

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

THREE AND SIX MONTHS ENDED JUNE 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

July 31, 2020

PERPETUAL ENERGY INC.

Condensed Interim Consolidated Statements of Financial Position

As at June 3		D Decer	December 31, 2019	
(Cdn\$ thousands unaudited)				
Assets				
Current assets				
Accounts receivable (note 16)	\$ 3,15	2 \$	5,056	
Tourmaline Oil Corp. ("TOU") share investment (note 3)		-	15,220	
Prepaid expenses and deposits	44	7	1,154	
Fair value of derivatives (note 18)	6,39	3		
	9,99	2	21,430	
Property, plant and equipment (note 4)	110,51	2	194,634	
Exploration and evaluation (note 5)	10,73	5	23,609	
Right-of-use assets (note 6)	1,53	2	1,475	
Total assets	\$ 132,77	2 \$	241,148	
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	\$ 12,47	2 \$	13,278	
TOU share margin demand loan		-	100	
Revolving bank debt (note 8)	11,08	0	47,552	
Term loan (note 9)	44,56	7	_	
Fair value of derivatives (note 18)	7,45	4	10,542	
Royalty obligations (note 11)	3,51	4	582	
Lease liabilities (note 12)	73:	2	633	
Provisions (note 13)	77	0	2,382	
	80,58	9	75,069	
Fair value of derivatives (note 18)	1,68	1	2,732	
Term loan (note 9)		_	44,274	
Senior notes (note 10)	32,54	9	32,255	
Royalty obligations (note 11)	3,88	3	289	
Lease liabilities (note 12)	1,96	7	2,052	
Provisions (note 13)	32,31	9	36,459	
Total liabilities	152,98	3	193,130	
Equity				
Share capital (note 14)	97,30	5	96,876	
Warrants (note 14c)		_	923	
Contributed surplus	45,04	3	44,234	
Deficit (note 14)	(162,56		(94,015)	
Total equity	(20,21		48,018	
Total liabilities and equity	\$ 132,77		241,148	
Future operations (note 1)	7 102///	- Ψ	2 12/2 10	

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

		,				ended June 30,	
(Cdn\$ thousands, except per share amounts, unaudited)	2020		2019		2020		2019
Revenue							
Oil and natural gas (note 16)	\$ 3,722	\$	19,235	\$	14,219	\$	41,434
Royalties	(794)		(2,464)		(3,177)		(5,640)
	2,928		16,771		11,042		35,794
Change in fair value of derivatives (note 18)	(950)		(2,901)		10,143		(10,310)
Gas over bitumen royalty credit	144		146		319		534
·	2,122		14,016		21,504		26,018
Expenses	•		,		•		•
Production and operating	1,834		4,911		6,002		10,231
Transportation	782		1,635		2,052		3,166
Exploration and evaluation (note 5)	64		(44)		142		120
General and administrative	1,995		3,177		4,220		6,648
Share-based payments (note 15)	496		616		1,037		1,324
Depletion and depreciation (note 4 and 6)	2,901		8,171		9,180		16,730
Impairments (note 4b and note 5)	_		22,600		60,500		22,600
Loss from operating activities	(5,950)		(27,050)		(61,629)		(34,801)
Finance expense (note 17)	(2,881)		(2,665)		(6,016)		(5,870)
Change in fair value of TOU share investment (note 3)	-		(6,561)		(904)		(497)
Net loss and comprehensive loss	(8,831)		(36,276)		(68,549)		(41,168)
Net loss per share (note 14d)							
Basic and diluted	\$ (0.15)	\$	(0.60)	\$	(1.13)	\$	(0.68

See accompanying notes to the condensed interim consolidated financial statements.

