# MANAGEMENT'S DISCUSSION AND ANALYSIS

*The following is management's discussion and analysis ("MD&A") of Perpetual Energy Inc.'s ("Perpetual", the "Company" or the "Corporation") operating and financial results for the three and six months ended June 30, 2017 as well as information and estimates concerning the Corporation's future outlook based on currently available information. This discussion should be read in conjunction with the Corporation's condensed interim consolidated financial statements and accompanying notes for the three and six months ended June 30, 2017 as well as audited consolidated financial statements and accompanying notes for the years ended December 31, 2016 and 2015. The MD&A should be read in conjunction with the Corporation's MD&A for the year ended December 31, 2016 as disclosure which is unchanged from the December 31, 2016 MD&A has not been duplicated herein. The Corporation's consolidated financial statements are prepared in accordance with Canadian generally accepted accounting principles ("GAAP") which require publicly accountable enterprises to prepare their financial statements using International Financial Reporting Standards ("IFRS"). Readers are referred to the advisories for additional information regarding forecasts, assumptions and other forward-looking information contained in the "Forward Looking Information and Statements" section of this MD&A. The date of this MD&A is August 10, 2017.*

*Certain financial measures referred to in this MD&A are not prescribed by IFRS. See "Non-GAAP Financial Measures" for information regarding the following non-GAAP financial measures used in this MD&A: "adjusted funds flow", "operating netback", "realized revenue", "gas over bitumen net of payments", "adjusted working capital deficiency (surplus)", "net debt", and "total capitalization".*

**NATURE OF BUSINESS**: Perpetual is an oil and natural gas exploration, production and marketing company headquartered in Calgary, Alberta. Perpetual operates a diversified asset portfolio, including liquids-rich natural gas assets in the deep basin of west central Alberta, heavy oil and shallow natural gas in eastern Alberta, with longer term opportunities through undeveloped oil sands leases in northern Alberta. Additional information on Perpetual, including the most recently filed Annual Information Form ("AIF"), can be accessed at www.sedar.com or from the Corporation's website at www.perpetualenergyinc.com.

On October 1, 2016, the Company disposed of a significant portion of the Company's shallow gas properties in east central and northeast Alberta (the "Shallow Gas Disposition"). The Shallow Gas Disposition resulted in the sale of over 40% of low netback, mature shallow gas production and approximately 20% of proved and probable reserves, but created significant value by disposing of $128.0 million of decommissioning obligations while improving cash flow. The impact of this disposition has a pervasive effect when comparing to prior period financial and operating results in this MD&A and is the primary driver of period over period variances unless otherwise noted in the foregoing analysis.

## SECOND QUARTER 2017 HIGHLIGHTS

During the second quarter of 2017, Perpetual's exploration and development spending totaled $4.0 million ($28.6 million year to date), a four-fold increase over prior year spending levels as October 1, 2016 Shallow Gas Dispositions combined with several financing initiatives undertaken in 2017, have provided a strong foundation for growth.

Drilling and completion activity was focused at East Edson, comprising 87% of capital expenditures. One (1.0 net) Wilrich horizontal well was drilled which was previously forecast to be spud in the third quarter. Wet weather conditions throughout the second quarter impacted access and delayed frac and tie-in operations for 3 wells drilled in the first quarter, all 3 of which have been frac'd and tied into production in July.

Capital spending in eastern Alberta comprised the remaining 13% of capital spending in the second quarter, and included additional completion and equipping on the Q1 drilling program, 2 oil well reactivations and 8 gas recompletions. Two of the three exploratory oil pool tests in Q1 have established oil production; however, at current oil prices the development locations are not as attractive as East Edson drilling and will be deferred until higher commodity prices can be realized. Low variable operating costs in Mannville result in shallow gas recompletions paying out within six months, even at relatively low commodity prices. The two horizontal wells drilled during the fourth quarter of 2016 and the first quarter of 2017 to advance the evaluation of the shallow shale gas play in the Viking and Colorado formations, are on production at low rates and are being evaluated. Fracture stimulation of the Viking gas well has been delayed pending further learnings and a recovery in natural gas prices.

Second quarter average production of 9,223 boe/d was 13% higher than the first quarter of 2017 as increased production due to the ramp up of capital investment subsequent to the Shallow Gas Disposition, more than offset natural declines. Compared to the second quarter of 2016, total production was down 6,736 boe/d or 42% primarily driven by the sale of 6,424 boe/d related to producing assets included in the Shallow Gas Disposition which represented 95% of the period over period variance. The remaining second quarter variance was due to natural production declines as capital spending was constrained throughout 2016 due to low commodity prices.

Despite the 42% decrease in average daily production compared to the second quarter of 2016, adjusted funds flow grew to $5.2 million in the second quarter of 2017 compared to negative $1.9 million in the prior year period. Improved performance compared to the prior year period reflected higher netbacks related to increased average realized prices and lower production and operating costs. Operating costs during the second quarter of 2017 on a unit-of-production basis were reduced by 15% compared to the same period in 2016, demonstrating the Company's positive results over the past 12 months to affect a sustainable cost structure to increase operating netbacks per boe.

Perpetual continued to take steps to strengthen its financial position during the second quarter. On April 17, 2017 Perpetual exchanged $0.5 million 8.75% senior notes that were scheduled to mature on March 15, 2018 (the "2018 Senior Notes") for new 8.75% senior notes maturing on January 23, 2022 (the "2022 Senior Notes") and completed the early repayment of the remaining $27.1 million 2018 Senior Notes. In mid-July, $1.0 million face value of senior notes due to mature on July 23, 2019 (the "2019 Senior Notes") were re-purchased at 96.75% of face value and also retired. On July 4, 2017, the Company announced that it had doubled its borrowing capacity available under its reserve-based credit facility (the "Credit Facility") to $40 million and extended its repayment term to two years, at lower borrowing costs. On July 31, 2017, the Company also completed the refinancing of the $36.5 million of margin loans secured by the Company's shares of Tourmaline Oil Corp. ("TOU"), with $18.7 million of proceeds from a replacement one-year margin loan, and borrowings under its Credit Facility. As at June 30, 2017, 49% of Perpetual's debt matures in 2021 or later. Incorporating net debt at June 30, 2017, adjusted for the financing transactions completed in July 2017, Perpetual has access to draw approximately $24 million under the Credit Facility and second lien senior secured term loan facility (the "Term Loan"). Combined with the current market value of the Company's TOU share investment, net of the new margin loan, total current available liquidity is approximately $48 million. On July 7, 2017, Moody's Investor Service upgraded Perpetual's corporate credit rating to Caa1 stable.

**OUTLOOK**

Success in advancing the Company's strategic priorities has established a foundation for strong growth in production and adjusted funds flow in 2017. Financing transactions closed during 2017 have ensured sufficient liquidity to execute the planned growth-oriented capital program. The Company will continue its diligent focus on capital efficiency improvements and reductions in operating, financing and administrative costs to improve upon the sustainable cost structure driven by strategic decisions implemented over the past two years.

Based on the total capital spending plan in 2017 of $65 to $70 million, Perpetual expects to exit 2017 at a production rate of approximately 13,000 boe/d. This represents growth in exit rate based on average December production of approximately 60% compared to the prior year. Full year 2017 production is expected to average 10,000 to 11,000 boe/d (85% natural gas).

The Company began actively executing its single rig, continuous drilling program in early June and is planning to drill up to nine horizontal wells at East Edson during the second half of 2017. With the recent completion and frac of the three standing Q1 drills in mid-July as well as the first two post spring break-up drills in early August, production capacity at East Edson is expected to exceed the company-owned infrastructure capacity and matching firm transportation capacity of 60 to 65 MMcf/d plus associated liquids. Perpetual has also agreed to participate in a 40% working interest non-operated Notikewin horizontal drill in the Brazeau area during the third quarter. Operations at Mannville will be primarily focused on additional waterflood conversion as well as shallow gas recompletions, with up to 23 additional recompletions planned for the second half of 2017. Heavy oil drilling will likely be deferred until 2018, pending higher oil prices.

Capital spending during the remainder of 2017 will be funded through adjusted funds flow generation, the final $10 million drawdown of the Term Loan and borrowings under the Credit Facility.

In order to protect a base level of adjusted funds flow, Perpetual has commodity price contracts in place for the second half of 2017 on an estimated 45% of forecast production for the remainder of the year. These include a combination of forward month physical and financial natural gas contracts at AECO hub on a net 27,500 GJ/d to December 2017 at an average price of $3.15/GJ and 12,500 GJ/d for November 2017 through March 2018 at an average price of $2.94/GJ. Additionally, the Company has diversified its natural gas price exposure from AECO by entering into arrangements to sell 25,000 MMBtu/d priced using a basket of five North American natural gas hub pricing points for a five year period commencing November 1, 2017. Perpetual also has oil sales arrangements on 750 bbl/d protecting a WTI floor price of $USD50.00/bbl. See "Commodity Price Risk Management" section of this MD&A for further details.

Based on these assumptions and the current forward market for oil and natural gas prices, Perpetual forecasts 2017 adjusted funds flow of approximately $28 to $32 million. Incorporating the current market value of 1.67 million Tourmaline Oil Corp. shares (TSX – "TOU"), the Company estimates year-end 2017 total net debt of approximately $90 to $100 million, with a corresponding estimated net debt to trailing twelve months adjusted funds flow ratio of approximately 3.2 at year end 2017.

**SECOND QUARTER FINANCIAL AND OPERATING RESULTS**

**Capital expenditures**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands*) | **2017** | 2016 | **2017** | 2016 |
| Exploration and development | **3,981** | 822 | **28,544** | 5,616 |
| Other | **25** | 464 | **52** | 484 |
| Capital expenditures | **4,006** | 1,286 | **28,596** | 6,100 |
| Geological and geophysical costs[1] | **(22)** | 11 | **(22)** | 26 |
| Dispositions, net of acquisitions | **609** | (302) | **772** | (6,768) |
| Disposition of gas storage facility investment | **–** | (19,750) | **–** | (19,750) |
| **Total** | **4,593** | (18,755) | **29,346** | (20,392) |

(1) Geological and geophysical expenditures and dry hole costs are expensed directly in the Corporation's statement of income (loss); they are considered by Perpetual to be more closely related to investing activities than operating activities, and therefore are included with capital expenditures for the purposes of this MD&A.

