PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Financial Position

As at	March 31, 2019	December 31, 2018
(*Cdn$ thousands unaudited*)		
Assets		
Current assets		
Accounts receivable (note 17)	**$ 7,373**	$ 8,931
Tourmaline Oil Corp. (“TOU”) share investment (note 3)	**34,196**	28,132
Prepaid expenses and deposits	**855**	1,138
Fair value of derivatives (note 19)	**2,112**	7,012
	44,536	45,213
Fair value of derivatives (note 19)	**1,996**	3,906
Property, plant and equipment (note 4)	**254,073**	260,091
Exploration and evaluation (note 5)	**26,127**	25,879
Right-of-use assets (note 6)	**1,763**	–
Total assets	**$ 328,495**	$ 335,089
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	**$ 13,592**	$ 16,612
Fair value of derivatives (note 19)	**2,850**	1,405
TOU share margin demand loan (note 9)	**14,080**	14,109
Revolving bank debt (note 10)	**–**	42,561
Senior notes (note 12)	**14,552**	14,536
Lease liabilities (note 13)	**606**	–
Gas over bitumen royalty financing	**725**	680
Lease inducement (note 2a)	**–**	202
Decommissioning obligations (note 14)	**2,280**	1,731
	48,685	91,836
Fair value of derivatives (note 19)	**190**	894
Revolving bank debt (note 10)	**39,598**	–
Term loan (note 11)	**43,861**	43,729
Senior notes (note 12)	**17,385**	17,344
Lease liabilities (note 13)	**2,413**	–
Gas over bitumen royalty financing	**440**	472
Lease inducement (note 2a)	**–**	1,065
Decommissioning obligations (note 14)	**39,181**	38,366
Total liabilities	**191,753**	193,706
Equity		
Share capital (note 15)	**1,338,406**	1,338,369
Warrants (note 15c)	**923**	923
Contributed surplus	**44,647**	44,433
Deficit	**(1,247,234)**	(1,242,342)
Total equity	**136,742**	141,383
Total liabilities and equity	**$ 328,495**	$ 335,089

Contingencies (note 7)
2019 Senior Notes early redemption (note 12)

See accompanying notes to the condensed interim consolidated financial statements.

/s/ Robert A. Maitland

Robert A. Maitland
Director

/s/ Geoffrey C. Merritt

Geoffrey C. Merritt
Director

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

	Three months ended March 31,	
(*Cdn$ thousands, except per share amounts, unaudited*)	**2019**	2018
Revenue		
Oil and natural gas (note 17)	**$ 22,199**	$ 23,340
Royalties	**(3,176)**	(3,063)
	19,023	20,277
Change in fair value of derivatives (note 19)	**(7,409)**	(1,635)
Gas over bitumen royalty credit	**388**	383
	12,002	19,025
Expenses		
Production and operating	**5,320**	4,772
Transportation	**1,531**	1,443
Exploration and evaluation (note 5)	**164**	170
General and administrative	**3,471**	3,311
Share-based payments (note 16)	**708**	806
Depletion and depreciation (note 4 and 6)	**8,559**	10,124
Loss (gain) on dispositions (note 4a)	**–**	871
Loss from operating activities	**(7,751)**	(2,472)
Finance expense (note 18)	**(3,205)**	(2,442)
Change in fair value of TOU share investment (note 3)	**6,064**	(1,551)
Net loss and comprehensive loss	**(4,892)**	(6,465)
Net loss per share (note 15d)		
Basic and diluted	**$ (0.08)**	$ (0.11)

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, 2018	60,240	$ 1,338,369	$ 923	$ 44,433	$ (1,242,342)	$ 141,383
Net loss	–	–	–	–	(4,892)	(4,892)
Common shares issued (note 15)	19	59	–	(59)	–	–
Change in shares held in trust (note 15)	(222)	(22)	–	(78)	–	(100)
Share-based payments	–	–	–	351	–	351
Balance at March 31, 2019	**60,037**	**$1,338,406**	**$ 923**	**$ 44,647**	**$(1,247,234)**	**$ 136,742**

	Share capital (thousands)	Share capital ($thousands)	Warrants	Contributed surplus	Deficit	Total equity
(Cdn$ thousands unaudited)						
Balance at December 31, 2017	59,263	$ 1,336,838	$ 923	$ 44,152	$ (1,221,962)	$ 159,951
Net loss	–	–	–	–	(6,465)	(6,465)
Common shares and warrants issued (note 15)	472	905	–	(905)	–	–
Change in shares held in trust (note 15)	112	218	–	(218)	–	–
Share-based payments	–	–	–	806	–	806
Balance at March 31, 2018	**59,847**	**$1,337,961**	**$ 923**	**$ 43,835**	**$ (1,228,427)**	**$ 154,292**

See accompanying notes to the condensed interim consolidated financial statements.

PERPETUAL ENERGY INC.
Condensed Interim Consolidated Statements of Cash Flows

(*Cdn$ thousands, unaudited*)	Three months ended March 31, **2019**	2018
Cash flows from (used in) operating activities		
Net loss	**$ (4,892)**	$ (6,465)
Adjustments to add (deduct) non-cash items:		
Depletion and depreciation (note 4)	**8,559**	10,124
Share-based payments (note 16)	**708**	806
Unrealized change in fair value of derivatives (note 19)	**7,551**	2,326
Change in fair value of TOU share investment (note 3)	**(6,064)**	1,551
Loss (gain) on dispositions (note 4a)	**–**	871
Finance expenses (note 18)	**895**	327
Decommissioning obligations settled (note 14)	**(306)**	(553)
Payments of lease inducement	**–**	(185)
Change in non-cash working capital	**2,841**	2,396
Net cash flows from operating activities	**9,292**	11,198
Cash flows from (used in) financing activities		
Change in revolving bank debt, net of issue costs	**(3,031)**	15,286
Change in TOU share margin demand loan, net of issue costs	**(44)**	(2,523)
Payments of lease liabilities (note 13)	**(107)**	–
Change in gas over bitumen royalty financing	**(395)**	(439)
Shares purchased and held in trust (note 15)	**(100)**	–
Net cash flows from (used in) financing activities	**(3,677)**	12,324
Cash flows from (used in) investing activities		
Capital expenditures	**(1,238)**	(14,897)
Net proceeds (payments) on dispositions (note 4a)	**–**	(926)
Change in non-cash working capital	**(4,377)**	(7,699)
Net cash flows used in investing activities	**(5,615)**	(23,522)
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 operates 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 months ended March 31, 2019 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.

