CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020

MANAGEMENT'S REPORT

To the Shareholders of Perpetual Energy Inc.

The accompanying unaudited condensed interim consolidated financial statements of Perpetual Energy Inc ("Perpetual", or the "Company") have been prepared by and are the responsibility of the Company's management. The Company's independent auditor has not performed a review of these financial statements in accordance with standards established by the Chartered Professional Accountants of Canada for a review of interim financial statements by an entity's auditor.

The condensed interim consolidated financial statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") and are considered by management to present fairly the consolidated financial position, operating results and cash flows of the Company.

These condensed interim consolidated financial statements have been approved by the Audit Committee and the Board of Directors of the Company.

/s/ Susan L. Riddell Rose	*/s/ W. Mark Schweitzer*
Susan L. Riddell Rose President & Chief Executive Officer	**W. Mark Schweitzer** Vice President, Finance & Chief Financial Officer

November 10, 2020

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Financial Position

As at	September 30, 2020		December 31, 2019	
(*Cdn$ thousands unaudited*)				
Assets				
Current assets				
Accounts receivable (note 16)	**$**	**3,910**	$	5,056
Tourmaline Oil Corp. ("TOU") share investment (note 3)		**–**		15,220
Prepaid expenses and deposits		**1,397**		1,154
Fair value of derivatives (note 18)		**3,549**		–
		8,856		21,430
Property, plant and equipment (note 4)		**108,872**		194,634
Exploration and evaluation (note 5)		**10,736**		23,609
Right-of-use assets (note 6)		**1,495**		1,475
Total assets	**$**	**129,959**	$	241,148
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	**$**	**13,690**	$	13,278
TOU share margin demand loan		**–**		100
Revolving bank debt (note 8)		**15,089**		47,552
Term loan (note 9)		**44,714**		–
Fair value of derivatives (note 18)		**5,257**		10,542
Royalty obligations (note 11)		**4,308**		582
Lease liabilities (note 12)		**714**		633
Provisions (note 13)		**1,005**		2,382
		84,777		75,069
Fair value of derivatives (note 18)		**840**		2,732
Term loan (note 9)		**–**		44,274
Senior notes (note 10)		**32,702**		32,255
Royalty obligations (note 11)		**3,869**		289
Lease liabilities (note 12)		**1,930**		2,052
Provisions (note 13)		**33,450**		36,459
Total liabilities		**157,568**		193,130
Equity				
Share capital (note 14)		**97,318**		96,876
Warrants (note 14c)		**–**		923
Contributed surplus		**45,128**		44,234
Deficit (note 14)		**(170,055)**		(94,015)
Total equity		**(27,609)**		48,018
Total liabilities and equity	**$**	**129,959**	$	241,148

Future operations (note 1)
Contingencies (note 7)

See accompanying notes to the condensed interim consolidated financial statements.

/s/ Robert A. Maitland	*/s/ Geoffrey C. Merritt*
Robert A. Maitland	**Geoffrey C. Merritt**
Director	Director

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

	Three months ended September 30, 2020	Three months ended September 30, 2019	Nine months ended September 30, 2020	Nine months ended September 30, 2019
(*Cdn$ thousands, except per share amounts, unaudited*)				
Revenue				
Oil and natural gas (note 16)	**$ 7,089**	$ 17,097	**$ 21,308**	$ 58,531
Royalties	**(1,563)**	(2,237)	**(4,740)**	(7,877)
	5,526	14,860	**16,568**	50,654
Change in fair value of derivatives (note 16 and 18)	**13**	(7,508)	**10,156**	(17,818)
Gas over bitumen royalty credit	**155**	116	**474**	650
	5,694	7,468	**27,198**	33,486
Expenses				
Production and operating	**2,618**	4,262	**8,620**	14,493
Transportation	**761**	1,541	**2,813**	4,707
Exploration and evaluation (note 5)	**87**	866	**229**	986
General and administrative	**1,656**	2,606	**5,876**	9,254
Share-based payments (note 15)	**463**	483	**1,500**	1,807
Depletion and depreciation (note 4 and 6)	**3,447**	7,498	**12,627**	24,228
Impairments (note 4b and note 5)	**–**	–	**60,500**	22,600
Loss from operating activities	**(3,338)**	(9,788)	**(64,967)**	(44,589)
Finance expense (note 17)	**(4,153)**	(3,100)	**(10,169)**	(8,970)
Change in fair value of TOU share investment (note 3)	**–**	(5,915)	**(904)**	(6,412)
Restructuring (note 13(b))	**–**	(1,546)	**–**	(1,546)
Net loss and comprehensive loss	**(7,491)**	(20,349)	**(76,040)**	(61,517)
Net loss per share (note 14d)				
Basic and diluted	**$ (0.12)**	$ (0.34)	**$ (1.25)**	$ (1.02)

See accompanying notes to the condensed interim consolidated financial statements.

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

	Share capital (thousands)	Share capital ($thousands)	Warrants	Contributed surplus	Deficit	Total equity
(Cdn$ 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 14 and 15)	508	331	(923)	592	–	–
Change in shares held in trust (note 14 and 15)	232	111	–	(111)	–	–
Share-based payments	–	–	–	413	–	413
Balance at September 30, 2020	**61,253**	**$ 97,318**	**$ –**	**$ 45,128**	**$ (170,055)**	**$ (27,609)**

	Share capital (thousands)	Share capital ($thousands)	Warrants	Contributed surplus	Deficit	Total equity
(Cdn$ thousands unaudited)						
Balance at December 31, 2018	60,240	$ 1,338,369	$ 923	$ 44,433	$ (1,242,342)	$ 141,383
Net loss	–	–	–	–	(61,517)	(61,517)
Common shares issued (note 14)	407	688	–	(688)	–	–
Change in shares held in trust (note 14)	(222)	116	–	(316)	–	(200)
Share-based payments	–	–	–	727	–	727
Elimination of deficit (note 14)	–	(1,242,342)	–	–	1,242,342	–
Balance at September 30, 2019	**60,425**	**$ 96,831**	**$ 923**	**$ 44,156**	**$ (61,517)**	**$ 80,393**