***Exploration and development spending by area***

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands*) | **2017** | 2016 | **2017** | 2016 |
| West Central | **3,448** | 675 | **21,973** | 5,311 |
| Eastern Alberta | **533** | 147 | **6,571** | 305 |
| **Total** | **3,981** | 822 | **28,544** | 5,616 |

***Wells drilled by area***

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (gross/net) | **2017** | 2016 | **2017** | 2016 |
| West Central | **1/1.0** | -/- | **6/6.0** | 1/1.0 |
| Eastern Alberta | **-/-** | -/- | **5/4.3** | -/- |
| **Total** | **1/1.0** | -/- | **11/10.3** | 1/1.0 |

Capital expenditure activity levels in the second quarter are seasonally reduced as the spring thaw and rain reduces road and lease accessibility. Perpetual's exploration and development spending in the second quarter of 2017 totaled $4.0 million (Q2 2016 - $0.8 million). For the six months ended June 30, 2017, exploration and development expenditures reached $28.5 million, an increase of 408% over prior year levels as financing initiatives and improved commodity prices have supported strong investment in the Company's asset base.

Spending at East Edson represented 87% of total exploration and development expenditures in the second quarter (77% year to date). East Edson capital activity included the drilling of one (1.0 net) Wilrich horizontal well which was previously forecast to be spud in the third quarter. Weather access issues continued throughout the second quarter and delayed frac and tie-in operations for three wells drilled in the first quarter, all three of which were frac'd and brought on production in July. Road upgrade costs of $0.6 million are now forecast for the second half of 2017 to improve year round access issues. The Company plans to continue drilling through the third quarter to grow production at East Edson to fill the existing Company-owned infrastructure and matching firm transportation capacity of 60 to 65 MMcf/d plus associated liquids, with the drilling of up to an additional 9 wells during the second half of 2017. Drilling costs continue to show a 30% improvement over prior year costs as a result of well design changes, with seven wells now having been drilled with an average cost of $1.75 million per well, excluding pad and completion costs. Several extended reach horizontal wells are included in the drilling program which are expected to result in a continued reduction in costs per horizontal meter of formation to continue to drive enhanced capital efficiencies in the Wilrich play.

Spending in Eastern Alberta consisted of additional completion and equipping costs on the Q1 drilling program, 2 oil well reactivations, and 8 gas recompletions. The two exploratory oil pool tests in Q1 have established oil production; however, at current oil prices the development locations will be deferred until higher commodity prices can be realized, allowing capital spending to be strategically high-graded for East Edson growth. Low variable operating costs in Mannville result in recompletions paying out within 6 months even at low commodity prices, and these will continue during the second half of 2017 with up to 23 additional recompletions planned. The two horizontal wells drilled during the fourth quarter of 2016 and the first quarter of 2017 to advance the evaluation of the shallow shale gas play in the Viking and Colorado formations are on production at low rates and are being evaluated. Fracture stimulation of the Viking gas well has been delayed pending further learnings and stronger natural gas prices.

***Expenditures on decommissioning obligations***

During the six months ended June 30, 2017, Perpetual spent $0.5 million (2016 - $2.0 million) on abandonment and reclamation projects. Plans are in place to execute an internally-managed asset-retirement program at Mannville in the second half of 2017 targeting well abandonments, pipeline discontinuations and abandonments as well as reclamation work to reduce mineral and surface lease rental payments, maintenance costs and high municipal taxes associated with the linear property in the Mannville area. Anticipated expenditures over the remainder of 2017 are $1.5 million to $2.0 million.

**Net income (loss)**

Loss from operating activities for the second quarter of 2017 was $1.4 million, a $23.2 million improvement over the prior year period due to improved commodity prices, cost reductions, and the absence of high cost, Shallow Gas Disposition production. For the six month period ended June 30, 2017, loss from operating activities was $2.5 million, a $15.2 million improvement over the prior year period, due to the same drivers of improved second quarter comparable performance.

Net loss for the three month and six month periods ended June 30, 2017 was $7.2 million and $21.4 million respectively, and included reductions in the fair value of Perpetual's TOU share investment of $3.0 million and $14.2 million respectively, due to the declines in TOU's share price during the period.

Net income for the three month and six month periods ended June 30, 2016 of $64.9 million and $97.7 million respectively, included an $81.5 million gain realized on the exchange of 4.4 million TOU shares for $214.4 million principal amount of 8.75% senior notes at a discount to par value that was completed in the second quarter of 2016. The resulting reduction in debt is the primary contributor to lower finance expense levels in 2017. During the second quarter of 2016, Perpetual sold its interest in a gas storage facility for proceeds of $19.8 million, resulting in a loss of $6.1 million. The fair value of the Company's TOU share investment increased by $21.4 million and $55.4 million in the three and six month periods ended June 30, 2016 which contributed to net income.

**Cash flow from operating activities**

Cash flow from operating activities for the second quarter of 2017 was $4.7 million, compared to cash flow used in operating activities of $3.4 million in the prior year period, due to improved realized commodity prices, lower costs and the absence of high cost, Shallow Gas Disposition production.

For the six months ended June 30, 2017, cash flow from operating activities was $2.4 million, an improvement of $12.6 million over the prior year period due to the same drivers that contributed to improved operating performance in the second quarter.

**Adjusted funds flow**

Management uses adjusted funds flow and adjusted funds flow per share to analyze operating performance and borrowing capacity. Adjusted funds flow is cash flow from operating activities before changes in non-cash working capital, settlement of decommissioning obligations and certain exploration and evaluation costs, but after payments on the gas over bitumen royalty financing and payments on restructuring costs. Adjusted funds flow is not intended to represent cash flow from operating activities, net earnings or other measures of financial performance calculated in accordance with IFRS.

Below is a table to reconcile cash flow from operating activities to adjusted funds flow:

| (*$ thousands, except per share amounts*) | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Cash flow from (used in) operating activities | **4,728** | (3,396) | **2,439** | (10,166) |
| Changes in non-cash working capital | **718** | 927 | **7,026** | 7,286 |
| Payments on gas over bitumen royalty financing(1) | **(710)** | (306) | **(1,526)** | (956) |
| Payments on restructuring costs(2) | **555** | – | **1,899** | – |
| Expenditures on decommissioning obligations | **(26)** | 912 | **537** | 2,006 |
| Exploration and evaluation costs(3) | **(22)** | 11 | **(22)** | 26 |
| Adjusted funds flow | **5,243** | (1,852) | **10,353** | (1,804) |
| **Adjusted funds flow per share(4)** | **0.09** | (0.04) | **0.18** | (0.04) |

(1) These payments are indexed to gas over bitumen revenue and are recorded as a reduction to the Corporation's gas over bitumen royalty financing obligation in accordance with IFRS. To present gas over bitumen revenue net of these payments, the Corporation has reclassified these payments from financing to operating activities in the calculation of adjusted funds flow.
(2) Restructuring cost payments include employee downsizing costs and surplus office lease obligations associated with the Shallow Gas Disposition which the Company considers to be unrelated to cash flow from operating activities.
(3) The Corporation expenses exploratory dry hole costs, geological and geophysical costs, lease rentals on undeveloped properties and the cost of expired leases in the period incurred. To make reported adjusted funds flow in this MD&A more comparable to industry practice, dry hole costs and geological and geophysical costs are reclassified from operating to investing activities in the adjusted funds flow reconciliation.
(4) Based on basic weighted average shares outstanding for the period.

For the second quarter of 2017, adjusted funds flow was $5.2 million (six months ended June 30, 2017 - $10.4 million), a $7.1 million increase over the prior year period (six months ended June 30, 2017 - $12.2 million increase over the prior year period). Improved adjusted funds flow performance was due to the same factors detailed above that contributed to improved cash flow from operating activities.

**Reconciliation of adjusted funds flow to net income (loss)**

| | Three months ended June 30, | | | |
|---|---|---|---|---|
| | **2017** | | 2016 | |
| | **(*$ thousands*)** | **(*$/boe*)** | (*$ thousands*) | (*$/boe*) |
| Realized revenue(1) | **19,890** | **23.70** | 20,075 | 13.82 |
| Royalties(2) | **(3,606)** | **(4.30)** | (1,851) | (1.27) |
| Production and operating expenses | **(4,634)** | **(5.52)** | (9,480) | (6.53) |
| Transportation costs | **(1,226)** | **(1.46)** | (2,114) | (1.46) |
| Operating netback(1) | **10,424** | **12.42** | 6,630 | 4.56 |
| Gas over bitumen revenue net of payments | **(23)** | **(0.03)** | (96) | (0.07) |
| Other revenue | **86** | **0.10** | – | – |
| Exploration and evaluation – lease rentals | **(181)** | **(0.22)** | (572) | (0.39) |
| General and administrative expense | **(3,142)** | **(3.74)** | (3,727) | (2.57) |
| Finance expense, cash | **(1,921)** | **(2.29)** | (4,588) | (3.16) |
| Dividends from gas storage investment | **–** | **–** | 501 | 0.34 |
| Adjusted funds flow(1) | **5,243** | **6.24** | (1,852) | (1.29) |
| Unrealized gains (losses) on derivatives | **1,129** | **1.35** | (9,491) | (6.54) |
| Payments on gas over bitumen royalty financing | **710** | **0.85** | 306 | 0.21 |
| Exploration and evaluation(3) | **(483)** | **(0.58)** | (509) | (0.35) |
| Share based compensation expense, non-cash | **(985)** | **(1.17)** | (1,958) | (1.35) |
| Gain (loss) on dispositions | **(1,032)** | **(1.23)** | (5,227) | (3.60) |
| Gain on exchange of senior notes for TOU shares | **–** | **–** | 81,572 | 56.17 |
| Depletion and depreciation | **(7,929)** | **(9.45)** | (16,146) | (11.12) |
| Finance expense, non-cash | **(921)** | **(1.10)** | (3,250) | (2.24) |
| Change in fair value of TOU share investment | **(2,951)** | **(3.52)** | 21,430 | 14.76 |
| Net income and dividends from gas storage investment | **–** | **–** | 50 | 0.03 |
| Net income (loss) | **(7,219)** | **(8.61)** | 64,925 | 44.68 |

(1) See "Non-GAAP measures" in this MD&A.
(2) Includes $2.1 million in gross overriding royalty payments at East Edson for the three months ended June 30, 2017 (Q2 2016- $1.0 million).
(3) Includes non-cash exploration and evaluation expense from expired leases and geological and geophysical costs.