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

	Share capital Co			ontributed						
	(thousands)	(\$t	thousands)	Wa	rrants		surplus	Deficit	To	tal equity
(Cdn\$ thousands unaudited)										
Balance at December 31, 2019	60,513	\$	96,876	\$	923	\$	44,234	\$ (94,015)	\$	48,018
Net loss	_		_		_		_	(68,549)		(68,549)
Common shares issued (note 14)	177		331		(923)		592	_		-
Change in shares held in trust (note 14)	204		98		_		(98)	_		_
Share-based payments	_		_		_		315	_		315
Balance at June 30, 2020	60,894	\$	97,305	\$	-	\$	45,043	\$ (162,564)	\$	(20,216)

	Share	capital		Contributed		
	(thousands)	(\$thousands)	Warrants	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	· –		_	_	(41,168)	(41,168)
Common shares issued (note 14)	228	199	_	(199)	_	_
Change in shares held in trust (note 14)	(131)	106	_	(256)	_	(150)
Share-based payments	_	_	_	607	_	607
Elimination of deficit (note 14)	_	(1,242,342)	_	_	1,242,342	_
Balance at June 30, 2019	60,337	\$ 96,332	\$ 923 \$	\$ 44,585 \$	(41,168)	\$ 100,672

See accompanying notes to the condensed interim consolidated financial statements.

PERPETUAL ENERGY INC.

Condensed Interim Consolidated Statements of Cash Flows

	Three moni	ths ended June 30, 2019	Six months er 2020	ded June 30, 2019
(Cdn\$ thousands, unaudited)	2020	2019	2020	2013
Cash flows from (used in) operating activities				
Net loss	\$ (8,831)	\$ (36,276)	\$ (68,549)	\$ (41,168)
Adjustments to add (deduct) non-cash items:				
Depletion and depreciation (note 4 and 6)	2,901	8,171	9,180	16,730
Exploration and evaluation	29	61	65	61
Share-based payments (note 15)	135	616	315	1,324
Unrealized change in fair value of derivatives (note 18)	1,611	1,791	(10,532)	9,342
Change in fair value of TOU share investment (note 3)	-	6,561	904	497
Finance expense (note 17)	979	415	1,544	1,310
Impairments (note 4b and note 5)	_	22,600	60,500	22,600
Oil and natural gas revenue in-kind (note 11)	(650)	_	(650)	_
Decommissioning obligations settled (note 13a)	(3)	(360)	(177)	(666
Payments of restructuring costs (note 13b)	(331)	=	(809)	_
Change in non-cash working capital	1,383	716	2,318	3,557
Net cash flows from (used in) operating activities	(2,777)	4,295	(5,891)	13,587
Change in revolving bank debt, net of issue costs Change in TOU share margin demand loan, net of issue costs Change in senior notes, net of issue costs Net proceeds on dispositions (note 4a and note 11) Payments of lease liabilities (note 12) Payments of gas over bitumen royalty financing (note 11)	(28,163) - - 6,996 (145) (152)	(1,835) (585) (36) – (110) (290)	(36,627) (100) - 6,996 (268) (356)	(4,866 (629 (36 – (217 (685
Shares purchased and held in trust (note 14b)	(132)	(50)	(330)	(150
Net cash flows used in financing activities	(21,464)	(2,906)	(30,355)	(6,583
Cash flows from (used in) investing activities				
Capital expenditures	11	(5,200)	(5,222)	(6,438
Acquisitions	(89)		(89)	., -
Net proceeds on dispositions (note 4a)	27,754	_	27,754	_
Proceeds on sale of TOU share investment (note 3)	<i>'</i> –	_	14,316	_
Change in non-cash working capital	(3,435)	3,811	(513)	(566
Net cash flows from (used in) investing activities	24,241	(1,389)	36,246	(7,004
Change in cash and cash equivalents	_	_	_	
Cash and cash equivalents, beginning of period	_	_	_	
Cash and cash equivalents, beginning of period Cash and cash equivalents, end of period		<u> </u>		\$ -

See accompanying notes to the condensed interim consolidated financial statements.

PERPETUAL ENERGY INC.

Notes to the Condensed Interim Consolidated Financial Statements (unaudited)

For the three and six months ended June 30, 2020

(All tabular amounts are in Cdn\$ thousands, except where otherwise noted)

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 six months ended June 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 Canada.

