HPQ Silicon Inc.

Consolidated Financial Statements (unaudited)
As at March 31, 2024

(in Canadian dollars)

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The Consolidated financial statements have not been reviewed by the Company’s independent auditor

HPQ Silicon Inc.
Consolidated Statements of Financial Position (unaudited)
As at March 31, 2024 and December 31, 2023
(in Canadian dollars)

	Notes	2024	2023
		$	$
ASSETS			
Current			
Cash		513,937	597,404
Marketable securities	6	438,518	676,493
Goods and services tax receivable		102,728	66,545
Investment tax credits receivable	21	549,446	692,508
Prepaid expenses and other		161,150	192,999
		1,765,779	2,225,949
Non-current			
Property and equipment	9	1,453,917	1,932,920
Intangible assets	10	4,486,805	4,559,836
Royalties' receivable	8	182,875	174,886
Right-of-use assets		16,041	18,715
Investment accounted for using the equity method	11	130,159	147,210
		6,269,797	6,833,567
Total assets		8,035,576	9,059,516
LIABILITIES			
Current			
Payable to a subcontractor and other trade payables	12	4,774,558	4,586,145
Due to directors	13	84,615	100,000
Royalties payable to a subcontractor	10	689,959	667,418
Current portion of lease liabilities		12,079	12,019
Income tax payable		28,223	28,193
		5,589,434	5,393,775
Non-current			
Due to directors, officers and a company owned by a director, without interest	13	920,291	920,291
Lease liabilities		4,126	6,857
Royalties payable to a subcontractor	10	938,809	904,411
		1,863,226	1,831,559
Total liabilities		7,452,660	7,225,334
EQUITY			
Share capital	14	56,924,090	56,835,710
Contributed surplus		2,961,896	2,931,580
Accumulated other comprehensive income		1,283	5,140
Deficit		(59,865,819)	(58,517,741)
Equity attributable to owners		21,450	1,254,689
Non-controlling interests	21	561,466	579,493
Total equity		582,916	1,834,182
Total liabilities and equity		8,035,576	9,059,516

The accompanying notes are an integral part of the consolidated financial statements.
These consolidated financial statements were approved and authorized for issue by the Board of Directors on May 28, 2024.

ON BEHALF OF THE BOARD

(s) Patrick Levasseur Director
(s) Bernard J. Tourillon Director

HPQ Silicon Inc.
Consolidated Statements of Net Loss (unaudited)
As at March 31, 2024 and 2023
(in Canadian dollars)

	Notes	2024	2023
		$	$
Expenses			
Salaries and employee benefits expense	15.1	137,555	135,252
Other operating expenses	17	295,466	217,749
Research and development costs		304,091	1,044,989
Amortization of intangible assets	10	73,023	173,811
Amortization of property and equipment	9	478,986	472,219
Operating loss		1,289,121	2,048,020
Other income (expenses)			
Finance (loss) income	18	(3,633)	515,217
Finance costs	18	(56,939)	(114,081)
Share of loss from equity-accounted investment		(14,224)	(10,606)
Adjustment of ownership in equity-accounted investment		(2,827)	(540)
		(77,623)	389 990
Net loss		(1,366,744)	(1,658,030)
Net loss attributable to:			
Owners of the Company		(1,348,078)	(1,659,047)
Non-controlling interests	21	(18,666)	1,017
		(1,366,744)	(1,658,030)
Loss per share attributable to owners			
Basic and diluted loss per share	20	(0.00)	(0.00)

The accompanying notes are an integral part of the consolidated financial statements.

HPQ Silicon Inc.
Consolidated Statements of Comprehensive Loss (unaudited)
As at March 31, 2024 and 2023
(in Canadian dollars)

	Notes	2024	2023
		$	$
Net loss		(1,366,744)	(1,658,030)
Other comprehensive income item that will subsequently be reclassified to net earnings:			
Exchange difference resulting from the conversion of a foreign subsidiary		(3,857)	8,002
Comprehensive loss		(1,370,601)	(1,650,028)
Comprehensive loss attributable to:			
Owners of the Company		(1,351,935)	(1,651,045)
Non-controlling interests	21	(18,666)	1,017
		(1,370,601)	(1,650,028)

The accompanying notes are an integral part of the consolidated financial statements.

HPQ Silicon Inc.
Consolidated Statements of Changes in Equity (unaudited)
As at March 31, 2024 and 2023
(in Canadian dollars)

		Equity attribuable to owners						
	Notes	Share capital	Contibuted surplus	Deficit	Accumulated Other comprehensive	Total	Non-controlling interests	Total shareholders' equity
		$	$	$	$	$	$	$
Balance at January 1 st 2023		54,865,457	3,782,159	(44,270,333)	16,991	14,394,274	124,396	14,518,670
Exercice warrants	14.2	150,000	-	-	-	150,000	-	150,000
Common share issuance for the settlement of accounts payable		44,100	13,566	-	-	57,666	-	57,666
		55,059,557	3 ,795,725	(44,270,333)	16,991	14,601,940	124,396	14,726,336
Net income for the period		-	-	(1,659,047)	-	(1,659,047)	1,017	(1,658,030)
Total comprehensive for the period		-	-	-	8,002	8,002	-	8,002
Balance at March 31, 2023		55,059,557	3,795,725	(45,929,380)	2,993	12,950,895	125,413	13,076,308
Solde au 1 er janvier 2024		56,835,710	2,931,580	(58,517,741)	5,140	1,254,689	579,493	1,834,182
Common share issuance for the settlement of accounts payable	14.1	88,380	30,316	-	-	118,696	-	118,696
		56,924,090	2,961,896	(58,517,741)	5,140	1,373,385	579,493	1,952,878
Net income for the period		-	-	(1,348,078)	-	(1,348,078)	(18,666)	(1,366,744)
Total comprehensive for the period		-	-	-	(3,857)	(3,857)	639	(3,218)
Balance at March 31, 2024		56,924,090	2,961,896	(59,865,819)	1,283	21,450	561,466	582,916

The accompanying notes are integral part of the consolidated financial statements.

HPQ Silicon Inc.
Consolidated Statements of Cash Flows (unaudited)
As at March 31, 2024 and 2023
(in Canadian dollars)

	Notes	2024	2023
		$	$
OPERATING ACTIVITIES			
Net loss		(1,366,744)	(1,658,030)
Non-cash items			
Amortization of intangible assets		73,023	173,811
Amortization of property and equipment		478,986	476,219
Depreciation of right-of-use assets		2,993	2,869
Net change in fair value of marketable securities		(20,762)	(476,138)
Share of loss from equity-accounted investment		14,224	10,606
Adjustment of ownership in equity-accounted investment		2,827	540
Accretion revenues – royalties receivable		(7,989)	(6,681)
Accretion expenses – due to directors, officers and a company owned by a director		-	8,461
Accretion expenses – royalties payable		56,939	105,620
Salaries and employee benefits expense		8,750	-
Interest income on royalties receivable		(6,250)	(6,250)
		(722,734)	(1,368,973)
Changes in working capital items	20	443,367	2,264,774
Cash flows used for operating activities		(279,112)	895,801
INVESTING ACTIVITIES			
Additions to intangible assets		-	(51,749)
Purchase of investments in a subcontractor		-	(900,000)
Disposal of investments in a subcontractor		217,213	-
Tax credits received		-	41,689
Cash flows provided by investing activities		217,213	(910,060)
FINANCING ACTIVITIES			
Proceeds from exercise of warrants		-	150,000
Repayment of dues to directors		(15,385)	(23,077)
Repayment of lease liabilities		(2,990)	(3,771)
Cash flows used for financing activities		(18,375)	123,152
Net change in cash		(80,274)	108,893
Effect of exchange difference on cash		(3,193)	3,731
Cash, beginning of the period		597,404	1,143,902
Cash, end of the period		513,937	1,256,526

For additional cash flows information refer to Note 20.

Cash operations		
Interests received from operating activities	9,140	26,148

The accompanying notes are an integral part of the consolidated financial statements.

1. NATURE OF OPERATIONS

HPQ Silicon Inc. (“HPQ” or the “Company”) specializes in the development of technologies related to the transformation of quartz into silicon materials and its derivatives.

2. GOING CONCERN AND STATEMENT OF COMPLIANCE WITH IFRS

The consolidated financial statements of the Company have been prepared in accordance with IAS 34 interim financial reporting and the basis of the going concern assumption, meaning the Company will be able to realize its assets and discharge its liabilities in the normal course of operations.