Perpetual's operating netback of $12.42/boe ($10.4 million) in the second quarter of 2017 increased 172% from $4.56/boe ($6.6 million) in the comparative period of 2016. This increase was due to the 71% increase in realized prices and the 15% reduction in unit production and operating expenses, partially offset by increased royalties related to higher commodity prices and lower gas cost allowance recoveries from the Crown. Improved operating cost performance reflected the impact of the Shallow Gas Disposition combined with improved cost performance on retained properties.

| | Six months ended June 30, 2017 | | 2016 | |
|---|---|---|---|---|
| | **($ thousands)** | **($/boe)** | *($ thousands)* | *($/boe)* |
| Realized revenue[(1)] | **38,795** | **24.68** | 52,772 | 16.89 |
| Royalties[(2)] | **(6,708)** | **(4.27)** | (4,128) | (1.32) |
| Production and operating expenses | **(9,235)** | **(5.87)** | (23,849) | (7.63) |
| Transportation costs | **(2,241)** | **(1.43)** | (4,613) | (1.48) |
| Operating netback[(1)] | **20,611** | **13.11** | 20,182 | 6.46 |
| Gas over bitumen revenue net of payments | **86** | **0.05** | (216) | (0.07) |
| Other revenue | **86** | **0.05** | – | – |
| Exploration and evaluation – lease rentals | **(369)** | **(0.23)** | (1,080) | (0.35) |
| General and administrative expense | **(6,243)** | **(3.97)** | (9,670) | (3.09) |
| Finance expense, cash | **(3,818)** | **(2.43)** | (11,521) | (3.69) |
| Dividends from gas storage investment | **–** | **–** | 501 | 0.16 |
| Adjusted funds flow[(1)] | **10,353** | **6.58** | (1,804) | (0.58) |
| Unrealized gains (losses) on derivatives | **4,375** | **2.78** | 1,522 | 0.49 |
| Payments on gas over bitumen royalty financing | **1,526** | **0.97** | 956 | 0.31 |
| Exploration and evaluation[(3)] | **(1,796)** | **(1.14)** | (1,366) | (0.44) |
| Share based compensation expense, non-cash | **(2,517)** | **(1.60)** | (2,358) | (0.75) |
| Gain (loss) on dispositions | **(3,223)** | **(2.05)** | 1,846 | 0.59 |
| Gain on exchange of senior notes for TOU shares | **–** | **–** | 81,572 | 26.11 |
| Depletion and depreciation | **(15,054)** | **(9.58)** | (33,693) | (10.78) |
| Finance expense, non-cash | **(888)** | **(0.56)** | (4,893) | (1.57) |
| Change in fair value of TOU share investment | **(14,167)** | **(9.01)** | 55,384 | 17.72 |
| Net income and dividends from gas storage investment | **–** | **–** | 523 | 0.17 |
| Net income (loss) | **(21,391)** | **(13.61)** | 97,689 | 31.27 |

(1) See "Non-GAAP measures" in this MD&A.
(2) Includes $4.1 million in gross overriding royalty payments at East Edson for the six months ended June 30, 2017 (2016- $2.3 million).
(3) Includes non-cash exploration and evaluation expense from expired leases and geological and geophysical costs.

Perpetual's operating netback of $13.11/boe ($20.6 million) for the six months ended June 30, 2017 increased 103% over $6.46/boe ($20.2 million) in the prior year period. The increase was due to a 46% increase in realized prices and a 23% reduction in unit production and operating expenses. Improved operating performance reflected the impact of the Shallow Gas Disposition combined with improved cost performance on retained properties.

**Production**

| | Three months ended June 30, 2017 | 2016 | Six months ended June 30, 2017 | 2016 |
|---|---|---|---|---|
| Natural gas (*MMcf/d*) | | | | |
| Eastern Alberta | **6.4** | 44.6 | **6.4** | 45.0 |
| West Central | **38.7** | 40.6 | **36.5** | 46.7 |
| Total natural gas | **45.1** | 85.2 | **42.9** | 91.7 |
| Crude oil (*bbl/d*) | | | | |
| Eastern Alberta[(1)] | **1,032** | 1,050 | **945** | 1,109 |
| West Central | **17** | 23 | **17** | 15 |
| Total crude oil | **1,049** | 1,073 | **962** | 1,124 |
| Total NGL (*bbl/d*)[(2)] | **665** | 682 | **573** | 759 |
| **Total production (*boe/d*)** | **9,223** | 15,959 | **8,686** | 17,169 |

(1) Primarily Mannville heavy oil.
(2) Primarily West Central liquids-rich gas.

Second quarter production averaged 9,223 boe/d, down 6,736 boe/d or 42% from the prior year period production of 15,959 boe/d, due to the sale of Q2 2016 production of 6,424 boe/d related to producing assets included in the Shallow Gas Disposition which represented 95% of the period over period variance. The remaining variance was due to natural production declines as capital spending was constrained in 2016 due to low commodity prices. For the six months ended June 30, 2017, production averaged 8,686, down 49% from the prior year period, due to the same reasons noted above.

The residual impacts of minimal capital spending throughout 2016 were evident at East Edson as natural production declines were stabilized with the startup of three new wells later in the first quarter of 2017. Natural gas production at East Edson decreased by 5% from the prior year period but increased 13% compared to the first quarter of 2017, as the startup of new wells late in the first quarter more than made up for natural declines resulting from limited capital expenditures in 2016. Drilling at East Edson began ramping up in late 2016 with three wells coming on stream during the first quarter of 2017, however, the full impact of those wells was not seen until the second quarter as wells came online in mid-February and late March. The completion of the five wells since the end of the quarter has now re-established production levels to the capacity of the Company-owned infrastructure of 60 to 65 MMcf/d plus associated liquids ahead of year-end 2017. With continuance of the drilling program, this level is anticipated to be maintained for the remainder of 2017, with actual production levels subject to several firm transportation outages anticipated in August. Crude oil production in Eastern Alberta was consistent with the prior year period, and 20% higher than the first quarter of 2017, as production increases from wells drilled in the first quarter as well as positive responses to waterflooding in several pools began to be realized.

**Commodity Prices**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | **2017** | 2016 | **2017** | 2016 |
| **Reference prices** | | | | |
| AECO Monthly Index (*$/GJ*) | **2.63** | 1.18 | **2.71** | 1.59 |
| AECO Monthly Index ($/Mcf)[(1)] | **2.77** | 1.25 | **2.86** | 1.68 |
| AECO Daily Index (*$/GJ*) | **2.64** | 1.32 | **2.60** | 1.53 |
| AECO Daily Index ($/Mcf)[(1)] | **2.79** | 1.39 | **2.74** | 1.61 |
| Alberta Gas Reference Price (*$/GJ*)[(2)] | **2.47** | 1.04 | **2.48** | 1.40 |
| West Texas Intermediate ("WTI") light oil (*$USD/bbl*) | **48.28** | 45.59 | **50.10** | 39.52 |
| Western Canadian Select ("WCS") differential (*$USD/bbl*) | **(11.13)** | (13.30) | **(12.85)** | (13.77) |
| WTI and WCS combined fixed price (*$CAD/bbl*)[(3)] | **49.78** | 41.65 | **49.54** | 34.25 |
| **Average Perpetual prices** | | | | |
| Natural gas | | | | |
| Before derivatives (*$/Mcf*)[(4)] | **3.09** | 1.37 | **3.25** | 1.84 |
| Percent of AECO Monthly Index | **101** | 104 | **103** | 103 |
| Including derivatives (*$/Mcf*) | **3.18** | 1.85 | **4.05** | 2.55 |
| Percent of AECO Monthly Index | **104** | 140 | **129** | 143 |
| Oil | | | | |
| Before derivatives (*$/bbl*) | **45.92** | 38.47 | **44.93** | 29.91 |
| Including derivatives (*$/bbl*) | **43.91** | 39.17 | **38.24** | 36.42 |
| Natural gas liquids ("NGL") (*$/bbl*) | **44.28** | 34.71 | **46.54** | 31.75 |

(1) Converted from $/GJ using a standard conversion rate of 1.06 GJ:1 Mcf.
(2) Alberta Gas Reference Price is the price used to calculate Alberta Crown royalties.
(3) Derived internally using the Bank of Canada average $USD to $CAD foreign exchange rate of 1.34 for the three months ended June 30, 2017 (Q2 2016 - 1.29) and 1.33 for the six months ended June 30, 2017 (2016 – 1.33).
(4) Natural gas price before derivatives includes physical forward sales contracts for which delivery was made during the reporting period but excludes realized gains and losses on financial derivatives.

Increases in benchmark prices on all commodities resulted in a positive effect to second quarter 2017 realized pricing compared to the prior year period. Average AECO Monthly Index pricing of $2.63/GJ in the second quarter of 2017 was 123% higher than $1.18/GJ for the same period in 2016, reflecting the year-on-year reduction of natural gas in storage in Alberta and generally in North America. The deficit of natural gas storage levels was a result of increases in base load natural gas demand in the United States from liquefied natural gas exports, additional power generation, and increased Mexican exports.

WTI oil prices rallied from the lows of US$33.45/bbl during the first quarter of 2016 to average US$48.28/bbl for the quarter ended June 30, 2017, as the supply-demand imbalance dissipated as a result of OPEC's November 30, 2016 announcement to cut 1.2 million barrels per day of oil production, along with an additional cut from select non-OPEC producers of up to 0.6 million barrels per day, that began in January 2017, offset by a recent resurgence of United States shale production.

Increased AECO Monthly Index prices were reflected in Perpetual's natural gas price before derivatives of $3.09/Mcf for the second quarter of 2017, up 126% from $1.37/Mcf for the same period in 2016 and 12% higher than the AECO Monthly Index price of $2.77/Mcf. Price optimization strategies applied to prompt month physical settlements contributed to improved realized prices over the AECO Monthly Index price.

Perpetual's average realized gas price, including derivatives, increased 72% to $3.18/Mcf for the second quarter ended June 30, 2017 from $1.85/Mcf in the second quarter of 2016. The Corporation's second quarter 2017 realized natural gas price includes $0.4 million of realized gains on natural gas fixed price contracts. During the second quarter of 2017, the average conversion ratio for Perpetual's natural gas production was 1.16 GJ:1 Mcf, compared to 1.12 GJ:1 Mcf in the comparative second quarter of 2016. This increase reflects the larger percentage of total gas production from East Edson, which yields higher heat content gas compared to Perpetual's other production areas.

