QUARTERHILL INC.

2023 Annual Report

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Quarterhill Inc.

Management's Discussion and Analysis
For the three months and year ended December 31, 2023 and 2022

March 14, 2024

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INTRODUCTION

This Management's Discussion and Analysis of Quarterhill Inc. (this "MD&A") is dated March 14, 2024. References in this MD&A to "Quarterhill", "the Company", "we", "us" and "our" refer to Quarterhill Inc. and its consolidated subsidiaries during the periods presented, unless the context requires otherwise. References to "Common Shares" in this MD&A refer to common shares in the capital of Quarterhill. References to "Convertible Debentures" in this MD&A refer to Quarterhill's 6.0% Convertible Unsecured Subordinated Debentures due October 30, 2026.

The Common Shares and Convertible Debentures are listed under the symbols "QTRH" and "QTRH.DB" respectively on the Toronto Stock Exchange (the "TSX") and the Common Shares are listed on the United States OTCQX Best Market (the "OTCQX") under the symbol "QTRHF".

Quarterhill is a growth-oriented Canadian company operating in the intelligent transportation system ("ITS") industry. We are a global leader in ITS that manages attractive technology companies in the intelligent transportation systems industry and its adjacent markets.

This MD&A provides information for the three months and year ended December 31, 2023 and up to and including March 14, 2024. This MD&A should be read in conjunction with Quarterhill's consolidated financial statements ("financial statements") and the notes thereto for the year ended December 31, 2023, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Unless otherwise indicated, all financial information in this MD&A is reported in thousands of Canadian dollars, except for Common Share and earnings per share data which is reported in number of Common Shares and Canadian dollars respectively. The tables and charts included in this document form an integral part of this MD&A.

This MD&A has been prepared with reference to National Instrument 51-102 - Continuous Disclosure Obligations of the Canadian Securities Administrators. Additional information filed by us with the Canadian Securities Administrators, including quarterly reports, annual reports and our Annual Information Form for the year ended December 31, 2023 (our "AIF"), is available online at www.sedarplus.ca and also on our website at www.Quarterhill.com.

Quarterhill and our operating subsidiaries operate in ever-changing business and competitive economic environments that expose us to a number of risks and uncertainties, many of which are discussed under the heading "Risks and Uncertainties" in this MD&A and/or under the heading "Risk Factors" in our AIF available online at www.sedarplus.ca.

Our management is responsible for establishing appropriate information systems, procedures and controls to ensure that all financial information disclosed externally, including in this MD&A, and used internally by us, is complete and reliable. These procedures include the review and approval of our financial statements and associated information, including this MD&A, first by our management's Disclosure Committee, then by the Audit Committee of our Board of Directors (the "Board") and, finally, by our Board as a whole.

FOURTH QUARTER 2023 HIGHLIGHTS

Business Performance and Future Business Developments

Revenues for the three months and year ended December 31, 2023 were $58,451 and $194,316 compared to $40,142 and $159,334 in the comparative prior year period, respectively. The increase in revenue is primarily driven by stronger performance in our North American tolling and enforcement revenue streams.

During the three months and year ended December 31, 2023, through our wholly owned subsidiaries, we announced new long-term customer contracts worth approximately $6.9 million and $35.3 million in lifetime contract value to provide a variety of ITS products, solutions and services to US government agencies. The initial term of these contracts currently ranges from one to three years with renewal options to extend services.

Our tolling business launched the operation of the E-ZPass Interoperability Hub with all E-ZPass InterAgency Group ("IAG") members now utilizing the new Hub. The Hub will help IAG members provide a seamless tolling experience for their customers across interstate lines, with less time and effort than before. The tolling business also went live on select roadways with both the Central Texas Regional Mobility Authority ("CTRMA"), in Austin, Texas, and with the Orange County Transportation Authority ("OCTA"), in Orange County, California. Additional roadways for both CTRMA and OCTA are expected to go-live in 2024.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements and forward-looking information within the meaning of Canadian securities laws, including such statements relating to:

- assumptions and expectations described in our critical accounting policies and estimates;
- our expectation regarding the adoption and impact of certain accounting pronouncements;
- our expectation regarding the growth rates of our subsidiaries' businesses;
- our estimates regarding our effective tax rate;
- our expectations regarding our ability to acquire additional businesses to further our growth; and
- our expectations with respect to the sufficiency of our financial resources.

The words "expect", "anticipate", "estimate", "may", "will", "should", "would", "intend", "believe", "plan", "continue", "project", "could", the negatives of these words or other variations on these words, comparable terms and similar expressions are intended to identify forward-looking statements and forward-looking information. Forward-looking statements and forward-looking information are based on estimates and assumptions made by us in light of our experience and our perception of historical trends, current conditions and expected future developments, as well as other factors that we believe are appropriate in the circumstances.

We provide forward-looking statements and forward-looking information to assist external stakeholders in understanding our management's expectations and plans relating to the future as of the date of this MD&A and such statements and information may not be appropriate for any other purposes. The forward-looking statements and forward-looking information in this MD&A are made as of the date of this MD&A only. We have no intention and undertake no obligation to update or revise any forward-looking statements or forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.

NON-IFRS FINANCIAL MEASURES AND NON-IFRS RATIOS

Non-IFRS Financial Measures and Non-IFRS Ratios

Quarterhill uses both IFRS and certain non-IFRS financial measures to assess performance. Non-IFRS financial measures are financial measures disclosed by a company that (a) depict historical or expected future financial performance, financial position or cash flow of a company, (b) with respect to their composition, exclude amounts that are included in, or include amounts that are excluded from the composition of the most directly comparable financial measure disclosed in the primary financial statements of the company, (c) are not disclosed in the financial statements of the company and (d) are not a ratio, fraction, percentage or similar representation. Non-IFRS ratios are financial measures disclosed by a company that are in the form of a ratio, fraction, percentage or similar representation that has a non-IFRS financial measure as one or more of its components, and that are not disclosed in the financial statements of the Company.

These non-IFRS financial measures and non-IFRS ratios are not standardized financial measures under IFRS, and, therefore, are unlikely to be comparable to similar financial measures presented by other companies. Management believes these non-IFRS financial measures and non-IFRS ratios provide transparent and useful supplemental information to help investors evaluate our financial performance, financial condition, and liquidity using the same measures as management. These non-IFRS financial measures and non-IFRS ratios should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with IFRS.

Adjusted EBITDA - Non-IFRS Financial Measures

In this MD&A, we use the non-IFRS financial measure "Adjusted EBITDA" to mean net (loss) income adjusted for (i) income taxes, (ii) finance expense or income; (iii) amortization and impairment of intangibles; (iv) other charges and other one-time items; (v) depreciation of right-of-use assets and property, plant and equipment; (vi) stock-based compensation; (vii) foreign exchange (gain) loss; (viii) other income which includes equity in earnings from joint ventures; (ix) dividends received from joint ventures; and (x) changes in fair value of derivative liability. Adjusted EBITDA is used by our management to assess our normalized cash generated. Adjusted EBITDA is also a performance measure that may be used by investors to analyze the cash generated by Quarterhill. Adjusted EBITDA should not be interpreted as an alternative to net loss and cash flows from operations as determined in accordance with IFRS or as a measure of liquidity. The most directly comparable IFRS financial measure is Net (loss) income. See the Reconciliation of Net (Loss) Income to Adjusted EBITDA within the Overall Performance section of this MD&A.

Adjusted EBITDA per share – Non-IFRS ratio

Adjusted EBITDA per share is calculated as Adjusted EBITDA divided by the basic weighted average of Common Shares. Adjusted EBITDA per share is used by our management and investors to analyze cash generated by Quarterhill on a per share basis. The most comparable IFRS measure is earnings per share.

Supplementary Financial Measures

Supplementary financial measures are financial measures disclosed by a company that (a) are, or are intended to be, disclosed on a periodic basis to depict the historical or expected future financial performance, financial position or cash flow of a company (b) are not disclosed in the financial statements of the company, (c) are not non-IFRS financial measures, and (d) are not non-IFRS ratios.

Key supplementary measures disclosed in this MD&A are as follows:

Gross margin %

Calculated as gross profit as a percentage of revenue.

Working capital

Calculated as total current assets minus total current liabilities.

DESCRIPTION OF OUR BUSINESS

Quarterhill is a disciplined manager and acquirer of established ITS companies. Our goal is to pursue both organic and inorganic growth that capitalizes on attractive market trends in the ITS industry and its adjacent markets. Additionally, in appropriate circumstances, we may also divest certain assets if favourable conditions for such a divestiture are presented.

Strategy

We are focusing our business on building a consistently profitable company through the management and growth of companies in the ITS industry and its adjacent markets.

We believe that if we increase the share of our revenue derived from recurring sources we will also increase the predictability of our revenues and cash flows. This will allow us to better scale our operations to ensure we meet our strategic mandate of operating profitably regardless of the prevailing economic market conditions as we grow both organically and through acquisitions. In appropriate circumstances, we may also divest certain assets if favourable conditions for such a divestiture are presented, exemplified by the sale of WiLAN. On December 28, 2023, the Company disposed of its net investment in PAT Traffic, a foreign subsidiary operating in Latin America.

Our existing businesses are fully described in more detail in our AIF.

Our Business

Our businesses are focused on enhancing safety, mobility, efficiency and environmental performance across road and other transportation infrastructure by providing ITS, products, solutions and services. Based on market research, we believe the global ITS industry is expected to exceed US$90 billion by 2025, influenced by major driving factors such as infrastructure spending, public safety, traffic congestion, smart city development and environmental impact. We believe that we are well positioned to capitalize on these trends.

Our businesses are leading providers of essential ITS products, solutions and services with more than 60 years of combined experience in areas such as commercial vehicle enforcement and tolling. Our customers include government transportation and tolling agencies, traffic engineering operators and industrial, and transportation service companies worldwide.

We have predictable and recurring revenue streams derived from selling ITS systems, products and solutions through long-term customer relationships and recurring service contracts. Our businesses offer a portfolio of integrated hardware and software to detect, measure and analyze a variety of transportation metrics which produces a valuable source of analytics and telematics for users. With a variety of product and service offerings throughout our operations in North America and Europe, we believe there is an abundance of opportunity to create scale and efficiencies.

Former Licensing Segment

On June 15, 2023, we disposed of our investment in WiLAN, which represented our licensing segment in its entirety, for adjusted net proceeds of $54,286 through a combination of cash and equity consideration. Net income (loss) from discontinued operations for the three months and year ended December 31, 2023 were $nil and $(21,809), respectively. Included in the net loss for the year ended December 31, 2023 is a $11,505 loss on sale of WiLAN. Net (loss) income for the three months and year ended December 31, 2022 were $(1,144) and $56,917, respectively.

BUSINESS COMBINATIONS

We remain focused on building robust cash flows and controlling expenses throughout all our businesses to facilitate a healthy and sustainable balance sheet capable of supporting both our organic and acquisitive growth strategies.

OVERALL PERFORMANCE

Consolidated Statements of (Loss) Income

	Three months ended December 31,		Year ended December 31,	
	2023	2022	**2023**	2022
Revenues	**$58,451**	$40,142	**$194,316**	$159,334
Direct cost of revenues	**46,934**	29,976	**153,719**	121,525
Gross profit	**11,517**	10,166	**40,597**	37,809
Operating expenses				
Selling, general and administrative expenses	**9,166**	11,927	**35,025**	48,616
Research and development expenses	**983**	586	**4,268**	2,539
Depreciation of right-of-use assets	**510**	747	**2,047**	2,327
Depreciation of property, plant and equipment	**529**	644	**2,163**	2,234
Amortization of intangible assets	**3,232**	2,833	**11,590**	11,620
Impairment and other charges	**7,048**	4,285	**9,619**	20,292
	21,468	21,022	**64,712**	87,628
Results from operations	**(9,951)**	(10,856)	**(24,115)**	(49,819)
Finance income	**(812)**	(140)	**(1,379)**	(390)
Finance expense	**2,328**	2,586	**9,058**	9,763
Foreign exchange loss (gain)	**2,272**	(147)	**1,732**	(2,816)
Other (income) loss	**(122)**	665	**(996)**	(1,439)
Change in fair value of derivative liability	**1,757**	(332)	**1,248**	(7,655)
Loss before taxes	**(15,374)**	(13,488)	**(33,778)**	(47,282)
Current income tax (recovery) expense	**396**	(713)	**(3,021)**	276
Deferred income tax expense	**(156)**	6,170	**13,045**	6,593
Income tax expense	**240**	5,457	**10,024**	6,869
Net loss from continuing operations	**(15,614)**	(18,945)	**(43,802)**	(54,151)
Net (loss) income from discontinued operations	**-**	(1,144)	**(21,809)**	56,917
Net (loss) income	**(15,614)**	(20,089)	**(65,611)**	2,766
Other comprehensive (loss) income that may be reclassified subsequently to net (loss) income:				
Foreign currency translation adjustment	**(3,004)**	(1,451)	**(2,101)**	16,313
Comprehensive (loss) income	**($18,618)**	($21,540)	**($67,712)**	$19,079
(Loss) income per share - Basic				
From continuing operations	**($0.14)**	($0.17)	**($0.38)**	($0.47)
From discontinued operations	**-**	($0.01)	**($0.19)**	0.49
(Loss) income per share - Basic	**($0.14)**	($0.18)	**($0.57)**	$0.02
(Loss) income per share - Diluted				
From continuing operations	**($0.14)**	($0.17)	**($0.38)**	($0.47)
From discontinued operations	**-**	($0.01)	**($0.19)**	0.49
(Loss) income per share - Diluted	**($0.14)**	($0.18)	**($0.57)**	$0.02

Our revenue streams consist of revenues earned on contracted projects, which are generally recognized over time, product sales, hardware and software system implementations, and service and maintenance contracts. Service and maintenance projects generally range from one to five-year terms but can be renewed with some contracts that could reach up to ten years or more. For project-based work, revenues will routinely vary significantly depending on the timing and nature of the specific projects underway in each reporting period.

Revenues for the three months and year ended December 31, 2023 were $58,451 and $194,316 compared to $40,142 and $159,334 in the prior year comparative periods, respectively. The increase in revenue for the three months and year ended December 31, 2023 as compared to the comparative prior year period was a result of increased activity and improved performance in North American project revenue. Project revenues in the comparative periods were impacted by lingering after-effects of the COVID-19 pandemic, such as labour shortages and supply chain hindrances.

Gross profit as a value and as a percentage of revenues may be subject to significant variance in each reporting period due to the nature and type of contract and service work performed and currency volatility. Gross profit for the three months and year ended December 31, 2023 were $11,517 and $40,597, or 20% and 21%, as compared to $10,166 and $37,809, or 25% and 24% in the prior year comparative periods, respectively. The decrease in gross profit margin percentage compared to the prior year periods is primarily attributed to tolling implementation project expense overruns. These expense overruns resulted in additional unanticipated costs and a reduced margin profile for the implementation projects. This decrease in gross profit margin was partially offset by continuing strong performance in our enforcement operations.

Total operating expenses are comprised of selling, general and administrative costs ("SG&A"), Research and Development ("R&D") costs, depreciation, amortization of intangible assets and impairment and other charges. Total operating expenses for the three months and year ended December 31, 2023 were $21,468 and $64,712 compared to $21,022 and $87,628 in the prior year comparative periods, respectively. The increase for the three months ended December 31, 2023, was due to higher impairment and other charges, which was offset by lower SG&A. On December 28, 2023, the Company disposed of its net investment in PAT Traffic, a foreign subsidiary operating in Latin America. The proceeds on disposal less transaction costs of disposal and the carrying amount of the investment resulted in a loss of $3,741. The decrease for the year ended December 31, 2023 is mainly attributed to the cost reduction initiatives deployed by the Company and the allocation of certain selling, general and administrative personnel costs into cost of revenues as well as the absence of a one-time legal settlement of $14,600 that was present in the comparative period.