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 shares 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 used to repay a portion of 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 4a). 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, with the next Borrowing Limit redetermination scheduled on or prior to July 31, 2020. The July 31, 2020 redetermination date has been extended to August 10, 2020 to provide the lenders additional time to complete their review. If not extended, the Credit Facility will cease to revolve, and all outstanding advances will be repayable on November 30, 2020. 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 the Credit Facility which has a current maturity of November 30, 2020, in addition to the \$45 million Term Loan maturing on March 14, 2021.

During the six months ended June 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 \$8.9 million as at June 30, 2020 and a \$5.9 million use of cash from operations for the six months then ended, with a forecasted use of cash in operations expected to continue for the next twelvemonth period and potentially beyond. 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 meets 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 July 31, 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. Where the grant relates to an asset, it is recognized as a reduction to the net book value of the related asset and then subsequently in net loss over the expected useful life of the related asset through lower charges to depletion, depreciation and impairment. During the three months ended June 30, 2020, the Company received government grants of \$0.5 million through the Canada Emergency Wage Subsidy ("CEWS"). The grants were recognized as a reduction to general and administrative and production and operating expenses of \$0.4 million and \$0.1 million, respectively (Q2 2019 – nil).

3. TOURMALINE OIL CORP. SHARE INVESTMENT

	June 30	0, 2020		December 3	1, 2019	
	Shares		Amount	Shares		Amount
	(thousands)		(\$thousands)	(thousands)	(\$thousan	
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 six months ended June 30, 2020 included an unrealized loss of \$0.9 million (2019 – unrealized loss of \$0.5 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	Co	orporate 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 13a)		(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		5,169		(38)		5,131
Drilling program rights (a)		18,000		_		18,000
Acquisitions		89		_		89
Change in decommissioning obligations related to PP&E (note 13a)		2,017		_		2,017
Transfers from exploration and evaluation (note 5)		252		_		252
Dispositions (a)		(193,672)		_		(193,672)
June 30, 2020	\$	563,381	\$	7,650	\$	571,031
Accumulated depletion, depreciation and impairment						
December 31, 2018	\$	(459,469)	\$	(7,255)	\$	(466,724)
December 31, 2018 Depletion and depreciation	\$	(30,628)	\$	(7,255) (176)	\$	(30,804)
December 31, 2018 Depletion and depreciation Impairment (b)	'	(30,628) (47,052)		(176) –	'	(30,804) (47,052)
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019	\$	(30,628) (47,052) (537,149)	\$	(176) - (7,431)	\$	(30,804) (47,052) (544,580)
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation	'	(30,628) (47,052) (537,149) (8,893)		(176) –	'	(30,804) (47,052) (544,580) (8,955)
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation Impairment (b)	'	(30,628) (47,052) (537,149) (8,893) (50,300)		(176) - (7,431)	'	(30,804) (47,052) (544,580) (8,955) (50,300)
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation Impairment (b) Dispositions (a)	\$	(30,628) (47,052) (537,149) (8,893) (50,300) 143,316	\$	(176) - (7,431) (62) - -	\$	(30,804) (47,052) (544,580) (8,955) (50,300) 143,316
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation Impairment (b)	'	(30,628) (47,052) (537,149) (8,893) (50,300)		(176) - (7,431)	'	(30,804) (47,052) (544,580) (8,955) (50,300)
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation Impairment (b) Dispositions (a)	\$	(30,628) (47,052) (537,149) (8,893) (50,300) 143,316	\$	(176) - (7,431) (62) - -	\$	(30,804) (47,052) (544,580) (8,955) (50,300) 143,316
December 31, 2018 Depletion and depreciation Impairment (b) December 31, 2019 Depletion and depreciation Impairment (b) Dispositions (a) June 30, 2020	\$	(30,628) (47,052) (537,149) (8,893) (50,300) 143,316	\$	(176) - (7,431) (62) - -	\$	(30,804) (47,052) (544,580) (8,955) (50,300) 143,316

At June 30, 2020, PP&E included \$1.6 million (December 31, 2019 – \$1.9 million) of costs currently not subject to depletion. As at June 30, 2020, \$18.0 million of drilling program rights are included in oil and gas properties and have been subject to depletion. No wells had been drilled by the Purchaser (a).

