PERPETUAL
ENERGY

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2021

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Financial Position

As at		**September 30, 2021**		December 31, 2020
(*Cdn$ thousands unaudited*)				
Assets				
Current assets				
Accounts receivable (note 17)	**$**	**6,434**	$	3,953
Promissory notes receivable (note 1 and note 4)		**53,600**		–
Marketable securities (note 3)		**3,901**		–
Prepaid expenses and deposits		**482**		872
		64,417		4,825
Property, plant and equipment (note 4)		**141,819**		123,985
Exploration and evaluation (note 5)		**10,183**		10,272
Right-of-use assets (note 6)		**1,246**		1,372
Total assets	**$**	**217,665**	$	140,454
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	**$**	**27,228**	$	11,924
Term loan payable (note 9)		**39,847**		–
Revolving bank debt (note 8)		**–**		17,495
Term loan (note 9)		**–**		46,691
Other liability (note 10)		**40**		–
Fair value of derivatives (note 19)		**942**		3,373
Royalty obligations (note 12)		**5,565**		3,553
Lease liabilities (note 13)		**778**		710
Decommissioning obligations (note 14)		**984**		1,048
		75,384		84,794
Revolving bank debt (note 8)		**13,183**		–
Term loan (note 9)		**2,482**		–
Other liability (note 10)		**1,216**		–
Senior notes (note 11)		**34,065**		32,359
Royalty obligations (note 12)		**1,177**		2,596
Lease liabilities (note 13)		**1,490**		1,791
Decommissioning obligations (note 14)		**28,483**		31,976
Total liabilities		**157,480**		153,516
Equity				
Share capital (note 15)		**95,143**		97,333
Contributed surplus		**45,202**		45,217
Deficit		**(80,160)**		(155,612)
Total equity		**60,185**		(13,062)
Total liabilities and equity	**$**	**217,665**	$	140,454

Contingencies (note 7)

See accompanying notes to the condensed interim consolidated financial statements.

/s/ Robert A. Maitland — **Robert A. Maitland**, Director

/s/ Geoffrey C. Merritt — **Geoffrey C. Merritt**, Director

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)

	Three months ended September 30, **2021**	2020	Nine months ended September 30, **2021**	2020
(*Cdn$ thousands, except per share amounts, unaudited*)				
Revenue				
Oil and natural gas (note 17)	**$ 14,603**	$ 7,089	**$ 39,365**	$ 21,308
Royalties	**(1,620)**	(1,563)	**(6,134)**	(4,740)
	12,983	5,526	**33,231**	16,568
Change in fair value of derivatives (note 19)	**(977)**	13	**(2,317)**	10,156
Gas over bitumen royalty credit	**(78)**	155	**385**	474
Other income (note 14)	**57**	–	**739**	–
	11,985	5,694	**32,038**	27,198
Expenses				
Production and operating	**3,159**	2,618	**9,997**	8,620
Transportation	**678**	761	**2,122**	2,813
Exploration and evaluation (note 5)	**74**	87	**93**	229
General and administrative	**3,051**	1,656	**7,100**	5,876
Share-based payments (note 16)	**574**	463	**1,576**	1,500
Depletion and depreciation (note 4 and 6)	**3,559**	3,447	**9,838**	12,627
Loss (gain) on dispositions (note 4 and 6)	**(47,920)**	–	**(48,017)**	–
Impairments (reversals) (note 4 and note 5)	–	–	**(30,100)**	60,500
Net income (loss) from operating activities	**48,810**	(3,338)	**79,429**	(64,967)
Finance expense (note 18)	**1,800**	(4,153)	**(4,508)**	(10,169)
Change in fair value of marketable securities (note 3)	**531**	–	**531**	(904)
Net income (loss) and comprehensive income (loss)	**51,141**	(7,491)	**75,452**	(76,040)
Net income (loss) per share (note 15)				
Basic	**$ 0.80**	$ (0.12)	**$ 1.20**	$ (1.25)
Diluted	**$ 0.72**	$ (0.12)	**$ 1.08**	$ (1.25)

See accompanying notes to the condensed interim consolidated financial statements.

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Changes in Equity

	Share capital		Warrants	Contributed surplus	Deficit	Total equity
	(thousands)	*($thousands)*				
(Cdn$ thousands unaudited)						
Balance at December 31, 2020	61,305	$ 97,333	$ –	$ 45,217	$ (155,612)	$ (13,062)
Net income	–	–	–	–	75,452	75,452
Common shares issued (note 15 and 16)	2,828	616	–	(298)	–	318
Change in shares held in trust (note 15 and 16)	349	177	–	(168)	–	9
Common share split (note 15)	8,158	–	–	–	–	–
Common share cancellation (note 15)	(8,158)	(2,779)	–	–	–	(2,779)
Common share odd-lot consolidation (note 15)	(590)	(204)	–	–	–	(204)
Share-based payments (note 16)	–	–	–	451	–	451
Balance at September 30, 2021	**63,892**	**$ 95,143**	**$ –**	**$ 45,202**	**$ (80,160)**	**$ 60,185**

	Share capital		Warrants	Contributed surplus	Deficit	Total equity
	(thousands)	*($thousands)*				
(Cdn$ thousands unaudited)						
Balance at December 31, 2019	60,513	$ 96,876	$ 923	$ 44,234	$ (94,015)	$ 48,018
Net loss	–	–	–	–	(76,040)	(76,040)
Common shares issued (note 15 and 16)	508	331	(923)	592	–	–
Change in shares held in trust (note 15 and 16)	232	111	–	(111)	–	–
Share-based payments (note 16)	–	–	–	413	–	413
Balance at September 30, 2020	**61,253**	**$ 97,318**	**$ –**	**$ 45,128**	**$ (170,055)**	**$ (27,609)**

See accompanying notes to the condensed interim consolidated financial statements.