Perpetual's 2017 second quarter oil price, before derivatives, of $45.92/bbl increased 19% compared to the same period in 2016, due primarily to the 20% increase in WCS pricing. The increase in the average WCS price was primarily driven by higher benchmark WTI prices and lower differentials compared to the prior year period in addition to the weakening of the Canadian dollar from $CAD/$USD 1.29 to 1.34. Included in Perpetual's average oil price before derivatives are deductions for quality adjustments, loss allowance, terminal fees, and diluent blending fees. In the second quarter of 2017, these deductions averaged $4.63/bbl (Q2 2016 - $5.17/bbl). Perpetual's realized oil price of $43.91/bbl, including derivatives, was lower than the price before derivatives due to losses of $0.2 million recorded on financial crude oil derivative contracts for the WCS differential.

Perpetual's realized average NGL price for the second quarter of 2017 reached $44.28/bbl, up 28% from the second quarter of 2016, reflecting an increase in all NGL component prices as excess North American inventory levels began to stabilize due to increasing exports from the United States to Asia and Europe. Perpetual's average NGL sales composition for the second quarter ended June 30, 2017 consisted of 65% condensate, a slight increase from the prior year period (Q2 2016 – 64%).

In order to protect a base level of adjusted funds flow, Perpetual has commodity price contracts in place for the second half of 2017 on an estimated 45% of forecast production for the remainder of the year. These include a combination of forward month physical and financial natural gas contracts at AECO hub on a net 27,500 GJ/d to December 2017 at an average price of $3.15/GJ and 12,500 GJ/d for November 2017 through March 2018 at an average price of $2.94/GJ. Additionally, the Company has diversified its natural gas price exposure from AECO by entering into arrangements to sell 25,000 MMBtu/d priced using a basket of five North American natural gas hub pricing points (Chicago, Dawn, Empress, Malin and Mich Con) for a five year period commencing November 1, 2017. Perpetual also has oil sales arrangements on 750 bbl/d protecting a WTI floor price of $USD50.00/bbl.

**Revenue**

| ($ thousands, except as noted) | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Petroleum and natural gas revenue | | | | |
| Natural gas(1) | **12,667** | 10,590 | **25,230** | 30,695 |
| Oil(1) | **4,380** | 3,758 | **7,831** | 6,116 |
| NGL | **2,681** | 2,153 | **4,825** | 4,384 |
| Total petroleum and natural gas revenue | **19,728** | 16,501 | **37,886** | 41,195 |
| Realized gains on derivatives | **162** | 3,574 | **909** | 11,577 |
| Realized revenue | **19,890** | 20,075 | **38,795** | 52,772 |
| Unrealized gains (losses) on derivatives | **1,129** | (9,491) | **4,375** | 1,522 |
| Total revenue | **21,019** | 10,584 | **43,170** | 54,294 |
| Realized revenue *($/boe)* | **23.70** | 13.82 | **24.68** | 16.89 |
| Total revenue *($/boe)* | **25.04** | 7.29 | **27.46** | 17.38 |

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

Perpetual's petroleum and natural gas ("P&NG") revenue, before derivatives, for the three months ended June 30, 2017 of $19.7 million increased 20% from 2016, as the 71% increase in prices more than offset a 42% decrease in average daily production.

Natural gas revenue, before derivatives, of $12.7 million in the second quarter of 2017 increased 20% from $10.6 million in 2016, reflecting the 123% improvement in AECO Monthly Index prices, offset by the 40% drop in production volumes attributable to the Shallow Gas Disposition. Natural gas revenue represented 64% of total petroleum and natural gas revenue in the second quarter of 2017 (Q2 2016 – 64%).

Second quarter 2017 oil revenues of $4.4 million were 17% higher than the same period in 2016 ($3.8 million), due primarily to higher crude oil prices.

NGL revenue for the second quarter of 2017 of $2.7 million was 25% higher than the same period in 2016 ($2.2 million) due to higher NGL prices, offset slightly by a 2% decrease in daily production volumes.

Realized gains on derivatives totaled $0.2 million for the second quarter of 2017 compared to gains of $3.6 million in 2016. Total gains in the current period were comprised of $0.4 million on natural gas derivatives offset by losses of $0.2 million from oil derivatives.

Perpetual recorded unrealized gains on derivatives of $1.1 million during the second quarter of 2017 compared to unrealized losses of $9.5 million for the same period in 2016. Unrealized gains and losses represent the change in mark-to-market value of derivative contracts as forward commodity prices and foreign exchange rates change. Unrealized gains and losses on derivatives are excluded from the Corporation's calculation of cash flow from operating activities as they are non-cash. Derivative gains and losses vary depending on the nature and extent of derivative contracts in place. Commodity price management contracts are actively managed in accordance with the Corporation's assessment of commodity price risk, committed capital spending and other factors.

**Royalties**

| ($ thousands, except as noted) | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Crown | **754** | 520 | **1,232** | 822 |
| Freehold and overriding(1) | **2,852** | 1,331 | **5,476** | 3,306 |
| Total | **3,606** | 1,851 | **6,708** | 4,128 |
| Crown (*% of P&NG revenue*) | **3.8** | 3.2 | **3.3** | 2.0 |
| Freehold and overriding (*% of P&NG revenue*) | **14.5** | 8.1 | **14.5** | 8.0 |
| Total (*% of P&NG revenue*) | **18.3** | 11.3 | **17.8** | 10.0 |
| $/boe | **4.30** | 1.27 | **4.27** | 1.32 |

(1) Includes $2.1 million in gross overriding royalty payments at East Edson ("East Edson GORR") for the three months ended June 30, 2017 (2016 – $1.0 million) and $4.1 million for the six months ended June 30, 2017 (2016 - $2.3 million).

Royalty expenses for the quarter ended June 30, 2017 were $3.6 million, representing an increase in the effective combined average royalty rate on P&NG revenue to 18.3% from 11.3% in the second quarter of 2016. Average crown royalty rates increased to 3.8% in the second quarter of 2017 compared to 3.2% in the second quarter of 2016 as a result of the disposition of lower net royalty assets through the Shallow Gas Disposition combined with higher Alberta natural gas reference prices and higher oil prices.

Freehold and overriding royalty rates increased from 8.1% in the second quarter of 2016 to 14.5% in the 2017 period, reflecting both the increase in natural gas prices and reduced total revenue following the Shallow Gas Disposition in 2016, leaving a larger percentage of total production sourced from East Edson wells in the second quarter of 2017. Pursuant to Perpetual's East Edson agreements, the partner is entitled to a gross overriding royalty equivalent to a maximum of 5.6 MMcf/d of natural gas from the East Edson property plus oil and associated NGLs on a monthly basis. The East Edson royalty is calculated based on the daily index natural gas price. As the East Edson royalty is a fixed volume royalty, it is expected to decrease as a percentage of revenue as production at East Edson grows in 2017 with renewed capital investment. Excluding royalty payments of $2.1 million under the East Edson overriding royalty arrangement (Q2 2016 - $1.0 million), the effective freehold and overriding royalty rate for the three months ended June 30, 2017 was 3.8% compared to 2.0% for the prior year period.

**Production and operating expenses**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands, except as noted*) | **2017** | 2016 | **2017** | 2016 |
| Production and operating expenses | **4,634** | 9,480 | **9,235** | 23,849 |
| $/boe | **5.52** | 6.53 | **5.87** | 7.63 |

Total production and operating expenses decreased 51% to $4.6 million during the second quarter of 2017 compared to $9.5 million recorded during the same period in 2016. This decrease reflected the impact of the Shallow Gas Disposition and continued efficiencies realized through the Company-owned and operated gas plant at East Edson, offset by higher costs incurred for road and lease maintenance due to wet weather conditions throughout the quarter. Production and operating expenses on a unit-of-production basis were $5.52/boe, a decrease of 15% from the prior period, and are expected to decrease through the remainder of 2017 as natural production grows through capital investment at East Edson.

**Transportation costs**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands, except as noted*) | **2017** | 2016 | **2017** | 2016 |
| Transportation costs | **1,226** | 2,114 | **2,241** | 4,613 |
| $/boe | **1.46** | 1.46 | **1.43** | 1.48 |

Transportation costs include clean oil trucking and NGL transportation as well as costs to transport natural gas from the plant gate to commercial sales points. Consistent with the decrease in period-over-period production, transportation costs decreased 42% to $1.2 million from $2.1 million for the same period in 2016, reflecting lower oil and gas sales volumes combined with lower rates on clean oil trucking.

**Gas over bitumen**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands, except as noted*) | **2017** | 2016 | **2017** | 2016 |
| Gas over bitumen revenue | **687** | 210 | **1,612** | 740 |
| Payments on gas over bitumen royalty financing(1) | **(710)** | (306) | **(1,526)** | (956) |
| Gas over bitumen, net of payments | **(23)** | (96) | **86** | (216) |
| $/boe | **(0.03)** | (0.07) | **0.05** | (0.07) |

(1) At June 30, 2017, the fair value of the gas over bitumen royalty financing was estimated to be $5.6 million (December 31, 2016 - $8.3 million).

Perpetual records revenue in relation to gas over bitumen royalty credits received under the Natural Gas Royalty Regulation for natural gas wells which have been shut-in pursuant to shut-in orders issued by the Government of Alberta. During the three months ended June 30, 2017, Perpetual recorded $0.7 million in gas over bitumen revenue; an increase of $0.5 million from the same period in 2016 attributable to the higher Alberta gas reference prices, offset by the annual 10% decline in deemed production.

Gas over bitumen royalty credits earned in the second quarter of 2017 funded payments of $0.7 million (Q2 2016 – $0.3 million) in relation to the 2014 monetization of Perpetual's future gas over bitumen royalty credits. As part of the arrangement, Perpetual makes monthly payments to the purchaser, which from time to time will vary from the actual gas over bitumen credit received in the period due to timing differences. The monthly payment commitment expires concurrent with the gas over bitumen credit, with final expiries expected to occur in June 2021.

