# **MANAGEMENT'S DISCUSSION & ANALYSIS**

The following Management's Discussion and Analysis ("MD&A") of financial results should be read in conjunction with the unaudited Consolidated Financial Statements for the three and six months ended June 30, 2018 of Pengrowth Energy Corporation ("Pengrowth" or the "Corporation"). This MD&A is based on information available to August 2, 2018.

Pengrowth's second quarter and year to date 2018 results are contained within this MD&A.

#### **BUSINESS OF THE CORPORATION**

Pengrowth is a Canadian resource company that is engaged in the production, development, exploration and acquisition of oil and natural gas assets. The financial and operating results from divested properties are included in Pengrowth's results up to the month-end nearest the date of closing for each disposition.

### FREQUENTLY RECURRING TERMS

"SOR"

"CSOR"

Pengrowth uses the following frequently recurring industry terms and abbreviations in this MD&A:

"bbl"	barrel	"ARO"	asset retirement obligations
"bbl/d"	barrels per day	"G&A"	general and administrative expenses
"Mbbl"	thousand barrels	"DD&A"	depletion, depreciation and amortization
"MMbbls"	million barrels	"IFRS"	International Financial Reporting Standards
"boe"	barrel of oil equivalent (1)	"AIF"	Annual Information Form
"boe/d"	barrels of oil equivalent per day (1)	"WTI"	West Texas Intermediate crude oil price
"Mboe"	thousand boe (1)	"WCS"	Western Canadian Select crude oil price
"MMboe"	million boe (1)	"AECO"	Alberta natural gas price point
"Mcf"	thousand cubic feet	"NYMEX"	New York Mercantile Exchange
"Mcf/d"	thousand cubic feet per day	"SOEP"	Sable Offshore Energy Project
"MMcf"	million cubic feet	"GCA"	Gas Cost Allowance
"MMcf/d"	million cubic feet per day	"NCG"	Non-Condensable Gas
"Bcf"	billion cubic feet	"NGTL"	Nova Gas Transmission Limited
"EPEA"	Environmental Protection and Enhancement Act		
"CO2"	carbon dioxide which is a gas at room temperature and pressure		
"SAGD"	steam assisted gravity drainage		
"diluent"	hydrocarbon based diluting agent required to facilitate the transportation of bitumen		
"dilbit" or "diluted bitumen"	bitumen blended with diluent		

### ADVISORY REGARDING FORWARD-LOOKING STATEMENTS

steam oil ratio

cumulative steam oil ratio

This MD&A contains forward-looking statements within the meaning of securities laws, including the "safe harbour" provisions of Canadian securities legislation and the United States *Private Securities Litigation Reform Act of 1995*. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "believe", "expect", "plan", "intend", "forecast", "target", "project", "guidance", "may", "will", "should", "could", "estimate", "predict" or similar words suggesting future outcomes or language suggesting an outlook.

Disclosure provided herein in respect of a boe may be misleading, particularly if used in isolation. A boe conversion ratio of six Mcf of natural gas to one barrel of crude oil equivalent is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

Forward-looking statements in this MD&A include, but are not limited to, statements with respect to: reserves, production, the proportion of production of each product type, production additions from Pengrowth's development program, royalty expenses, operating expenses, tax horizon, deferred income taxes, ARO, remediation, reclamation and abandonment expenses, clean-up and remediation costs, capital expenditures, development activities, cash G&A, onerous office lease contracts, Lindbergh expansion plans, production capacity, anticipated low costs and sustaining capital and proceeds from the disposal of properties, anticipated free funds flow and use of free funds flow to pay down debt, the proposed construction of co-generation capacity at Lindbergh and the anticipated impact of the implementation of NCG to enhance production and lower SORs. Statements relating to "reserves" are forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the reserves described exist in the quantities predicted or estimated and can profitably be produced in the future.

Forward-looking statements and information are based on Pengrowth's current beliefs as well as assumptions made by, and information currently available to, Pengrowth concerning general economic and financial market conditions, anticipated financial performance, business prospects, strategies, regulatory developments, including in respect of taxation, royalty rates and environmental protection, future capital expenditures and the timing thereof, future oil and natural gas commodity prices and differentials between light oil and bitumen prices, future oil and natural gas production levels, future exchange rates and interest rates, the amount of future cash dividends paid by Pengrowth, the cost of expanding our property holdings, our ability to obtain labour and equipment in a timely manner to carry out development activities, our ability to market our oil and natural gas successfully to current and new customers including transportation availability, the impact of increasing competition, our ability to obtain financing on acceptable terms and meet financial covenants and our ability to add production and reserves through our development, exploitation and exploration activities. Although management considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks that predictions, forecasts, projections and other forward-looking statements will not be achieved. We caution readers not to place undue reliance on these statements as a number of important factors could cause the actual results to differ materially from the beliefs, plans, objectives, expectations and anticipations, estimates and intentions expressed in such forward-looking statements. These factors include, but are not limited to: the volatility of oil and gas prices; Canadian light oil and bitumen differentials; production and development costs and capital expenditures; the imprecision of reserve estimates and estimates of recoverable quantities of oil, natural gas and liquids; Pengrowth's ability to replace and expand oil and gas reserves, ability to produce those reserves; production may be impacted by unforeseen events such as equipment and transportation failures and weather related issues; environmental claims and liabilities; incorrect assessments of value when making acquisitions; increases in debt service charges; the loss of key personnel; the marketability of production; defaults by third party operators; unforeseen title defects; fluctuations in foreign currency and exchange rates; inadequate insurance coverage; counterparty risk; compliance with environmental laws and regulations; actions by government authorities, including the imposition or reassessment of taxes including changes in income taxes and royalty laws; Pengrowth's ability to access external sources of debt and equity capital; new IFRS; and the implementation of greenhouse gas emissions legislation and the impact of carbon taxes. Further information regarding these factors may be found under the heading "Business Risks" herein and under "Risk Factors" in Pengrowth's most recent AIF, and in Pengrowth's most recent audited annual Consolidated Financial Statements, management information circular, quarterly reports, material change reports and news releases. Copies of Pengrowth's public filings are available on SEDAR at www.sedar.com and EDGAR at www.sec.gov.

Pengrowth cautions that the foregoing list of factors that may affect future results is not exhaustive. When relying on our forward-looking statements to make decisions with respect to Pengrowth, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Furthermore, the forward-looking statements contained in this MD&A are made as of the date of this MD&A and Pengrowth does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, except as required by law. The forward-looking statements in this document are provided for the limited purpose of enabling current and potential investors to evaluate an investment in Pengrowth. Readers are cautioned that such statements may not be appropriate, and should not be used for other purposes.

The forward-looking statements contained in this MD&A are expressly qualified by this cautionary statement.

## **CRITICAL ACCOUNTING ESTIMATES**

The unaudited Consolidated Financial Statements are prepared in accordance with IFRS. The preparation of these Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported

amounts of assets and liabilities, the disclosure of contingencies at the date of the unaudited Consolidated Financial Statements and revenues and expenses during the reporting period. Actual results could differ from those estimated. For more information about Pengrowth's critical accounting estimates and accounting policies refer to the December 31, 2017 annual report.

Pengrowth's ARO risk free discount rate was 2.3 percent at June 30, 2018, unchanged from December 31, 2017. Pengrowth uses the 30 year Canadian Government long term bond rate to estimate its ARO discount rate. There were no other changes to Pengrowth's critical accounting estimates in the six months ended June 30, 2018.

## **COMPARATIVE FIGURES**

Certain prior years' comparative figures have been reclassified to conform to presentation in the current year.

### **ADOPTION OF IFRS 15**

Pengrowth elected to early adopt IFRS 15 Revenue from Contracts with Customers ('IFRS 15") in the fourth quarter of 2017 effective January 1, 2017, using the cumulative effect method. In accordance with this method, prior years' financial statements had not been restated upon adoption and the cumulative effect on net earnings of the application of IFRS 15 to revenue contracts in progress at January 1, 2017 was \$nil. Pengrowth management reviewed its revenue streams and major contracts with customers using the IFRS 15 five step model and there were no material changes to net earnings or timing of produced petroleum revenue recognized. It should be noted, however, that certain Income Statement line item reclassifications were made at the time of adoption as a result of the implementation of IFRS 15. See Accounting Pronouncements section of this MD&A as well as Note 2 to the December 31, 2017 audited Consolidated Financial Statements for more information.

### **NON-GAAP FINANCIAL MEASURES**

This MD&A refers to certain financial measures that are not determined in accordance with IFRS. These measures do not have standardized meanings and may not be comparable to similar measures presented by other oil and gas companies.

Management monitors Pengrowth's capital structure and covenant compliance using non-GAAP financial metrics some of which are discussed in the Financial Resources and Liquidity section of this MD&A. These metrics are:

- trailing twelve months earnings before interest, taxes, DD&A, accretion, impairment, gain (loss) on disposition
  of properties, change in fair value of commodity risk management contracts, unrealized foreign exchange gain
  (loss), non-cash share based compensation expense, loss on extinguishment of debt, foreign exchange
  derivative settlements, restructuring costs and EBITDA related to material divestments ("Adjusted EBITDA");
- trailing twelve months interest expense excluding interest expense related to debt repaid with proceeds from divestments ("Adjusted Interest Expense");
- Adjusted EBITDA to Adjusted Interest Expense ratio (the "Interest Coverage" ratio);
- Total debt before working capital to the trailing twelve months Adjusted EBITDA; and
- Total debt before working capital as a percentage of total book capitalization ("Debt to Book Capitalization").

For the purposes of certain covenant calculations only, letters of credit and finance leases are incorporated in total debt before working capital for covenant purposes. Total book capitalization is the sum of total debt before working capital for covenant purposes and shareholders' equity.

Management believes that, in addition to net income (loss), adjusted net income (loss) is a useful supplemental measure as it reflects the underlying performance of Pengrowth's core business activities. Net income (loss) may significantly be impacted by non-cash changes in fair value of commodity risk management contracts and unrealized foreign exchange gains and losses while adjusted net income (loss) excludes the after-tax effect of these items which do not represent Pengrowth's core business activities.

Management considers adjusted funds flow to be a key measure of operating performance as it demonstrates Pengrowth's ability to generate the necessary funds for sustaining capital, future growth through capital investment, and to repay debt. Management believes that such a measure provides an insightful assessment of Pengrowth's operations on a continuing basis by eliminating changes in non-cash operating working capital and actual settlements of ARO. The extent and timing of ARO settlements, in the opinion of Management, is largely discretionary and in the case of SOEP is pre funded by an externally managed trust fund.

Free funds flow is defined as adjusted funds flow less capital expenditures. Management believes this is a useful supplemental measure as it reflects funds available for debt repayment.

