2022
CONSOLIDATED FINANCIAL STATEMENTS

MANAGEMENT'S REPORT

The consolidated financial statements of Perpetual Energy Inc. ("Perpetual" or the "Company") are the responsibility of Management and have been approved by the Board of Directors of the Company. These consolidated financial statements have been prepared by Management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and the Interpretations of the IFRS Interpretations Committee.

The consolidated financial statements are audited and have been prepared using accounting policies in accordance with IFRS. The preparation of Management's Discussion and Analysis is based on the Company's financial results which have been prepared in accordance with IFRS. It compares the Company's financial performance in 2022 to 2021 and should be read in conjunction with the consolidated financial statements and accompanying notes.

Management is responsible for establishing and maintaining adequate internal control over the Company's financial reporting. Management believes that the system of internal controls that have been designed and maintained at the Company provide reasonable assurance that financial records are reliable and form a proper basis for preparation of financial statements. The internal accounting control process includes Management's communication to employees of policies which govern ethical business conduct.

Internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Board of Directors has appointed an Audit Committee consisting of unrelated, non-management directors which meets during the year with Management and independently with the external auditors and as a group to review any significant accounting, internal control and auditing matters in accordance with the terms of the charter of the Audit Committee as set out in the Annual Information Form. The Audit Committee reviews the consolidated financial statements and Management's Discussion and Analysis before the consolidated financial statements are submitted to the Board of Directors for approval. The external auditors have free access to the Audit Committee without obtaining prior Management approval.

With respect to the external auditors, the Audit Committee approves the terms of engagement and reviews the annual audit plan, the Auditors' Report and results of the audit. It also recommends to the Board of Directors the firm of external auditors to be appointed by the shareholders.

The independent external auditors, KPMG LLP, have been appointed by the Board of Directors on behalf of the shareholders to express an opinion as to whether the consolidated financial statements present fairly, in all material respects, the Company's financial position, financial performance and cash flows in accordance with IFRS. The report of KPMG LLP outlines the scope of their examination and their opinion on the consolidated financial statements.

/s/ Susan L. Riddell Rose

Susan L. Riddell Rose

President &
Chief Executive Officer

/s/ Ryan A. Shay

Ryan A. Shay

Vice President, Finance &
Chief Financial Officer

March 2, 2023

INDEPENDENT AUDITORS' REPORT

To the Shareholders of Perpetual Energy Inc.

Opinion

We have audited the consolidated financial statements of Perpetual Energy Inc. (the "Company"), which comprise:

- the consolidated statements of financial position as at December 31, 2022 and December 31, 2021
- the consolidated statements of income and comprehensive income for the years then ended
- the consolidated statements of changes in equity for the years then ended
- the consolidated statements of cash flows for the years then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

Hereinafter referred to as the "financial statements".

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2022 and December 31, 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

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 **"*Auditors' Responsibilities for the Audit of the Financial Statements*"** section of our auditors' report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the 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.

KPMG LLP, an Ontario limited liability partnership and member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. KPMG Canada provides services to KPMG LLP.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2022. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have determined the matters described below to be the key audit matters to be communicated in our auditors' report.

Assessment of the impact of estimated proved and probable oil and gas reserves on property, plant and equipment ("PP&E") and the deferred tax asset ("DTA")

Description of the matter

We draw attention to note 2, note 3, note 5 and note 23 to the financial statements. The Company uses estimated proved and probable oil and gas reserves to deplete its development and production assets included in PP&E, to assess for indicators of impairment or impairment reversal on each of the Company's cash generating units ("CGU") and if any such indicators exist, to perform an impairment test to estimate the recoverable amount of a CGU and to determine if it is probable that future taxable profits will be sufficient to utilize the underlying deductible temporary differences and unused tax losses associated with the DTA.

The Company has $170.6 million of PP&E as at December 31, 2022.

The Company identified an indicator of impairment reversal at March 31, 2022 for the Eastern Alberta CGU and performed an impairment reversal test to estimate the recoverable amount of the CGU. It was determined the recoverable amount of the Eastern Alberta CGU exceeded the CGU's carrying value, resulting in all previous Eastern Alberta CGU impairment, net of depletion, of $7.4 million being reversed.

The estimated recoverable amount of the Eastern Alberta CGU involves significant estimates including:

- The estimate of proved and probable oil and gas reserves
- The discount rates.

The Company depletes its net carrying value of development and production assets using the unit-of-production method by reference to the ratio of production in the period to the related proved and probable oil and gas reserves, taking into account estimated forecasted future development costs necessary to bring those reserves into production. Depletion expense on development and production assets was $17.8 million for the year ended December 31, 2022.

The Company recognized a DTA of $15.9 million at December 31, 2022. The determination of probable future taxable profits involves significant estimates, including proved and probable oil and gas reserves.

The estimated proved and probable oil and gas reserves includes significant assumptions related to:

- Forecasted oil and gas commodity prices
- Forecasted production volumes
- Forecasted operating costs
- Forecasted royalty costs
- Forecasted future development costs.

The Company engages independent third party reserve evaluators to estimate proved and probable oil and gas reserves. For purposes of the March 31, 2022 impairment test, the Company's internal reserve evaluators updated the significant assumptions from the independent third party reserve evaluators estimate of proved and probable oil and gas reserves as at December 31, 2021.

Why the matter is a key audit matter

We identified the assessment of the impact of estimated proved and probable oil and gas reserves on PP&E and the DTA as a key audit matter. Significant auditor judgment was required to evaluate the results of our audit procedures regarding the estimate of proved and probable oil and gas reserves and discount rates. Additionally, the assessment of the recoverable amounts of a CGU and the measurement of the DTA requires the use of professionals with specialized skills and knowledge in valuation and tax.

How the matter was addressed in the audit

The following are the primary procedures we performed to address this key audit matter:

We examined management's impairment reversal test for the Eastern Alberta CGU as at March 31, 2022 by comparing amounts to the underlying source documents and performing recalculations.

With respect to the estimate of proved and probable oil and gas reserves as at December 31, 2021 for purposes of the March 31, 2022 impairment test:

- We evaluated the competence, capabilities and objectivity of the independent third party reserve evaluators engaged by the Company
- We compared forecasted oil and gas commodity prices to those published by other independent third party reserve evaluators
- We compared the 2021 actual production, operating costs, royalty costs and development costs of the Company to those estimates used in the prior year's estimate of proved oil and gas reserves to assess the Company's ability to accurately forecast
- We evaluated the appropriateness of forecasted production and forecasted operating costs, royalty costs and future development costs assumptions by comparing to 2021 historical results. We took into account changes in conditions and events affecting the Company to assess the adjustments or lack of adjustments made by the Company in arriving at the assumptions.

With respect to the estimate of proved and probable oil and gas reserves as at March 31, 2022 for purposes of the March 31, 2022 impairment test:

- We evaluated the competence, capabilities and objectivity of the internal reserve evaluators
- We compared forecasted oil and gas commodity prices to those published by other independent third party reserve evaluators
- We evaluated the appropriateness of forecasted production and forecasted operating costs, royalty costs and future development costs assumptions by comparing to corresponding amounts in the proved and probable oil and gas reserves estimated by the independent third party reserve evaluators as at December 31, 2021 and by comparing to 2022 historical results. We took into account changes in conditions and events affecting the Company to assess the adjustments or lack of adjustments made by the Company in arriving at the assumptions.

We involved valuation professionals with specialized skills and knowledge, who assisted in:

- Evaluating the appropriateness of the Eastern Alberta CGU discount rate by comparing the discount rate to market and other external data
- Assessing the reasonableness of the Company's estimate of the recoverable amount of the Eastern Alberta CGU by comparing the Company's estimate to market metrics and other external data.

We assessed the depletion expense calculation and measurement of the DTA for compliance with IFRS as issued by the IASB.

With respect to the estimate of proved and probable oil and gas reserves as at December 31, 2022 for purposes of depletion and the DTA:

- We evaluated the competence, capabilities and objectivity of the independent third party reserve evaluators engaged by the Company
- We compared forecasted oil and gas commodity prices to those published by other independent third party reserve evaluators
- We compared the 2022 actual production, operating costs, royalty costs and development costs of the Company to those estimates used in the prior year's estimate of proved oil and gas reserves to assess the Company's ability to accurately forecast
- We evaluated the appropriateness of forecasted production and forecasted operating costs, royalty costs and future development costs assumptions by comparing to 2022 historical results. We took into account changes in conditions and events affecting the Company to assess the adjustments or lack of adjustments made by the Company in arriving at the assumptions.

We involved income tax professionals with specialized skills and knowledge who assisted in evaluating the application of relevant tax laws and regulations and the appropriateness of the Company's estimate of future taxable profits used in the measurement of the DTA.

Other Information

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

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.
- the information, other than the financial statements and the auditor's report thereon, included in a document likely to be entitled "2022 Annual Results".

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

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

The information, other than the financial statements and the auditor's report thereon, included in a document likely to be entitled "2022 Annual Results" is expected to be made available to us after the date of this auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Company'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 Company or to cease operations, or has no realistic alternative but to do so.

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' 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 the 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 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 Company'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 Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the 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 auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- 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.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
- Determine, from the matters communicated with those charged with governance, those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' 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 auditors' 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 auditors' report is Gregory Ronald Caldwell.

KPMG LLP

Chartered Professional Accountants

Calgary, Canada
March 2, 2023

PERPETUAL ENERGY INC.
Consolidated Statements of Financial Position

As at	December 31, 2022	December 31, 2021
(Cdn$ thousands)		
Assets		
Current assets		
Cash	**$ —**	$ 1,090
Accounts receivable	**15,804**	11,671
Marketable securities (note 4, 25)	**1,814**	2,409
Prepaid expenses and deposits	**1,564**	910
Product inventory	**674**	—
Risk management contracts (note 22)	**3,847**	682
	23,703	16,762
Property, plant and equipment (note 5)	**170,644**	153,620
Exploration and evaluation (note 6)	**7,168**	7,329
Right-of-use assets (note 7)	**864**	1,140
Deferred tax asset (note 23)	**15,894**	—
Total assets	**$ 218,273**	$ 178,851
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	**$ 18,962**	$ 32,223
Other liability (note 11)	**532**	63
Risk management contracts (note 22)	**—**	321
Royalty obligations (note 13)	**—**	4,697
Lease liabilities (note 14)	**705**	778
Decommissioning obligations (note 15)	**1,688**	1,327
	21,887	39,409
Term loan (note 10)	**2,524**	2,469
Revolving bank debt (note 9)	**14,909**	2,487
Other liability (note 11)	**2,470**	1,324
Senior notes (note 12)	**34,527**	34,189
Lease liabilities (note 14)	**870**	1,324
Decommissioning obligations (note 15)	**25,764**	31,600
Total liabilities	**102,951**	112,802
Equity		
Share capital (note 17)	**98,615**	94,809
Contributed surplus	**46,801**	45,731
Deficit	**(30,094)**	(74,491)
Total equity	**115,322**	66,049
Total liabilities and equity	**$ 218,273**	$ 178,851

Contingencies (note 8) & contractual obligations (note 16)

See accompanying notes to the consolidated financial statements.

/s/ Linda A. Dietsche

Linda A. Dietsche
Director

/s/ Geoffrey C. Merritt

Geoffrey C. Merritt
Director

PERPETUAL ENERGY INC.
Consolidated Statements of Income and Comprehensive Income

(Cdn$ thousands, except per share amounts)		December 31, 2022		December 31, 2021
Revenue				
Oil and natural gas (note 19)	$	109,687	$	60,814
Royalties		(20,790)		(9,920)
		88,897		50,894
Unrealized gain risk management contracts (note 22)		3,487		3,733
Realized loss risk management contracts (note 22)		(4,620)		(4,810)
Gas over bitumen royalty credit		—		385
Other income (note 15)		348		704
		88,112		50,906
Expenses				
Production and operating		16,107		12,859
Transportation		3,872		2,993
Exploration and evaluation (note 6)		118		120
General and administrative		9,911		10,757
Share-based payments (note 18)		7,434		2,044
Gain on dispositions (note 5)		—		(47,522)
Depletion and depreciation (note 5 and 7)		17,962		14,020
Impairment reversal (note 5b)		(7,400)		(30,600)
Net income from operating activities		40,108		86,235
Finance expense (note 20)		(10,971)		(5,396)
Change in fair value of marketable securities (note 4)		(634)		282
Net income, before income tax	$	28,503	$	81,121
Deferred income tax recovery (expense) (note 23)		15,894		—
Net income and comprehensive income	$	44,397	$	81,121
Net income per share (note 17f)				
Basic	$	0.69	$	1.29
Diluted	$	0.59	$	1.16

See accompanying notes to the consolidated financial statements.

PERPETUAL ENERGY INC.
Consolidated Statements of Changes in Equity

	Share capital								
	(thousands)		*($thousands)*		Contributed surplus		Deficit		Total equity
(Cdn$ thousands, except share amounts)									
Balance at December 31, 2021	63,567	$	94,809	$	45,731	$	(74,491)	$	66,049
Net income	—		—		—		44,397	$	44,397
Common shares issued (note 17 and 18)	3,174		4,611		(4,611)		—	$	—
Change in shares held in trust (note 17 and 18)	(797)		(805)		(502)		—	$	(1,307)
Share-based payments (note 18)	—		—		6,183		—		6,183
Balance at December 31, 2022	**65,944**	**$**	**98,615**	**$**	**46,801**	**$**	**(30,094)**	**$**	**115,322**

	Share capital								
	(thousands)		*($thousands)*		Contributed surplus		Deficit		Total equity
(Cdn$ thousands, except share amounts)									
Balance at December 31, 2020	61,305	$	97,333	$	45,217	$	(155,612)	$	(13,062)
Net income	—		—		—		81,121		81,121
Common shares issued (note 17 and 18)	2,828		473		(284)		—		189
Change in shares held in trust (note 17 and 18)	24		(14)		(49)		—		(63)
Common share split (note 17)	8,158		—		—		—		—
Common share cancellation (note 17)	(8,158)		(2,779)		—		—		(2,779)
Common share odd-lot cancellation (note 17)	(590)		(204)		—		—		(204)
Share-based payments (note 18)	—		—		847		—		847
Balance at December 31, 2021	**63,567**	**$**	**94,809**	**$**	**45,731**	**$**	**(74,491)**	**$**	**66,049**

See accompanying notes to the consolidated financial statements.

