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 nine months ended September 30, 2018 of Pengrowth Energy Corporation ("Pengrowth" or the "Corporation"). This MD&A is based on information available to November 7, 2018.

Pengrowth's third 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 and exploration 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.

"ARO"

asset retirement obligations

FREQUENTLY RECURRING TERMS

barrel

"bbl"

"SOR"

"CSOR"

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

וטט	Dailei	ANO	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. Aboe 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, Pengrowth's 2018 and 2019 guidance, production additions from Pengrowth's development program, Pengrowth's business plan, the geological characteristics of Pengrowth's properties, royalty expenses, operating expenses, tax horizon, deferred income taxes, management's expectations as to tax and royalty receivables, 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, flexibility of Pengrowth to change its capital spending plans, production capacity, anticipated low costs and sustaining capital and proceeds from the disposal of properties, ability of management to manage exposure to commodity price fluctuations, the availability and cost of capital, the ability of Pengrowth to pay its debt obligations, anticipated free funds flow and use of free funds flow to pay down debt, the ability of Pengrowth's Groundbirch property to fulfill Lindbergh's natural gas needs, 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 risks associated with the oil and gas industry in general; 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 impact on Pengrowth's financial statements; 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 September 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 nine months ended September 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 dispositions ("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 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 which substantially relate to SOEP and are 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 with a regulatory approval for 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

In June 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.

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 2020 and onwards will be dependent on the prevailing commodity prices. In addition, Pengrowth continues to assess additional co-generation capacity options at Lindbergh to provide steam and power sufficient enough to support further efficient production expansions to reach approximately 35,000 bbl/d.

With the current commodity price uncertainty, Pengrowth is budgeting for a modest capital program of \$45 million in 2019. Lindbergh full year average production volumes are expected to average between 17,750 to 18,250 bbl/d in 2019 with total corporate volumes expected to be between 22,500 to 23,500 boe/d. Pengrowth intends to redirect the free funds flow towards debt repayment and any future expansion will depend on stability and improvement of commodity prices and differentials.

Groundbirch has a low cost structure which supports growth in production and cash flow under a stronger natural gas pricing environment. 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 nine months ended September 30, 2018:

	Actual Year to date Sept 30, 2018	Full year 2018 Guidance (1)
Average production (boe/d)	21,324	22,500 - 23,500
Capital expenditures (\$ millions)	56.3	65
Royalty expenses (% of produced petroleum revenue) (2) (3)	8.1	8.5 (4)
Adjusted operating expenses (\$/boe) (2)	10.41	10.50 - 11.50
Cash G&A expenses (\$/boe) (2)	4.41	3.50 - 3.85 ⁽⁴⁾

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

Year to date 2018 production of 21,324 boe/d is on track to reach full year 2018 Guidance supported by solid base production from Lindbergh and Groundbirch. Lindbergh production averaged 15,805 bbl/d in the first nine months of 2018 incorporating a partial outage to complete planned maintenance activity and initial production from four of the eight infill wells. The remaining four infill wells are targeted to be on production throughout the fourth quarter of 2018. Lindbergh production is now expected to exit the year at approximately 19,000 bbl/d. The previously curtailed gas production at Groundbirch due to low natural gas prices will be brought back on stream in the fourth quarter of 2018 given higher seasonal pricing.

Year to date 2018 cash G&A expenses per boe are higher than full year 2018 Guidance due to inclusion of costs related to the administrative support associated with disposed properties, higher professional fees, and salaries of staff subject to corporate restructuring. Fourth quarter cash G&A expenses are expected to further decrease and coupled with strong production in the fourth quarter drop to a range of \$2.50 to \$2.80 per boe. Pengrowth therefore anticipates full year 2018 cash G&A expenses per boe to be in line with its revised full year 2018 Guidance as per the table above.

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

(3) Evaluates financial commodity risk management activities.

 ⁽³⁾ Excludes financial commodity risk management activities.
 (4) Guidance revised in the second quarter of 2018.

2019 GUIDANCE

The following table provides Pengrowth's 2019 Guidance:

	2019 Guidance (1)
Average production (boe/d)	22,500 - 23,500
Capital expenditures (\$ millions)	45
Royalty expenses (% of produced petroleum revenue) (2) (3)	7.0 - 8.0
Adjusted operating expenses (\$/boe) (2)	9.25 - 10.00
Cash G&A expenses (\$/boe) (2)	2.50 - 2.75