The Company has not yet generated income or positive cash flows from its operations for the period ended March 31, 2024 and December 31, 2023. As at March 31, 2024, the Company has an accumulated deficit of $59,865,819 ($58,517,741 as at December 31, 2023). The company has negative working capital of $3,823,655 as at March 31,2024 ($3,167,826 as of December 31, 2023). Management has determined that the Company has adequate resources to continue operations normally for at least the next 3 months from the date of the statement of financial position. As the Company is still in its development phase and will now focus on the innovation of silicon solutions and related technology, the Company will likely continue to operate at a loss until the technology can be commercialized, and the Company will require additional financing in order to fund future operations and expansion plans. The Company does not expect to generate revenue from product sales unless and until it successfully completes development of its silicon solutions, which may take a number of years and is subject to significant uncertainty. Until such time that it can generate significant revenue from product sales, if ever, the Company expects to finance its operations through a combination of public or private equity or debt financings or other sources. The Company currently has no committed sources of financing available. While the Company has been successful in securing financing in the past, raising additional funds is dependent on a number of factors outside the Company’s control, and as such there is no assurance that it will be able to do so in the future. The ability of the Company to meet its commitments and discharge its liabilities as they become due and become profitable is dependent on the successful completion of the development of its technology and its commercial production, its ability to raise additional funding to finance these activities and the continued financial support of shareholders and lenders. The conditions mentioned above indicate the existence of a material uncertainty that may cast a significant doubt as to the Company’s ability to continue as a going concern.

The carrying amounts of assets, liabilities, revenues and expenses presented in the consolidated financial statements and the classification used in the statement of financial position have not been adjusted as would be required if the going concern assumption was not appropriate. Those adjustments could be material.

There is a significant business relationship and economic dependence with the subcontractor, PyroGenesis Canada Inc. (PyroGenesis or subcontractor), which is a shareholder of HPQ. HPQ does business with PyroGenesis for its research and development activities involving the plasma-based process, the latter is a company that develops plasma reactors in a closed-loop furnace. Under agreements with the Company or its subsidiaries, PyroGenesis provides engineering services and assembles the equipment and the Company pays the costs upon presentation of invoices for the work performed. The QRR PUREVAP™ equipment is located on the premises of PyroGenesis. As described in note 5.1, as of March 31, 2024, PyroGenesis has a right to convert the royalties into 50% of the shares of the subsidiary HPQ Polvere held by HPQ. The assets acquired with the subcontractor, PyroGenesis, as well as the related royalties’ payable are described in Note 9 and 11.The expenses recorded in 2023 relating to expenses generated with PyroGenesis are $1,763,600 in research and development costs. During the year ended December 31, 2023, PyroGenesis exercised 5,594,600 warrants for a total amount of $559,460.

(in Canadian dollars)

3. GENERAL INFORMATION

HPQ is incorporated under the *Canada Business Corporations Act*. The address of the registered office and its principal place of business is 3000 Omer-Lavallée Street, office 306, Montreal, Quebec, Canada. HPQ shares are listed on the TSX Venture Exchange.

4. MATERIAL ACCOUNTING POLICIES

4.1 Overall considerations

The material accounting policies that have been applied in the preparation of these consolidated financial statements are summarized below.

4.2 Principle of consolidation

The Company's consolidated financial statements include the accounts of the parent company and the subsidiaries it controls. Control exists when an investor is exposed, or has rights, to variable returns from its involvement with an investee and has the ability to affect those returns through its power over the investee. Subsidiaries are included in the consolidated financial statements from the date control is obtained until the date control ceases. Where the Company's interest in a subsidiary is less than 100%, the Company recognizes non-controlling interests. All intercompany balances, transactions, income, expenses, profits, and losses, including unrealized gains and losses have been eliminated on consolidation. When the Company ceases to have control; any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture, or financial asset.

The following table presents detailed information on the subsidiaries and affiliated companies held by the Company at the end of the financial reporting period.

Name	Principal activities	Country of incorporation	Percentages held by the Company
HPQ Nano Silicon Powders Inc. (HPQ Nano)	Manufacture of silicon nanoscale materials	Canada	100%
HPQ Silica Polvere Inc. (HPQ Polvere)	Manufacture of Fumed Silica	Canada	100%
NOVACIUM S.A.S. (Novacium)	Research and development of products made of silicon and its derivatives	France	20%

With regard to Novacium, since June 7, 2022, the Company exercises control through the holding of a preferred share granting it a right of veto over decisions that have a significant impact on the relevant activities of this affiliated company.

4.3 Investment in associate

The associate is an entity over which the Company is able to exert significant influence, but which is not a subsidiary. Investments in the associate are initially recognized at cost and subsequently accounted for using the equity method.

4. MATERIAL ACCOUNTING POLICIES (continued)

4.4 Functional and presentation currency

The Company and its subsidiaries each determine their functional currency based on the currency of the primary economic environment in which they operate. Transactions denominated in a currency other than the functional currency of the entity are translated at the exchange rate in effect on the transaction date. Related exchange differences are included in each entity's net income for the period in which they arise.

4.5 Financial Instruments

Recognition and derecognition

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the financial instrument.

Financial assets and liabilities are initially measured at fair value adjusted for transaction costs, if applicable.

Financial assets are derecognized when the contractual rights to cash flows from a financial asset expire, or when a financial asset and substantially all risks and rewards are transferred. A financial liability is derecognized in the event of termination, extinction, cancellation or expiration.

The classification of financial instruments under IFRS 9 is based on the entity’s business model and the characteristics of the contractual cash flows of the financial asset or liability.

Classification and initial valuation of financial assets

Financial assets are classified into one of the following categories:

- Amortized cost;
- Fair value through profit or loss (“FVTPL”);

All income and expenses relating to financial assets recognized in profit or loss are presented in finance costs or financial income.

Subsequent measurement of financial assets

Financial assets

Financial assets are measured at amortized cost if they meet the following conditions:

- They are held according to an economic model whose objective is to hold financial assets in order to collect the contractual cash flows;
- The contractual terms of the financial assets give rise to cash flows that correspond solely to repayments of principal and interest payments on the principal outstanding.

After initial recognition, they are measured at amortized cost using the effective interest rate method. Royalties’ receivables are included in this category of financial instruments.

Financial assets that are held in a different economic model other than “holding for the purpose of collection” or “holding for the purpose of collection and sale” are classified in the FVTPL category.

Financial assets at fair value through profit or loss (“FVTPL”)

The class includes the marketable securities of a quoted company as an equity investment.

Assets in this category are measured at fair value and gains or losses are recognized in net income. The fair value of financial assets in this category is determined based on transactions in an active market or by applying a valuation technique when there is no active market.

4. MATERIAL ACCOUNTING POLICIES (continued)

4.5 Financial instruments (continued)

Impairment of financial assets

The impairment provisions in IFRS 9 use more forward-looking information, the expected credit loss model, which replaces the IAS 39 loss model.

The recognition of credit losses is no longer dependent on the identification of a credit loss event by the Company. Rather, it must take into account an expanded range of information for assessing credit risk and assessing expected credit losses, including past events, current circumstances, and reasonable and justifiable forecasts that affect expected recoverability of future cash flows of the financial instrument.

The estimate of expected credit losses is determined at each reporting date to reflect changes in credit risk since the initial recognition of the related financial asset.

Classification and measurement of financial liabilities

The Company's financial liabilities include trade payables and other payables (excluding salaries and personnel expenses), royalties payable, due to directors and officers (current and non-current liabilities), and to a corporation owned by a director (excluding salaries and personnel expenses).

4.6 Basic and diluted loss per share

Basic loss per share is calculated by dividing the loss attributable to common equity holders of the Company by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated by adjusting loss attributable to common equity holders of the Company, and the weighted average number of common shares outstanding, for the effects of all dilutive potential common shares which include share options, brokers' warrants, brokers' units and warrants. Dilutive potential common shares shall be deemed to have been converted into common shares at the average market price at the beginning of the period or, if later, at the date of issue of the potential common shares.

4.7 Investment tax credits receivable

Tax credits are recognized as a reduction of the cost of assets acquired and on estimates made by management. The Company records these tax credits when there is reasonable assurance with regards to collections and assessments and that the Company will comply with the conditions associated to them. Adjustments required, if any, are reflected in the year when such assessments are received.

4.8 Property and equipment

Property and equipment are held at cost less accumulated amortization and accumulated impairment losses. Cost includes all costs incurred initially to acquire or construct an item of property and equipment. Amortization is recognized on a straight-line basis to reduce the cost to its estimated residual value, with a constant charge over the useful life of the asset.

Equipment and leasehold improvements are amortized on a straight-line basis over a period of 3 to 10 years and equipment under construction will be amortized on a straight-line basis over a period of 3 to 10 years when they are ready for use.