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, 2018 which were prepared in conformity with International Financial Reporting Standards ("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, 2018 have been applied in the preparation of these condensed interim consolidated financial statements.

These condensed interim consolidated financial statements of the Corporation were approved and authorized for issue by the Board of Directors on May 7, 2019.

a) Accounting pronouncements adopted

IFRS 16 "Leases"

Effective January 1, 2019, the Company adopted IFRS 16, "Leases", which replaced IAS 17, "Leases" and IFRIC 4, "Determining Whether an Arrangement Contains a Lease". The Company applied the new standard using the modified retrospective approach and, in accordance with the transitional provisions, the comparative information has not been restated.

i) Right-of-use assets

The Company recognises right-of-use assets and lease liabilities at the lease commencement date. The assets are initially measured at cost, which comprises the initial amount of the lease liabilities adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use assets are depreciated to the earlier of the end of the useful life of the asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. Perpetual presents right-of-use assets as its own line item on the consolidated statement of financial position. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the right-of-use assets are periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liabilities. The depreciation term of the right-of-use assets is between 2 and 5 years.

ii) Lease liabilities

The lease liabilities are initially measured at the present value of the future lease payments, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The lease liabilities are measured at amortised cost using the effective interest rate method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liabilities are remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use assets, or is recorded in profit or loss if the carrying amount of the right-of-use assets have been reduced to zero. Lease payments are applied against the lease liabilities, with a portion reflected as interest expense using the effective interest rate method. Perpetual presents lease liabilities as their own line item on the consolidated statement of financial position.

iii) Transition impact

Perpetual has elected to use the modified retrospective approach upon adoption and therefore, the comparative information has not been restated. The effect of initially applying the standard was a $3.1 million increase to right-of-use assets and lease liabilities, with no impact on deficit. The previously recorded lease inducement recognized under IAS 37 was incorporated into the recorded lease liabilities. As this also represented a lability over fair market value of the head office lease, the right-of-use asset was correspondingly reduced by the same amount ($1.3 million). The weighted average incremental borrowing rate used to determine the right-of-use assets and lease liabilities on adoption was approximately 6.4 percent. The leases recognized under IFRS 16 largely relate to the Company's head office lease in Calgary.

Upon transition, the Company used the following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- right-of-use assets and lease liabilities for leases with less than 12 months of lease term were not recognized;
- right-of-use assets and lease liabilities for leases of low-value assets were not recognized;
- applied a single discount rate to a portfolio of leases with similar characteristics;
- excluded initial direct costs from measuring right-of-use assets at the date of initial application; and
- adjusted the right-of-use assets by the amount of an IAS 37 lease inducement provision immediately before the date of initial application, as an alternative to an impairment review.

The following table provides a reconciliation of the lease commitments disclosed as at December 31, 2018 to the Company's lease liabilities as at January 1, 2019:

	Total
Lease commitments	
Office leases	6,489
Vehicle leases	220
Other leases	133
Lease commitments, December 31, 2018	**6,842**
Non-lease components and variable payments	(4,310)
Lease inducement recognized under IAS 37	1,267
	3,799
Impact of discounting	(673)
Lease liabilities recognized, January 1, 2019	**3,126**

The adoption of the new standard had the following impact on the Company's Q1 2019 financial results, compared to what would have occurred had the new accounting policy not been adopted:

(*$ thousands, except as noted*)	**Impact on net loss**	**Impact on net cash flows from operating activities**	**Impact on net cash flows from financing activities**
Production and operating expense	23	23	–
General and administrative expense	84	84	–
Depletion and depreciation expense	(96)	–	–
Cash interest on lease liabilities	(50)	(50)	–
Payments of lease liabilities	–	–	(107)
Net IFRS 16 implementation impact	**(39)**	**57**	**(107)**

iv) Critical accounting judgements and estimate uncertainty

The preparation of the condensed interim consolidated financial statements in accordance with IFRS requires management to make judgments, estimates, and assumptions that affect the reported amount of the right-of-use assets and lease liabilities, and the resulting interest and depreciation expense. Actual results could differ significantly as a result of these estimates. Key areas where management has made judgments, estimates, and assumptions related to the application of IFRS 16 include:

- *Incremental borrowing rate*: The rates used to present value future lease payments are based on judgments about the economic environment in which the Company operates and theoretical analyses about the security provided by the underlying leased asset, the amount of funds required to be borrowed in order to meet the future lease payments associated with the leased asset, and the term for which these funds would be borrowed.
- *Lease term*: In determining the period which the Company has the right to use an underlying asset, management considers the non-cancellable period along with all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option.

3. TOURMALINE OIL CORP. ("TOU") SHARE INVESTMENT

	March 31, 2019		December 31, 2018	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of period	**1,656**	**$ 28,132**	$ 1,667	$ 37,985
Sold	**–**	–	(11)	(278)
Change in fair value of TOU share investment	–	**6,064**	–	(9,575)
Balance, end of period	**1,656**	**$ 34,196**	$ 1,656	$ 28,132

At March 31, 2019, the Company held 1.66 million (December 31, 2018 – 1.66 million) TOU shares with a fair value of $34.2 million (December 31, 2018 – $28.1 million) based on a March 31, 2019 closing price of $20.64 per share (December 31, 2018 – $16.98 per share). Net loss for the three month period ended March 31, 2019 included an unrealized gain of $6.1 million (Q1 2018 – unrealized loss of $1.6 million) representing the change in fair value of TOU shares held during the period.