PERPETUAL ENERGY INC.
Consolidated Statements of Cash Flows

(Cdn$ thousands)	December 31, 2022	December 31, 2021
Cash flows from operating activities		
Net income	$ 44,397	$ 81,121
Adjustments to add (deduct) non-cash items:		
Other income (note 15)	(348)	(704)
Depletion and depreciation (note 5 and 7)	17,962	14,020
Share-based payments (note 18)	6,183	360
Deferred income tax recovery (note 23)	(15,894)	—
Unrealized gain on risk management contracts (note 22)	(3,487)	(3,734)
Change in fair value of marketable securities (note 4)	634	(282)
Finance expense (note 20)	6,424	4,087
Gain on disposition (note 5)	—	(47,522)
Impairment reversal (note 5b)	(7,400)	(30,600)
Oil and natural gas revenue in-kind (note 13)	—	(4,995)
Transaction costs on disposition (note 5)	—	(583)
Decommissioning obligations settled (note 15)	(1,199)	(1,759)
Change in non-cash working capital (note 21)	(9,442)	3,406
Net cash flows from operating activities	37,830	12,815
Cash flows from (used in) financing activities		
Change in revolving bank debt, net of issue costs (note 9)	11,886	(15,174)
Change in senior notes, net of issue costs (note 12)	(834)	(233)
Change in term loan, net of issue costs (note 10)	—	(38,700)
Payments of lease liabilities (note 14)	(708)	(620)
Payments of royalties (note 13)	(6,953)	(558)
Shares purchased and held in trust (note 17)	(1,307)	(395)
Other liability payments (note 11)	(63)	—
Common shares issues, net of issue costs	—	230
Net cash flows from (used in) financing activities	2,021	(55,450)
Cash flows from (used in) investing activities		
Capital expenditures (note 5)	(31,909)	(19,062)
Acquisitions (note 5)	—	(1,325)
Net proceeds from dispositions (note 5(a))	—	49,549
Purchase of marketable securities (note 4)	(39)	—
Change in non-cash working capital (note 21)	(8,993)	14,563
Net cash flows from (used in) investing activities	(40,941)	43,725
Change in cash and cash equivalents	(1,090)	1,090
Cash and cash equivalents, beginning of year	1,090	—
Cash and cash equivalents, end of year	$ —	$ 1,090

See accompanying notes to the consolidated financial statements.

1. REPORTING ENTITY

Perpetual Energy Inc. ("Perpetual" or the "Company") is an oil and natural gas exploration, production, and marketing company headquartered in Calgary, Alberta. Perpetual owns a diversified asset portfolio, including liquids-rich conventional natural gas assets in the deep basin of West Central Alberta, heavy crude oil and shallow conventional natural gas in Eastern Alberta, and undeveloped bitumen leases in Northern Alberta.

The address of the Company's registered office is 3200, 605 – 5 Avenue S.W., Calgary, Alberta, T2P 3H5.

The consolidated financial statements of the Company are comprised of the accounts of Perpetual Energy Inc. and its wholly owned subsidiaries: Perpetual Operating Corp., Perpetual Energy Partnership, and Perpetual Operating Trust, which are incorporated in Alberta.

2. BASIS OF PREPARATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements of the Company were approved and authorized for issue by the Board of Directors on March 2, 2023.

a) Critical accounting judgments and significant estimates

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, revenue and expenses. These judgments, estimates, and assumptions are continuously evaluated and are based on management's experience and all relevant information available to the Company at the time of financial statement preparation. As the effect of future events cannot be determined with certainty, the actual results may differ from estimates. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about the critical judgments and significant estimates made by management are described below and in the relevant notes to the financial statements.

b) Critical accounting judgments:

The following are the critical judgments that management has made in the process of applying the Company's accounting policies. These judgments have the most significant effect on the amounts reported in the consolidated financial statements.

i) Cash-generating units ("CGUs")

The Company allocates its development and production assets to CGUs, identified as the smallest group of assets that generate cash inflows independent of the cash inflows of other assets or groups of assets. Determination of the CGUs is subject to management's judgement and is based on geographical proximity, shared infrastructure, and similar exposure to market risk.

ii) Identification of impairment indicators

Significant judgment is required to assess when internal or external indicators of impairment or impairment reversal exist, and impairment testing is required. Management considers internal and external sources of information including oil and gas commodity prices, expected production volumes, estimated proved and probable oil and gas reserves and rates used to discount the related future cash flow estimates. Judgement is required to assess these factors when determining if the carrying amount of an asset or CGU is impaired, or in the case of a previously impaired asset or CGU, whether the carrying amount of the asset or CGU has been restored.

iii) Componentization

For the purposes of depletion, the Company allocates its development and production assets to components with similar useful lives and depletion methods. The grouping of assets is subject to management's judgment and is performed on the basis of geographical proximity and similar reserve life. The Company's oil and gas assets are depleted on a unit-of-production basis.

iv) Exploration and evaluation ("E&E") expenditures

Costs associated with acquiring oil and gas licenses and exploratory drilling are accumulated as exploration and evaluation assets pending determination of technical feasibility and commercial viability. Establishment of technical feasibility and commercial viability is subject to judgment and involves management's review of project economics, resource quantities, expected production techniques, production costs and required capital expenditures to develop and extract the underlying resources. Management uses the establishment of commercial reserves within the exploration area as the basis for determining technical feasibility and commercial viability. Upon determination of commercial reserves, E&E assets attributable to those reserves are tested for impairment and reclassified from E&E assets to a separate category within property, plant and equipment referred to as development and production assets.

v) Joint arrangements

Judgment is required to determine when the Company has joint control over an arrangement. In establishing joint control, the Company considers whether unanimous consent is required to direct the activities that significantly affect the returns of the arrangement, such as the capital and operating activities of the arrangement.

Once joint control has been established, judgment is also required to classify a joint arrangement. The type of joint arrangement is determined through analysis of the rights and obligations arising from the arrangement by considering its structure, legal form, and terms agreed upon by the parties sharing control. An arrangement where the controlling parties have rights to the assets and revenues, and obligations for the liabilities and expenses, is classified as a joint operation. Arrangements where the controlling parties have rights to the net assets of the arrangement are classified as joint ventures.

vi) Deferred taxes

Deferred tax assets (if any) are recognized only to the extent it is considered probable that future taxable profits will be sufficient to utilize the underlying deductible temporary differences and unused tax losses associated with the deferred tax asset. This involves an assessment of when those deferred tax assets are likely to reverse and judgment as to whether there will be sufficient taxable profits available to offset the tax assets when they do reverse. The determination of probable future taxable profits involves significant estimates, including proved and probable oil and gas reserves. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amounts recognized in profit or loss in the period in which the change occurs.

vii) Revenue – principal versus agent

When determining if the Company acted as a principal or as an agent in transactions, management determines if the Company obtains control of the product. As part of this assessment, management considers if the Company obtained control of the goods or services more than momentarily, in advance of transferring those goods or services to the customer. In this assessment, the Company considers indicators that it controlled the goods or services, including whether the Company was primarily responsible for the goods and services, whether the Company had inventory risk and whether the Company had discretion in establishing prices for the goods or services. Where control was indicated, the Company has been determined to be the principal and has recorded revenue and the associated expenses on a gross basis. In other cases, the Company has been determined to be the agent and has recorded revenue net of associated expenses.

c) Significant estimates:

The following assumptions represent the key sources of estimation uncertainty at the end of the reporting period. As future confirming events occur, the actual results may differ from estimated amounts.

i) Reserves

The Company uses estimates of proved and probable oil and gas reserves to deplete its development and production assets included in PP&E, to assess for indicators of impairment or impairment reversal on each of the Company's CGUs and if any such indicators exist, to perform an impairment test to estimate the recoverable amount of a CGU and to determine if it is probable that future taxable profits will be sufficient to utilize the underlying deductible temporary differences and unused tax losses associated with the deferred tax asset. Estimates of proved and probable oil and gas reserves are based upon a number of significant assumptions, such as forecasted production volumes, oil and gas commodity prices, operating costs, royalty costs, and future development costs. Additional estimates are made in relation to the marketability of oil and gas, and the assumed effects of regulation by government agencies. The geological, economic and technical factors used to estimate reserves may change from period to period. Changes in the reported reserves could have a material impact on the carrying values of the Company's development and production assets, the calculation of depletion and depreciation, and the timing of decommissioning expenditures.

The estimate of proved and probable oil and gas reserves are evaluated by independent third party reserve evaluators at least annually. This evaluation of proved and proved plus probable oil and gas reserves is prepared in accordance with the reserve definitions contained in National Instrument 51-101 and the COGE Handbook.

The Company is also required to estimate the recoverable amount of exploration and evaluation assets, which consists of undeveloped lands, exploratory drilling assets and bitumen evaluation assets, for impairment testing. The recoverable amount is based on relevant industry sales value data.

ii) Marketable securities

Rubellite Share Purchase Warrants are recorded at fair value using the Black Scholes option pricing model. In assessing the fair value of the warrants, estimates have to be made regarding the expected volatility in share price, option life, dividend yield, and risk-free rate.

iii) Provisions for decommissioning obligations

Decommissioning, abandonment, and site reclamation expenditures for production facilities, wells, and pipelines are expected to be incurred by the Company over many years into the future. Amounts recorded for decommissioning obligations and the associated accretion are calculated based on estimates of the extent and timing of decommissioning activities, future site remediation regulations and technologies, inflation, liability specific discount rates and related cash flows. The provision represents management's best estimate of the present value of the future abandonment and reclamation costs required. Actual abandonment and reclamation costs could be materially different from estimated amounts.

iv) Derivative financial instruments

Derivatives are measured at fair value on each reporting date. Fair value is the price that would be received or paid to exit the position as of the measurement date. The Company uses estimated external forecasted market commodity and foreign exchange price curves available at period end and the contracted volumes over the contracted term to determine the fair value of each contract. Changes in market pricing between period end and settlement of the derivative contracts could have a material impact on financial results related to the derivatives.

v) Other liability

The other liability is measured at fair value on each reporting date. The fair value of the other liability is estimated by discounting future cash payments based on Perpetual's annual average realized oil and natural gas prices exceeding certain thresholds. Changes in market pricing between period end and settlement could have a material impact on financial results related to the other liability.

vi) Royalty obligations

The retained East Edson royalty obligation and the gas over bitumen royalty financing are measured at fair value on each reporting date. The fair value is estimated by discounting future cash payments based on the forecasted natural gas and NGL commodity prices multiplied by the remaining royalty obligation volumes. Changes in market pricing between period end and settlement could have a material impact on financial results related to the royalty obligations.

vii) Share-based payments

Share options, deferred share options, and long-term incentive awards issued by the Company are recorded at fair value using the Black Scholes option pricing model. In assessing the fair value of share options and deferred share options, estimates have to be made regarding the expected volatility in share price, option life, dividend yield, risk-free rate and estimated forfeitures at the initial grant date.

3. SIGNIFICANT ACCOUNTING POLICIES

The accounting policies set out below have been applied consistently to all periods presented in these annual consolidated financial statements and have been applied consistently by the Company and its subsidiaries.

a) Basis of consolidation

i) Subsidiaries

Subsidiaries are entities controlled by the Company. Control exists when the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that are currently exercisable are considered. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases

ii) Business combinations

The acquisition method of accounting is used to account for acquisitions of subsidiaries and assets that meet the definition of a business under IFRS. The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued, and liabilities incurred or assumed at the date of acquisition of control. Identifiable assets acquired, and liabilities assumed in a business combination are measured at their recognized amounts (generally fair value) at the acquisition date. The excess of the cost of acquisition over the recognized amounts of the identifiable assets acquired and liabilities assumed is recorded as goodwill. If the cost of acquisition is less than the recognized amount of the net assets acquired, the difference is recognized as a bargain purchase gain in net income (loss).

iii) Jointly owned assets

Many of the Company's oil and gas activities involve jointly owned assets which are not conducted through a separate entity. The consolidated financial statements include the Company's proportionate share of these jointly owned assets, liabilities, revenues and expenses.

iv) Transactions eliminated on consolidation

Intercompany balances and transactions, and any unrealized income and expenses arising from intercompany transactions, are eliminated in preparing the consolidated financial statements.

b) Financial instrument

Financial instruments comprise cash, accounts receivable, marketable securities, deposits, fair value of derivative assets and liabilities, accounts payable and accrued liabilities, revolving bank debt, Term Loan, other liability, royalty obligations, and senior notes. These financial instruments are recognized initially at fair value, net of any directly attributable transaction costs.

i) Classification and measurement of financial assets

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated at fair value through profit or loss ("FVTPL"):

- 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.

A debt investment is measured at fair value through other comprehensive income ("FVOCI") if it meets both of the following conditions and is not designated at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; 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.

On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income ("OCI"). This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. On initial recognition, the Company may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition.

The following accounting policies apply to the subsequent measurement of financial assets:

a) Financial assets at FVTPL

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

b) Financial assets at amortized cost

These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

ii) Classification and measurement of financial liabilities

Financial liabilities are classified and measured at amortized cost or FVTPL. A financial liability is classified at FVTPL if it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

The Company has classified cash, accounts receivable, deposits, accounts payable and accrued liabilities, revolving bank debt, Term Loan and senior notes as amortized cost. The marketable securities, other liability, and royalty obligations have been classified as FVTPL.

iii) Derivative assets and liabilities

The Company has entered into certain financial derivative contracts to manage the exposure to market risks from fluctuations in commodity prices and currency rates. The Company has not designated its financial derivative contracts as effective accounting hedges, and thus has not applied hedge accounting, even though the Company considers all commodity and currency contracts to be economic hedges. As a result, all financial derivative contracts are designated as FVTPL and recorded as derivatives on the statement of financial position at fair value. Changes in the fair value of the commodity price and currency rate derivatives are recognized in net income (loss).

The Company has accounted for its forward physical delivery fixed-price sales contracts as derivative financial instruments. Accordingly, such forward physical delivery fixed-price sales contracts are designated as FVTPL and recorded as derivatives on the statement of financial position at fair value.