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

SUMMARY OF FINANCIAL & OPERATING RESULTS

	Three months ended		Nine months ended			
(\$ millions except per boe and per share amounts)	Sept 30, 2018	Sept 30, 2017	% Change (1)	Sept 30, 2018	Sept 30, 2017	% Change
		As adjusted (2)			As adjusted (2)	
PRODUCTION						
Average daily production (boe/d)	21,807	35,072	(38)	21,324	45,727	(53)
FINANCIAL						
Oil and gas sales (2)	147.9	125.1	18	419.5	542.9	(23)
Capital expenditures	6.8	33.6	(80)	56.3	89.7	(37)
Cash proceeds from dispositions	9.6	449.8	(98)	17.5	791.8	(98)
Interest and financing charges	12.3	14.7	(16)	36.0	58.3	(38)
Adjusted funds flow (3)	15.6	(0.3)		32.9	55.9	(41)
Weighted average number of shares outstanding (000's)	556,117	552,246	1	554,997	550,839	1
Adjusted funds flow per share (3)	0.03	_		0.06	0.10	(40)
OPERATIONAL						
Produced petroleum revenue per boe (3)	47.10	28.08	68	43.36	32.20	35
Operating expenses per boe (2)	11.02	15.99	(31)	10.67	15.01	(29)
Adjusted operating expenses per boe (3)	10.72	14.54	(26)	10.41	13.66	(24)
Royalty expenses per boe	3.69	1.89	95	3.52	3.03	16
Operating netback before realized commodity risk management per boe (3)	29.85	9.91	201	26.68	13.77	94
Cash G&A expenses per boe (3)	3.99	3.47	15	4.41	3.52	25
STATEMENT OF INCOME (LOSS)						
Net income (loss)	(1.6)	(144.7)	(99)	(56.3)	(473.4)	(88)
Net income (loss) per share	_	(0.26)	(100)	(0.10)	(0.86)	(88)
DEBT						
Total debt before working capital (4)				672.2	956.0	(30)

⁽¹⁾ Percentage changes in excess of 500 are excluded.

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

⁽³⁾ Excludes financial commodity risk management activities.

⁽²⁾ 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.

⁽³⁾ See definition under section "Non-GAAP Financial Measures".

⁽⁴⁾ Includes Credit Facility, current and long term portions of term notes, as applicable, and bank indebtedness. Excludes letters of credit and finance leases.

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 mor	ths ended	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Drilling, completions and facilities					
Lindbergh	6.0	24.3	31.9	67.4	
Groundbirch and conventional assets	0.4	5.1	19.9	6.6	
Maintenance and other development capital	0.5	3.9	4.4	15.1	
Development capital	6.9	33.3	56.2	89.1	
Other capital (1)	(0.1)	0.3	0.1	0.6	
Capital expenditures	6.8	33.6	56.3	89.7	

⁽¹⁾ Third quarter and year to date 2018 include onerous lease payments of \$0.4 million.

Third quarter of 2018 capital expenditures of \$6.8 million were primarily focused on the final completions and tie-in activities related to the 2018 Lindbergh infill drilling program. Production from this program is anticipated to be brought on stream in the fourth quarter of 2018 increasing Lindbergh production to approximately 19,000 bbl/d by the end of 2018. In addition to the drilling program, maintenance activities focused on facility debottlenecking and well optimization.

Groundbirch capital spending in the third quarter of 2018 encompassed trailing charges related to the finalization of the compression expansion and Nova Gas Transmission Limited system tie-in project which was completed in April 2018. Maintenance and integrity spending during the third quarter of 2018 on Pengrowth's other minor conventional assets amounted to \$0.4 million.

Year to date 2018 capital expenditures were \$56.3 million, with \$35.7 million spent at Lindbergh inclusive of maintenance capital and \$19.5 million spent at Groundbirch. The remaining capital was spent at Pengrowth's conventional properties as noted above.

Pengrowth's 2018 capital program of \$65 million was 87 percent complete in the first nine months of 2018, as planned.

PRODUCTION

	Three months ended			Nine months ended				
Daily production	Sept 30, 2018	% of total	Sept 30, 2017	% of total	Sept 30, 2018	% of total	Sept 30, 2017	% of total
Bitumen (bbl/d)	16,408	75	12,086	34	15,805	74	13,526	30
Natural gas (Mcf/d)	27,604	21	83,979	40	27,264	21	107,919	39
Light oil (bbl/d)	663	3	5,472	16	743	4	8,482	19
Natural gas liquids (NGL) (bbl/d)	135	1	3,517	10	232	1	5,732	12
Total boe/d	21,807		35,072		21,324		45,727	

Third quarter of 2018 total average daily production decreased 38 percent compared to the same period in 2017 due to the absence of approximately 17,800 boe/d of production related to properties divested in 2017. Partly offsetting this impact was the 36 percent increase in bitumen production in the third 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 62 percent in the third quarter of 2018 compared to the same period last year driven by production from three of the four new wells drilled in the fourth quarter of 2017 which commenced flow on the NGTL system on April 1, 2018. The fourth well was partially completed in 2017 and will commence flowing in the fourth quarter of 2018 as natural gas prices have improved. The final completion of this well is planned for the first quarter of 2019. The previously curtailed gas production at Groundbirch due to low natural gas prices will also be brought back on stream in the fourth quarter of 2018.

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

Third quarter of 2018 natural gas, light oil and NGL production decreased 67 percent, 88 percent and 96 percent, respectively, compared to the third quarter of 2017 due to property divestments. In addition, Groundbirch production was intentionally curtailed to 16,199 Mcf/d during the third quarter of 2018 from a peak production of 28,000 Mcf/d in early April due to weaker natural gas prices.

Year to date 2018 total average daily production decreased 53 percent compared to the same period in 2017 due to the absence of approximately 27,000 boe/d of production related to 2017 divestments. This was partly offset by a 17 percent and 47 percent increase in Lindbergh and Groundbirch production, respectively, compared to the same period in 2017.