Under IFRS, the monetization of future gas over bitumen royalty credits was recorded as a financial obligation ("Gas over bitumen royalty financing"); however, entitlement to future revenue from gas over bitumen royalty adjustments are not recorded as an asset, but as revenue with the passage of time as it is earned. As such, gas over bitumen revenue will continue to be recognized separately as revenue in accordance with Perpetual's accounting policies with the monthly payments recognized separately as a reduction to the gas over bitumen royalty financing obligation. For purposes of this MD&A, the monthly payments have been included as a reduction to gas over bitumen revenue to reflect the substantive monetization of the future gas over bitumen royalty adjustments. During the second quarter of 2017, the gas over bitumen royalty financing obligation was reduced by $0.7 million, comprised of payments of $0.7 million and an unrealized loss of $33,000. The loss has been included in non-cash finance expense and represents an increase in the fair value of the gas over bitumen royalty financing obligation as a result of higher forecasted natural gas reference prices.

**Exploration and evaluation ("E&E")**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands*) | **2017** | 2016 | **2017** | 2016 |
| Lease rentals | **181** | 572 | **369** | 1,080 |
| Geological and geophysical costs(1) | **(22)** | 11 | **(22)** | 26 |
| Lease expiries | **505** | 498 | **1,818** | 1,340 |
| Total exploration and evaluation | **664** | 1,081 | **2,165** | 2,446 |

(1) Geological and geophysical expenditures and dry hole costs are expensed directly in the Corporation's statement of income (loss); they are considered by Perpetual to be more closely related to investing activities than operating activities, and therefore are included with capital expenditures for the purposes of this MD&A.

E&E costs include lease rentals on undeveloped acreage, geological and geophysical costs and the write down of carrying costs related to lease expiries. E&E costs of $0.7 million during the three months ended June 30, 2017 were 39% lower than the same period in 2016 due to lower lease rental costs that were due primarily to the impact of the Shallow Gas Disposition.

**General and administrative ("G&A") expenses**

| *($ thousands, except as noted)* | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Cash G&A expense | **3,553** | 4,863 | **7,758** | 11,961 |
| Overhead recoveries | **(411)** | (1,136) | **(1,515)** | (2,291) |
| Total G&A expense | **3,142** | 3,727 | **6,243** | 9,670 |
| Total G&A expense *($/boe)* | **3.74** | 2.57 | **3.97** | 3.09 |

G&A expense decreased 16% to $3.1 million in the second quarter of 2017 from $3.7 million in the comparative period. This decrease reflected reductions in staffing levels and office space following the Shallow Gas Disposition along with savings related to lower consulting fees and on-going cost saving initiatives implemented by the Corporation in response to the depressed commodity price environment. Overhead recoveries have decreased 64% from the comparative period in 2016 due to reduced production and operating expenses and lower spending on reclamation and abandonment activities, offset slightly by increased capital spending compared to 2016.

**Share based compensation expenses**

| *($ thousands, except as noted)* | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Share based compensation expense (non-cash) | **985** | 1,958 | **2,517** | 2,358 |
| Share based compensation expense (non-cash) *($/boe)* | **1.17** | 1.35 | **1.60** | 0.75 |

Non-cash share based compensation expenses for the three months ended June 30, 2017 decreased $1.0 million compared to the same period in 2016. This decrease was the result of reductions in staffing levels following the Shallow Gas Disposition.

**Dispositions**

***Proceeds on dispositions***

| *($ thousands)* | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Proceeds on dispositions of oil and gas properties | **–** | 302 | **436** | 6,768 |
| Proceeds on retained shallow gas marketing arrangements | **331** | – | **869** | – |
| Payments on fixed portion of retained shallow gas marketing arrangements | **(940)** | – | **(1,869)** | – |
| Net proceeds (payments) on dispositions | **(609)** | 302 | **(564)** | 6,768 |

The Shallow Gas Disposition which closed October 1, 2016 included retained marketing arrangements whereby the Company provided floor price protection at $2.58/GJ to the purchaser and retained price participation to the extent average monthly AECO natural gas 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. During the three months ended June 30, 2017, payments of $0.9 million were recorded as a reduction to this liability. The liability is settled monthly through physical marketing contracts at a rate equal to $0.295 GJ/d on 35,000 GJ/d.

Realized and unrealized gains and losses on these marketing arrangements are recognized as adjustments to gains/losses on dispositions and included as cash flows from investing activities on the consolidated statement of cash flows.

***Loss (gain) on dispositions***

| *($ thousands)* | Three months ended June 30, **2017** | 2016 | Six months ended June 30, **2017** | 2016 |
|---|---|---|---|---|
| Realized gain on retained shallow gas marketing arrangements | **(331)** | – | **(869)** | – |
| Unrealized loss on retained shallow gas marketing arrangements | **1,363** | – | **4,520** | – |
| | **1,032** | – | **3,651** | – |
| Gains on oil and gas property dispositions | **–** | (892) | **(428)** | (7,965) |
| Loss (gain) on dispositions | **1,032** | (892) | **3,223** | (7,965) |

During the second quarter of 2017, Perpetual recorded unrealized losses of $1.4 million, partially offset by realized gains of $0.3 million with respect to retained marketing arrangements. The unrealized loss is the result of mark-to-market adjustments resulting from declining forward AECO monthly prices, whereas the realized gain relates to proceeds received as consideration for increasing the $2.81/GJ price to $3.50/GJ on 10,000 GJ/d for the period of November 1, 2017 to March 31, 2018.

As at June 30, 2017, the net retained shallow gas marketing arrangements have been summarized as follows:

| **Term** | **Volumes at AECO (GJ/d)** | **Floor price *($/GJ)*** | **Ceiling price *($/GJ)*** | **Fair value *($ thousands)*** |
|---|---|---|---|---|
| July 2017 – August 2018 | 33,611 | – | 2.81 | 1,660 |
| November 2017 – March 2018 | (10,000) | – | (2.81) | (345) |
| November 2017 – March 2018 | 10,000 | – | 3.50 | 116 |
| April 2018 – August 2018 | 33,611 | 2.58 | – | (2,142) |

**Depletion and depreciation**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands, except as noted*) | **2017** | 2016 | **2017** | 2016 |
| Depletion and depreciation | **7,929** | 16,146 | **15,054** | 33,693 |
| $/boe | **9.45** | 11.12 | **9.58** | 10.78 |

Perpetual recorded $7.9 million of depletion and depreciation expense for the three months ended June 30, 2017 (Q2 2016 - $16.1 million). The reduction is primarily due to lower production following the Shallow Gas Disposition. On a per boe basis, second quarter 2017 depletion and depreciation expense of $9.45/boe was 15% lower than the comparative period, mainly due to a reduction in estimated future development costs.

**Finance expenses**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (*$ thousands*) | **2017** | 2016 | **2017** | 2016 |
| Cash interest | | | | |
| Interest on revolving bank debt | **204** | 1,204 | **384** | 2,122 |
| Interest on TOU share margin loans | **87** | – | **301** | – |
| Interest on term loan | **709** | – | **854** | – |
| Interest on senior notes | **921** | 3,277 | **2,279** | 9,292 |
| Total cash interest | **1,921** | 4,481 | **3,818** | 11,414 |
| Non-cash finance expense | | | | |
| Amortization of debt issue costs | **189** | 136 | **283** | 399 |
| Accretion on decommissioning obligations | **195** | 818 | **386** | 1,735 |
| Change in fair value of gas over bitumen royalty financing | **33** | 1,234 | **(1,206)** | (344) |
| Change in fair value of TOU share margin loans | **504** | 1,062 | **1,425** | 3,103 |
| Non-cash finance expenses | **921** | 3,250 | **888** | 4,893 |
| **Finance expenses recognized in net income (loss)** | **2,842** | 7,731 | **4,706** | 16,307 |

Total cash interest expense of $1.9 million for the three months ended June 30, 2017 was 57% lower than the prior year period (Q2 2016 - $4.5 million). Decreased cash interest on the senior notes is due to the reduction of $214.4 million principal amount of 8.75% senior notes that were exchanged for 4.4 million TOU shares during the second quarter of 2016, combined with the early repayment of $27.1 million of 8.75% 2018 Senior Notes on April 17, 2017. These reductions in cash interest expense were partially offset by the $0.7 million in interest charged on the 8.1% $35 million Term Loan that was drawn on March 14, 2017.

Non-cash finance expenses for the three months ended June 30, 2017 included accretion on decommissioning obligations of $0.2 million (Q2 2016 - $0.8 million), a loss of $33,000 on the change in fair value of the gas over bitumen royalty financing (Q2 2016 – loss of $1.2 million) and a loss of $0.5 million on the change in fair value of the TOU share margin loans (Q2 2016 – loss of $1.1 million). Accretion on decommissioning obligations was $0.6 million lower than in the prior year period due to the $128.0 million reduction in decommissioning obligations associated with the Shallow Gas Disposition.

**Change in fair value of TOU share investment**

During the three months ended June 30, 2017, Perpetual recorded a loss of $3.0 million related to the change in fair value of the TOU share investment. This change was due to the 6% decline in the TOU share price over the second quarter. At June 30, 2017, the Company owned 1.67 million TOU shares (June 30, 2016 – 1.85 million shares). In the second quarter of 2016, a gain of $21.4 million was recorded, reflecting a 24% increase in the TOU share price during the period.

## LIQUIDITY AND CAPTIAL RESOURCES

Perpetual's strategy includes maintaining a strong capital base so as to retain investor, creditor and market confidence to support the execution of its business plans. The Company manages its capital structure and makes adjustments to its capital spending in light of changes in economic conditions and the risk characteristics of its underlying oil and natural gas assets. The Company considers its capital structure to include share capital, senior notes, revolving bank debt, Term Loan, TOU share margin loans and net working capital, with value and liquidity enhanced through the current ownership of TOU shares. In order to manage its capital structure, the Corporation may from time to time issue equity or debt securities, enter into business transactions including the sale of its TOU shares or other assets and adjust its capital spending to manage current and projected debt levels.