Transaction costs on derivatives are recognized in net income (loss) when incurred.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and the combined instrument is not measured at FVTPL. Changes in the fair value of separable embedded derivatives are recognized immediately in net income (loss).

iv) Share capital and warrants

Incremental costs directly attributable to the issue of common shares, warrants and share options are recognized as a deduction from equity, net of any tax effects.

c) Inventory

Product inventory consists of the Company's unsold crude oil and is valued at the lower of cost or net realizable value. The cost of crude oil is determined on a first-in first-out basis. Costs include the direct and indirect expenditures incurred in the normal course of business to bring the product to its existing condition and location. Net realizable value is the estimated selling price less applicable expenditures required to sell the product. If the carrying value exceeds the net realizable value, a write down is recognized. Write-downs may be reversed in a subsequent period if the inventory is still on hand and the circumstances which caused the write-down no longer exist.

d) Property, plant and equipment (PP&E)

i) Development and Production costs

Items of property, plant and equipment, which include development and production assets, are measured at cost less accumulated depletion and depreciation and accumulated impairment losses. The initial cost of property, plant and equipment includes the purchase price or construction costs, costs that are directly attributable to bringing the asset into commercial operations, the initial estimate of decommissioning costs, and borrowing costs for qualifying assets.

Significant parts of an item of property, plant and equipment, including development and production assets, that have different useful lives from the life of the area or facility in general, are accounted for as separate items.

Gains and losses on disposition of an item of property, plant and equipment, including development and production assets, are determined by comparing the proceeds from disposition with the carrying amount of property, plant and equipment and are recognized in net income (loss). Proceeds may include cash, or other non-cash consideration such as retained drilling rights which are fair valued at the time of disposition. The carrying amount of any replaced or disposed item of property, plant and equipment is derecognized.

ii) Subsequent costs

Costs incurred after the determination of technical feasibility and commercial viability and the costs of replacing parts of property, plant and equipment are recognized as property, plant and equipment only when they increase the future economic benefits embodied in the specific asset to which they relate. Such capitalized property, plant and equipment generally represent costs incurred in developing proved and/or probable oil and gas reserves and bringing on or enhancing production from such reserves, and are accumulated on a

field or geotechnical area basis. All other expenditures including the costs of the day-to-day servicing of property, plant and equipment are recognized as production and operating expense in net income (loss) as incurred.

iii) Depletion and depreciation

The Company depletes its net carrying value of development and production assets using the unit-of-production method by reference to the ratio of production in the period to the related proved and probable oil and gas reserves, taking into account estimated forecasted future development costs necessary to bring those reserves into production. The forecasted future development cost estimates are reviewed by independent third-party reserve evaluators at least annually.

Costs associated with office furniture, information technology, and leasehold improvements are carried at cost and are depreciated on a straight-line basis over a period ranging from one to three years.

Depreciation methods, useful lives and residual values are reviewed at each period end date for all classes of property, plant, and equipment.

e) Exploration and evaluation expenditures (E&E)

Pre-license costs, geological and geophysical costs, and lease rentals of undeveloped properties are recognized in net income (loss) as incurred.

E&E costs, consisting of the costs of acquiring oil and gas licenses, are capitalized initially as E&E assets according to the nature of the assets acquired. Costs associated with drilling exploratory wells in an undeveloped area are capitalized as E&E costs. The costs are accumulated in cost centers by well, field or exploration area pending determination of technical feasibility and commercial viability. When technical feasibility and commercial viability are determined, the relevant expenditure is transferred to property, plant and equipment as development and production assets, after impairment is assessed and any applicable impairment loss is recognized in net income (loss).

The Company's E&E assets consist of undeveloped lands, exploratory drilling assets, and bitumen evaluation assets. Gains and losses on disposition of E&E assets are determined by comparing the proceeds from disposition with the carrying amount and are recognized in net income (loss).

f) Right-of-use assets

The Company recognizes right-of-use assets and lease liabilities at the lease commencement date. The assets are measured at the lease liability initially recognized, which comprise the present value of the future lease payments 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 right-of-use assets are depreciated to the earlier of the end of the useful life of the asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The Company presents right-of-use assets as its own line item on the consolidated statements of financial position. In determining the lease term, management considers the non-cancellable period along with all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option. In addition, the right-of-use assets are periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liabilities. The depreciation term of the right-of-use assets is between two and five years.

g) Lease Liabilities

The lease liabilities are initially measured at the present value of the future lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate, which is determined based on judgments about the economic environment in which the Company operates and theoretical analyses about the security provided by the underlying leased asset, the amount of funds required to be borrowed in order to meet the future lease payments associated with the leased asset, and the term for which these funds would be borrowed.

The lease liabilities are measured at amortized cost using the effective interest rate method. They are remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is 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 liabilities are remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use assets, or is recorded in profit or loss if the carrying amount of the right-of-use assets has been reduced to zero. Lease payments are applied against the lease liabilities, with a portion allocated as cash finance expense using the effective interest rate method. The Company presents lease liabilities as their own line item on the consolidated statements of financial position.

h) Assets held for sale

Non-current assets, or disposal groups consisting of assets and liabilities ("disposal groups"), are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Assets and liabilities qualifying as held for sale must be available for immediate sale in their present condition subject to normal terms and conditions, and their sale must be highly probable.

Non-current assets, or disposal groups, are measured at the lower of the carrying amount and FVLCD, with impairments recognized in net income (loss). Non-current assets or disposal groups held for sale are presented in current assets and liabilities within the statement of financial position. Assets held for sale are not subject to depletion and depreciation.

i) Impairment

i) Financial assets

The Company has elected to measure loss allowances for trade receivables and contract assets at an amount equal to lifetime expected credit losses ("ECLs"). The maximum period considered when estimating ECLs is the maximum contractual period over which the Company is exposed to credit risk.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Company expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

Loss allowances for financial assets are deducted from the gross carrying amount of the assets. Impairment losses on financial assets are presented under "other expenses" in the consolidated statements of income (loss) and comprehensive income (loss).

ii) Non-financial assets

The carrying amounts of the Company's property, plant and equipment, which includes development and production assets, are reviewed at each period end date to determine whether there are any internal or external indicators of impairment or impairment reversal. If any such indicator exists, then the recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together at a CGU level. The estimated recoverable amount of an asset or a CGU is determined based on the higher of its FVLCD and its VIU. FVLCD is determined as the amount that would be obtained from the sale of a CGU in an arm's length transaction between knowledgeable and willing parties. The FVLCD of development and production assets is generally determined as the net present value of estimated future cash flows expected to arise from the continued use of the CGU and its eventual disposition, using assumptions that an independent market participant may take into account. These cash flows are discounted by an appropriate discount rate which would be applied by such a market participant to arrive at a net present value of the CGU. In determining VIU, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. VIU is generally the future cash flows expected to be derived from production of proved and probable oil and gas reserves estimated by the Company's independent third-party reserve evaluators.

An impairment is recognized if the carrying amount of a CGU exceeds the estimated recoverable amount for that CGU. The Company determines the estimated recoverable amount by using the greater of FVLCD and the VIU. Impairment losses recognized in respect of CGUs are allocated to reduce the carrying amount of assets in the unit (group of units) on a pro rata basis. Impairment losses are recognized in net income or loss.

E&E assets are assessed for impairment at the time that any triggering facts and circumstances suggest that the carrying amount exceeds the estimated recoverable amount as well as upon their eventual reclassification to development and production assets in property, plant and equipment. If a test is required as a result of triggering facts and circumstances, the Company considers whether the combined estimated recoverable amount of the CGUs and E&E assets at the total company level is sufficient to cover the combined carrying value of the CGUs and E&E assets.

In respect of other assets, impairment losses recognized in prior years are assessed at each period end date for any indication that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depletion and depreciation, if no impairment loss had been recognized.

j) Share-based payments

Fixed equity awards granted under the equity-settled share-based payment plans and agreements are measured at grant-date fair value. Fair values are determined by means of an option pricing model using the exercise price of the equity instrument granted, the share price at the grant date, the expected life of the grant based on the vesting date and expiry date, estimates of share price volatility, and interest rates over the expected contractual life of the equity award. A forfeiture rate is estimated on the grant date and is subsequently adjusted to reflect the actual number of options that vest.

The costs of the equity-settled share-based payments are recognized within general and administrative expense, production and operating expense, or property, plant and equipment to the extent they are directly attributable, with a corresponding increase in contributed surplus over the vesting period. Upon exercise or settlement of an equity-based instrument, consideration received, and associated amounts previously recorded in contributed surplus are recorded to share capital.

Certain awards granted under the performance share rights plan may be settled in cash, in common shares of the Company, or a combination thereof at the discretion of the Company's Board of Directors. Fixed value, equity-settled awards are accounted for as cash-settled share-based payment transactions and are expensed into profit and loss over the unit vesting period with an associated accumulation in accounts payable and accrued liabilities, as a variable number of equity units will be required to settle the liability.

k) Shares held in trust

The Company has share-based payment plans whereby employees may be entitled to receive shares of the Company purchased on the open market by a trustee controlled by the Company. Shares acquired and held by the trustee for the benefit of employees that have not yet been issued to employees, are a separate category of equity that are presented net of common shares outstanding in share capital on the consolidated statements of financial position (note 17(b)). The balance of shares held in trust represents the cumulative cost of shares held by the trustee. Upon the issuance of shares to the employee, the amount attributable to an employee is deducted from the balance of shares held in trust and removed from contributed surplus.

l) Provisions

Provisions are recognized when the Company has a current legal or constructive obligation as a result of a past event, which can be reliably estimated, and will require the outflow of economic resources to settle the obligation. A non-current provision is determined using the estimated future cash flows discounted at a rate that reflects current market conditions and obligation specific risks.

i) Decommissioning obligations

The Company's activities give rise to dismantling, decommissioning, and site disturbance remediation activities. A provision is recorded for the estimated cost of site restoration and capitalized in the relevant asset category.

Decommissioning obligations are measured at the present value of management's estimate of the extent and timing of expenditures required to settle the obligation at the statement of financial position date, using a risk-free interest rate not adjusted for credit risk. Subsequent to the initial measurement, the obligation is adjusted at the end of each reporting period to reflect the passage of time, changes in the timing and estimate of future cash flows underlying the obligation, and changes in the risk-free rate. The accretion of the provision due to the passage of time is recognized in net income (loss) whereas changes in the provision arising from changes in estimated cash flows or changes in the risk-free rate are capitalized. Actual costs incurred upon settlement of the decommissioning obligations are charged against the provision to the extent the provision was established.

m) Revenue

Revenue from the sale of heavy crude oil, conventional natural gas and NGL is recognized based on the consideration specified in contracts with customers. The Company recognizes revenue when control of the product transfers to the buyer and collection is reasonably assured. This is generally at the point in time when the customer obtains legal title to the product which is when it is physically transferred to the pipelines or other transportation method agreed upon.

Revenues from processing activities are recognized over time as processing occurs and are generally billed monthly.

Royalty income is recognized monthly as it accrues in accordance with the terms of the royalty agreements.

When allocating the transaction price realized in contracts with multiple performance obligations, management is required to make estimates of the prices at which the Company would sell the product separately to customers. The Company does not currently have any contracts with multiple performance obligations.

If the consideration promised in a contract includes a variable amount, the Company estimates the amount of consideration to which it will be entitled in exchange for transferring the promised goods or services to a customer. Royalty obligations (note 13) are considered to be variable consideration that will be remeasured at fair value at each reporting date.

The Company's entitlement to gas over bitumen royalty adjustments under the Natural Gas Royalty Regulation (2004) with respect to foregone production (deemed production) from natural gas wells shut-in for the benefit of bitumen producers in the Athabasca oil sands area, is recognized as gas over bitumen royalty credit revenue in the period that deemed production occurs, to the extent that the revenue is expected to be recovered through gas Crown royalties otherwise payable. The final payment related to the gas over bitumen royalty financing was made on July 25, 2021.

n) Income tax

Income tax expense comprises current and deferred components. Income tax expense is recognized in net income (loss) except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity.

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

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized on the initial recognition of assets or liabilities in a transaction that is not a business combination. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the period end date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized to the extent that it is probable that future taxable profits will be sufficient to utilize the underlying deductible temporary differences and unused tax losses associated with the deferred tax asset. The determination of probable future taxable profits involves significant estimates, including proved and probable oil and gas reserves. Deferred tax assets are reviewed at each period end date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

o) Income (loss) per share amounts

Basic income or loss per share is calculated by dividing the net income (loss) by the weighted average number of common shares outstanding during the period. For the dilutive net income per share calculation, the weighted average number of shares outstanding is adjusted for the potential number of shares which may have a dilutive effect on net income.

Diluted income per share is calculated giving effect to the potential dilution that would occur if outstanding warrants, share options, restricted rights, performance share rights, or deferred compensation awards were exercised or converted into common shares. The weighted average number of diluted shares is calculated in accordance with the treasury stock method for warrants, share options, restricted rights, performance share rights and deferred compensation awards. The treasury stock method assumes that the proceeds received from the exercise of all potentially dilutive instruments are used to repurchase common shares at the average market price.

p) Government Grants

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as an expense reduction in the period in which the costs are

incurred. Government grants related to income are recorded as other income in the period in which eligible expenses were incurred or when the services have been performed. During the year ended December 31, 2021, the Company received government grants through the Canada Emergency Wage Subsidy ("CEWS") and Canada Emergency Rent Subsidy ("CERS") of $0.9 million. For the year ended December 31, 2021, the grants were recognized as a reduction to general and administrative and production and operating expenses of $0.8 million and $0.1 million, respectively.

The Company also received government grant funding pursuant to Alberta's Site Rehabilitation Program ("SRP") with respect to approved abandonment and reclamation expenditures incurred by the Company. SRP funding of $0.3 million was received in 2022 (2021 - $0.7 million) and has been reported as other income (note 15).

q) Changing regulation

Regulations and government programs regarding emissions and climate-related matters are constantly evolving. With respect to environmental, social and governance ("ESG") and climate reporting, the IASB has issued an IFRS Disclosure Standard with the aim to develop sustainability disclosure standards that are globally consistent, comparable and reliable. In addition, the Canadian Securities Administrators have issued a proposed National Instrument 51-107 Disclosure of Climate-related Matters. The cost to comply with these standards and others that may be developed over time has not yet been quantified.