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,		Nine months ended September 30,	
	2020	2019	**2020**	2019
(*Cdn$ thousands, unaudited*)				
Cash flows from (used in) operating activities				
Net loss	**$ (7,491)**	$ (20,349)	**$ (76,040)**	$ (61,517)
Adjustments to add (deduct) non-cash items:				
Depletion and depreciation (note 4 and 6)	**3,447**	7,498	**12,627**	24,228
Exploration and evaluation	**–**	779	**65**	840
Share-based payments (note 15)	**98**	(1,041)	**413**	283
Unrealized change in fair value of derivatives (note 18)	**(194)**	9,182	**(10,726)**	18,524
Change in fair value of TOU share investment (note 3)	**–**	5,915	**904**	6,412
Restructuring costs (note 13(b))	**–**	1,546	**–**	1,546
Finance expense (note 17)	**2,193**	756	**3,737**	2,066
Impairments (note 4b and note 5)	**–**	–	**60,500**	22,600
Oil and natural gas revenue in-kind (note 11)	**(752)**	–	**(1,402)**	–
Decommissioning obligations settled (note 13(a))	**62**	(527)	**(115)**	(1,193)
Payments of restructuring costs (note 13(b))	**(77)**	–	**(886)**	–
Change in non-cash working capital	**176**	1,750	**2,494**	5,307
Net cash flows from (used in) operating activities	**(2,538)**	5,509	**(8,429)**	19,096
Cash flows from (used in) financing activities				
Change in revolving bank debt, net of issue costs	**3,885**	3,006	**(32,742)**	(1,860)
Change in TOU share margin demand loan, net of issue costs	**–**	(3,099)	**(100)**	(3,728)
Change in senior notes, net of issue costs	**–**	3	**–**	(33)
Net proceeds on dispositions (note 4(a) and note 11)	**–**	**–**	**6,996**	**–**
Payments of lease liabilities (note 12)	**(141)**	(111)	**(409)**	(328)
Payments of gas over bitumen royalty financing (note 11)	**(151)**	(103)	**(507)**	(788)
Shares purchased and held in trust (note 14(b))	**–**	(50)	**–**	(200)
Net cash flows from (used in) financing activities	**3,593**	(354)	**(26,762)**	(6,937)
Cash flows from (used in) investing activities				
Capital expenditures	**(251)**	(4,506)	**(5,473)**	(10,944)
Acquisitions	**(133)**	–	**(222)**	–
Net proceeds on dispositions (note 4(a))	**–**	–	**27,754**	–
Proceeds on sale of TOU share investment (note 3)	**–**	–	**14,316**	–
Change in non-cash working capital	**(671)**	(649)	**(1,184)**	(1,215)
Net cash flows from (used in) investing activities	**(1,055)**	(5,155)	**35,191**	(12,159)
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 a Canadian corporation engaged in the exploration, development and marketing of oil and natural gas based energy in Alberta, Canada. The Company owns a diversified asset portfolio that includes liquids-rich natural gas, shallow natural gas and conventional heavy oil producing properties, as well as undeveloped bitumen resource properties.

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, 2020 are comprised of the accounts of Perpetual Energy Inc. and its wholly owned subsidiaries: Perpetual Operating Corp. and Perpetual Operating Trust, which are incorporated in Alberta.

Future operations

Perpetual has a first lien, reserve-based credit facility (the "Credit Facility") (note 8). On December 24, 2019, Perpetual's syndicate of lenders completed their semi-annual borrowing base redetermination, reducing the Credit Facility borrowing limit (the "Borrowing Limit") from $55 million to $45 million effective January 22, 2020.

In January 2020, the Company sold its remaining 1,000,000 TOU share investment for net cash proceeds of $14.3 million (the "TOU Share Proceeds"). Net proceeds were used to repay the outstanding TOU share margin demand loan of $0.1 million, with the balance applied to the Credit Facility. 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") (note 4(a)). Net proceeds were used to repay a portion of the Credit Facility. Effective April 1, 2020, Perpetual's syndicate of Credit Facility lenders completed their borrowing base redetermination, incorporating the impact of the East Edson Transaction. The Borrowing Limit was reduced from $45 million to $20 million. As at September 30, 2020, $15.1 million was borrowed and $1.3 million of letters of credit were issued on the Credit Facility. On October 30, 2020, the $20 million Borrowing Limit was confirmed with the next Borrowing Limit redetermination scheduled on or prior to November 30, 2020. If not extended by November 30, 2020, the Credit Facility will cease to revolve, and all outstanding advances will be repayable. The further extension of the Credit Facility repayment term is dependent on the Company's ability to repay or extend the term of the $45 million second lien term loan (the "Term Loan") that matures and requires repayment on March 14, 2021 (note 9). The Company also has $33.6 million of unsecured senior notes that mature on January 23, 2022 (note 10). Although the TOU Share Proceeds and the East Edson Transaction cash consideration have reduced the Company's revolving bank debt borrowed under its Credit Facility, the Company remains dependent on the support of its lenders to extend approaching maturities.

During the nine months ended September 30, 2020, there was a dramatic decline in oil, natural gas, and natural gas liquids ("NGL") prices due to local and global supply and demand imbalances and the COVID-19 pandemic. This contributed to a net working capital deficiency (accounts payable and accrued liabilities, less accounts receivable and prepaid expenses and deposits) of $8.4 million as at September 30, 2020 and an $8.4 million use of cash from operations for the nine months then ended, with improving forecasted cash flows from operations expected for the next twelve-month period and beyond, based on forward market commodity prices. The Company will require additional financing to fund the net working capital deficiency and future operations, and to refinance the upcoming Credit Facility and Term Loan maturities as the available liquidity and operating cash flows are not anticipated to be sufficient. Perpetual is considering options including the sale or monetization of additional assets, the extension of existing debt maturity dates, or alternative financing.