At March 31, 2019, 1.66 million TOU shares (December 31, 2018 – 1.66 million TOU shares) were pledged as security for the TOU share margin demand loan (note 9).

As at March 31, 2019, a $1.00 per share change in the market price of TOU shares would change the Company's net loss by $1.7 million.

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

	Oil and Gas Properties	**Corporate Assets**	**Total**
Cost			
December 31, 2017	$ 687,301	$ 7,261	$ 694,562
Additions	26,073	353	26,426
Acquisitions	1,261	–	1,261
Change in decommissioning obligations related to PP&E (note 14)	4,644	–	4,644
Transfers from exploration and evaluation (note 5)	770	–	770
Dispositions	(848)	–	(848)
December 31, 2018	$ 719,201	$ 7,614	$ 726,815
Additions	962	28	990
Change in decommissioning obligations related to PP&E (note 14)	1,455	–	1,455
March 31, 2019	**$ 721,618**	**$ 7,642**	**$ 729,260**
Accumulated depletion and depreciation			
December 31, 2017	$ (424,665)	$ (7,113)	$ (431,778)
Depletion and depreciation	(34,804)	(142)	(34,946)
December 31, 2018	$ (459,469)	$ (7,255)	$ (466,724)
Depletion and depreciation	(8,375)	(88)	(8,463)
March 31, 2019	**$ (467,844)**	**$ (7,343)**	**$ (475,187)**
Carrying amount			
December 31, 2018	$ 259,732	$ 359	$ 260,091
March 31, 2019	**$ 253,774**	**$ 299**	**$ 254,073**

At March 31, 2019, property, plant and equipment included $2.0 million (December 31, 2018 – $1.9 million) of costs currently not subject to depletion.

a) Dispositions

Proceeds (payments) on dispositions

($ thousands)	Three months ended March 31, **2019**	2018
Proceeds from dispositions of oil and gas properties	–	3
Payments on retained shallow gas marketing arrangements	–	(929)
Net proceeds (payments) on dispositions	–	(926)

Gain (loss) on dispositions

($ thousands)	Three months ended March 31, **2019**	2018
Proceeds from dispositions of oil and gas properties	–	3
Realized loss on retained shallow gas marketing arrangements	–	(874)
Gain (loss) on dispositions	–	(871)

On October 1, 2016, Perpetual sold mature, high cost shallow gas assets in east central and northeast Alberta for nominal cash consideration and the transfer of $128.0 million of associated decommissioning obligations to the purchaser (the "Shallow Gas Disposition"). The Shallow Gas Disposition also included marketing arrangements whereby the Company provided floor price protection at $2.58/GJ to the purchaser and retained price exposure to the extent average monthly AECO prices exceed $2.81/GJ on 33,611 GJ/d through to August 31, 2018. The Company entered into marketing arrangements prior to closing to fix the cost of the floor price protection through to March 31, 2018. Realized and unrealized gains and losses on these marketing arrangements have been recognized as adjustments to gains/losses on dispositions and included as cash flows from investing activities in the consolidated statement of cash flows. The related marketing arrangements have since expired.

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

	March 31, 2019	December 31, 2018
Balance, beginning of period	**$ 25,879**	$ 46,704
Additions	**248**	462
Acquisitions	–	610
Dispositions	–	(12,442)
Impairments	–	(7,200)
Non-cash exploration and evaluation expense	–	(1,485)
Transfers to property, plant, and equipment	–	(770)
Balance, end of period	**$ 26,127**	$ 25,879

During the three months ended March 31, 2019, $0.2 million (Q1 2018 – $0.2 million) in costs were charged directly to E&E expense in the consolidated statements of net loss.

6. RIGHT-OF-USE ASSETS

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

	Head office	**Vehicles**	**Other leases**	**Total**
Cost				
January 1, 2019	$ 1,498	$ 200	$ 161	$ 1,859
Additions	–	–	–	–
March 31, 2019	**$ 1,498**	**$ 200**	**$ 161**	**$ 1,859**
Accumulated depreciation				
January 1, 2019	$ –	$ –	$ –	$ –
Depreciation	(60)	(20)	(16)	(96)
March 31, 2019	**$ (60)**	**$ (20)**	**$ (16)**	**$ (96)**
Carrying amount				
January 1, 2019	$ 1,498	$ 200	$ 161	$ 1,859
March 31, 2019	**$ 1,438**	**$ 180**	**$ 145**	**$ 1,763**

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, with the Alberta Court of Queen's Bench (the "Court"), against Perpetual (the "Sequoia Litigation"). The claim relates to an over two-year-old transaction when, on October 1, 2016, Perpetual closed the Shallow Gas Disposition 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. The Court's decision is anticipated to be received in the second quarter of 2019. Management expects that the Company is more likely than not to be successful in defending against the claim such that no damages will be awarded against it, and therefore, no amounts have been accrued as a liability in these financial statements.

8. CAPITAL MANAGEMENT

Perpetual's strategy includes maintaining a strong capital base to retain investor, creditor and market confidence to support the execution of its business plans. The Company manages its capital structure and adjusts its capital spending in light of changes in economic conditions such as depressed commodity prices, declines in the fair value of the Company's investment in TOU shares, and the risk characteristics of its underlying oil and natural gas assets. The Company considers its capital structure to include share capital, senior notes, the term loan, revolving bank debt, TOU share margin demand loan and net working capital, with value and liquidity enhanced through the ownership of TOU shares. To manage its capital structure and available liquidity, the Company may from time to time issue equity or debt securities, sell its TOU shares or other assets, and adjust its capital spending to manage current and projected debt levels. The Company will continue to regularly assess changes to its capital structure and repayment alternatives, with considerations for both short term liquidity and longer term financial sustainability.