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Cash Flows

	Three months ended September 30, 2021	2020	Nine months ended September 30, 2021	2020
(*Cdn$ thousands, unaudited*)				
Cash flows from (used in) operating activities				
Net income (loss)	**$ 51,141**	$ (7,491)	**$ 75,452**	$ (76,040)
Adjustments to add (deduct) non-cash items:				
Other income (note 14)	**(57)**	–	**(739)**	–
Depletion and depreciation (note 4 and 6)	**3,559**	3,447	**9,838**	12,627
Exploration and evaluation (note 5)	–	–	–	65
Share-based payments (note 16)	**199**	98	**451**	413
Unrealized change in fair value of derivatives (note 19)	**(830)**	(194)	**(2,431)**	(10,726)
Change in fair value of marketable securities (note 3)	**(531)**	–	**(531)**	904
Finance expense (note 18)	**(2,716)**	2,193	**4,238**	3,737
Loss (gain) on dispositions (note 4)	**(47,920)**	–	**(48,017)**	–
Impairments (reversals) (note 4)	–	–	**(30,100)**	60,500
Oil and natural gas revenue in-kind (note 12)	**(1,282)**	(752)	**(3,613)**	(1,402)
Transaction costs on disposition (note 4)	**(583)**	–	**(583)**	–
Decommissioning obligations settled (note 14)	**54**	62	**(377)**	(115)
Payments of restructuring costs	**–**	(77)	–	(886)
Change in non-cash working capital	**5,621**	176	**7,604**	2,494
Net cash flows from (used in) operating activities	**6,655**	(2,538)	**11,192**	(8,429)
Cash flows from (used in) financing activities				
Change in revolving bank debt, net of issue costs	**(2,071)**	3,885	**(4,415)**	(32,742)
Change in term loan, net of issue costs	**(188)**	–	**(188)**	–
Change in share margin demand loan, net of issue costs	**–**	–	–	(100)
Change in senior notes, net of issue costs	**26**	–	**(199)**	–
Net proceeds on dispositions (note 4)	**–**	–	**–**	6,996
Payments of lease liabilities (note 13)	**(158)**	(141)	**(454)**	(409)
Payments of gas over bitumen royalty financing (note 12)	**(88)**	(151)	**(558)**	(507)
Common shares issued, net of issue costs	**(116)**	–	**114**	–
Net cash flows used in financing activities	**(2,595)**	3,593	**(5,700)**	(26,762)
Cash flows from (used in) investing activities				
Capital expenditures	**(9,947)**	(251)	**(11,504)**	(5,473)
Acquisitions	–	(133)	**(625)**	(222)
Net proceeds on dispositions, net of cash disposed (note 4)	**(4,060)**	–	**(3,858)**	27,754
Proceeds on sale of marketable securities (note 3)	–	–	**–**	14,316
Change in non-cash working capital	**9,947**	(671)	**10,495**	(1,184)
Net cash flows from (used in) investing activities	**(4,060)**	(1,055)	**(5,492)**	35,191
Change in cash and cash equivalents	**–**	–	**–**	–
Cash and cash equivalents, beginning of period	**–**	–	**–**	–
Cash and cash equivalents, end of period	**$ –**	$ –	**$ –**	$ –

See accompanying notes to the condensed interim 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 condensed interim consolidated financial statements of the Company as at and for the three and nine months ended September 30, 2021 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. The statements also include Rubellite Energy Inc. ("Rubellite") from its incorporation on July 12, 2021 to September 3, 2021.

Material transactions

On September 3, 2021, the plan of arrangement under the Business Corporations Act (Alberta) (the "Plan of Arrangement") involving Perpetual, the shareholders of Perpetual and Rubellite was completed following approval by the shareholders of Perpetual at its special meeting held on August 31, 2021 and the receipt of the final approval order of the Court of Queen's Bench of Alberta. Under the Plan of Arrangement, Rubellite acquired Perpetual's Clearwater Assets, accounted for with an effective date of September 3, 2021, for aggregate consideration of $65.5 million. The consideration consisted of $53.6 million in promissory notes, the assumption of $5.8 million of promissory notes due to 1974918 Alberta Ltd. (a company controlled by Perpetual's President and Chief Executive Officer ("CEO"))("197Co"), 8.2 million Perpetual common shares valued at $2.8 million, 0.7 million Rubellite common shares ("AIMCo Bonus Shares") valued at $1.4 million, and the 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 (the "Rubellite Share Purchase Warrants") valued at $2.0 million (note 3). Rubellite received the 8.2 million Perpetual common shares from Perpetual shareholders in exchange for Rubellite common shares and warrants as part of the Plan of Arrangement. Perpetual also entered into a Management Services Agreement with Rubellite whereby Perpetual receives payment for certain technical and administrative services provided to Rubellite on a cost recovery basis.

Upon completion of the Plan of Arrangement, Perpetual's agreement with its Term Loan lender for the settlement of principal and all interest owing on the Term Loan was accounted for as being effective. Perpetual substantively modified the previous Term Loan in exchange for the payment of approximately $38.5 million in cash (reflected as current Term Loan payable on the statement of financial position), 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 bearing interest at 8.1% annually and maturing December 31, 2024 (the "New Term Loan") (note 9), 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 10).

On October 5, 2021, Perpetual received cash proceeds of approximately $53.6 million. The cash proceeds were used to satisfy the $38.5 million cash component of the Second Lien Loan Settlement with the remaining cash applied to repay a significant portion of the Credit Facility. In addition, the borrowing limit on the Credit Facility was reduced from $20 million to $17 million, and the maturity was extended from November 15, 2021 to May 31, 2023.