Due to the facts and circumstances detailed above, coupled with considerable economic instability and uncertainty in the oil and gas industry which negatively impacts operating cash flows and lender and investor sentiment, there remains considerable risk around the Company's ability to address its liquidity shortfalls and upcoming maturities. In addition, there continues to be some uncertainty regarding the Statement of Claim (note 7) which may restrict the Company's ability to manage its capital structure. As a result, there is material uncertainty surrounding the Company's ability to continue as a going concern that creates significant doubt as to the ability of the Company to meet its obligations as they come due. Therefore, the Company may be unable to realize its assets and discharge its liabilities in the normal course of business.

These financial statements have been prepared in accordance with generally accepted accounting principles applicable to a going concern, which assumes that the Corporation will be able to realize its assets and discharge its liabilities in the normal course of business. These financial statements do not reflect adjustments that would be necessary if the going concern assumption were not appropriate. If the going concern basis were not appropriate for these financial statements, then adjustments would be necessary in the carrying value of the assets and liabilities, the reported revenues and expenses, and the balance sheet classifications used. These adjustments could be material.

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, 2019 which were prepared in conformity with IFRS as issued by the International Accounting Standards Board ("IASB").

Except for the changes described below, 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, 2019 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 10, 2020.

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 three and nine months ended September 30, 2020, the Company received government grants through the Canada Emergency Wage Subsidy ("CEWS") of $0.5 million and $1.0 million, respectively (2019 – nil). For the nine months ended September 30, 2020, the grants were recognized as a reduction to general and administrative and production and operating expenses of $0.9 million and $0.1 million, respectively (2019 – nil).

3. TOURMALINE OIL CORP. SHARE INVESTMENT

	September 30, 2020		December 31, 2019	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of period	**1,000**	**$ 15,220**	1,656	$ 28,132
Sold	**(1,000)**	**(14,316)**	(656)	(9,705)
Change in fair value of TOU share investment	**–**	**(904)**	–	(3,207)
Balance, end of period	**–**	**$ –**	1,000	$ 15,220

During the three months ended March 31, 2020, the Company sold the 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 revolving bank debt (note 8). Net loss for the nine months ended September 30, 2020 included an unrealized loss of $0.9 million (2019 – unrealized loss of $6.4 million) representing the change in fair value of TOU shares held during the period.

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

	Oil and Gas Properties	**Corporate Assets**	**Total**
Cost			
December 31, 2018	$ 719,201	$ 7,614	$ 726,815
Additions	12,201	74	12,275
Change in decommissioning obligations related to PP&E (note 13(a))	(1,211)	–	(1,211)
Transfers from exploration and evaluation (note 5)	1,335	–	1,335
December 31, 2019	$ 731,526	$ 7,688	$ 739,214
Additions	5,420	(38)	5,382
Drilling program rights (a)	18,000	–	18,000
Acquisitions	222	–	222
Change in decommissioning obligations related to PP&E (note 13(a))	3,317	–	3,317
Transfers from exploration and evaluation (note 5)	252	–	252
Dispositions (a)	(193,672)	–	(193,672)
September 30, 2020	**$ 565,065**	**$ 7,650**	**$ 572,715**
Accumulated depletion, depreciation and impairment			
December 31, 2018	$ (459,469)	$ (7,255)	$ (466,724)
Depletion and depreciation	(30,628)	(176)	(30,804)
Impairment (b)	(47,052)	–	(47,052)
December 31, 2019	$ (537,149)	$ (7,431)	$ (544,580)
Depletion and depreciation	(12,180)	(99)	(12,279)
Impairment (b)	(50,300)	–	(50,300)
Dispositions (a)	143,316	–	143,316
September 30, 2020	**$ (456,313)**	**$ (7,530)**	**$ (463,843)**
Carrying amount			
December 31, 2019	$ 194,377	$ 257	$ 194,634
September 30, 2020	**$ 108,752**	**$ 120**	**$ 108,872**

At September 30, 2020, PP&E included $1.6 million (December 31, 2019 – $1.9 million) of costs currently not subject to depletion.

a) Dispositions

On April 1, 2020, the Company sold a 50% working interest in its East Edson property in West Central Alberta to the Purchaser. 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 (loss) on disposition	**–**

i)	Cash proceeds from disposition	$35.0 million of cash received on closing, net of $0.2 million of 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. Two horizontal wells targeting development of the Wilrich formation were drilled, completed and tied-in during the third quarter of 2020 resulting in a corresponding transfer of $4.5 million of drilling program rights to PP&E. Drilling program rights have been subject to depletion. The Purchaser is required to fulfill its entire commitment by April 1, 2022 and will be obligated to pay Perpetual $2.25 million for each commitment well not completed and tied-in by this time.
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 NGL production (note 11).
iv)	Carrying amount of assets held for sale 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 held for sale disposed	$7.0 million of decommissioning obligations associated with oil and gas properties disposed.

b) Cash-generating units ("CGUs") and impairment

In accordance with IFRS, an impairment test is performed if the Company identifies an indicator of impairment. For the three months ended September 30, 2020, the Company conducted an assessment of impairment indicators for the Company's CGUs. There were no triggers identified and therefore, no impairments or impairment reversals recognized during the third quarter of 2020.