FINANCIAL HIGHLIGHTS

	Three mor	Three months ended		ths ended
(\$ millions except per boe amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
Production (boe/d)	21,807	35,072	21,324	45,727
Capital expenditures	6.8	33.6	56.3	89.7
Cash flow from operating activities	21.8	11.8	22.3	114.0
Adjusted funds flow (1)	15.6	(0.3)	32.9	55.9
Operating netback before realized commodity risk management (\$/boe) (1)	29.85	9.91	26.68	13.77
Adjusted net income (loss) (1)	(20.4)	(148.3)	(60.0)	(528.4)
Net income (loss)	(1.6)	(144.7)	(56.3)	(473.4)
Total debt before working capital (2)	672.2	956.0	672.2	956.0

See definition under section "Non-GAAP Financial Measures".

Adjusted Funds Flow

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

	Three mor	nths ended	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Cash flow from operating activities	21.8	11.8	22.3	114.0	
Add (deduct):					
Interest and financing charges	(12.3)	(14.7)	(36.0)	(58.3)	
Expenditures on remediation	3.8	4.6	14.1	13.1	
Change in non-cash operating working capital	2.3	(2.0)	32.5	(12.9)	
Total	(6.2)	(12.1)	10.6	(58.1)	
Adjusted funds flow (1)	15.6	(0.3)	32.9	55.9	

⁽¹⁾ See definition under section "Non-GAAP Financial Measures".

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

The following table represents a continuity of adjusted funds flow:

(\$ millions)	Q3/17 vs. Q3/18	YTD 2017 vs. 2018
Adjusted funds flow for comparative period (1)	Q3/17 (0.3)	YTD 2017 55.9
Increase (decrease) due to:		
Volumes	(33.4)	(217.9)
Prices including differentials	37.3	68.3
Realized commodity risk management	(26.6)	(43.9)
Royalties	(1.3)	17.3
Expenses:		
Adjusted operating (1)	25.4	109.9
Cash G&A (1)	3.2	18.3
Interest & financing	2.4	22.3
Onerous office lease payments	(1.3)	(4.3)
Restructuring costs - severance	8.7	7.2
Other - including transportation	1.5	(0.2)
Net change	15.9	(23.0)
Adjusted funds flow (1)	Q3/18 15.6	YTD 2018 32.9

⁽¹⁾ See definition under section "Non-GAAP Financial Measures".

Third quarter of 2018 adjusted funds flow increased to \$15.6 million compared to a negative adjusted funds flow of \$0.3 million in the same period last year. This was primarily due to higher realized bitumen prices as a result of an increase in WTI pricing. Despite wider WCS differentials, the favourable impact of the physical delivery fixed price differential contracts combined with higher bitumen production improved funds flow in the third quarter of 2018 compared to 2017. These increases were partly offset by realized commodity risk management losses, higher cost of diluent and the impact of lower volumes related to the property divestments.

The absence of volumes related to divested properties was partly offset by the absence of adjusted operating expenses, royalties and lower severance costs year over year.

Year to date 2018 adjusted funds flow decreased \$23.0 million compared to the same period last year primarily due to the impact of property divestments, realized commodity risk management losses and higher cost of diluent. Partly offsetting these decreases were higher overall realized bitumen prices and production in 2018, lower interest and financing charges and lower cash G&A.

Net Income (Loss)

Pengrowth recorded a net loss of \$1.6 million in the third quarter of 2018 compared to a net loss of \$144.7 million in the same period last year. The net loss decreased primarily due to the absence of impairment charges and higher adjusted funds flow compared to the same period last year.

Year to date 2018 net loss decreased to \$56.3 million compared to a net loss of \$473.4 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 a decrease in unrealized gains on commodity risk management and losses on foreign exchange recorded in 2018 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 mon	ths ended	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Net income (loss)	(1.6)	(144.7)	(56.3)	(473.4)	
Exclude non-cash items from net income (loss):					
Change in fair value of commodity risk management contracts	21.7	(8.7)	13.4	47.5	
Unrealized foreign exchange gain (loss) (1)	3.0	10.0	(6.1)	20.4	
Tax effect on non-cash items above	(5.9)	2.3	(3.6)	(12.9)	
Total excluded	18.8	3.6	3.7	55.0	
Adjusted net income (loss) (2)	(20.4)	(148.3)	(60.0)	(528.4)	

⁽¹⁾ 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)	Q3/	/17 vs. Q3/18	YTD 20	17 vs. 2018
Adjusted net income (loss) for comparative period (1)	Q3/17	(148.3)	YTD 2017	(528.4)
Adjusted funds flow increase (decrease)		15.9		(23.0)
DD&A and accretion expense (increase) decrease		7.6		82.5
Impairment charges (increase) decrease		127.1		504.4
Realized foreign exchange gain (loss) on derivative settlements		_		2.8
Loss on property dispositions (increase) decrease		21.4		45.7
Onerous lease contracts		2.7		4.4
Onerous office lease payments		1.3		4.3
Loss on extinguishment of debt		_		7.5
Other		(0.4)		2.1
Estimated tax on above		(47.7)		(162.3)
Net change		127.9		468.4
Adjusted net income (loss) (1)	Q3/18	(20.4)	YTD 2018	(60.0)

⁽¹⁾ See definition under section "Non-GAAP Financial Measures".

Pengrowth posted an adjusted net loss of \$20.4 million in the third quarter of 2018 compared to an adjusted net loss of \$148.3 million in the third quarter of 2017. The \$127.9 million decrease in adjusted net loss was primarily due to the absence of impairment charges.

Year to date 2018 adjusted net loss of \$60.0 million was \$468.4 million lower than the same period last year primarily driven by the absence of impairment charges, lower DD&A expenses, absence of losses on property dispositions partly offset by a decrease in adjusted funds flow driven by property divestments.