4. MATERIAL ACCOUNTING POLICIES (continued)

4.9 Intangible assets

Patents and intellectual property are intangible assets measured at historical cost less accumulated amortization and accumulated impairment losses, if any. The cost of patents consists of the cost of patent applications. The cost of intellectual property is initially comprised of the acquisition cost. Amortization is calculated on a straight-line basis over the estimated useful life of the patent and intellectual property, which is valued at 17 and 21 years, respectively. The amortization period and amortization method are reviewed annually and adjusted prospectively as required.

4.10 Impairment of assets

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). As a result, some assets are tested individually for impairment and some are tested at a cash-generating unit level.

Whenever events or changes in circumstances indicate that the carrying amount may not be recoverable, an asset or cash-generating unit is reviewed for impairment, with the exception the equipment under construction and intangible assets that are not yet ready for use.

Intangible assets that are not yet ready for use must be tested for impairment annually.

An impairment loss is recognized for the amount by which the asset's (or cash-generating unit's) carrying amount exceeds its recoverable amount, which is the higher of fair value less costs of disposal and value-in-use. To determine the value-in-use, management estimates expected futures cash flows from each cash-generating unit and determines a suitable discount rate in order to calculate the present value of those cash flows. Discount factors are determined individually for each cash-generating unit and reflect current market assessments of the time value of money and asset-specific risk factors.

An impairment loss is recognized in profit or loss for the amount by which the assets or cash-generating unit's carrying amount exceeds its recoverable amount. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less cost to sell and its value in use.

An impairment charge is reversed if the assets or cash-generating unit's recoverable amount exceeds it carrying amount.

4.11 Provisions and contingent liabilities

All provisions are reviewed at each reporting date and adjusted to reflect the current best estimate. No provision was recognized in the consolidated statements of financial position at March 31, 2024 and December 31, 2023.

4.12 Income taxes

Tax expenses recognized in profit or loss comprises the sum of deferred tax and current tax not recognized directly in equity.

Calculation of current tax is based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Deferred income taxes are calculated using the liability method.

Deferred tax assets are recognized to the extent that it is probable that the underlying tax loss or deductible temporary difference will be utilized against future taxable income. This is assessed based on the Company's forecast of future operating results, adjusted for significant non-taxable income and expenses and specific limits on the use of any unused tax loss or credit.

4. MATERIAL ACCOUNTING POLICIES (continued)

4.12 Income taxes (continued)

Deferred tax liabilities are generally recognized in full, although IAS 12 “Income Taxes” specifies limited exemptions. As a result of these exemptions, the Company does not recognize deferred tax on temporary differences relating to goodwill, or to its investments in subsidiaries.

4.13 Equity

Share capital represents the amount received on the issue of shares. If shares are issued when share options, brokers’ warrants, brokers’ units or warrants are exercised, the share capital account also comprises the compensation costs or the value of the stock options, warrants or brokers’ warrants previously recorded as contributed surplus.

Unit placements

Proceeds from unit placements are allocated between shares and warrants issued using the residual method. Proceeds are first allocated to the shares according to the quoted price of existing shares at the time of issuance and any residual in the proceeds is allocated to warrants.

4.14 Equity-settled share-based payments

The Company operates an equity-settled share-based payment plan for its eligible directors, officers, employees and consultants. The Company’s plan does not feature any option for a cash settlement.

All goods and services received in exchange for the grant of any share-based payments are measured at their fair values, unless that fair value cannot be estimated reliably. If the Company cannot estimate reliably the fair value of the goods or services received, the Company shall measure their value indirectly by reference to the fair value of the equity instruments granted. For the transactions with employees and others providing similar services, the Company measured the fair value of the services rendered by reference to the fair value of the equity instruments granted.

All equity-settled share-based payments (except brokers’ warrants, brokers’ units and brokers’ options) are ultimately recognized as an expense in profit or loss, depending on the nature of the payment with a corresponding credit to Contributed surplus, in equity. Equity-settled share-based payments to brokers, in respect of an equity financing are recognized as issuance costs of the equity instruments with a corresponding credit to contributed surplus, in equity.

4.15 Segmental reporting

The Company presents and discloses segmental information based on information that is regularly reviewed by the chief operating decision maker, i.e. the Chairman and the Board of Directors. The Company has determined that there was only one operating segment, being the sector of the transformation of quartz into silicon materials and derivative products.

4.16 New accounting standards adopted

IAS 1, Disclosure of Accounting Policies

In February 2021, the IASB issued amendments to IAS 1 to require entities to disclose its material accounting policies instead of its significant accounting policies.

This amendment is applicable to the Company beginning January 1, 2023. The adoption of this amendment did not have a significant impact on the Company’s financial statements.

4. MATERIAL ACCOUNTING POLICIES (continued)

4.16 New accounting standards adopted (continued)

IAS 8, Definition of Accounting Estimates

In February 2021, the IASB issued amendments to IAS 8 to replace the definition of a change in accounting estimate. Under the new definition, accounting estimates are “monetary amounts in financial statements that are subject to measurement uncertainty”.

This amendment is applicable to the Company beginning January 1, 2023. The adoption of this amendment did not have a significant impact on the Company’s financial statements.

IAS 12, Deferred Tax Related to Assets and Liabilities Arising From a Single Transaction

In May 2021, the IASB issued amendments to IAS 12 to require entities to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences.

This amendment is applicable to the Company beginning January 1, 2023. The adoption of this amendment did not have a significant impact on the Company’s financial statements.

4.17 New accounting standards not yet adopted

At the date of authorization of these consolidated financial statements, certain new standards, amendments and interpretations to existing standards have been published but are not yet effective and have not been adopted early by the Company.

Management anticipates that all of the relevant pronouncements will be adopted in the Company’s accounting policies for the first period beginning after the effective date of the pronouncement. Information on new standards, amendments and interpretations that are expected to be relevant to the Company’s consolidated financial statements is provided below. Certain other new standards and interpretations have been issued but are not expected to have a material impact on the Company’s consolidated financial statements.

IAS 1 Presentation of financial statements

Amendments to the classification of liabilities as current or non-current: includes classification of liabilities as current or non-current.

IFRS 16 Leases – lease liability in case of sale and leaseback

The amendments introduce a new accounting model that affects how a seller-turned-tenant accounts for variable lease payments resulting from a lease-back transaction.

IAS 7 Statement of cash flows & IFRS 7 Financial instruments: Disclosure – Supplier finance arrangements

The amendments introduce new communication objectives for a company to provide information on its supplier financing agreements that would enable investors to assess the impact of these agreements on liabilities, cash flows and exposure to the company’s liquidity risk. The new disclosure should also include the type and effect of non-cash changes in the book value of financial liabilities that are part of a funding agreement with a supplier.

5. JUDGMENTS, ESTIMATES AND ASSUMPTIONS

When preparing the consolidated financial statements, management undertakes a number of judgments, estimates and assumptions about recognition and measurement of assets, liabilities, income and expenses.

5.1 Significant management judgments

The following are significant management judgments in applying the accounting policies of the Company that have the most significant effect on the consolidated financial statements.

Determination of control, joint control or significant influence over a business

The Company must make judgments when assessing the level of control and influence it exercises over its holdings, considering in particular the way in which decisions concerning the relevant activities of the holding company are taken, the protective nature or substantial rights held by other holders and the Company's ability to influence the returns of the investee. The Company must also make judgments in identifying related parties.

Going concern

The assessment of the Company’s ability to continue as a going concern and to raise sufficient funds to pay for its ongoing operating expenditures, meets its liabilities for the ensuing year, and to fund planned and contractual scientific research and experimental development, involves significant judgment based on historical experience and other factors including expectation of future events that are believed to be reasonable under the circumstances. See Note 2 for more information.

Impairment indicators

The Company performs an evaluation of facts and circumstances from internal and external sources demonstrating the existence of potential indicators of impairment. Significant judgments are required in evaluating impairment indicators.

Conversion of royalties payable

As described in note 2, there is a significant business relationship and economic dependence with the subcontractor, PyroGenesis Canada Inc. (PyroGenesis or subcontractor), who is also a shareholder of HPQ. PyroGenesis owns less than 10 % of the shares of the Company including the dilutive effect of exercising warrants. In addition, certain subsidiaries of the Company have the obligation to pay perpetual royalties of 10 % of future sales related to intellectual properties purchased from PyroGenesis. At March 31, 2024, PyroGenesis has a right to convert the royalties from HPQ Polvere and HPQ Nano into 50% of the shares held by HPQ in its subsidiaries. The conversion right in the HPQ Nano subsidiary ceased on March 24, 2024, upon handover of the underlying NRSi intellectual property to PyroGenesis. The Company has assessed that PyroGenesis has neither de-facto control over the Company, given the fact that it does not have the ability to direct the relevant activities of the Company unilaterally, nor does it exercise significant influence over the Company. The Company considered the substance of the arrangement and agreements with PyroGenesis, the latter’s percentage shareholding of the Company, combined with the Company’s s obligation to pay royalties on future sales, the timing of such sales and the probability of conversion of such royalties into 50 % of the shares held by HPQ in certain subsidiaries of the Company.