2. BASIS OF PREPARATION

These condensed interim consolidated financial statements have been prepared in accordance with IAS 34 Interim Financial Reporting and do not include all of the information required for full annual financial statements. These condensed interim consolidated financial statements should be read in conjunction with the Company's consolidated financial statements as at and for the year ended December 31, 2020 which were prepared in conformity with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

The accounting policies, basis of measurement, critical accounting judgements and significant estimates used to prepare the annual consolidated financial statements as at and for the year ended December 31, 2020 have been applied in the preparation of these condensed interim consolidated financial statements.

These condensed interim consolidated financial statements of the Company were approved and authorized for issue by the Board of Directors on November 11, 2021.

3. MARKETABLE SECURITIES

	Amount *($thousands)*
December 31, 2019	$ 15,220
Tourmaline Oil Corp ("TOU") shares sold	(14,316)
Change in fair value of marketable securities	(904)
December 31, 2020	$ –
Plan of Arrangement Rubellite shares and warrants received	9
AIMCo Bonus Shares received (note 9)	1,361
Rubellite Share Purchase Warrants received (1)	2,000
Change in fair value of marketable securities	531
September 30, 2021	**$ 3,901**

(1) The Company used the Black Scholes option pricing model to calculate the estimated fair value of the Rubellite Share Purchase Warrants at the date of grant using an expected volatility of 40%, risk-free interest rate of 1.2%, dividend yield of nil, contractual life of 5-years, share price at grant date of $2.00 and exercise price of $3.00.

Under the terms of the Plan of 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 Plan of Arrangement. Subsequent to September 30, 2021, Perpetual exercised its warrant rights in full for the amount of $0.1 million in exchange for 54,000 Rubellite shares.

Under the terms of the Plan of Arrangement, Perpetual also received 4.0 million Rubellite Share Purchase Warrants. 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 at period end:

	September 30, 2021
Dividend yield (%)	–
Expected volatility (%)	40%
Risk-free interest rate (%)	1.9%
Contractual life (years)	4.9
Share price at grant date	$2.00
Exercise price	$3.00

During the year ended December 31, 2020, the Company sold its remaining 1,000,000 TOU shares at a weighted average price of $14.32 per share for net cash proceeds of $14.3 million. Proceeds were used to repay the $0.1 million TOU share margin demand loan in full and to pay down a portion of the Credit Facility (note 8).

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

	Oil and Gas Properties	**Corporate Assets**	**Total**
Cost			
December 31, 2019	$ 731,526	$ 7,688	$ 739,214
Additions	5,884	(36)	5,848
Drilling program rights (b)	18,000	–	18,000
Acquisitions	222	–	222
Change in decommissioning obligations related to PP&E (note 14)	2,747	–	2,747
Transfers from exploration and evaluation (note 5)	252	–	252
Dispositions (b)	(193,672)	–	(193,672)
December 31, 2020	$ 564,959	$ 7,652	$ 572,611
Additions	11,502	2	11,504
Acquisitions	625	–	625
Change in decommissioning obligations related to PP&E (note 14)	(1,973)	–	(1,973)
Transfers from exploration and evaluation (note 5)	89	–	89
Dispositions (a)	(16,044)	–	(16,044)
September 30, 2021	**$ 559,158**	**$ 7,654**	**$ 566,812**
Accumulated depletion and depreciation			
December 31, 2019	$ (537,149)	$ (7,431)	$ (544,580)
Depletion and depreciation	(14,926)	(136)	(15,062)
Impairment (c)	(32,300)	–	(32,300)
Dispositions (b)	143,316	–	143,316
December 31, 2020	$ (441,059)	$ (7,567)	$ (448,626)
Depletion and depreciation	(9,441)	(51)	(9,492)
Dispositions (a)	3,025	–	3,025
Impairment reversal (c)	30,100	–	30,100
September 30, 2021	**$ (417,375)**	**$ (7,618)**	**$ (424,993)**

Carrying amount						
December 31, 2020	$	123,900	$	85	$	123,985
September 30, 2021	**$**	**141,783**	**$**	**36**	**$**	**141,819**

At September 30, 2021, PP&E included $1.0 million (December 31, 2020 – $1.0 million) of costs currently not subject to depletion.

a) Clearwater Assets Disposition

On September 3, 2021, the disposition of 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, including $53.6 million in promissory notes, the assumption of $5.8 million of promissory notes due to 197Co, 8.2 million Perpetual common shares valued at $2.8 million, AIMCo Bonus Shares valued at $1.4 million, and the issuance of Rubellite Share Purchase Warrants valued at of $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)	**(18,687)**
Carrying amount of net working capital disposed, including cash (iv)	**823**
Carrying amount of decommissioning obligations disposed (v)	**853**
Gain on disposition	**47,920**

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**
8.2 million 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 5). 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 3) 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	$18.7 million of assets including oil and gas properties ($15.9 million of cost less $3.0 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 oil and gas properties disposed.

b) East Edson Disposition

On April 1, 2020, the Company sold a 50% working interest in its East Edson property in West Central Alberta to a third party (the "Purchaser") for consideration including a cash payment of $35 million and the carried interest funding of the drill, complete and tie-in costs for an eight well drilling program (the "East Edson Transaction"). The consideration received, and calculation of the gain (loss) recorded on disposition is summarized below:

($ thousands)	
Cash proceeds from disposition (i)	**34,750**
Drilling program rights received (ii)	**18,000**
Retained East Edson royalty obligation (iii)	**(6,996)**
Carrying amount of assets held for sale disposed (iv)	**(52,803)**
Carrying amount of decommissioning obligations held for sale disposed (v)	**7,049**
Gain on disposition	**–**

i)	Cash proceeds from disposition	$35.0 million of cash received on closing, net of $0.2 million transaction costs and closing adjustments. In order to reflect the nature of the proceeds received, cash proceeds from disposition have been allocated on the condensed interim consolidated statements of cash flows to financing and investing activities in the amount of $7.0 million and $27.8 million, respectively.
ii)	Drilling program rights received	$18.0 million of drilling program rights, comprised of the carried interest funding of the drill, complete, and tie-in costs for an eight-well drilling program. All eight horizontal wells targeting development of the Wilrich formation have been drilled, completed, and commenced production. Drilling program rights have been subject to depletion.
iii)	Retained East Edson royalty obligation	$7.0 million that Perpetual will retain until December 31, 2022 on behalf of the Purchaser, comprising the Purchaser's 50% working interest in the existing gross overriding royalty on the East Edson property equivalent to 2.8 MMcf/d of natural gas and associated natural gas liquids ("NGL") production (note 12).
iv)	Carrying amount of assets disposed	$52.8 million of oil and gas properties ($50.4 million) and exploration and evaluation assets ($2.4 million).
v)	Carrying amount of decommissioning obligations disposed	$7.0 million of decommissioning obligations associated with oil and gas properties disposed.

c) Cash-generating units ("CGUs"), impairment, and impairment reversals

In accordance with IFRS, the Company is required to assess when internal or external indicators of impairment or impairment reversal exist, and impairment testing is required. For the three months ended September 30, 2021, the Company conducted an assessment of indicators of impairment and impairment reversal for all the Company's CGUs. There were no triggers identified and therefore, no impairments or impairment reversals recognized during the third quarter of 2021.

At June 30, 2021, the Company also conducted an assessment of indicators of impairment and impairment reversal for all the Company's CGUs. In performing the assessment, management determined that 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, justified calculation of the recoverable amount of the liquids-rich natural gas assets and heavy oil assets which comprise the West Central CGU and Eastern Alberta CGU, respectively. The estimated recoverable amounts of the CGUs were determined using value-in-use ("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 oil and gas commodity price estimates 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 the carrying amounts of $89.6 million and $28.6 million, respectively. Accordingly, a non-cash impairment reversal of $30.1 million was included in net income in the second quarter of 2021.

For the year ended December 31, 2020, the Company recorded an aggregate non-cash impairment charge of $32.3 million related to the CGUs in net loss.

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

	September 30, 2021	December 31, 2020
Balance, beginning of period	**$ 10,272**	$ 23,609
Additions	**–**	91
Acquisitions	**5,773**	–
Dispositions	**(5,773)**	(2,447)
Impairments	**–**	(10,200)
Non-cash exploration and evaluation expense	**–**	(529)
Transfers to property, plant and equipment	**(89)**	(252)
Balance, end of period	**$ 10,183**	$ 10,272

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.

During the nine months ended September 30, 2021, $0.1 million (2020 – $0.2 million) in costs were charged directly to E&E expense in the consolidated statements of loss and comprehensive loss.

Impairment of E&E assets

E&E assets are tested for impairment when internal or external indicators of impairment or impairment reversal exist as well as upon their eventual reclassification to oil and natural gas properties in PP&E.

At September 30, 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, no impairments or impairment reversals recognized during the first nine months of 2021.

For the year ended December 31, 2020, the Company recorded a non-cash impairment charge of $10.2 million related to E&E assets which was included in net loss.

6. RIGHT-OF-USE ASSETS

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

	Head office	Vehicles	Other leases	Total
Cost				
January 1, 2020	$ 1,498	$ 200	$ 161	$ 1,859
Additions	93	189	86	368
December 31, 2020	$ 1,591	$ 389	$ 247	$ 2,227
Additions	–	220	–	220
September 30, 2021	**$ 1,591**	**$ 609**	**$ 247**	**$ 2,447**
Accumulated depreciation				
January 1, 2020	$ (240)	$ (80)	$ (64)	$ (384)
Depreciation	(257)	(135)	(79)	(471)
December 31, 2020	$ (497)	$ (215)	$ (143)	$ (855)
Depreciation	(193)	(99)	(54)	(346)
September 30, 2021	**$ (690)**	**$ (314)**	**$ (197)**	**$ (1,201)**
Carrying amount				
December 31, 2020	$ 1,094	$ 174	$ 104	$ 1,372
September 30, 2021	**$ 901**	**$ 295**	**$ 50**	**$ 1,246**

7. 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 five-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 at the time 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, the Court issued its written decision related to the Sequoia Disposition. The decision 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").

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. In July 2020, the Orphan Well Association ("OWA"), certain oil and gas companies, and six municipalities applied to intervene in the second BIA 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 has subsequently appealed this decision, which is scheduled to be heard on February 10, 2022.

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.

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.

8. REVOLVING BANK DEBT

At September 30, 2021, the Company's Credit Facility had a borrowing limit of $20 million (December 31, 2020 – $20 million) under which $13.2 million was drawn (December 31, 2020 – $17.5 million) and $1.0 million of letters of credit had been issued (December 31, 2020 – $0.9 million). 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 September 30, 2021 was 5.5%. For the period ended September 30, 2021 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.

During the quarter, Perpetual entered into an agreement with its syndicate of lenders to extend its Credit Facility maturity to November 30, 2022 with the opportunity to extend the revolving period for a further six months subject to approval by the syndicate. If not extended on or before November 30, 2022, the Credit Facility will cease to revolve and will mature on May 31, 2023.