Produced petroleum revenue is a useful measure of revenue as it only includes the revenue from company interest production, by excluding processing income and revenue from purchased products, such as diluent and other third party volumes. This measure can be expressed on a per boe basis.

Adjusted operating expenses are calculated as operating expenses less processing income primarily generated by processing third party volumes at processing facilities where Pengrowth has an ownership interest, and can be expressed on a per boe basis. Management believes this is a useful supplemental measure as it reflects the cash outlay at its processing facilities, being after cost recoveries earned by utilizing spare capacity though processing third party volumes.

Royalty expenses as a percent of produced petroleum revenue is a useful measure as it reflects overall royalty percentage related to revenues which are subject to royalties.

Pengrowth's operating netbacks are defined as produced petroleum revenue, less royalties, less adjusted operating expenses and less transportation expenses divided by production for the period. Operating netbacks can be expressed either before or after realized commodity risk management. Operating netbacks may not be comparable to similar measures presented by other companies, as there are no standardized measures.

Management believes that segregating G&A expenses into cash and non-cash expenses is useful to the reader, as non-cash expenses only affect net income (loss) but not adjusted funds flow. Cash and non-cash G&A expenses per boe are calculated by dividing cash and non-cash G&A expenses by production for the period.

### **OPERATIONAL MEASURES**

The reserves and production in this MD&A refer to company-interest reserves or production that is Pengrowth's working interest share of production or reserves prior to the deduction of Crown and other royalties plus any Pengrowth-owned royalty interest in production or reserves at the wellhead, in accordance with Canadian industry practice. Company-interest is more fully described in the AIF.

When converting natural gas to equivalent barrels of oil within this MD&A, Pengrowth uses the industry standard of six Mcf to one boe. Barrels of oil equivalent may be misleading, particularly if used in isolation; a conversion ratio of six Mcf of natural gas to one boe is based on an energy equivalency conversion method primarily applicable to the burner tip and does not represent a value equivalency at the wellhead.

Steam Oil Ratio measures the rate of steam required to produce a barrel of bitumen. This can be expressed either as an average or at a point in time.

These measures do not have standardized meanings and may not be comparable to similar measures presented by other oil and gas companies.

## **CURRENCY**

All amounts are stated in Canadian dollars unless otherwise specified.

## **CORPORATE OVERVIEW**

Pengrowth is a conventional resource developer focused on growing bitumen production from the Lloydminster formation at the Lindbergh thermal project through steam assisted gravity drainage ("SAGD"). The project encompasses 42.5 sections of land which has potential capacity of more than 40,000 bbl/d, once fully developed. As one of the southernmost SAGD projects in Alberta, Lindbergh has natural advantages in terms of location and oil quality that allows flexibility in accessing markets.

Pengrowth's 100 percent owned Groundbirch property is in the Montney fairway and encompasses 19 sections of land. This project indirectly fulfills the Lindbergh project's natural gas needs. Dry natural gas from the Montney formation is produced using horizontal wells and multi-stage fracture technology with drilling potential of up to 360 unrisked net locations. The Corporation operates a 30 MMcf/d facility to process and deliver natural gas onto major pipelines.

## **MULTI-YEAR DEVELOPMENT PLAN**

On June 26, 2018, Pengrowth launched its multi-year development plan to incrementally increase bitumen production at Lindbergh in bite sized steps rather than in one large phase. In addition to aligning capital spending with Pengrowth's

expected cash flow, this common sense approach gives Pengrowth the flexibility to rapidly change its capital spending plans depending on the price of oil.

Pengrowth is currently assessing third party proposals to construct and own additional co-generation capacity at Lindbergh to provide steam and power for further expansion in late 2020. This would allow Pengrowth to focus capital on developing new well pads, drilling new well pairs, additional infill wells, as well as adding incremental facility fluid handling capacity.

Low-cost proven technologies, including the co-injection of Non-Condensable Gas ("NCG") and solvents, to further enhance production and lower steam-oil ratios (SOR) will be deployed. Pengrowth received regulatory approval for the application of NCG injection at Lindbergh in early June 2018.

Using a U.S.\$65/bbl WTI price scenario, Lindbergh full year average production volumes are expected to grow to a range of 17,500 to 18,000 bbl/d in 2019 with total corporate volumes expected to be between 22,000 to 22,500 boe/d. In 2020 under this price scenario, Lindbergh volumes are expected to average between 19,500 and 20,000 bbl/d with corporate volumes of 23,000 to 24,000 boe/d.

Ultimately, the multi-year development plan aims to grow Lindbergh production to 35,000 bbl/d by the end of 2023. Plans to further expand production to 40,000 to 50,000 bbl/d will depend on commodity prices.

Groundbirch maintains a significant inventory of more than 300 locations in some of the most productive Montney horizons in the basin, as demonstrated by recent Pengrowth and industry results. Capital investment in Groundbirch beyond 2018 will be curtailed until natural gas pricing improves.

## **2018 GUIDANCE**

The following table provides a summary of full year 2018 Guidance and actual results for the six months ended June 30, 2018:

	Actual YTD June 30, 2018	Original full year 2018 Guidance (1)	Revised full year 2018 Guidance (1)	Change
Average production (boe/d)	21,079	22,500 - 23,500	22,500 - 23,500	_
Capital expenditures (\$ millions)	49.5	65	65	_
Royalty expenses (% of produced petroleum revenue) (2) (3)	8.3	6.0	8.5	2.5
Adjusted operating expenses (\$/boe) (2)	10.25	10.50 - 11.50	10.50 - 11.50	_
Cash G&A expenses (\$/boe) (2)	4.64	3.10 - 3.35	3.50 - 3.85	0.40 - 0.50

<sup>(1)</sup> Per boe estimates based on high and low ends of production Guidance.

Year to date 2018 production of 21,079 boe/d is on track to reach full year 2018 Guidance. Guidance is supported by solid base production from Lindbergh, the increase in Groundbirch production since April 1, 2018 with the addition of new wells, and with the contribution of the eight infill wells at Lindbergh expected to commence production in the fourth quarter of 2018. Lindbergh production was 15,499 bbl/d in the first six months of 2018, not incorporating production from the eight infill wells drilled and completed at the end of the second quarter, as noted above. Lindbergh production is expected to exit the year at approximately 18,000 bbl/d.

Year to date 2018 royalty expenses as a percent of produced petroleum revenue of 8.3 percent were above full year 2018 Guidance impacted by an increase in commodity prices. Crown royalties are paid on a sliding scale and original 2018 Guidance was determined based on U.S.\$50/bbl WTI. Pengrowth is revising its full year 2018 Guidance for royalty expenses as a percent of produced petroleum revenue to 8.5 percent based on the impact of higher commodity prices year to date 2018 and the assumption that WTI will average U.S.\$65/bbl for the remainder of 2018.

Cash G&A expenses in the first half of 2018 included costs related to administrative support associated with disposed properties and salaries of staff subject to corporate restructuring. Full year 2018 cash G&A expenses per boe are anticipated to be higher than original 2018 Guidance due to higher costs incurred in the first half of 2018. Pengrowth is therefore revising full year 2018 Guidance related to cash G&A expenses per boe to a range of \$3.50 - \$3.85/boe.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

<sup>(3)</sup> Excludes financial commodity risk management activities.

#### **RESULTS OF OPERATIONS**

All volumes, wells and spending amounts stated below reflect Pengrowth's net working interest for both operated and non-operated properties unless otherwise stated.

#### **CAPITAL EXPENDITURES**

	Three months ended		Six month	ns ended
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Drilling, completions and facilities				
Lindbergh (1)	17.8	30.3	25.9	43.1
Groundbirch and conventional assets	3.4	0.3	19.5	1.5
Total drilling, completions and facilities	21.2	30.6	45.4	44.6
Land & seismic acquisitions (2)	_	0.2	(0.1)	0.2
Maintenance capital	1.8	6.0	4.0	11.0
Development capital	23.0	36.8	49.3	55.8
Other capital	0.1	(0.1)	0.2	0.3
Capital expenditures	23.1	36.7	49.5	56.1

<sup>(1)</sup> Excludes capitalized interest, see Interest and Financing Charges section of the MD&A.

Second quarter of 2018 capital expenditures of \$23.1 million were primarily focused on the Lindbergh 2018 infill drilling of additional producer wells. Through the second quarter of 2018, eight infill wells were drilled and completed, tie in work was largely completed and production is anticipated to be brought on stream in the fourth quarter of 2018 increasing Lindbergh production to approximately 18,000 bbl/d by the end of 2018. In addition to the drilling program, 4.5 megawatt of power generation was brought on line in the second quarter of 2018 to meet the current Central Processing Facility backup needs.

Groundbirch capital spending through the second quarter of 2018 was primarily focused on the finalization of the compression project which increased Groundbirch production from 9 MMcf/d to approximately 28 MMcf/d in early April 2018. The finalization of this project enables Pengrowth to shift transportation of natural gas production from Groundbirch away from Station Two and onto the Nova Gas Transmission Limited ('NGTL") system. Pengrowth has elected to curtail production volumes to approximately 20 MMcf/d with the continued weakness of Western Canadian natural gas prices. During the second quarter of 2018, capital spending on maintenance and integrity of existing assets amounted to \$1.8 million.

Year to date 2018 capital expenditures were \$49.5 million, with \$28.7 million spent at Lindbergh inclusive of maintenance capital and \$19.6 million spent at Groundbirch. The remaining capital was spent at Pengrowth's conventional properties as noted above.

Pengrowth's 2018 capital program was 76 percent complete in the first half of 2018, as planned.

Expansion at Lindbergh will be achieved in incremental steps aligning capital spending with Pengrowth's expected cash flow, shifting the development methodology away from the previously contemplated large single phase approach. Development capital is expected to be focused on drilling new well pairs, additional infill wells, as well as, adding incremental facilities for fluid handling capacity. The Corporation expects to implement the use of Non-Condensable Gas ("NCG") to further enhance production and lower SORs. Regulatory approval for the application of NCG injection at Lindbergh was received in June 2018. Capital to be committed to Lindbergh in 2019 and onwards will be dependent on the prevailing commodity prices.

Groundbirch has a low cost structure which supports growth in production and cash flow under a stronger natural gas pricing environment.

<sup>(2)</sup> Seismic acquisitions are net of seismic sales revenue.

#### **PRODUCTION**

	Three months ended			Six months ended				
Daily production	Jun 30, 2018	% of total	Jun 30, 2017	% of total	Jun 30, 2018	% of total	Jun 30, 2017	% of total
Bitumen (bbl/d)	15,876	70	13,657	28	15,499	74	14,258	28
Natural gas (Mcf/d)	34,064	25	118,939	40	27,091	21	120,088	39
Light oil (bbl/d)	769	4	9,322	19	783	4	10,012	20
Natural gas liquids (NGL) (bbl/d)	278	1	6,547	13	281	1	6,858	13
Total boe/d	22,600		49,349		21,079		51,143	

Second quarter of 2018 total average daily production decreased 54 percent compared to the same period in 2017 due to the absence of approximately 30,000 boe/d of production related to properties divested in 2017. Partly offsetting this impact was the 16 percent increase in bitumen production in the second quarter of 2018 compared to the same period in 2017 as the production growth from the Lindbergh wells drilled in late 2017 outpaced natural declines. Average production at Groundbirch increased 109 percent in the second quarter of 2018 compared to the same period last year driven by production from the wells drilled in the fourth quarter of 2017 which commenced flow on the NGTL system on April 1, 2018.