⁽²⁾ 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. No new financial risk management contracts were entered into during the third quarter of 2018 and Pengrowth has no financial commodity risk management contracts in place for 2019. See Note 12 to the September 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	\$71.12	\$1.00	
Bitumen				8.3
Oil risk management (3)				(1.2)
Light oil and NGLs				0.3
Net impact of U.S.\$1/bbl increase in WTI				7.4
Oil differentials (2)				
Bitumen	U.S.\$/bbl	\$25.72	\$1.00	(8.3)
Light oil	U.S.\$/bbl	\$17.59	\$1.00	(0.3)
Physical oil differential risk management (4)				5.6
Net impact of U.S.\$1/bbl increase in differentials				(3.0)
AECO Natural Gas (2)	Cdn\$/Mcf	\$1.80	\$0.10	
Natural gas				1.1
Net impact of Cdn\$0.10/Mcf increase in AECO				1.1

⁽¹⁾ 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.\$0.77 was used for the 12 month period.

Estimated Impact on

⁽²⁾ Commodity price is based on an estimation of the 12 month forward price curve at October 15, 2018 and does not include the impact of commodity risk management contracts.

⁽³⁾ Includes commodity risk management contracts as at September 30, 2018.

⁽⁴⁾ Reflects 2018 physical delivery contracts for 17,000 bbl/d of dilbit at a fixed price differential of approximately U.S.\$16.82/bbl and 2019 physical delivery contracts for 10,000 bbl/d of dilbit at a fixed price differential of approximately U.S.\$19.24/bbl. See Commodity Prices section of this MD&A for more information.

BUSINESS ENVIRONMENT

Pengrowth's revenues are substantially derived from the sale of diluted bitumen, light oil, natural gas and natural gas liquids and are dependent on commodity prices the Company receives. The following table shows industry benchmark prices and foreign exchange rates to assist in understanding the impact of commodity prices, price differentials and foreign exchange rates on Pengrowth's financial results:

Benchmark Prices and Differentials

	Three mor	iths ended	Nine months ended		
	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Average Commodity Prices					
Crude Oil:					
WTI oil (U.S.\$/bbl)	69.50	48.19	66.75	49.43	
WTI oil (Cdn\$/bbl)	90.26	60.38	85.58	64.62	
WCS differential to WTI (U.S.\$/bbI)	(22.25)	(9.94)	(21.93)	(11.86)	
WCS oil (U.S.\$/bbl)	47.25	38.25	44.82	37.57	
WCS oil (Cdn\$/bbl)	61.36	47.92	57.46	49.08	
Edmonton Condensate:					
Condensate at Edmonton (Cdn\$/bbl)	87.35	59.01	85.24	64.10	
WCS differential to Condensate (Cdn\$/bbl)	(25.99)	(11.09)	(27.78)	(15.02)	
Natural Gas:					
AECO monthly gas (Cdn\$/MMBtu)	1.35	2.04	1.41	2.58	
Average Exchange Rate					
Cdn\$1=U.S.\$	0.77	0.80	0.78	0.77	

Crude Oil Benchmark Prices and Differentials

Global crude oil prices continued to improve through the third quarter of 2018 as production and supply tightened. The WTI price which is an important benchmark reflecting the inland North American crude oil price averaged U.S.\$69.50/bbl during the third quarter of 2018, reflecting a 44 percent increase compared to the same period in 2017. Year to date 2018 WTI price averaged U.S.\$66.75/bbl, an increase of 35 percent from the same period in 2017.

Despite the increase in benchmark prices for global oil, Canadian producers were subject to a larger 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. WCS is a blend of heavy oil consisting of conventional heavy oil and diluted bitumen and the benchmark price represents the North American heavy oil price at Hardisty, Alberta.

The discount between WCS and WTI widened significantly in 2018 compared to 2017. During the third quarter of 2018, the WCS to WTI differential averaged U.S.\$22.25/bbl compared to U.S.\$9.94/bbl in the third quarter of 2017. Although the differential was wider in the first nine months of 2018 compared to 2017, the average U.S. dollar WCS oil price was 24 percent and 19 percent higher compared to the third quarter of 2017 and year to date 2017, respectively, due to the higher overall global prices in the quarter.

Condensate Benchmark Prices and Differentials

In order to meet pipeline specifications and facilitate delivery on pipeline systems, bitumen production is blended with condensate which is used as a diluent to reduce viscosity. Pengrowth's blending ratio which reflects diluent volumes as a percentage of total blended volumes remained unchanged at approximately 30 percent throughout the first nine months of 2018 as compared to 2017. The WCS to Condensate differential reflects the amount of condensate costs that are not recoverable when selling a barrel of blended bitumen. The narrower the WCS to Condensate differential, the more condensate costs are recovered. When the demand for condensate in Alberta exceeds the supply available, Edmonton condensate prices may be driven by U.S. Gulf Coast condensate prices plus the cost to transport the condensate to Edmonton. Condensate prices, benchmarked at Edmonton, were stronger in the first nine months of 2018 at an average of Cdn\$87.35/bbl compared to Cdn\$59.01/bbl in the same period in 2017 due to higher demand for diluent in Alberta.

Natural Gas Benchmark Prices and Differentials

The average AECO natural gas price decreased 34 percent and 45 percent in the third 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.