At March 31, 2019, Perpetual had available liquidity of $31.8 million, comprised of an unutilized Borrowing Limit of $11.7 million and the market value of its Tourmaline share investment net of the associated margin demand loan, of $20.1 million.

9. TOU SHARE MARGIN DEMAND LOAN

At March 31, 2019, Perpetual had a $14.1 million TOU share margin demand loan secured by 1.66 million TOU shares. Interest rates are based on 90-day Banker's Acceptance rates plus 1.25%. Perpetual may repay a portion or the entirety of the loan at any time. Any repayment is a permanent reduction to the loan. Perpetual is required to maintain a lending ratio of less than 55% based on the ratio of the TOU share margin demand loan compared to the market value of the pledged TOU shares (the "Lending Ratio"). If at any time the Lending Ratio exceeds 55%, Perpetual is obligated to pay down the TOU share margin demand loan to restore the Lending Ratio to 40%. As at March 31, 2019, the Lending Ratio was 41% of the closing market value of the pledged TOU shares. The TOU share margin demand loan is designated as a financial liability for accounting purposes and measured at amortized cost.

During the quarter ended March 31, 2018 the TOU share price declined in value, prompting the Company to voluntarily pay down the TOU share margin loan by $2.5 million to maintain the Lending Ratio at less than 55%, funded from borrowings on its Credit Facility.

The effective interest rate on the TOU share margin demand loan as at March 31, 2019 was 3.6%. For the period ended March 31, 2019, if interest rates changed by 1%, with all other variables held constant, the impact on annual interest expense and net loss would be $0.1 million.

In addition to the Lending Ratio requirements, the TOU share margin demand loan is subject to customary non-financial covenants. The Company was in compliance with all TOU share margin demand loan covenants as at March 31, 2019.

10. REVOLVING BANK DEBT

As at March 31, 2019, the Company's reserve-based credit facility (the "Credit Facility") had a borrowing limit ("the Borrowing Limit") of $55.0 million (December 31, 2018 - $55.0 million) under which $39.6 million was drawn (December 31, 2018 – $42.6 million) and $3.7 million of letters of credit had been issued (December 31, 2018 – $3.7 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 2.0% and 4.5%.

On March 27, 2019, the $55.0 million Borrowing Limit was confirmed by the Company's lenders and the maturity was extended from May 31, 2019 to November 30, 2020. It has been presented as a non-current liability on the consolidated statement of financial position as at March 31, 2019. As part of the lenders agreement to extend the term of the Company's revolving bank debt, a significant shareholder has undertaken to support the refinancing of the 2019 Senior Notes. Previously, on November 7, 2018, the Borrowing Limit had been reduced from $60.0 million to $55.0 million, following a reduction in the Borrowing Limit on May 7, 2018 from $65.0 million to $60.0 million. The Credit Facility will revolve until May 31, 2020 and may be extended for a further 364-day period subject to approval by the Company's lenders. If not extended, the Credit Facility will cease to revolve, and all outstanding advances will be repayable on November 30, 2020. The next Borrowing Limit redetermination is scheduled on or prior to November 30, 2019.

The Credit Facility is secured by general, first lien security agreements covering all of the Company's assets, with the exception of the TOU shares that have been pledged as security for the TOU share margin demand loan (note 9) and 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.

The effective interest rate on the Credit Facility at March 31, 2019 was 6.3%. For the period ended March 31, 2019, if interest rates changed by 1% with all other variables held constant, the impact on annual interest expense and net loss would be $0.4 million (Q1 2018 – $0.5 million).

At March 31, 2019, the Credit Facility was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

11. TERM LOAN

			March 31, 2019		December 31, 2018	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
Term loan	March 14, 2021	8.1%	**$ 45,000**	**$ 43,861**	$ 45,000	$ 43,729

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 has a cross-default provision with the revolving bank debt and contains substantially similar provisions and covenants as the revolving bank debt (note 10). 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 revolving bank debt, TOU shares secured in favor of the TOU share margin demand loan lenders, and certain lands pledged to the gas over bitumen royalty financing counterparty.

At March 31, 2019 the term loan is presented net of $1.1 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 March 31, 2019, the term loan was not subject to any financial covenants and the Company was in compliance with all customary non-financial covenants.

12. SENIOR NOTES

			March 31, 2019		December 31, 2018	
	Maturity date	**Interest rate**	**Principal**	**Carrying Amount**	Principal	Carrying amount
2019 senior notes	July 23, 2019	8.75%	**14,572**	**14,552**	14,572	14,536
2022 senior notes	January 23, 2022	8.75%(1)	**17,918**	**17,385**	17,918	17,344
			$ 32,490	**$ 31,937**	$ 32,490	$ 31,880

(1) Annual interest rate through to January 23, 2018 was 9.75% and 8.75% thereafter.

The 2019 and 2022 senior notes bear a fixed interest rate of 8.75% with semi-annual interest payments due January 31 and July 31 of each year, and have identical covenants and rights.

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. At any time prior to three years before the senior note maturity date, the Company can redeem up to 35 percent of the principal amount of the senior notes at a premium to face value. Within three years of maturity, the Company may redeem up to 100 percent of the senior notes at a premium to face value. Within one year of maturity, the Company may redeem up to 100 percent of the senior notes at the principal amount.

The senior notes have a cross-default provision with the Company's Credit Facility (note 10). In addition, the senior notes indenture contains restrictions on certain payments including dividends, retirement of subordinated debt and stock repurchases. The permitted amount of any restricted payment is limited to:

i) To the extent the Company's Consolidated Debt (defined as the sum of the period end balance of revolving bank debt, the term loan, TOU share margin demand loan and gas over bitumen royalty financing) to trailing twelve-months income before interest, taxes, depletion and depreciation and non-cash items ("TTM EBITDA") is less than 3.0 to 1.0 (the "Consolidated Debt Ratio"), the sum of 50 percent of TTM EBITDA from January 1, 2011 to the end of the most recently completed fiscal quarter plus 100 percent of the fair market value of any equity contributions made to the Company during that period less the sum of all restricted payments during that period; and

ii) To the extent the Company's Consolidated Debt Ratio is greater than or equal to 3.0 to 1.0 pro forma for the proposed restricted payment, $50 million plus 100 percent of the fair market value of any equity contributions made to the Company.