Subsequent to September 30, 2021, the Credit Facility borrowing limit was reduced from $20 million to $17 million. The next borrowing limit redetermination is scheduled on or before November 30, 2021.

The Credit Facility is secured by general first lien security agreements covering all present and future property of the Company and its subsidiaries, with the exception of certain lands pledged to the gas over bitumen royalty financing counterparty. The Credit Facility also contains provisions which restrict the Company's ability to repay Term Loan and senior note principal and interest, and to pay dividends on or repurchase its common shares.

At September 30, 2021, the Credit Facility was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

9. TERM LOAN

			September 30, 2021		December 31, 2020	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Term loan	December 31, 2024	8.1%	**$ 2,671**	**$ 2,482**	$ 46,823	$ 46,691

During the quarter, Perpetual and its Term Loan lender entered into an agreement establishing the terms and conditions of the Second Lien Loan Settlement. On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's agreement with its Term Loan lender for the settlement of principal and accrued interest owing on the Term Loan was accounted for as being effective. Perpetual substantively modified the previous Term Loan for the payment of approximately $38.5 million in cash (reflected in current term loan payable on the statement of financial position), the delivery by Perpetual of 0.7 million Rubellite common shares (AIMCo Bonus Shares) at a value of $1.4 million (reflected in current term loan payable on the statement of financial position), the issuance of a new $2.7 million second lien Term Loan, and up to an aggregate of $4.5 million in potential contingent payments in the event that Perpetual's annual average realized oil and natural gas prices exceed certain thresholds initially valued at $0.2 million. The New Second Lien Term Loan bears interest at 8.1% annually, which Perpetual may elect to pay-in-kind, and will mature on December 31, 2024. The current term loan payable was repaid on October 5, 2021.

The Company and the Term Loan lender agreed to allow $1.8 million of interest due on the 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 has been recorded in the third quarter of 2021 (YTD 2021 – $2.7 million), which increased the principal amount of the Term Loan owing upon settlement to $49.6 million. As a result of the September 3, 2021 substantive modification of the Term Loan, 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 18).

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 8). 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 September 30, 2021, the Term Loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

10. OTHER LIABILITY

Pursuant to the terms of the Second Lien Loan Settlement, Perpetual is committed to pay up to $4.5 million in potential contingent payments in the event that Perpetual's annual average realized crude oil and natural gas prices exceed certain thresholds over the three year period ended December 31, 2023. The payment in 2022 is capped at $0.4 million; 2023 is capped at $1.3 million; and in 2024 the payment is capped at $2.8 million for a maximum total obligation of $4.5 million. At September 30, 2021 the Company estimated the fair value of the contingent liability to be $1.3 million. The change in fair value of this liability was recorded in the statement of comprehensive income (loss) as a non-cash finance expense. The table below summarizes the change in fair value of the contingent payments:

	Amount *($thousands)*

Balance, initial recognition	$ 228
Change in fair value	1,028
September 30, 2021	**$ 1,256**

	September 30, 2021	December 31, 2020
Current	**$ 40**	$ –
Non-current	**1,216**	–
Total other liability	**$ 1,256**	$ –

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 nine months ended September 30, 2021, an unrealized loss of $1.0 million is included in non-cash finance expense related to the change in fair value of other liability (note 18).

At September 30, 2021, 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 $0.3 million. 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 change by $0.4 million.

11. SENIOR NOTES

			September 30, 2021		December 31, 2020	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Senior notes	January 23, 2025	8.75%	**$ 36,583**	**$ 34,065**	$ 33,580	$ 32,359

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"). The Company elected to pay the January 23, 2021 semi-annual interest of $1.5 million by a PIK Interest Payment, and satisfied the semi-annual interest payment due July 23, 2021 by making a PIK Interest Payment of $1.6 million, increasing the principal amount owing at September 30, 2021 to $36.6 million. The Company currently intends to satisfy the January 23, 2022 semi-annual interest payment in by making a cash payment and has recorded cash interest of $0.6 million in the third quarter of 2021.

At September 30, 2021, the senior notes are recorded at the present value of future cash flows, net of $2.5 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 11.2%.

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 September 30, 2021, 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 $15.2 million of the 2025 Senior Notes outstanding. An entity that is associated with the Company's CEO, and an entity that is associated with a Director of the Company hold an additional $9.9 million and $0.7 million of the 2025 Senior Notes outstanding, respectively.

12. ROYALTY OBLIGATIONS

	Retained East Edson royalty obligation	**Gas over bitumen royalty financing**	**Total**
December 31, 2019	–	871	871
Initial recognition (note 4)	6,996	–	6,996
Cash payments	–	(704)	(704)
Non-cash payments in-kind	(2,319)	–	(2,319)
Change in fair value (note 18)	1,037	268	1,305
December 31, 2020	5,714	435	6,149
Cash payments(1)	–	(558)	(558)
Non-cash payments in-kind	(3,613)	–	(3,613)
Change in fair value (note 18)	4,641	123	4,764
September 30, 2021	**6,742**	**–**	**6,742**

(1) The final payment related to the gas over bitumen royalty financing was made on July 25, 2021.

	September 30, 2021	December 31, 2020
Current	**$ 5,565**	$ 3,553
Non-current	**1,177**	2,596
Total royalty obligations	**$ 6,742**	$ 6,149

The retained East Edson royalty obligation formed part of the net consideration received by Perpetual from the East Edson Transaction 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 (see note 4(b)). The retained

East Edson royalty obligation is paid in-kind and settled through non-cash delivery of contractual natural gas and NGL volumes to the royalty holder (note 17). For the three and nine months ended September 30, 2021, non-cash payments in-kind totalled $1.3 million and $3.6 million, respectively (Q3 2020 – $0.8 million; YTD 2020 – $1.4 million).