The gas production from Groundbirch provides an indirect supply of natural gas for Pengrowth's requirements to generate steam at Lindbergh.

Second quarter of 2018 natural gas, light oil and NGL production decreased 71 percent, 92 percent and 96 percent, respectively, compared to the second quarter of 2017 due to property divestments.

Year to date 2018 total average daily production decreased 59 percent compared to the same period in 2017 due to the absence of approximately 31,000 boe/d of production related to 2017 divestments. This was partly offset by a 9 percent and 41 percent increase in Lindbergh and Groundbirch production, respectively, compared to the same period in 2017.

## FINANCIAL HIGHLIGHTS

	Three months ended		Six months ended	
(\$ millions except per boe amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Production (boe/d)	22,600	49,349	21,079	51,143
Capital expenditures	23.1	36.7	49.5	56.1
Cash flow from operating activities	12.8	36.5	0.5	102.2
Adjusted funds flow (1)	10.1	29.3	17.3	56.2
Operating netback before realized commodity risk management (\$/boe) (1)	25.82	13.23	25.01	15.13
Adjusted net income (loss) (1)	(22.9)	(250.6)	(39.5)	(380.1)
Net income (loss)	(27.5)	(242.4)	(54.7)	(328.7)
Total debt before working capital (2)	701.5	1,061.1	701.5	1,061.1

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures"

<sup>(2)</sup> Includes Credit Facility, current and long term portions of term notes, as applicable, and bank indebtedness. Excludes letters of credit and finance leases.

## Adjusted Funds Flow

The following table provides a reconciliation of cash flow from operating activities to adjusted funds flow:

Three months ended		ths ended	Six months ended		
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Cash flow from operating activities	12.8	36.5	0.5	102.2	
Add (deduct):					
Interest and financing charges	(12.6)	(17.2)	(23.7)	(43.6)	
Expenditures on remediation	6.3	4.1	10.3	8.5	
Change in non-cash operating working capital	3.6	5.9	30.2	(10.9)	
Total	(2.7)	(7.2)	16.8	(46.0)	
Adjusted funds flow (1)	10.1	29.3	17.3	56.2	

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures".

The following table represents a continuity of adjusted funds flow:

(\$ millions)		Q2/17 vs. Q2/18	% Change		YTD 2017 vs. 2018	% Change
Adjusted funds flow for comparative period (1)	Q2/17	29.3		YTD 2017	56.2	
Increase (decrease) due to:						
Volumes		(82.5)	(281)		(185.9)	(331)
Prices including differentials		23.9	81		32.4	58
Realized commodity risk management		(19.9)	(68)		(17.3)	(31)
Royalties		7.8	26		18.6	33
Expenses:						
Adjusted operating		42.2	144		84.5	151
Cash G&A		7.3	25		15.1	27
Interest & financing		4.6	16		19.9	35
Onerous office lease payments		(1.5)	(5)		(3.0)	(5)
Restructuring costs - severance		(1.0)	(4)		(1.5)	(3)
Other - including transportation		(0.1)	_		(1.7)	(3)
Net change		(19.2)	(66)		(38.9)	(69)
Adjusted funds flow (1)	Q2/18	10.1		YTD 2018	17.3	

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures".

Second quarter and year to date 2018 adjusted funds flow decreased 66 percent and 69 percent, respectively, compared to the same periods last year primarily due to property divestments, realized commodity risk management losses and higher cost of diluent. Partly offsetting these decreases were higher realized bitumen prices in 2018 resulting from an increase in WCS benchmark prices and the favourable impact of the physical delivery fixed price differential contracts compared to the prior year.

The absence of volumes related to divested properties was partly offset by the absence of operating expenses and royalties also related to the divested properties combined with lower interest and financing charges and lower cash G&A.

### Net Income (Loss)

Pengrowth recorded a net loss of \$27.5 million in the second quarter of 2018 compared to a net loss of \$242.4 million in the same period last year. The net loss decreased primarily due to the absence of impairment charges and lower DD&A expenses.

Year to date 2018 net loss decreased to \$54.7 million compared to a net loss of \$328.7 million in 2017 due to the absence of impairment charges, lower DD&A expenses and absence of losses on property dispositions recorded in the prior year. These were partly offset by unrealized losses on commodity risk management and foreign exchange both recorded in 2018 compared to unrealized gains in 2017, combined with lower adjusted funds flow in 2018.

## Adjusted Net Income (Loss)

Pengrowth reports adjusted net income (loss) to remove the effect of unrealized gains and losses.

The following table provides a reconciliation of net income (loss) to adjusted net income (loss):

Three months e		hs ended	ended Six months		
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Net income (loss)	(27.5)	(242.4)	(54.7)	(328.7)	
Exclude non-cash items from net income (loss):					
Change in fair value of commodity risk management contracts	(3.6)	2.5	(8.3)	56.2	
Unrealized foreign exchange gain (loss) (1)	(2.0)	6.4	(9.1)	10.4	
Tax effect on non-cash items above	1.0	(0.7)	2.2	(15.2)	
Total excluded	(4.6)	8.2	(15.2)	51.4	
Adjusted net income (loss) (2)	(22.9)	(250.6)	(39.5)	(380.1)	

<sup>(1)</sup> Relates to the foreign denominated debt net of associated foreign exchange risk management contracts.

The following table represents a continuity of adjusted net income (loss):

(\$ millions)		Q2/17 vs. Q2/18	YTD 2	017 vs. 2018
Adjusted net income (loss) for comparative period	Q2/17	(250.6)	YTD 2017	(380.1)
Adjusted funds flow increase (decrease)		(19.2)		(38.9)
DD&A and accretion expense (increase) decrease		32.2		74.9
Impairment charges (increase) decrease		306.3		377.3
Realized foreign exchange gain (loss) on settled FX swaps		_		2.8
Loss on property dispositions (increase) decrease		(21.1)		24.3
Restructuring costs - onerous office lease contracts		_		1.7
Onerous office lease payments		1.5		3.0
Loss on extinguishment of debt		1.1		7.5
Other		1.5		2.5
Estimated tax on above		(74.6)		(114.5)
Net change		227.7		340.6
Adjusted net income (loss) (1)	Q2/18	(22.9)	YTD 2018	(39.5)

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures".

Pengrowth posted an adjusted net loss of \$22.9 million in the second quarter of 2018 compared to an adjusted net loss of \$250.6 million in the second quarter of 2017. The \$227.7 million decrease in adjusted net loss was primarily due to the absence of impairment charges and lower DD&A expenses.

Year to date 2018 adjusted net loss of \$39.5 million was \$340.6 million lower than the same period last year primarily driven by the absence of impairment charges, lower DD&A expenses partly offset by a decrease in adjusted funds flow mainly as a result of property divestments.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

## Sensitivity of Adjusted Funds Flow to Commodity Prices

The following table illustrates the sensitivity of adjusted funds flow to increases in commodity prices and differentials after taking into account Pengrowth's commodity risk management contracts and outlook on oil differentials. See Note 12 to the June 30, 2018 unaudited Consolidated Financial Statements for more information on Pengrowth's risk management contracts. The calculated impact on revenue/cash flow is only applicable within a limited range of the change indicated and is based on production guidance levels contained herein.

12 Month Adjusted **Funds Flow COMMODITY PRICE ENVIRONMENT (1) Assumption** Change (Cdn\$ millions) West Texas Intermediate Oil (2) U.S.\$/bbl \$64.54 \$1.00 Bitumen 8.1 Oil risk management (3) (2.6)0.4 Light oil and NGLs Net impact of U.S.\$1/bbl increase in WTI 5.9 Oil differentials (2) Bitumen U.S.\$/bbl \$1.00 (8.1)\$19.43 Light oil U.S.\$/bbl \$6.58 \$1.00 (0.4)Physical oil differential risk management (4) 4.1 Net impact of U.S.\$1/bbl increase in differentials (4.4)AECO Natural Gas (2) Cdn\$/Mcf \$1.56 \$0.10 Natural gas 8.0 Net impact of Cdn\$0.10/Mcf increase in AECO 8.0

**Estimated Impact on** 

<sup>(1)</sup> Calculations are performed independently and are not indicative of actual results when multiple variables change at the same time. The exchange rate of Cdn \$1 = U.S.\$0.76 was used for the 12 month period.

<sup>(2)</sup> Commodity price is based on an estimation of the 12 month forward price curve at July 17, 2018 and does not include the impact of commodity risk management contracts.

<sup>(3)</sup> Includes commodity risk management contracts as at July 17, 2018.

<sup>(4)</sup> Reflects 2018 physical delivery contracts for 17,000 bbl/d of dilbit at a fixed price differential of approximately U.S.\$16.80/bbl and 2019 physical delivery contracts for 7,500 bbl/d of dilbit at a fixed price differential of approximately U.S.\$17.80/bbl. See Commodity Prices section of this MD&A for more information.

#### **COMMODITY PRICES**

## Bitumen and Liquids Prices Excluding Realized Commodity Risk Management from Financial Contracts

	Three mon	Three months ended		ns ended	
	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Average exchange rate (Cdn\$1 = U.S.\$)	0.77	0.74	0.78	0.75	
Average Benchmark Prices					
WTI oil (U.S.\$/bbl)	67.90	48.29	65.42	50.07	
WCS differential to WTI (U.S.\$/bbl) (1)	(19.24)	(11.11)	(21.74)	(12.84)	
WCS oil (U.S.\$/bbl)	48.66	37.18	43.68	37.23	
WCS oil (Cdn\$/bbl)	62.82	50.02	55.83	49.67	
Average Sales Prices (Cdn\$/bbl)					
Bitumen (1) (2) (3)	52.47	34.20	47.55	35.53	
Light oil	71.45	60.36	65.62	61.09	
Natural gas liquids	51.39	33.40	53.09	32.79	

<sup>(1)</sup> In the second quarter of 2018 Pengrowth managed WCS differential with fixed price differential physical delivery contracts of 17,000 bbl/d at approximately U.S. \$16.80/bbl of diluted bitumen.

Global crude oil prices continued to improve through the second quarter of 2018 as production and supply tightened. WTI crude oil prices averaged U.S.\$67.90/bbl during the second quarter of 2018, a 41 percent increase compared to the same period in 2017. Year to date 2018 average U.S. dollar WTI price of U.S.\$65.42/bbl was an increase of 31 percent from the same period in 2017.