At March 31, 2019, the senior notes are presented net of $0.6 million in issue costs which are amortized over the remaining term using a weighted average effective interest rate of 9.6%.

At March 31, 2019, 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.

On May 7, 2019, Perpetual announced it will early redeem the $14.6 million 8.75% senior unsecured notes due July 23, 2019 (the "2019 Senior Notes"), effective June 11, 2019 for $1,000 for each $1,000 principal amount of 2019 Senior Notes (the "Cash Consideration"), or $1,075 principal amount of 8.75% senior unsecured notes due January 23, 2022 (the "2022 Senior Notes"). A significant shareholder of the Company will backstop the Cash Consideration such that the redemption of the $14.6 million 2019 Senior Notes will be fully funded, and result in the issuance of $15.7 million 2022 Senior Notes.

13. LEASE LIABILITIES

	Total
January 1, 2019	**3,126**
Additions	**–**
Interest expense (note 18)	**50**
Payments	**(157)**
March 31, 2019	**3,019**
Current	**606**
Non-current	**2,413**
March 31, 2019	**3,019**

Lease terms are negotiated on an individual basis and contain a wide range of terms and conditions. Incremental borrowing rates during the three months ended March 31, 2019 were between 4.3% and 6.6%.

Undiscounted cash outflows related to the lease liabilities are:

	Less than 1 year	Year 2	Year 3	Year 4	Thereafter	Total
Head office	458	520	581	581	1,161	**3,301**
Vehicles	101	76	6	–	–	**183**
Other leases	68	72	18	–	–	**158**
Impact of discounting	(21)	(63)	(93)	(121)	(325)	**(623)**
Total	**606**	**605**	**512**	**460**	**836**	**3,019**

14. DECOMMISSIONING OBLIGATIONS

The following significant assumptions were used to estimate decommissioning obligations:

	March 31, 2019	December 31, 2018
Obligations incurred, including acquisitions	**$ –**	$ 632
Change in risk free interest rate	**1,455**	(287)
Change in estimates	**–**	4,299
Change in decommissioning obligations related to PP&E (note 5)	**1,455**	4,644
Obligations settled	**(306)**	(1,969)
Obligations disposed	**–**	(500)
Accretion (note 18)	**215**	841
Change in decommissioning obligations	**1,364**	3,016
Balance, beginning of year	**40,097**	37,081
Balance, end of year	**$ 41,461**	$ 40,097
Current	**$ 2,280**	$ 1,731
Non-current	**39,181**	38,366
Total	**$ 41,461**	$ 40,097

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

	March 31, 2019	December 31, 2018
Undiscounted obligations	**$ 40,865**	$ 41,171
Average risk-free rate	**1.9%**	2.2%
Inflation rate	**2.0%**	2.0%
Expected timing of settling obligations	**1 to 25 years**	1 to 25 years

15. SHARE CAPITAL

	March 31, 2019		December 31, 2018	
	Shares *(thousands)*	**Amount *($thousands)***	Shares *(thousands)*	Amount *($thousands)*
Balance, beginning of period	**60,240**	**$ 1,338,369**	59,263	$ 1,336,838
Issued pursuant to share-based payment plans	**19**	**59**	1,191	1,200
Shares held in trust purchases (b)	**(339)**	**(100)**	(633)	(325)
Shares held in trust issued (b)	**117**	**78**	419	656
Balance, end of period	**60,037**	**$ 1,338,406**	60,240	$ 1,338,369

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 16d). 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 March 31, 2019, 0.9 million shares were held in trust (December 31, 2018 – 0.7 million).

c) Warrants

The following table summarizes the warrants issued:

	Warrants (*thousands*)	**Amount (*$thousands*)**
Balance, December 31, 2017	6,480	$ 923
Warrants exercised for common shares	–	–
Balance, December 31, 2018	6,480	$ 923
Warrants exercised for common shares	–	–
Balance, March 31, 2019	**6,480**	**$ 923**

Each warrant entitles the holder to acquire common shares on a one for one basis at an exercise price of $2.34 per share prior to March 14, 2020. If the volume weighted average price of Perpetual's common shares is greater than $2.34 per share for 60 consecutive calendar days, Perpetual has the option to require warrant holders to exercise all or any portion of the warrants at any time thereafter.

d) Per share information

	Three months ended March 31,	
	2019	2018
(*thousands, except per share amounts*)		
Net loss – basic	**$ (4,892)**	$ (6,465)
Effect of dilutive securities	**–**	–
Net loss – diluted	**$ (4,892)**	$ (6,465)
Weighted average shares		
Issued common shares	**60,911**	59,759
Effect of shares held in trust	**(800)**	(414)
Weighted average common shares outstanding – basic and diluted	**60,111**	59,345
Net loss per share – basic and diluted	**$ (0.08)**	$ (0.11)

In computing per share amounts for the three months ended March 31, 2019, 18.4 million potentially issuable common shares through the share-based compensation plans (Q1 2018 – 16.1 million) and warrants were excluded as the Corporation had a net loss.

16. SHARE-BASED PAYMENTS

The components of share-based payments are as follows:

	Three months ended March 31,	
	2019	2018
Share options (note 16a)	**$ 157**	$ 239
Restricted rights (note 16b)	–	–
Performance share rights (note 16c)	**408**	252
Compensation awards (note 16d)	**143**	315
Share-based payments	**$ 708**	$ 806

a) Share option plan

Perpetual's share option plan provides a long-term incentive to employees and directors associated with the Company's long-term performance. The Board of Directors administers the share option plan and determines participants, number of share options and terms of vesting. The exercise price of the share options granted shall not be less than the value of the weighted average trading price for the Company's common shares for the five trading days immediately preceding the date of grant. Share options granted vest evenly over 4 years, with expiry occurring 5 years after issuance.