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:

(\$ th	ousands)		
Cash	proceeds from disposition (i)		34,750
Drillin	ng program rights received (ii)		18,000
Retai	ined East Edson royalty obliga	tion (iii)	(6,996)
	ing amount of assets held for	(52,803)	
,	9	ng obligations held for sale disposed (v)	7,049
	(loss) on disposition		_
i)	Cash proceeds from disposition	\$35.0 million of cash received on closing, net of \$0.2 million transaction adjustments. In order to reflect the nature of the proceeds received, cash properties been allocated on the condensed interim consolidated statements of and investing activities in the amount of \$7.0 million and \$27.8 million, response.	roceeds from disposition cash flows to financing
ii)	Drilling program rights received	\$18.0 million of drilling program rights, comprised of the carried intere complete, and tie-in costs for an eight-well drilling program. A minimum targeting development of the Wilrich formation are required to be commencing in the third quarter of 2020. The Purchaser is required to fulfill by April 1, 2022 and will be obligated to pay Perpetual \$2.25 million for each	of two horizontal wells completed and tied-in Il its entire commitment

completed and tied-in by this time.

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).
 (v) Carrying amount of sale disposed
 (v) Carrying amount of decommissioning obligations
 (v) Carrying amount of decommissioning obligations

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

held for sale disposed

In accordance with IFRS, an impairment test is performed if the Company identifies an indicator of impairment. For the three months ended June 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 second 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:

	WTI Crude Oil	USD/CDN exchange rate	Alberta Heavy Crude Oil	AECO Gas	NYMEX Gas
Year	(US\$/bbl)	(US\$/Cdn\$)	(Cdn\$/bbl)	(Cdn\$/MMBtu)	(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")

\$ 23,609 91 (10,200)	\$	25,879 664
		664
(10.200)		
(10,200)		_
(65)		(1,599)
(252)		(1,335)
(2,447)		
\$ 10,736	\$	23,609
	(2 <u>,</u> 447)	(2,447)

During the six months ended June 30, 2020, \$0.1 million (2019 – \$0.1 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 June 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 second 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 miscellaneous other assets. Information about leases for which the Company is a lessee is presented below:

	Hea	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		_		282
June 30, 2020		1,591		389		161		2,141
Accumulated depreciation								
January 1, 2019	\$	_	\$	_	\$	_	\$	_
Depreciation		(240)		(80)		(64)		(384)
December 31, 2019		(240)		(80)		(64)		(384)
Depreciation		(129)		(64)		(32)		(225)
June 30, 2020	\$	(369)	\$	(144)	\$	(96)	\$	(609)
Carrying amount								
December 31, 2019	\$	1,258	\$	120	\$	97	\$	1,475
June 30, 2020	\$	1,222	\$	245	\$	65	\$	1,532

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 three-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 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 with respect to Perpetual's security for costs application, 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 in favor of Perpetual on July 21, 2020.

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 transaction nor caused to be insolvent by the 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 will be permitted to intervene in the proceedings which will take place on October 1st and 2nd, 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 June 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 \$11.1 million was drawn (December 31, 2019 – \$47.6 million) and \$2.3 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 June 30, 2020 was 6.0%. For the period ended June 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 \$0.1 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, with the next Borrowing Limit redetermination scheduled on or prior to July 31, 2020. The July 31, 2020 redetermination date has been extended to August 10, 2020 to provide the lenders additional time to complete their review. If not extended, the Credit Facility will cease to revolve, and all outstanding advances will be repayable on November 30, 2020. As a result, revolving bank debt has been presented as a current liability on the condensed interim consolidated statements of financial position as at June 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 June 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

			June 30, 2020		Decemb	er 31, 2019
	Maturity date	Interest rate	Principal	Carrying Amount	Principal	Carrying amount
Term loan	March 14, 2021	8.1%	\$ 45,000	\$ 44,567	\$ 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 June 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 June 30, 2020 the Term Loan is presented net of \$0.4 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 June 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