Average Realizations

	Three mon	iths ended	Nine months ended		
(Cdn\$)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Average Sales Price (1)					
Bitumen (Cdn\$/bbl) (2) (3)	56.64	31.57	50.73	34.34	
Natural gas (Cdn\$/Mcf) ⁽⁴⁾	1.61	2.33	2.23	2.93	
Natural gas liquids (Cdn\$/bbl)	40.26	33.07	50.52	32.85	
Light oil (Cdn\$/bbl)	72.14	53.24	67.54	59.38	

⁽¹⁾ Excluding realized financial risk management contracts.

Bitumen Realization

Pengrowth's average bitumen sales price represents the price received for bitumen production from Lindbergh, prior to blending of the product with diluent. Pengrowth purchases diluent which is added to the bitumen produced and the blended product is then sold at Hardisty. The cost of blending is impacted by the amount of diluent required and the cost of purchasing and transporting the diluent. Third quarter and year to date 2018 bitumen realization was 79 percent and 48 percent higher, respectively, compared to the same periods in 2017 primarily due to an increase in WCS and favourable impact of the WCS physical delivery fixed price differential contracts in 2018.

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.\$16.82/bbl discount to WTI in 2018, this resulted in higher realized bitumen sales prices by approximately Cdn\$6.62/bbl, as compared to index prices, in the third quarter of 2018, and Cdn\$6.95/bbl year to date 2018.

Light Oil, Natural Gas and NGL Realizations

Realized pricing for light oil moved in line with the underlying Canadian benchmarks which also experienced wider discounts to global prices. The increase in NGL pricing year over year reflects movements in the underlying benchmark and a more favourable pricing environment for component products.

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 including Algonquin City Gate in the Northeast U.S., which can result in a significant variance between Pengrowth's realized natural gas prices and the AECO benchmark price in any given period.

Pengrowth's third quarter and year to date 2018 average sales price for natural gas decreased 31 percent and 24 percent, respectively, compared to the same periods in 2017. The lower realized prices correspond to the decrease in AECO benchmark price as noted above, partially offset by the higher Algonquin benchmark price.

During the third quarter 2018 Pengrowth managed WCS differential with fixed price differential physical delivery contracts of 17,000 bbl/d at approximately U.S. \$16.82/bbl of diluted bitumen. Third quarter 2018 and year to date 2018 bitumen average sale prices were higher, as compared to index prices, by approximately Cdn\$6.62/bbl and Cdn\$6.95/bbl, respectively, resulting from the impact of these fixed price differential physical delivery contracts.

⁽³⁾ Calculated based on bitumen sales volumes and excludes diluent.

⁽⁴⁾ Average sales prices are recorded in Mcf to reflect the volumetric reporting standard for Pengrowth's natural gas.

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	ths ended	Nine months ended		
(Cdn\$/boe)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Produced petroleum revenue (1)	47.10	28.08	43.36	32.20	
Realized commodity risk management gain (loss)	(11.41)	1.15	(9.81)	(1.06)	
Total including realized commodity risk management	35.69	29.23	33.55	31.14	

⁽¹⁾ See definition under section "Non-GAAP Financial Measures".

Pengrowth's third quarter and year to date 2018 produced petroleum revenue realizations of \$47.10/boe and \$43.36/boe increased 68 percent and 35 percent, respectively, compared to the same periods in 2017, reflecting the increase in prices for all commodities.

A realized commodity risk management loss of \$11.41/boe was recorded in the third quarter of 2018 compared to a gain of \$1.15/boe in the third quarter of 2017. The change is primarily due to WTI exceeding the fixed prices in existing WTI commodity risk management contracts, all of which expire at the end of 2018.

Pengrowth incurred a realized commodity risk management loss of \$9.81/boe year to date 2018, compared to a loss of \$1.06/boe in 2017 also due to the WTI contracts that were put in place in 2017, and unwind at the end of 2018.

Risk Management

Realized Commodity Risk Management Gains (Losses) from Financial Contracts

	Three mor	iths ended	Nine months ended		
(\$ millions except per unit amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Oil risk management gain (loss)	(22.9)	_	(57.1)	(16.8)	
\$/bbl ⁽¹⁾	(14.58)	_	(12.64)	(2.80)	
Natural gas risk management gain (loss)	_	3.7	_	3.6	
\$/Mcf	_	0.48	_	0.12	
Total realized commodity risk management gain (loss)	(22.9)	3.7	(57.1)	(13.2)	
\$/boe	(11.41)	1.15	(9.81)	(1.06)	

⁽¹⁾ 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 financial risk management contracts were entered into during the third quarter of 2018 and Pengrowth has no financial commodity risk management contracts in place for 2019.

A realized commodity risk management loss of \$22.9 million was recorded in the third quarter of 2018 compared to a gain of \$3.7 million in the third quarter of 2017. The change was 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 \$57.1 million increased \$43.9 million compared to the realized commodity risk management loss of \$13.2 million in the same period of 2017 due to the same.

	Three mont	ths ended	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Fair value of commodity risk management assets (liabilities) at period end	(26.4)	(6.5)	(26.4)	(6.5)	
Less: Fair value of commodity risk management assets (liabilities) at beginning of period	(48.1)	2.2	(39.8)	(54.0)	
Change in fair value of commodity risk management contracts for the period	21.7	(8.7)	13.4	47.5	

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 September 30, 2018, Pengrowth recorded an increase in the fair value of commodity risk management contracts of \$21.7 million as the fair value of commodity risk management liabilities at June 30, 2018 of \$48.1 million decreased to a liability of \$26.4 million at September 30, 2018. The decrease in liability was primarily the result of the settlement of contracts during the third quarter of 2018.