Despite the increase in benchmark prices for global oil, Canadian producers continue to receive a discount for their production. Exchange rates, location and quality differentials as well as transportation bottlenecks are all factors that lower the price received for the Canadian crude oil. Canadian prices are represented by Edmonton par for light oil and WCS for diluted bitumen. Pengrowth primarily sells diluted bitumen from the Lindbergh property.

The discount between WTI and WCS widened significantly in 2018 compared to 2017. During the second quarter of 2018, the WCS index to WTI price discount averaged U.S.\$19.24/bbl compared to U.S.\$11.11/bbl in the second quarter 2017. Although the discount was wider in the first six months of 2018 compared to 2017, the average U.S.\$ WCS oil price was 31 percent and 17 percent higher compared to the second quarter of 2017 and year to date 2017, respectively, due to the higher overall global prices in the quarter.

Pengrowth's average bitumen sales price represents the price received for bitumen production from Lindbergh, prior to blending of the product with diluent. During the second quarter of 2018 bitumen realization was Cdn\$52.47/bbl, an increase of 53 percent compared to the same period in 2017. Pengrowth purchases diluent which is added to the bitumen produced and the blended product is then sold as WCS. The cost of blending is impacted by the amount of diluent required and the cost of purchasing and transporting the diluent.

Pengrowth uses physical delivery contracts to ensure access to markets, protect against pipeline apportionment, limit credit risk and exposure to widening WCS differentials. Since Pengrowth's physical delivery fixed price differential contracts averaged approximately U.S.\$16.80/bbl discount to WTI in the first six months of 2018, this resulted in a higher realized bitumen sales price by approximately Cdn\$3.95/bbl as compared to index prices in the second quarter of 2018.

Realized pricing for light oil moved in line with the underlying benchmarks, while the increase in NGL pricing year over year reflects movements in the underlying benchmark and a more favourable pricing environment for component products.

<sup>(2)</sup> Second quarter 2018 and year to date 2018 bitumen average sale prices were higher, as compared to index prices, by approximately Cdn\$3.95/bbl and \$7.13/bbl, respectively, resulting from the impact of fixed price differential physical delivery contracts.

<sup>(3)</sup> Calculated based on bitumen sales volumes and excludes diluent.

## Natural Gas Prices Excluding Realized Commodity Risk Management from Financial Contracts

	Three mor	iths ended	Six months ended	
(Cdn\$)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Average Benchmark Price				
AECO monthly gas (per MMBtu)	1.03	2.78	1.44	2.86
Average Sales Price				
Natural gas (per Mcf) (1)	1.77	3.01	2.55	3.14

<sup>(1)</sup> Average sales prices are recorded in Mcf to reflect the volumetric reporting standard for Pengrowth's natural gas.

The price realized by the Corporation for natural gas production from Western Canada is primarily determined by the AECO benchmark and based on Canadian fundamentals. Pengrowth also sells its natural gas at other sales points in addition to AECO monthly, which can result in a significant variance between Pengrowth's realized natural gas prices and the benchmark prices in any given period.

Pengrowth's second quarter and year to date 2018 average sales price for natural gas decreased 41 percent and 19 percent, respectively, compared to the same periods in 2017. The lower prices correspond to the decrease in AECO natural gas prices of 63 percent and 50 percent in the second quarter of 2018 and year to date 2018, respectively, compared to the same periods in 2017 which primarily resulted from an oversupply of Canadian natural gas and transportation constraints. The impact of this decrease was partially offset by sales of the Corporation's SOEP gas at the Algonquin City Gate trading hub in the Northeast U.S., which had a higher price in the second quarter of 2018 and year to date 2018 due to periods of colder weather impacting demand.

#### Produced Petroleum Revenue Realizations

Produced petroleum revenue realizations are calculated based on bitumen, natural gas, light oil and natural gas liquids sales volumes and exclude processing income, diluent and other revenue.

	Three mont	hs ended	Six months ended		
(\$/boe)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Produced petroleum revenue (1)	42.59	32.56	41.39	33.64	
Realized commodity risk management gain (loss)	(9.82)	(0.07)	(8.96)	(1.83)	
Total including realized commodity risk management	32.77	32.49	32.43	31.81	

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures".

Pengrowth's second quarter and year to date 2018 produced petroleum revenue realizations of \$42.59/boe and \$41.39/boe increased 31 percent and 23 percent, respectively, compared to the same periods in 2017, reflecting the increase in prices for all commodities.

A realized commodity risk management loss of \$9.82/boe was recorded in the second quarter of 2018 compared to a loss of \$0.07/boe in the second quarter of 2017. The increase is primarily due to WTI exceeding the fixed prices in existing WTI commodity risk management contracts.

Pengrowth incurred a realized commodity risk management loss of \$8.96/boe year to date 2018, compared to a loss of \$1.83/boe in 2017 also due to the WTI contracts that were put in place in 2017.

## Realized Commodity Risk Management Gains (Losses) from Financial Contracts

	Three mon	ths ended	Six months ended		
(\$ millions except per unit amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Oil risk management gain (loss)	(20.2)	_	(34.2)	(16.8)	
\$/bbl <sup>(1)</sup>	(13.34)	_	(11.60)	(3.82)	
Natural gas risk management gain (loss)	_	(0.3)	_	(0.1)	
\$/Mcf	_	(0.03)	_	_	
Total realized commodity risk management gain (loss)	(20.2)	(0.3)	(34.2)	(16.9)	
\$/boe	(9.82)	(0.07)	(8.96)	(1.83)	

<sup>(1)</sup> Includes light oil and bitumen.

Pengrowth's commodity risk management program primarily uses forward price swaps and collars to manage the exposure to commodity price fluctuations and provide a measure of stability and predictability to cash flows. Changes in the business environment are regularly monitored by management and the Board of Directors to ensure that Pengrowth's risk management program is adequate and aligned with the long term strategic goals of the Corporation. See the Forward Contracts - Commodity Risk Management section of this document for information on the Corporation's forward price swaps, collars and physical delivery contracts.

Realized commodity risk management gains and losses vary from period to period and are a function of the volumes under risk management contracts, the fixed prices of those risk management contracts and the benchmark pricing for the commodities under risk management contracts at settlement. Realized losses result when the average fixed risk management contracted prices are lower than the benchmark prices, while realized gains are recorded when the average fixed risk management contracted prices are higher than the benchmark prices at settlement. Realized gains and losses directly impact cash flow for the period. No new risk management contracts were entered into during the second quarter of 2018 and Pengrowth has no financial commodity risk management contracts in place for 2019.

A realized commodity risk management loss of \$20.2 million was recorded in the second quarter of 2018 compared to a loss of \$0.3 million in the second quarter of 2017 resulting in a \$19.9 million increase primarily due to benchmark prices exceeding the fixed prices in outstanding commodity risk management contracts. The year to date 2018 realized commodity risk management loss of \$34.2 million increased \$17.3 million compared to the realized commodity risk management loss of \$16.9 million in the same period of 2017 due to the same.

## Changes in Fair Value of Financial Commodity Risk Management Contracts

	Three mon	ths ended	Six months ended		
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Fair value of commodity risk management assets (liabilities) at period end	(48.1)	2.2	(48.1)	2.2	
Less: Fair value of commodity risk management assets (liabilities) at beginning of period	(44.5)	(0.3)	(39.8)	(54.0)	
Change in fair value of commodity risk management contracts for the period	(3.6)	2.5	(8.3)	56.2	

Changes in fair value of commodity risk management contracts vary period to period and are a function of the volumes under risk management contracts, actual settlements of risk management contracts during the period, the fixed prices of those risk management contracts and the forward curve pricing for the commodities under risk management contracts at the end of the period. A decrease in fair value of commodity risk management contracts occurs when the forward price curve moves higher in relation to the fixed price, with the magnitude of the change being proportional to the movement in the forward price curve. An increase in fair value of commodity risk management contracts occurs when the forward price curve moves lower in relation to the fixed price, with the magnitude of the change being proportional to the movement in the forward price curve. Changes in fair value of commodity risk management contracts are also affected by the change in volumes under risk management in the period. Changes in fair value of commodity risk management contracts are reported on the Consolidated Statements of Income (Loss) and do not impact cash flow for the period.

For the three months ended June 30, 2018, Pengrowth recorded a decrease in the fair value of commodity risk management contracts of \$3.6 million as the fair value of commodity risk management liabilities at March 31, 2018 of \$44.5 million increased to a liability of \$48.1 million at June 30, 2018. The increase in liability was primarily the result

of higher forward price curves for oil relative to the beginning period partly offset by settlement of contracts during the second guarter of 2018.

For the six months ended June 30, 2018, Pengrowth recorded a decrease in the fair value of commodity risk management contracts of \$8.3 million as the fair value of commodity risk management liabilities at December 31, 2017 of \$39.8 million increased to a liability of \$48.1 million at June 30, 2018. The increase in liability was also the result of higher forward price curves for oil relative to the beginning period partly offset by settlement of contracts during the first six months of 2018.

## Forward Contracts - Commodity Risk Management

Pengrowth primarily uses crude oil and natural gas swaps and collars to manage its exposure to commodity price fluctuations. In addition, financial and physical contracts are sometimes used to manage oil price differentials.

At June 30, 2018, Pengrowth had the following financial contracts outstanding:

#### Crude Oil

Financial Swap Cont	tracts				
Reference point	Remaining term	Volume (bbl/d) Price/bbl (U			
WTI	Jul. 1, 2018 to Dec. 31, 2018	8	49.97		
Collars			Price/bb	ol (U.S.\$)	
Reference point	Remaining term	Volume (bbl/d)	Bought Puts	Sold Calls	
WTI	Jul. 1, 2018 to Dec. 31, 2018	2,000	\$48.00	\$53.48	

At June 30, 2018, physical delivery contracts were held for the purpose of delivery of non-financial items in accordance with Pengrowth's expected sales requirements. The prices per bbl as per the table below include an apportionment protection fee to guarantee flow assurance in the event export pipelines are restricted, as was experienced in the first half of 2018.

## **WCS Differentials**

Physical Delivery Contracts			
Reference point	Remaining term	Volume of dilbit (bbl/d)	Price/bbl (U.S.\$)
Western Canada Select	Jul. 1, 2018 to Dec. 31, 2018	12,000	WTI less \$16.95
Western Canada Select	Jul. 1, 2018 to Dec. 31, 2018	5,000	WTI less \$16.50 - \$19.25
Western Canada Select	Jan. 1, 2019 to Dec. 31, 2019	2,500	WTI less \$17.95
Western Canada Select	Jan. 1, 2019 to Dec. 31, 2019	5,000	WTI less \$17.70 - \$20.45

In the second quarter of 2018, Pengrowth produced an average of 15,876 bbl/d of bitumen and sold an average of 23,045 bbl/d of dilbit at Hardisty. Physical delivery contracts are not considered financial instruments and therefore, no asset or liability has been recognized in the Consolidated Financial Statements related to these contracts. The impact of realized physical delivery contract prices is included in Oil and gas sales, as per the Consolidated Statements of Income (Loss), and therefore in realized average sales prices.