			June	e 30, 2020	Decemb	er 31, 2019
	Maturity date	Interest rate	Principal	Carrying Amount	Principal	Carrying amount
2022 Senior Notes	January 23, 2022	8.75%	\$ 33,580	\$ 32,549	\$ 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 June 30, 2020, the 2022 Senior Notes are recorded at the present value of future cash flows, net of \$1.0 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 June 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 4a)	6,996	_	6,996
Cash payments	_	(356)	(356)
Non-cash payments in-kind	(650)	`	(650)
Change in fair value (note 17)	382	154	536
June 30, 2020	6,728	669	7,397

	June 30, 2020	Decembe	r 31, 2019
Current	\$ 3,514	\$	582
Non-current	3,883		289
Total royalty obligations	\$ 7,397	\$	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. 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 six months ended June 30, 2020, an unrealized loss of \$0.5 million (2019 – loss of \$0.4 million) is included in non-cash finance expense related to the change in fair value of total royalty obligations (note 17).

As at June 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 \$0.8 million.

12. LEASE LIABILITIES

	Total
January 1, 2019, lease liabilities recognized on adoption of IFRS 16	3,126
Additions	_
Interest on lease liabilities	189
Payments	(630)
December 31, 2019	2,685
Additions	282
Interest on lease liabilities (note 17)	90
Payments	(358)
June 30, 2020	2,699

	June 30, 2020	December 31, 20		
Current	\$ 732	\$	633	
Non-current	1,967		2,052	
Total lease liabilities	\$ 2,699	\$	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 June 30, 2020 were between 4.3% and 6.6% (2019 – 4.3% and 6.6%).

13. PROVISIONS

The components of provisions are as follows:

	June	June 30, 2020			
Decommissioning obligations (a)	\$	32,962	\$	37,905	
Restructuring costs (b)		127		936	
Total provisions	\$	33,089	\$	38,841	
Current	\$	770	\$	2,382	
Non-current	•	32,319		36,459	
Total provisions	\$	33,089	\$	38,841	

a) Decommissioning obligations

The following table summarizes changes in decommissioning obligations:

	June 30, 2020	Decembe	er 31, 2019
Obligations incurred, including acquisitions	\$ 232	\$	327
Change in risk free interest rate	1,785		(1,900)
Change in estimates	_		362
Change in decommissioning obligations related to PP&E (note 4)	2,017		(1,211)
Obligations settled	(177)	(1,733)
Obligations disposed (note 4a)	(7,049)	
Accretion (note 17)	266		752
Change in decommissioning obligations	(4,943)	(2,192)
Balance, beginning of period	37,905		40,097
Balance, end of period	\$ 32,962	\$	37,905
Decommissioning obligations – current	\$ 643	\$	1,446
Decommissioning obligations – non-current	32,319		36,459
Total decommissioning obligations	\$ 32,962	\$	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 Company adjusts the decommissioning obligations at each period end date for changes in the risk-free interest rate. Accretion is calculated on the adjusted balance 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:

	June 30, 2020	December 31, 2019
Undiscounted obligations	\$ 32,868	\$ 40,304
Average risk-free rate	1.0%	1.8%
Inflation rate	1.0%	1.3%
Expected timing of settling obligations	1 to 25 years	1 to 25 years

b) Restructuring costs

	Employee	Lease	
	downsizing costs	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	(809)	-	(809)
June 30, 2020, current	127	_	127

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 six month periods ended June 30, 2020 with respect to restructuring costs were \$0.3 million and \$0.8 million, respectively.