In the first quarter of 2020, the Company also conducted an assessment of impairment indicators for the Company's CGUs. In performing the review, management determined that the significant decline in global oil and natural gas prices, coupled with the considerable economic instability and uncertainty in the oil and natural gas industry which negatively 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 recoverable amounts of the CGUs were determined using value-in-use ("VIU") based on the net present value of cash flows from natural gas, oil, and NGL reserves using estimates of total proved plus probable reserves evaluated or reviewed by the Company's independent reserves evaluators and updated internally by management, along with commodity price estimates based on an average of three independent reserve evaluators, and an estimate of market discount rates between 12% and 25% to consider risks specific to the asset.

At March 31, 2020, the Company determined that the carrying amounts of the West Central CGU and Eastern Alberta CGU exceeded the estimated recoverable amounts of $66.3 million and $26.4 million, respectively. Accordingly, a non-cash impairment charge of $50.3 million was included in net loss.

Commodity price estimates based on an average of three independent reserve evaluators were used in the VIU calculations as at March 31, 2020:

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)*
2020	33.64	0.715	18.15	1.84	2.76
2021	40.45	0.728	30.21	2.20	3.40
2022	49.17	0.745	41.00	2.38	3.59
2023	53.28	0.747	45.58	2.45	3.67
2024	55.66	0.748	48.55	2.53	3.76
2025	56.87	0.750	50.00	2.60	3.86
2026	58.01	0.750	51.17	2.66	3.94
2027	59.17	0.750	52.36	2.72	4.01
2028	60.35	0.750	53.57	2.79	4.09
2029	61.56	0.750	54.80	2.85	4.19
2030	62.79	0.750	55.90	2.91	4.27
2031	64.05	0.750	57.02	2.97	4.36
2032	65.33	0.750	58.16	3.03	4.44
2033	66.63	0.750	59.32	3.09	4.53
2034(1)	67.97	0.750	60.51	3.15	4.62

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

As at March 31, 2020, if discount rates used in the calculation of impairment changed by 1% with all other variables held constant, the impairment loss for the West Central CGU and Eastern Alberta CGU would change by approximately $3.6 million and $0.9 million, respectively. As at March 31, 2020, if commodity price estimates changed by 5% with all other variables held constant, the impairment loss for the West Central CGU and Eastern Alberta CGU would change by approximately $8.7 million and $4.8 million, respectively.

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

	September 30, 2020	December 31, 2019
Balance, beginning of period	**$ 23,609**	$ 25,879
Additions	**91**	664
Impairment	**(10,200)**	–
Non-cash exploration and evaluation expense	**(65)**	(1,599)
Transfers to PP&E	**(252)**	(1,335)
Dispositions (note 4(a)(iv))	**(2,447)**	–
Balance, end of period	**$ 10,736**	$ 23,609

During the nine months ended September 30, 2020, $0.2 million (2019 – $0.2 million) in costs were charged directly to E&E expense in the consolidated statements of loss and comprehensive loss.

During the first quarter of 2020, the Company and its President and Chief Executive Officer ("CEO") acquired undeveloped lands from third parties in its Eastern Alberta core area. The Company has the option, but not the obligation, to acquire the CEO's interest in the acquired lands for a pre-determined amount, prior to July 1, 2021.

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 oil and natural gas properties in PP&E.

For the three months ended September 30, 2020, the Company conducted an assessment of impairment indicators for the Company's E&E assets. There were no triggers identified and therefore, no impairments or impairment reversals recognized during the third quarter of 2020.

In the first quarter of 2020, management determined that the significant decline in global oil and natural gas prices, coupled with the considerable economic instability and uncertainty in the oil and natural gas industry, justified calculation of the recoverable amount of certain undeveloped lands classified as E&E. As a result, the carrying value of the undeveloped lands was written down to the estimated recoverable amount, resulting in a non-cash impairment charge of $10.2 million (2019 – nil).

6. RIGHT-OF-USE ASSETS

The Company leases several assets including office space, vehicles, and other assets where the lease contract conveys the right to control the use of an identified asset for a period of time. Information about leases for which the Company is a lessee is presented below:

	Head office	Vehicles	Other leases	Total
Cost				
January 1, 2019	$ 1,498	$ 200	$ 161	$ 1,859
Additions	–	–	–	–
December 31, 2019	$ 1,498	$ 200	$ 161	$ 1,859
Additions	93	189	86	368
September 30, 2020	**1,591**	**389**	**247**	**2,227**
Accumulated depreciation				
January 1, 2019	$ –	$ –	$ –	$ –
Depreciation	(240)	(80)	(64)	(384)
December 31, 2019	(240)	(80)	(64)	(384)
Depreciation	(193)	(100)	(55)	(348)
September 30, 2020	**$ (433)**	**$ (180)**	**$ (119)**	**$ (732)**
Carrying amount				
December 31, 2019	$ 1,258	$ 120	$ 97	$ 1,475
September 30, 2020	**$ 1,158**	**$ 209**	**$ 128**	**$ 1,495**

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 of Sequoia Resources Corp. ("Sequoia"), with the Alberta Court of Queen's Bench (the "Court"), against Perpetual (the "Sequoia Litigation"). The claim relates to an over four-year-old transaction when, on October 1, 2016, Perpetual closed the disposition of shallow 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. 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 an application to the Court to dismiss all claims has been made on the basis that there is no merit to any of them.

Perpetual's Application for Summary Dismissal was heard during the fourth quarter of 2018. On August 15, 2019 the Court issued its oral decision and on January 13, 2020 the Court issued its written decision which dismissed and struck all but one of the claims filed by PwC against Perpetual. Consistent with the position advanced from the outset by the Company, the Court ruled in favour of Perpetual and struck PwC's oppression claim and claim for relief on the grounds of public policy, statutory illegality and equitable rescission.

Despite referring several times to this transaction as one of "arm's length" in the decision, 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 can continue against Perpetual. On August 23, 2019, PwC filed a notice of appeal with the Court of Appeal of Alberta, contesting the entire August 15, 2019 oral decision. On August 26, 2019, Perpetual filed a notice of appeal with the Court of Appeal of Alberta, contesting the BIA claim portion of the oral decision. The appeal proceedings are scheduled to be heard in December of 2020.