The following tables summarize information about share options outstanding:

	March 31, 2019		December 31, 2018	
	Average exercise price *($/share)*	**Share options *(thousands)***	Average exercise price *($/share)*	Share options *(thousands)*
Balance, beginning of period	**1.33**	**4,724**	1.67	3,987
Granted	–	–	0.25	903
Cancelled/forfeited	–	–	1.66	(83)
Expired	–	–	5.97	(83)
Balance, end of period	**1.33**	**4,724**	1.33	4,724

	Options outstanding			**Options exercisable**	
Range of exercise prices	**Number of share options (*thousands*)**	**Average contractual life (*years*)**	**Weighted average exercise price (*$/share*)**	**Number of share options (*thousands*)**	**Weighted average exercise price (*$/share*)**
$0.25 to $1.13	903	4.7	0.25	–	–
$1.14 to $1.57	1,805	2.2	1.41	930	1.42
$1.58 to $2.00	2,016	3.1	1.73	602	1.75
Total	4,724	3.0	1.33	1,532	1.55

The Company used the Black Scholes pricing model to calculate the estimated fair value of the outstanding share options at the date of grant. During the three months ended March 31, 2019 and 2018, the Company did not grant any additional share options.

b) Restricted rights plan

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

The fair value of an award granted under the restricted rights plan is assessed on the grant date by factoring in the weighted average common share trading price for the five days preceding the grant date. This fair value is recognized as share-based payment expense over the vesting period with a corresponding increase to contributed surplus. Upon exercise of restricted rights, the value in contributed surplus pertaining to the exercise is recorded as shareholders capital. During the three months ended March 31, 2019, the Company did not grant any restricted rights to employees, other than to settle performance share rights and deferred shares.

Restricted rights granted upon the exercise of performance share rights (note 16c) vest on the grant date and have a 90-day exercise period. Restricted rights granted upon the exercise of deferred compensation awards (note 16d) vest on the grant date and have a 30-day exercise period. No value is assigned to restricted rights issued pursuant to those plans as the value and expense have been previously recognized pursuant to the grant date and expensed over the vesting period of the underlying performance share rights and deferred compensation awards.

The following table shows changes in the restricted rights outstanding under the restricted rights plan:

(*thousands*)	**March 31, 2019**	December 31, 2018
Balance, beginning of period	–	–
Granted to employees	–	–
Granted pursuant to exercise of performance share rights (note 16c)	–	1,008
Granted pursuant to exercise of deferred shares (note 16d)	**37**	196
Exercised for common shares	**(20)**	(1,204)
Balance, end of period	**17**	–

c) Performance share rights plan

The Company has an equity-settled performance share rights plan for the Company's executive officers. Performance rights granted under the performance share rights plan vest two years after the date upon which the performance rights were granted. The performance rights that vest and become redeemable are a multiple of the performance rights granted, dependent upon the achievement of certain performance metrics over the vesting period. Vested performance rights can be settled in cash or restricted rights (note 16b), at the discretion of the Board of Directors. Performance rights are forfeited if participants of the performance share rights plan leave the organization other than through retirement or termination without cause prior to the vesting date.

The fair value of an award granted under the performance share rights plan is determined at the date of grant by using the closing price of common shares multiplied by the estimated performance multiplier. As at March 31, 2019, performance multipliers of 1.0 have been assumed for those unvested awards granted in 2018. Fluctuations in share-based payment expense may occur due to changes in estimates of performance outcomes. The amount of share-based payment expense is reduced by an estimated forfeiture rate of 5% (2018 – 5%) for outstanding awards. During the three months ended March 31, 2019, the Company did not grant any additional performance share rights.

The following table shows changes in the performance share rights outstanding under the performance share rights plan:

(*thousands*)	**March 31, 2019**	December 31, 2018
Balance, beginning of period	**1,465**	1,060
Granted	–	1,035
Performance adjustment[(1)]	**(215)**	–
Exercised in exchange for restricted rights[(1)]	–	(630)
Balance, end of period	**1,250**	1,465

(1) In 2019, vested performance share rights are exercisable in exchange for restricted rights based on a performance multiplier of 0.5. In 2018, vested performance share rights were exercised based on a performance multiplier of 1.6.

In 2018, the Company introduced a performance-based long-term incentive awards plan (the "PLTI" plan) for the executive officers. The awards granted pursuant to the plan are tied to specific individual-based performance metrics established by the Board which can be based on "total shareholder return" or other metrics specifically designed to align with value creation for shareholders and to incentivize and retain key executive officers. The awards vest evenly over 4 years, with expiry occurring 5 years after issuance. Upon vesting, award holders may be entitled to receive, at the discretion of the Board of Directors, cash, a grant of restricted rights (note 16b), or a combination of cash and restricted rights. Awards granted pursuant to the PLTI plan are included in the table below (note 16d).

Certain awards granted under the PLTI plan contain monetary awards that may be settled in cash, in common shares of the Company, or a combination thereof at the discretion of the Board of Directors, equal to the monetary amount at the time of vesting. These awards are accounted for as cash-settled share-based compensation in which the fair value of the estimated amounts payable under the plan are recognized incrementally as an expense over the vesting period, with a corresponding change in liabilities. Upon exercise of these agreements in exchange for cash, the liability is reduced. Upon exercise of these awards in exchange for a variable number of shares, the value in liabilities pertaining to the exercise is recorded as share capital. As at March 31, 2019, $0.8 million had been accrued pursuant to cash-settled share-based compensation awards (December 31, 2018 – $0.4 million).

d) Deferred compensation awards

Deferred options

The Company has deferred option agreements in place with certain employees whereby they may be entitled to receive shares of the Company purchased on the open market by an independent trustee if they remain employees of the Company during such time and exercise their options. Deferred options generally vest evenly over 4 years, with expiry occurring 5 years after issuance. The shares purchased by the independent trustee are reported as shares held in trust (note 15b).