For the nine months ended September 30, 2018, Pengrowth recorded an increase in the fair value of commodity risk management contracts of \$13.4 million as the fair value of commodity risk management liabilities at December 31, 2017 of \$39.8 million decreased to a liability of \$26.4 million at September 30, 2018. The decrease in liability was the result of the settlement of contracts offset by higher forward price curves for oil relative to the beginning period.

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 September 30, 2018, Pengrowth had the following financial contracts outstanding:

Crude Oil

Financial Swap Con	tracts			
Reference point	Remaining term	Volum	ne (bbl/d)	Price/bbl (U.S.\$)
WTI	Oct. 1, 2018 to Dec. 31, 2018	8,000 49.9		
Collars			Price/bb	ol (U.S.\$)
Reference point	Remaining term	Volume (bbl/d)	Bought Puts	Sold Calls
WTI	Oct. 1, 2018 to Dec. 31, 2018	2,000	48.00	53.48

At September 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 nine months of 2018.

WCS Differentials

Physical Delivery Contracts			
Reference point	Remaining term	Volume of dilbit (bbl/d)	Price/bbl (U.S.\$)
Western Canada Select	Oct. 1, 2018 to Dec. 31, 2018	12,000	WTI less \$16.95
Western Canada Select	Oct. 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	2,500	WTI less \$23.60 - \$26.35
Western Canada Select	Jan. 1, 2019 to Dec. 31, 2019	5,000	WTI less \$17.70 - \$20.45

In the third quarter of 2018, Pengrowth produced an average of 16,408 bbl/d of bitumen and sold an average of 22,702 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 September 30, 2018 unaudited Consolidated Financial Statements for more information.

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

(\$ millions)

Crude oil swaps and collars	Cdn\$1/bbl increase in future C oil prices	Cdn\$1/bbl decrease in future oil prices
Increase (decrease) to fair value of oil risk management contracts	(0.9)	0.9

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 September 30, 2018, revenue and cash flow would have been \$26.4 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 \$26.4 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	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
		As adjusted (1)		As adjusted (1)	
Bitumen	85.5	35.1	218.9	126.8	
Natural gas	4.1	18.0	16.6	86.3	
Light oil	4.4	26.8	13.7	137.5	
Natural gas liquids	0.5	10.7	3.2	51.4	
Produced petroleum revenue (2)	94.5	90.6	252.4	402.0	
Diluent and other revenue	53.4	34.5	167.1	140.9	
Oil and gas sales (1)(3)	147.9	125.1	419.5	542.9	

⁽¹⁾ 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 September 30, 2018 versus Quarter ended September 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)
Quarter ended September 30, 2017 (1)	35.1	18.0	26.8	10.7	90.6
Effect of change in product prices and differentials	37.8	(1.8)	1.2	0.1	37.3
Effect of change in sales volumes	12.6	(12.1)	(23.6)	(10.3)	(33.4)
Quarter ended September 30, 2018 (1)	85.5	4.1	4.4	0.5	94.5

⁽¹⁾ Excludes realized commodity risk management from financial contracts.

Bitumen sales increased by 144 percent in the third 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 77 percent, 84 percent and 95 percent, respectively, compared to the third 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.

Nine Months ended September 30, 2018 versus Nine Months ended September 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⁾
Nine months ended September 30, 2017 (1)	126.8	86.3	137.5	51.4	402.0
Effect of change in product prices and differentials	70.7	(5.2)	1.7	1.1	68.3
Effect of change in sales volumes	21.4	(64.5)	(125.5)	(49.3)	(217.9)
Nine months ended September 30, 2018 (1)	218.9	16.6	13.7	3.2	252.4

⁽¹⁾ Excludes realized commodity risk management from financial contracts.

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

⁽³⁾ Excludes realized commodity risk management from financial contracts.

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

Year to date 2018 bitumen sales increased 73 percent compared to the same period in 2017 resulting from an increase in WCS and the favorable impact of physical delivery fixed price differential contracts combined with higher production volumes. Natural gas, light oil and NGL sales decreased 81 percent, 90 percent and 94 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	iths ended	Nine months ended		
(\$ millions except per boe amounts and percentages)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Royalties, net of incentives	7.4	6.1	20.5	37.8	
\$/boe	3.69	1.89	3.52	3.03	
Royalties as a percent of produced petroleum revenue (%) (1) (2)	7.8	6.7	8.1	9.4	

⁽¹⁾ Excludes realized commodity risk management from financial contracts.

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

Third quarter of 2018 royalties as a percent of produced petroleum revenues increased to 7.8 percent from 6.7 percent in the third quarter of 2017. The overall increase in the third quarter of 2018 royalty rate is primarily attributed to Lindbergh royalties, which increased compared to the same period last year due to higher benchmark prices. This was partly offset by the absence of royalties related to divested properties of approximately \$2 million.

Year to date 2018 royalties as a percent of produced petroleum revenues decreased to 8.1 percent from 9.4 percent in the same period last year driven by the absence of approximately \$25 million of royalties related to divested properties. This was also partly offset by higher Lindbergh royalties year over year due to higher benchmark prices.