14. SHARE CAPITAL

	June 3	Dec	December 31,					
	Shares	Shares Amount Shares			Amount			
	(thousands) (\$thousand		(\$thousands) (thousands)		sthousands) (thousands)			(\$thousands)
Balance, beginning of period	60,513	\$	96,876	60,240	\$	1,338,369		
Issued pursuant to share-based payment plans	177		331	412		690		
Shares held in trust purchases (b)	_		_	(756)		(200)		
Shares held in trust issued (b)	204		98	617		359		
Elimination of deficit	-		-	_		(1,242,342)		
Balance, end of period	60,894	\$	97,305	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 June 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		Amount	
	(thousands)	(\$thou	ısands)	
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, June 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 June 30,		Six months en		nded June 30,	
	2020		2019	2020		2019
(thousands, except per share amounts)						
Net loss – basic	\$(8,831)	\$	(36,276)	\$ (68,549)	\$	(41,168)
Effect of dilutive securities	_		_	_		_
Net loss – diluted	\$(8,831)	\$	(36,276)	\$ (68,549)	\$	(41,168)
W. Charles and the control of the co						
Weighted average shares						
Issued common shares	61,372		61,005	61,343		60,958
Effect of shares held in trust	(596)		(851)	(618)		(825)
Weighted average common shares outstanding – basic and diluted	60,776		60,154	60,725		60,133
Net loss per share – basic and diluted	\$ (0.15)	9	(0.60)	\$ (1.13)	\$	(0.68)

In computing per share amounts as at June 30, 2020, 16.9 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 e	Three months ended June 30,		led June 30,
	2020	2019	2020	2019
Compensation awards	35	144	79	287
Share options	70	136	156	293
Performance share rights	391	336	802	744
Share-based payments	496	616	1,037	1,324

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

	Compensation awards					
	Deferred	Deferred	Share	Performance	Restricted	
(thousands)	options	shares	options	share rights ⁽¹⁾⁽²⁾	rights	
December 31, 2018	4,165	1,947	4,724	1,465	-	
Granted	_	253	_	1,710	423	
Exercised for common shares	_	_	_	_	(423)	
Exercised for shares held in trust	_	(617)	_	_	_	
Exercised for restricted rights	_	(208)	_	(215)	_	
Performance adjustment	_	_	_	(215)	_	
Cancelled/forfeited	(577)	(99)	(120)	=	_	
Expired	(1)	· -	· -	=	_	
December 31, 2019	3,587	1,276	4,604	2,745	-	
Granted ⁽³⁾	2,250	1,204	873	1,710	517	
Exercised for common shares	_	· -	_	· <u>-</u>	(177)	
Exercised for shares held in trust	_	(204)	_	_	_	
Exercised for restricted rights	-	` -	_	(517)	-	
Performance adjustment	_	_	_	(518)	_	
Cancelled/forfeited	(410)	(60)	_	`	_	
Expired	(1)	`	_	_	_	
June 30, 2020	5,426	2,216	5,477	3,420	340	

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 June 30, 2020, \$1.1 million had been accrued pursuant to cash-settled share-based compensation awards (December 31, 2019 – \$0.4 million).

During the six months ended June 30, 2020, the Company granted 6.0 million deferred options, deferred shares, share options, and performance share rights (2019 – nil).

During the six months ended June 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 - 0.1 million).

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 three months ended June 30, 2020 have an exercise price of \$0.07 per award and vest evenly over four years, with expiry occurring five years after issuance. Forfeiture rates used to value the deferred options and share options were estimated at 10% and 5%, respectively. The Company used the Black Scholes pricing model to calculate the estimated fair value of the awards at the date of grant. The estimated fair value of deferred options and share options granted during the three months ended June 30, 2020 was \$0.03 per award.

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\$0.0175/MMBtu until October 31, 2022 and less US\$0.0775/MMBtu thereafter, less transportation costs from AECO to each market price point as detailed below.

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

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

	Three months end	Six months ended June 30,		
	2020	2019	2020	2019
Oil and natural gas revenue				
Natural gas ⁽¹⁾⁽²⁾	2,060	8,968	7,382	23,856
Oil	1,212	6,733	4,230	11,771
NGL	450	3,534	2,607	5,807
Total oil and natural gas revenue	3,722	19,235	14,219	41,434

Includes revenues related to the market diversification contract of nil for the three and six months ended June 30, 2020 (Q2 2019 – \$7.4 million; 2019 - \$19.1 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 June 30, 2020 (Q2 2019 – gains of \$0.7 million) and losses of \$2.8 million for the six months ended June 30, 2020 (2019 – gains of \$0.9 million).