4. MARKETABLE SECURITIES

		Amount *($thousands)*
December 31, 2020	$	—
Rubellite shares and warrants received (note 4)[1]		9
Warrants exercised (note 17(d))		118
AIMCo Bonus Shares received (note 10)[2]		1,361
AIMCo Bonus Shares delivered (note 10)[2]		(1,361)
Rubellite Share Purchase Warrants received		2,000
Change in fair value of marketable securities		282
December 31, 2021	$	2,409
Purchase		39
Change in fair value of marketable securities		(634)
December 31, 2022	**$**	**1,814**

(1) On September 3, 2021, a Plan of Arrangement was completed involving Perpetual, the shareholders of Perpetual, and Rubellite Energy Inc. ("Rubellite") (the "Arrangement"). Under the terms of the Arrangement, for every 46 common shares of Perpetual held, shareholders received 1 common share of Rubellite and 12 warrants to purchase Rubellite common shares ("Rubellite Warrants"). Each Rubellite Warrant entitled the holder to subscribe for one Rubellite common share at a price of $2.00 per share until October 4, 2021. Through it's employee trust, Perpetual received 4,500 Rubellite common shares and 54,000 Rubellite Warrants as part of the Arrangement.

(2) Upon completion of the Arrangement, Perpetual executed its agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan ("Second Line Loan Settlement"). As part of the Second Lien Loan Settlement, Perpetual delivered 680,485 Rubellite shares (the "AIMCo Bonus Shares) to the second lien lender. The AIMCo Bonus Shares were valued at $1.4 million.

As at December 31, 2022 the Company holds 58,500 Rubellite shares on behalf of its employees valued at $0.1 million using the Rubellite common share price of $1.85 per share.

Under the terms of the Arrangement, Perpetual also received 4.0 million Rubellite Share Purchase Warrants, with an exercise price of $3.00 per share, that were initially valued at $2.0 million when received and revalued to $1.4 million as at December 31, 2022. The Company used the Black Scholes pricing model to calculate the estimated fair value of the Rubellite Share Purchase Warrants.

The following assumptions were used to arrive at the estimate of fair value of the Rubellite Share Purchase Warrants at the initial grant date upon completion of the Arrangement and as at period end:

	December 31, 2022	**Grant Date**
Dividend Yield (%)	**—**	—
Expected volatility (%)	**40%**	40%
Risk-free interest rate (%)	**3.28%**	1.20%
Contractual life (years)	**3.7**	5.0
Share price	**$1.85**	$2.00
Exercise price	**$3.00**	$3.00
Fair value	**$0.34**	$0.50

5. PROPERTY, PLANT AND EQUIPMENT ("PP&E")

	Development and Production Assets	Corporate Assets	Total
Cost			
December 31, 2020	$ 564,959	$ 7,652	$ 572,611
Additions	19,060	2	19,062
Acquisitions	1,325	—	1,325
Change in decommissioning obligations related to PP&E (note 15)	2,689	—	2,689
Transfers from exploration and evaluation (note 6)	2,943	—	2,943
Dispositions (a)	(16,442)	—	(16,442)
December 31, 2021	$ 574,534	$ 7,654	$ 582,188
Additions	31,772	137	31,909
Change in decommissioning obligations related to PP&E (note 15)	(4,655)	—	(4,655)
Transfers from exploration and evaluation (note 6)	161	—	161
December 31, 2022	**$ 601,812**	**$ 7,791**	**$ 609,603**
Accumulated depletion and depreciation			
December 31, 2020	$ (441,059)	$ (7,567)	$ (448,626)
Depletion and depreciation	(13,500)	(67)	(13,567)
Dispositions (a)	3,025	—	3,025
Impairment reversal (b)	30,600	—	30,600
December 31, 2021	$ (420,934)	$ (7,634)	$ (428,568)
Depletion and depreciation[1]	(17,781)	(10)	(17,791)
Impairment reversal (b)	7,400	—	7,400
December 31, 2022	**$ (431,315)**	**$ (7,644)**	**$ (438,959)**
Carrying amount			
December 31, 2021	$ 153,600	$ 20	153,620
December 31, 2022	**$ 170,497**	**$ 147**	**170,644**

(1) During the year ended December 31, 2022, depletion and depreciation expense includes $0.3 million which has been capitalized to inventory in accordance with the Company's inventory policy (December 31, 2021 - nil).

For the year ended December 31, 2022, $2.2 million (December 31, 2021 – $0.4 million) of direct general and administrative expenses were capitalized. Future development costs for the period ended December 31, 2022 of $104.6 million (December 31, 2021 – $75.3 million) were included in the depletion calculation. Depletion was $17.8 million (December 31, 2021 - $13.5 million) on development and production assets for the year ended December 31, 2022.

a) Clearwater Assets Disposition

On September 3, 2021, the Arrangement was completed involving Perpetual, the shareholders of Perpetual, and Rubellite. The Arrangement resulted in the disposition of all of Perpetual's Clearwater lands, wells, roads and facilities in northeast Alberta (the "Clearwater Assets"), working capital and associated cash, and decommissioning obligations to Rubellite was accounted for as being effective for consideration of $65.5 million.

Consideration included $53.6 million in promissory notes, paid in cash on October 5, 2021, and the assumption of $5.8 million of promissory notes due to 1974918 Alberta Ltd. (a company controlled by the Company's CEO ("CEO") ("197Co"), the issuance of 680,485 Rubellite common shares valued at $1.4 million ("AIMCo Bonus Shares"), the return of 8.2 million Perpetual common shares exchanged in the Arrangement valued at $2.8 million and issuance of warrants to purchase 4.0 million Rubellite common shares at a price of $3.00 per share for a period of five years, valued at $2.0 million.

The consideration received, and calculation of the gain recorded on disposition is summarized below:

($ thousands)	
Proceeds from disposition (i)	**$ 65,514**
Transaction costs and closing adjustments (ii)	**(583)**
Carrying amount of assets disposed (iii)	**(19,085)**
Carrying amount of net working capital disposed, including cash (iv)	**823**
Carrying amount of decommissioning obligations disposed (v)	**853**
Gain on disposition	**$ 47,522**

i) Total consideration $65.5 million of consideration as outlined below:

($ thousands)	
Promissory note issued by Rubellite to Perpetual[1]	$ 53,600
PEI-197Co note assumed by Rubellite[2]	5,773
AIMCo Bonus Shares[3]	1,361
Perpetual common shares[4]	2,780
Rubellite Share Purchase Warrants[5]	2,000
Total consideration received	**$65,514**

(1) Demand promissory note, secured by the Clearwater Assets, and settled on October 5, 2021.
(2) On July 15, 2021, Perpetual exercised an option to acquire certain E&E lands located at Figure Lake in exchange for a demand promissory note secured by the Figure Lake lands in the amount of $5.8 million owing to 197Co (note 6). The acquired Figure Lake lands comprised part of the Clearwater Assets sold to Rubellite. The secured promissory note obligation owing to 197Co was assigned by Perpetual to Rubellite as part of the total consideration.
(3) Rubellite shares issued to Perpetual on September 3, 2021 valued at $1.4 million.
(4) Rubellite returned to Perpetual 8.2 million Perpetual common shares valued at $2.8 million. Pursuant to the Plan of Arrangement, Perpetual shareholders exchanged 8.2 million Perpetual common shares with Rubellite for Rubellite common shares and warrants. The Perpetual shares received were subsequently cancelled.
(5) Represents the estimated value of 4.0 million Rubellite Share Purchase Warrants at $3.00 per share exercise price (note 4) valued at $2.0 million.

ii) Transaction costs and closing adjustments — $0.6 million of transaction costs and closing adjustments.

iii) Carrying amount of assets disposed — $19.1 million of assets including development and production assets ($16.1 million of costs less $2.8 million of accumulated depletion) and exploration and evaluation assets ($5.8 million).

iv) Carrying amount of net working capital disposed — $0.8 million of net working capital including cash ($4.1 million), accounts receivable ($0.7 million), and accounts payable ($5.6 million).

v) Carrying amount of decommissioning obligations disposed — $0.9 million of decommissioning obligations associated with development and production assets disposed.

b) Cash-generating units and impairment reversals

There were no indicators of impairment for the Company’s cash generating units ("CGUs") as at December 31, 2022 and therefore, an impairment test was not performed.

The Company identified an indicator of impairment reversal at March 31, 2022 for the Eastern Alberta CGU and performed an impairment reversal test to estimate the recoverable amount of the CGU. It was determined the recoverable amount of the Eastern Alberta CGU exceeded the CGU’s carrying value, resulting in all previous Eastern Alberta CGU impairment, net of depletion, of $7.4 million being reversed. No historical impairments remain for the Eastern Alberta CGU.

At March 31, 2022, indicators of impairment reversal for the Eastern Alberta CGU were primarily a result of increased forecasted benchmark commodity prices which positively impacted operating cash flows. The estimated recoverable amount of the Eastern Alberta CGU was determined using the value-in-use methodology, based on the estimates of proved and probable oil and gas reserves and the related cash flows at March 31, 2022, as updated by internal reserve evaluators, along with forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators, and an estimate of market discount rates between 10% and 20% to consider risks specific to the Eastern Alberta CGU. For purposes of the March 31, 2022 impairment test, the Company's internal reserve evaluators updated the significant assumptions from the independent third party reserve evaluators estimate of proved and probable oil and gas reserves as at December 31, 2021.

Forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators were used in the VIU calculation as at March 31, 2022:

Year	West Texas Intermediate ("WTI") Crude Oil *(US$/bbl)*	USD/CDN exchange rate *(US$/Cdn$)*	Alberta Heavy Crude Oil *(Cdn$/bbl)*	AECO Gas *(Cdn$/MMBtu)*	NYMEX Gas *(Cdn$/MMBtu)*
2022	94.53	1.25	95.13	5.13	5.48
2023	84.15	1.25	77.65	4.28	4.44
2024	77.51	1.25	70.24	3.69	3.75
2025	71.63	1.25	64.45	3.45	3.56
2026	73.06	1.25	65.74	3.52	3.63
2027	74.53	1.25	67.06	3.59	3.70
2028	76.02	1.25	68.40	3.66	3.77
2029	77.54	1.25	69.77	3.73	3.85
2030	79.09	1.25	71.16	3.81	3.93
2031	80.67	1.25	72.58	3.88	4.00
2032	82.28	1.25	74.04	3.96	4.08
2033	83.93	1.25	75.52	4.04	4.17
2034	85.61	1.25	77.03	4.12	4.25
2035	87.32	1.25	78.57	4.20	4.33
2036(1)	89.06	1.25	80.14	4.29	4.42

(1) Forecasted oil and gas commodity prices escalate 2.0% per year thereafter.

As at March 31, 2022, if discount rates used in the calculation of impairment reversal changed by 1% with all other variables held constant, the impairment reversal would be unchanged. As at March 31, 2022, if commodity price estimates changed by 5% with all other variables held constant, the impairment reversal would be unchanged.

During the year ended December 31, 2021, the Company reversed $30.6 million of historical impairments, net of depletion.

The Company identified an indicator of impairment reversal at June 30, 2021 for the West Central and Eastern Alberta cash generating units and additionally at December 31, 2021 for the Eastern Alberta CGU and performed impairment reversal tests to estimate the recoverable amount of each CGU. It was determined the recoverable amount of the West Central and Eastern Alberta CGUs exceeded each CGU's carrying value, resulting in all previous West Central impairment, net of depletion, of $22.6 million and Eastern Alberta impairment of $8.0 million, respectively, being reversed. No historical impairments remain for the West Central CGU.

At December 31, 2021, indicators of impairment reversal for the Eastern Alberta CGU included the recovery in global oil and gas commodity prices, changing development plans, positive proved and probable oil and gas reserve revisions, and increasing economic stability and certainty in the oil and gas industry, all of which positively impact operating cash flows. There were no internal or external indicators of impairment for the West Central CGU as at December 31, 2021. The estimated recoverable amount of the Eastern Alberta CGU was determined using the value-in-use methodology, based on the estimates of proved and probable oil and gas reserves and the related cash flows as evaluated by the Company's independent third party reserve evaluators at December 31, 2021, along with forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators, and an estimate of market discount rates between 10% and 20% to consider risks specific to the Eastern Alberta CGU.

At December 31, 2021, the Company determined that the estimated recoverable amount of the Eastern Alberta CGU exceeded the carrying amount of $42.2 million. Accordingly, an impairment reversal of $0.5 million was included in net income.

Forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators were used in the VIU calculation as at December 31, 2021:

Year	West Texas Intermediate ("WTI") Crude Oil *(US$/bbl)*	USD/CDN exchange rate *(US$/Cdn$)*	Alberta Heavy Crude Oil *(Cdn$/bbl)*	AECO Gas *(Cdn$/MMBtu)*	NYMEX Gas *(Cdn$/MMBtu)*
2022	72.83	0.797	66.45	3.56	4.83
2023	68.78	0.797	61.90	3.21	4.32
2024	66.76	0.797	59.45	3.05	3.98
2025	68.09	0.797	60.64	3.11	4.06
2026	69.45	0.797	61.87	3.17	4.15
2027	70.84	0.797	63.11	3.23	4.23
2028	72.26	0.797	64.37	3.30	4.31
2029	73.70	0.797	65.67	3.36	4.40
2030	75.18	0.797	66.68	3.43	4.49
2031	76.68	0.797	68.02	3.50	4.58
2032	78.21	0.797	69.38	3.57	4.67
2033	79.78	0.797	70.77	3.64	4.76
2034	81.37	0.797	72.18	3.71	4.86
2035	83.00	0.797	73.63	3.79	4.95
2036(1)	84.66	0.797	75.10	3.86	5.05

(1) Forecasted oil and gas commodity prices escalate 2.0% per year thereafter.

As at December 31, 2021, if discount rates used in the calculation of impairment reversal changed by 1% with all other variables held constant, the impairment reversal would change by approximately $1.5 million. As at December 31, 2021, if commodity price estimates changed by 5% with all other variables held constant, the impairment reversal would change by approximately $5.8 million.