On September 24, 2019, Perpetual filed an application for security for costs of the appeal. On January 28, 2020, the Court of Appeal issued its decision, requiring PwC to post security with the Court of Appeal in the amount of $0.2 million. Applications filed by PwC to appeal the security for costs decision and alter the reasons for the decision were dismissed at a hearing held on June 18, 2020. Costs of $0.1 million were awarded by the Court of Appeal against PwC on July 21, 2020.

On August 26, 2020, costs of $0.6 million were awarded by the Court against PwC in their personal capacity, related to the claims against Perpetual's CEO which were dismissed and struck in the January 13, 2020 decision. Additionally, the Court ordered PwC to post security of $1.7 million as a condition to continuing PwC's Statement of Claim action. PwC has since posted the required security with the Court and has filed a notice of appeal with the Court of Appeal of Alberta with respect to the cost award decision.

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 1st and 2nd, 2020. The Court's decision is pending. In late October, the Intervenors also filed applications with the Court of Appeal of Alberta to be permitted to intervene in PwC's appeal of the January 13, 2020 Court decision scheduled for December 2020.

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

As at September 30, 2020, the Company's reserve-based Credit Facility had a Borrowing Limit of $20.0 million (December 31, 2019 – $55.0 million) under which $15.1 million was drawn (December 31, 2019 – $47.6 million) and $1.3 million of letters of credit had been issued (December 31, 2019 – $2.3 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, 2020 was 6.0%. For the period ended September 30, 2020, if interest rates changed by 1% with all other variables held constant, the impact on annual cash finance expense and net loss would be $0.2 million.

Effective April 1, 2020, Perpetual's syndicate of Credit Facility lenders completed their borrowing base redetermination, incorporating the impact of the East Edson Transaction. The Borrowing Limit was reduced from $45 million to $20 million. On October 30, 2020, the $20 million Borrowing Limit was confirmed, with the next Borrowing Limit redetermination scheduled on or prior to November 30, 2020. If not extended by November 30, 2020, the Credit Facility will cease to revolve, and all outstanding advances will be repayable. As a result, revolving bank debt has been presented as a current liability on the condensed interim consolidated statements of financial position as at September 30, 2020. Previously, on December 24, 2019, Perpetual's syndicate of Credit Facility lenders completed their semi-annual borrowing base redetermination, reducing the Borrowing Limit from $55 million to $45 million on January 22, 2020.

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 second lien and unsecured debt and to pay dividends on or repurchase its common shares.

At September 30, 2020, 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, 2020		December 31, 2019	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Term loan	March 14, 2021	8.1%	**$ 45,000**	**$ 44,714**	$ 45,000	$ 44,274

The Term Loan bears a fixed interest rate of 8.1% with semi-annual interest payments due June 30 and December 31 of each year. Amounts borrowed under the Term Loan that are repaid are not available for re-borrowing. The Company may repay the Term Loan at any time without penalty. The Term Loan matures and is repayable on March 14, 2021 and has been presented as a current liability on the condensed interim consolidated statement of financial position as at September 30, 2020.

The 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, and certain lands pledged to the gas over bitumen royalty financing counterparty.

At September 30, 2020 the Term Loan is presented net of $0.3 million in issue costs which are amortized over the remaining term of the loan using a weighted average effective interest rate of 9.5%.

At September 30, 2020, the Term Loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

10. SENIOR NOTES

			September 30, 2020		December 31, 2019	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
2022 Senior Notes	January 23, 2022	8.75%	**$ 33,580**	**$ 32,702**	$ 33,580	$ 32,255

The 2022 Senior Notes bear a fixed interest rate of 8.75% with semi-annual interest payments due January 23 and July 23 of each year. The senior notes are direct senior unsecured obligations of the Company, ranking pari passu with all other present and future unsecured and unsubordinated indebtedness of the Company. Prior to January 23, 2021, the Company may redeem up to 100% of the senior notes at 103.3% of the principal amount. Subsequent to January 23, 2021, the Company may redeem up to 100% of the senior notes at the principal amount.

At September 30, 2020, the 2022 Senior Notes are recorded at the present value of future cash flows, net of $0.9 million in issue and principal discount costs which are amortized over the remaining term using a weighted average effective interest rate of 10.9%.

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, 2020, other than the restricted payment covenants noted above, 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 $14.6 million of the 2022 Senior Notes outstanding. An entity that is associated with the Company's CEO holds an additional $9.1 million of the 2022 Senior Notes outstanding.

11. ROYALTY OBLIGATIONS

	Retained East Edson royalty obligation	**Gas over bitumen royalty financing**	**Total**
December 31, 2018	–	1,152	1,152
Cash payments	–	(1,013)	(1,013)
Change in fair value	–	732	732
December 31, 2019	–	871	871
Initial recognition (note 4(a))	6,996	–	6,996
Cash payments	–	(507)	(507)
Non-cash payments in-kind	(1,402)	–	(1,402)
Change in fair value (note 17)	1,878	341	2,219
September 30, 2020	**7,472**	**705**	**8,177**

	September 30, 2020	December 31, 2019
Current	**$ 4,308**	$ 582
Non-current	**3,869**	289
Total royalty obligations	**$ 8,177**	$ 871

The retained East Edson royalty obligation of $7.0 million 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(a)(iii)). 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 16).

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 prices multiplied by the royalty obligation volumes. For the nine months ended September 30, 2020, an unrealized loss of $2.2 million (2019 – unrealized loss of $0.6 million) is included in non-cash finance expense related to the change in fair value of total royalty obligations (note 17).

As at September 30, 2020, if future natural gas prices changed by $0.25 per GJ with all other variables held constant, the fair value of the total royalty obligations and net loss for the period would change by $0.7 million.