During the first half of 2017, the Company completed a number of financing transactions to strengthen Perpetual's liquidity and debt repayment profile and secure funding for the Company's 2017 and 2018 business plan. The significant financing transactions are as follows:

- Partial repayment and refinancing of its existing TOU share put option margin loan previously maturing in March 2017, reducing the loan amount outstanding to $18.9 million, extending the maturity to August 1, 2017 and increasing the number of shares pledged as collateral to 0.9 million TOU shares, with a new floor price on these shares of $21.14 per TOU share;
- Exchange of $17.4 million aggregate principal amount of its existing senior notes maturing in 2018 and 2019 for new 2022 Senior Notes;
- Establishment of the Term Loan bearing annual interest at 8.1% and maturing March 14, 2021. The initial draw on the Term Loan was $35 million with the remaining $10 million to be drawn prior to November 30, 2017. In addition, for no additional consideration, 5.4 million warrants were issued and valued at $0.8 million which entitle the lender to acquire common shares on a one for one basis for a period of up to three years, at an exercise price of $2.34 per share;

- Issuance of 5.1 million common shares and 1.1 million additional warrants at $1.75 per Equity Unit for aggregate gross proceeds of $9 million;
- Extension of the Company's Credit Facility to October 31, 2017, while providing for a $14 million increase in total borrowing capacity under the Credit Facility to $20 million. Restricted cash of $2.0 million was released by Perpetual's lender pursuant to this extension; and
- The early redemption of all $27.6 million 2018 Senior Notes with repayment of $27.1 million in cash and $0.5 million through an exchange for new 2022 Senior Notes.

Significant financing transactions subsequent to June 30, 2017 were as follows:

- On July 4, 2017, total borrowing capacity under the Credit Facility was increased from $20 million to $40 million. The maturity date was extended to May 31, 2019; and
- On July 31, 2017, Perpetual entered into a new $18.7 million margin loan secured by 1.67 million TOU shares that matures in July 2018. Proceeds on the new margin loan along with borrowings under its Credit Facility were used to repay the $36.5 million TOU share put option margin loans that were scheduled to mature in August and November of 2017. Proceeds of $1.0 million were realized from the sale of underlying put options.

These financing transactions provide the Company with enhanced optionality and flexibility to manage near term obligations while at the same time, creating opportunities to continue pursuing exploration and development projects. 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.

**Capital Management**

| (*$ thousands, except as noted*) | **June 30, 2017** | December 31, 2016 |
|---|---|---|
| Revolving bank debt | **4,404** | – |
| Term loan, measured at principal amount | **35,000** | – |
| Carrying amount of TOU share margin loans | **35,543** | 39,953 |
| Senior notes, measured at principal amount | **33,490** | 60,573 |
| Carrying amount of TOU share investment(1) | **(46,489)** | (66,343) |
| Adjusted working capital deficiency (surplus)(2) | **6,389** | 3,917 |
| Net debt(2) | **68,337** | 38,100 |
| Shares outstanding at end of period (*thousands*) (3) | **59,035** | 53,421 |
| Market price at end of period (*$/share*) | **1.43** | 2.35 |
| Market value of shares | **84,420** | 125,539 |
| Total capitalization(2) | **152,757** | 163,639 |
| Net debt as a percentage of total capitalization | **45** | 23 |
| Trailing twelve months adjusted funds flow(2) | **13,077** | 920 |

(1) The carrying amount of the TOU share investment is based on the June 30, 2017 closing price per the Toronto Stock Exchange ($27.88 per share) and 1.67 million TOU shares held (December 31, 2016 – 1.85 million TOU shares held with a closing price of $35.91 per share).
(2) See "Non-GAAP measures" in this MD&A.
(3) All common shares are net of shares held in trust.

At June 30, 2017, Perpetual had total net debt of $68.3 million, up $30.2 million from December 31, 2016. The increase reflects the ramp up in capital investment during the year combined with a decrease of $14.2 million in the fair value of TOU shares.

**Revolving Bank Debt**

As at June 30, 2017, the Company's Credit Facility had a borrowing limit (the "Borrowing Limit") of $20.0 million (December 31, 2016 - $6.0 million) under which $4.4 million was drawn (December 31, 2016 – nil). Additionally, $4.0 million of letters of credit had been issued under the Credit Facility (December 31, 2016 - $4.0 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 margins range between 2.25% and 4.75%.

On July 4, 2017, the Borrowing Limit was increased from $20 million to $40 million and the applicable margins were adjusted to range between 2.0% and 4.5%. The maturity date of the Credit Facility was extended from October 31, 2017 to May 31, 2018 and may be extended for a further 364 day period subject to approval by the syndicate. If not extended, the Credit Facility will cease to revolve and all outstanding advances will be repayable on May 31, 2019. The next Borrowing Limit redetermination is scheduled for November 30, 2017.

Borrowings are secured by general security agreements covering all of the Company's assets with the exception of TOU shares pledged as security for the TOU share margin loans and certain lands pledged to the gas over bitumen royalty financing counterparty.

For the periods ended June 30, 2017 and 2016, if interest rates changed by 1% with all other variables held constant, the impact on interest expense and net income (loss) would be nominal, as the Company's revolving bank debt, subject to floating interest rates, was minimal.

Prior to the July 4, 2017 Borrowing Limit redetermination, the Credit Facility was subject to a working capital covenant which required the Company to maintain net working capital plus outstanding letters of credit not exceeding the Borrowing Limit. Net working capital includes the sum of cash and cash equivalents, restricted cash, accounts receivable, prepaid expenses and unpledged TOU shares less accounts payable and accrued liabilities and accrued interest on senior notes and the Term Loan up to the Credit Facility maturity date. On July 4, 2017, as part of the Borrowing Limit redetermination, Perpetual's lenders removed this working capital covenant. The Credit Facility also contains provisions which restrict the Company's ability to pay dividends on or repurchase its common shares. The Company was in compliance with all Credit Facility covenants at June 30, 2017.

**TOU share margin loans**

At June 30, 2017, $18.9 million TOU share put option margin loans mature in August 2017 and $17.6 million mature in November 2017. For the August 2017 maturity, 0.9 million TOU shares have been pledged as collateral with a put option floor price of $21.14 per TOU share. For the November 2017 maturity, 0.65 million TOU shares have been pledged as collateral with a put option floor price of $27.38 per TOU share.

The TOU share put option margin loans are hybrid financial instruments comprising a debt host with an embedded TOU put option derivative related to indexation of the future settlement amount to changes in the market price of TOU shares pledged as collateral. The Company has designated the TOU share put option margin loans as financial liabilities which are measured at fair value through profit and loss. For the three months ended June 30, 2017, an unrealized loss of $0.5 million is included in finance expense, representing the change in fair value of the TOU put options during the year.

On July 31, 2017, Perpetual entered into a new $18.7 million margin loan secured by 1.67 million TOU shares that matures on July 31, 2018. Proceeds on the new margin loan along with borrowings under its Credit Facility were used to repay the $36.5 million TOU share put option margin loans that were scheduled to mature in August and November of 2017. Proceeds of $1.0 million were realized from the sale of underlying put options. Interest rates are indexed to the same applicable margins as the Credit Facility and range between 1.5% and 4.0%.

**Term Loan**

On March 14, 2017, Perpetual entered into the Term Loan which included the issuance of 5.4 million warrants to purchase common shares.

| | **June 30, 2017** |
|---|---|
| Balance, beginning of period | **$ –** |
| Principal amount of Term Loan issued | **35,000** |
| Value allocated to Warrants | **(769)** |
| Issue costs | **(1,251)** |
| Amortization of issue costs | **134** |
| Balance, end of period | **$ 33,114** |

The Term Loan matures on March 14, 2021 and bears interest at 8.1% per annum with semi-annual interest payments due June 30 and December 31 of each year. The Term Loan has a cross-default provision with the Credit Facility and contains substantially similar provisions and covenants as the Credit Facility.

The Term Loan is made available by way of two draws consisting of an initial draw of $35 million completed upon closing with the remaining $10 million to be drawn prior to November 30, 2017. Amounts borrowed under the Term Loan that are repaid or prepaid are not available for re-borrowing. The Company may not prepay the Term Loan prior to the second anniversary thereof, except with payment of a make whole premium.

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, TOU shares secured in favor of the TOU share margin loan lenders, and certain lands pledged to the gas over bitumen royalty financing counterparty.

The Company was in compliance with all Term Loan covenants at June 30, 2017.

**Senior notes**

| | | | **June 30, 2017** | | December 31, 2016 | |
|---|---|---|---|---|---|---|
| | **Maturity date** | **Interest rate** | **Principal** | **Carrying Amount** | Principal | Carrying amount |
| 2018 Senior Notes | March 15, 2018 | 8.75% | $ – | $ – | $ 36,013 | $ 35,847 |
| 2019 Senior Notes | July 23, 2019 | 8.75% | 15,572 | 15,440 | 24,560 | 24,273 |
| 2022 Senior Notes | January 23, 2022 | 8.75%(1) | 17,918 | 17,315 | – | – |
| | | | $ 33,490 | $ 32,755 | $ 60,573 | $ 60,120 |

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

On January 23, 2017, the Company exchanged $8.4 million and $9.0 million aggregate principal amount of 2018 Senior Notes and 2019 Senior Notes respectively for $17.4 million new 8.75% senior notes with a maturity date of January 23, 2022. Included in the exchange were $3.7 million 2018 Senior Notes and $4.3 million 2019 Senior Notes held by directors and officers of the Company or entities controlled by them. The 2022 Senior Notes bear a fixed rate of 9.75% for the first year of issuance and 8.75% thereafter, and have identical covenants and rights as the existing 2018 and 2019 Senior Notes.

On April 17, 2017, Perpetual completed the early redemption of $27.1 million aggregate outstanding principal amount of its 8.75% senior notes maturing March 15, 2018 and exchanged $0.5 million for an equal amount of 2022 Senior Notes.

During the second quarter of 2016, the Company repurchased and cancelled $114.0 million of outstanding 2018 Senior Notes and $100.4 million of outstanding 2019 Senior Notes through the exchange of 4.4 million TOU shares and cash payments of $3.9 million for accrued interest. The fair market value of TOU shares exchanged was $130.5 million based on an average closing price of $29.64 per share. Included in the exchange were $81.6 million 2018 Senior Notes and $57.0 million 2019 Senior Notes held by directors and officers of the Company or entities controlled by them. The Company recorded a net gain of $81.5 million, representing the difference between the carrying amount of senior notes cancelled of $212.0 million ($214.4 million principal amount) and the fair market value of TOU shares exchanged of $130.5 million, net of transaction costs.

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% 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% of the senior notes at a premium to face value. Within one year of maturity, the Company may redeem up to 100% of the senior notes at the principal amount.