5. JUDGMENTS, ESTIMATES AND ASSUMPTIONS (continued)

5.2 Assumptions and estimation uncertainty

Information about estimates and assumptions that have the most significant effect on the recognition and measurement of assets, liabilities, income and expenses are discussed below. Actual results may be substantially different.

Investment tax credits receivable

The calculation of the Company's refundable tax credit of scientific research and experimental development tax credits involves a degree of estimation and judgment with respect to certain items whose tax treatment cannot be finally determined until a notice of assessment has been issued by the relevant taxation authority and payment has been received. Differences arising between the actual results following final resolution of some of these items and the assumptions made could necessitate adjustments to the refundable tax credit, refundable tax credit for scientific research and experimental development, property and equipment and income tax expense in future periods. See Note 4.7 for more information.

Impairment of assets

When an indication of an impairment loss or a reversal of an impairment loss exists, the recoverable amount of the individual asset or the cash-generating units must be estimated.

In assessing impairment, the Company must make some estimates and assumptions regarding future circumstances. Estimates and assumptions may change if new information becomes available. If, information becomes available suggesting that the recovery of expenditure is unlikely, the amount capitalized is written off in profit or loss in the period when the new information becomes available.

Impairment of property and equipment and intangible assets

In assessing impairment, management estimates the recoverable amount of each cash-generating asset or unit based on future cash flows and uses an interest rate to discount them. The uncertainty in the estimates is related to assumptions about future operating results and the determination of an appropriate discount rate.

During the year ended December 31, 2023, the Company recorded a write-off of $2,951,879 on intangible assets and an impairment of $3,888,227 on intangible assets in profit or loss.

6. MARKETABLE SECURITIES

The Company holds shares and warrants in various public companies. During the period ended March 31, 2024, these shares and warrants were valued at fair market value, resulting in a loss of $20,762 (loss of $933,910 as at December 31, 2023).

The Company disposed of 442,000 shares the PyroGenesis for cash amounts totalling of $217,213, realizing a loss of $210,650.

Shares of various public companies are classified as FVTPL and are recorded at fair value using quoted market prices as at March 31, 2024 and are therefore classified as Level 1 within the fair value hierarchy.

The warrants in various public companies are classified as FVTPL and are recorded at fair value using a Black-Scholes pricing model with observable inputs and are therefore classified as Level 2 within the fair value hierarchy.

(in Canadian dollars)

6. MARKETABLE SECURITIES (continued)

The following table summarizes the information on marketable securities for the periods presented:

	March 31, 2024	December 31, 2023
	$	$
Balance at January 1st	676,493	710,403
Acquisition (b)	-	900,000
Disposed	(217,213)	-
Change in fair market value	(20,762)	(933,910)
	438,518	676,493

(a) During the month of August 2022, the Company received 3,000,000 units consisting of one common share and one-half of one warrant from Québec Innovatrice Materials Corp. (QIMC) (formerly Québec Silica Resources Inc.), a public company, in exchange for the sale of 27 claims from the Ronceveaux property and 36 claims from the Martinville property. The shares were issued at $0.07 per share and each full warrant is exercisable at $0.15 for a period of 3 years expiring on August 31, 2025. The fair value of one-half of one warrant was estimated using the Black-Scholes model as follows: share price $0.07, risk-free interest rate – 1.65%, expected life of warrants – 3 years, volatility rate – 417% and dividend rate – 0%.

The Company held 3,000,000 common shares as at March 31, 2024 (2022- 3,000,000) and the quoted price of QIMC shares was $0.015 as at March 31, 2024 ($0.025 as at December 31, 2023).

For the variation of warrants, the Company held 1,500,000 warrants that are exercisable at a price of $0.15 per share (2023 – 1,500,000). The fair value of warrants was valued at $3,938 as at March 31, 2024 ($12,136 as at December 31,2023) and was estimated using the Black-Scholes model with the following assumptions: share price of $0.015, risk-free interest rate of 4.20%, expected life of warrants of 1.42 years, volatility rate of 142% and a dividend rate of 0%. (As at December 31, 2023 - share price of $0.025, risk-free interest rate of 3.91%, expected life of warrants of 1.67 years, volatility rate of 144% and a dividend rate of 0%).

(b) During the month of March 2023, the Company acquired 900,000 units consisting of one common share and one warrant of PyroGenesis Canada Inc. for a total value of $900,000. Each warrant is exercisable at a price of $1.25 over a period of 2 years expiring on March 7, 2025. The Company held 858,000 common shares as at March 31, 2024 (1,300,000 common shares as at December 2023) and the quoted price of PyroGenesis shares was $0.43 as at March 31, 2024 ($0.43 as at December 31, 2023).

For the variation of warrants, the Company held 1,100,000 warrants (1,100,000 as at December 31,2023) that are exercisable at an average price of $1.34 per share ($1.34 as at December 31,2023). The fair value of the warrants was valued at $20,640 as at March 31, 2024 ($30,357 as at December 31, 2023) and was estimated using the Black-Scholes model with the following assumptions: share price of $0.43, risk-free interest rate of 4.20%, expected life of warrants of 0.86 years, volatility rate of 80% and dividend rate of 0% (December 31, 2023 - share price of $0.43, risk-free interest rate of 3.91%, expected life of warrants of 1.11 years, volatility rate of 78% and dividend rate of 0%).

(in Canadian dollars)

7. INSTALLMENTS TO A SUBCONTRACTOR

This amount represents the balance of the installment made by the Company, on September 28, 2022, to a subcontractor in the amount of $2,650,000 to be used for acquisition and works anticipated in the near future. This amount is conditional and had to be returned to the Company in the event the planned work and transaction were not agreed upon by the parties before December 31, 2022. The balance of this deposit was $890,000 as of December 31, 2022. This amount was refunded by the subcontractor during the first quarter of 2023.

8. ROYALTIES RECEIVABLE

During 2021, the Company received 166,667 shares of the capital stock of GBF as a settlement of a royalty receivable from GBF of $50,000. As a result of the exchange, the Company recognized an increase of $9,770 in its investment of BGF and a loss of $40,230.

On June 23, 2022, an addendum was signed to modify initial terms of the agreement. The NSR payments for each subsequent year have been replaced with 10% annual interest, the $250,000 royalty is non-transferable and the due date is December 31, 2025 including unpaid interest. As at March 31, 2024, the balance of interest receivable is $56,250 ($50,000 as at December 31, 2023).

	March 31, 2024	December 31, 2023
	$	$
Balance, beginning	174,886	146,273
Accretion charge	7,989	28,613
Balance, end	182,875	174,886

The fair value of the royalties' receivable was estimated using a present value technique, immediately prior to the modification date. The revalued fair value of $230,932 was estimated based on the probability of cash outflows over a four-year period at 18%, which is the interest rate for similar financial instruments. Undiscounted cash inflows are $250,000 and reflect management's estimate of the timing of royalty repayment.

During fiscal 2022, the Company derecognized the royalty receivable of $230,932 and with the new agreement revalued the royalty in the amount of $133,772, calculated based on estimated cash flows under the addendum over a period of 3.5 years discounted at a rate of 18%. Undiscounted cash inflows are $250,000 and reflect management's estimate of the timing of royalty payment. The change in royalty resulted in a loss of $97,160 which was recorded in net income during fiscal 2022.

(in Canadian dollars)

9. PROPERTY AND EQUIPMENT

Property and equipment of the Company are composed of leashold improvements, equipment and equipment under construction. The $5,090,000 equipment and rental improvements pertain to the QRR PUREVAP™ process pilot plant located at the subcontractor's facilities.