At June 30, 2021, indicators of impairment reversal for the West Central and Eastern Alberta CGUs related to the significant recovery in global oil and natural gas prices, coupled with the increasing economic stability and certainty in the oil and natural gas industry which positively impacts operating cash flows. The estimated recoverable amounts of the CGUs were determined using VIU based on the estimates of proved and probable oil and gas reserves and the related cash flows as evaluated or reviewed by the Company's independent third party reserves evaluators and updated by internal reserve evaluators, along with forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators as at July 1, 2021, and an estimate of market discount rates between 12% and 22% to consider risks specific to the CGUs.

The Company determined that the estimated recoverable amounts of the West Central CGU and Eastern Alberta CGU exceeded their carrying amounts of $89.6 million and $28.6 million, respectively. Accordingly, an impairment reversal of $30.1 million was included in net income in the second quarter of 2021.

Forecasted oil and gas commodity prices based on an average of three independent third party reserve evaluators were used in the VIU calculations as at June 30, 2021:

Year	WTI Crude Oil *(US$/bbl)*	USD/CDN exchange rate *(US$/Cdn$)*	Alberta Heavy Crude Oil *(Cdn$/bbl)*	AECO Gas *(Cdn$/MMBtu)*	NYMEX Gas *(Cdn$/MMBtu)*
2021	66.59	0.80	61.66	3.18	4.16
2022	67.20	0.80	61.13	3.13	3.98
2023	63.95	0.80	55.88	2.72	3.65
2024	63.23	0.80	54.95	2.71	3.70
2025	64.50	0.80	56.06	2.76	3.78
2026	65.79	0.80	57.19	2.82	3.85
2027	67.10	0.80	58.34	2.88	3.93
2028	68.44	0.80	59.51	2.94	4.01
2029	69.81	0.80	60.71	2.99	4.09
2030	71.21	0.80	61.92	3.05	4.17
2031	72.63	0.80	63.16	3.12	4.26
2032	74.09	0.80	64.43	3.18	4.34
2033	75.57	0.80	65.71	3.24	4.43
2034	77.08	0.80	67.03	3.31	4.52
2035(1)	78.62	0.80	68.37	3.37	4.61

(1) Commodity price estimates escalate 2.0% per year thereafter.

6. EXPLORATION AND EVALUATION ("E&E")

	December 31, 2022	December 31, 2021
Balance, beginning of year	**$ 7,329**	$ 10,272
Acquisitions	**—**	5,773
Dispositions	**—**	(5,773)
Transfers to property, plant and equipment (note 5)	**(161)**	(2,943)
Balance, end of year	**$ 7,168**	$ 7,329

During the year ended December 31, 2022, $0.1 million (2021 - $0.1 million) in costs were charged directly to E&E expense in net income (loss).

On July 15, 2021, Perpetual exercised an option to acquire lands located at Figure Lake in exchange for a demand promissory note secured by the Figure Lake lands in the amount of $5.8 million owing to 197Co. The acquired Figure Lake lands comprised part of the Clearwater Assets sold to Rubellite. The secured promissory note obligation owing to 197Co was assigned by Perpetual to Rubellite as part of the disposition of the Clearwater Assets.

Impairment of E&E assets

E&E assets are tested for impairment both at the time of any triggering facts and circumstances as well as upon their eventual reclassification to development and production assets in PP&E.

At December 31, 2022 and 2021, the Company conducted an assessment of indicators of impairment and impairment reversal for the Company's E&E assets. There were no triggers identified and therefore, an impairment test was not performed. The Company transferred undeveloped land to PP&E in 2022 at a value of $0.2 million (2021 - $2.9 million), which was equal to the book value in E&E.

7. RIGHT-OF-USE ASSETS

The Company leases several assets including office space, vehicles, and other leases. Information about leases for which the Company is a lessee is presented below:

	Head office	Vehicles	Other leases	Total
Cost				
January 1, 2021	$ 1,591	$ 389	$ 247	$ 2,227
Additions	—	221	—	221
December 31, 2021	$ 1,591	$ 610	$ 247	$ 2,448
Additions	—	181	—	181
December 31, 2022	**$ 1,591**	**$ 791**	**$ 247**	**$ 2,629**
Accumulated depreciation				
January 1, 2021	$ (497)	$ (215)	$ (143)	$ (855)
Depreciation	(258)	(134)	(61)	(453)
December 31, 2021	$ (755)	$ (349)	$ (204)	$ (1,308)
Depreciation	(258)	(170)	(29)	(457)
December 31, 2022	**$ (1,013)**	**$ (519)**	**$ (233)**	**$ (1,765)**
Carrying amount				
December 31, 2021	$ 836	$ 261	$ 43	$ 1,140
December 31, 2022	**$ 578**	**$ 272**	**$ 14**	**$ 864**

8. CONTINGENCIES

On August 3, 2018, the Company received a Statement of Claim that was filed by PricewaterhouseCoopers Inc. LIT ("PwC"), in its capacity as trustee in bankruptcy (the "Trustee") of Sequoia Resources Corp. ("Sequoia"), with the Alberta Court of Queen's Bench (the "Court"), against Perpetual (the "Sequoia Litigation"). The claim relates to a six-year-old transaction when, on October 1, 2016, Perpetual closed the disposition of shallow conventional natural gas assets in Eastern Alberta to an arm's length third party at fair market value after an extensive and lengthy marketing, due diligence, and negotiation process (the "Sequoia Disposition"). This transaction was one of several completed by Sequoia. Sequoia assigned itself into bankruptcy on March 23, 2018. PwC is seeking an order from the Court to either set this transaction aside or declare it void, or damages of approximately $217 million. On August 27, 2018, Perpetual filed a Statement of Defence and Application for Summary Dismissal with the Court in response to the Statement of Claim. All allegations made by PwC have been denied and applications to the Court to dismiss all claims has been made on the basis that there is no merit to any of them.

On January 13, 2020, a written decision related to the Application for Dismissal, dismissed and struck all claims against the Company's CEO and all but one of the claims filed against Perpetual. The Court did not find that the test for summary dismissal relating to whether the asset transaction was an arm's length transfer for purposes of section 96(1) of the Bankruptcy and Insolvency Act (the "BIA") was met, on the balance of probabilities. Accordingly, the BIA claim was not dismissed or struck and only that part of the claim could continue against Perpetual. The Trustee filed a notice of appeal with the Court of Appeal of Alberta, challenging the entire decision, and Perpetual filed a similar notice of appeal contesting the BIA claim portion of the decision (the "First Appeal"). The First Appeal proceedings were heard on December 10, 2020. On January 25, 2021, the Court of Appeal of Alberta issued their judgement with respect to the First Appeal proceedings,

dismissing the appeal filed by Perpetual and granting certain aspects of the appeals filed by the Trustee, thereby reinstating certain elements of the Sequoia Litigation for trial. On March 24, 2021, Perpetual applied for leave to appeal the First Appeal decision to the Supreme Court of Canada (the "SCC"). On July 8, 2021, the SCC dismissed Perpetual's application.

On February 25, 2020, Perpetual filed a second application to strike and summarily dismiss the BIA claim on the basis that there was no transfer at undervalue, and Sequoia was not insolvent at the time of the asset transaction nor caused to be insolvent by the asset transaction (the "Second Summary Dismissal Application"). In July 2020, the Orphan Well Association ("OWA"), certain oil and gas companies, and six municipalities applied to intervene in the Second Summary Dismissal Application proceedings. The OWA and certain oil and gas companies were permitted to intervene (the "Intervenors") in the proceedings which took place on October 1 and 2, 2020. The Intervenors were also permitted to intervene in the First Appeal proceedings. On January 14, 2021 the Court issued its decision, finding that the Trustee could not establish a necessary element of the BIA Claim as Sequoia was not insolvent at the time of, nor rendered insolvent by, the Sequoia Disposition. The Court therefore concluded there is "no merit" to the BIA Claim and it summarily dismissed the balance of the Statement of Claim. The Trustee appealed this decision, and the Court of Appeal hearing took place on February 10, 2022, with the panel reserving judgement. On March 25, 2022, the Court of Appeal issued their judgement with respect to this matter and allowed PwC's appeal on the basis that the Court of Queen's Bench erred in law in its handling of the end-of-life obligations and that based on the record, it could not be concluded the error was without consequence, and that the Court of Queen's Bench also erred in agreeing to hear the Second Summary Dismissal Application. On this basis, the BIA Claim has been directed to trial.

The Trustee filed its Amended Statement of Claim with the Court on October 14, 2022. Perpetual filed its Statement of Defence to Amended Statement of Claim on December 12, 2022.

Management expects that the Company is more likely than not to be completely successful in defending against the Sequoia Litigation such that no damages will be awarded against it, and therefore, no amounts have been accrued as a liability in these financial statements.

9. REVOLVING BANK DEBT

The Company has a first lien credit facility of $30.0 million (December 31, 2021 - $17 million) with an initial term to May 31, 2023. The initial term may be extended to May 31, 2024 subject to approval by the syndicate. If the facility is not extended all outstanding balances would be repayable on May 31, 2024. The next semi-annual borrowing base redetermination is scheduled to be completed on or before May 31, 2023.

As at December 31, 2022, $14.9 million was drawn (December 31, 2021 – $2.5 million) and $1.2 million of letters of credit had been issued (December 31, 2021 – $1.0 million) under the Company's credit facility. Borrowings under the Credit Facility bear interest at its lenders' prime rate or Banker's Acceptance rates, plus applicable margins and standby fees. The applicable Banker's Acceptance margins range between 3.0% and 5.5%. The effective interest rate on the Credit Facility at December 31, 2022 was 7.9%. For the year ended December 31, 2022 if interest rates changed by 1% with all other variables held constant, the impact on annual cash finance expense and net income would be $0.1 million.

The Credit Facility is secured by general first lien security agreements covering all present and future property of the Company and its subsidiaries.

At December 31, 2022, the Credit Facility was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

10. TERM LOAN

			December 31, 2022		December 31, 2021	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Term loan	December 31, 2024	8.1%	**$ 2,671**	**$ 2,524**	$ 2,671	$ 2,469

During the third quarter of 2021, Perpetual executed an agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan. Perpetual substantively modified the previous Term Loan with Alberta Investment Management Corporation ("AIMCo") in exchange for the payment of approximately $38.5 million in cash, the delivery by Perpetual of the AIMCo Bonus Shares at a value of $1.4 million, the issuance of a new $2.7 million second lien Term Loan (the "New Term Loan"), and up to an aggregate $4.5 million in contingent payments over the three year period ended June 30, 2024 in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds (the "Second Lien Loan Settlement") (note 11). All amounts related to the Second Lien Loan Settlement were paid on October 5, 2021. The New Term Loan bears interest at 8.1% annually, which Perpetual may elect to pay-in-kind and will mature on December 31, 2024. Perpetual has the ability to repay the Term Loan at any time without any repayment penalty.

The Company and the Term Loan lender agreed to allow $1.8 million of interest due December 31, 2020 to be paid-in-kind and added to the outstanding principal amount of the loan and all other interest owing on the Term Loan to be settled as part of the Second Lien Loan Settlement. Non-cash paid-in-kind interest of $0.8 million was recorded in the third quarter of 2021, which increased the principal amount of the Term Loan owing upon settlement to $49.6 million. As a result of the Second Lien Loan Settlement, the carrying amount of $49.6 million was in excess of the consideration received of $42.8 million, resulting in a gain of $6.8 million being recognized (note 20).

The New Term Loan has a cross-default provision with the Credit Facility and contains substantially similar provisions and covenants as the Credit Facility (note 9). The Term Loan is secured by a general security agreement over all present and future property of the Company and its subsidiaries on a second priority basis, subordinate only to liens securing loans under the Credit Facility.

At December 31, 2022, the Term Loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

11. OTHER LIABILITY

Pursuant to the terms of the Second Lien Loan Settlement, Perpetual committed to pay up to $4.5 million in potential contingent payments in the event that the Company's annual average realized crude oil and natural gas prices exceed certain thresholds in each of the annual periods ended December 31, 2023. The payment for 2021 was capped at $1.3 million; the payment for 2022 is capped at $1.3 million; and the payment for 2023 is capped at $1.9 million. For 2021, $0.2 million was earned and $0.1 million was paid on June 30, 2022, with the remaining $0.1 million to be paid on June 30, 2023. For 2022, $1.3 million was earned. This leaves a maximum remaining total obligation to be earned for 2023 of $2.0 million. At December 31, 2022, the Company estimated the maximum total remaining obligation to be $3.3 million, and after discounting the fair value of the contingent liability was recorded as $3.0 million. The change in fair value of this liability was recorded as a non-cash finance expense in the statements of income and comprehensive income.

The table below summarizes the change in fair value of the contingent payments:

	December 31, 2022	December 31, 2021
Balance, beginning of year	**$ 1,387**	$ —
Initial recognition	**—**	228
Cash payments	**(63)**	—
Change in fair value	**1,678**	1,159
Balance, end of year	**$ 3,002**	$ 1,387

	December 31, 2022	December 31, 2021
Current	**$ 532**	$ 63
Non-current	**2,470**	1,324
Total other liability	**$ 3,002**	$ 1,387

The Company has designated the other liability as financial liabilities which are measured at fair value through profit and loss, estimated by discounting potential contingent payments. For the year ended December 31, 2022, an unrealized loss of $1.7 million (2021 – $1.2 million) is included in non-cash finance expense related to the change in fair value of other liability (note 20).

At December 31, 2022, if forecasted natural gas commodity prices changed by $0.25 per GJ with all other variables held constant, the fair value of the total other liability and net income for the period would change by nil as the maximum remaining obligation has been met and this movement would not reduce the remaining obligation to less than it's maximum. If forecasted crude oil commodity prices changed by $5.00 per bbl with all other variables held constant, the fair value of the other liability and net income for the period would also change by nil for the same reason.

12. SENIOR NOTES

	Maturity date	Interest rate	December 31, 2022 Principal	December 31, 2022 Carrying Amount	December 31, 2021 Principal	December 31, 2021 Carrying amount
Senior notes	January 23, 2025	8.75%	**$ 35,647**	**$ 34,527**	$ 36,583	$ 34,189

On January 22, 2021, Perpetual announced the completion of a Court-approved plan of arrangement whereby the unsecured 2022 Senior Notes were exchanged for new 8.75% secured third lien notes due January 23, 2025. The 2025 Senior Notes have been issued under a trust indenture that contains substantially the same terms as the 2022 Senior Notes, other than the 2025 Senior Notes are secured on a third lien basis and allow for the semi-annual interest payments to be paid at Perpetual's option, in cash, or in additional 2025 Senior Notes (a "PIK Interest Payment"). In 2021, the Company elected to pay the semi-annual interest payments by making PIK Interest Payments, increasing the principal amount to $36.6 million.