See the Commodity Price Contracts section in Note 12 to the June 30, 2018 unaudited Consolidated Financial Statements for more information.

## Financial Risk Management Contracts Sensitivity to Commodity Prices as at June 30, 2018

(\$ millions)

Crude oil swaps and collars	Cdn\$1/bbl increase in future oil prices	Cdn\$1/bbl decrease in future oil prices
Increase (decrease) to fair value of oil risk management contracts	(1.8)	1.8

The changes in fair value of the forward risk management contracts directly affect reported net income (loss) through the unrealized amounts recorded in the Consolidated Statements of Income (Loss) during the period. The effect on

cash flow will be recognized separately only upon settlement of the risk management contracts, which could vary significantly from the unrealized amount recorded due to timing and prices when each contract is settled.

If each commodity risk management contract was to have settled at June 30, 2018, revenue and cash flow would have been \$48.1 million lower than if the risk management contracts were not in place based on the estimated fair value of the risk management contracts at period end. The \$48.1 million liability was related to risk management contracts expiring within one year.

Pengrowth has not designated any outstanding commodity risk management contracts as hedges for accounting purposes and therefore records these risk management contracts on the Consolidated Balance Sheets at their fair value and recognizes changes in fair value of commodity risk management contracts on the Consolidated Statements of Income (Loss). The volatility in net income (loss) will continue to the extent that the fair value of the commodity risk management contracts fluctuates. However, these non-cash amounts do not affect Pengrowth's cash flow until realized.

Realized commodity risk management gains (losses) on financial crude oil and natural gas contracts are recorded separately on the Consolidated Statements of Income (Loss) and impact cash flow at that time.

#### **OIL AND GAS SALES**

The following table shows the composition of oil and gas sales:

	Three mor	nths ended	Six months ended		
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
		As adjusted (1)		As adjusted (1)	
Bitumen	75.8	42.5	133.4	91.7	
Natural gas	5.5	32.6	12.5	68.3	
Light oil	5.0	51.2	9.3	110.7	
Natural gas liquids	1.3	19.9	2.7	40.7	
Produced petroleum revenue (2)	87.6	146.2	157.9	311.4	
Diluent and other revenue	58.8	51.7	113.7	106.4	
Oil and gas sales (1)(3)	146.4	197.9	271.6	417.8	

<sup>(1)</sup> IFRS 15 was early adopted in the fourth quarter of 2017 effective January 1, 2017 using cumulative effect approach without restating prior period comparatives. See Note 2 to the December 31, 2017 audited Consolidated Financial Statements.

In order to reduce viscosity and meet pipeline specifications, bitumen requires blending with a diluent. The cost of diluent is mostly recovered when the blended product, also known as dilbit or diluted bitumen, is sold at Hardisty. This is reflected in diluent and other revenue together with processing income.

### Price and Volume Analysis

## Quarter ended June 30, 2018 versus Quarter ended June 30, 2017

The following table illustrates the effect of changes in prices and volumes on the components of produced petroleum revenue:

(\$ millions)	Bitumen	Natural gas	Light oil	NGLs	Produced petroleum revenue <sup>(2)</sup>
Quarter ended June 30, 2017 (1)	42.5	32.6	51.2	19.9	146.2
Effect of change in product prices and differentials	26.4	(3.8)	0.8	0.5	23.9
Effect of change in sales volumes	6.9	(23.3)	(47.0)	(19.1)	(82.5)
Quarter ended June 30, 2018 (1)	75.8	5.5	5.0	1.3	87.6

<sup>(1)</sup> Excludes realized commodity risk management from financial contracts.

Bitumen sales increased by 78 percent in the second quarter of 2018 compared to the same period in 2017 driven by an increase in WCS and the favourable impact of physical delivery fixed price differential contracts combined with higher production volumes. Natural gas, light oil and NGL sales decreased 83 percent, 90 percent and 93 percent,

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

<sup>(3)</sup> Excludes realized commodity risk management from financial contracts.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

respectively, compared to the second quarter of 2017 primarily due to decreases in sales volumes related to 2017 divestments. These decreases were partly offset by an improvement in realized prices for light oil and NGLs.

### Six Months ended June 30, 2018 versus Six Months ended June 30, 2017

The following table illustrates the effect of changes in prices and volumes on the components of produced petroleum revenue:

(\$ millions)	Bitumen	Natural gas	Light oil	NGLs	Produced petroleum revenue (2)
Six months ended June 30, 2017 (1)	91.7	68.3	110.7	40.7	311.4
Effect of change in product prices and differentials	33.7	(2.9)	0.6	1.0	32.4
Effect of change in sales volumes	8.0	(52.9)	(102.0)	(39.0)	(185.9)
Six months ended June 30, 2018 (1)	133.4	12.5	9.3	2.7	157.9

<sup>(1)</sup> Excludes realized commodity risk management from financial contracts.

Year to date 2018 bitumen sales increased 45 percent compared to the same period in 2017 resulting from favorable impact of physical delivery fixed price differential contracts combined with higher production volumes. Natural gas, light oil and NGL sales decreased 82 percent, 92 percent and 93 percent, respectively, compared to year to date 2017 primarily due to the decrease in sales volumes related to 2017 divestments. These decreases were partly offset by an improvement in realized prices for light oil and NGLs.

### **ROYALTIES**

	Three mon	ths ended	Six months ended		
(\$ millions except per boe amounts and percentages)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
Royalties, net of incentives	8.2	16.0	13.1	31.7	
\$/boe	3.99	3.56	3.43	3.42	
Royalties as a percent of produced petroleum revenue (%) (1) (2)	9.4	10.9	8.3	10.2	

<sup>(1)</sup> Excludes realized commodity risk management from financial contracts.

Royalties include Crown, freehold, overriding royalties, mineral taxes and GCA.

Second quarter of 2018 royalties as a percent of produced petroleum revenues decreased to 9.4 percent from 10.9 percent in the second quarter of 2017. The overall decrease in the second quarter of 2018 royalty rate is attributed to the absence of royalties related to divested properties of approximately \$12 million which attracted higher royalty rates. Lindbergh related royalties, which represent the majority of total royalties in the second quarter of 2018, increased compared to the same period last year due to higher benchmark prices.

Similarly, the year to date 2018 royalties as a percent of produced petroleum revenues decreased to 8.3 percent from 10.2 percent in the same period last year driven by the absence of approximately \$23 million of royalties related to divested properties. This was also partly offset by higher Lindbergh royalties year over year due to higher benchmark prices.

Crown royalties are paid on a sliding scale and original 2018 royalty Guidance was determined based on U.S.\$50/bbl WTI. Pengrowth is revising its full year 2018 Guidance for royalty expenses as a percent of produced petroleum revenue to 8.5 percent based on the impact of higher commodity prices year to date 2018 and the assumption that WTI will average U.S.\$65/bbl for the remainder of 2018.

The Lindbergh Crown royalty rate is price sensitive and varies depending on whether the project is pre-payout or post-payout. Lindbergh is currently in pre-payout, and will reach payout when its cumulative revenues exceed its cumulative eligible costs. The Crown royalty rate applicable to pre-payout varies from 1 percent when the monthly Cdn\$ equivalent WTI price is less than or equal to \$55/bbl to 9 percent when the Cdn\$ equivalent WTI price is in excess of \$120/bbl. Lindbergh royalties also incorporate a 4.0 percent gross overriding royalty.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

#### ADJUSTED OPERATING EXPENSES

	Three mor	iths ended	Six months ended		
(\$ millions except per boe amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
		As adjusted (1)		As adjusted (1)	
Operating expenses (1)	21.3	68.5	40.0	135.8	
Less: Processing income	0.5	5.5	0.9	12.2	
Adjusted operating expenses (2)	20.8	63.0	39.1	123.6	
\$/boe	10.11	14.03	10.25	13.35	

<sup>(1)</sup> IFRS 15 was early adopted in the fourth quarter of 2017 effective January 1, 2017 using cumulative effect approach without restating prior period comparatives. See Note 2 to the December 31, 2017 audited Consolidated Financial Statements.

Second quarter of 2018 adjusted operating expenses decreased \$42.2 million or 67 percent compared to the same period in 2017 primarily due to the absence of approximately \$43 million of adjusted operating expenses associated with the divested properties. Adjusted operating expenses related to the remaining assets were relatively unchanged in the second quarter of 2018 compared to the second quarter of 2017.

Year to date 2018 adjusted operating expenses decreased \$84.5 million or 68 percent compared to the same period in 2017 primarily due to the absence of approximately \$85 million of adjusted operating expenses associated with the divested properties.

On a per boe basis, second quarter and year to date 2018 adjusted operating expenses decreased \$3.92/boe and \$3.10/boe, respectively, compared to the same periods last year driven by the impact of property dispositions mentioned above.

### **DILUENT AND OTHER PURCHASES**

	Three mor	iths ended	Six months ended		
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017	
		As adjusted (1)		As adjusted (1)	
Diluent purchases	58.3	36.6	111.1	79.7	
Other product purchases	_	8.6	1.2	12.2	
Diluent and other purchases (1)	58.3	45.2	112.3	91.9	

<sup>(1)</sup> IFRS 15 was early adopted in the fourth quarter of 2017 effective January 1, 2017 using cumulative effect approach without restating prior period comparatives. See Note 2 to the December 31, 2017 audited Consolidated Financial Statements.

Diluent purchases reflect the cost of condensate required for processing activities and blending with bitumen to reduce viscosity and meet pipeline specifications. The amount of condensate purchases depends on the volume of diluent required and the price of condensate.

The increase in bitumen production in the first six months of 2018 relative to 2017 required higher volume of purchased diluent. Pengrowth's blending ratio which reflects diluent volumes as a percentage of total blended volumes remained unchanged at approximately 30 percent throughout the first six months of 2018 as compared to 2017. Average condensate prices were stronger in the first six months of 2018 compared with 2017 due to higher demand for diluent in Alberta further increasing the overall cost of purchased condensate.

Other product purchases include third party hydrocarbons purchased for resale. The reduction in other product purchases in 2018 was due to the impact of 2017 property divestments.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

#### TRANSPORTATION EXPENSES

	Three mon	iths ended	Six months ended	
(\$ millions except per boe amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Transportation expenses	5.5	7.8	10.3	16.1
\$/boe	2.67	1.74	2.70	1.74

Second quarter and year to date 2018 transportation expenses decreased \$2.3 million and \$5.8 million, respectively, compared to the same periods in 2017 due to the impact of 2017 property divestments of approximately \$2.6 million and \$6.5 million, respectively.