12. LEASE LIABILITIES

	Total
January 1, 2019, lease liabilities recognized on adoption of IFRS 16	3,126
Additions	–
Interest on lease liabilities (note 17)	189
Payments	(630)
December 31, 2019	2,685
Additions	368
Interest on lease liabilities (note 17)	134
Payments	(543)
September 30, 2020	**2,644**

	September 30, 2020	December 31, 2019
Current	**$ 714**	$ 633
Non-current	**1,930**	2,052
Total lease liabilities	**$ 2,644**	$ 2,685

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, 2020 were between 4.3% and 6.6% (2019 – 4.3% and 6.6%).

13. PROVISIONS

The components of provisions are as follows:

	September 30, 2020	December 31, 2019
Decommissioning obligations (a)	**$ 34,405**	$ 37,905
Restructuring costs (b)	**50**	936
Total provisions	**$ 34,455**	$ 38,841
Current	**$ 1,005**	$ 2,382
Non-current	**33,450**	36,459
Total provisions	**$ 34,455**	$ 38,841

a) Decommissioning obligations

The following table summarizes changes in decommissioning obligations:

	September 30, 2020	December 31, 2019
Obligations incurred, including acquisitions	**$ 416**	$ 327
Change in risk free interest rate	**2,459**	(1,900)
Change in estimates	**442**	362
Change in decommissioning obligations related to PP&E (note 4)	**3,317**	(1,211)
Obligations settled	**(115)**	(1,733)
Obligations disposed (note 4(a))	**(7,049)**	–
Accretion (note 17)	**347**	752
Change in decommissioning obligations	**(3,500)**	(2,192)
Balance, beginning of period	**37,905**	40,097
Balance, end of period	**$ 34,405**	$ 37,905
Decommissioning obligations – current	**$ 955**	$ 1,446
Decommissioning obligations – non-current	**33,450**	36,459
Total decommissioning obligations	**$ 34,405**	$ 37,905

Total future 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 a 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 to PP&E. Decommissioning obligations are also adjusted for revisions to future cost estimates and the estimated timing of costs to be incurred in future years.

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

	September 30, 2020	December 31, 2019
Undiscounted obligations	**$ 33,543**	$ 40,304
Average risk-free rate	**1.1%**	1.8%
Inflation rate	**1.3%**	1.3%
Expected timing of settling obligations	**1 to 25 years**	1 to 25 years

b) Restructuring costs

	Employee downsizing costs	**Lease inducement**	**Total**
December 31, 2018	–	1,267	1,267
Lease inducement transferred to lease liability	–	(1,267)	(1,267)
Initial recognition	1,546	–	1,546
Payments	(610)	–	(610)
December 31, 2019	936	–	936
Payments	(886)	–	(886)
September 30, 2020, current	**50**	**–**	**50**

In response to the decrease in forward commodity prices, the Company implemented a restructuring plan in the third quarter of 2019, which resulted in the reduction of approximately 25% of its corporate employee head count. Restructuring costs of $1.5 million were expensed in 2019 in the consolidated statements of loss and comprehensive loss, and are anticipated to be fully paid by the end of 2020. Payments made during the three and nine month periods ended September 30, 2020 with respect to restructuring costs were $0.1 million and $0.9 million, respectively (2019 – nil).

14. SHARE CAPITAL

	September 30, 2020		December 31, 2019	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of period	**60,513**	**$ 96,876**	60,240	$ 1,338,369
Issued pursuant to share-based payment plans	**508**	**331**	412	690
Shares held in trust purchases (b)	**–**	**–**	(756)	(200)
Shares held in trust issued (b)	**232**	**111**	617	359
Elimination of deficit	**–**	**–**	–	(1,242,342)
Balance, end of period	**61,253**	**$ 97,318**	60,513	$ 96,876

At the Company's annual general meeting on May 15, 2019, shareholders approved a resolution to reduce share capital for accounting purposes, without the payment of or a reduction to stated or paid-up capital, by the amount of the deficit on December 31, 2018 of $1,242.3 million.

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 15). 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, 2020, 0.6 million shares were held in trust (December 31, 2019 – 0.8 million).

c) Warrants

The following table summarizes the warrants issued:

	Warrants (*thousands*)	**Amount (*$thousands*)**
Balance, December 31, 2018	6,480	$ 923
Exercised for common shares	–	–
Balance, December 31, 2019	6,480	$ 923
Exercised for common shares	–	–
Expired	(6,480)	(923)
Balance, September 30, 2020	**–**	**$ –**

On March 14, 2020, the warrants expired unexercised. The value associated to the warrants was transferred to contributed surplus.

d) Per share information

	Three months ended September 30, 2020	2019	Nine months ended September 30, 2020	2019
(thousands, except per share amounts)				
Net loss – basic	**$ (7,491)**	$ (20,349)	**$ (76,040)**	$ (61,517)
Effect of dilutive securities	**–**	–	**–**	–
Net loss – diluted	**$ (7,491)**	$ (20,349)	**$ (76,040)**	$ (61,517)
Weighted average shares				
Issued common shares	**61,787**	61,196	**61,492**	61,038
Effect of shares held in trust	**(587)**	(879)	**(596)**	(843)
Weighted average common shares outstanding – basic and diluted	**61,200**	60,317	**60,896**	60,195
Net loss per share – basic and diluted	**$ (0.12)**	$ (0.34)	**$ (1.25)**	$ (1.02)

In computing per share amounts as at September 30, 2020, 16.4 million potentially issuable common shares through the share-based compensation plans were excluded as the Company had a net loss.