We are committed to continual investments in R&D to enhance our current products and advance the availability of new products within the ITS industry. For the three months and year ended December 31, 2023, net R&D spending levels as a percentage of revenue were approximately 1.7% and 2.2%, as compared to 1.5% and 1.6% in the comparative prior year periods, respectively. R&D expenses compared to the prior year comparative periods have increased as a result of the Company's continued investment in its ITS products and services.

Income tax expense for the twelve months ended December 31, 2023 was $10,024 compared to $6,869 for the comparative prior year period. The increase in the current period was caused by deferred tax asset write-offs triggered by the disposition of WiLAN.

The Company is exposed to foreign exchange risk primarily relating to its revenue, operating and capital expenditures, net assets held in foreign currencies, and embedded derivative portions of unearned revenue on certain U.S. dollar denominated sales contracts in North America, and previously in Latin America. This is more fully described in the Risks and Uncertainties section.

Other income includes IRD's share of income in its joint venture, Xuzhou-PAT Control Technologies Limited ("XPCT"). XPCT has two business divisions that provide products and services to the ITS industry and construction equipment manufacturers. For the year ended December 31, 2023, IRD's share of XPCT's income was $502 compared to $1,806 for the comparative prior year period. The decrease in earnings for the year ended December 31, 2023 in XPCT is a result of a decrease in the number of concurrent wire harness projects underway in comparison to the same period of the prior year.

Reconciliation of Net Loss to Adjusted EBITDA

Management considers Adjusted EBITDA, a non-IFRS financial measure, to be a useful indicator for the business to capture financial performance in a given period related to the operations of Quarterhill.

We reported Adjusted EBITDA of $3,186 and $3,832 for the three months and year ended December 31, 2023, compared to $(1,491) and $(10,467) for the comparative prior year periods, respectively. The increase in Adjusted EBITDA for the three months ended December 31, 2023, compared to the prior year period is due to the changes in revenue and direct costs of revenue as previously explained. Impairment and other charges generally consist of impairment losses, advisor fees, accounting and valuation fees, due diligence related expenses and legal fees, restructuring charges, and other one-time items. Although these expenses may recur, they are not fundamental to the actual operations of our businesses and, therefore, have been excluded in the calculation of Adjusted EBITDA. The remaining adjustments relate to finance income or expense, depreciation and amortization, non-cash stock-based compensation, equity earnings and dividends received from joint venture, change in fair value of derivative liability, other acquisition related accounting items and other one-time charges.

From time to time, we may acquire businesses in purchase transactions that typically result in the recognition of goodwill and other identifiable intangible assets. Acquired goodwill is not amortized but is subject to impairment testing at least annually and as other events and circumstances dictate. Other identifiable intangible assets are typically subject to amortization and, therefore, will likely increase future expenses. The determination of the value of such intangible assets requires us to make estimates and assumptions. We have ascribed value to identifiable intangible assets other than goodwill in our purchase price allocations including, but not limited to, backlog, trade name, non-competition agreements, customers and developed software related intangible assets. To the extent we ascribe values to identifiable intangible assets that have finite lives, we amortize those values over the estimated useful lives of the assets.

Reconciliation of Net Loss to Adjusted EBITDA

	Three months ended December 31,			
	2023		2022	
	$	**Per Share [2]**	$	Per Share
Net loss from continuing operations	**($15,614)**	**($0.14)**	($18,945)	($0.17)
Adjusted for:				
Income tax expense	**240**	**0.00**	5,457	0.05
Foreign exchange gain	**2,272**	**0.02**	(147)	(0.00)
Finance expense, net	**1,516**	**0.01**	2,446	0.02
Other charges	**7,048**	**0.06**	4,285	0.04
Depreciation and amortization	**4,271**	**0.04**	4,224	0.04
Stock based compensation expense	**978**	**0.01**	284	0.00
Dividends received from joint venture	**840**	**0.01**	572	0.01
Change in fair value of derivative liability	**1,757**	**0.02**	(332)	(0.00)
Other income	**(122)**	**(0.00)**	665	0.01
Adjusted EBITDA [1]	**$3,186**	**$0.03**	($1,491)	($0.01)
Weighted average number of Common Shares				
Basic	**115,025,344**		114,639,700	

[1] Refer to Adjusted EBITDA - Non-IFRS Financial Measures
[2] Refer to Adjusted EBITDA per share – Non-IFRS ratios

	Year ended December 31,			
	2023		2022	
	$	**Per Share [2]**	$	Per Share
Net loss from continuing operations	**($43,802)**	**($0.38)**	($54,151)	($0.47)
Adjusted for:				
Income tax expense	**10,024**	**0.09**	6,869	0.06
Foreign exchange gain	**1,732**	**0.02**	(2,816)	(0.02)
Finance expense, net	**7,679**	**0.07**	9,373	0.08
Other charges	**9,619**	**0.08**	20,292	0.18
Depreciation and amortization	**15,800**	**0.14**	16,181	0.14
Stock based compensation expense	**1,688**	**0.01**	1,589	0.01
Dividends received from joint venture	**840**	**0.01**	1,290	0.01
Change in fair value of derivative liability	**1,248**	**0.01**	(7,655)	(0.07)
Other income	**(996)**	**(0.01)**	(1,439)	(0.01)
Adjusted EBITDA [1]	**$3,832**	**$0.04**	($10,467)	($0.09)
Weighted average number of Common Shares				
Basic	**114,776,086**		114,389,608	

[1] Refer to Adjusted EBITDA - Non-IFRS Financial Measures
[2] Refer to Adjusted EBITDA per share – Non-IFRS ratios

SELECTED CONSOLIDATED ANNUAL AND QUARTERLY RESULTS

Selected Annual Results

	Year ended December 31,		
(in thousands of Canadian dollars, except per share amounts)	**2023**	2022	2021
Revenue	**$194,316**	$159,334	$125,695
Net income (loss) from continuing operations	**(43,802)**	(54,151)	(14,974)
Net income from discontinued operations	**(21,809)**	56,917	(7,209)
Net income (loss)	**$(65,611)**	$2,766	$(22,183)
(Loss) income from continuing operations per share, basic and diluted	**$(0.38)**	$(0.47)	$(0.13)
(Loss) income per share, basic and diluted	**$(0.57)**	$0.02	$(0.19)
Dividends declared per share	**$0.0125**	$0.05	$0.05
Total assets	**$332,079**	$411,944	$427,195
Total liabilities	**$142,023**	$154,284	$186,079

Selected Quarterly Results

Quarter ended	Revenues $ 000s	Net loss from continuing operations	Net loss from continuing operations per share (basic)	Net loss $ 000s	Net loss per share (basic) $	Adjusted EBITDA * $ 000s	Adjusted EBITDA per share *(basic) $
December 31, 2023	58,451	(15,614)	(0.14)	(15,614)	(0.14)	3,186	0.03
September 30, 2023	45,685	(2,228)	(0.02)	(1,863)	(0.02)	1,935	0.02
June 30, 2023	51,865	(13,681)	(0.12)	(32,520)	(0.28)	3,901	0.03
March 31, 2023	38,315	(12,279)	(0.11)	(15,614)	(0.13)	(5,190)	(0.05)
December 31, 2022	40,142	(18,945)	(0.17)	(20,089)	(0.18)	(1,491)	(0.01)
September 30, 2022	42,185	(4,985)	(0.04)	(9,714)	(0.08)	1,015	0.01
June 30, 2022	39,240	(20,357)	(0.18)	(24,332)	(0.21)	(8,120)	(0.07)
March 31, 2022	37,767	(9,864)	(0.09)	56,901	0.49	(1,871)	(0.02)

* Adjusted EBITDA and the respective per share amounts are non-IFRS measures; please refer to "Non-IFRS Financial Measures and Non-IFRS Ratios" and "Reconciliation of Adjusted EBITDA" sections of this MD&A.

Historically, our operating results have fluctuated on a quarterly basis and we expect that quarterly results will continue to fluctuate in the future, as revenues derived from the ITS business may be subject to varying project phases and seasonality. The prior periods in the table above have been adjusted to reflect only continuing operations. Operating results for interim periods should not be relied upon as an indication of the results to be expected or achieved in any future period or any fiscal year as a whole. The risk factors affecting our revenue and results, many of which are outside of our control, include those set out under the heading “Risk Factors” in our AIF.

Dividends declared on the Common Shares for the years ended December 31, 2023 and 2022 were as follows:

	2023		2022	
	Per Share	**Total**	Per Share	Total
1st quarter	**$0.0125**	**$1,433**	$0.0125	$1,408
2nd quarter	**-**	**-**	$0.0125	1,432
3rd quarter	**-**	**-**	$0.0125	1,420
4th quarter	**-**	**-**	$0.0125	1,433
	$0.0125	**$1,433**	$0.0500	$5,693

In May 2023 the Company adjusted its capital allocation strategy and announced it will no longer pay a dividend. This decision creates financial flexibility and will best position the business to generate value through a capital allocation strategy focused on supporting the growth of the ITS business.

CAPITAL AND LIQUIDITY

The Company's capital management objectives are to maintain financial flexibility in order to pursue its strategy of organic growth and acquisition, and, from time to time, return capital to shareholders. The Company defines our capital as cash, the aggregate of cash and cash equivalents, short-term investments, restricted short-term investments, long-term debt, convertible debentures and shareholders' equity. The Company manages its capital structure in accordance with changes in economic conditions. To maintain or adjust its capital structure, the Company may purchase Common Shares for cancellation pursuant to one or more normal course issuer bids and/or substantial issuer bids, issue new Common Shares, issue convertible debentures or raise or retire our debts.

Our cash, cash equivalents and short-term investments, exclusive of any restricted amounts, totaled $56,621 as at December 31, 2023 compared to $67,907 as at December 31, 2022, representing a decrease of $11,286 primarily due to operational losses, debt repayment, dividends and termination costs, among other working capital fluctuations. At December 31, 2023, we had sufficient working capital of $104,607 to cover short and long-term obligations. Due to the nature of our business activities, operating cash flows may vary significantly between periods due to changes and timing in working capital balances.

Our cash resources are generally used to fund our operations, provide working capital to any of our subsidiaries if needed and to acquire additional businesses. We may also fund our ongoing cash requirements through the use of additional short-term and long-term debt and, if desirable, based on market conditions, by selling Common Shares and debt securities to the public.

In 2021, in order to finance the ETC acquisition, we entered into a credit agreement to receive senior secured credit facilities from HSBC Bank Canada and Royal Bank of Canada consisting of a revolving credit facility in the maximum amount of US$15,000 and a term credit facility of US$50,000. These facilities replaced all existing credit facilities we had with HSBC Bank Canada. The interest rate as at December 31, 2023 was 9.8% and both facilities have a maturity date of September 1, 2026 with a general security agreement over all the assets in North America of IRD, ETC and its parent holding company, Quarterhill USA, Inc. The carrying value of these assets as at December 31, 2023 was $290,598. As at and during the year ended December 31, 2023, we repaid $3,100 of the term loan and had no borrowings or repayments on the revolving credit facility.

On June 27, 2023 (the "Amendment Date"), the Company finalized an amendment to its existing credit agreement. As of the Amendment Date, the balance on the term loan was US$21,250. The amendment modified certain terms and conditions of the credit agreement to provide the Company with additional flexibility in its covenant and cash management, including a waiver on the Senior Leverage Ratio for all reporting periods up to March 31, 2024 (the "Covenant Relief Period") and a reduction in the revolving credit facility from US$15,000 to US$5,000. During the Covenant Relief Period, the Fixed Charge Covenant Ratio can be satisfied through support of the parent company to its subsidiaries.

Repayment of principal on the term credit facility was renegotiated to 2.5% of the balance as at the Amendment Date per quarter up to the maturity date, upon which the remaining balance is due.

Stated Capital Reduction

On May 8, 2023, the Company's shareholders approved a reduction of the stated capital of the Company in the amount of $120,000. The purpose of the stated capital reduction was to grant the board of directors more flexibility in capital management, specifically in relation to its ability to distribute dividends. The reduction in stated capital was offset by a corresponding increase in contributed surplus.

CONTRACTUAL OBLIGATIONS

Contractual obligations relating to accounts payable and accrued liabilities, long-term debt, convertible debentures and lease liabilities as at December 31, 2023 are due as follows:

	Total	Less than 1 year	2 - 3 years	4 - 5 years	Thereafter
Accounts payable and accrued liabilities	$40,186	$40,186	-	-	-
Long-term debt	26,045	2,816	23,229		-
Convertible debentures	57,500	-	57,500		-
Lease liabilities	11,420	3,025	5,032	2,485	878
	$135,151	$46,027	$85,761	$2,485	$878

OUTSTANDING COMMON SHARE DATA

We are authorized to issue an unlimited number of Common Shares, 6,351 special preferred, redeemable, retractable, non-voting shares and an unlimited number of preferred shares, issuable in series. As at December 31, 2023, there were 115,076,583 Common Shares and no special or preferred shares issued and outstanding. We also maintain the Quarterhill Inc. 2018 Equity Incentive Plan (the "Equity Plan"). Under the Equity Plan, we can issue a maximum of 9.5% of our issued and outstanding Common Shares from time to time which was, as at December 31, 2023, up to 10,932,275 Common Shares. As at December 31, 2023, we had options granted to purchase up to 5,628,129 Common Shares.

OFF-BALANCE SHEET ARRANGEMENTS

As at December 31, 2023, IRD has an outstanding 100% guarantee to XPCT, for a loan in the amount of 15,000 Chinese yuan or $2,864 (December 31, 2022 - $2,945); however, IRD has the right to seek recourse against its joint venture partner for any amount greater than IRD's proportionate share of the liability. The amount owing represents the maximum amount available to be drawn under this facility.

RELATED PARTY TRANSACTIONS

Subsidiaries

The financial statements include the accounts of Quarterhill Inc. and its wholly-owned subsidiaries. Balances and transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this section.

Investment in Joint Venture

Investment in Joint Venture comprises a 50% interest, held by the Company's IRD subsidiary, in XPCT, an ITS products and manufacturing service provider in China. IRD had sales of $11 (2022- $125) during the year ended December 31, 2023. At December 31, 2023, XPCT had $nil owing to IRD (December 31, 2022- $nil).

PROPOSED TRANSACTIONS

There are no proposed transactions.

CRITICAL ESTIMATES

Key areas involving estimation, uncertainty and critical judgments include the following:

Revenue Recognition

Contract revenue, contract costs, contract liabilities and contract assets are based on estimates and judgments used in determining the progress of a contract. Estimates include amounts derived to measure the progress of the contract. Progress towards completion is measured by comparing the actual costs incurred to the total estimated costs for the contract. In determining the estimated costs to complete the contracts, assumptions and estimates are required to evaluate issues related to schedule, material and labour costs, changes in contract scope and subcontractor costs. Due to the nature of project contracts, estimates may change significantly between accounting periods. Changes in estimates are reflected in the period in which the circumstances that gave rise to the change became known and affect the Company's revenue, contract assets, and contract liabilities.

Asset Impairments and Impairment Reversals

Quarterhill's estimate of the recoverable amount for the purpose of impairment testing requires management to make assumptions regarding estimates of the present value of future cash flows including growth opportunities, economic risk, and the discount rate. These same assumptions are also used when assessing recoverability of impairments previously recognized.

Income Taxes and Deferred Taxes

Quarterhill is subject to income taxes in Canada and other foreign jurisdictions. The calculation of income taxes in many cases, however, requires significant judgment in interpreting tax rules and regulations. The Company's tax filings are subject to audits which could materially change the amount of current and deferred income taxes and liabilities. Additionally, estimation of the income tax provision includes evaluating the recoverability of deferred tax assets based on the assessment of the Company's ability to use the underlying future tax deductions before they expire against future taxable income. The assessment is based on existing tax laws, estimates of future profitability and tax planning strategies. If the future taxable results of the Company differ significantly from those expected, the Company would be required to increase or decrease the carrying value of the deferred tax assets with a potentially material impact on the Company's consolidated statements of financial position and consolidated statements of comprehensive income. The carrying amount of deferred tax assets is reassessed at each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to utilize all or part of the deferred tax assets. Unrecognized deferred tax assets are recognized to the extent that it is more likely than not that taxable income will be available against which deferred tax assets can be utilized.