The carrying amount is set out as follows:

	Leasehold improvements	Equipment	Total
	$	$	$
Gross carrying amount			
Balance at January 1, 2024	344,000	5,072,587	5,416,587
Effect of foreign exchange	-	(23)	(23)
Balance at March 31, 2024	344,000	5,072,564	5,416,564
Accumulated depreciation			
Balance at January 1, 2024	229,333	3,254,334	3,483,667
Depreciation	28,667	450,319	478,986
Effect of foreign exchange	-	(6)	(6)
Balance at March 31, 2024	258,000	3,704,647	3,962,647
Carrying amount at March 31, 2024	86,000	1,357,917	1,453,917

	Leasehold improvements	Equipment	Total
	$	$	$
Gross carrying amount			
Balance at January 1, 2023	344,000	5,063,215	5,407,215
Acquisition	-	7,614	7,614
Effect of foreign exchange	-	1,758	1,758
Balance at December 31, 2023	344,000	5,072,587	5,416,587
Accumulated depreciation			
Balance at January 1, 2023	114,667	1,453,490	1,568,157
Depreciation	114,666	1,800,568	1,915,234
Effect of foreign exchange	-	276	276
Balance at December 31, 2023	229,333	3,254,334	3,483,667
Carrying amount at December 31, 2023	114,667	1,818,253	1,932,920

(in Canadian dollars)

10. INTANGIBLE ASSETS

Fumed Silica

On June 30, 2021, the Company acquired intellectual property for the production of fumed silica materials. Pursuant to the purchase agreement, the Company is committed to pay to the seller an annual royalty equal to 10% of net revenues, excluding the samples and testing products (as defined in the agreement) generated from the exploitation of the acquired technology or the minimum amounts per the agreement not exceeding total sales. Also, the seller is being granted the right to convert, at any time and at its sole discretion, its royalties into a 50% equity stake of HPQ Polvere. An amount of $3,300,000 paid in cash was recorded as the cost of intellectual property. No royalties to be paid are recorded for this process as of March 31, 2024 and December 31, 2023.

Under this agreement, the minimum annual royalty amounts not exceeding total sales owed when there is income are as follows:

	$
2024	100,000
2025	150,000
2026 and after	200,000

PUREVAP™ NSiR

On August 18, 2020, the Company acquired from PyroGenesis the PUREVAP™ NSiR technology for the fabrication of nano silicon materials. Pursuant to the purchase agreement, the Company is committed to pay to the seller the greater of an annual royalty equal to 10% of net revenues (as defined in the agreement) generated from the exploitation of the acquired technology or the minimum amounts per the agreement. Also, the seller is being granted the right to convert, at any time and at its sole discretion, its royalties into a 50% equity stake of HPQ Nano.

The intellectual property, was recognized upon acquisition for a total amount of $2,400,000, paid in cash. The related liability, royalties payable, of $864,013 calculated based on estimated cash flows under the agreement over a period of 25 years at a discounted rate of 18%, was also recorded to intellectual property.

After a careful review of the Nano Silicon material market environment, the technology advancement and associated future development costs needed to get the PUREVAPTM Nano Silicon Reactor (NSiR) to a potential commercial stage, HPQ has advised its technology provider that it no longer intends to pursue the development of this technology. During the year of 2023, the Company wrote off the total book value of intellectual property of $3,264,013 net of amortization of $466,287 and the book value of related patents of $170,758 net of amortization of $16,605, for a total expense of $2,951,879. The intellectual property was officially transferred to PyroGenesis on March 24, 2024. The royalties payable to PyroGenesis relating to this technology were derecognized as of December 31, 2023 and a gain on the cancellation of the royalties payable of 972,498 $ was recognized in the statement of profit or loss.

(in Canadian dollars)

10. INTANGIBLE ASSETS (continued)

PUREVAP™ QRR

On July 29, 2016, the Company acquired PUREVAP™ QRR technology from PyroGenesis for the transformation of quartz into silicon metal of high purity. Pursuant to the purchase agreement, the Company is committed to pay to the seller the greater of an annual royalty equal to 10% of net revenues (as defined in the agreement) generated from the exploitation of the acquired technology or the minimum annual amounts per the agreement are as follows:

	$
2024 and after	250,000

The intellectual property and its related liability, royalties payable, were recognized upon acquisition for a total amount of $815,427 and were calculated based on estimated cash flows under the agreement over a period of 20 years at a rate of 22%. The amount of $50,000 recorded as a deposit in 2015 was reversed at the cost of the intellectual property. In 2016, an amount of $1,000,000 paid in cash was recorded at the cost of the intellectual property.

Management uses its judgment to estimate the amount of royalties payable under the QRR PUREVAP™ and NSiR PUREVAP™ technology acquisition agreement. Estimation uncertainty is related to net revenue assumptions and the determination of a suitable discount rate.

The following table shows the distribution of royalty payments to be paid according to PUREVAP™ technology as at March 31, 2024:

	QRR	NSiR	Total
	$	$	$
Balance at January 1, 2024	1,359,329	212,500	1,571,829
Accretion expenses	56,939	-	56,939
Balance at March 31, 2024	1,416,268	212,500	1,628,768
Current	477,459	212,500	689,959
Non-current	938,809	-	938,809
	1,416,268	212,500	1,628,768

(in Canadian dollars)

10. INTANGIBLE ASSETS (continued)

PUREVAP™ QRR

The following table shows the distribution of royalty payments to be paid according to PUREVAP™ technology as at December 31, 2023:

	QRR	NSiR	Total
	$	$	$
Balance at January 1, 2023	1,124,778	1,044,051	2,168,829
Accretion expenses	234,551	141,397	375,948
Derecognition of NSiR	-	(972,948)	(972,948)
Balance at December 31, 2023	1,359,329	212,500	1,571,829
Current	454,918	212,500	667,418
Non-current	904,411	-	904,411
	1,359,329	212,500	1,571,829

CARBON EMISSION REDUCTION PROCESS:

On November 10, 2022, the company acquired from PyroGenesis, in consideration of $3,600,000, the technology relating to carbon emission reduction for the production of Silicon. n accordance with the purchase agreement, the Company has agreed to make the payment of the remaining balance of $3,430,000 no later than June 30, 2024.

The Company relies on government programs for the development of this technology. The activities of one of the main funders for this type of project, Sustainable Development Technology Canada (SDTC), are frozen until further notice due to internal governance issues at SDTC. During the last year of 2023, the management recorded an impairment of $3,599,999 of the book value with a corresponding depreciation of $264,706 and the book value of the related patents of $644,721 with a corresponding depreciation of $91,787 for a net charge of $3,888,227 and continues to retain its rights in the related intellectual property.

(in Canadian dollars)

10. INTANGIBLE ASSETS (continued)

The Company's intangible assets include patents and intellectual property. The carrying amount is as follows:

	Patents	Intellectual property	Total
	$	$	$
Gross carrying amount			
Balance at January 1, 2024	294,330	5,165,428	5,459,758
Effect of foreign exchange	(13)	-	(13)
Balance as at March 31, 2024	294,317	5,165,428	5,459,745
Accumulated depreciation			
Balance at January 1, 2024	68,141	831,781	899,922
Depreciation	33,737	39,286	73,023
Effect of foreign exchange	(5)	-	(5)
Balance as at March 31, 2024	101,873	871,067	972,940
Carrying amount at March 31, 2024	192,444	4,294,361	4,486,805

	Patents	Intellectual property	Total
	$	$	$
Gross carrying amount			
Balance at January 1, 2023	890,618	12,029,440	12,920,058
Acquisitions	216,481	-	216,481
Write-off	(170,758)	(3,264,013)	(3,434,771)
Impairment	(644,721)	(3,599,999)	(4,244,720)
Effect of foreign exchange	2,710	-	2,710
Balance as at December 31, 2023	294,330	5,165,428	5,459,758
Accumulated depreciation			
Balance at January 1, 2023	85,724	967,564	1,053,288
Depreciation	90,514	595,210	685,724
Write-off	(16,605)	(466,287)	(482,892)
Impairment	(91,787)	(264,706	(356,493)
Effect of foreign exchange	295	-	295
Balance as at December 31, 2023	68,141	831,781	899,922
Carrying amount at December 31, 2023	226,189	4,333,647	4,559,836

An amount of $73,023 ($685,724 as at December 31, 2023) is presented in Amortization of intangible assets.

(in Canadian dollars)

11. INVESTMENT ACCOUNTED FOR USING THE EQUITY METHOD

On March 31, 2024, the Company holds the 3.67% (4.07% as at December 31, 2023) voting and equity interest in BGF. The investment is accounted for using the equity method since December 2018. Although the Company holds less than 20% of the voting rights, it has concluded that it exercises significant influence over it, in particular because of the representation it has on the Board of Directors. As at March 31, 2024, the fair value of the investment amounts to $106,288 ($106,288 as at December 31, 2023).