On a per boe basis, the increase in the second quarter and year to date 2018 relative to the same periods in 2017 resulted from Lindbergh representing a higher proportion of total production following the 2017 dispositions, and at a higher than average 2017 transportation cost per boe.

## **OPERATING NETBACKS**

Pengrowth's operating netbacks are defined as produced petroleum revenue, less royalties, less adjusted operating expenses and less transportation expenses divided by production for the period. Operating netbacks may not be comparable to similar measures presented by other companies, as there are no standardized measures.

	Three months ended		Six months ended	
Operating Netbacks (\$/boe) (1) (2)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Produced petroleum revenue	42.59	32.56	41.39	33.64
Royalties	(3.99)	(3.56)	(3.43)	(3.42)
Adjusted operating expenses	(10.11)	(14.03)	(10.25)	(13.35)
Transportation expenses	(2.67)	(1.74)	(2.70)	(1.74)
Operating netbacks before realized commodity risk management	25.82	13.23	25.01	15.13
Realized commodity risk management	(9.82)	(0.07)	(8.96)	(1.83)
Operating netbacks (\$/boe)	16.00	13.16	16.05	13.30

<sup>(1)</sup> See definition under section "Non-GAAP Financial Measures".

Second quarter and year to date 2018 operating netback, before realized commodity risk management, increased 95 percent and 65 percent, respectively, compared to the same periods in 2017 primarily in response to an increase in commodity benchmark prices and lower adjusted operating expenses.

Second quarter and year to date 2018 operating netbacks, after realized commodity risk management, increased 22 percent and 21 percent, respectively, compared to the same periods in 2017 also due to an increase in commodity benchmark prices partly offset by higher per boe realized commodity risk management loss.

## **GENERAL AND ADMINISTRATIVE EXPENSES**

	Three months ended		Six months ended	
(\$ millions except per boe amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Cash G&A expenses (1) (2)	8.8	16.1	17.7	32.8
\$/boe	4.28	3.59	4.64	3.54
Non-cash G&A expenses (1)	0.7	2.2	1.4	4.9
\$/boe	0.34	0.49	0.37	0.53
Total G&A (1)	9.5	18.3	19.1	37.7
\$/boe	4.62	4.08	5.01	4.07

<sup>(1)</sup> Net of recoveries and capitalization, as applicable.

Prior year comparative figures changed to conform to presentation in the current year.

<sup>(2)</sup> See definition under section "Non-GAAP Financial Measures".

Second quarter and year to date 2018 cash G&A expenses decreased \$7.3 million or 45 percent and \$15.1 million or 46 percent, respectively, compared to the same periods in 2017 primarily due to significantly lower staffing costs as well as lower office and IT expenditures. These decreases were driven by 2017 asset divestments and ongoing corporate restructuring.

On a per boe basis, second quarter and year to date 2018 cash G&A expenses increased \$0.69/boe and \$1.10/boe, respectively, compared to the same periods in 2017 as decreases in production volumes outpaced the decreases in cash G&A expenses. First half of 2018 cash G&A included approximately \$2.4 million of staffing costs related to divested properties as administrative tasks were being wound up. Although these costs are not expected in the second half of 2018, Pengrowth anticipates full year 2018 cash G&A expenses per boe to be higher than original 2018 Guidance and is therefore revising full year 2018 Guidance related to cash G&A expenses per boe to a range of \$3.50 - \$3.85/boe

The non-cash component of G&A represents the compensation expenses associated with Pengrowth's share-settled LTIP. See Note 8 to the June 30, 2018 unaudited Consolidated Financial Statements for additional information on Pengrowth's share-settled LTIP. The compensation costs associated with these plans are expensed over the applicable vesting periods.

Second quarter and year to date 2018 non-cash G&A expenses decreased \$1.5 million or 68 percent and \$3.5 million or 71 percent compared to the same periods in 2017, respectively, primarily due to lower share-settled incentive grants and lower performance factors combined with increased forfeiture rates related to staff reductions.

During the six months ended June 30, 2018, \$1.2 million (June 30, 2017 - \$1.3 million) of directly attributable G&A costs were capitalized to Property, Plant and Equipment ("**PP&E**").

## **RESTRUCTURING COSTS**

	Three mon	Three months ended		Three months ended Six months ended		s ended
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017		
Severance costs	1.0	_	1.5	_		
Onerous office lease contracts	_	_	(1.7)	_		
Total restructuring costs	1.0	_	(0.2)	_		

During 2017, Pengrowth completed a number of significant asset dispositions which led to a management decision to complete an operational restructuring. For more information about the restructuring costs refer to the December 31, 2017 annual report.

Year to date 2018 restructuring costs contained an additional \$1.5 million expense relating to severance costs and a \$1.7 million reduction related to an estimate revision to the onerous office lease provision.

## DEPLETION, DEPRECIATION, AMORTIZATION AND ACCRETION

	Three months ended		Six months ended	
(\$ millions except per boe amounts)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Depletion, depreciation and amortization	34.0	64.1	65.1	135.9
\$/boe	16.53	14.27	17.06	14.68
Accretion	1.6	3.7	3.4	7.5
\$/boe	0.78	0.82	0.89	0.81

Second quarter and year to date 2018 DD&A expenses decreased \$30.1 million and \$70.8 million, respectively, compared to the same periods in 2017 primarily due to the absence of approximately \$33 million in the second quarter of 2018 and \$73 million year to date 2018 of DD&A associated with the divested properties.

On a per boe basis, second quarter and year to date 2018 DD&A increased \$2.26/boe and \$2.38/boe, respectively, compared to the same periods in 2017 as the remaining assets have a higher unit of production rate relative to the 2017 Corporation average unit of production rate.

Accretion includes ARO accretion expense as well as accretion related to the onerous office lease. Second quarter and year to date 2018 accretion expense decreased \$2.1 million and \$4.1 million, respectively, compared to the same

periods in 2017 primarily due to the absence of accretion related to the ARO liability associated with 2017 property dispositions.

## INTEREST AND FINANCING CHARGES

	Three mon	ths ended	Six month	ns ended
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Interest and financing charges	14.0	18.1	26.1	45.3
Capitalized interest	(1.4)	(0.9)	(2.4)	(1.7)
Total interest and financing charges	12.6	17.2	23.7	43.6

At June 30, 2018, Pengrowth had \$522.5 million in outstanding fixed rate debt and \$179.0 million of Credit Facility borrowings. Total fixed rate debt consists primarily of U.S. dollar denominated term notes at a weighted average interest rate of 6.6 percent and the Credit Facility had an average 6.3 percent interest rate.

Second quarter and year to date 2018 interest and financing charges, before capitalized interest, decreased \$4.1 million or 23 percent and \$19.2 million or 42 percent, respectively, compared to the same periods in 2017 reflecting the impact of the prepayments of term notes of approximately \$1 billion throughout 2017, and the repayment of \$126.6 million of convertible debentures at maturity on March 31, 2017.

In accordance with IFRS, interest is capitalized for qualifying assets in the construction phase based on costs incurred on the project and the average cost of borrowing. During the six months ended June 30, 2018, \$2.4 million (June 30, 2017 - \$1.7 million) of interest was capitalized on the Lindbergh project to PP&E using Pengrowth's weighted average cost of debt of 6.5 percent (June 30, 2017 - 5.5 percent).

#### **TAXES**

Deferred income tax is a non-cash item relating to temporary differences between the accounting and tax basis of Pengrowth's assets and liabilities and has no immediate impact on its cash flows. Pengrowth recorded a deferred tax recovery of \$4.9 million in the second quarter of 2018 compared to a deferred tax recovery of \$77.8 million in the second quarter of 2017. This was primarily due to the temporary differences related to the change in fair value of commodity risk management contracts, the absence of PP&E impairment charges in the second quarter of 2018, and temporary differences related to 2017 asset dispositions. Year to date 2018 deferred tax recovery amounted to \$12.1 million compared to a recovery of \$109.2 million in the same period last year driven by the above mentioned impairment charges and temporary differences.

Pengrowth has certain income tax filings from predecessor entities that are in dispute with tax authorities and has paid \$9.5 million and \$2.7 million to the Canada Revenue Agency ("CRA") and the Alberta Tax and Revenue Administration, respectively, to formally begin the process of challenging the particular taxation year. Pengrowth believes that its filings to-date are correct and that it will be successful in defending its positions. Therefore, no provision for any potential income tax liability was recorded and the \$12.2 million has been recorded as a long term receivable.

## **FOREIGN CURRENCY GAINS (LOSSES)**

	Three mon	ths ended	Six month	ns ended
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Currency exchange rate (Cdn\$1 = U.S.\$) at beginning of period	0.78	0.75	0.80	0.74
Currency exchange rate (Cdn\$1 = U.S.\$) at period end	0.76	0.77	0.76	0.77
Unrealized foreign exchange gain (loss) on U.S. dollar denominated debt <sup>(1)</sup>	(8.4)	22.3	(20.7)	35.9
Unrealized foreign exchange gain (loss) on U.K. pound sterling denominated debt (1)	0.9	(0.3)	(0.5)	(0.5)
Total unrealized foreign exchange gain (loss) from translation of foreign denominated debt	(7.5)	22.0	(21.2)	35.4
Unrealized gain (loss) on U.S. foreign exchange risk management contracts (2)	6.5	(16.1)	11.4	(25.6)
Unrealized gain (loss) on U.K. foreign exchange risk management contracts	(1.0)	0.5	0.7	0.6
Total unrealized gain (loss) on foreign exchange risk management contracts	5.5	(15.6)	12.1	(25.0)
Net unrealized foreign exchange gain (loss)	(2.0)	6.4	(9.1)	10.4
Net realized foreign exchange gain (loss)	0.4	0.4	0.5	(1.7)

<sup>(1)</sup> Includes both principal and interest.

As 72 percent of Pengrowth's total debt before working capital is denominated in foreign currencies at June 30, 2018, the majority of Pengrowth's unrealized foreign exchange gains and losses are attributable to the translation of this debt into Canadian dollars and changes in the fair value of the related foreign exchange swap contracts Pengrowth employs to manage this risk.

The gains or losses on foreign debt principal restatement each period are calculated by comparing the translated Canadian dollar balance of foreign currency denominated long term debt from one period to another. The magnitude of the gains and losses is proportionate to the magnitude of the exchange rate fluctuation between the opening and closing rates for the respective periods and the amount of debt denominated in a foreign currency.