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 nine months ended September 30, 2021, an unrealized loss of $4.8 million (YTD 2020 – unrealized loss of $2.2 million) is included in non-cash finance expense related to the change in fair value of total royalty obligations (note 18).

As at September 30, 2021, if forecasted natural gas commodity prices changed by $0.25 per GJ with all other variables held constant, the fair value of the total royalty obligations and net income for the period would change by $0.3 million.

13. LEASE LIABILITIES

	September 30, 2021	December 31, 2020
Balance, beginning of period	**$ 2,501**	$ 2,685
Additions	**221**	368
Interest on lease liabilities (note 18)	**112**	175
Payments	**(566)**	(727)
Total lease liabilities	**$ 2,268**	$ 2,501
Current	**$ 778**	$ 710
Non-current	**1,490**	1,791
Total lease liabilities	**$ 2,268**	$ 2,501

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 September 30, 2021 were between 4.3% and 6.6% (2020 – 4.3% and 6.6%).

14. DECOMMISSIONING OBLIGATIONS

The following significant assumptions were used to estimate decommissioning obligations:

	September 30, 2021	December 31, 2020
Obligations incurred, including acquisitions	**$ 751**	$ 603
Change in risk free interest rate	**(2,724)**	2,344
Change in estimates	–	(200)
Change in decommissioning obligations related to PP&E (note 4)	**(1,973)**	2,747
Obligations settled[1] (cash)	**(377)**	(210)
Obligations settled[2] (non-cash)	**(739)**	(812)
Obligations disposed (note 4)	**(853)**	(7,049)
Accretion (note 18)	**385**	443
Change in decommissioning obligations	**(3,557)**	(4,881)
Balance, beginning of period	**33,024**	37,905
Balance, end of period	**$ 29,467**	$ 33,024
Current	**$ 984**	$ 1,048
Non-current	**28,483**	31,976
Total decommissioning obligations	**$ 29,467**	$ 33,024

(1) Includes obligations settled (cash) for the three and nine months ended September 30, 2021 of $(0.1) million and $0.4 million, respectively (Q3 2020 – $(0.1) million; YTD 2020 - $0.1 million).

(2) Includes obligations settled (non-cash) for the three and nine months ended September 30, 2021 of $0.1 million and $0.7 million, respectively (Q3 2020 – nil; YTD 2020 - nil). These settlements have been recorded as other income and are funded by payments made directly to Perpetual's service providers from the Alberta Site Rehabilitation Program.

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 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 loss and comprehensive loss. 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:

	September 30, 2021	December 31, 2020
Undiscounted obligations	**$ 30,516**	$ 31,683
Average risk-free rate	**2.0%**	1.2%
Inflation rate	**1.7%**	1.5%
Expected timing of settling obligations	**1 to 25 years**	1 to 25 years

15. SHARE CAPITAL

	September 30, 2021		December 31, 2020	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of period	**61,305**	**$ 97,333**	60,513	$ 96,876
Issued pursuant to share-based payment plans	**1,828**	**386**	548	340
Shares held in trust issued (b)	**349**	**168**	244	117
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 period	**63,892**	**$ 95,143**	61,305	$ 97,333

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 16). 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 September 30, 2021, 0.2 million shares were held in trust (December 31, 2020 – 0.6 million).

c) Treasury shares issued

During the first quarter of 2021, 1.0 million common shares were issued to an Officer of the Company in exchange for $0.2 million in 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

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	**2021**	2020
(*thousands, except per share amounts*)				
Net income (loss) – basic	**$ 51,141**	$ (7,491)	**$ 75,452**	$ (76,040)
Effect of dilutive securities	**–**	–	**–**	–
Net income (loss) – diluted	**$ 51,141**	$ (7,491)	**$ 75,452**	$ (76,040)
Weighted average shares				
Issued common shares	**64,091**	61,787	**63,130**	61,492
Effect of shares held in trust	**(290)**	(587)	**(462)**	(596)
Weighted average common shares outstanding – basic	**63,801**	61,200	**62,668**	60,896
Weighted average common shares outstanding – diluted(1)	**71,227**	61,200	**69,955**	60,896
Net income (loss) per share – basic	**$ 0.80**	$ (0.12)	**$ 1.20**	$ (1.25)
Net income (loss) per share – diluted	**0.72**	(0.12)	**1.08**	(1.25)

(1) For the three months ended September 30, 2021, 9.4 million potentially issuable common shares through the share-based compensation plans were excluded as they were not dilutive. For the nine months ended September 30, 2021, 9.5 million potentially issuable common shares through the share-based compensation plans were excluded as they were not dilutive.

16. SHARE-BASED PAYMENTS

The components of share-based payments are as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	**2021**	2020
Compensation awards	**75**	35	**145**	114
Share options	**16**	30	**67**	186
Performance share rights	**483**	398	**1,364**	1,200
Share-based payments	**574**	463	**1,576**	1,500

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, 2019	3,587	1,276	4,604	2,745	–	12,212
Granted	2,250	1,571	873	1,710	557	6,961
Exercised for common shares	–	–	–	–	(548)	(548)
Exercised for shares held in trust	–	(244)	–	–	–	(244)
Exercised for restricted rights	–	(40)	–	(517)	–	(557)
Performance adjustment	–	–	–	(518)	–	(518)
Cancelled/forfeited	(754)	(162)	–	–	(9)	(925)
Expired	(26)	–	(80)	–	–	(106)
December 31, 2020	5,057	2,401	5,397	3,420	–	16,275
Granted(2)(3)	2,288	1,239	1,258	1,715	1,437	7,937
Exercised for common shares	–	–	(398)	–	(1,429)	(1,827)
Exercised for shares held in trust	(188)	(161)	–	–	–	(349)
Exercised for restricted rights	(304)	(278)	–	(855)	–	(1,437)
Cancelled/forfeited	(647)	(76)	–	(855)	(8)	(1,586)
Expired	(438)	(20)	(1,725)	–	–	(2,183)
September 30, 2021	**5,768**	**3,105**	**4,532**	**3,425**	**–**	**16,830**

(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 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. As at September 30, 2021, $1.5 million had been accrued pursuant to cash-settled share-based compensation awards (December 31, 2020 – $0.4 million).