FUTURE ACCOUNTING PRONOUNCEMENTS

Amendments to IAS 1, "Presentation of Financial Statements" - *Classification of Liabilities as Current or Non-Current*

In January 2020 and October 2022, the IASB issued amendments to paragraphs 69 - 76 of IAS 1 to clarify the requirements for classifying liabilities as current or non-current. The amendments specify that the conditions which exist at the end of a reporting period are those which will be used to determine if a right to defer settlement of a liability exists. The amendments also clarify the situations that are considered a settlement of a liability. The amendments are effective for annual periods on or after January 1, 2024, with early adoption permitted. The amendments are to be applied retrospectively.

Amendments to IFRS 16, "Leases" - *Lease Liability in a Sale and Leaseback*

In September 2022, the IASB issued *Lease Liability in a Sale and Leaseback* (Amendments to IFRS 16). The amendment to IFRS 16 *Leases* specifies the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction, to ensure the seller-lessee does not recognize any amount of the gain or loss that relates to the right of use it retains. After the commencement date in a sale and leaseback transaction, the seller-lessee applies paragraphs 29 to 35 of IFRS 16 to the right-of-use asset arising from the leaseback and paragraphs 36 to 46 of IFRS 16 to the lease liability arising from the leaseback. In applying paragraphs 36 to 46, the seller-lessee determines 'lease payments' or 'revised lease payments' in such a way that the seller-lessee would not recognize any amount of the gain or loss that relates to the right of use retained by the seller-lessee. Applying these requirements does not prevent the seller-lessee from recognizing, in profit or loss, any gain or loss relating to the partial or full termination of a lease, as required by paragraph 46(a) of IFRS 16. The amendments are effective for annual periods on or after January 1, 2024, with early adoption permitted. The amendments are to be applied retrospectively.

Management is currently assessing the impact of these amendments.

RISKS AND UNCERTAINTIES

Quarterhill operates in a dynamic and competitive business environment that exposes it to a number of risks and uncertainties. This MD&A is qualified in its entirety by the risk factors described under the heading "Risk Factors" in the AIF. The risks and uncertainties discussed in greater detail under the heading "Risk Factors" in our AIF are not, however, the only risks we face. We may also be subject to additional risks and uncertainties that are currently unknown or not currently deemed material to our business operations. If any of the risks or uncertainties we face were to occur, they could materially affect our future operating results and could cause actual events and results to differ materially from those which we expect or that we have described in our forward-looking statements.

In addition to the risk factors identified in our AIF, we may be exposed to other risks as follows:

Credit Risk

Credit risk is the risk of financial loss to the Company if a counter-party to a financial instrument fails to meet its contractual obligations. Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents, accounts receivable and unbilled revenue.

Our cash and cash equivalents consist primarily of deposit investments that are held primarily with Canadian and American chartered banks. Management does not expect any counter-parties to fail to meet their obligations.

We recognize a loss allowance provision using the simplified approach based on lifetime expected credit losses. Our exposure to credit risk with our accounts receivable from customers is influenced mainly by the individual characteristics of each customer. Our operating subsidiaries' customers are for the most part, large multinational companies or government organizations which do not have a history of non-payment. Credit risk from accounts receivable encompasses the default risk of customers. Prior to entering into transactions with new customers, we assess the risk of default associated with the particular customer. In addition, on an ongoing basis, management monitors the level of accounts receivable attributable to each customer and the length of time taken for amounts to be settled and where necessary, takes appropriate action to follow up on those balances considered overdue. We have had no material bad debts for any periods presented.

None of the amounts outstanding have been challenged by the respective counterparties and we continue to conduct business with them on an ongoing basis.

Quarterhill reviews financial assets on an ongoing basis with the objective of identifying potential matters which could delay the collection of funds at an early stage. Once items are identified as being past due, contact is made with the respective customer to determine the reason for the delay in payment and to establish an agreement to rectify the breach of contractual terms.

Liquidity Risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they fall due. Our objective in managing liquidity risk is to ensure that we have sufficient liquidity available to meet our liabilities when due. We manage our liquidity needs through various sources including cash generated through operations, cash reserves, various revolving credit facilities, long-term debt, convertible debentures and the issuance of Common Shares.

Market Risk

Market risk is the risk that the fair value of future cash flows from our financial instruments will fluctuate due to changes in interest rates and foreign currency exchange rates.

Interest Rate Risk

The financial instruments that expose the Company to interest rate risk are its cash and cash equivalents, short-term investments, bank indebtedness and long-term debt. The Company's objectives of managing its cash and cash equivalents and short-term investments are to ensure sufficient funds are maintained on hand at all times to meet day-to-day requirements and to place any amounts that are considered in excess of day-to-day requirements on short-term deposit with the Company's banks so that they earn interest. When placing amounts of cash and cash equivalents into short-term investments, the Company only places investments with Canadian chartered banks and ensures that access to the amounts placed can be obtained on short notice. A one percent increase or decrease in interest rates would not have resulted in a material increase or decrease in interest income or expense during the year ended December 31, 2023.

Currency Risk

Portions of the Company's revenues and operating expenses are denominated in U.S. dollars, Chilean pesos, Mexican pesos, Euros and Chinese yuan. Because these financial statements are reported in Canadian dollars, the Company's operating results are subject to changes in the exchange rate of the foreign currencies (primarily U.S. dollars) relative to the Canadian dollar. For instance, a decrease in the value of the U.S. dollar relative to the Canadian dollar has an unfavourable impact on U.S. dollar denominated revenues and a favourable impact on U.S. dollar denominated direct cost of revenues and operating expenses. Approximately 92% of the Company's cash and cash equivalents and short-term investments are denominated in U.S. dollars and are subject to changes in the exchange rate of the Canadian dollar relative to the U.S. dollar.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

Our Chief Executive Officer and Chief Financial Officer have designed or caused to be designed under their supervision, disclosure controls and procedures which provide reasonable assurance that material information regarding Quarterhill is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer in a timely manner.

In addition, our Chief Executive Officer and Chief Financial Officer have designed or caused to be designed under their supervision internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements. The control framework used to design our ICFR is the "Internal Control - Integrated Framework (2013)" published by the Committee of Sponsoring Organizations of the Treadway Commission.

As of December 31, 2023, an evaluation was performed on the effectiveness of ICFR to provide reasonable assurance regarding the reliability of financial reporting and financial statement compliance with IFRS. Based on the evaluation performed at that time, the Chief Executive Officer and Chief Financial Officer concluded they were able to certify that the design and operating effectiveness of ICFR were effective.

There were no changes to our ICFR during the three months and year ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our ICFR.

A control system, no matter how well designed, can provide only reasonable, not absolute, assurance that its objectives are met. Due to inherent limitations in all such systems, no evaluations of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures and our internal controls over financial reporting are effective in providing reasonable, not absolute, assurance that the objectives of our control systems have been met.

Quarterhill Inc.

2023 Annual Consolidated Financial Statements

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying consolidated financial statements of Quarterhill Inc. ("Quarterhill" or the "Company") are the responsibility of management and have been approved by the Board of Directors (the "Board").

The consolidated financial statements have been prepared by management in accordance with the International Financial Reporting Standards. Management is responsible for ensuring that these consolidated financial statements, which include certain amounts based on estimates and judgments, reflect the Company's business transactions and financial position in all material respects.

Quarterhill maintains systems of internal accounting and administrative controls of high quality, consistent with reasonable cost. Such systems are designed to provide reasonable assurance that the financial information is relevant, reliable and accurate, and that the Company's assets are appropriately accounted for and adequately safeguarded.

The Board is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the consolidated financial statements. The Board carries out this responsibility through its Audit Committee (the "Committee"). The Committee is appointed by the Board, and all of its members are independent unrelated directors.

The Committee meets periodically with management, as well as with external auditors, to discuss internal controls over the financial reporting process, auditing matters and financial reporting items, to satisfy itself that each party is properly discharging its responsibilities, the consolidated financial statements and the external auditors' report. The Committee reports its findings to the Board for consideration when approving the consolidated financial statements for issuance to the shareholders. The Committee also considers, for review by the Board and approval by the shareholders, the engagement or re-appointment of the external auditors.

The consolidated financial statements have been audited by Ernst & Young LLP, the external auditors on behalf of the shareholders. Ernst & Young LLP has full and free access to the Committee.

March 14, 2024

/s/ Chuck Myers

Chuck Myers
Chief Executive Officer

/s/ Kyle Chriest

Kyle Chriest
Interim Chief Financial Officer

Independent auditor's report

To the Shareholders of
Quarterhill Inc.

Opinion

We have audited the consolidated financial statements of **Quarterhill Inc**. and its subsidiaries [the "Group"], which comprise the consolidated statements of financial position as at December 31, 2023 and 2022, and the consolidated statements of (loss) income and comprehensive (loss) income, consolidated statements of shareholders' equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including material accounting policy information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2023 and 2022, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards ["IFRSs"].

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period. These matters were addressed in the context of the audit of the consolidated financial statements as a whole, and in forming the auditor's opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter

Goodwill impairment	*How our audit addressed the key audit matter*
As at December 31, 2023, the Group has $38,450 thousand of goodwill as disclosed in note 14 to the consolidated financial statements. The Group performed its annual impairment analysis as at December 31, 2023 and estimated the recoverable amount for its group of cash generating units ["CGUs"] using a discounted cash flow model. The Group recognized no goodwill impairment during the year ended December 31, 2023. Auditing the Group's annual goodwill impairment test was complex given the degree of judgment and subjectivity in evaluating the estimates and assumptions used to calculate the recoverable amount for the group of CGUs. Significant assumptions included revenue projections and growth rates, earnings before interest, taxes, and depreciation and amortization ["EBITDA"] margins, terminal growth rates and discount rates, which are affected by expectations about future market and economic conditions.	To test the estimated recoverable amount for the group of CGUs, with the assistance of our valuation specialists, we performed the following procedures, among others: • Evaluated the Group's discounted cash flow model and valuation methodology; • Assessed the appropriateness of the Group's revenue projections and growth rates and EBITDA margins by comparing past projections to actual and historical performance, and/or current industry, market and economic trends; • Evaluated the terminal growth rate by comparing assumptions to long-term inflation expectations; • Evaluated the discount rate by assessing comparable market data and considering specific risk premiums; • Performed sensitivity analysis on discount rate to evaluate changes in the recoverable amount of the group of CGUs; and • Assessed the adequacy of the Group's disclosures included in note 14 to the consolidated financial statements.

Estimate to complete for long-term fixed price contracts	*How our audit addressed the key audit matter*
The Group sells integrated systems with distinct performance obligations, which involve the design, manufacturing, installation, maintenance and warranty of long-term projects that can span over periods beyond one year. Revenues for these fixed price contracts are recognized over time based on the progress towards completion of the contract using the percentage of completion method. This method is measured by reference to costs incurred relative to the total estimated costs. The Group's policy for revenue recognition together with the related significant accounting estimates and assumptions is described in note 2 to the consolidated financial statements. For the year ended December 31, 2023, the Group recorded $175,083 thousand of revenue recognized over time. We determined that revenue recognition for open contracts for the Group is a matter of significance to the audit due to the significant judgment made by management in determining the estimated costs to complete for long-term fixed priced contracts and, where applicable, the estimation of any loss on a project. Assessing the appropriateness of the remaining costs to complete for each project is subjective and requires significant auditor judgment.	To test the estimate to complete, we performed the following procedures, amongst others, for a sample of open, long-term fixed price contracts as at December 31, 2023: • Inspected contractual arrangements including pricing and billing terms, change orders and terms and conditions impacting revenue recognition; • Inquired and evaluated the consistency of responses obtained from operational and finance personnel regarding risks and uncertainties with respect to fixed price contracts, as well as the nature of the work yet to be completed and estimated costs to complete such work; • Compared estimated costs to complete, on a sample basis, to vendor quotes, purchase orders, contractual labour rates, or actual costs for similar completed projects; • Performed a look back analysis comparing the current gross margin for projects to the initial gross margin and/or to other similar completed projects; and • Considered subsequent events after December 31, 2023 to corroborate estimates made.

Other information

Management is responsible for the other information. The other information comprises:

- Management's Discussion and Analysis

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information, and in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis prior to the date of this auditor's report. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Kwan-Ho Song.

Ernst & Young LLP

Chartered Professional Accountants
Licensed Public Accountants

Toronto, Canada
March 14, 2024

Consolidated Statements of (Loss) Income and Comprehensive (Loss) Income

(in thousands and in Canadian dollars)

	Note	Year ended December 31, 2023	2022
Revenues	21	**$194,316**	$159,334
Direct cost of revenues		**153,719**	121,525
Gross profit		**40,597**	37,809
Operating expenses	22		
Selling, general and administrative expenses		**35,025**	48,616
Research and development expenses		**4,268**	2,539
Depreciation of right-of-use assets	8	**2,047**	2,327
Depreciation of property, plant and equipment	9	**2,163**	2,234
Amortization of intangible assets	10	**11,590**	11,620
Impairment and other charges	19	**9,619**	20,292
		64,712	87,628
Results from operations		**(24,115)**	(49,819)
Finance income		**(1,379)**	(390)
Finance expense		**9,058**	9,763
Foreign exchange loss (gain)		**1,732**	(2,816)
Other income		**(996)**	(1,439)
Change in fair value of derivative liability	17	**1,248**	(7,655)
Loss before taxes		**(33,778)**	(47,282)
Current income tax (recovery) expense	23	**(3,021)**	276
Deferred income tax expense	23	**13,045**	6,593
Income tax expense		**10,024**	6,869
Net loss from continuing operations		**(43,802)**	(54,151)
Net (loss) income from discontinued operations	4	**(21,809)**	56,917
Net (loss) income		**(65,611)**	2,766
Other comprehensive (loss) income that may be reclassified subsequently to net (loss) income:			
Foreign currency translation adjustment		**(2,101)**	16,313
Comprehensive (loss) income		**($67,712)**	$19,079
(Loss) income per share - Basic			
From continuing operations		**($0.38)**	($0.47)
From discontinued operations		**($0.19)**	0.49
(Loss) income per share - Basic	20	**($0.57)**	$0.02
(Loss) income per share - Diluted			
From continuing operations		**($0.38)**	($0.47)
From discontinued operations		**($0.19)**	0.49
(Loss) income per share - Diluted	20	**($0.57)**	$0.02

See accompanying notes to these consolidated financial statements.

Consolidated Statements of Financial Position

(in thousands and in Canadian dollars)

As at	Note	**December 31, 2023**	December 31, 2022
Current assets			
Cash and cash equivalents		**$56,621**	$66,357
Short-term investments		**-**	1,550
Restricted short-term investments		**-**	6,529
Accounts receivable, net		**36,160**	23,277
Unbilled revenue	6	**45,377**	41,423
Income taxes receivable		**-**	340
Inventories (net of obsolescence)	7	**14,257**	13,671
Prepaid expenses and deposits		**6,353**	6,852
		158,768	159,999
Non-current assets			
Accounts and other long-term receivables		**5,782**	539
Long-term prepaid expenses and deposits		**-**	1,705
Right-of-use assets, net	8	**7,006**	10,312
Property, plant and equipment, net	9	**5,480**	6,926
Intangible assets, net	10	**104,795**	141,335
Investment in joint venture	11	**6,696**	7,751
Investment in other entity	4, 12	**3,840**	-
Deferred compensation asset	13	**1,262**	1,344
Deferred income tax assets	23	**-**	25,648
Goodwill	14	**38,450**	56,385
		173,311	251,945
TOTAL ASSETS		**$332,079**	$411,944
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	15	**$40,186**	$47,063
Income taxes payable		**877**	982
Current portion of lease liabilities	8	**2,589**	2,611
Current portion of deferred revenue	6	**7,693**	8,542
Current portion of long-term debt	16	**2,816**	29,292
		54,161	88,490
Non-current liabilities			
Deferred revenue	6	**823**	2,744
Long-term lease liabilities	8	**7,588**	9,655
Long-term debt	16	**22,938**	-
Convertible debentures	17	**50,609**	48,379
Derivative liability	17	**3,034**	1,786
Deferred compensation liabilities	13	**1,252**	1,169
Deferred income tax liabilities	23	**1,618**	2,061
		87,862	65,794
TOTAL LIABILITIES		**142,023**	154,284
Shareholders' equity			
Capital stock	18	**427,155**	546,482
Contributed surplus	18	**171,826**	50,958
Accumulated other comprehensive income		**14,356**	16,457
Deficit		**(423,281)**	(356,237)
		190,056	257,660
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**$332,079**	$411,944

See accompanying notes to these consolidated financial statements.

