$ 784,893	\$ -	\$ -	\$ 734,893
Lease obligation	7,000	-	-	7,000
Preferred shares <sup>(1)</sup>	3,909,565	-	-	3,909,565
Total	\$ 4,701,458	\$ -	\$ -	\$ 4,701,458

<sup>(1)</sup> The preferred shares are classified as a current liability due to the optional redemption feature as described in Note 9 of the financial statements.

c. Market risk

i. Foreign currency risk and sensitivity analysis

The Company is exposed to foreign currency risk on fluctuations related to cash and cash equivalents, accounts payable and preferred share liabilities that are denominated in USD. As at December 31, 2023, net financial liabilities totaling \$1,301,000 (December 31, 2022 – financial liabilities of \$30,000) were held in USD. The Company has not entered into any derivatives or contracts to hedge or otherwise mitigate this exposure.

Based on the above net exposure as at December 31, 2023 and assuming all other variables remain constant, a 2% depreciation or appreciation of the USD against the Canadian dollar would result in an

increase or decrease of approximately \$26,020 (December 31, 2022 - \$600) in the Company's loss and comprehensive loss for the year- ended December 31, 2023.

ii. Commodity price risk

The nature of the Company's operations may expose the Company to commodity price risks when the Company begins production.

As at December 31, 2023, the Company has no derivative financial instruments. It may in the future enter into derivative financial instruments and in order to manage price risk, it will only enter into derivative financial instruments with highly rated investment grade counterparties.

iii. Interest rate risk

Interest rate risk is the risk the future cash flows will fluctuate as a result of changes in market interest rates. The Company is not exposed to interest rate cash flow risk as the Company had no variable rate interest-bearing debt as of December 31, 2023.

The Company is exposed to interest rate price risk as the preferred share liability has a fixed cumulative dividend rate.

### **CRITICAL ACCOUNTING ESTIMATES, JUDGEMENTS, AND ASSUMPTIONS**

The preparation of the condensed interim consolidated financial statements in accordance with IFRS requires the Company to make judgments, apart from those involving estimates, in applying accounting policies. The most significant judgments in preparing the Company's financial statements include:

- i. Going-concern - the assessment of the Company's ability to continue as a going concern and whether there are events or conditions that may give rise to significant uncertainty;
- ii. Cash-generating units ("CGUs") - The Company's exploration and evaluation assets are aggregated into cash-generating units for calculating impairment, based on their ability to generate largely independent cash flows. The classification of assets into CGU's requires significant judgment and interpretations with respect to the integration between assets, the existence of active markets, external users, shared infrastructures and the way in which management monitors the Company's operations;
- iii. Exploration and evaluation assets – The application of the Company's accounting policy for exploration and evaluation assets requires management to make certain judgments as to future events and circumstances as to whether economic quantities of resources have been found in assessing economic viability and technical feasibility;
- iv. Leases - Judgments are required to determine if a contract is, or contains, a lease. These judgments require an assessment of whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Judgment is also required to determine the interest rate used to discount the lease payments; and
- v. Decommissioning liabilities - the Company estimates the decommissioning obligations for its wells. Amounts recorded for the decommissioning obligations require assumptions regarding removal date, the extent of reclamation activities required, the engineering methodology for estimating cost, inflation estimates, and where discounting is required, the estimate of the specific discount rates for these liabilities in order to determine the present value of these obligation settlements.
- vi. Stock-based compensation – The amounts recorded for stock-based compensation expense relating to the fair value of stock options issued are estimated using the Black-Scholes option pricing model including management's estimates of the future volatility of the Company's share value, estimated market value of the Company's shares at grant date, expected forfeiture rates, expected lives of the options (based on general holder behavior) and the risk-free interest rate (based on government bonds).
- vii. Derivatives – Estimates of the fair value of the Company's preferred share derivative is dependent on the estimated market value of the Company's shares, the future volatility of the Company's share value, expected future dividends, the expected holding period before conversion to equity, and the risk-free interest rate.

**CONTRACTUAL OBLIGATIONS AND COMMITMENTS**

As at December 31, 2023, the Company holds 10 helium exploration permits over certain lands in Saskatchewan that it plans to hold until maturity. The Company is required to make future annual lease maintenance expenditures and annual permit exploration expenditures as follows:

	2024	2025	Total
Annual lease maintenance expenditures	\$ 17,884	\$ -	\$ 17,884
Annual permit exploration expenditures	423,338	33,314	456,652
<b>Total</b>	<b>\$ 441,222</b>	<b>\$ 33,314</b>	<b>\$ 474,536</b>

The initial term of the permits is 3 years, extendable to 5 years if the above noted expenditure requirements are met. Furthermore, the Company has the right to apply for a lease and drill a well on these lands if the permits are in good standing. Should the Company not meet the above spending requirements, the Company can allow the permit to lapse or elect to make a cash payment in lieu of the spending requirements to keep the permit in good standing for one additional year. If the Company were to allow permits to lapse, the Company would lose the right to explore on the applicable lands.

**OFF-BALANCE SHEET ARRANGEMENTS**

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

**RISKS AND UNCERTAINTIES**

The Company's principal activity is exploration, acquisition and development of resource deposits. Companies in this industry are subject to many and varied kinds of risks, including but not limited to; environmental, fluctuating helium prices, social, political, financial and economics. Additionally, few exploration projects successfully achieve development due to factors that cannot be predicted or foreseen. While risk management cannot eliminate the impact of all potential risks, the Company strives to manage such risks to the extent possible and practicable.

The risks and uncertainties are considered by management to be the most important in the context of the Company's business. The risks and uncertainties are not limited to but include risks associated with the Company's dependence on the exploration and evaluation assets are: geological exploration and development; changes in law; continued negative operating cash flow and the availability of additional funding as and when required; infrastructure; inflation; governmental regulation; environmental; hazards, insurance; uninsured risks; competition; currency fluctuations; labour and employment; joint ventures; contract repudiation; dependence on key management personnel and executives; and litigation risks.



**FORWARD-LOOKING STATEMENTS**

Statements herein that are not historical facts are forward-looking statements that are subject to risks and uncertainties. Words such as “expects”, “intends”, “may”, “could”, “should”, “anticipates”, “likely”, “believes” and words of similar import also identify forward-looking statements. Forward-looking statements are based on current facts and analyses and other information that are based on forecasts of future results, estimates of amounts not yet determined and assumptions of management, including, but not limited to, the Company’s ability to raise additional debt and/or equity financing to fund operations and working capital requirements. Actual results may differ materially from those currently anticipated due to a number of factors including, but not limited to, general economic conditions, the geology of helium properties, helium industry conditions, the Company’s ability to generate sufficient cash flows from operations and financing to support general operating activities and capital expansion plans, and laws and regulations and changes thereto that may affect operations, and other factors beyond the reasonable control of the Company.

Management periodically reviews information reflected in forward-looking statements. The Company has and continues to disclose in its Management Discussion and Analysis and other publicly filed documents, changes to material factors or assumptions underlying the forward-looking statements and to the validity of the statements themselves, in the period the changes occur.

Historical results of operations and trends that may be inferred from the above discussions and analysis may not necessarily indicate future results from operations.

**OTHER INFORMATION**

Additional information on factors that may affect the business and financial results of the Company can be found on [www.sedar.com](http://www.sedar.com).