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. This is not expected for at least 5 more years. 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 that is based on posted WCS benchmark prices.

ADJUSTED OPERATING EXPENSES

	Three months ended		Nine months ended	
(\$ millions except per boe amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
		As adjusted (1)		As adjusted (1)
Operating expenses (1)	22.1	51.6	62.1	187.4
Less: Processing income	0.6	4.7	1.5	16.9
Adjusted operating expenses (2)	21.5	46.9	60.6	170.5
\$/boe	10.72	14.54	10.41	13.66

⁽¹⁾ 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.

Third quarter of 2018 adjusted operating expenses decreased \$25.4 million or 54 percent compared to the same period in 2017 primarily due to the absence of approximately \$25 million of adjusted operating expenses associated with the divested properties. Adjusted operating expenses related to the remaining assets were relatively unchanged in the third quarter of 2018 compared to the third quarter of 2017.

Year to date 2018 adjusted operating expenses decreased \$109.9 million or 64 percent compared to the same period in 2017 primarily due to the absence of approximately \$110 million of adjusted operating expenses associated with the divested properties.

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

On a per boe basis, third quarter and year to date 2018 adjusted operating expenses decreased \$3.82/boe and \$3.25/boe, respectively, compared to the same periods last year driven by the impact of property dispositions mentioned above.

DILUENT AND OTHER PURCHASES

	Three months ended		Nine mon	ths ended
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
		As adjusted (1)		As adjusted (1)
Diluent purchases	52.8	26.1	163.9	105.8
Other product purchases	_	2.8	1.2	15.0
Diluent and other purchases (1)	52.8	28.9	165.1	120.8

⁽¹⁾ 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.

Third quarter and year to date 2018 diluent purchases increased \$26.7 million and \$58.1 million, respectively, compared to the same periods last year as the increase in bitumen production in the first nine months of 2018 relative to 2017 required higher volume of purchased diluent. In addition, average condensate prices were stronger in the first nine months of 2018 compared with 2017 due to higher demand for diluent in Alberta further increasing the overall cost of purchased condensate. Pengrowth's blending ratio which reflects diluent volumes as a percentage of total blended volumes remained unchanged at approximately 30 percent throughout the first nine months of 2018 as compared to 2017.

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.

TRANSPORTATION EXPENSES

	Three months ended		Nine mont	hs ended
(\$ millions except per boe amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
Transportation expenses	5.7	5.6	16.0	21.7
\$/boe	2.84	1.74	2.75	1.74

Third quarter of 2018 transportation expenses remained relatively unchanged compared to the same period in 2017. Year to date 2018 transportation expenses decreased \$5.7 million compared to the same period in 2017 due to the impact of 2017 property divestments of approximately \$7.7 million. This was partly offset by incremental transportation expenses related to higher Lindbergh production in 2018.

On a per boe basis, the increase in the third 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		Three months ended Nine months en		ths ended
Operating Netbacks (\$/boe) (1) (2)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Produced petroleum revenue (1)	47.10	28.08	43.36	32.20	
Royalties	(3.69)	(1.89)	(3.52)	(3.03)	
Adjusted operating expenses (1)	(10.72)	(14.54)	(10.41)	(13.66)	
Transportation expenses	(2.84)	(1.74)	(2.75)	(1.74)	
Operating netbacks before realized commodity risk management	29.85	9.91	26.68	13.77	
Realized commodity risk management	(11.41)	1.15	(9.81)	(1.06)	
Operating netbacks (\$/boe)	18.44	11.06	16.87	12.71	

⁽¹⁾ See definition under section "Non-GAAP Financial Measures".

Third quarter and year to date 2018 operating netback, before realized commodity risk management, increased 201 percent and 94 percent, respectively, compared to the same periods in 2017 primarily in response to an increase in commodity benchmark prices and lower adjusted operating expenses.

Third quarter and year to date 2018 operating netbacks, after realized commodity risk management, increased 67 percent and 33 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 losses in 2018.

GENERAL AND ADMINISTRATIVE EXPENSES

	Three months ended		Three months ended Nine		Nine mont	ths ended
(\$ millions except per boe amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017		
Cash G&A expenses (1)(2)	8.0	11.2	25.7	44.0		
\$/boe	3.99	3.47	4.41	3.52		
Non-cash G&A expenses (1)	1.7	1.3	3.1	6.2		
\$/boe	0.84	0.40	0.54	0.50		
Total G&A (1)	9.7	12.5	28.8	50.2		
\$/boe	4.83	3.87	4.95	4.02		

⁽¹⁾ Net of recoveries and capitalization, as applicable.

Third quarter and year to date 2018 cash G&A expenses decreased \$3.2 million or 29 percent and \$18.3 million or 42 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, third quarter and year to date 2018 cash G&A expenses increased \$0.52/boe and \$0.89/boe, respectively, compared to the same periods in 2017 as decreases in production volumes outpaced the decreases in cash G&A expenses.

Year to date 2018 cash G&A expenses are higher than full year 2018 Guidance due to inclusion of costs related to the administrative support associated with disposed properties and salaries of staff subject to corporate restructuring. Pengrowth anticipates full year 2018 cash G&A expenses to be in line with its revised full year 2018 Guidance.

The non-cash component of G&A represents the compensation expenses associated with Pengrowth's share-settled LTIP. See Note 8 to the September 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.