On behalf of the Board of Directors:

/s/ Roxanne Anderson	*/s/ Pamela Steer*
Roxanne Anderson	Pamela Steer
Chair, Audit Committee	Director

Consolidated Statements of Cash Flows

(in thousands and in Canadian dollars)

	Note	Year ended December 31, 2023	2022
Operating activities:			
Net loss from continuing operations		**($43,802)**	($54,151)
Add (deduct) non-cash items:			
Stock-based compensation expense		**1,688**	1,589
Depreciation and amortization	8, 9, 10	**15,800**	16,181
Foreign exchange loss (gain)		**1,732**	(2,816)
Other income		**(996)**	(1,439)
Impairment losses	19	**2,967**	1,778
Loss on disposal	19	**3,741**	-
Deferred and non-cash income tax expense		**9,176**	6,593
Embedded derivatives		**14**	657
Change in fair value of derivative liability	17	**1,248**	(7,655)
Non-cash interest expense		**2,850**	2,412
Net change in non-cash working capital balances	27	**(17,016)**	(6,974)
Cash used in continuing operations		**(22,598)**	(43,825)
Net operating cash flows attributable to discontinued operations		**(5,896)**	83,438
Net cash (used in) generated from operating activities		**(28,494)**	39,613
Financing activities:			
Dividends paid		**(2,866)**	(5,693)
Payment of lease liabilities	8	**(3,058)**	(2,015)
Repayment of long-term debt		**(3,100)**	(36,128)
Common shares issued for cash on the exercise of options		**107**	1,149
Cash used in financing activities		**(8,917)**	(42,687)
Net financing cash flows attributable to discontinued operations		**(135)**	(201)
Net cash used in financing activities		**(9,052)**	(42,888)
Investing activities:			
Net proceeds from disposition of a subsidiary	4	**43,578**	-
Cash sold on disposition of a subsidiary	4	**(10,751)**	-
Proceeds from short-term investments		**-**	301
Proceeds from sale of property, plant and equipment		**56**	234
Purchase of property, plant and equipment		**(2,214)**	(2,943)
Dividend received from joint venture	11	**934**	1,290
Capitalized software costs		**(4,497)**	(5,746)
Cash generated from (used in) investing activities		**27,106**	(6,864)
Net investing cash flows attributable to discontinued operations		**1,603**	(3,434)
Net cash generated from (used in) financing activities		**28,709**	(10,298)
Foreign exchange on cash held in foreign currencies		**(899)**	9,184
Net decrease in cash and cash equivalents		**(9,736)**	(4,389)
Cash and cash equivalents, beginning of year		**66,357**	70,746
Cash and cash equivalents, end of year		**$56,621**	$66,357

See accompanying notes to these consolidated financial statements.

Consolidated Statements of Shareholders' Equity

(in thousands and in Canadian dollars)

	Note	Capital Stock	Contributed Surplus	Accumulated Other Comprehensive Income	Deficit	Total Shareholders' Equity
Balance, January 1, 2022		$544,345	$49,937	$144	($353,310)	$241,116
Net income		-	-	-	2,766	2,766
Other comprehensive income		-	-	16,313	-	16,313
Stock-based compensation expense		-	1,875	-	-	1,875
Exercise of stock options		1,778	(629)	-	-	1,149
Common shares issued from restricted stock units	18	313	(179)	-	-	134
Common shares issued from performance stock units		46	(46)	-	-	-
Dividends declared	18	-	-	-	(5,693)	(5,693)
Balance, December 31, 2022		$546,482	$50,958	$16,457	($356,237)	$257,660
Net loss		**-**	**-**	**-**	**(65,611)**	**(65,611)**
Other comprehensive loss		**-**	**-**	**(2,101)**	**-**	**(2,101)**
Stock-based compensation expense		**-**	**1,688**	**-**	**-**	**1,688**
Exercise of stock options		**195**	**(88)**	**-**	**-**	**107**
Common shares issued from restricted stock units	**18**	**403**	**(657)**	**-**	**-**	**(254)**
Common shares issued from deferred stock units	**18**	**75**	**(75)**	**-**	**-**	**-**
Reduction of stated capital	**18**	**(120,000)**	**120,000**	**-**	**-**	**-**
Dividends declared	**18**	**-**	**-**	**-**	**(1,433)**	**(1,433)**
Balance, December 31, 2023		**$427,155**	**$171,826**	**$14,356**	**($423,281)**	**$190,056**

See accompanying notes to these consolidated financial statements.

1. NATURE OF BUSINESS

Quarterhill Inc. ("Quarterhill" or the "Company") is a Canadian company incorporated and domiciled in Canada. The address of the Company's registered office is 200 Bay Street, Suite 1200, Toronto, Ontario, M5J 2J2. The Company's shares are listed under the symbol “QTRH” on the Toronto Stock Exchange (the “TSX”) and on the United States OTCQX Best Market under the symbol “QTRHF”. Quarterhill is focused on the acquisition, management and growth of companies that provide integrated, tolling and mobility systems and solutions to the intelligent transportation systems ("ITS") industry as well as its adjacent markets.

On June 15, 2023, the Company sold its investment in WiLAN Inc. and its related entities (“WiLAN”), which represented the Licensing segment. The results of WiLAN have been presented as discontinued operations in the Company’s consolidated financial statements in Note 4, Discontinued Operations.

2. MATERIAL ACCOUNTING POLICY INFORMATION

Basis of presentation

These consolidated financial statements of the Company were prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

These consolidated financial statements were authorized for issue by the Board of Directors on March 14, 2024.

Basis of measurement

These consolidated financial statements have been prepared on a historical cost basis, except for certain financial instruments that are measured at fair value on a recurring basis, as explained in the accounting policies below.

Basis of consolidation

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. The Company also holds, through one of its subsidiaries, a 50% joint venture ownership interest in Xuzhou-PAT Control Technologies Limited (“XPCT”), which is accounted for using the equity method and includes only the Company’s net investment and equity in earnings of the joint venture. Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company ceases to control the subsidiary. All intercompany transactions and balances have been eliminated in these consolidated financial statements.

Functional and presentation currency

The consolidated financial statements are presented in Canadian dollars, which differs from the functional currency of the Company, which is US dollars.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

The Company follows the requirements as prescribed in IAS 21, "The Effects of Changes in Foreign Exchange Rates" to translate to the presentation currency. The assets and liabilities of the consolidated entity are translated to Canadian dollars at the exchange rate as at the reporting date and the income and expenses are translated to Canadian dollars at the monthly average exchange rates of the reporting period. Foreign currency differences arising from the translation are recognized in other comprehensive (loss) income ("OCI"). Exchange differences on monetary items forming part of net investment of the Company in its foreign subsidiaries is recognized initially in OCI and reclassified from equity to profit or loss on disposal of the net investment in accordance with IAS 21, "The Effects of Changes in Foreign Exchange Rates".

Estimates, assumptions and judgments

The preparation of these consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities and the disclosure of contingent assets and liabilities at the reporting date. Uncertainty about these assumptions and estimates could result in adjustments to the carrying amount of an asset or liability or the reported amount of revenues and expenses in future periods. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Business combinations

Purchase prices related to business combinations are allocated to the underlying acquired assets and liabilities based on their estimated fair value at the time of acquisition. The determination of fair value requires the Company to make assumptions, estimates and judgments regarding cash flow projects, valuation techniques, economic risk, weighted average cost of capital and future events. Significant judgments, estimates and assumptions are also required by management in estimating the amount of contingent consideration payable. As a result, the purchase price allocation impacts the Company’s reported assets and liabilities, including the amounts allocated to intangible assets and goodwill, and future earnings due to the impacts of amortization expense and impairment testing.

Revenue recognition

Contract revenue, contract costs, contract liabilities and contract assets are based on estimates and judgments used in determining the progress of a contract. Estimates include amounts derived to measure the progress of the contract. Progress towards completion is measured by comparing the actual costs incurred to the total estimated costs for the contract. In determining the estimated costs to complete the contracts, assumptions and estimates are required to evaluate issues related to schedule, material and labour costs, changes in contract scope and subcontractor costs. Due to the nature of project contracts, estimates may change significantly between accounting periods. Changes in estimates are reflected in the period in which the circumstances that gave rise to the change became known and affect the Company’s revenue, contract assets, and contract liabilities.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Impairments for non-financial assets and impairment reversals

The Company’s estimate of the recoverable amount for the purpose of impairment testing requires management to make assumptions regarding estimates of the present value of future cash flows including growth opportunities, economic risk, and the discount rate. These same assumptions are also used when assessing recoverability of impairments previously recognized.

Income taxes

The Company is subject to income taxes in Canada and other foreign jurisdictions. The calculation of income taxes in many cases, however, requires significant judgment in interpreting tax rules and regulations. The Company's tax filings are subject to audits, which could materially change the amount of current and deferred income taxes and liabilities. Additionally, estimation of the income tax provision includes evaluating the recoverability of deferred tax assets based on the assessment of the Company's ability to use the underlying future tax deductions before they expire against future taxable income. The assessment is based on existing tax laws, estimates of future profitability and tax planning strategies. If the future taxable results of the Company differ significantly from those expected, the Company would be required to increase or decrease the carrying value of the deferred tax assets with a potentially material impact on the Company's consolidated statements of financial position and consolidated statements of (loss) income and comprehensive (loss) income. The carrying amount of deferred tax assets is reassessed at each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to utilize all or part of the deferred tax assets. Unrecognized deferred tax assets are recognized to the extent that it is more likely than not that taxable income will be available against which deferred tax assets can be utilized.

Business combinations

The Company uses the acquisition method of accounting for business combinations. The cost of an acquisition is measured as the consideration transferred at fair value at the acquisition date. The determination of fair values for the acquired intangible assets involves the use of discounted cash flow analyses. Any contingent consideration to be transferred by the Company is recognized at fair value at the acquisition date. The Company determines that a pre-acquisition contingency is probable in nature and estimable as of the acquisition date and records its best estimate for the contingency as part of the purchase price allocation. The Company continues to gather information and evaluates any pre-acquisition contingencies throughout the measurement period and makes adjustments as necessary to the purchase price allocation. Changes in fair value of contingent consideration outside of the measurement period are measured at fair value, with changes in fair value recognized in profit or loss. Acquisition-related costs are expensed as incurred. Any excess of the fair value of the consideration transferred over the fair value of identifiable net assets acquired, at the acquisition date, is recorded as goodwill.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Foreign currency transactions

Monetary assets and liabilities denominated in foreign currencies are translated into the applicable functional currency of the entity at exchange rates prevailing at the consolidated statements of financial position dates. Revenue and expenses are translated at the average rate for the period. The gains and losses from foreign currency denominated transactions are included in foreign exchange gain/loss in the consolidated statements of (loss) income.

Cash and cash equivalents

Cash and cash equivalents consist of cash in banks and highly liquid investments with original terms to maturity at the date of acquisition of three months or less. As at December 31, 2023, cash equivalents were $nil (2022 - $nil).

Short-term investments

Short-term investments are accounted for at amortized cost using the effective interest rate method. Short-term investments comprise guaranteed investment certificates with original maturities of one year or less at the date of investment, and their carrying value approximates their fair value.

Unbilled revenue

Unbilled revenue includes unbilled amounts typically resulting from sales under long-term contracts when the cost-to-cost method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer accounted for under IFRS 15, "Revenue from Contracts with Customers" ("IFRS 15"). At any given period-end, a large portion of the balance in this account represents the accumulation of labour, materials and other costs that have not been billed due to timing, whereby the accumulation of each month's costs and earnings is administratively billed in subsequent months. Also included in the account are amounts that will become billable according to contract terms, which usually require the consideration of the passage of time, achievement of milestones or completion of the project.

Inventories

Inventories are measured at the lower of cost or net realizable value. The cost of inventories is determined on a weighted average basis. Cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes the purchase price and the directly attributable costs required to bring the asset to the condition necessary for the asset to be capable of operating in the manner intended by management. When components of an item of property, plant and equipment have different useful lives, they are accounted for as

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

separate items of property, plant and equipment and depreciated accordingly. The cost of replacing or repairing a component of an item of property, plant and equipment is recognized in the carrying amount of the item if it is probable that future economic benefits will occur and the cost can be measured reliably. The costs of routine maintenance are recognized in profit or loss as incurred. Depreciation is calculated on the straight-line basis over the estimated useful lives of the assets as follows:

Leasehold improvements	term of the lease
Computer equipment and software	3 years
Furniture and fixtures	5 years
Machinery and equipment	4-7 years
Building	20 years

The Company reviews the residual value, useful lives and depreciation methods used on an annual basis and, where revisions are required, the Company applies such changes in estimates on a prospective basis.

Intangible assets

Intangible assets consist of developed software, customer relationships, non-competition agreements, trade name and backlog.

Developed software, customer relationships, and trade names were acquired through business acquisitions and are recognized at fair value as determined on the acquisition date less accumulated amortization and impairments. Fair value of the developed software and brand is determined based on the present value of expected future cash flows. Customer relationships represent acquired customer relationships with customers that are capable of being separated from the acquired entity and being sold, transferred, licensed, rented or exchanged. These customer relationships are initially recorded at their fair value based on the present value of expected future cash flows.

Amortization is calculated on a straight-line basis over the estimated useful lives of the intangible assets as follows:

Developed software	3-15 years
Customer relationships and backlog	7-15 years
Trade name	7-12 years
Non-competition agreements	term of agreement

The Company continually evaluates the remaining estimated useful lives of its finite intangible assets to determine whether events and circumstances warrant a revision to the remaining period of amortization and are accounted for prospectively from the date of the change.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Impairment of non-financial assets

The carrying amounts of non-financial assets, excluding inventories, deferred income tax assets and contract assets, are reviewed for impairment at each reporting date, or whenever events or changes in circumstances indicate the carrying amounts may not be recoverable. If there are indicators of impairment, a review is undertaken to determine whether the carrying amounts are in excess of their recoverable amounts. Goodwill is tested at least annually, at year-end, for impairment. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows, the cash-generating unit ("CGU"), from continuing use that are largely independent of the cash inflows of other assets or groups of assets.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. The value in use is determined by the cash flows expected to arise from the CGU discounted using a pre-tax discount rate that reflects the current market assessments of the time value of money and asset-specific risk.

In determining fair value less costs of disposal, an appropriate valuation model is used. These calculations are corroborated by the use of valuation multiples, quoted share prices and other available fair value indicators. An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGUs, and then to reduce the carrying amount of the other assets in the CGUs.

For non-financial assets that have been previously impaired, excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previous impairment losses may no longer exist or may have decreased. If such an indication exists, the Company estimates the recoverable amount of the asset or CGU. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset’s recoverable amount since the impairment loss was recognized. The impairment loss to be reversed in the consolidated statements of (loss) income and comprehensive (loss) income is limited to the recoverable amount, but not beyond the carrying amount, net of depreciation or amortization, that would have arisen if the prior impairment loss had not been recognized.

Investment in joint venture

The Company’s joint arrangement has been determined to be a joint venture based on the Company's assessment of its contractual rights and obligations. Joint ventures are accounted for using the equity method whereby the investments are initially recorded at cost. The investment is increased or decreased to reflect the Company’s proportionate share of the post-acquisition earnings or losses and equity movements of the investee, after adjustments to align the accounting policies with those of the Company. When the Company’s share of losses

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

exceeds its interest in an equity-accounted investee, the carrying amount of that interest, including any long-term investments, is reduced to nil, and the recognition of further losses is discontinued except to the extent that the Company has an obligation or has made payments on behalf of the investee.