The aggregate amount of the associate can be summarized as follows:

	January 31, 2024	October 31, 2023
	$	$
Current assets	365,658	195,758
Non-current assets	4,331,936	4,302,372
Current liabilities	458,240	356,507
Non-current liabilities	177,649	169,849
Net and total loss of comprehensive income	366,558	741,380

A reconciliation of the summarized financial information with the carrying value of the investment is as follows:

	January 31, 2024	October 31, 2023
	$	$
Total net assets	4,061,705	3,951,774
Contributed surplus not attached to ordinary shareholders	(513,704)	(351,571)
	3,548,001	3,600,203
Portion of the interest held by the Company	3.67%	4.07%
	130,159	147,210

The Company has not incurred any contingent liabilities or other commitments relating to its investment in this associate.

During 2021, the Company received 166,667 shares of the capital stock of GBF as a settlement of a royalty receivable from GBF of $50,000. As a result of the exchange, the Company recognized an increase of $9,770 in its investment of BGF and a loss of $40,230.

During the period ended March 31, 2024, BGF issued shares for the closing of a private placement and exercise of warrants. Those issuances decreased the Company’s ownership from 4.07% to 3.67%.

(in Canadian dollars)

12. TRADE AND OTHER PAYABLES

	March 31, 2024	December 31, 2023
	$	$
Trade accounts	369,958	326,466
Payable to a subcontractor	4,054,188	3,982,922
Salaries payable	33,750	25,000
Other	316,662	251,757
	4,774,558	4,586,145

13. DUE TO DIRECTORS, OFFICERS AND A COMPANY OWNED BY A DIRECTOR

The Company owes to directors, officers and a company owned by a director some salaries and remuneration for a nominal value of $1,004,906 (2023: $1,020,291). The Company has obtained confirmation for said nominal value of $920,291 in debts (2023: $920,291), that they will not request payment thereof prior to 12 months plus one day following March 31, 2024. These amounts are classified as non-current liabilities. The remaining amount of $84,615 (2023: $100,000) has been classified as current liabilities and presented as due to the directors.

14. EQUITY

14.1 Share capital

The authorized share capital of the Corporation consists of an unlimited number of common shares without par value. They are voting, participating and eligible to receive the dividends.

	March 31, 2024	December 31, 2023
	Number of shares	Number of shares
Shares issued at the beginning	365,296,688	351,998,770
Private placements (c) (d)	-	2,207,318
Issuance for the payment of accounts payable (a) (b) (e) (f)	396,000	396,000
Exercise of warrants	-	12,694,600
Total shares issued and fully paid at the end	367,692,688	365,296,688

(a) On February 21, 2023, the Company settled a trade account payable of $44,100 by the issuance of 180,000 units. Each unit consists of one common share and one warrant. Each warrant entitles the holder thereof to acquire one common share of the Company at a price of $0.32 per share for 24 months following the closing date of the transaction. An amount of $13,566 was attributable to the warrants and no gain or loss was recorded on this transaction.

(b) On June 07, 2023, the Company settled a trade account payable of $49,680 by the issuance of 216,000 units. Each unit consists of one common share and one warrant. Each warrant entitles the holder thereof to acquire one common share of the Company at a price of $0.27 per share for 24 months following the closing date of the transaction. An amount of $16,750 was attributable to the warrants and no gain or loss was recorded on this transaction.

(in Canadian dollars)

14. EQUITY (continued)

14.1 Share capital (continued)

(c) On November 17,2023, the Company completed a private financing for an amount of $337,013. The Company issued 1,225,500 units consisting of one common share and one warrant. Each warrant entitles the holder thereof to subscribe to one common share of the Company at a price of $0.30 per share during a period of 24 months following the closing of the financing. In addition, the Company paid an amount of $3,300 in commission fees and issued 12,000 warrants to an agent (for a value of $1,076). Each warrant entitles the holder to subscribe to one common share of the Company at a price of $0.30 per share for a period of 24 months from the date of closing of the financing. No amount related to warrants was recorded.

(d) On November 24,2023, the Company completed a private financing for an amount of $270,000. The Company issued 981,818 units consisting of one common share and one warrant. Each warrant entitles the holder thereof to subscribe to one common share of the Company at a price of $0.30 per share during a period of 24 months following the closing of the financing. In addition, the Company paid an amount of $10,575 in commission fees and issued 38,454 warrants to agents (for a value of $2,412). Each warrant entitles the holder to subscribe to one common share of the Company at a price of $0.30 per share for a period of 24 months from the date of closing of the financing.

(e) On January 14, 2024, the Company settled a trade account payable of $49,680 by the issuance of 216,000 units. Each unit consists of one common share and one warrant. Each warrant entitles the holder thereof to acquire one common share of the Company at a price of $0.27 per share for 24 months following the closing date of the transaction.

(f) On January 26, 2024, the Company settled a trade account payable of $38,700 by the issuance of 180,000 units. Each unit consists of one common share and one warrant. Each warrant entitles the holder thereof to acquire one common share of the Company at a price of $0.32 per share for 24 months following the closing date of the transaction.

During the year ended December 31, 2023, 12,694,600 common shares were issued following the exercise of warrants. The weighted average share price at the date of exercise was $0.10 per share.

14.2 Warrants

Outstanding warrants entitle their holders to subscribe an equivalent number of common shares, as follows:

	March 31, 2024		December 31, 2023	
	Number of warrants	Weighted average exercise price	Number of warrants	Weighted average exercise price
		$		$
Balance, beginning of reporting year	9,403,318	0.52	23,494,600	0.33
Granted	396,000	0.29	2,603,318	0.30
Exercised	-	-	(12,694,600)	0.10
Expired	-	-	(4,000,000)	0.61
Balance, end of reporting period	9,799,318	0.28	9,403,318	0.52

(in Canadian dollars)

14. EQUITY (continued)

14.2 Warrants (continued)

The weighted average fair value of $0.077 ($0.077 as at December 31,2023) of the warrants granted for the settlement of account payable was determined using the Black-Scholes model based on the following weighted average assumptions:

	2024	2023
Average share price at date of grant	$0.24	$0.24
Expected dividend yield	0%	0%
Expected weighted volatility	66.5%	66.5%
Average risk-free interest rate	4.39%	4.39%
Expected average life	2.0 years	2.0 years
Average exercise price at date of grant	$0.29	$0.29

Outlined below are the outstanding warrants which could be exercised for an equivalent number of common shares:

	March 31, 2024		December 31, 2023	
Expiration date	Number	Exercise price	Number	Exercise price
		$		$
May 2024 (1)	6,800,000	0.275	6,800,000	0.60
February 2025	360,000	0.32	180,000	0.32
June 2025	432,000	0.27	216,000	0.27
Novembre 2025	2,207,318	0.30	2,207,318	0.30
	9,799,318	0.28	9,403,318	0.52

(1) On February 2, 2024, the Company reduced the exercise price for 6,800,000 warrants expiring on May 2, 2024, decreasing from $0.60 to $0.275.

(in Canadian dollars)

14.3 Brokers' warrants

Outstanding brokers' warrants entitle their holders to subscribe to an equivalent number of common shares as follows:

	March 31, 2024		December 31, 2023	
	Number of broker's warrants	Weighted average exercise price	Number of broker's warrants	Weighted average exercise price
		$		$
Balance, beginning	50,454	0.30	-	-
Granted	-	-	50,454	0.30
Balance, end	50,454	0.30	50,454	0.30

The Company recorded as at December 31, 2023 an amount of $3,488 in issuance costs when the brokers' warrants were issued and was recorded as an increase to contributed surplus and a decrease to retained deficit.

The weighted average fair value $0.069 of the brokers' warrants granted was estimated on the grant date using the Black-Scholes option pricing model, based on the following weighted average assumptions:

	2023
Share price at date of grant	$0.22
Expected dividend yield	0%
Expected volatility	70%
Risk-free interest rate	4,46%
Expected life	2.0 years
Exercise price at date of grant	$0.30

The underlying expected volatility was determined in relation to the historical data of the Company's shares over the expected life of the brokers' warrants.

Outlined below are the outstanding brokers' warrants which can be exercised for an equivalent number of common shares:

	March 31, 2024		December 31, 2023	
Expiration date	Number	Weighted average exercise price	Number	Weighted average exercise price
		$		$
November 2026	50,454	0.30	50,454	0.30
	50,454	0.30	50,454	0.30

(in Canadian dollars)

15. EMPLOYEE REMUNERATION

15.1 Salaries and employee benefits expense

Salaries and employee benefits expense are analyzed below:

	As at March 31,	
	2024	2023
	$	$
Salaries and benefits	46,652	51,459
Management fees	93,750	93,750
Salaries and benefits recovered	(2,847)	(9,957)
	137,555	135,252

15.2 Share-based payments

Under this option plan, the Directors may grant options to its Directors, Employees and Consultants or of those of its subsidiaries. The maximum number of shares to be granted under the Plan is 19,100,000 (19,100,000 as at December 31, 2023). As at March 31, 2024, 17,735,000 options remained exercisable (17,735,000 options as at December 31, 2023).