The Company satisfied the January 23, 2022 and the July 23, 2022 semi-annual interest payment of $1.6 million by making cash payments. Subsequent to December 31, 2022 the Company satisfied the January 23, 2023 semi-annual interest of $1.6 million by making a cash payment.

At December 31, 2022, the senior notes are recorded at the present value of future cash flows, net of $1.1 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 13.9%.

During the third quarter of 2022 the Company purchased and cancelled a portion of the 2025 Senior Notes balance with a carrying value of $0.9 million (2021 - nil) for gross proceeds of $0.8 million. A gain on extinguishment of $0.1 million (2021 - nil) is included in non-cash finance expense (note 20).

The senior notes are direct senior secured, third lien obligations of the Company. The Company may redeem the senior notes without any repayment penalty. The senior notes have a cross-default provision with the Company's Credit Facility. In addition, the senior notes indenture contains restrictions on certain payments including dividends, retirement of subordinated debt, and stock repurchases.

At December 31, 2022, the senior notes were not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

Entities controlled by the Company's CEO hold $15.9 million of the 2025 Senior Notes outstanding. An entity that is associated with the Company's CEO holds an additional $10.3 million of the 2025 Senior Notes outstanding.

13. ROYALTY OBLIGATIONS

	Retained East Edson royalty obligation	Gas over bitumen royalty financing	Total
December 31, 2020	$ 5,714	$ 435	$ 6,149
Cash payments[1]	—	(558)	(558)
Non-cash payments in-kind	(4,995)	—	(4,995)
Change in fair value (note 20)	3,978	123	4,101
December 31, 2021	4,697	—	4,697
Cash payments[2]	**(6,953)**	**—**	**(6,953)**
Change in fair value (note 20)	**2,256**	**—**	**2,256**
December 31, 2022	**$ —**	**$ —**	**$ —**

(1) The final payment related to the gas over bitumen royalty financing was made on July 25, 2021.
(2) The retained East Edson royalty obligation ended on December 31, 2022.

The retained East Edson royalty obligation formed part of the net consideration received by Perpetual following the disposition transaction in 2020, whereby Perpetual agreed to retain the purchaser's 50% working interest in the existing gross overriding royalty obligation on the property, equivalent to 2.8 MMcf/d of natural gas and associated NGL production for the period April 1, 2020 to December 31, 2022. Prior to November 1, 2021, the retained East Edson royalty obligation was paid in-kind, and settled through non-cash delivery of contractual natural gas and NGL volumes to the royalty holder. As of November 1, 2021, the royalty obligation is settled through payment in cash.

The Company has designated the retained East Edson royalty obligation and the gas over bitumen royalty financing as financial liabilities which are measured at fair value through profit and loss, estimated by discounting future royalty obligations based on forecasted natural gas and NGL commodity prices multiplied by the royalty obligation volumes. For the year ended December 31, 2022, an unrealized loss of $2.3 million (2021 – unrealized loss of $4.1 million) is included in non-cash finance expense related to the change in fair value of the retained East Edson total royalty obligation (note 20).

14. LEASE LIABILITIES

	December 31, 2022	December 31, 2021
Balance, beginning of year	**$ 2,102**	$ 2,501
Additions	**181**	221
Interest on lease liabilities (note 20)	**116**	148
Payments	**(824)**	(768)
Total lease liabilities	**$ 1,575**	**$ 2,102**
Current	**$ 705**	$ 778
Non-current	**870**	1,324
Total lease liabilities	**$ 1,575**	**$ 2,102**

Lease terms are negotiated on an individual basis and contain a wide range of terms and conditions. Incremental borrowing rates used to measure the present value of the future lease payments at December 31, 2022 were between 4.3% and 6.6% (2021 – 4.3% and 6.6%).

15. DECOMMISSIONING OBLIGATIONS

The following significant assumptions were used to estimate decommissioning obligations:

		December 31, 2022		December 31, 2021
Obligations incurred, including acquisitions	**$**	**687**	$	965
Change in risk free interest rate		**(5,325)**		(1,309)
Change in estimates		**(17)**		3,033
Change in decommissioning obligations related to PP&E (note 5)		**(4,655)**		2,689
Obligations settled (cash)		**(1,199)**		(1,760)
Obligations settled[1] (non-cash)		**(348)**		(704)
Obligations disposed (note 5(a)(v))		**—**		(853)
Accretion (note 20)		**727**		531
Change in decommissioning obligations		**(5,475)**		(97)
Balance, beginning of year		**32,927**		33,024
Balance, end of year	**$**	**27,452**	$	32,927
Decommissioning obligations – current[2]	**$**	**1,688**	$	1,327
Decommissioning obligations – non-current		**25,764**		31,600
Total decommissioning obligations	**$**	**27,452**	$	32,927

(1) During the year ended December 31, 2022, obligations settled (non-cash) of $0.3 million (2021 – $0.7 million) respectively were funded by payments made directly to Perpetual's service providers from the Alberta Site Rehabilitation Program. These amounts have been recorded as other income.
(2) Current decommissioning liabilities relate to obligations that the Company reasonably expects to be settled within the next 12 months.

Decommissioning obligations are estimated based on the Company's net ownership interest in all wells and facilities, estimated costs to reclaim and abandon these wells and facilities, and the estimated timing of the costs to be incurred in future periods. The Company's current decommissioning obligation exceeds the Alberta Energy Regulator's ("AER") required spend over the next twelve months.

The increase in the provision due to the passage of time, which is referred to as accretion, is recognized as non-cash finance expense in the condensed interim consolidated statements of income and comprehensive income. Decommissioning obligations are further adjusted at each period end date for changes in the risk-free interest rate, after considering additions and dispositions of PP&E. Decommissioning obligations are also adjusted for revisions to future cost estimates and the estimated timing of costs to be incurred in future periods.

The following significant assumptions were used to estimate the Company's decommissioning obligations:

		December 31, 2022		December 31, 2021
Undiscounted obligations	**$**	**32,664**	$	32,254
Average risk-free rate		**3.3%**		1.7%
Inflation rate		**2.1%**		1.8%
Expected timing of settling obligations		**1 to 25 years**		1 to 25 years

16. CONTRACTUAL OBLIGATIONS

As at December 31, 2022, the Company's minimum contractual obligations and lease commitments over the next five years and thereafter, excluding estimated interest payments, are as follows:

	2023	**2024**	**2025**	**2026**	**Total**
Contractual obligations					
Accounts payable and accrued liabilities	18,962	–	–	–	18,962
Revolving bank debt	–	14,909	–	–	14,909
Term loan, principal amount	–	2,671	–	–	2,671
Senior notes, principal amount	–	–	35,647	–	35,647
Lease liabilities	705	680	190	–	1,575
Pipeline transportation commitments	1,924	1,659	1,293	319	5,195
Total	**21,591**	**19,919**	**37,130**	**319**	**78,959**

17. SHARE CAPITAL

	December 31, 2022		December 31, 2021	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of year	**63,567**	**$ 94,809**	61,305	$ 97,333
Issued pursuant to share-based payment plans	**3,174**	**4,611**	1,828	243
Shares held in trust purchased (b)	**(1,334)**	**(1,307)**	(542)	(191)
Shares held in trust issued (b)	**537**	**502**	566	168
Treasury shares issued (c)	**—**	**—**	1,000	230
Shares held in trust sold pursuant to the Plan of Arrangement (d)	**—**	**—**	189	9
Shares held in trust split pursuant to the Plan of Arrangement (d)	**—**	**—**	(189)	—
Common share split (d)	**—**	**—**	8,158	—
Common share cancellation (d)	**—**	**—**	(8,158)	(2,779)
Common share odd-lot consolidation (e)	**—**	**—**	(590)	(204)
Balance, end of year	**65,944**	**$ 98,615**	63,567	$ 94,809

a) Authorized

Authorized capital consists of an unlimited number of common shares.

b) Shares held in trust

The Company has compensation agreements in place with employees whereby they may be entitled to receive shares of the Company purchased on the open market by a trustee (note 18). Share capital is presented net of the number and cumulative purchase cost of shares held by the trustee that have not yet been issued to employees. As at December 31, 2022, 1.3 million shares were held in trust (December 31, 2021 – 0.5 million).

c) Treasury shares issued

During the first quarter of 2021, 1.0 million common shares were issued to an Officer of the Company for $0.2 million of cash consideration at a price of $0.23 per share, representing the volume weighted average trading price of the shares for the 5 day period immediately preceding the issuance.

d) Common share split and common share cancellation

As part of the Plan of Arrangement, 8.2 million Perpetual common shares were received by Rubellite from Perpetual shareholders in exchange for Rubellite common shares and warrants, and Perpetual split its shares by a ratio such that the number of Perpetual shares exchanged to Rubellite was equal to the number of shares split. On September 3, 2021, Perpetual received 8.2 million Perpetual common shares held by Rubellite as part of the consideration for the disposition of the Clearwater Assets and these shares were cancelled.

e) Common share odd-lot consolidation

Pursuant to steps in the Plan of Arrangement, Perpetual consolidated its common shares on the basis of 1,000 to 1 (the "Consolidation") and subsequently split the Common Shares on the same ratio. Shareholders who owned a number of common shares less than 1 subsequent to the consolidation and preceding the split (the "Consolidated Shareholders") were paid an amount in cash of $0.3419 per pre consolidated common share, being the volume weighted average trading price of the common shares on the Toronto Stock Exchange for the 20-day period prior to the effective date. Based on the ratio, 590,000 Common Shares were cancelled as a result of the Consolidation and Perpetual paid an aggregate of $0.2 million to the Consolidated Shareholders.

f) Per share information

(thousands, except per share amounts)	**December 31, 2022**	December 31, 2021
Net income – basic and diluted	**$ 44,397**	$ 81,121
Weighted average shares		
Issued common shares	**65,213**	63,377
Effect of shares held in trust	**(765)**	(408)
Weighted average common shares outstanding – basic	**64,448**	62,969
Weighted average common shares outstanding – diluted[1]	**74,798**	69,989
Net income per share – basic	**$ 0.69**	$ 1.29
Net income per share – diluted	**$ 0.59**	$ 1.16

[1] For the year ended December 31, 2022, 4.3 million potentially issuable common shares through the share-based compensation plan were excluded as they were not dilutive (year ended December 31, 2021 - 8.8 million).

18. SHARE-BASED PAYMENTS

The components of share-based payment expense are as follows:

	December 31, 2022	December 31, 2021
Compensation awards	$ 665	$ 277
Share options	194	83
Performance share rights	6,575	1,684
Share-based payments[(1)]	**$ 7,434**	$ 2,044

(1) For the year ended December 31, 2022, the Company has recorded $1.3 million respectively, (year ended December 31, 2021 - $1.5 million) related to equity settled transactions that are expected to settle in cash.

The following tables summarize information about options, rights, and awards outstanding:

	Compensation awards					
(thousands)	Deferred options	Deferred shares	Share options	Performance share rights[(1)]	Restricted rights	Total
December 31, 2020	5,057	2,401	5,397	3,420	—	16,275
Granted	2,448	1,367	1,258	1,715	1,436	8,224
Exercised for common shares	—	—	(398)	—	(1,428)	(1,826)
Exercised for shares held in trust	(198)	(161)	—	—	—	(359)
Exercised for restricted rights	(303)	(278)	—	(855)	—	(1,436)
Performance adjustment[(4)]	—	—	—	(855)	—	(855)
Cancelled/forfeited	(1,090)	(151)	(455)	(360)	(8)	(2,064)
Expired	(438)	(20)	(1,725)	—	—	(2,183)
December 31, 2021	5,476	3,158	4,077	3,065	—	15,776
Granted[(2)]	1,457	792	1,298	833	3,125	7,505
Exercised for common shares	—	—	(49)	—	(3,125)	(3,174)
Exercised for shares held in trust	(780)	(280)	—	—	—	(1,060)
Exercised for restricted rights	—	(760)	—	(2,365)	—	(3,125)
Performance adjustment[(3)]	—	—	—	1,014	—	1,014
Cancelled/forfeited	(267)	(42)	(1,725)	—	—	(2,034)
December 31, 2022	**5,886**	**2,868**	**3,601**	**2,547**	**—**	14,902

(1) Certain performance share rights contain monetary awards that may be settled in cash, in common shares of the Company, or a combination thereof at the discretion of the Board of Directors, equal to the monetary amount at the time of vesting. These awards are accounted for as cash-settled share-based payments in which the fair value of the amounts payable under the plan are recognized incrementally as an expense over the vesting period, with a corresponding change in liabilities. As at December 31, 2022, nil has been accrued pursuant to cash-settled share-based payment awards (December 31, 2021 – $0.3 million).

(2) During the year ended December 31, 2022, 1.5 million deferred options, 0.8 million deferred shares, 1.3 million share options, 0.8 million performance share rights, and 3.1 million restricted rights were granted to Officers, Directors, and employees of the Company.

(3) Performance share rights are subject to a performance multiplier of 0.5 to 2.0.

During the year ended December 31, 2022, the Company granted 4.4 million share-based payment awards, comprised of deferred options, deferred shares, share options, and performance share rights (2021 – 6.8 million). The Company used the Black Scholes pricing model to calculate the estimated fair value of the outstanding deferred options (note 18(a)) and share options (note 18(b)) at the date of grant. The following assumptions were used to arrive at the estimate of fair value as at the date of grant:

	2022	2021
Dividend yield (%)	**0.0**	0.0
Forfeiture rate (%)	**5.0-10.0**	5.0-10.0
Expected volatility (%)	**60.0**	60.0
Risk-free interest rate (%)	**2.2-3.2**	0.6-0.9
Expected life (years)	**3.2-3.4**	3.2-3.4
Vesting period (years)	**4.0**	4.0
Contractual life (years)	**5.0**	5.0
Weighted average share price at grant date	**1.04**	0.31-0.35
Weighted average fair value at grant date	**1.07-1.08**	0.13-0.14

During the year ended December 31, 2022, 2.4 million restricted rights were issued in exchange for the exercise of performance share rights (2021 – 0.9 million), 0.8 million in exchange for the exercise of deferred shares (2021 – 0.3 million), and nil in exchange for deferred options (2021 – 0.3 million).

a) Compensation awards

Deferred options

The Company has deferred option agreements in place with certain employees whereby they may be entitled to receive shares of the Company purchased on the open market by an independent trustee if they remain employees of the Company during such time and exercise their options. Deferred options generally vest one quarter on each year of the term, with expiry occurring five years after issuance. The shares purchased by the independent trustee are reported as shares held in trust (note 18(b)).