Included in accounts receivable at June 30, 2020 is \$1.5 million of accrued oil and natural gas revenue related to June 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 June 30,		Six months end	ed June 30,
	2020	2019	2020	2019
Cash finance expense				
Interest on revolving bank debt	220	657	1,099	1,340
Interest on TOU share margin demand loan	_	115	_	236
Interest on term loan	902	887	1,813	1,798
Interest on senior notes	735	741	1,470	1,452
Interest on lease liabilities (note 12)	45	48	90	98
Dividend income from TOU share investment	_	(198)	-	(364)
Total cash finance expense	1,902	2,250	4,472	4,560
Non-cash finance expense				
Amortization of debt issue costs	395	266	742	538
Accretion on decommissioning obligations (note 13a)	100	196	266	411
Change in fair value of royalty obligations (note 11)	484	(47)	536	361
Total non-cash finance expense	979	415	1,544	1,310
Finance expense recognized in net loss	2,881	2,665	6,016	5,870

⁽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 (Q2 2020 – \$0.7 million; Q2 2019 – nil).

18. FINANCIAL RISK MANAGEMENT

Perpetual's net loss for the six months ended June 30, 2020 included a realized loss on derivatives of \$0.4 million (2019 – realized gain of \$1.0 million).

Natural gas contracts

At June 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 \$8.5 million.

Oil contracts

At June 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 \$6.5 million.

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

		WTI-WCS differential	Fair Value
Term	Volumes (bbls/d)	(<i>US\$/bbl</i>)	(\$ thousands)
July 2020 - December 2020	500	(19.75)	(675)
July 2020 – October 2020	100	(17.65)	(73)

Oil contracts - sensitivity analysis

As at June 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 \$0.7 million.

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

	June 30, 2020	December 31, 2019		
Physical natural gas contracts	\$ (5,711)	\$ (6,294)		
Financial natural gas contracts	(2,782)	(4,302)		
Financial oil contracts	5,755	(2,253)		
Financial NGL contracts	_	(351)		
Financial foreign exchange contracts	(4)	(74)		
Fair value of derivatives	\$ (2,742)	\$ (13,274)		
Derivative assets – current	6,393	_		
Derivative liabilities – current	(7,454)	(10,542)		
Derivative liabilities – non-current	(1,681)	(2,732)		
Fair value of derivatives	\$ (2,742)	\$ (13,274)		

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

	Three months ended June 30,		Six months end	ded June 30,	
	2020	2019	2020	2019	
Unrealized gain (loss) on physical natural gas contracts	862	(2,203)	583	(4,968)	
Unrealized gain (loss) on financial natural gas contracts	1,413	(1,917)	1,520	(4,673)	
Unrealized gain (loss) on financial oil contracts	(3,800)	1,671	8,008	(1,831)	
Unrealized gain (loss) on financial NGL contracts	(116)	(28)	351	(28)	
Unrealized gain (loss) on financial foreign exchange contracts	30	686	70	2,158	
Unrealized change in fair value of derivatives	(1,611)	(1,791)	10,532	(9,342)	
Realized gain (loss) on financial natural gas contracts	(1,622)	252	(3,427)	1,547	
Realized gain (loss) on financial oil contracts	2,325	(1,242)	3,611	(2,132)	
Realized gain (loss) on financial NGL contracts	(28)	(9)	(171)	(9)	
Realized gain (loss) on financial foreign exchange contracts	(14)	(111)	(402)	(374)	
Change in fair value of derivatives	(950)	(2,901)	10,143	(10,310)	

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:

			Carrying	Fair value		
As at June 30, 2020	Gross	Netting ⁽¹⁾	Amount	Level 1	Level 2	Level 3
Financial assets						
Fair value through profit and loss						
Fail value of derivatives	19,264	(12,871)	6,393	_	6,393	_
Financial liabilities						
Financial liabilities at amortized cost						
Revolving bank debt	(11,080)	_	(11,080)	(11,242)	_	_
Senior notes	(32,549)	_	(32,549)		(20,148)	_
Term loan	(44,567)	_	(44,567)	_		(45,000)
Fair value through profit and loss						
Fair value of derivatives	(22,006)	12,871	(9,135)	_	(9,135)	_
Royalty obligations	(7,397)	· -	(7,397)	_	_	(7,397)

⁽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.