15. SHARE-BASED PAYMENTS

The components of share-based payments are as follows:

	Three months ended September 30, 2020	2019	Nine months ended September 30, 2020	2019
Compensation awards	**35**	87	**114**	380
Share options	**30**	307	**186**	1,051
Performance share rights	**398**	89	**1,200**	376
Share-based payments	**463**	483	**1,500**	1,807

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

	Compensation awards					
(thousands)	**Deferred options**	**Deferred shares**	**Share options**	**Performance share rights(1)(2)**	**Restricted rights**	**Total**
December 31, 2018	4,165	1,947	4,724	1,465	–	12,301
Granted	–	253	–	1,710	423	2,386
Exercised for common shares	–	–	–	–	(412)	(412)
Exercised for shares held in trust	–	(617)	–	–	–	(617)
Exercised for restricted rights	–	(208)	–	(215)	–	(423)
Performance adjustment	–	–	–	(215)	–	(215)
Cancelled/forfeited	(577)	(99)	(120)	–	(11)	(807)
Expired	(1)	–	–	–	–	(1)
December 31, 2019	3,587	1,276	4,604	2,745	–	12,212
Granted (3)	2,250	1,371	873	1,710	517	6,721
Exercised for common shares	–	–	–	–	(508)	(508)
Exercised for shares held in trust	–	(232)	–	–	–	(232)
Exercised for restricted rights	–	–	–	(517)	–	(517)
Performance adjustment	–	–	–	(518)	–	(518)
Cancelled/forfeited	(557)	(131)	–	–	(9)	(697)
Expired	(26)	–	(80)	–	–	(106)
September 30, 2020	**5,254**	**2,284**	**5,397**	**3,420**	**–**	**16,355**

(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, 2020, $1.5 million had been accrued pursuant to cash-settled share-based compensation awards (December 31, 2019 – $0.4 million).

(2) In 2020, vested performance share rights were exercised in exchange for restricted rights based on a performance multiplier of 0.5 (2019 – 0.5).

(3) Deferred options and share options granted during the nine months ended September 30, 2020 have an exercise price of $0.07 and vest evenly over four years, with expiry occurring five years after issuance. The Company used the Black Scholes 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 10% and 5% were used to value the deferred options and share options, respectively.

During the nine months ended September 30, 2020, the Company granted 6.2 million share-based payment awards, comprised of deferred options, deferred shares, share options, and performance share rights (2019 – 1.9 million).

During the nine months ended September 30, 2020, 0.5 million restricted rights were issued in exchange for the exercise of performance share rights (2019 – 0.2 million) and no restricted rights were issued in exchange for the exercise of deferred shares (2019 – 0.2 million).

16. 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 natural gas, 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.

Natural gas, 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 below.

In the third quarter of 2019, the Company eliminated its market diversification contract obligations at five North American natural gas hub pricing points (Chicago, Malin, Dawn, Michcon, and Empress) for the period commencing December 1, 2019 and ending on October 31, 2020 in consideration for receipt of $2.7 million. The amount was recognized as a realized gain on derivatives (note 18).

In the third quarter of 2020, the Company reduced its fixed volume obligations by 30,000 MMBtu/d for the period commencing November 1, 2020 and ending on October 31, 2021 in consideration for the payment of $1.0 million over the term of the associated contract volumes. The amount has been recognized as a realized loss on derivatives (note 18).

Market/Pricing Point	**November 1, 2020 to October 31, 2021 Daily sales volume *(MMBtu/d)***	**November 1, 2021 to October 31, 2022 Daily sales volume *(MMBtu/d)***	**November 1, 2022 to October 31, 2024 Daily sales volume *(MMBtu/d)***
Chicago	4,000	12,200	–
Malin	–	10,800	15,000
Dawn	6,000	8,000	15,000
Michcon	–	5,200	–
Empress	–	3,800	–
Emerson	–	–	10,000
Total natural gas sales volume obligation	**10,000**	**40,000**	**40,000**

Subsequent to September 30, 2020, the Company reduced its fixed volume obligation by 14,600 MMBtu/d for the period commencing November 1, 2021 and ending on October 31, 2022 in consideration for the receipt of $0.5 million over the term of the associated contract volumes.

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,	
	2020	2019	**2020**	2019
Oil and natural gas revenue				
Natural gas(1)(2)	**2,445**	8,199	**9,827**	32,055
Oil	**3,939**	6,320	**8,169**	18,091
NGL	**705**	2,578	**3,312**	8,385
Total oil and natural gas revenue	**7,089**	17,097	**21,308**	58,531

(1) Includes revenues related to the market diversification contract of nil for the three and nine months ended September 30, 2020 (Q3 2019 – $6.8 million; 2019 – $25.9 million). Also included are losses related to physical forward sales contracts which settled during of the period of $1.2 million for the three months ended September 30, 2020 (Q3 2019 – gains of $0.8 million) and losses of $4.0 million for the nine months ended September 30, 2020 (2019 – gains of $0.9 million).

(2) Commencing April 1, 2020, natural gas revenue includes non-cash revenue taken in-kind related to production used in the settlement of the retained East Edson royalty obligation for the three and nine months ended September 30, 2020 of $0.8 million and $1.4 million, respectively (Q3 2019 – nil; 2019 – nil).

Included in accounts receivable at September 30, 2020 is $2.0 million of accrued oil and natural gas revenue related to September 2020 production (December 31, 2019 – $4.5 million related to December 2019 production).