(2) There were two tranches of share options granted during the nine months ended September 30, 2021. On March 18, 2021, share options were granted with an exercise price of $0.23 per award and vest evenly over four years, with expiry occurring five years after issuance. On August 24, 2021, share options were granted with an exercise price of $0.34 per award and vest evenly over four years, with expiry occurring five years after issuance. The Company used the Black Scholes option pricing model to calculate the estimated fair value of the outstanding deferred options and share options at the date of grant. Expected volatility of 60% and forfeiture rates of 5% were used to value the share options.

(3) During the nine months ended September 30, 2021, 1.3 million share options, 1.7 million performance share rights, and 0.3 million deferred shares were granted to Officers and Directors of the Company.

17. 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 plus US$0.02/MMBtu until October 31, 2022 and less US$0.08/MMBtu thereafter, less transportation costs from AECO to each market price point as detailed in the table below.

In the first quarter of 2021, the Company eliminated its remaining fixed volume obligations of 10,000 MMBtu/d for the period commencing April 1, 2021 and ending on October 31, 2021 in consideration for the payment of $1.4 million over the term of the associated contract volumes. The amount was recognized as a realized loss on derivatives (note 19).

In the second quarter of 2021, the Company eliminated its fixed volume obligations of 25,400 MMBtu/d for the period commencing November 1, 2021 and ending on March 31, 2022 in consideration for the payment of $1.6 million over the term of the associated contract volumes. The amount was recognized as a realized loss on derivatives (note 19).

In the third quarter of 2021, the Company eliminated its fixed volume obligations of 25,400 MMBtu/d for the period commencing April 1, 2022 and ending on October 31, 2022 in consideration for the payment of $1.8 million over the term of the associated contract volumes. The amount was recognized as a realized loss on derivatives (note 19).

Market/Pricing Point	**November 1, 2022 to October 31, 2024 Daily sales volume *(MMBtu/d)***
Chicago	–
Malin	15,000
Dawn	15,000
Michcon	–
Emerson	10,000
Total sales volume obligation	**40,000**

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

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	**2021**	2020
Oil and natural gas revenue				
Natural gas(1)(2)	**6,966**	2,445	**19,098**	9,827
Oil	**5,832**	3,939	**15,309**	8,169
NGL	**1,805**	705	**4,958**	3,312
Total oil and natural gas revenue	**14,603**	7,089	**39,365**	21,308

(1) Includes revenues related to the market diversification contract of nil and $2.2 million for the three and nine months ended September 30, 2021 (Q3 2020 – nil; YTD 2020 - nil). Also included are losses related to physical forward sales contracts which settled during of the period of $0.8 million for the three months ended September 30, 2021 (Q3 2020 – losses of $1.2 million) and losses of $2.4 million for the nine months ended September 30, 2021 (YTD 2020 – losses of $4.0 million).

(2) Commencing April 1, 2020, natural gas revenue includes non-cash revenue related to production used in the settlement of the retained East Edson royalty obligation (Q3 2021 – $1.3 million; YTD 2021 – $3.6 million; Q3 2020 – $0.8 million; YTD 2020 – $1.4 million).

Included in accounts receivable at September 30, 2021 is $4.4 million of accrued oil and natural gas revenue related to September 2021 production (December 31, 2020 – $2.3 million related to December 2020 production).

18. FINANCE EXPENSE

The components of finance expense are as follows:

	Three months ended September 30, **2021**	2020	Nine months ended September 30, **2021**	2020
Cash finance expense				
Interest on revolving bank debt	**275**	270	**803**	1,369
Interest on Term Loan	**–**	911	**–**	2,724
Interest on 2022 Senior Notes[(1)]	**608**	735	**(645)**	2,205
Interest on lease liabilities (note 13)	**33**	44	**112**	134
Total cash finance expense	**916**	1,960	**270**	6,432
Non-cash finance expense				
Interest accrued on Term Loan (note 9)	**847**	–	**2,743**	–
Interest paid in-kind on 2025 Senior Notes (note 11)	**178**	–	**3,002**	–
Gain on senior note maturity extension[(1)] (note 11)	**–**	–	**(1,591)**	–
Gain on Term Loan substantive modification[(2)] (note 9)	**(6,820)**	–	**(6,820)**	–
Amortization of debt issue costs	**169**	429	**727**	1,171
Accretion on decommissioning obligations (note 14)	**140**	81	**385**	347
Change in fair value of other liability[(3)] (note 10)	**1,028**	–	**1,028**	–
Change in fair value of royalty obligations (note 12)	**1,742**	1,683	**4,764**	2,219
Total non-cash finance expense	**(2,716)**	2,193	**4,238**	3,737
Finance expense recognized in net income (loss)	**(1,800)**	4,153	**4,508**	10,169

(1) 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 Note cash interest of $1.3 million was reversed and replaced by $1.3 million of 2025 Senior Note non-cash interest expense. The Company satisfied the semi-annual interest payment due July 23, 2021 by making a PIK Interest Payment.