The following table summarizes information about the deferred options and performance-based long-term incentive awards outstanding:

	Deferred options outstanding			Deferred options exercisable	
Range of exercise prices	**Number of deferred options (thousands)**	**Average contractual life (years)**	**Weighted average exercise price ($/share)**	**Number of deferred options (thousands)**	**Weighted average exercise price ($/share)**
$0.00 to $0.29	3,466	2.2	0.05	1,640	0.04
$0.30 to $0.48	929	3.7	0.34	213	0.34
$0.49 to $1.33	1,491	4.6	1.00	—	—
Total	5,886	3.2	0.32	1,853	0.08

There were 1.5 million deferred options granted during 2022 (2021 - 2.4 million).

Deferred shares

The Company also has deferred share agreements in place with directors and certain employees whereby, in the case of directors, upon retirement from the Board of Directors, or in the case of employees, over a period of two years if they remain employees of the Company during such time, may be entitled to receive at the discretion of the Board of Directors, cash, a grant of restricted rights (note 18(d)), or shares of the Company purchased on the open market by an independent trustee. The shares purchased by the independent trustee are reported as shares held in trust (note 18(b)).

The fair value of these awards is assessed on the grant date by factoring in the weighted average common share trading price for the five days preceding the grant date and is reduced by an estimated forfeiture rate of 5% (2021 – 5%). The fair value is recognized as share-based payment expense over the vesting period with a corresponding increase to contributed surplus. Upon exercise of these agreements in exchange for restricted rights, the value in contributed surplus pertaining to the exercise is recorded as share capital. Upon exercise of these agreements in exchange for shares held in trust, the shares held in trust account is reduced by the number of shares issued using the average cost base of purchased shares and offset to contributed surplus.

The estimated average value of deferred shares at the time of grant during the year ended December 31, 2022 was $1.07 per deferred share (2021 – $0.34).

b) Share options

Perpetual's share option plan provides a long-term incentive to executive officers and directors associated with the Company's long-term performance. The Board of Directors administers the share option plan and determines participants, number of share options and terms of vesting. The exercise price of the share options granted shall not be less than the value of the weighted average trading price for the Company's common shares for the five trading days immediately preceding the date of grant. Share options granted vest evenly over four years, with expiry occurring five years after issuance.

The following table summarizes information about share options outstanding:

	Options outstanding			Options exercisable	
Range of exercise prices	**Number of share options (thousands)**	**Average contractual life (years)**	**Weighted average exercise price ($/share)**	**Number of share options (thousands)**	**Weighted average exercise price ($/share)**
$0.07 to $0.30	1,436	2.0	0.17	827	0.19
$0.31 to $0.75	867	3.6	0.34	217	0.34
$0.76 to $1.33	1,298	4.6	1.04	—	—
Total	3,601	3.3	0.53	1,044	0.22

There were 1.3 million share options granted during 2022 (2021 – 1.3 million)

c) Performance share rights

The Company has an equity-settled performance share rights plan for the Company's executive officers. Performance rights granted under the performance share rights plan vest two years after the date upon which the performance rights were granted. The performance rights that vest and become redeemable are a multiple of the performance rights granted, dependent upon the achievement of certain performance metrics over the vesting period. Vested performance rights can be settled in cash or restricted rights (note 18(d)), at the discretion of the Board of Directors. Performance rights are forfeited if participants of the performance share rights plan leave the organization other than through retirement or termination without cause prior to the vesting date.

The fair value of a performance share rights award is determined at the date of grant by using the closing price of common shares and multiplied by the estimated performance multiplier. As at December 31, 2022, performance multipliers of 2.0 and 1.2 have been assumed for unvested awards granted in 2021 and 2022, respectively. Fluctuations in share-based payments may occur due to changes in estimates of performance outcomes. The amount of share-based payment expense is reduced by an estimated forfeiture rate of 5% (2021 – 5%) for outstanding awards. The estimated value of performance share rights granted during the year ended December 31, 2022 was $0.97 per performance share right (2021 – $0.23).

In 2018, the Company introduced a performance-based long-term incentive awards plan (the "PLTI" plan) for the executive officers. The awards granted pursuant to the plan are tied to specific individual-based performance metrics established by the Board which can be based on "total shareholder return" or other metrics specifically designed to align with value creation for shareholders and to incentivize and retain key executive officers. The awards vest evenly over four years, with expiry occurring five years after issuance. Upon vesting, award holders may be entitled to receive, at the discretion of the Board of Directors, cash, a grant of restricted rights (note 18(d)), or a combination of cash and restricted rights.

Certain awards granted under the PLTI plan contain monetary awards that may be settled in cash, in common shares of the Company, or a combination thereof at the discretion of the Board of Directors, equal to the monetary amount at the time of vesting. These awards are accounted for as cash-settled share-based compensation in which the fair value of the amounts payable under the plan are recognized incrementally as an expense over the vesting period, with a corresponding change in liabilities. Upon exercise of these awards in exchange for cash, the liability is reduced. Upon exercise of these awards in exchange for a variable number of shares, the value in liabilities pertaining to the exercise is recorded as share capital. In 2022, the Company made payments of $1.3 million (2021 – $1.3 million) pursuant to cash-settled share-based payment awards. As at December 31, 2022, nil had been accrued pursuant to cash-settled share-based compensation awards (December 31, 2021 – $0.3 million).

d) Restricted rights

The Company has a restricted rights plan for certain officers, employees and consultants. Restricted rights granted under the restricted rights plan may be exercised during a period (the "Exercise Period") not exceeding five years from the date upon which the restricted rights were granted. The restricted rights typically vest on a graded basis over two years. At the expiration of the Exercise Period, any restricted rights which have not been exercised shall expire. Upon vesting, the plan participant is entitled to receive one common share for each right held at a cost of $0.01 per share.

The fair value of an award granted under the restricted rights plan is assessed on the grant date by factoring in the weighted average common share trading price for the five days preceding the grant date. This fair value is recognized as share-based payment expense over the vesting period with a corresponding increase to contributed surplus. During the year ended December 31, 2022, the Company did not grant any restricted rights to employees, other than to settle performance share rights and deferred shares.

Restricted rights granted upon the exercise of performance share rights (note 18(c)) vest on the grant date and have a 90-day exercise period. Restricted rights granted upon the exercise of deferred compensation awards (note 18(a)) vest on the grant date and have a 30-day exercise period. No value is assigned to restricted rights issued pursuant to those plans as the value and expense have been previously recognized over the vesting period of the underlying performance share rights and deferred compensation awards.

19. REVENUE

The Company sells its production pursuant to fixed or variable price contracts. The transaction price for variable priced contracts is based on the commodity price, adjusted for quality, location, or other factors, whereby each component of the pricing formula can be either fixed or variable, depending on the contract terms. Under the contracts, the Company is required to deliver fixed or variable volumes of conventional natural gas, heavy crude oil or NGL as may be applicable to the contract counterparty. Revenue is recognized when a unit of production is delivered to the contract counterparty. The amount of revenue recognized is based on the agreed transaction price, whereby any variability in revenue relates specifically to the Company's efforts to transfer production, and therefore the resulting revenue is allocated to the production delivered in the period during which the variability occurs. As a result, none of the variable revenue is considered constrained.

Conventional natural gas, heavy crude oil and NGL are mostly sold under contracts of varying price and volume terms of up to one year. Revenues are typically collected on the 25th day of the month following production.

Natural gas volumes sold pursuant to the Company's market diversification contract are sold at fixed volume obligations and priced at daily index prices, less transportation costs from AECO, to each market price point as detailed in the table below.

Market/Pricing Point	**January 1, 2023 to October 31, 2023 Daily sales volume *(MMBtu/d)***	**November 1, 2023 to October 31, 2024 Daily sales volume *(MMBtu/d)***
Malin	—	15,000
Dawn	15,000	15,000
Emerson	10,000	10,000
Total sales volume obligation	**25,000**	**40,000**

The following table presents the Company's oil and natural gas sales disaggregated by revenue source:

		December 31, 2022		December 31, 2021
Oil and natural gas revenue				
Natural gas	**$**	**66,781**	$	33,012
Oil		**29,538**		20,172
NGL		**13,368**		7,630
Total oil and natural gas revenue	**$**	**109,687**	$	60,814

Included in accounts receivable at December 31, 2022 is $10.0 million of accrued oil and natural gas revenue related to December 2022 production (December 31, 2021 – $7.0 million related to December 2021 production).

20. FINANCE EXPENSE

The components of finance expense are as follows:

	December 31, 2022	December 31, 2021
Cash finance expense		
Interest on revolving bank debt	**$ 1,031**	$ 953
Interest on term loan	**216**	53
Interest on 2025 Senior Notes[1]	**3,184**	1,408
Interest on 2022 Senior Notes[2]	**—**	(1,253)
Interest on lease liabilities (note 14)	**116**	148
Total cash finance expense	**4,547**	1,309
Non-cash finance expense		
Interest paid in-kind on term loan (note 10)	**—**	2,743
Interest paid in-kind on 2022 Senior Notes (note 12)[1]	**—**	1,469
Interest paid in-kind on 2025 Senior Notes (note 12)[2]	**—**	1,533
Gain on senior note maturity extension (note 12)	**—**	(1,591)
Gain on senior note extinguishment (note 12)[3]	**(101)**	—
Gain on Second Lien Loan Settlement[4]	**—**	(6,820)
Amortization of debt issue costs	**1,864**	962
Accretion on decommissioning obligations (note 15)	**727**	531
Change in fair value of other liability (note 11)	**1,678**	1,159
Change in fair value of royalty obligations (note 13)	**2,256**	4,101
Total non-cash finance expense	**6,424**	4,087
Finance expense recognized in net income	**$ 10,971**	$ 5,396

(1) The Company satisfied the January 23, 2022 and July 23, 2022 semi-annual interest payment of $1.6 million by making cash payments.

(2) On January 22, 2021, Perpetual's 2022 Senior Notes were exchanged for 2025 Senior Notes, providing Perpetual the option to pay interest in-kind. Perpetual elected to pay the January 23, 2021 semi-annual interest of $1.5 million by a PIK Interest Payment. As a result, the previously accrued 2022 Senior Notes cash interest of $1.3 million was reversed and replaced by $1.3 million of 2025 Senior Note non-cash interest expense.

(3) During the year ended December 31, 2022 the Company extinguished $0.9 million of Senior Notes outstanding for a total cost of $0.8 million, resulting in a gain on extinguishment of $0.1 million.

(4) On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's Term Loam was substantively modified pursuant to the Second Lien Loan Settlement which included payment of $38.5 million, delivery of 0.7 million Rubellite shares valued at $1.4 million, the entry into a new second lien term loan of $2.7 million, and a contingent payment obligation valued at $0.2 million resulting in a gain of $6.8 million.

(5) Pursuant to the terms of the Second Lien Loan Settlement, $0.2 million has been earned related to the 2021 payment cap and $1.3 million has been earned related to the 2022 payment cap. Perpetual is committed to pay up to an additional $1.9 million in potential contingent payments in the event that Perpetual's annual average realized crude oil and natural gas prices exceed certain thresholds. The change in fair value of this liability was recorded in the statement of comprehensive income as a non-cash finance expense.

21. CHANGES IN NON-CASH WORKING CAPITAL INFORMATION

	December 31, 2022	December 31, 2021
Accounts receivable	**$ (4,133)**	$ (7,718)
Prepaid expenses and deposits	**(654)**	(38)
Change in non-cash working capital on disposition and other	**—**	5,426
Inventory	**(387)**	—
Accounts payable and accrued liabilities	**(13,261)**	20,299
Change in non-cash working capital	**$ (18,435)**	$ 17,969

The change in non-cash working capital has been allocated to the following activities:

	December 31, 2022	December 31, 2021
Operating	**$ (9,442)**	$ 3,406
Investing	**(8,993)**	14,563
Change in non-cash working capital	**$ (18,435)**	$ 17,969

22. FINANCIAL RISK MANAGEMENT

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework and has implemented and monitors compliance with risk management policies.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to market conditions and the Company's activities.

a) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from joint venture partners, oil and natural gas marketers and derivative contract counterparties.

Receivables from oil and natural gas marketers are normally collected on the 25th day of the month following sales. The Company's policy to mitigate credit risk associated with these balances is to establish marketing relationships with large, well established purchasers. The Company historically has not experienced any significant collection issues with its oil and natural gas marketing receivables. Joint venture receivables are typically collected within one to three months of the joint venture bill being issued to the partner. The Company attempts to mitigate the risk from joint venture receivables by obtaining partner approval of significant capital expenditures prior to expenditure. However, the receivables are generally from participants in the oil and natural gas sector, and collection of the outstanding balances is dependent on industry factors such as commodity price fluctuations, escalating costs, the risk of unsuccessful drilling, and oil and natural gas production; in addition, further risk exists with joint venture partners as disagreements occasionally arise that increase the potential for non-collection. The Company does not typically obtain collateral from oil and natural gas marketers or joint venture partners, however, the Company does have the ability in some cases to withhold production or amounts payable to joint venture partners in the event of non-payment.

The Company manages the credit exposure related to derivatives by engaging in risk management transactions with credit worthy counterparties, and periodically monitoring counterparty credit assessments.

The combined carrying amount of cash and cash equivalents, accounts receivable and fair value of derivative assets at December 31, 2022 was $19.7 million (December 31, 2021 – $13.4 million), representing the Company's maximum credit exposure. The Company's credit provisions are represented by its loss allowance based on lifetime expected credit losses as at December 31, 2022 of $0.1 million (December 31, 2021 – $0.4 million). The amount of the loss allowance was determined based on historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment. The total amount of accounts receivables 90 days past due is nominal as at December 31, 2022 (December 31, 2021 – nominal).

b) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking harm to the Company's reputation.

c) Market risk

Market risk is the risk that changes in market prices such as foreign exchange rates, commodity prices and interest rates will affect the Company's net income (loss) or the value of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable limits, while maximizing returns.