Deferred compensation asset and liability

The Company recognizes a deferred compensation plan that enables upper level management and executives to defer compensation until retirement. The Company funds these deferred compensation liabilities by making contributions to a trust invested in various mutual funds, presented as deferred compensation asset on the consolidated financial statements.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Company's share of the net identifiable assets of the acquired business at the date of acquisition. Goodwill is presented separately on the consolidated statements of financial position and is subsequently measured at cost less any accumulated impairment losses.

Revenue recognition

The Company recognizes revenue, at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, when control of the promised goods or services is transferred to the customer. Revenue represents the amount that the Company expects to receive for products and services in its contracts with customers, net of sales taxes. The cumulative effects of revisions to contract revenues and estimated completion costs are recorded in the accounting period in which the amounts become evident and can be reasonably estimated. These revisions can include such items as the effects of change orders and claims, warranty claims, liquidated damages or other contractual penalties and adjustments for contract closeout settlements. The following paragraphs describe the specific revenue recognition policies for each of the Company's significant types of revenue.

Contracted projects

The majority of sales of integrated systems are delivered as contracted projects with contract terms of less than one year to more than five years, and the Company typically transfers control of goods or services, and satisfies performance obligations over time and therefore recognizes revenue over time as these performance obligations are satisfied. This continuous transfer of control to the customer is often supported by the customer's physical possession or legal title to the work in process, contractual clauses that provide the Company with a present right to payment for work performed to date plus a reasonable profit in the event a customer unilaterally terminates the contract for convenience, and as the customer simultaneously receives and consumes the benefits provided by the Company's performance. The Company's contract types include fixed price and time and materials

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

contracts. The transaction price includes amounts expected to be received in exchange for the goods or services plus any contract amendments that are expected to be received. Payment terms are based on completion of milestones throughout the project life for fixed price contracts and monthly for time and materials projects.

Many of these projects have distinct performance obligations typically encompassing one or more of installation, maintenance and warranty. A contract's transaction price is allocated to each distinct performance obligation using the best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus margin approach.

Installations
Revenue for the installation obligations of fixed price contracts is recognized over time using the input method based on costs incurred relative to the total expected costs to complete each project. Control is transferred to the customer over time as the customer gains physical possession or legal title to the work in process, as well as contractual clauses that provide the Company with a present right to payment for work performed to date plus a reasonable profit in the event a customer unilaterally terminates the contract for convenience and, accordingly, revenue earned from the contract is recognized over time based on the extent of progress towards completion of the performance obligation based on costs incurred relative to the total expected costs to complete each project. The Company reviews and updates the contract-related estimates regularly. Determining the contract costs and estimates to complete requires significant judgment. Adjustments are recognized in profit on contracts under the cumulative catch-up method in the period the adjustment is identified. If the Company anticipates the estimated remaining costs to completion will exceed the value allocated to the performance obligation, the resulting loss is recognized immediately.

Maintenance
The maintenance obligation of contracts with multiple performance obligations is recognized over the term of the contract as control is transferred to the customer as the customer simultaneously receives and consumes the benefits provided by the Company's performance. Stand-alone maintenance service contracts are typically time and materials, but some are fixed price, for which revenue is recognized in the same manner as fixed price installations, over time using the input method based on costs incurred relative to the total expected costs to complete each project. For time and materials contracts, labour and material rates are established within the contract. Revenues from time and materials contracts are recognized as control is transferred to the customer based on cost plus margin. These services are billed on a monthly basis and collected shortly thereafter.

Warranty
Revenue from warranty obligations is recognized over time based on time lapsed as this best represents the value transferred to the customer.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Product sales

Product sales revenue is recognized when control transfers under the term of the enforceable contract. Customers are billed when transfer of control occurs, and payments are typically due within 30 days.

Financial instruments

Recognition and initial measurement

Financial assets and liabilities, with the exception of accounts receivable and unbilled revenues that do not have a significant financing component, are initially recognized at fair value plus or minus directly attributable transaction costs as appropriate, except for financial assets at fair value through profit or loss ("FVTPL"), for which transaction costs are expensed. Accounts receivable and unbilled revenue that does not have a significant financing component are initially measured at the transaction price determined in accordance with IFRS 15. Accounts receivable are recognized on the date that they originate, and all other financial instruments are recognized when the Company becomes a party to the contractual provisions of the instrument. The Company considers whether a contract contains an embedded derivative when the Company first becomes party to it. Embedded derivatives are separately accounted for from the host contract if the host contract is not measured at FVTPL and when the economic characteristics and risks are not closely related to those of the host contract. Reassessment of the fair value of derivatives occurs each reporting period, with the changes in fair value recognized through profit or loss.

Financial assets

The classification of financial assets depends on the business model for managing the financial assets and the associated contractual cash flows. A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold assets to collect contractual cash flows, and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's financial assets consist of cash and cash equivalents, short-term investments, restricted short-term investments, accounts receivable, unbilled revenue, and deferred compensation asset, all of which are classified at amortized cost.

Financial liabilities

The Company determines the classification of its financial liabilities at initial recognition. The Company's financial liabilities consist of accounts payable and accrued liabilities, convertible debentures, long-term debt and deferred compensation liabilities, which are classified at amortized cost.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Subsequent measurement

Subsequent to initial recognition, financial assets and liabilities classified at amortized cost are measured using the effective interest method, less, in the case of financial assets, any impairment. Interest income and expense, foreign exchange gains and losses, impairment and any gain or loss on derecognition are recognized in profit and loss. Contingent liabilities are reported at fair value and the gain or loss recognized in profit or loss as an other charge.

Derecognition

The Company derecognizes a financial asset when the rights to receive cash flows from the financial asset have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership. The Company derecognizes a financial liability when the contractual obligations are discharged, cancelled or expired.

Derivative instruments

The Company may use derivative financial instruments to reduce exposure to fluctuation in foreign currency exchange rates. The Company may enter into foreign exchange contracts to hedge anticipated cash flows denominated in a foreign currency. Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset or liability and certain criteria are met. Derivative assets and liabilities are remeasured at each subsequent reporting period with any gains or losses arising from changes in fair value recorded within profit or loss.

The Company has elected not to apply hedge accounting to derivative contracts; as such, these derivative financial instruments are recorded at fair value upon recognition and on a recurring basis, with subsequent changes in fair value recorded in profit or loss during the period of change. Derivatives are reported as other current assets when they have a positive fair value and as other current liabilities when they have a negative fair value.

Fair value measurement of financial instruments

The Company uses various valuation techniques and assumptions when measuring fair value of its financial assets and financial liabilities. The Company utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

The Company's fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value. The three levels of the fair value hierarchy are as follows:

Level 1 – Inputs are based on quoted prices (unadjusted) in active markets that are accessible at the reporting date for identical assets or liabilities;

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Level 2 – Inputs are based on quoted prices included in Level 1 that are observable for the asset or liability either directly (i.e., prices) or indirectly (i.e., derived from prices); and

Level 3 – Inputs are based on prices or valuation techniques that are both unobservable and significant to the overall fair value measurement.

The following methods and assumptions were used to estimate the fair values of each class of financial instruments for which it is practicable to estimate that value.

Derivative financial instruments
The fair value of sales contract embedded derivatives is measured using a market approach, based on the difference between the quoted forward exchange rate as of the contract date and quoted forward exchange rate as of the reporting date. The fair value of forward exchange contracts is determined using the quoted forward exchange rates at the reporting date. The fair value of derivative liabilities related to the convertible debentures is measured using the Black-Scholes option pricing model.

Contingent liabilities
Contingent liabilities are carried at fair value, which is calculated using management's estimates or, where appropriate, a Monte Carlo simulation model.

The carrying amount of the Company's other financial assets and liabilities, including cash and cash equivalents, short-term investments, restricted short-term investments, accounts receivable, unbilled revenue, and accounts payable and accrued liabilities, approximate their fair value due to their short-term maturity. The fair value of the bank indebtedness and long-term debt approximates the carrying amount since these debt instruments have floating interest rates. The value of convertible debentures is initially recognized at fair value, and subsequently measured at amortized cost using the effective interest rate method. The carrying amount of the deferred compensation asset and deferred compensation liability are measured at fair value based on the fair value of the underlying investments.

Impairment of non-derivative financial assets
The Company applies the IFRS 9, "Financial Instruments" simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for all accounts receivable and contract assets. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, observable changes in national or local economic conditions that correlate with default on receivables, and financial condition of the borrower. Financial assets are written off when there is no reasonable expectation of recovery.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Research and development

Research costs are included in the consolidated statements of (loss) income and comprehensive (loss) income in the periods in which they are incurred, net of earned investment tax credits. Software development costs are deferred and amortized when technological feasibility has been established, or otherwise are expensed as incurred.

Warranties

The Company records the estimated costs of product warranties at the time revenue is recognized. Warranty obligation arises from the Company having to replace goods and/or services that have failed to meet required customer specifications due to breakdown or error related to product or workmanship. The Company's warranty obligations are affected by product failure rates, differences in warranty periods, regulatory developments with respect to warranty obligations in the countries in which the Company carries on business, freight expense and material usage and other related repair costs.

The Company's estimates of costs are based upon historical experience, expectations of future return rates and unit warranty repair costs. If the Company experiences increased or decreased warranty activity or increased or decreased costs associated with servicing those obligations, revisions to the estimated warranty liability are recognized in the reporting period when such revisions are made.

Financing costs

Financing costs are comprised of borrowing costs related to short- and long-term debt and the unwinding of the discount on provisions.

Leases

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company recognizes a right-of-use ("ROU") asset and a lease liability at the lease commencement date, which is the date the leased asset is available for use. The Company has elected not to separate lease and non-lease components and instead treats them all as lease payments and a single lease component.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. The incremental borrowing rate is the rate that the Company would have to pay to borrow the funds necessary to obtain an asset of similar value to the ROU asset in a similar economic environment with similar terms, security and conditions. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. The lease liability is

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

measured at amortized cost using the effective interest method. The lease liability is remeasured when there is a change in future lease payments arising from a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the ROU asset unless it has been reduced to zero. Any further reduction in the lease liability is then recognized in profit or loss.

The ROU asset is initially measured based on the initial lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The ROU assets are depreciated over the shorter of the lease term and the useful life of the underlying asset using the straight-line method as this most closely reflects the expected pattern of the consumption of the future economic benefits. In addition, the ROU asset can be periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

A lease modification will be accounted for as a separate lease if the modification increases the scope of the lease and if the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope. For a modification that is not a separate lease or where the increase in consideration is not commensurate, at the effective date of the lease modification, the Company will remeasure the lease liability using the Company's incremental borrowing rate on the date of modification, when the rate implicit to the lease is not readily available, with a corresponding adjustment to the ROU asset.

The lease payments associated with short-term and low-value leases are recognized as an expense on a straight-line basis over the lease term as the Company has elected the relevant practical expedients. Short-term leases are those with a lease term of 12 months or less. Low-value asset leases are those leases where the asset being leased when new has a value of less than US$5.

Income taxes, deferred taxes and investment tax credits

Income taxes comprise current and deferred income taxes. Income taxes are recognized in the consolidated statements of (loss) income and comprehensive (loss) income, except to the extent that they relate to items recognized directly in equity or in OCI, in which case the income taxes are also recognized in equity or in OCI.

Current income taxes are the expected taxes payable on the taxable income for the year, using income tax rates enacted or substantively enacted, at the end of the reporting period, and any adjustment to income taxes payable in respect of previous years.

2. MATERIAL ACCOUNTING POLICY INFORMATION (continued)

Deferred income tax assets and liabilities are determined based on the difference between the accounting and tax bases of the assets and liabilities and measured using the enacted tax rates that are expected to be in effect when the differences are estimated to be reversed. The realization of deferred income tax assets is dependent upon the generation of sufficient future taxable income during the periods prior to the expiration of the associated tax attributes. The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be used. Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax assets to be recovered.

The Company is also engaged in scientific research and experimental development giving rise to investment tax credits that may be available to reduce future taxes payable in certain jurisdictions. In calculating income taxes and investment tax credits, consideration is given to factors such as current and future tax rates in the different jurisdictions, non-deductible expenses, qualifying expenditures and changes in tax law. In addition, management makes judgments on the ability of the Company to realize these investment tax credits reported as assets based on its estimations of amounts and timing of future taxable income and future cash flows in the related jurisdiction.

Discontinued operations

A discontinued operation is a component of the Company's business, of which the operations and cash flows can be clearly distinguished from the rest of the Company, and either (a) represents a separate major line of business or geographic area of operations; (b) is part of a single coordinated plan to dispose of a separate major line of business or geographic area of operations; or (c) is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs at the earlier of disposal or when the operation meets the criteria to be classified as held for sale. Discontinued operations are presented separately from continuing operations in the consolidated statements of (loss) income and comprehensive (loss) income and consolidated statements of cash flows for all periods presented.

3. FUTURE ACCOUNTING PRONOUNCEMENTS

Listed below are the standards, amendments and interpretations that the Company reasonably expects to be applicable at a future date and intends to adopt when they become effective.

Amendments to IAS 1, "Presentation of Financial Statements" - *Classification of Liabilities as Current or Non-Current*

In January 2020 and October 2022, the IASB issued amendments to paragraphs 69 - 76 of IAS 1 to clarify the requirements for classifying liabilities as current or non-current. The amendments specify that the conditions that exist at the end of a reporting period are those that will be used to determine if a right to defer settlement of a liability exists. The amendments also clarify the situations that are considered a settlement of a liability. The amendments are effective for annual periods on or after January 1, 2024, with early adoption permitted. The amendments are to be applied retrospectively.

Amendments to IFRS 16, "Leases" - *Lease Liability in a Sale and Leaseback*

In September 2022, the IASB issued *Lease Liability in a Sale and Leaseback* (Amendments to IFRS 16). The amendment to IFRS 16, "Leases" specifies the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction, to ensure the seller-lessee does not recognize any amount of the gain or loss that relates to the right of use it retains. After the commencement date in a sale and leaseback transaction, the seller-lessee applies paragraphs 29 to 35 of IFRS 16 to the right-of-use asset arising from the leaseback and paragraphs 36 to 46 of IFRS 16 to the lease liability arising from the leaseback. In applying paragraphs 36 to 46, the seller-lessee determines "lease payments" or "revised lease payments" in such a way that the seller-lessee would not recognize any amount of the gain or loss that relates to the right of use retained by the seller-lessee. Applying these requirements does not prevent the seller-lessee from recognizing, in profit or loss, any gain or loss relating to the partial or full termination of a lease, as required by paragraph 46(a) of IFRS 16. The amendments are effective for annual periods on or after January 1, 2024, with early adoption permitted. The amendments are to be applied retrospectively.