17. FINANCE EXPENSE

The components of finance expense are as follows:

	Three months ended September 30, **2020**	2019	Nine months ended September 30, **2020**	2019
Cash finance expense				
Interest on revolving bank debt	**270**	752	**1,369**	2,092
Interest on TOU share margin demand loan	**–**	99	**–**	335
Interest on term loan	**911**	911	**2,724**	2,709
Interest on senior notes	**735**	734	**2,205**	2,186
Interest on lease liabilities (note 12)	**44**	47	**134**	145
Dividend income from TOU share investment	**–**	(199)	**–**	(563)
Total cash finance expense	**1,960**	2,344	**6,432**	6,904
Non-cash finance expense				
Amortization of debt issue costs	**429**	323	**1,171**	861
Accretion on decommissioning obligations (note 13(a))	**81**	179	**347**	590
Change in fair value of royalty obligations (note 11)	**1,683**	254	**2,219**	615
Total non-cash finance expense	**2,193**	756	**3,737**	2,066
Finance expense recognized in net loss	**4,153**	3,100	**10,169**	8,970

18. FINANCIAL RISK MANAGEMENT

Perpetual's net loss for the nine months ended September 30, 2020 included a realized loss on derivatives of $0.6 million (2019 – realized gain of $0.7 million).

Natural gas contracts

At September 30, 2020, the Company had entered into various fixed price AECO-NYMEX basis arrangements for the remainder of 2020 and 2021 that have been substantially offset by similar arrangements having an aggregate fair value loss of $2.4 million and $3.4 million, respectively.

Oil contracts

At September 30, 2020, the Company had entered into various fixed price WTI and WCS arrangements and WTI-WCS differential arrangements for the remainder of 2020 that have been substantially offset by similar arrangements having an aggregate fair value gain of $3.3 million.

At September 30, 2020, the Company had entered into the following additional WTI-WCS differential arrangements which have not been substantially offset by similar arrangements:

Term	**Volumes (*bbls/d*)**	**WTI-WCS differential (*US$/bbl*)**	**Fair Value (*$ thousands*)**
October 2020 – December 2020	200	(19.75)	(214)

Oil contracts - sensitivity analysis

As at September 30, 2020, if future WTI-WCS differential oil prices changed by US$5.00 per boe with all other variables held constant, the fair value of derivatives and net loss for the period would change by $0.1 million.

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

	September 30, 2020	December 31, 2019
Physical natural gas contracts	**$ (4,448)**	$ (6,294)
Financial natural gas contracts	**(1,361)**	(4,302)
Financial oil contracts	**3,285**	(2,253)
Financial NGL contracts	**–**	(351)
Financial foreign exchange contracts	**(24)**	(74)
Fair value of derivatives	**$ (2,548)**	$ (13,274)
Derivative assets – current	**3,549**	–
Derivative liabilities – current	**(5,257)**	(10,542)
Derivative liabilities – non-current	**(840)**	(2,732)
Fair value of derivatives	**$ (2,548)**	$ (13,274)

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

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	**2020**	2019
Unrealized gain (loss) on physical natural gas contracts	**1,263**	(5,182)	**1,846**	(10,150)
Unrealized gain (loss) on financial natural gas contracts	**1,421**	(2,990)	**2,941**	(7,663)
Unrealized gain (loss) on financial oil contracts	**(2,470)**	(503)	**5,538**	(2,334)
Unrealized gain (loss) on financial NGL contracts	**–**	(127)	**351**	(155)
Unrealized gain (loss) on financial foreign exchange contracts	**(20)**	(380)	**50**	1,778
Unrealized change in fair value of derivatives	**194**	(9,182)	**10,726**	(18,524)
Realized gain (loss) on financial natural gas contracts(1)	**(2,341)**	2,871	**(5,768)**	4,418
Realized gain (loss) on financial oil contracts	**2,192**	(1,049)	**5,803**	(3,181)
Realized gain (loss) on financial NGL contracts	**–**	(67)	**(171)**	(76)
Realized gain (loss) on financial foreign exchange contracts	**(32)**	(81)	**(434)**	(455)
Change in fair value of derivatives	**13**	(7,508)	**10,156**	(17,818)

(1) Realized losses in the third quarter of 2020 include $1.0 million from the modification of the market diversification contract for the November 1, 2020 to October 31, 2021 period. Realized gains in the third quarter of 2019 include $2.7 million from the elimination of the Company's 40,000 MMBtu/d market diversification contract obligations for the period of December 1, 2019 to October 31, 2020.

Fair value of financial assets and liabilities

The Company's fair value measurements are classified as 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 forward prices for commodities.

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, and accounts payable and accrued liabilities approximate their carrying amounts due to their short terms to maturity. Revolving bank debt and the TOU share margin demand loan bear interest at a floating market rate, and accordingly, the fair market value approximates the carrying amount.

The fair value of the gas over bitumen royalty financing is estimated by discounting future cash payments based on the forecasted Alberta gas reference price multiplied by the contracted deemed volume. This fair value measurement is classified as level 3 as significant unobservable inputs, including the discount rate and forecasted Alberta gas reference prices, are used in determination of the carrying amount. The discount rate of 12.2% was determined on inception of the agreement based on the characteristics of the instrument. The forecasted Alberta gas reference prices for the remaining term are based on AECO forward market pricing with adjustments for historical differences between the Alberta reference price and market prices.

The fair value of the retained East Edson royalty obligation is estimated by discounting future royalties based on forecasted natural gas and NGL 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 prices, are used in determination of the carrying amount. The discount rate of 12.0% was determined on inception of the agreement based on the characteristics of the instrument.

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

				Fair value		
As at September 30, 2020	**Gross**	**Netting(1)**	**Carrying Amount**	**Level 1**	**Level 2**	**Level 3**
Financial assets						
Fair value through profit and loss						
Fail value of derivatives	18,118	(14,569)	3,549	–	3,549	–
Financial liabilities						
Financial liabilities at amortized cost						
Revolving bank debt	(15,089)	–	(15,089)	(15,186)	–	–
Senior notes	(32,702)	–	(32,702)	–	(20,148)	–
Term loan	(44,714)	–	(44,714)	–	–	(45,000)
Fair value through profit and loss						
Fair value of derivatives	(20,666)	14,569	(6,097)	–	(6,097)	–
Royalty obligations	(8,177)	–	(8,177)	–	–	(8,177)

(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.