The Company utilizes both financial derivatives and fixed price physical delivery sales contracts to manage market risks related to commodity prices and foreign currency rates. All such transactions are conducted in accordance with the Company's Risk Management Policy, which has been approved by the Board of Directors.

i) Commodity price risk

Commodity price risk is the risk that the fair value or future cash flow will fluctuate as a result of changes in commodity prices. Commodity prices for oil and natural gas are impacted not only by the relationship between the Canadian and United States dollar, but also by world economic events that dictate the levels of supply and demand. The Company manages commodity price risk using various financial derivatives and fixed price physical delivery sales contracts.

Natural gas contracts

At December 31, 2022 the Company had entered into the following natural gas risk management contracts at AECO:

Commodity	Volumes sold	Term	Reference/Index	Contract Traded Bought/sold	Market Price
Natural gas	5,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 5A (CAD$/GJ)	Swap - sold	$4.62
Natural gas	5,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 7A (CAD$/GJ)	Collar	$7.00-8.00
Natural gas	10,000 GJ/d	Jan 1 - Mar 31, 2023	AECO 7A (CAD$/GJ)	Collar	$7.00-8.10

Subsequent to December 31, 2022, the Company has entered into the following natural gas risk management contracts::

Commodity	Volumes sold	Term	Reference/Index	Contract Traded Bought/Sold	Market Price
Natural gas	5,000 GJ/d	Feb 1 - Feb 28, 2023	AECO 7A (CAD$/GJ)	Swap - sold	$4.02
Natural gas	2,500 GJ/d	Mar 1 - Mar 31, 2023	AECO 7A (CAD$/GJ)	Swap - sold	$3.55

Natural gas contracts - sensitivity analysis

As December 31, 2022, if future natural gas prices changed by $0.25 per GJ with all other variables held constant, net income for the period would change by $0.1 million due to changes in the fair value of risk management contracts. Fair value sensitivity was based on published forward AECO prices.

Oil contracts

At December 31, 2022, the Company had entered the following oil risk management contracts which settle in CAD$:

Commodity	Volumes sold	Term	Reference/ Index	Contract Traded Bought /sold	Market Price
Crude oil	100 bbl/d	Jan 1 - Dec 31, 2023	WTI (USD$/bbl)	Swap - sold	$89.15
Crude oil	100 bbl/d	Jan 1 – Dec 31, 2023	WCS (CAD$/bbl)	Differential	($17.30)

Subsequent to December 31, 2022, the Company has entered into the following natural gas risk management contracts:

Commodity	Volumes sold	Term	Reference/ Index	Contract Traded Bought /sold	Market Price
Crude oil	200 bbl/d	Apr 1 - Dec 31, 2023	WTI (USD$/bbl)	Swap - sold	$77.40
Crude oil	200 bbl/d	Apr 1 - Dec 31, 2023	WCS (USD$/bbl)	Differential	($17.40)
Crude oil	250 bbl/d	Apr 1 – Dec 31, 2023	WCS (USD$/bbl)	Differential	($17.45)

Oil contracts - sensitivity analysis

As at December 31, 2022, if future WTI oil prices changed by CAD$5.00 per bbl with all other variables held constant, net income for the period would change by $0.2 million due to changes in the fair value of risk management contracts.

Foreign exchange contracts

At December 31, 2022, the Company had entered the following CAD/USD foreign exchange swaps which settle in CAD$:

Contract	Notional amount	Term	Price (US$/CAD$)
Average rate forward (US$/CAD$)	$316,444 US$/month	Jan 1 – Mar 31, 2023	1.3740
Average rate forward (US$/CAD$)	$250,000 US$/month	Jan 1 – Dec 31, 2023	1.3600
Average rate forward (US$/CAD$)	$200,000 US$/month	Jan 1 – Dec 31, 2023	1.3029
Average rate forward (US$/CAD$)	$500,000 US$/month	Jan 1 – Dec 31, 2023	1.3710

As at December 31, 2022, if future USD/CAD exchange rates changed by CAD$0.05 with all other variables held constant, net income for the period would change by $0.7 million due to changes in the fair value of risk management contracts.

Foreign exchange contracts - sensitivity analysis

The following table summarizes the risk management contracts by type:

	December 31, 2022	December 31, 2021
Natural gas contracts	**2,841**	682
Foreign exchange contracts	**30**	—
Oil contracts	**976**	(321)
Risk management contracts	**$ 3,847**	$ 361
Risk management contracts – current asset	**3,847**	682
Risk management contracts – current liability	**—**	(321)
Risk management contracts	**$ 3,847**	$ 361

The following table details the gains (losses) on risk management contracts:

	December 31, 2022	December 31, 2021
Unrealized gain (loss) on foreign exchange contracts	**$ 30**	$ —
Unrealized gain (loss) on natural gas contracts	**2,159**	4,033
Unrealized gain (loss) on oil contracts	**1,298**	(300)
Unrealized gain (loss) on fair value of derivatives	**3,487**	3,733
Realized gain (loss) on natural gas contracts	**(491)**	(4,748)
Realized gain (loss) on oil contracts	**(4,129)**	(62)
Realized gain (loss) on financial derivatives	**(4,620)**	(4,810)
Change in fair value of derivatives	**$ (1,133)**	$ (1,077)

Fair value of financial assets and liabilities

The Company's fair value measurements are classified into one of the following levels of the fair value hierarchy:

> Level 1 – inputs represent unadjusted quoted prices in active markets for identical assets and liabilities. An active market is characterized by a high volume of transactions that provides pricing information on an ongoing basis.
>
> Level 2 – inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These valuations are based on inputs that can be observed or corroborated in the marketplace, such as market interest rates or forecasted commodity prices.
>
> Level 3 – inputs for the asset or liability are not based on observable market data.

The Company aims to maximize the use of observable inputs when preparing calculations of fair value. Classification of each measurement into the fair value hierarchy is based on the lowest level of input that is significant to the fair value calculation.

The fair value of cash and cash equivalents, accounts receivable, prepaid expenses and deposits, and accounts payable and accrued liabilities approximate their carrying amounts due to their short terms to maturity. The Credit Facility bears interest at a floating market rate, and accordingly, the fair market value approximates the carrying amount.

The fair value of the other liability is estimated by discounting future cash payments based on Perpetual's annual average realized oil and natural gas prices exceeding certain thresholds. This fair value measurement is classified as level 3 as significant unobservable inputs, including the discount rate and Perpetual's forecasted annual average realized oil and natural gas prices, are used in determination of the carrying amount. A discount rate of 8.1% was determined on inception of the agreement based on the characteristics of the instrument.

The fair value of the royalty obligations is estimated by discounting future cash payments based on the forecasted natural gas and NGL commodity prices multiplied by the royalty volumes. This fair value measurement is classified as level 3 as significant unobservable inputs, including the discount rate and forecasted natural gas and NGL commodity prices, are used in determination of the carrying amount. Discount rates of 12.0% to 12.2% were determined on inception of the agreements based on the characteristics of the instruments.

The fair value of financial assets and liabilities, excluding working capital, is attributable to the following fair value hierarchy levels:

				Fair value		
As at December 31, 2022	**Gross**	**Netting**[(1)]	**Carrying Amount**	**Level 1**	**Level 2**	**Level 3**
Financial assets						
Fair value through profit and loss						
Marketable securities	1,814	—	1,814	—	1,814	—
Risk management contracts	3,970	(123)	3,847	—	3,847	—
Financial liabilities						
Financial liabilities at amortized cost						
Revolving bank debt	(14,909)	—	(14,909)	(14,909)	—	—
Senior notes	(34,527)	—	(34,527)	—	(34,527)	—
Term loan	(2,524)	—	(2,524)	—	—	(2,524)
Fair value through profit and loss						
Other liability	(3,002)	—	(3,002)	—	—	(3,002)
Risk management contracts	(123)	123	—	—	—	—

(1) Risk management contract assets and liabilities presented in the condensed interim consolidated statements of financial position are shown net of offsetting assets or liabilities where the arrangement provides for the legal right, and intention for net settlement exists.

				Fair value		
As at December 31, 2021	**Gross**	**Netting**[(1)]	**Carrying Amount**	**Level 1**	**Level 2**	**Level 3**
Financial assets						
Fair value through profit and loss						
Marketable securities	2,409	—	2,409		2,409	—
Risk management contracts	775	(93)	682	—	682	—
Financial liabilities						
Financial liabilities at amortized cost						
Revolving bank debt	(2,487)	—	(2,487)	(2,487)	—	—
Senior notes	(34,189)	—	(34,189)	—	(34,189)	—
Term loan	(2,469)	—	(2,469)	—	—	(2,469)
Fair value through profit and loss						
Other liability	(1,387)	—	(1,387)	—	—	(1,387)
Risk management contracts	(414)	93	(321)	—	(321)	—
Royalty obligations	(4,697)	—	(4,697)	—	—	(4,697)

(1) Risk management contract assets and liabilities presented in the condensed interim consolidated statements of financial position are shown net of offsetting assets or liabilities where the arrangement provides for the legal right, and intention for net settlement exists.

d) Capital risk

The Company's policy is to maintain a strong but flexible capital structure so as to maintain investor, creditor and market confidence and to sustain its future development. The Company manages its capital structure and adjusts it in light of changes in economic conditions. The Company's capital structure consists of shareholders' equity and working capital. The Company has access to its $30.0 million first lien credit facility with a syndicate of lenders, under which $14.9 million was drawn (December 31, 2021 – $17.0 million) and $1.2 million of letters of credit had been issued (December 31, 2021 – $1.0 million).

23. DEFERRED INCOME TAXES

The provision for income taxes in the consolidated financial statements differs from the result that would have been obtained by applying the combined federal and provincial tax rate to the Company's net income before income tax. This difference results from the following items:

		December 31, 2022		December 31, 2021
Net income before income tax	**$**	**28,503**	$	81,121
Combined federal and provincial tax rate		**23.0 %**		23.0 %
Computed income tax expense		**6,556**		18,658
Increase (decrease) in income taxes resulting from:				
Non-deductible expenses		**1,422**		162
Non-taxable capital (gain) loss		**73**		(952)
Other		**(471)**		218
Change in tax rates and unrecognized tax assets		**(23,474)**		(18,086)
Deferred tax (recovery)	**$**	**(15,894)**	$	—

The following table summarizes the deferred tax liabilities of the Company and its subsidiaries, which are offset against certain deferred tax assets:

		December 31, 2022		December 31, 2021
Liabilities:				
Property, plant and equipment	**$**	**(27,798)**	$	(28,187)
Senior notes		**(257)**		(550)
Term loan		**(34)**		(46)
Revolving bank debt		**—**		(118)
Share investment		**(194)**		(262)
Fair value of derivatives		**(884)**		(157)
Right-of-use-assets		**(199)**		(262)
Total deferred tax liabilities		**(29,366)**		(29,582)
Assets:				
Decommissioning obligations	**$**	**6,314**	$	7,573
Lease liabilities		**362**		484
Royalty obligations		**—**		1,080
Share and debt issue costs		**364**		548
Fair value of derivatives		**—**		74
Other liabilities		**690**		319
Non-capital losses		**37,530**		19,504
Total deferred tax assets		**45,260**		29,582
Net deferred tax asset	**$**	**15,894**	$	—

The unused tax losses and deductible temporary differences included in the Company's unrecognized deferred tax assets are as follows:

For the years ended		**December 31, 2022**		December 31, 2021
Non-capital losses	**$**	**—**	$	100,923
Capital losses		**158,294**		219,345
	$	**158,294**	$	320,268

As at December 31, 2022, the Company had approximately $163.2 million (December 31, 2021 – $187.9 million) of non-capital losses available for future use. The unused non-capital losses expire between 2036 and 2042, and unused capital losses have no expiry date. The development and production assets and facilities owned by the Company and its subsidiaries have an approximate tax basis of $57.6 million (December 31, 2021 – $38.0 million) available for future use as deductions from taxable income, as indicated below:

Resource Tax Pools	**December 31, 2022**	December 31, 2021
Canadian oil & gas property expense	**$ 4,483**	$ 2,968
Canadian development expense	**33,368**	11,249
Canadian exploration expense	**—**	238
Undepreciated capital cost	**19,773**	23,525
	$ 57,624	$ 37,980

Deferred tax assets have not been recognized in respect of capital losses because it is not probable that future taxable capital gains will be available against which the Company can utilize the benefits.

24. KEY MANAGEMENT PERSONNEL

The Company has defined key management personnel as executive officers, as well as the Board of Directors, as they have the collective authority and responsibility for planning, directing and controlling the activities of the Company. The following table outlines the total compensation expense for key management personnel:

For the years ended	**December 31, 2022**	December 31, 2021
Short-term compensation	**$ 4,792**	$ 2,074
Share-based payments	**1,527**	1,547
	$ 6,319	$ 3,621

25. RELATED PARTIES

During the year ended December 31, 2022 Perpetual billed and/or incurred on behalf of Rubellite net transactions, which are considered to be normal course of oil and gas operations, totaling $5.6 million (December 31, 2021 - $1.4 million). Included within this amount are $1.9 million (December 31, 2021 - $0.4 million) of costs billed under the MSA. The Company recorded an accounts receivable of $0.6 million owing from Rubellite as at December 31, 2022 (December 31, 2021 - accounts payable of $0.1 million).

Investments made in entities directed or controlled by the Company's CEO were revalued to $0.4 million at December 31, 2022 (December 31, 2021 - nominal). There were no amounts outstanding or receivable at December 31, 2022 (December 31, 2021 - nil).

26. SUPPLEMENTAL DISCLOSURE

The Company's consolidated statements of income and comprehensive income are prepared primarily by nature of expense, except for employee compensation costs which are included in both production and operating and general and administrative expenses.

The following table details the amount of total employee compensation costs included in production and operating and general and administrative expenses in the consolidated statements of income and comprehensive income.

For the years ended	**December 31, 2022**	December 31, 2021
Production and operating	**$ 1,335**	$ 1,198
General and administrative	**8,523**	5,145
Share-based payments	**7,434**	2,044
	$ 17,292	$ 8,387