The Directors fix the exercise price of an option granted under the plan which cannot be lesser than the last closing price of the Corporation's shares as quoted by the TSX Venture Exchange at the end of the day preceding the one on which an option is granted, less the applicable discount as defined by the TSX Venture Exchange. The options can be exercisable for a maximum of ten years. Options are non-assignable and non-transferable except by will or the laws of succession. Upon the death of an option holder, the option may be exercised by the legal heirs or personal representatives of the option holder for a period not exceeding one year from the option holder's death provided that nothing in the foregoing shall have the effect of extending the Term of an option beyond its original expiry date. Options granted to an option holder who is a Director, Employee, Consultant or Management Company Employee shall expire at no later than a period of 12 months after the option holder ceases to be part of at least one of those categories, by reason other than the option holder's death.

No more than 5% of the shares issued by the Company may be granted to any individual in any 12-month period (unless the Company has obtained disinterested shareholder approval). No more than 2% of the shares issued by the Company may be granted to any one Consultant, in any 12-month period. No more than an aggregate of 2% of the shares issued by the Company may be granted to Persons providing Investor Relations Activities, during a 12-month period, calculated at the date the option was granted. Options granted to Consultants providing Investor Relations activities must vest gradually over 12 months with no more that ¼ of the options vesting in any three-month period. No accelerated acquisition of such options granted to those consultants shall be permitted if not approved by the Exchange. Options granted to an option holder who is providing Investor Relations activities shall terminate on expiry of a period not in excess of 30 days following the date that the option holder ceases to be provide such services. The number of Options granted to insiders, within a 12-month period may not exceed 10% of the issued Shares of the resulting issuer. The number of shares reserved for issuance under the Plan granted to insiders may not exceed 10% of the issued shares of the Company.

(in Canadian dollars)

15. EMPLOYEE REMUNERATION (continued)

15.2 Share-based payments (continued)

The Company's share options are as follows for the reporting periods presented:

	March 31, 2024		December 31, 2023	
	Number	Weighted average exercise price	Number	Weighted average exercise price
		$		$
Outstanding, beginning of reporting year	17,735,000	0.46	16,485,000	0.67
Granted	-	-	10,900,000	0.22
Expired	-	-	(9,650,000)	0.55
Outstanding and exercisable, end of reporting period	17,735,000	0.46	17,735,000	0.46

The table below summarizes the information related to outstanding share options as at March 31, 2024:

Outstanding options		
Number of options	Weighted average exercise price	Weighted average remaining contractual life
	$	(years)
9,800,000	0.215	4.74
200,000	0.23	1.27
800,000	0.28	0.51
900,000	0.28	1.52
700,000	0.35	3.12
5,335,000	1.00	2.72
17,735,000	0.46	3.68

(in Canadian dollars)

15. EMPLOYEE REMUNERATION (continued)

15.2 Share-based payments (continued)

The table below summarizes the information related to outstanding share options as at December 31, 2023:

Outstanding options		
Number of options	Weighted average exercise price	Weighted average remaining contractual life
	$	(years)
9,800,000	0.215	4.99
200,000	0.23	1.52
800,000	0.28	0.76
900,000	0.28	177
700,000	0.35	3.37
5,335,000	1.00	2.97
17,735,000	0.46	3.93

The weighted fair value of the granted options of $0.127 as at December 31, 2023 was determined using the Black-Scholes option pricing model based on the following weighted average assumptions:

	2023
Average share price at date of grant	$0.21
Expected dividend yield	0%
Expected weighted volatility	74.0%
Average risk-free interest rate	4.26%
Expected average life	4.7 years
Average exercise price at date of grant	$0.22

The underlying expected volatility was determined by reference to historical data of the Company's shares over the expected average life of the options. No special features inherent to the options granted were incorporated into measurement of fair value.

In total, an amount of $1,380,036 as at December 31, 2023 of employee remuneration expense (all of which related to equity-settled share-based payment transactions) were included in profit or loss and credited to contributed surplus, therefore $1,155,634 as salaries and employee benefit expenses, $147,352 as professional and consulting fees and $77,050 in research and development expenses.

(in Canadian dollars)

16. FAIR VALUE MEASUREMENT

16.1 Financial instruments measured at fair value

The hierarchy groups financial assets and liabilities into three levels based on the significance of inputs used in measuring the fair value of the financial assets and liabilities. The fair value hierarchy levels are as follows:

– Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities at the reporting date;

– Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and

– Level 3: Inputs for the assets or liabilities that are not based on observable market data.

The fair value of the marketable securities in a quoted company was estimated based on the market price at the closing date. Marketable securities in a quoted company measured at fair value in the consolidated statement of financial position as at March 31, 2024 and December 31, 2023 are classified as Level 1 and warrants are classified as Level 2.

16.2 Financial instruments measured at amortized cost for which a fair value is disclosed

The fair value of royalties' receivable, due to directors, officers and a company owned by a director and royalties payable was estimated using an analysis of discounted cash flows with an interest rate for similar financial instruments.

The fair value royalties' receivable in the current term as well as the royalties payable in the current term approximate the book value at the end of the period.

The fair value of royalties' receivable in the non-current term, due to directors, officers and a company owned by a director and royalties payable in the non-current term is $182,875, $920,291 and $938,809 respectively ($174,886, $920,291 and $904,411 respectively as at December 31, 2023). See Notes 8, 13 and 10 for methods of assessing fair values.

Financial instruments are classified in Level 2 of the fair value hierarchy except for royalties' receivable and royalties' payable which are classified in Level 3 of the fair value hierarchy.

17. OTHER OPERATING EXPENSES

Other operating expenses are detailed as follows:

	March 31,	
	2024	2023
	$	$
Professional and consultation fees	217,526	165,674
Travelling expenses	16,612	3,854
Office expenses	40,333	30,375
Information to shareholders and registration fees	14,293	17,954
Bank charges	1,940	1,537
Loss (gain) on exchange rate	6,502	(17)
Administrative expenses recovered	(1,740)	(1,628)
	295,466	217,749

(in Canadian dollars)

18. FINANCE INCOME AND FINANCE COSTS

Finance income consists of the following for the reporting periods presented:

	March 31,	
	2024	2023
	$	$
Change in fair value of marketable securities in a quoted company	(20,762)	476,138
Amortization of discount rate on royalties' receivable	7,989	6,681
Interest income	9,140	32,398
	(3,633)	515,217

Finance costs consists of the following for the reporting periods presented:

	March 31,	
	2024	2023
	$	$
Accretion expenses- royalties payable	(56,939)	(105,620)
Accretion expenses- due to directors, officers and companies owned by a director	-	(8,461)
	(56,939)	(114,081)

19. INCOME (LOSS) PER SHARE

The calculation of basic loss per share is based on the loss for the period divided by the weighted average number of outstanding shares during the period. In calculating the diluted loss per share, dilutive potential common shares such as warrants, brokers' warrants, brokers' units, share options and the convertible debenture have not been included as they would have the effect of decreasing the loss per share. Decreasing the loss per share would be antidilutive. Details of share options and warrants issued that could potentially dilute earnings per share in the future are given in Notes 14.2 ,14.3 and 15.2.

Both the basic and diluted loss per share have been calculated using the loss as the numerator, i.e. no adjustment to the loss was necessary in 2024 and 2023.

	March 31,	
	2024	2023
Net loss	$(1,366,744)	$(1,658,030)
Weighted average number of outstanding shares	367,672,229	353,372,030
Basic and diluted loss per share	$(0.00)	$(0.00)

(in Canadian dollars)

20. ADDITIONAL INFORMATION – CASH FLOWS

The changes in working capital items are detailed as follows:

	As at March 31,	
	2024	2023
	$	$
Goods and services tax receivable	(36,183)	765,871
Prepaid expenses and other	38,099	(37,983)
Deposit on contract	-	693,000
Installments to a subcontractor	-	890,000
Investment tax credits receivable	143,062	-
Trade and other payables	298,359	(46,114)
Income tax payable	30	-
	443,367	2,264,774

Non-cash balance sheet transactions are detailed as follows:

	As at March 31,	
	2024	2023
	$	$
Trade and other payables included in intangible assets	3,582,487	3,792,009
Issuance of shares for payment of accounts payables included in intangible assets	88,380	44,100
Issuance of equity instruments for payment of accounts payable	30,316	13,566

21. NON-WHOLLY-OWNED PARTNER COMPANY

	March 31, 2024	December 31, 2023
Proportion of ownership interests and voting rights held by non-controlling interests	80%	80%
Net earnings allocated to non-controlling interests for the period	(18,666)	442,760
Non-controlling interests	561,466	579,493

(in Canadian dollars)

21. NON-WHOLLY-OWNED PARTNER COMPANY (continued)

Summarized financial information of the subsidiary that has non-controlling interests is set out below. The summarized financial information below represents amounts before intragroup eliminations.