(2) On September 3, 2021, upon completion of the Plan of Arrangement, Perpetual's Term Loan was substantively modified in exchange for a payable 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.

(3) Pursuant to the terms of the Second Lien Loan Settlement, Perpetual is committed to pay up to $4.5 million in potential contingent payments in the event that Perpetual's annual average realized crude oil and natural gas prices exceed certain thresholds over the three year period ended December 31, 2023. The change in fair value of this liability was recorded in the statement of comprehensive income (loss) as a non-cash finance expense.

19. FINANCIAL RISK MANAGEMENT

Natural gas contracts

At September 30, 2021 the Company had entered into the following physical fixed price natural gas sales arrangements at AECO:

Term	**Sold/bought**	**Volumes (*GJ/d*)**	**Average price (*$/GJ*)**	**Fair Value (*$ thousands*)**
October 2021	Bought	10,000	3.75	45
October 2021	Sold	(15,000)	3.76	(66)

In addition, at September 30, 2021, the Company had entered into various fixed price basis differential contracts between AECO and NYMEX for terms settling in 2021 that have been substantially locked-in by similar equal and offsetting arrangements having an aggregate fair value loss of $0.8 million.

Natural gas contracts - sensitivity analysis

As September 30, 2021, if future natural gas prices changed by $0.25 per GJ with all other variables held constant, the fair value of derivatives and net income for the period of the open contracts would change by a nominal amount. Fair value sensitivity was based on published forward AECO prices.

Oil contracts

At September 30, 2021, the Company had entered into the following physical fixed price oil sales arrangements which settle in US$:

Term	**Volumes (*bbls/d*)**	**Western Canadian Select ("WCS") (US*$/bbl*)**	**Fair Value (*$ thousands*)**
October 2021 – December 2021	310	(13.25)	(48)

At September 30, 2021, the Company had entered into the following financial fixed price oil sales arrangements which settle in US$:

Term	**Volumes (*bbls/d*)**	**WTI Fixed Price (CAD*$/bbl*)**	**Fair Value (*$ thousands*)**
October 2021 – December 2021	150	92.65	(25)

Oil contracts - sensitivity analysis

As at September 30, 2021, if future WTI oil prices changed by US$5.00 per bbl with all other variables held constant, the fair value of derivatives and net income for the period of the open contracts would change by $0.1 million.

As at September 30, 2021, if future WTI-WCS differential oil prices changed by US$5.00 per bbl with all other variables held constant, the fair value of derivatives and net income for the period of the open contracts would change by $0.2 million.

The following table is a summary of the fair value of the Company's derivative contracts by type:

	September 30, 2021	December 31, 2020
Physical natural gas contracts	**$ (869)**	$ (3,351)
Physical oil contracts	**(48)**	(22)
Financial oil contracts	**(25)**	–
Fair value of derivatives	**$ (942)**	$ (3,373)
Derivative liabilities – current	**(942)**	(3,373)
Fair value of derivatives	**$ (942)**	$ (3,373)

The following table details the Company's changes in fair value of derivatives:

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	**2021**	2020
Unrealized gain (loss) on physical natural gas contracts	**944**	1,263	**2,482**	1,846
Unrealized gain (loss) on financial natural gas contracts	**–**	1,421	**–**	2,941
Unrealized gain (loss) on physical oil contracts	**(88)**	–	**(26)**	–
Unrealized gain (loss) on financial oil contracts	**(25)**	(2,470)	**(25)**	5,538
Unrealized gain (loss) on financial NGL contracts	**–**	–	**–**	351
Unrealized gain (loss) on financial foreign exchange contracts	**–**	(20)	**–**	50
Unrealized change in fair value of derivatives	**830**	194	**2,431**	10,726
Realized gain (loss) on financial natural gas contracts(1)	**(1,808)**	(2,341)	**(4,749)**	(5,768)
Realized gain (loss) on financial oil contracts	**–**	2,192	**–**	5,803
Realized gain (loss) on financial NGL contracts	**–**	–	**–**	(171)
Realized gain (loss) on financial foreign exchange contracts	**–**	(32)	**–**	(434)
Change in fair value of derivatives	**(977)**	13	**(2,317)**	10,156

(1) Includes realized losses of $1.8 million (Q3 2020 - $1.0 million) and $4.7 million (YTD 2020 – nil) for the three and nine months ended September 30, 2021 from the elimination of the Company's market diversification contract obligations.

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, promissory notes receivable, marketable securities, prepaid expenses and deposits, accounts payable and accrued liabilities, and term loan payable 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:

As at September 30, 2021	Gross	Netting[1]	Carrying Amount	Fair value Level 1	Level 2	Level 3
Financial assets						
Financial assets at amortized cost						
Promissory notes receivable	53,600	–	53,600	–	–	53,600
Fair value through profit and loss						
Marketable securities	3,901	–	3,901	–	3,901	–
Fail value of derivatives	5,967	(5,967)	–	–	–	–
Financial liabilities						
Financial liabilities at amortized cost						
Term loan payable	(39,847)	–	(39,847)	–	–	(39,847)
Revolving bank debt	(13,183)	–	(13,183)	(13,183)	–	–
Senior notes	(34,065)	–	(34,065)	–	–	(36,583)
Term loan	(2,482)	–	(2,482)	–	–	(2,671)
Fair value through profit and loss						
Other liability	(1,256)	–	(1,256)	–	–	(1,256)
Fair value of derivatives	(6,909)	5,967	(942)	–	(942)	–
Royalty obligations	(6,742)	–	(6,742)	–	–	(6,742)

(1) Derivative assets and liabilities presented in the statement 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.