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. 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, Term Loan, TOU share margin loans 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% of TTM EBITDA from January 1, 2011 to the end of the most recently completed fiscal quarter plus 100% 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% of the fair market value of any equity contributions made to the Company.

The Company was in compliance with all covenants at June 30, 2017.

At June 30, 2017 the senior notes are presented net of $0.7 million in issue costs which are amortized using a weighted average effective interest rate of 9.6%.

In mid-July, $1.0 million face value of 2019 Senior Notes were re-purchased at 96.75% of face value and cancelled.

**Equity**

At June 30, 2017 there were 59.0 million common shares outstanding which is net of 0.5 million shares held in trust for employee compensation programs. Basic and diluted weighted average shares outstanding for the three months ended June 30, 2017 were 59.0 million. (June 30, 2016 – 52.1 million basic, 52.9 million diluted).

On March 14, 2017, in conjunction with the funding of the Term Loan, the lender received, for no additional consideration, warrants to purchase common shares of Perpetual at a ratio of 120 warrants for every $1,000 committed under the Term Loan, resulting in the issuance of 5.4 million warrants. Each warrant entitles the holder to acquire Common Shares on a one for one basis, at an exercise price equal to a $2.34 per share at any time prior to March 14, 2020. Provided the volume weighted average trading price of the common shares is greater than the exercise price for 60 consecutive calendar days (subject to certain restrictions), Perpetual will have the option to require the warrant holder to exercise all or any portion of the warrants at any time thereafter.

Further, as part of the equity private placement concurrent with the issuance of the Term Loan, 5.1 million common shares and 1.1 million additional warrants were issued for proceeds of $9.0 million, of which $8.9 million has been allocated to share capital and $0.1 million to warrants. Directors and officers of Perpetual or entities controlled by them purchased 1.6 million common shares and 0.4 million warrants for proceeds of $2.9 million.

At August 10, 2017 there were 59.0 million common shares outstanding which is net of 0.6 million shares held in trust for employee compensation programs.

## SUMMARY OF QUARTERLY RESULTS

| *($ thousands, except where noted)* | **Q2 2017** | Q1 2017 | Q4 2016 | Q3 2016 |
|---|---|---|---|---|
| **Financial** | | | | |
| Oil and natural gas revenues | **19,728** | 18,158 | 17,940 | 22,268 |
| Cash flow from (used in) operating activities | **4,728** | (2,289) | 4,740 | (1,710) |
| Adjusted funds flow[1] | **5,243** | 5,110 | 3,326 | (602) |
| Per share – basic | **0.09** | 0.09 | 0.06 | (0.01) |
| Net income (loss) | **(7,219)** | (14,172) | 20,379 | (10,919) |
| Per share – basic | **(0.12)** | (0.26) | 0.39 | (0.21) |
| – diluted | **(0.12)** | (0.26) | 0.37 | (0.21) |
| Net Capital expenditures | | | | |
| Exploration and development and other | **4,006** | 24,590 | 7,069 | 1,411 |
| Geological and geophysical | **(22)** | – | (3) | – |
| Dispositions, net of acquisitions | **609** | 163 | 1,785 | (989) |
| Disposition of gas storage facility investment | – | – | – | 47 |
| Net capital expenditures | **4,593** | 24,753 | 8,851 | 469 |
| **Common shares** *(thousands)* | | | | |
| Weighted average – basic | **59,045** | 54,468 | 52,924 | 52,253 |
| Weighted average – diluted | **59,045** | 54,468 | 54,678 | 52,253 |
| **Operating** | | | | |
| Daily average production | | | | |
| Natural gas *(MMcf/d)* | **45.1** | 40.7 | 40.3 | 75.5 |
| Oil *(bbl/d)* | **1,049** | 877 | 936 | 1,052 |
| NGL *(bbl/d)* | **665** | 479 | 467 | 476 |
| Total *(boe/d)* | **9,223** | 8,143 | 8,118 | 14,123 |
| Average prices | | | | |
| Natural gas – before derivatives *($/Mcf)* | **3.09** | 3.43 | 3.31 | 2.44 |
| Natural gas – including derivatives *($/Mcf)* | **3.18** | 5.04 | 2.41 | 2.12 |
| Oil – before derivatives *($/bbl)* | **45.92** | 43.72 | 42.35 | 38.93 |
| Oil – including derivatives *($/bbl)* | **43.91** | 31.39 | 38.95 | 38.90 |
| NGL *($/bbl)* | **44.28** | 49.70 | 46.99 | 35.80 |

(1) See "Non-GAAP measures" in this MD&A.

| ($ thousands, except where noted) | Q2 2016 | Q1 2016 | Q4 2015 | Q3 2015 |
|---|---|---|---|---|
| **Financial** | | | | |
| Oil and natural gas revenues | 16,501 | 24,694 | 33,044 | 35,460 |
| Cash flow from (used in) operating activities | (3,396) | (6,770) | 11,980 | (2,803) |
| Adjusted funds flow[1] | (1,852) | 48 | 362 | (2,514) |
| Per share – basic | (0.04) | 0.00 | 0.05 | (0.33) |
| Net income (loss) | 64,925 | 32,764 | (93,539) | (67,139) |
| Per share – basic | 1.25 | 0.72 | (12.34) | (8.89) |
| – diluted | 1.23 | 0.70 | (12.34) | (8.89) |
| Net capital expenditures | | | | |
| Exploration and development and other | 1,286 | 4,814 | 831 | 15,254 |
| Geological and geophysical | 11 | 15 | (93) | 16 |
| Dispositions, net of acquisitions | (302) | (6,466) | 3 | (2,630) |
| Disposition of gas storage facility investment | (19,750) | – | – | – |
| Net capital expenditures | (18,755) | (1,637) | 741 | 12,640 |
| **Common shares** (*thousands*)[2] | | | | |
| Weighted average – basic | 52,140 | 45,573 | 7,582 | 7,549 |
| Weighted average – diluted | 52,904 | 47,022 | 7,582 | 7,549 |
| **Operating** | | | | |
| Daily average production | | | | |
| Natural gas (*MMcf/d*) | 85.2 | 98.2 | 105.1 | 105.5 |
| Oil (*bbl/d*) | 1,073 | 1,174 | 1,278 | 1,426 |
| NGL (*bbl/d*) | 682 | 836 | 866 | 741 |
| Total (*boe/d*) | 15,959 | 18,378 | 19,661 | 19,758 |
| Average prices | | | | |
| Natural gas – before derivatives (*$/Mcf*) | 1.37 | 2.25 | 2.74 | 2.91 |
| Natural gas – including derivatives (*$/Mcf*) | 1.85 | 3.15 | 2.92 | 2.86 |
| Oil – before derivatives (*$/bbl*) | 38.47 | 22.08 | 33.04 | 40.58 |
| Oil – including derivatives (*$/bbl*) | 39.17 | 33.90 | 39.81 | 41.40 |
| NGL (*$/bbl*) | 34.71 | 29.33 | 33.68 | 28.07 |

(1) See "Non-GAAP measures" in this MD&A.
(2) Common shares and per share amounts have been retroactively adjusted to reflect the consolidation of outstanding common shares on the basis of 20 common shares to one common share on March 24, 2016. All common shares are net of shares held in trust.

### Commodity price risk management

Perpetual's commodity price risk management strategy is focused on managing downside risk and increasing certainty in adjusted funds flow by mitigating the effect of commodity price volatility. Physical forward sales and financial derivatives are used to manage the balance sheet, to lock in economics on capital programs and acquisitions, and to take advantage of perceived anomalies in commodity markets. Perpetual also utilizes foreign exchange swaps and physical or financial swaps related to the differential between natural gas prices at the AECO and NYMEX trading hubs and oil basis differentials between WTI and WCS in order to mitigate the effects of fluctuations in foreign exchange rates and basis differentials on the Corporation's realized revenue. Additionally, the Company has diversified its natural gas price exposure from AECO by entering into arrangements to sell 25,000 MMBtu/d priced using a basket of five North American natural gas hub pricing points for a five year period commencing November 1, 2017.

The following tables provide a summary of commodity price management contracts outstanding at August 10, 2017.

Natural Gas

The Company has in place open physical and financial natural gas arrangements at AECO as summarized in the table below. Settlements on physical sales contracts are recognized in oil and natural gas revenue.

| **Term** | **Volumes sold (bought) at AECO (*GJ/d*)** | **Average price (*$/GJ*)[1]** | **Market prices (*$/GJ*)[2]** | **Type of contract** |
|---|---|---|---|---|
| July 2017 – December 2017 | 22,500 | 3.14 | 2.20 | Physical |
| July 2017 – December 2017 | (2,500) | 2.92 | 2.20 | Physical |
| July 2017 – December 2017 | 7,500 | 3.16 | 2.20 | Financial |
| November 2017 – March 2018 | 12,500 | 2.94 | 2.48 | Physical |

(1) Average price calculated using weighted average price for net open contracts.
(2) Market prices for July and August 2017 are based on settled AECO Monthly Index prices. Market prices for subsequent months are based on forward AECO Monthly Index prices as of market close on August 9, 2017.

Crude Oil

The Corporation had entered into financial oil sales arrangements in $USD as follows:

| Term | Volumes (*bbl/d*) | Floor price (*$USD/bbl*) | Ceiling price (*$USD/bbl*) | Market prices (*$USD/bbl*)[(1)] | Type of contract |
|---|---|---|---|---|---|
| July 2017 | 250 | 50.00 | 61.50 | 46.68 | Financial |
| July 2017 | 500 | 50.00 | 59.40 | 46.68 | Financial |
| August 2017 – December 2017 | 250 | 50.00 | 61.50 | 49.19 | Financial |
| August 2017 – December 2017 | 500 | 50.00 | 59.40 | 49.19 | Financial |

(1) Market prices for July are based on settled WTI oil prices. Market prices for subsequent months are based on forward WTI oil prices as of market close on August 9, 2017.