The following tables summarize information about the deferred options and performance-based long-term incentive awards:

	March 31, 2019		December 31, 2018	
	Average exercise price (*$/share*)	**Deferred options (*thousands*)**	Average exercise price (*$/share*)	Deferred options (*thousands*)
Balance, beginning of period	**0.84**	**4,165**	1.68	2,268
Granted	**–**	**–**	0.25	2,159
Cancelled/forfeited	**1.28**	**(63)**	1.68	(220)
Expired	**–**	**–**	4.73	(42)
Balance, end of period	**0.83**	**4,102**	0.91	4,165

	Deferred options outstanding			**Deferred options exercisable**	
Range of exercise prices	**Number of deferred options (*thousands*)**	**Average contractual life (*years*)**	**Weighted average exercise price (*$/share*)**	**Number of deferred options (*thousands*)**	**Weighted average exercise price (*$/share*)**
$0.25 to $1.13	2,143	4.7	0.25	–	–
$1.14 to $1.57	722	2.2	1.42	361	1.42
$1.58 to $3.16	1,237	3.1	1.73	329	1.75
Total	4,102	3.7	0.83	690	1.58

The Company used the Black Scholes pricing model to calculate the estimated fair value of deferred options at the date of grant. During the three months ended March 31, 2019, the Company did not grant any additional deferred options.

Deferred shares

The Company also has deferred share agreements in place with directors and certain employees whereby, in the case of directors, upon retirement from the Board of Directors, or in the case of employees, over a period of two years if they remain employees of the Company during such time, may be entitled to receive at the discretion of the Board of Directors, cash, a grant of restricted rights (note 16b) or shares of the Company purchased on the open market by an independent trustee. The shares purchased by the independent trustee are reported as shares held in trust (note 15b).

The fair value of these agreements is assessed on the grant date by factoring in the weighted average common share trading price for the five days preceding the grant date and is reduced by an estimated forfeiture rate of 5% (2018 – 5%). The fair value is recognized as share-based payment expense over the vesting period with a corresponding increase to contributed surplus. Upon exercise of these agreements in exchange for restricted rights, the value in contributed surplus pertaining to the exercise is recorded as share capital. Upon exercise of these agreements in exchange for shares held in trust, the shares held in trust account is reduced by the number of shares issued using the average cost base of purchased shares and offset to contributed surplus. During the three months ended March 31, 2019, the Company did not grant any additional deferred shares.

The following table shows changes to these awards:

(*thousands*)	**March 31, 2019**	December 31, 2018
Balance, beginning of period	**1,947**	1,857
Granted	–	784
Exercised in exchange for shares held in trust (note 15)	**(121)**	(419)
Exercised in exchange for restricted rights (note 16b)	**(37)**	(196)
Cancelled/forfeited	**(17)**	(79)
Balance, end of period	**1,772**	1,947

17. REVENUE

The Company sells its production pursuant to fixed or variable price contracts. The transaction price for variable priced contracts is based on the commodity price, adjusted for quality, location or other factors, whereby each component of the pricing formula can be either fixed or variable, depending on the contract terms. Under the contracts, the Company is required to deliver fixed or variable volumes of 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 on a five-year contract expiring October 31, 2022, at fixed volume obligations of 35,000 MMBtu/d (40,000 MMBtu/d having commenced April 1, 2018) and priced at daily index prices at each of the five market price points, less transportation costs from AECO to each market price point as follows:

Market/Pricing Point	**Daily sales volume (*MMBtu/d*)**
Chicago	12,200
Malin	10,800
Dawn	8,000
Michcon	5,200
Empress	3,800
Total natural gas sales volume obligation	**40,000**

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

	Three months ended March 31,	
	2019	2018
Oil and natural gas revenue		
Natural gas[(1)]	**14,888**	15,451
Oil	**5,038**	3,490
NGL	**2,273**	4,399
Total oil and natural gas revenue	**22,199**	23,340

(1) Includes revenues related to the market diversification contract and physical forward sales contracts which settled during the period.

Included in accounts receivable at March 31, 2019 is $6.9 million of accrued oil and natural gas revenue related to March 2019 production (December 31, 2018 – $7.9 million related to December 2018 production).

18. FINANCE EXPENSE

The components of finance expense are as follows:

	Three months ended March 31, **2019**	2018
Cash interest expense and income		
Interest on revolving bank debt	**683**	468
Interest on TOU share margin demand loan	**121**	148
Interest on term loan	**911**	911
Interest on senior notes	**711**	721
Interest on lease liabilities (note 13)	**50**	–
Dividend income from TOU share investment	**(166)**	(133)
Total cash interest expense (and income)	**2,310**	2,115
Non-cash finance expense		
Amortization of debt issue costs	**272**	250
Accretion on decommissioning obligations (note 14)	**215**	207
Change in fair value of gas over bitumen royalty financing	**408**	(130)
Total non-cash finance expense	**895**	327
Finance expenses recognized in net loss	**3,205**	2,442

19. FINANCIAL RISK MANAGEMENT

Realized gains on derivatives recognized in net loss for the three months ended March 31, 2019 were $0.1 million (2018 – $0.7 million). The realized gains on derivatives for the three months ended March 31, 2019 did not include the early settlement of any contracts prior to their maturity.