	March 31, 2024	December 31, 2023
	$	$
Summary Statements of Net Loss and Comprehensive Loss		
Income	350,640	1,571,326
Expenses	373,972	1,017,876
Comprehensive income	(23,332)	553,450
Comprehensive income attributable to:		
Owners of the Company	(4,666)	110,690
Non-controlling interests	(18,666)	442,760
	(23,332)	553,450

	March 31, 2024	December 31, 2023
	$	$
Summary Statements of Cash Flows		
Cash flows from operating activities	6,695	159,465
Cash flows used in investing activities	-	(7,614)
Cash flows from financing activities	-	-
Net change in cash and cash equivalents	6,695	151,851
Summary Statement of Financial Position		
Current assets	822,145	837,130
Non-current assets	41,527	47,764
	863,672	884,894
Current liabilities	164,854	162,406
Non-current liabilities	-	-
Net asset	698,768	722,488
Equity attribuable to owners	137,302	144,293
Non-controlling interests	561,466	577,168
Foreign currency translation adjustment	50	1,027
	863,672	884,894

(in Canadian dollars)

22. RELATED PARTY TRANSACTIONS

The Company's related parties include key management and companies held by a director or an officer, as described below.

Unless otherwise stated, none of the transactions incorporated special terms and conditions and no guarantees were given or received. Outstanding balances are usually settled in cash with the exception of patent acquisitions which were settled by the issuance of units during the first two quarters.

22.1 Transactions with key management personnel

Key management personnel of the Company are members of the Board of Directors and officers. Key management personnel remuneration and asset acquisitions are as follows:

	As at March 31,	
	2024	2023
	$	$
Salaries and employee benefits expense	22,744	25,857
Salaries and benefits for research and development (1)	226,357	207,373
Management fees (2)	93,750	93,750
Salaries and employee benefit expenses	342,851	326,980
Acquisition of patent (1)	118,696	57,666
Salaries and employee benefit expenses and acquisition of patent	461,547	384,646

(1) Paid to managers and shareholders of Novacium S.A.S. .

(2) Paid to a company owned by a director.

Trade and other payables include an amount of $309,252 due to a company owned by a director ($186,452 as at December 31, 2023) and $3,057 to the officers and shareholders of Novacium S.A.S. ($112,126 as at December 31, 2023).

On March 31, 2024, due to directors, officers and a company owned by a director totalled $1,004,906 ($1,020,291 as at December 31, 2023).

23. CAPITAL MANAGEMENT POLICIES AND PROCEDURES

The Company's capital management objectives are to ensure the Company's ability to continue as a going concern, to increase the value of the assets of the business, and to provide an adequate return to owners of the Company.

These objectives will be achieved by technological development related to the transformation of quartz into silicon materials.

The Company monitors capital on the basis of the carrying amount of equity.

The Company is not exposed to any externally imposed capital requirements

23. CAPITAL MANAGEMENT POLICIES AND PROCEDURES (continued)

The Company finances its technology development activities related to the transformation of quartz into silicon materials primarily by seeking additional capital either through private placements or public placements. When funding conditions are not optimal, the Company can sign option agreements or other agreements to be able to continue its exploration and evaluation activities or can slow down its activities until funding conditions improve.

24. FINANCIAL INSTRUMENT RISKS

The Company is exposed to various risks in relation to financial instruments. The main types of risks are market risk, credit risk, interest rate risk, currency risk and liquidity risk.

The Company risk management is coordinated in close cooperation with the Board of Directors. The Company's risk management focuses on actively securing the Company's short-term to medium-term cash flows by minimizing the exposure to financial markets.

The Company does not actively engage in the trading of financial assets for speculative purposes.

24.1 Market risk

The most significant financial risks to which the Company is exposed are described below.

Equity price risk is defined as the potential adverse impact on the Company's results of operations and on the ability to obtain equity financing, or the ability of holders of convertible securities (options and warrants) to exercise their securities, which affects proceeds to the Company on such exercises, due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors individual equity movements to determine the appropriate course of action to be taken by the Company.

Commodity price risk is defined as the potential adverse impact on the Company's future results in respect of the fluctuation in the price of raw materials. The Company is exposed to commodity price risk including exposure to the fluctuating market prices of quartz and graphite. The Company is exposed to other price risk.

Other price risk sensitivity.

The Company was exposed to fluctuations in the market prices of its marketable securities in a quoted company and derivative financial liability. The maximum risk to which the shares and derivative financial liability were exposed is equal to their fair value.

If the quoted share price for the shares had changed by ± 15% as at March 31, 2024 (± 15% as at December 31, 2023), the profit or loss and equity would have changed by $62,100 ($126,400 as at December 31, 2023).

24.2 Credit risk

Credit risk is the risk that another party to a financial instrument fails to meet its obligations and, therefore, leads the Company to incur a financial loss.

The Company's maximum exposure to credit risk is limited to the carrying value of cash and royalties' receivable for an amount of $696,812 as at March 31, 2024 ($772,290 as at December 31, 2023).

The credit risk for the deposit on contract and the royalties' receivable is considered limited. The Company continuously monitors default of counterparts. No impairment loss has been recognized in the periods presented.

(in Canadian dollars)

24. FINANCIAL INSTRUMENT RISKS (continued)

24.2 Credit risk (continued)

The credit risk for cash is considered negligible, since the counterpart is a reputable bank with high quality external credit ratings.

The royalties to be paid by the Company are due to a company towards which it is economically dependent. The company considers the term thereof at 12 years.

24.3 Interest rate risk

The Company is exposed to interest rate risk because of the fluctuation of interest rates. The Company's exposure to variable interest rates is limited to cash and cash equivalents.

24.4 Currency risk

Currency risk is the risk of fluctuation in gains or losses that arise from fluctuations in foreign exchange rates and the degree of volatility of those rates. The Company is exposed through its subsidiary Novacium to currency risk with regards to its transactions in euros.

Based on the value of net assets denominated in foreign currency as at March 31, 2024, a ±3% (±10% as at December 31, 2023) fluctuation in foreign exchange rates relative to the Canadian dollar would impact the loss and comprehensive income for the period by approximately $7,000 ($7,400 as at December 31, 2023).

24.5 Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations with financial liabilities that are settled by cash or another financial asset.

Liquidity risk management serves to maintain a sufficient amount of cash and to ensure that the Company has financing sources such as private and public investments for a sufficient amount.

Over the period, the Company has financed its working capital requirements and acquisitions of property and equipment and intangible assets through private placements.

The following table sets out the contractual maturities of the Company's financial liabilities:

	March 31, 2024	December 31, 2023
	$	$
Less than a year		
Trade payables and other accounts payable	686,620	578,223
Payable to a subcontractor	4,054,188	3,982,922
Lease liabilities	12,079	12,019
Royalties payable RRQ Purevap™	500,000	500,000
Royalties payable NRSi Purevap™	212,500	212,500
Total	5,465,387	5,285,664

(in Canadian dollars)

24.5 Liquidity risk (continued)

	March 31, 2024	December 31, 2023
	$	$
Between one and 5 years		
Lease liabilities	6,099	9,144
Royalties payable RRQ Purevap™	1,000,000	1,000,000
	1,006,099	1,009,144
More 5 years		
Royalties payable RRQ Purevap™	2,000,000	2,000,000
	2,000,000	2,000,000

The Company considers expected cash flows from financial assets in assessing and managing liquidity risk, in particular its cash.

25. CONTINGENCIES AND COMMITMENTS

The Company is partially financed through the issuance of flow-through shares and, and is engaged in realizing mining exploration work, under the terms of the tax rules regarding this type of financing.

These tax rules also set deadlines for carrying out the exploration work, which must be performed no later than the first of the following dates:

- Two years following the flow-through financings;
- One year after the Company has renounced the tax deductions relating to the exploration work.

However, there is no guarantee that the Company's exploration expenses will qualify as Canadian exploration expenses, even if the Company is committed to taking all the necessary measures in this regard.

As at March 31, 2024, in addition to the royalties' payable mentioned in Note 10, the Company was committed to pay an amount of $284,021 with the contractor PyroGenesis for the fumed silica project.

26. SUBSEQUENT EVENTS

After the end of the period, 1,000,000 stock options were exercised for a total amount of $215,000 in cash.