Management is currently assessing the impact of these amendments.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

4. DISCONTINUED OPERATIONS

On June 15, 2023, the Company sold WiLAN for a combination of cash, equity and other non-cash proceeds totaling an estimated fair market value of $54,286. Equity consideration retained consists of 10% of WiLAN currently recognized at fair market value on the consolidated statement of financial position using Level 3 inputs. The contingent consideration has also been fair valued using Level 3 inputs and is recorded on the consolidated statement of financial position in accounts and other long-term receivables. WiLAN represented the Company's Licensing segment since its inception and, thus, following disposition, the Company has a single operating segment, comprised solely of its ITS operations. As a result of the sale, the Company recognized the following loss on sale in the consolidated statement of (loss) income:

Loss on sale of WiLAN

Gross cash proceeds at time of sale	**$46,378**
Amounts in escrow or receivable	**2,176**
Fair value of contingent consideration	**5,065**
Fair value of equity investment in other entity	**3,864**
Transaction costs	**(3,694)**
Subsequent adjustment to proceeds of sale paid in cash (net)	**497**
Net proceeds of sale	**54,286**
Net assets disposed (including cash of $10,501)	**(62,625)**
Cumulative foreign exchange loss reclassified from equity	**(3,166)**
Loss on disposal, before tax	**($11,505)**

The results of the discontinued operations are presented below for the following periods:

	Year ended December 31,	
	2023	2022
Revenues	**$5,850**	$146,356
Direct cost of revenues	**8,160**	66,629
Gross (loss) profit	**(2,310)**	79,727
Operating expenses	**7,918**	18,931
Results from operations	**(10,228)**	60,796
Other income	**(303)**	(305)
(Loss) income before taxes	**(9,925)**	61,101
Current income tax (recovery) expense	**(375)**	895
Deferred income tax (recovery) expense	**(3,357)**	3,289
(Loss) income from discontinued operations	**(6,193)**	56,917
Loss on disposal, before tax	**11,505**	-
Income tax expense on disposal	**4,111**	-
Net (loss) income from discontinued operations	**($21,809)**	$56,917

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

5. FINANCIAL INSTRUMENTS

Derivatives include the embedded derivative portion of the unearned revenue of US dollar denominated sales contracts in the Company's Canadian, Chilean and Mexican subsidiaries. The fair value of sales contract embedded derivatives is measured using a market approach, based on the difference between quoted forward exchange rates as of the contract date and quoted forward exchange rates as of the reporting date. Derivatives also include the derivative liability portion of convertible debentures and are measured using the Black-Scholes option pricing model. The fair value of convertible debentures and long-term debt approximates carrying value as these instruments bear interest at market rates. The carrying amount of the Company's other financial assets and liabilities, including cash and cash equivalents, short-term investments, restricted short-term investments, accounts receivable, unbilled revenue and accounts payable and accrued liabilities, approximates their fair values due to the short-term maturity of these items.

Inputs used to calculate the fair value of derivative and convertible debentures financial instruments are classified as Level 2 inputs, inputs used to calculate contingent liabilities are classified as Level 3 inputs, and inputs for all other financial instruments for which fair value approximates carrying value are classified as Level 1 inputs.

6. UNBILLED REVENUE AND DEFERRED REVENUE

Significant changes in unbilled revenue and deferred revenue balances during the year ended December 31, 2023 are as follows:

As at	**December 31, 2023**	December 31, 2022	$ Change
Unbilled revenue	**$45,377**	$41,423	$3,954
Deferred revenue - current	**(7,693)**	(8,542)	849
Deferred revenue - non-current	**(823)**	(2,744)	1,921
Net contract assets	**$36,861**	$30,137	$6,724

Revenue recognized for the year ended December 31, 2023 that was included in deferred revenue at the beginning of the year was $6,030 (2022 - $6,834).

7. INVENTORIES

As at	**December 31, 2023**	December 31, 2022
Raw materials	**$2,385**	$2,101
Original equipment manufacturer materials	**5,995**	6,517
Work in process	**2,012**	1,642
Finished goods	**3,865**	3,411
	$14,257	$13,671

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

7. INVENTORIES (continued)

During the year, inventories expensed within direct cost of revenues were $20,371 (2022 - $21,200). Write-downs of inventory that were included in direct cost of revenues for the year were $78 (2022 - $105). Reversals of write-downs recognized during the year were $75 (2022 - $127).

8. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

The Company has leases for corporate offices, production facilities, vehicles and equipment used in operations. These leases have remaining lease terms ranging from 3 months to 10 years, some of which include options to extend the leases for up to 14 years or to terminate the lease with notice periods of 120 days to 6 months or at predetermined dates as specified within the lease contract. The Company has classified the assets related to these leases as right-of-use assets and the liabilities associated with the future lease payments under these leases as lease liabilities. The following table provides details of changes in the Company's right-of-use assets:

	Buildings	Vehicles and Operations Equipment	Total
Cost			
Balance, January 1, 2022	$10,934	$437	$11,371
Additions	6,304	63	6,367
Disposals	(46)	-	(46)
Foreign currency translation	731	(2)	729
Balance, December 31, 2022	17,923	498	18,421
Additions	**2,063**	**-**	**2,063**
Disposals	**(3,264)**	**(115)**	**(3,379)**
Foreign currency translation	**(107)**	**4**	**(103)**
Balance, December 31, 2023	**$16,615**	**$387**	**$17,002**

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

8. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES (continued)

Accumulated Depreciation and Impairment			
Balance, January 1, 2022	$3,457	$153	$3,610
Depreciation	2,371	164	2,535
Disposals	(46)	-	(46)
Impairment	1,778	-	1,778
Foreign currency translation	230	2	232
Balance, December 31, 2022	7,790	319	8,109
Depreciation	**2,052**	**94**	**2,146**
Disposals	**(1,873)**	**(115)**	**(1,988)**
Impairment	**1,830**	**-**	**1,830**
Foreign currency translation	**(101)**	**-**	**(101)**
Balance, December 31, 2023	**$9,698**	**$298**	**$9,996**
Net Book Value			
Balance, January 1, 2022	$7,477	$284	$7,761
Balance, December 31, 2022	$10,133	$179	$10,312
Balance, December 31, 2023	**$6,917**	**$89**	**$7,006**

The Company recognized depreciation expense of $99 in discontinued operations during the year ended December 31, 2023 (2022 - $208).

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

8. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES (continued)

The following table provides details of changes in the Company's lease liabilities:

Balance, January 1, 2022	$7,792
Additions	6,367
Interest	329
Payments	(2,545)
Foreign currency translation	323
Balance, December 31, 2022	12,266
Additions	**2,063**
Disposals	**(1,402)**
Interest	**492**
Payments	**(3,194)**
Foreign currency translation	**(48)**
Balance, December 31, 2023	**$10,177**

As at	**December 31, 2023**
Maturities of lease liabilities:	
2024	**$3,025**
2025	**2,767**
2026	**2,265**
2027	**1,653**
2028	**832**
Thereafter	**878**
Total lease payments	**11,420**
Less imputed interest	**1,243**
Total	**$10,177**
Comprised of:	
Current portion of lease liabilities	**$2,589**
Long-term lease liabilities	**7,588**
Lease liabilities as at December 31, 2023	**$10,177**

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

9. PROPERTY, PLANT AND EQUIPMENT

	Leasehold Improvements	Computer Equipment and Software	Furniture and Fixtures	Machinery and Equipment	Land and Building	Total
Cost						
Balance, January 1, 2022	$477	$6,015	$1,646	$3,070	$701	$11,909
Additions	26	508	781	2,072	7	3,394
Disposals	-	-	-	(624)	-	(624)
Foreign currency translation	-	9	3	15	24	51
Balance, December 31, 2022	503	6,532	2,430	4,533	732	14,730
Additions	**157**	**383**	**10**	**1,664**	**-**	**2,214**
Disposals	**(227)**	**(2,494)**	**(765)**	**(1,409)**	**(727)**	**(5,622)**
Foreign currency translation	**(1)**	**27**	**(17)**	**(21)**	**(5)**	**(17)**
Balance, December 31, 2023	**432**	**4,448**	**1,658**	**4,767**	**-**	**11,305**
Accumulated Depreciation and Impairment						
Balance, January 1, 2022	210	3,894	827	1,233	51	6,215
Depreciation	50	487	787	925	19	2,268
Disposals	-	-	-	(622)	-	(622)
Foreign currency translation	-	(18)	(24)	(14)	(1)	(57)
Balance, December 31, 2022	260	4,363	1,590	1,522	69	7,804
Depreciation	**48**	**723**	**223**	**1,158**	**19**	**2,171**
Impairment	**-**	**21**	**4**	**437**	**-**	**462**
Disposals	**(78)**	**(2,476)**	**(715)**	**(1,264)**	**(88)**	**(4,621)**
Foreign currency translation	**-**	**1**	**1**	**7**	**-**	**9**
Balance, December 31, 2023	**230**	**2,632**	**1,103**	**1,860**	**-**	**5,825**
Net Book Value						
Balance, January 1, 2022	$267	$2,121	$819	$1,837	$650	$5,694
Balance, December 31, 2022	$243	$2,169	$840	$3,011	$663	$6,926
Balance, December 31, 2023	**$202**	**$1,816**	**$555**	**$2,907**	**-**	**$5,480**

Depreciation expense of $8 was recognized in discontinued operations during the year ended December 31, 2023 (2022 - $34).

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

10. INTANGIBLE ASSETS

	Patents	Developed Software	Customer Relationships, Trade Name, Non-competition Agreements and Backlog	Total
Cost				
Balance, January 1, 2022	$403,981	$45,452	$92,418	$541,851
Additions	-	5,714	-	5,714
Foreign currency translation	26,654	2,618	4,730	34,002
Balance, December 31, 2022	430,635	53,784	97,148	581,567
Additions	**-**	**4,580**	**-**	**4,580**
Disposals	**(428,877)**	**-**	**-**	**(428,877)**
Foreign currency translation	**24**	**(1,103)**	**(1,733)**	**(2,812)**
Balance, December 31, 2023	**1,782**	**57,261**	**95,415**	**154,458**
Accumulated Amortization and Impairment				
Balance, January 1, 2022	364,861	10,137	15,498	390,496
Amortization	13,496	3,308	8,005	24,809
Foreign currency translation	24,674	76	177	24,927
Balance, December 31, 2022	403,031	13,521	23,680	440,232
Amortization	**6,220**	**3,164**	**8,131**	**17,515**
Impairment	**297**	**-**	**378**	**675**
Disposals	**(408,425)**	**-**	**-**	**(408,425)**
Foreign currency translation	**(24)**	**(100)**	**(210)**	**(334)**
Balance, December 31, 2023	**1,099**	**16,585**	**31,979**	**49,663**
Net Book Value				
Balance, January 1, 2022	**$39,120**	**$35,315**	**$76,920**	**$151,355**
Balance, December 31, 2022	**$27,604**	**$40,263**	**$73,468**	**$141,335**
Balance, December 31, 2023	**$683**	**$40,676**	**$63,436**	**$104,795**

The Company recognized amortization expense in discontinued operations of $5,925 during the year ended December 31, 2023 (2022 - $13,189). In addition, impairment losses of $675 were recognized by the Company during the year ended December 31, 2023 (2022 - $nil).

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

11. INVESTMENT IN JOINT VENTURE

	December 31, 2023	December 31, 2022
Balance, beginning of the year	**$7,751**	$7,458
Currency loss on financial statement translation	**(623)**	(223)
Company's share of earnings (recorded in other income)	**502**	1,806
Dividend received	**(934)**	(1,290)
Balance, end of year	**$6,696**	$7,751

XPCT is a joint venture in China in which the Company's subsidiary International Road Dynamics Inc. ("IRD") holds a 50% interest. XPCT has two business divisions providing products and services to both the ITS industry and construction equipment manufacturers.

IRD had sales to XPCT of $11 during the year ended December 31, 2023 (2022 - $125). As at December 31, 2023, XPCT had no amounts owing to IRD (2022 - $nil).

As at December 31, 2023, IRD has an outstanding 100% joint and several liability guarantee to XPCT, for a loan in the amount of 15,000 yuan, or $2,864 (2022 - $2,945); however, IRD can seek recourse against its joint venture partner for any amount greater than IRD's proportionate share of the liability. The amount owing represents the maximum amount available to be drawn under this facility.

The Company's ownership interest comprises a 50% share of net assets and net earnings of XPCT as well as purchase price adjustments to allocate fair values assigned to certain assets and liabilities at the time of acquisition. Summary financial information for XPCT is as follows:

As at	**December 31, 2023**	December 31, 2022
Cash	**$300**	$446
Other current assets	**24,825**	40,532
Non-current assets	**535**	902
Current liabilities		
Accounts payable and accrued liabilities	**(7,496)**	(14,590)
Short-term loans	**(3,093)**	(9,844)
Non-current liabilities	**(1,679)**	(1,944)
Net assets - 100%	**$13,392**	$15,502
Net assets attributable to the Company - 50%	**$6,696**	$7,751

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

11. INVESTMENT IN JOINT VENTURE (continued)

	Year ended December 31,	
	2023	2022
Revenues	**$43,183**	$43,943
Direct cost of revenues	**(36,732)**	(35,915)
Depreciation and amortization	**(2,007)**	(1,499)
Finance expense	**(2,083)**	(962)
Other expenses	**(1,180)**	(1,322)
Income before income taxes	**1,181**	4,245
Income tax expense	**177**	633
Net income - 100%	**$1,004**	$3,612
Net income attributable to the Company - 50%	**$502**	$1,806

12. INVESTMENT IN OTHER ENTITY

On June 15, 2023, as part of the consideration for the sale of WiLAN, the Company retained a 10% equity stake in WiLAN. The investment is recorded at fair value using Level 3 inputs, with changes in fair value recognized through profit or loss. As at December 31, 2023, the investment in WiLAN is valued at $3,840.

13. DEFERRED COMPENSATION

The Company's subsidiary, Electronic Transaction Consultants, LLC ("ETC"), provides a deferred compensation plan that enables upper-level management and executives to defer compensation until retirement. ETC funds these deferred compensation liabilities by making contributions to a trust invested in various mutual funds, presented as a deferred compensation asset on the financial statements.

14. GOODWILL

The changes in the carrying amount of goodwill by segment are presented in the table below:

	Note	**Licensing**	**Intelligent Transportation Systems**	**Total**
Balance, January 1, 2022		$16,061	$37,004	$53,065
Foreign currency translation		1,065	2,255	3,320
Balance, December 31, 2022		17,126	39,259	56,385
Disposals	4	**(16,658)**	**-**	**(16,658)**
Foreign currency translation		**(468)**	**(809)**	**(1,277)**
Balance, December 31, 2023		**-**	**$38,450**	**$38,450**

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

14. GOODWILL (continued)

In accordance with the IFRS guidance related to goodwill, the Company is required to assess the carrying amount of its goodwill for potential impairment annually or more frequently if events or a change in circumstances indicate that impairment may have occurred. The Company tests goodwill for impairment annually at year-end using data as of December 31 of that year at the level of the group of CGUs to which the goodwill is allocated, which corresponds with the corresponding operating segment. On June 15, 2023, the Company sold WiLAN, which represented the Company's Licensing segment as disclosed in Note 4, Discontinued Operations.

The recoverable amount of the CGU to which the goodwill belongs is determined based on a value-in-use calculation that discounts the present value of estimated future cash flows at an appropriate risk-adjusted rate. The Company uses its internal forecasts to estimate future cash flows and includes an estimate of long-term future growth rates based on its most recent views of the long-term outlook for each business for a period of five years and a terminal growth rate of 3%. Actual results may differ from those assumed in these forecasts. The Company derives its discount rates using a capital asset pricing model and by analyzing published rates for industries relevant to its reporting units to estimate the cost of equity financing. The Company uses discount rates that are commensurate with the risks and uncertainty inherent in the respective businesses and in its internally developed forecasts. The discount rate used in valuations as at December 31, 2023 was 14% (2022 - 12%).

The results of the assessments performed as at December 31, 2023 and December 31, 2022 indicated that the recoverable amount of goodwill exceeded carrying value, and management believes that no reasonably possible change in any of the above key assumptions would have caused the carrying amount to exceed its recoverable amount.

Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including actual operating results. It is reasonably possible that the judgments and estimates described above could change in future periods.

15. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

As at	**December 31, 2023**	December 31, 2022
Trade payables	**$31,389**	$21,376
Accrued compensation	**4,422**	10,781
Accrued contingent partner payments and legal fees	**-**	1,146
Dividends payable	**-**	1,433
Accrued litigation costs	**-**	6,473
Accrued project losses	**1,989**	4,228
Other current liabilities	**2,386**	1,626
	$40,186	$47,063

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

16. LONG-TERM DEBT

As at	**December 31, 2023**	December 31, 2022
Senior term credit facility:		
US$50,000 due September 1, 2026	**$26,045**	$29,681
Less: current portion of long-term debt	**(2,816)**	(29,292)
Debt issuance costs, net of amortization	**(291)**	(389)
Total long-term debt	**$22,938**	-

During the year ended December 31, 2021, Quarterhill ITS, the parent company of IRD and ETC and wholly owned subsidiary of Quarterhill, entered into a credit agreement to receive senior secured credit facilities from HSBC Bank Canada and Royal Bank of Canada consisting of a revolving credit facility in the maximum amount of US$15,000 and a term credit facility of US$50,000. These credit facilities replaced all existing facilities the Company had with HSBC Bank Canada. The interest rate for the facilities as at December 31, 2023 was 9.8% (2022 – 6.9%). Both the facilities have a maturity date of August 31, 2026 with a general security agreement over all of the assets in North America of IRD, ETC and its parent holding company, Quarterhill USA Inc. The carrying value of these assets as at December 31, 2023 was $290,598.