Natural gas contracts

At March 31, 2019 the Company had entered into the following physical fixed price natural gas sales arrangements at AECO:

Term	**Sold/bought**	**Volumes (*GJ/d*)**	**Average price (*$/GJ*)**	**Fair Value (*$ thousands*)**
April 2019 – October 2019	Sold	10,551	1.74	1,323
June 2019 – October 2019	Sold	5,000	1.23	106

At March 31, 2019 the Company had entered into the following financial fixed price natural gas sales arrangements at AECO:

Term	**Sold/bought**	**Volumes (*GJ/d*)**	**Average price (*$/GJ*)**	**Fair Value (*$ thousands*)**
April 2019	Sold	7,913	1.65	65

At March 31, 2019 the Company had entered into the following physical basis differential contracts between AECO and NYMEX:

Term	**Sold/bought**	**Volumes (*MMBtu/d*)**	**AECO-NYMEX differential (*US$/MMBtu*)**	**Fair Value (*$ thousands*)**
April 2019 – October 2019	Bought	(10,000)	(1.64)	(602)
April 2019 – October 2019	Sold	5,000	(1.62)	326
April 2019 – December 2019	Sold	2,500	(1.55)	189
November 2019 – December 2019	Sold	10,000	(1.54)	(77)
January 2020 – December 2020	Sold	12,500	(1.41)	701
January 2021 – December 2021	Sold	5,000	(1.15)	562

At March 31, 2019 the Company had entered into the following financial basis differential contracts between AECO and NYMEX:

Term	**Sold/bought**	**Volumes (*MMBtu/d*)**	**AECO-NYMEX differential (*US$/MMBtu*)**	**Fair Value (*$ thousands*)**
May 2019 – December 2019	Sold	7,500	(1.50)	645
January 2020 – December 2020	Sold	15,000	(1.41)	870

Natural gas contracts - sensitivity analysis

As at March 31, 2019, if future natural gas prices changed by $0.25 per GJ with all other variables held constant, the fair value of derivatives and net loss for the period would change by $4.9 million. Fair value sensitivity was based on published forward AECO and NYMEX prices.

Oil contracts

At March 31, 2019, the Company had entered into the following financial costless collar oil sales arrangements which settle in US$:

Term	Volumes at WTI (*bbls/d*)	Floor price (*US$/bbl*)	Ceiling price (US*$bbl*)	Fair Value (*$ thousands*)
April 2019 – December 2019	500	60.00	72.40	552

At March 31, 2019, the Company had entered into the following financial oil basis differential contracts between WTI and WCS trading:

Term	Volumes at WTI (*bbls/d*)	WTI-WCS differential (*US$/bbl*)	Fair Value (*$ thousands*)
April 2019 – December 2019	750	(25.22)	(2,765)

Oil contracts - sensitivity analysis

As at March 31, 2019, if future oil prices changed by $5.00 per boe with all other variables held constant, the fair value of derivatives and net loss for the period would change by $1.7 million. Fair value sensitivity was based on published forward WTI and WCS prices.

Foreign exchange contracts

At March 31, 2019, the Company had entered into the following US$ forward sales arrangements to manage the Company's exposure to US$ denominated natural gas sales:

Term	Notional (*US$ thousands/month*)	Strike rate (*US$/Cdn$*)	Fair Value (*$ thousands*)
April 2019 – October 2019	2,000	1.31	(302)
November 2019 – March 2020	2,000	1.29	(335)
April 2020 – October 2020	1,500	1.30	(190)

Foreign exchange contracts - sensitivity analysis

As at March 31, 2019, if future exchange rates changed by $0.10 US$/Cdn$ with all other variables held constant, the fair value of foreign exchange derivatives and net loss for the period would change by $3.5 million. Fair value sensitivity was based on published forward US$/Cdn$ rates.

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

	March 31, 2019	December 31, 2018
Physical natural gas contracts	**$ 2,528**	$ 5,293
Financial natural gas contracts	**1,580**	4,336
Financial oil contracts	**(2,213)**	1,289
Financial foreign exchange contracts	**(827)**	(2,299)
Fair value of derivatives	**$ 1,068**	$ 8,619
Derivative assets – current	**2,112**	7,012
Derivative assets – non-current	**1,996**	3,906
Derivative liabilities – current	**(2,850)**	(1,405)
Derivative liabilities – non-current	**(190)**	(894)
Fair value of derivatives	**$ 1,068**	$ 8,619

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

	Three months ended March 31,	
	2019	2018
Unrealized gain (loss) on financial natural gas contracts	**(2,756)**	434
Unrealized gain (loss) on physical natural gas contracts	**(2,765)**	(1,948)
Unrealized gain (loss) on financial oil contracts	**(3,502)**	(812)
Unrealized gain (loss) on forward foreign exchange contracts	**1,472**	–
Unrealized change in fair value of derivatives	**(7,551)**	(2,326)
Realized gain (loss) on financial natural gas contracts	**1,295**	267
Realized gain (loss) on financial oil contracts	**(890)**	424
Realized gain (loss) on forward foreign exchange contracts	**(263)**	–
Change in fair value of derivatives	**(7,409)**	(1,635)

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

				Fair value		
As at March 31, 2019	**Gross**	**Netting[(1)]**	**Carrying Amount**	**Level 1**	**Level 2**	**Level 3**
Financial assets						
Fair value through profit and loss						
TOU share investment	34,196	–	34,196	34,196	–	–
Derivatives	5,382	(1,274)	4,108	–	4,108	–
Financial liabilities						
Financial liabilities at amortized cost						
TOU share margin demand loan	(14,080)	–	(14,080)	(14,100)	–	–
Revolving bank debt	(39,598)	–	(39,598)	(39,932)	–	–
Senior notes	(31,937)	–	(31,937)	–	(30,638)	–
Term loan	(43,861)	–	(43,861)	–	–	(45,000)
Lease liabilities	(3,019)	–	(3,019)	–	–	(3,019)
Fair value through profit and loss						
Derivatives	(4,314)	1,274	(3,040)	–	(3,040)	–
Gas over bitumen royalty financing	(1,165)	–	(1,165)	–	–	(1,165)

(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.