## Foreign Exchange Contracts Associated with U.S. Dollar Denominated Term Debt

Pengrowth holds a series of swap contracts which were transacted in order to fix the foreign exchange rate on a portion of principal for Pengrowth's U.S. dollar denominated term debt. The swaps partially offset foreign exchange gains/ losses on U.S. dollar denominated debt. Each swap requires Pengrowth to buy U.S. dollars at a predetermined rate and time, based upon maturity dates of the U.S. dollar term debt.

At June 30, 2018, Pengrowth held a total of U.S.\$255 million in foreign exchange swap contracts at a weighted average rate of U.S.\$0.75 per Cdn\$1 as follows:

Principal amount (U.S.\$ millions)	Swapped amount (U.S.\$ millions)	% of principal swapped	Average fixed rate (Cdn\$1 = U.S.\$)
366.3	255.0	70%	0.75

At June 30, 2018, the fair value of these U.S. foreign exchange derivative contracts was a liability of Cdn\$7.1 million and has been included on the Consolidated Balance Sheets. Changes in the fair value of these contracts between Balance Sheet dates are reported on the Consolidated Statements of Income (Loss) as an unrealized foreign exchange (gain) loss.

### Foreign Exchange Contracts Associated with U.K. Pound Sterling Denominated Term Debt

Pengrowth entered into foreign exchange risk management contracts when it issued the U.K. pound sterling denominated term debt. At June 30, 2018, Pengrowth held the following contract fixing the Canadian dollar to the U.K. pound sterling exchange rate on the interest and principal of the U.K. pound sterling denominated debt maturing in October 2019:

<sup>(2)</sup> Includes both foreign exchange risk management contracts associated with the U.S. term notes and with the U.S. dollar fixed price WCS differential, as applicable.

Principal amount (U.K. pound sterling millions)	Swapped amount (U.K. pound sterling millions)	% of principal swapped <sup>(1)</sup>	Fixed rate (Cdn\$1 = U.K. pound sterling)
12.1	15.0	124%	0.63

<sup>(1)</sup> Exceeds 100 percent as swaps were not liquidated when portion of the principal amount of term note was early repaid in the fourth quarter of 2017.

At June 30, 2018, the fair value of the U.K. foreign exchange derivative contracts was a net asset of \$2.3 million and has been included on the Consolidated Balance Sheets. Changes in the fair value of these contracts between Balance Sheet dates are reported on the Consolidated Statements of Income (Loss) as an unrealized foreign exchange (gain) loss.

## Foreign Denominated Term Debt Sensitivity to Foreign Exchange Rate

The following table summarizes the sensitivity on a pre-tax basis, of a change in the foreign exchange rate related to the translation of the foreign denominated term debt and the offsetting change in the fair value of the foreign exchange risk management contracts relating to that debt, holding all other variables constant:

	Cdn\$0.01 Exchange rate change	
Foreign exchange sensitivity as at June 30, 2018 (\$ millions)	Cdn - U.S.	Cdn - U.K.
Unrealized foreign exchange gain or loss on foreign denominated debt	3.7	0.1
Unrealized foreign exchange risk management gain or loss	2.6	0.1
Net pre-tax impact on Consolidated Statements of Income (Loss)	1.1	_

#### ASSET RETIREMENT OBLIGATIONS - NET PRESENT VALUE

At June 30, 2018, the ARO liability decreased \$6.9 million from December 31, 2017 primarily due to remediation expenditures.

Pengrowth has estimated the net present value of its total ARO to be \$229.8 million as at June 30, 2018 (December 31, 2017 – \$236.7 million), based on a total escalated future liability of \$411.6 million (December 31, 2017 – \$420.2 million). Pengrowth has been contributing to an externally managed trust fund established to fund certain abandonment and reclamation costs associated with its interest in the SOEP. The total balance of the SOEP remediation trust fund at June 30, 2018 was \$105.1 million (December 31, 2017 - \$111.6 million) and was included in Other Assets on the Consolidated Balance Sheets. The fund balance represents a pre funding of Pengrowth's entire share of the estimated costs of the SOEP abandonment and remediation, but the fund is not considered in calculating the ARO balance above. The costs relating to SOEP abandonment and reclamation are expected to be incurred over the next 3 to 4 years.

Pursuant to the royalty agreement with the Province of Nova Scotia, Pengrowth is entitled to deduct certain monies spent on abandonment and decommissioning activities from royalties otherwise payable and once the field ceases production, to obtain a refund of previously paid royalties. It is estimated that the deducted and refunded royalties will be approximately 25 - 30 percent of Pengrowth's share of remaining abandonment and decommissioning spending. Such remaining spending is currently estimated to be approximately \$100 million. Refunds of previously paid offshore royalties are recognized as receivables only when production in a field has ceased and as abandonment and decommissioning spending has been incurred. The reduction and refund are expected to be received as cash over the next 5 years, but they have not been recognized as receivables nor offset against the ARO.

The abandonment and reclamation costs on other assets, not covered by a fund, are expected to be incurred between 2035 and 2080. A risk free discount rate of 2.3 percent per annum (December 31, 2017 - 2.3 percent) and an ARO specific inflation rate of 1.5 percent (December 31, 2017 - 1.5 percent) were used to calculate the net present value of the ARO at June 30, 2018.

### **ACQUISITIONS AND DISPOSITIONS**

	Three months ended		Six months ended	
(\$ millions)	Jun 30, 2018	Jun 30, 2017	Jun 30, 2018	Jun 30, 2017
Property acquisitions	_	_	_	_
Proceeds from property dispositions (1)	3.5	94.7	7.9	342.0
Cash proceeds from dispositions	3.5	94.7	7.9	342.0

<sup>(1)</sup> Proceeds are net of transaction costs, closing adjustments and, where applicable, deferred proceeds.

Proceeds from property dispositions year to date 2018 include closing adjustments for dispositions completed in 2017 and collection of certain deferred proceeds.

During the second quarter of 2017, Pengrowth closed the sale of its non-producing Montney lands at Bernadet in north eastern British Columbia for \$92 million as well as other minor properties. Year to date 2017 also includes proceeds from the sale of a 4.0 percent GORR interest on the Lindbergh thermal property and certain seismic assets.

At June 30, 2018, Pengrowth's accounts receivable included approximately \$18 million of deferred proceeds relating to 2017 dispositions. These deferred proceeds are expected to be collected within the next 6 months.

### FINANCIAL RESOURCES AND LIQUIDITY

### Capital Resources

At June 30, 2018, Pengrowth had in place a secured \$330 million revolving, committed term Credit Facility supported by a syndicate of 11 domestic and international banks which matures on March 31, 2019.

Pengrowth is working with the lead bank in its syndicate on the terms for renewing the Credit Facility. The Facility was downsized from \$1 billion to \$330 million in October 2017, but at the time retained all syndicate bank participants. Indications are that the Facility will be renewed with a smaller group of syndicate bank members. Discussions are revolving around how the new credit agreement might permit Pengrowth to access the high yield debt market to refinance Pengrowth's existing term notes. Pengrowth is also exploring alternative financing arrangements including third party debt providers to refinance Pengrowth's entire debt portfolio. These discussions may not result in Pengrowth receiving an offer for replacement debt at the same cost as the current outstanding debt.

#### **Debt Maturities**

Pengrowth has no scheduled debt maturities in 2018. The available Credit Facility had drawings of \$179.0 million at June 30, 2018 (December 31, 2017 - \$109.0), and \$79.8 million of outstanding letters of credit (December 31, 2017 - \$69.4 million). Pengrowth expects to have free funds flow after capital expenditures in the second half of 2018, which together with the collection of the approximately \$18 million of deferred disposition proceeds will be applied to decrease the outstanding debt. Should WCS oil prices decline, Pengrowth can adjust to some extent its capital spending levels. A prolonged or significant decrease in WCS pricing may not leave sufficient free funds flow to be directed to debt repayment.

There are no term note maturities until October 2019.

### Financial Covenants

Pursuant to the debt amending agreements dated October 12, 2017, amendments to the existing financial covenants are effective through to and including the quarter ending September 30, 2019 in the case of its term notes, and expiring on March 31, 2019 in the case of its Credit Facility (the "Waiver Period") as this is the current maturity date. The only applicable covenant during the Waiver Period is the trailing 12 month Adjusted EBITDA to Adjusted Interest Expense ratio (the "Interest Coverage" ratio). The Interest Coverage ratio changes each quarter until the fourth quarter of 2019 for term notes and until the March 31, 2019 maturity for the Credit Facility after which it remains at 4.0 times, as noted below. Any new or extended Credit Facility could contain new or different covenants and credit limits.

Also after the Waiver Period, the Debt to Adjusted EBITDA ratio covenant of 3.5 times, and the Debt to Book Capitalization ratio covenant of 55 percent will be applicable again.

### During the Waiver Period:

- The Debt to Adjusted EBITDA ratio covenant and the Debt to Book Capitalization ratio covenants do not apply.
- The trailing 12 month Adjusted EBITDA to Adjusted Interest Expense minimum ratio covenant is revised as follows:

Year	Q1	Q2	Q3	Q4
2018	0.75 times	0.68 times	1.03 times	1.01 times
2019	1.13 times	1.19 times	1.23 times	4.0 times

The calculation of the Interest Coverage ratio is based on specific definitions within the agreements and contains adjustments, pursuant to the agreements, some of which cannot be readily replicated by referring to Pengrowth's Consolidated Financial Statements. Trailing 12 month EBITDA can be adjusted for certain one-time cash items, estimated EBITDA from material divested or acquired properties and non-cash items. Trailing 12 month interest expense can be adjusted for the interest expense related to debt repaid with asset divestment proceeds. See table below for more information. Pengrowth's Interest Coverage ratio was 1.8 times at June 30, 2018, which was above the second quarter of 2018 covenant of 0.68 times.

All loan agreements and amendments can be found on SEDAR at <a href="www.sedar.com">www.sedar.com</a> filed under "Other" or "Material Document" and on EDGAR at <a href="www.sec.gov">www.sec.gov</a>.

## **Covenant Calculation**

## Twelve month trailing actual covenant (1):

Interest Coverage ratio at June 30, 2018	1.8
Minimum Interest Coverage compliance ratio required at June 30, 2018	0.68

Twelve month trailing Adjusted Interest Expense (\$ millions):	Jun 30, 2018
Interest and financing charges	50.8
Less fees and interest on debt repaid with asset divestment proceeds (1)	(8.4)
Adjusted Interest Expense	42.4
Twelve month trailing Adjusted EBITDA (\$ millions):	
Net income (loss)	(409.8)
Add (deduct):	
Interest and financing charges	50.8
Deferred income tax expense (recovery)	(126.7)
Depletion, depreciation, amortization and accretion	144.1
Impairment	257.1
(Gain) loss on disposition of properties	38.3
Change in fair value of commodity risk management contracts	50.3
Unrealized foreign exchange (gain) loss	(31.9)
Non-cash share based compensation expense	1.4
Loss on extinguishment of debt	49.2
Foreign exchange derivative settlements	34.8
Restructuring costs	36.8
EBITDA related to material dispositions (1)	(16.8)
Adjusted EBITDA	77.6

<sup>(1)</sup> Calculation of the financial covenant is based on specific definitions within the agreements and contains adjustments, pursuant to the agreements, some of which cannot be readily replicated by referring to Pengrowth's Consolidated Financial Statements.