During the year ended December 31, 2023, no amounts were drawn from the revolving credit facility. Repayments, if any amounts are drawn, on the revolving credit facility are ultimately due on the maturity date.

On June 27, 2023 ("Amendment Date"), the Company finalized an amendment to its existing credit agreement. As of the Amendment Date, the balance on the term loan was US$21,250. The amendment modifies certain terms and conditions of the credit agreement to provide the Company with additional flexibility in its covenant and cash management, including a waiver on the Senior Leverage Ratio for all reporting periods up to March 31, 2024 (the "Covenant Relief Period") and a reduction in the revolving credit facility from US$15,000 to US$5,000.

Repayment of principal on the term credit facility has been renegotiated to 2.5% of the balance as at the Amendment Date per quarter up to the maturity date, upon which the remaining balance is due.

The financial covenants the Company must maintain are as follows:

- A Fixed Charge Coverage Ratio of at least 1.20 to 1.00 on a rolling four-quarter basis. During the Covenant Relief Period, this covenant is satisfied through support of the parent company to Quarterhill ITS;
- A Senior Leverage Ratio of not more than 3.50 to 1.00 as at September 1, 2021 and thereafter up to and including the fiscal quarter ending March 31, 2023. From April 1, 2023 and at all times thereafter, up to and including the maturity date, the Senior Leverage Ratio may not exceed 3.00 to 1.00. This covenant is waived for all reporting periods from March 31, 2023 up to March 31, 2024. This ratio may increase by 0.50 to 1.00 for the next two fiscal quarters immediately following an acquisition if the aggregate purchase price is equal to or greater than US$20,000; and
- Certain minimum earnings thresholds must be met at each reporting quarter during the covenant relief period.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

16. LONG-TERM DEBT (continued)

Scheduled principal repayments on long-term debt are as follows:

	Principal
To December 31, 2024	**$2,816**
To December 31, 2025	**2,816**
To September 1, 2026	**20,413**
	$26,045

17. CONVERTIBLE DEBENTURES AND DERIVATIVE LIABILITY

The following table illustrates the allocation of the gross proceeds of the debentures between debt and equity at issuance and subsequent remeasurement:

	December 31, 2023	December 31, 2022
Convertible unsecured subordinated debentures:		
Gross proceeds	**$57,500**	$57,500
Convertible debentures, host debt component	**$51,836**	$50,003
Debt issuance costs, net of amortization	**(1,227)**	(1,624)
Convertible debentures	**$50,609**	$48,379
Convertible debentures, derivative liability component, opening	**$1,786**	$9,441
Change in fair value of derivative liability	**1,248**	(7,655)
Derivative liability, ending	**$3,034**	$1,786

On October 27, 2021, the Company completed a brokered financing of $57,500 by way of the issuance of unsecured subordinated convertible debentures (the “Debentures”), which includes the full exercise of a $7,500 over allotment option by the underwriters. The Debentures are traded on the TSX under the symbol “QTRH.DB”.

The Debentures have a coupon rate of 6%, payable semi-annually, with a maturity date of October 30, 2026 and an initial conversion price into common shares of $3.80. Each Debenture is convertible into common shares of the Company at the option of the holder at any time prior to the close of business on the earlier of the last business day immediately preceding the date of maturity of October 30, 2026 (the "Maturity Date"). Holders converting their Debentures will, in addition to the applicable number of common shares to be received on conversion, receive accrued and unpaid interest, if any, thereon for the period from the last interest payment date on their Debentures up to, but excluding, the date of conversion. Except in certain circumstances involving a “Change of Control”, the Debentures will not be redeemable at the option of the Company before October 31, 2024. On or after October 31, 2024 and prior to October 31, 2025, the Debentures may be redeemed in whole or in part at the option of the Company on not more than 60 days’ and not less than 30 days’ prior notice at a price

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

17. CONVERTIBLE DEBENTURES AND DERIVATIVE LIABILITY (continued)

equal to the principal amount plus accrued and unpaid interest, provided that the volume weighted average trading price of the common shares on the TSX for 20 consecutive trading days ending on the fifth trading day preceding the date on which the notice of redemption is given is not less than 125% of the then conversion price. On or after October 31, 2025 and prior to the Maturity Date, the Debentures may be redeemed in whole or in part at the option of the Company on not more than 60 days' and not less than 30 days' prior notice at a price equal to their principal amount plus accrued and unpaid interest.

Assuming the conversion of all of the Debentures, the Company will issue 15,131,579 common shares. The initial fair value of the conversion option was estimated at $9,533. The conversion option is considered a derivative because the exercise price is in Canadian dollars whereas the Company's functional currency is US dollars. Accordingly, the Company recognizes the conversion option as a liability at fair value with changes in fair value recognized through profit or loss. The fair value of the conversion option is calculated using the Black-Scholes option pricing model with the following weighted average assumptions:

As at	**December 31, 2023**	December 31, 2022
Risk-free rate	**5.00%**	3.89%
Expected life (in years)	**2.83**	3.80
Expected volatility	**40%**	38%
Expected dividend yield	**0.00%**	1.95%
Share price	**$1.95**	$1.58

Debt issuance costs incurred in 2021 associated with the issuance of the Debentures were $2,476 and were allocated between the host debt and the conversion option on a relative fair value basis.

18. SHARE CAPITAL

The share capital of the Company consists of the following:

		Issued and Outstanding	
	Authorized	**December 31, 2023**	December 31, 2022
a) Common shares, with no par value	Unlimited	**115,076,583**	114,639,700
b) Special preferred, redeemable, retractable, non-voting shares	6,350.90	**Nil**	Nil
c) Preferred shares, issuable in series	Unlimited	**Nil**	Nil

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

18. SHARE CAPITAL (continued)

	Number
January 1, 2022	113,880,853
Issuance of common shares upon vesting of restricted stock units	131,316
Issuance of common shares upon vesting of performance stock units	19,196
Exercise of stock options	608,335
December 31, 2022	114,639,700
Issuance of common shares upon vesting of restricted stock units	278,915
Conversion of deferred stock units to common shares	51,168
Exercise of stock options	106,800
December 31, 2023	**115,076,583**

The Company paid quarterly cash dividends as follows:

	2023		2022	
	Per Share	**Total**	Per Share	Total
1st quarter	**$0.0125**	**$1,433**	$0.0125	$1,408
2nd quarter	**-**	**-**	$0.0125	1,432
3rd quarter	**-**	**-**	$0.0125	1,420
4th quarter	**-**	**-**	$0.0125	1,433
	$0.0125	**$1,433**	$0.0500	$5,693

Stated capital reduction

On May 8, 2023, the Company's shareholders approved a reduction of the stated capital of the Company in the amount of $120,000. The purpose of the stated capital reduction was to grant the Board of Directors more flexibility in capital management, specifically in relation to its ability to distribute dividends. The reduction in stated capital was offset by a corresponding increase in contributed surplus.

Stock-based compensation

At the annual and special meeting of shareholders held on April 18, 2018, Quarterhill's shareholders approved the adoption of the Company's 2018 Equity Incentive Plan (the "Equity Plan"). As at December 31, 2023, the Company had options to purchase up to 5,628,129 common shares outstanding. Upon adoption of the Equity Plan, all options outstanding under the Option Plan are now governed by the Equity Plan.

During the year ended December 31, 2023, the Company granted options to purchase 250,000 common shares at exercise price of $1.25. The Company used the Black-Scholes model for estimating the fair value of options granted with the following weighted average assumptions for the options granted in 2023.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

18. SHARE CAPITAL (continued)

	2023
Risk-free rate	3.22%
Volatility	41.74%
Expected option life (in years)	4.17
Expected dividend yield	3.75%
Forfeiture rate	31.15%

The table below illustrates the options activity for the years ending December 31, 2023 and 2022 :

	Options Outstanding			Exercisable Options	
	Number of Options	**Price Range**	**Weighted Average Exercise Price**	**Number**	**Weighted Average Exercise Price**
January 1, 2022	8,544,271	$1.33 — $2.84	$2.02	2,978,725	$2.04
Granted	1,963,824	2.08 — 2.14	2.12		
Forfeited	(703,331)	1.81 — 2.84	2.53		
Expired	(526,478)	1.81 — 2.84	2.68		
Exercised	(608,335)	1.81 — 2.17	1.96		
December 31, 2022	8,669,951	$1.33 — $2.84	$2.02	2,978,725	$2.04
Granted	**250,000**	**$1.25**	**$1.25**		
Forfeited	**(1,040,922)**	**1.81 — 2.70**	**2.28**		
Expired	**(2,144,100)**	**1.33 — 2.70**	**2.12**		
Exercised	**(106,800)**	**$1.33**	**1.33**		
December 31, 2023	**5,628,129**	**$1.25 — $2.70**	**$2.09**	**4,682,956**	**$2.05**

The weighted average fair value per option granted during the year ended December 31, 2023 was $0.41 (2022 – $0.84).

The intrinsic value of the exercisable options was $330 as at December 31, 2023 (2022 - $97). The total fair value of options vested was $66 for the year ended December 31, 2023 (2022 - $1,511).

As at December 31, 2023, there was $102 of total unrecognized stock-based compensation cost, net of expected forfeitures, related to unvested stock-based compensation arrangements granted under the stock option plan. This cost is expected to be recognized over a weighted average period of 3.3 years. Details of the outstanding options as at December 31, 2023 are as follows:

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

18. SHARE CAPITAL (continued)

Range of Exercise Prices			Outstanding Options at December 31, 2023	Remaining Term of Options in Years	Weighted Average Exercise Price	Exercisable Options at December 31, 2023	Weighted Average Exercise Price
$1.25	**—**	**$1.25**	**250,000**	**5.47**	**$1.25**	**250,000**	**$1.25**
1.26	**—**	**1.99**	**2,270,997**	**2.22**	**1.90**	**2,270,997**	**1.90**
2.00	**—**	**2.49**	**2,150,465**	**2.79**	**2.13**	**1,493,622**	**2.11**
2.50	**—**	**2.70**	**956,667**	**3.65**	**2.67**	**668,337**	**2.67**
$1.25		**$2.70**	**5,628,129**	**2.82**	**$2.09**	**4,682,956**	**$2.05**

Restricted stock units

Pursuant to the Equity Plan, the Company has also granted restricted stock units (“RSUs”) to certain employees during the year ended December 31, 2023. These RSUs are settled in common shares issued from treasury on a one-to-one basis in six tranches, with the first tranche having vested on the date of grant and each subsequent tranche vesting upon the Company coming out of its regular quarterly blackout for the fiscal quarters ending June 30 and December 31, 2024, 2025 and 2026. During the year ended December 31, 2023, the Company granted RSUs valued using the most recent TSX closing price for the common shares on the date of grant as follows:

Number	Price	Amount
100,715	$1.26	$127
500,000	1.47	735
150,000	1.52	228
250,000	1.78	445
1,000,715		$1,535

For the year ended December 31, 2023, the Company has recognized $614 in stock-based compensation expense as a result.

RSU activity for the years ended December 31, 2023 and 2022 was as follows:

	Number
January 1, 2022	395,257
Granted	390,264
Settled	(313,045)
Forfeited	(49,613)
December 31, 2022	422,863
Granted	**1,000,715**
Settled	**(420,103)**
Forfeited	**(129,847)**
December 31, 2023	**873,628**

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

18. SHARE CAPITAL (continued)

Deferred stock units

In May 2023 the Board opted to receive 2023 annual directors' fees in deferred stock units ("DSUs"). The Company granted DSUs to directors and board observers in June and September 2023. Pursuant to the Equity Plan, these DSUs can be settled in cash or common shares issued from treasury on a one-to-one basis, on the distribution dates at the Board's discretion, which are intended to be settled in common shares. The distribution date for a director is when the individual retires from the Board. The Company granted 661,600 DSUs on June 17, 2023, 60,259 DSUs on September 6, 2023, and 45,389 DSUs on September 15, 2023. For the year ended December 31, 2023, the Company has recognized $618 in stock-based compensation expense as a result.

DSU activity for the year ended December 31, 2023 was as follows:

	Number
December 31, 2022	-
Granted	**767,248**
Settled	**(98,400)**
December 31, 2023	**668,848**

19. IMPAIRMENT AND OTHER CHARGES

Other charges within the consolidated statements of (loss) income and comprehensive (loss) income include costs that relate to certain cost reduction initiatives that the Company has undertaken from time to time, acquisition and divestiture related costs and other charges. During the year ended December 31, 2023, the Company recognized other charges of $9,619 (2022 - $20,292).

Details of impairment and other charges for the years ended December 31, 2023 and December 31, 2022 were as follows:

	Year ended December 31,	
	2023	2022
Impairment losses	**2,967**	1,778
Loss on disposal	**3,741**	-
Severance costs	**2,911**	2,507
VIZIYA settlement	**-**	14,600
VIZIYA-related arbitration fees	**-**	1,407
Total impairment and other charges	**$9,619**	$20,292

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

19. IMPAIRMENT AND OTHER CHARGES (continued)

For the year ended December 31, 2023, the Company recorded impairment losses of $2,967 (2022 - $1,778). The impairment losses primarily relate to a planned change in the use of right-of-use building assets and other related assets. As a result, the Company recorded an impairment charge to reduce the carrying value of the right-of-use building assets of $1,830 (2022 - $1,778), property, plant and equipment of $462 (2022 - $nil), and intangible assets of $675 (2022 - $nil).

On December 28, 2023, the Company disposed of its net investment in PAT Traffic, a foreign subsidiary operating in Latin America. The proceeds on disposal less transaction costs of disposal and the carrying amount of the investment resulted in a loss of $3,741.

20. (LOSS) INCOME PER SHARE

Basic (loss) income per share is calculated by dividing net (loss) income by the weighted average number of common shares outstanding during the year. Diluted (loss) income per share is calculated by dividing net (loss) income by the adjusted weighted average number of common shares outstanding to assume conversion of all potential dilutive stock options to common shares.

	Year ended December 31,	
	2023	2022
Numerator:		
Net loss from continuing operations	**($43,802)**	($54,151)
Net (loss) income from discontinued operations	**(21,809)**	56,917
Net (loss) income	**($65,611)**	$2,766
Denominator:		
Weighted average number of common shares outstanding for basic (loss) income per share	**114,776,086**	114,389,608
Weighted average number of common shares outstanding for diluted (loss) income per share	**114,776,086**	114,389,608
From continuing operations	**($0.38)**	($0.47)
From discontinued operations	**(0.19)**	0.49
Basic (loss) income per share	**($0.57)**	$0.02
From continuing operations	**($0.38)**	($0.47)
From discontinued operations	**(0.19)**	0.49
Diluted (loss) income per share	**($0.57)**	$0.02

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

21. SEGMENT REPORTING

An operating segment is a component of the Company that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components, and for which discrete financial information is available. The operating results of all operating segments are reviewed regularly by the Company's Chief Operating Decision Maker ("CODM") to make decisions about resources to be allocated to the segment and assess their performance. The Company's CODM is the Chief Executive Officer. The Company's operating segments are organized on the basis of products and services provided and also represent its reportable segments. The Company's reportable segments were previously identified as Licensing and ITS. WiLAN represented the Licensing segment and was sold on June 15, 2023. The results of WiLAN have been presented as discontinued operations in the Company's consolidated financial statements in Note 4, Discontinued Operations. The Company's consolidated statements of (loss) income and comprehensive (loss) income reflect the sole ITS segment.