The following table provides a summary of basis differential contracts between WTI and WCS trading:

| Term | Volumes (*bbl/d*) | WTI-WCS differential (*$USD/bbl*)[(1)] | Market prices (*$USD/bbl*)[(2)] | Type of contract |
|---|---|---|---|---|
| July 2017 | 500 | (15.40) | (10.31) | Financial |
| July 2017 | 250 | (14.85) | (10.31) | Financial |
| August 2017 | 500 | (15.40) | (9.56) | Financial |
| August 2017 | 250 | (14.85) | (9.56) | Financial |
| September 2017 – December 2017 | 500 | (15.40) | (12.23) | Financial |
| September 2017 – December 2017 | 250 | (14.85) | (12.23) | Financial |

(1) Average price calculated using weighted average price for net open contracts; contracts settle at WTI index less a fixed basis amount.

(2) Market prices for July and August 2017 are based on settled WTI-WCS differential prices. Market prices for subsequent months are based on forward WTI-WCS differential prices as of market close on August 9, 2017.

## OFF BALANCE SHEET ARRANGEMENTS

Perpetual has no off balance sheet arrangements.

## FUTURE ACCOUNTING PRONOUNCEMENTS

The International Accounting Standards Board (IASB) and the IFRS Interpretations Committee regularly issue new and revised accounting pronouncements which have future effective dates and therefore are not reflected in Perpetual's financial statements. Once adopted, these new and amended pronouncements may have an impact on Perpetual's consolidated financial statements. Perpetual's analysis of recent accounting pronouncements is included in the notes to the consolidated financial statements at December 31, 2016.

## CORPORATE GOVERNANCE

The Corporation is committed to maintaining high standards of corporate governance. Each regulatory body, including the Toronto Stock Exchange and the Canadian provincial securities commissions, has a different set of rules pertaining to corporate governance. The Corporation fully conforms to the rules of the governing bodies under which it operates.

## INTERNAL CONTROLS AND PROCEDURES

### Evaluation of disclosure controls and procedures

There were no changes in the Corporation's internal control over financial reporting during the period beginning on April 1, 2017 and ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

## ADVISORIES

**NON-GAAP MEASURES:** This document contains the following non-GAAP financial measures which do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other issuers. Non-GAAP measures presented in this document should not be viewed as alternatives to measures of financial performance calculated in accordance with GAAP.

**Adjusted funds flow:** Management uses adjusted funds flow and adjusted funds flow per share to analyze operating performance and leverage. Adjusted funds flow is cash flow from operating activities before changes in non-cash working capital, settlement of decommissioning obligations and certain E&E costs, but after payments on the gas over bitumen royalty financing and payments on restructuring costs. Adjusted funds flow is not intended to represent cash flow from operating activities, net earnings or other measures of financial performance calculated in accordance with IFRS. The Corporation previously referred to adjusted funds flow as "funds flow".

**Operating netback:** Perpetual considers operating netback an important performance measure as it demonstrates its profitability relative to current commodity prices. Operating netback is calculated by deducting royalties, operating costs, and transportation from realized revenue. Operating netback is also calculated on a per boe basis using average boe production for the period. Operating netback on a per boe basis can vary significantly for each of the Company's operating areas.

**Realized revenue:** Realized revenue includes oil and natural gas revenue, realized gains (losses) on financial natural gas, crude oil and foreign exchange contracts but excludes any realized gains (losses) resulting from contracts related to the Shallow Gas Disposition. Realized revenue, excluding foreign exchange contracts is used by management to calculate the Corporation's net realized commodity prices taking into account monthly settlements on financial crude oil and natural gas forward sales, collars and basis differentials. These contracts are put in place to protect Perpetual's adjusted funds flow from potential volatility in commodity prices, and as such, any related realized gains or losses are considered part of the Corporation's realized price.

**Gas over bitumen revenue, net of payments:** Gas over bitumen revenue, net of payments, includes gas over bitumen revenue less monthly payments on the gas over bitumen royalty financing. This is used by management to calculate the Corporation's net realized gas over bitumen revenue to reflect the substantive monetization of the future gas over bitumen royalty credits.

**Adjusted working capital deficiency (surplus):** Adjusted working capital deficiency (surplus) includes total current assets and current liabilities excluding short-term derivative assets and liabilities related to the Corporation's risk management activities, current portion of gas over bitumen royalty financing, TOU (described below) share investment, current portion of the TOU share margin loans and current portion of provisions.

**Net debt:** Net debt includes adjusted working capital deficiency (surplus), the TOU share margin loans and the principal amount of the Term Loan and senior notes reduced for the mark-to-market value of TOU shares held. Net debt is used by management to analyze borrowing capacity.

**Total capitalization:** Total capitalization is equal to net debt plus market value of issued equity and is used by management to analyze leverage. Total capitalization is not intended to represent the total funds from equity and debt received by the Corporation upon issuance.

**VOLUME CONVERSIONS:** Barrel of oil equivalent ("boe") may be misleading, particularly if used in isolation. In accordance with National Instrument 51-101 ("NI 51-101"), a conversion ratio for natural gas of 6 Mcf:1 bbl has been used, which is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. In addition, utilizing a conversion on a 6 Mcf:1 bbl basis may be misleading as an indicator of value as the value ratio between natural gas and crude oil, based on the current prices of natural gas and crude oil, differ significantly from the energy equivalency of 6 Mcf:1 bbl.

**FORWARD-LOOKING INFORMATION AND STATEMENTS:** Certain information and statements contained in this MD&A including management's assessment of future plans and operations and including the information contained under the heading "Outlook" may constitute forward-looking information and statements within the meaning of applicable securities laws. This information and these statements relate to future events or to future performance. All statements other than statements of historical fact may be forward-looking information and statements. The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe", "outlook", "guidance", "objective", "plans", "intends", "targeting", "could", "potential", "strategy" and any similar expressions are intended to identify forward-looking information and statements.

In particular, but without limiting the foregoing, this MD&A contains forward-looking information and statements pertaining to the following: the quantity and recoverability of Perpetual's reserves; the timing and amount of future production; future prices as well as supply and demand for natural gas, natural gas liquids ("NGL") and oil; the existence, operations and strategy of the commodity price risk management program; the approximate amount of forward sales and financial contracts to be employed, and the value of financial forward natural gas, oil and other risk management contracts; net income and adjusted funds flow sensitivities to commodity price, production, foreign exchange and interest rate changes; operating, general and administrative ("G&A"), and other expenses; the expected impact of cost-saving initiatives on operating and G&A expenses, the costs and timing of future abandonment and reclamation, asset retirement and environmental obligations; the use of exploration and development activity, prudent asset management, and acquisitions to sustain, replace or add to reserves and production or expand the Corporation's asset base; the Corporation's acquisition and disposition strategy and the existence of acquisition and disposition opportunities, the criteria to be considered in connection therewith and the benefits to be derived therefrom; Perpetual's ability to benefit from the combination of growth opportunities and the ability to grow through the capital expenditure program; expected compliance with credit facility and term loan covenants in 2017 and 2018; the retention of, and benefits to be received from holding the TOU shares (as defined above); expected book value and related tax value of the Corporation's assets and prospect inventory and estimates of net asset value; adjusted funds flow; ability to fund exploration and development; the corporate strategy; expectations regarding Perpetual's access to capital to fund its acquisition, exploration and development activities; the effect of future accounting pronouncements and their impact on the Corporation's financial results; future income tax and its effect on adjusted funds flow; intentions with respect to preservation of tax pools and taxes payable by the Corporation; funding of and anticipated results from capital expenditure programs; renewal of and borrowing costs associated with the credit facility; future debt levels, financial capacity, liquidity and capital resources; future contractual commitments;

drilling, completion, facilities, construction and waterflood plans, and the effect thereof; the impact of Canadian federal and provincial governmental regulation on the Corporation relative to other issuers; Crown royalty rates; Perpetual's treatment under governmental regulatory regimes; business strategies and plans of management including future changes in the structure of business operations and debt reduction initiatives; and the reliance on third parties in the industry to develop and expand Perpetual's assets and operations.

The forward-looking information and statements contained in this MD&A reflect several material factors, expectations and assumptions of the Corporation including, without limitation, that Perpetual will conduct its operations in a manner consistent with its expectations and, where applicable, consistent with past practice; the general continuance of current or, where applicable, assumed industry conditions; the continuance of existing, and in certain circumstances, the implementation of proposed tax, royalty and regulatory regimes; the ability of Perpetual to obtain equipment, services, and supplies in a timely manner to carry out its activities; the accuracy of the estimates of Perpetual's reserve and resource volumes; the timely receipt of required regulatory approvals; certain commodity price and other cost assumptions; the timing and costs of storage facility and pipeline construction and expansion and the ability to secure adequate product transportation; the continued availability of adequate debt and/or equity financing and adjusted funds flow to fund the Corporation's capital and operating requirements as needed; and the extent of Perpetual's liabilities.

The Corporation believes the material factors, expectations and assumptions reflected in the forward-looking information and statements are reasonable but no assurance can be given that these factors, expectations and assumptions will prove to be correct. The forward-looking information and statements included in this MD&A are not guarantees of future performance and should not be unduly relied upon. Such information and statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking information or statements including, without limitation: volatility in market prices for oil and natural gas products; supply and demand regarding Perpetual's products; risks inherent in Perpetual's operations, such as production declines, unexpected results, geological, technical, or drilling and process problems; unanticipated operating events that can reduce production or cause production to be shut-in or delayed; changes in exploration or development plans by Perpetual or by third party operators of Perpetual's properties; reliance on industry partners; uncertainties or inaccuracies associated with estimating reserves volumes; competition for, among other things; capital, acquisitions of reserves, undeveloped lands, skilled personnel, equipment for drilling, completions, facilities and pipeline construction and maintenance; increased costs; incorrect assessments of the value of acquisitions; increased debt levels or debt service requirements; industry conditions including fluctuations in the price of natural gas and related commodities; royalties payable in respect of Perpetual's production; governmental regulation of the oil and gas industry, including environmental regulation; fluctuation in foreign exchange or interest rates; the need to obtain required approvals from regulatory authorities; changes in laws applicable to the Corporation, royalty rates, or other regulatory matters; general economic conditions in Canada, the United States and globally; stock market volatility and market valuations; limited, unfavorable, or a lack of access to capital markets, and certain other risks detailed from time to time in Perpetual's public disclosure documents. The foregoing list of risk factors should not be considered exhaustive.

The forward-looking information and statements contained in this MD&A speak only as of the date of this MD&A, and neither the Corporation nor any of its subsidiaries assumes any obligation to publicly update or revise them to reflect new events or circumstances, unless expressly required to do so by applicable securities laws.