## Total Debt Before Working Capital

At June 30, 2018 total debt before working capital of \$701.5 million comprised \$522.5 million of term notes, \$179.0 million drawn on the Credit Facility. Compared to December 31, 2017, total debt increased by \$91.0 million at June 30, 2018 as drawings on the Credit Facility increased and foreign exchange negatively impacted the balance.

As of June 30, 2018, Pengrowth's foreign denominated term notes comprised 72 percent of the total debt before working capital. Each term note is governed by a Note Purchase Agreement. See Note 4 to the June 30, 2018 unaudited Consolidated Financial Statements for additional information.

## Off-Balance Sheet Financing

Pengrowth does not have any off-balance sheet financing arrangements.

#### **WORKING CAPITAL**

Working capital surplus or deficiency is calculated as current assets less current liabilities per the Consolidated Balance Sheets. At June 30, 2018, Pengrowth had a working capital deficiency of \$243.4 million as current assets were exceeded by current liabilities mostly due to the Credit Facility balance, which is scheduled for renewal on March 31, 2019, presented as a current portion of long term debt on the Consolidated Balance Sheet.

### FINANCIAL INSTRUMENTS

Pengrowth uses financial instruments to manage its exposure to commodity price fluctuations and foreign currency exposure. Pengrowth's policy is not to utilize financial instruments for trading or speculative purposes. See Note 2 to the December 31, 2017 audited Consolidated Financial Statements for a description of the accounting policies for financial instruments and Note 12 to the June 30, 2018 unaudited Consolidated Financial Statements for additional information regarding the fair value of its financial instruments.

## **SUMMARY OF QUARTERLY RESULTS**

	2018		2017			2016		
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Oil and gas sales (\$ millions) (1)	146.4	125.2	130.5	125.1	197.9	219.9	169.2	145.6
Net income (loss) (\$ millions)	(27.5)	(27.2)	(210.4)	(144.7)	(242.4)	(86.3)	(92.4)	(52.9)
Net income (loss) per share (\$)	(0.05)	(0.05)	(0.38)	(0.26)	(0.44)	(0.16)	(0.17)	(0.10)
Net income (loss) per share - diluted (\$)	(0.05)	(0.05)	(0.38)	(0.26)	(0.44)	(0.16)	(0.17)	(0.10)
Adjusted funds flow (\$ millions) (2) (3) (4) (5) (6)	10.1	7.2	13.5	(0.3)	29.3	26.9	111.7	122.7
Daily production (boe/d)	22,600	19,541	24,702	35,072	49,349	52,957	54,354	55,137
Produced petroleum revenue (\$/boe) (1) (6)	42.59	39.97	37.14	28.08	32.56	34.66	33.62	28.45
Operating netback (\$/boe) (6) (7)	16.00	16.08	16.06	11.06	13.16	13.43	30.60	31.88

- (1) Excludes realized commodity risk management from financial contracts. IFRS 15 was early adopted in the fourth quarter of 2017 effective January 1, 2017 using cumulative effect approach without restating prior period comparatives. See Note 2 to the December 31, 2017 audited Consolidated Financial Statements.
- (2) First quarter of 2017 adjusted funds flow includes a \$12.7 million loss related to the early settlement of commodity risk management contracts.
- (3) Fourth quarter of 2016 adjusted funds flow includes \$35.6 million of gains related to the early settlement of commodity risk management contracts and excludes \$47.0 million related to the settlement of foreign exchange swap contracts as this was considered a financing activity.
- (4) Third quarter of 2016 adjusted funds flow includes \$41.6 million of gains related to early settlement of commodity risk management contracts.
- (5) Fourth quarter of 2017 adjusted funds flow excludes \$34.8 million loss related to the settlement of foreign exchange swap contracts as this was considered a financing activity.
- (6) See definition under section "Non-GAAP Financial Measures".
- (7) Includes realized commodity risk management.

Pengrowth recorded a net loss of \$27.5 million in the second quarter of 2018, a significant reduction from losses incurred in the preceding quarters of 2017 and 2016. The reduction is primarily due to the absence of impairments and losses on dispositions. Second quarter of 2017 net loss increased from the preceding quarters primarily due to lower adjusted funds flow and PP&E impairment charges at the time.

Second quarter of 2018 adjusted funds flow increased from the first quarter of 2018 however decreased compared to most quarters in 2017 and 2016 primarily due to the absence of adjusted funds flow from divested properties. Lower interest and financing charges as a result of debt reduction and lower cash G&A in 2018 had favourable impacts that offset the decreases to the adjusted funds flow.

Second quarter of 2018 produced petroleum revenue per boe increased compared to the preceding quarters of 2018, 2017 and 2016 due to continued improvements in underlying benchmark prices.

Oil and gas sales in the second quarter of 2018 increased from the preceding four quarters due to increases in benchmark prices, but decreased compared to all prior quarters in 2016 and the first quarter of 2017 mainly due to 2017 property dispositions. Second quarter of 2018 operating netbacks, after realized commodity risk management improved compared to 2017, but decreased compared to 2016 due to the absence of the substantial realized commodity risk management gains recorded in 2016.

Second quarter of 2018 production was higher than first quarter 2018 but lower than all of the preceding quarters in 2016 and 2017, as per the table above, resulting primarily from 2017 property dispositions and natural declines due to capital spending curtailments.

Quarterly net income (loss), as per the table above, has also been affected by non-cash charges, in particular depletion, depreciation and amortization, impairment charges, accretion of ARO, changes in fair value of commodity risk management contracts, unrealized foreign exchange gains (losses), gains (losses) on property divestments, and deferred income taxes, as applicable. Adjusted funds flow was also impacted by changes in royalty expense, operating expenses and cash G&A costs.

### **BUSINESS RISKS**

Pengrowth is exposed to normal market risks inherent in the oil and natural gas business, the details of which are set out in the AIF of the Corporation dated February 28, 2018 available on SEDAR at <a href="www.sedar.com">www.sedar.com</a> and EDGAR at <a href="www.sedar.com">www.sedar.com</a> and <a href="w

### **ACCOUNTING PRONOUNCEMENTS ADOPTED**

#### IFRS 9 Financial Instruments

On January 1, 2018, Pengrowth adopted all of the requirements of IFRS 9 (2014), Financial Instruments (IFRS 9). This standard replaces IAS 39 - Financial Instruments: recognition and measurement (IAS 39) and introduces new requirements for the classification and measurement of financial assets and liabilities. It introduces a new general hedge accounting standard, which aligns hedge accounting more closely with risk management. It also modifies the existing impairment model by introducing a new 'expected credit loss' model for calculating impairment. This new standard also increases required disclosures about an entity's risk management strategy, cash flows from hedging activities and the impact of hedge accounting on the consolidated financial statements. Pengrowth has applied IFRS 9 retrospectively in accordance with transition requirements with no impact to opening retained earnings or comparative periods.

IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. The approach is based on how an entity manages its financial instruments and the contractual cash flow characteristics of the financial assets. Most of the requirements in IAS 39 for classification and measurement of financial liabilities have been carried forward in IFRS 9.

The adoption of IFRS 9 did not result in any measurement adjustments to Pengrowth's financial assets or financial liabilities. The impact of the change in the impairment model was not significant as the credit-impaired financial assets are not significant.

The adoption of IFRS 9 did not result in any changes in the eligibility of existing hedge relationships. Pengrowth currently has no intentions of designating any of its financial instruments as hedges, or using hedge accounting.

## IFRS 15 Revenue from Contracts with Customers

Pengrowth elected to early adopt IFRS 15 in the fourth quarter of 2017 effective January 1, 2017, using the cumulative effect method. In accordance with this method, prior years' financial statements had not been restated upon adoption and the cumulative effect on net earnings of the application of IFRS 15 to revenue contracts in progress at January 1, 2017 was \$nil. Pengrowth management reviewed its revenue streams and major contracts with customers using the IFRS 15 five step model and there were no material changes to net earnings or timing of produced petroleum revenue recognized. It should be noted, however, that certain Income Statement line item reclassifications were made at the time of adoption as a result of the implementation of IFRS 15. Refer to Note 9 to the June 30, 2018 unaudited Consolidated Financial Statements for more information including additional disclosure as required under IFRS 15.

## Impact of Early Adoption of IFRS 15 on Interim 2017 Financial Statements

As a result of the adoption of IFRS 15, the presentation of, and calculations for, Oil and gas sales and Operating expenses were altered, and a new Income Statement line for Diluent and other purchases for 2017 and onwards was introduced. This change had no impact on operating income (loss), income (loss) before taxes, net income (loss) or Cash Flows. See Note 2 to both the December 31, 2017 audited Consolidated Financial Statements and June 30, 2018 unaudited Consolidated Financial Statements for more information.

#### ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED

#### IFRS 16 Leases

In January 2016, the IASB issued the complete IFRS 16 Leases ("**IFRS 16**") which replaces IAS 17, Leases. The effective date of IFRS 16 is for annual periods beginning on or after January 1, 2019 and early adoption is permitted. Under IFRS 16, a single recognition and measurement model will apply for lessees which will require recognition of assets and liabilities for most leases. Pengrowth is currently evaluating the impact that the adoption of this standard will have on its financial statements.

### **DISCLOSURE AND INTERNAL CONTROLS**

As a Canadian reporting issuer with securities listed on the TSX and an SEC registrant, Pengrowth is required to comply with Multilateral Instrument 52-109 - *Certification of Disclosure in Issuers' Annual and Interim Filings*, as well as the Sarbanes Oxley Act ("**SOX**") enacted in the United States.

At the end of the interim period ended June 30, 2018, Pengrowth did not have any material weakness relating to design of its internal control over financial reporting. Pengrowth has not limited the scope of its design of disclosure controls and procedures and internal control over financial reporting to exclude controls, policies and procedures of (i) a proportionately consolidated entity in which Pengrowth has an interest; (ii) a variable interest entity in which Pengrowth has an interest; or (iii) a business that Pengrowth acquired not more than 365 days before June 30, 2018 and summary financial information about these items has been proportionately consolidated or consolidated in Pengrowth's Consolidated Financial Statements. During the interim period ended June 30, 2018, no change occurred to Pengrowth's internal control over financial reporting that have materially affected, or is reasonably likely to materially affect, Pengrowth's internal control over financial reporting.

It should be noted that while Pengrowth's Chief Executive Officer ("**CEO**") and Chief Financial Officer ("**CFO**") believe that Pengrowth's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that Pengrowth's disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.