The following table includes revenue by contracts disaggregated by the timing of revenue recognition:

	Year ended December 31,	
	2023	2022
Revenue recognized at a point in time	**$19,233**	$20,129
Revenue recognized over time	**175,083**	139,205
Total revenues	**$194,316**	$159,334

Revenues by geography for the years ended December 31, 2023 and 2022 are as follows:

	Year ended December 31,	
	2023	2022
United States	**$173,244**	$133,843
Chile	**4,223**	4,444
Germany	**3,785**	3,273
Canada	**3,249**	3,552
Korea	**1,423**	2,462
Belgium	**954**	1,063
Thailand	**454**	2,441
Rest of the world	**6,984**	8,256
Total revenues	**$194,316**	$159,334

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

21. SEGMENT REPORTING (continued)

Total of property, plant and equipment, right-of-use assets, intangible assets, and goodwill by geography are as follows:

As at	**December 31, 2023**	December 31, 2022
United States	**$145,089**	$173,391
Canada	**5,040**	33,143
Belgium	**85**	220
Chile	**-**	244
Germany	**5,517**	7,960
Total	**$155,731**	$214,958

Major customers

A major customer is defined as an external customer whose transactions amount to approximately 10% or greater of the Company's revenue. There was one major customer totaling $34,884 for the year ended December 31, 2023, whereas for the year ended December 31, 2022 , there were two major customers that accounted for $54,432 of total revenues.

Remaining performance obligations

As at December 31, 2023, the amount of transaction price allocated to remaining performance obligations was $113,705. The Company expects to recognize approximately 43% of this revenue in 2024, 22% in 2025, and 35% thereafter.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

22. EXPENSE BY NATURE

	Year ended December 31,	
	2023	2022
Personnel costs	**$71,752**	$73,287
Subcontractor fees	**56,740**	37,142
Direct and indirect materials costs	**31,978**	29,282
Professional and outside services	**8,817**	10,532
Communications and information technology	**15,700**	13,517
Facilities	**2,472**	3,443
Travel and entertainment	**4,676**	4,580
Other administrative expenses	**878**	897
Depreciation of right-of-use assets	**2,047**	2,327
Depreciation of property, plant and equipment	**2,163**	2,234
Amortization of intangible assets	**11,590**	11,620
Impairment and other charges	**9,619**	20,292
Total direct cost of revenues and operating expenses	**$218,432**	$209,153

Salaries and wages	**$56,203**	$58,892
Employee benefits	**10,722**	10,325
Stock-based compensation	**1,688**	1,588
Bonuses	**2,132**	1,561
Other personnel costs	**1,007**	921
Total personnel costs	**$71,752**	$73,287

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

23. TAXES

The reconciliation of the expected provision for income tax expense (recovery) to the actual provision for income tax expense reported in the consolidated statements of (loss) income and comprehensive (loss) income for the year ended December 31, 2023 is as follows:

	Year ended December 31,	
	2023	2022
Net loss before income taxes	**($33,778)**	($47,282)
Canadian statutory income tax rate	**26.50%**	26.50%
Expected income tax recovery	**($8,951)**	($12,530)
Permanent differences	**376**	1,773
Foreign rate differential	**722**	851
Return to provision	**416**	391
Change in benefit of tax assets not recognized	**16,198**	16,043
Other	**1,263**	341
Income tax expense	**$10,024**	$6,869

The income tax (recovery) expense is as follows:

	Year ended December 31,	
	2023	2022
Current income tax (recovery) expense		
Current period	**($3,021)**	$276
Adjustment in respect of prior periods	**-**	-
	(3,021)	276
Deferred income tax expense		
Current period	**12,629**	6,202
Adjustment in respect of prior periods	**416**	391
	13,045	6,593
	$10,024	$6,869

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

23. TAXES (continued)

The effect of temporary differences, tax losses, and tax credits that give rise to significant components of the Company's deferred income tax assets and liabilities, which have been recognized during the year ended December 31, 2023, are as follows:

As at	**December 31, 2023**	December 31, 2022
Deferred income tax assets		
Tax loss carryforwards	**$1,510**	$16,378
Capital assets	**2,324**	5,464
Scientific research and experimental development ("SR&ED") carryforwards	**-**	7,732
Other temporary differences	**2,899**	957
Deferred income tax assets	**6,733**	30,531
Deferred income tax liabilities		
Capital assets	**(6,549)**	(4,058)
Other temporary differences	**(1,802)**	(2,886)
Deferred income tax liabilities	**(8,351)**	(6,944)
Deferred income tax liabilities, net	**($1,618)**	$23,587

The Company is required to assess whether it is probable that it will realize the benefits of its deferred tax assets based on consideration of all available evidence. The factors the Company uses to assess the likelihood of realization are its history of losses, forecasts of future pre-tax income, and tax planning strategies that could be implemented to realize the deferred tax assets. Accordingly, available deferred income tax assets in the amount of $27,123 were not recognized as it is not probable that future taxable income will be available to the Company to utilize the benefits.

The amount of deductible temporary differences, unused tax losses, and unused tax credits for which no deferred tax asset is recognized in the consolidated statements of financial position for the year ended December 31, 2023 is as follows:

As at	**December 31, 2023**	December 31, 2022
Tax loss carryforwards	**$52,496**	$53,238
Capital assets	**11,387**	22,136
Tax credits	**2,897**	8,201
Other deductible temporary differences	**32,771**	18,579
	$99,551	$102,154

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

23. TAXES (continued)

As at December 31, 2023, the Company had unused non-capital tax losses of approximately $57,878 (2022 - $47,093) that are due to expire as follows:

Expiry	SR&ED pool	Canadian Tax Losses	US Tax Losses	Other Jurisdictions	Consolidated Tax Losses
2038	-	3,294	-	-	**3,294**
2039	-	290	-	-	**290**
2040	-	2,550	-	-	**2,550**
2041	-	-	-	-	**-**
2042	-	2,994	-	-	**2,994**
2043	-	-	-	-	**-**
Indefinite	31,804	-	46,730	2,020	**48,750**
	$31,804	$9,128	$46,730	$2,020	**$57,878**

The Company has investment tax credits of $2,897 that expire in various amounts from 2024 to 2043. Investment tax credits, which are earned as a result of qualifying SR&ED expenditures, are recognized and applied to reduce income tax expense in the year in which the expenditures are made and their realization is reasonably assured.

As at December 31, 2023, the Company had temporary differences of $2,917 (2022 - $5,059) associated with investments in subsidiaries for which no deferred tax liabilities have been recognized, as the Company is able to control the timing of the reversal of these temporary differences and it is not probable that these differences will reverse in the foreseeable future.

24. FINANCIAL RISK MANAGEMENT

Credit risk

Credit risk is the risk of financial loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments, restricted short-term investments, accounts receivable and unbilled revenue. The Company recognizes a loss allowance provision using the simplified approach based on lifetime expected credit losses. The Company's exposure to credit risk with its accounts receivable from customers is influenced mainly by the individual characteristics of each customer. The Company's customers are for the most part large multinational companies or government organizations that do not have a history of non-payment. Credit risk from accounts receivable encompasses the default risk of the Company's customers. Prior to entering into transactions with new customers, the Company assesses the risk of default associated with the particular customer. In addition, on an ongoing basis, management monitors the level of accounts receivable attributable to each customer and the length of time taken for amounts to be settled and, where necessary, takes appropriate action to follow up on those balances considered overdue. The Company has had no significant bad debts for any periods presented.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

24. FINANCIAL RISK MANAGEMENT (continued)

The following table provides an aging analysis of trade accounts receivable. The age of an invoice does not necessarily indicate an account is past due as many contracts for system revenue require the successful completion of system testing and acceptance.

As at	**December 31, 2023**	December 31, 2022
Current	**$639**	$8,978
1 - 30 days	**21,827**	5,628
31 - 60 days	**5,658**	1,995
61 - 90 days	**2,141**	2,844
91 days and over	**6,135**	4,392
Less expected credit loss	**(240)**	(560)
Accounts receivable	**36,160**	23,277
Long-term accounts receivable	**5,782**	539
Total accounts receivable	**$41,942**	$23,816

None of the amounts outstanding have been challenged by the respective counterparties, and the Company continues to conduct business with them on an ongoing basis. Accordingly, management has no reason to believe that these balances are not fully collectable in the future.

The Company reviews financial assets on an ongoing basis with the objective of identifying potential matters that could delay the collection of funds at an early stage. Once items are identified as being past due, contact is made with the respective customer to determine the reason for the delay in payment and to establish an agreement to rectify the breach of contractual terms.

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's objective in managing liquidity risk is to ensure that it has sufficient liquidity available to meet its liabilities when due. The Company manages its liquidity needs through various sources including cash generated through operations, cash reserves, various revolving credit facilities, and the issuance of common shares. The Company's cash and cash equivalents, short-term investments, and restricted short-term investments consist primarily of deposit investments that are held primarily with Canadian chartered banks. Management does not expect any counterparties to fail to meet their obligations. Though the Company has reclassified its long-term debt as current as a result of breaching its financial covenants, there is sufficient working capital to cover such a repayment.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

24. FINANCIAL RISK MANAGEMENT (continued)

The table below presents a maturity analysis of the Company's financial liabilities:

	Total	To December 31, 2024	To December 31, 2025	To December 31, 2026	Thereafter
Accounts payable and accrued liabilities	$40,186	$40,186	-	-	-
Long-term debt	26,045	2,816	2,816	20,413	-
Convertible debentures	57,500	-	-	57,500	-
Lease liabilities	11,420	3,025	2,767	2,265	3,363
	$135,151	$46,027	$5,583	$80,178	$3,363

See Note 8 for maturity of lease liabilities.

Market risk

Market risk is the risk to the Company that the fair value of future cash flows from its financial instruments will fluctuate due to changes in interest rates and foreign currency exchange rates. Market risk arises as a result of the Company generating revenues from foreign currency transactions.

Interest rate risk

The financial instruments that expose the Company to interest rate risk are its cash and cash equivalents, short-term investments, bank indebtedness and long-term debt. The Company’s objectives of managing its cash and cash equivalents and short-term investments are to ensure sufficient funds are maintained on hand at all times to meet day-to-day requirements and to place any amounts that are considered in excess of day-to-day requirements on short-term deposit with the Company’s banks so that they earn interest. When placing amounts of cash and cash equivalents into short-term investments, the Company only places investments with Canadian chartered banks and ensures that access to the amounts placed can be obtained on short notice. A 1% increase or decrease in interest rates would not have resulted in a material increase or decrease in interest income or expense during the year ended December 31, 2023.

Currency risk

Portions of the Company’s revenues and operating expenses are denominated in US dollars, Chilean pesos, Mexican pesos, euros and Chinese yuan. Because these consolidated financial statements are reported in Canadian dollars, the Company’s operating results are subject to changes in the exchange rate of the foreign currencies (primarily US dollars) relative to the Canadian dollar. For instance, a decrease in the value of the US dollar relative to the Canadian dollar has an unfavourable impact on US dollar denominated revenues and a favourable impact on US dollar denominated direct cost of revenue and operating expenses. Approximately 92% of the Company’s cash and cash equivalents and short-term investments are denominated in US dollars and are subject to changes in the exchange rate of the Canadian dollar relative to the US dollar.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

24. FINANCIAL RISK MANAGEMENT (continued)

Foreign exchange risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates. Foreign exchange gains or losses in net (loss) income arise on the translation of foreign currency-denominated assets and liabilities held in the Company's North American operations and foreign subsidiaries. As the parent company's functional currency is in US dollars, it is subject to changes in the exchange rate of foreign currencies, primarily the Canadian dollar, relative to the US dollar while subsidiary companies with a functional currency not in US dollars are subject primarily to changes in the exchange rate of foreign currencies, primarily the US dollar. As at December 31, 2023, the Company's sensitivity to a 5% strengthening (weakening) of the US dollar relative to the Canadian dollar and all other currencies for which the functional currency of the subsidiary company differs from the Canadian dollar would result in approximately $698 of pre-tax (loss) income to the consolidated statement of (loss) income.

25. RELATED-PARTY TRANSACTIONS

These consolidated financial statements include the accounts of Quarterhill and its wholly owned subsidiaries. Balances and transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note. Transactions and balances with XPCT, a joint venture in China in which the Company's subsidiary IRD holds a 50% interest, which is also a related party, are disclosed in Note 11.

Key management personnel are Quarterhill's President & Chief Executive Officer, Chief Financial Officer and Senior Vice-President, General Counsel & Corporate Secretary and the Chief Executive Officers of each of IRD and ETC. Other related parties are close family members of the key management personnel and entities controlled by key management personnel.

The executive compensation expense to key management personnel is as follows:

	Year ended December 31,	
	2023	2022
Salaries and benefits	**$4,837**	$2,770
Stock-based compensation	**950**	1,073
	$5,787	$3,843

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

26. CAPITAL MANAGEMENT

The Company's capital management objectives are to maintain financial flexibility in order to pursue its strategy of organic acquisitional growth, pay dividends, and, from time to time, return capital to shareholders, while maintaining an adequate return for shareholders. The Company defines its capital as the aggregate of cash and cash equivalents, short-term investments, restricted short-term investments, long-term debt, convertible debentures and shareholders' equity.

	December 31, 2023	December 31, 2022
Current portion of long-term debt	**$2,816**	$29,292
Non-current portion of long-term debt	**22,938**	-
Convertible debentures	**50,609**	48,379
Long-term debt and convertible debentures, net of debt issuance costs	**76,363**	77,671
Less:		
Cash and cash equivalents	**(56,621)**	(66,357)
Short-term investments	**-**	(1,550)
Restricted short-term investments	**-**	(6,529)
Net debt	**19,742**	3,235
Shareholders' equity	**190,056**	257,660
Total capital management	**$286,161**	$338,566

The Company manages its capital structure in accordance with changes in economic conditions. To maintain or adjust its capital structure, the Company may purchase shares for cancellation pursuant to a normal course issuer bid or substantial issuer bid, issue new shares, or raise or retire debt. The Company is subject to covenants and restrictions related to its credit facilities as further described in Note 16, Long-term Debt.

(in thousands and in Canadian dollars, except share and per share amounts, unless otherwise stated)

27. CHANGES IN NON-CASH WORKING CAPITAL BALANCES

	Year ended December 31,	
	2023	2022
Accounts receivable	**($13,670)**	$1,091
Unbilled revenue	**(6,376)**	(4,521)
Income taxes receivable	**138**	(345)
Inventories	**(2,095)**	60
Prepaid expenses and deposits	**(1,371)**	(1,687)
Deferred revenue	**(1,172)**	(741)
Deferred compensation asset	**82**	(180)
Deferred compensation liabilities	**83**	181
Accounts payable and accrued liabilities	**6,962**	(937)
Income taxes payable	**403**	105
	($17,016)	($6,974)

Supplemental cash flow information

	Year ended December 31,	
	2023	2022
Net interest paid in cash	**$4,829**	$6,509
Taxes paid	**$548**	$707

28. RECLASSIFICATION OF PRIOR YEAR PRESENTATION

Certain prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications had no effect on the reported results of operations.

DIRECTORS

Roxanne Anderson (1)
Chair of the Audit Committee

Rusty Lewis (2, 3)
Chair of the Board

Bill Morris (1,2)
Chair of the Compensation Committee

Chuck Myers
Chief Executive Officer

Pamela Steer (1, 3)

Anna Tosto (2, 3)
Chair of the Nominating & ESG Committee

Member of (1) Audit Committee, (2) Compensation Committee, (3) Nominating & ESG Committee

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LEADERSHIP TEAM

Chuck Myers
Chief Executive Officer

Kyle Chriest
Chief Financial Officer

Mike Childress
Chief Technology Officer

David Sparks
Executive Vice President, Strategy

Ana Guerra
Vice President, People & Culture

Donna Bergan
Vice President, Marketing

Kevin Holbert
President, Tolling

STOCK EXCHANGE LISTINGS

Toronto Stock Exchange, Symbol: QTRH

OTCQX Best Market, Symbol: QTRHF

TRANSFER AGENT

Computershare Investor Services Inc.

PUBLIC FILINGS – SEDAR

Quarterhill's publicly filed documents are available at www.sedarplus.ca

AUDITORS

EY Canada

INVESTOR RELATIONS

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