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

⁽²⁾ See definition under section "Non-GAAP Financial Measures".

Third quarter and year to date 2018 non-cash G&A expenses decreased \$0.4 million or 31 percent and \$3.1 million or 50 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 nine months ended September 30, 2018, \$1.4 million (September 30, 2017 - \$1.8 million) of directly attributable G&A costs were capitalized to Property, Plant and Equipment ("PP&E").

RESTRUCTURING COSTS

	Three months ended		Three months ended		Nine mont	hs ended
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017		
Severance costs	0.5	9.2	2.0	9.2		
Onerous office lease contracts	_	8.0	(1.7)	8.0		
Total restructuring costs	0.5	17.2	0.3	17.2		

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 \$2.0 million expense relating to severance costs and a \$1.7 million reduction related to an estimate revision to the onerous lease provision.

DEPLETION, DEPRECIATION, AMORTIZATION AND ACCRETION

	Three months ended		Nine months ended	
(\$ millions except per boe amounts)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
Depletion, depreciation and amortization	33.0	39.8	98.1	175.7
\$/boe	16.45	12.33	16.85	14.07
Accretion	1.8	2.6	5.2	10.1
\$/boe	0.90	0.81	0.89	0.81

Third quarter 2018 DD&A expenses decreased \$6.8 million compared to the same period in 2017 primarily due to the absence of approximately \$12 million of DD&A in the third quarter of 2018 related to divested properties. This was partially offset by higher Lindbergh and Groundbirch DD&A driven by the production growth from the Lindbergh wells drilled in late 2017 and increased production at Groundbirch driven by production from the three new wells drilled in the fourth guarter of 2017.

Year to date 2018 DD&A expenses decreased \$77.6 million compared to the same period in 2017 due to the absence of approximately \$85 million year to date 2018 of DD&A associated with the divested properties.

On a per boe basis, third quarter and year to date 2018 DD&A increased \$4.12/boe and \$2.78/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 onerous leases. Third quarter and year to date 2018 accretion expense decreased \$0.8 million and \$4.9 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 months ended		Three months ended Nine months e		ths ended
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Interest and financing charges	12.3	15.7	38.4	61.0	
Capitalized interest	_	(1.0)	(2.4)	(2.7)	
Total interest and financing charges	12.3	14.7	36.0	58.3	

At September 30, 2018, Pengrowth had \$513.7 million in outstanding fixed rate debt and \$158.5 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.

Third quarter and year to date 2018 interest and financing charges, before capitalized interest, decreased \$3.4 million or 22 percent and \$22.7 million or 37 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.

Pengrowth ceased the capitalization of interest during the third quarter of 2018 due to the change in the development plan for Lindbergh. During the nine months ended September 30, 2018, \$2.4 million (September 30, 2017 - \$2.7 million) of interest was capitalized on the Lindbergh project to PP&E using Pengrowth's weighted average cost of debt of 6.5 percent (September 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 \$1.1 million in the third quarter of 2018 compared to a deferred tax recovery of \$57.0 million in the third 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 third quarter of 2018, and temporary differences related to 2017 asset dispositions. Year to date 2018 deferred tax recovery amounted to \$13.2 million compared to a recovery of \$166.2 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.

OTHER (INCOME) EXPENSE

Third quarter and year to date 2018 other expenses of \$6.5 million and \$6.3 million, respectively, included \$5.4 million of onerous lease obligation related to a construction camp at Lindbergh. As Pengrowth shifted its development methodology away from the previously contemplated large single phase approach to expansion achieved in incremental steps, the camp will likely not be utilized at Lindbergh. Accordingly, the economic benefits of the construction camp were exceeded by the unavoidable costs of the contract over the remaining term.

FOREIGN CURRENCY GAINS (LOSSES)

	Three months ended		nded Nine months ende	
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017
Currency exchange rate (Cdn\$1 = U.S.\$) at beginning of period	0.76	0.77	0.80	0.74
Currency exchange rate (Cdn\$1 = U.S.\$) at period end	0.77	0.80	0.77	0.80
Unrealized foreign exchange gain (loss) from translation of foreign denominated debt	9.1	35.4	(12.1)	70.8
Unrealized gain (loss) on foreign exchange risk management contracts	(6.1)	(25.4)	6.0	(50.4)
Net unrealized foreign exchange gain (loss)	3.0	10.0	(6.1)	20.4
Net realized foreign exchange gain (loss)	(0.1)	(2.3)	0.4	(4.0)

As 73 percent of Pengrowth's total debt before working capital is denominated in foreign currencies at September 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 September 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 September 30, 2018, the fair value of these U.S. foreign exchange derivative contracts was a liability of Cdn\$12.3 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 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 September 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:

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

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

At September 30, 2018, the fair value of the U.K. foreign exchange derivative contracts was an asset of \$1.4 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 September 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 September 30, 2018, the ARO liability decreased \$9.3 million from December 31, 2017 primarily due to remediation expenditures.

Pengrowth has estimated the net present value of its total ARO to be \$227.4 million as at September 30, 2018 (December 31, 2017 – \$236.7 million), based on a total escalated future liability of \$407.8 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 September 30, 2018 was \$100.3 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. Expenditures of approximately \$13 million year to date September 30, 2018 were funded by the trust fund.

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 September 30, 2018.

ACQUISITIONS AND DISPOSITIONS

	Three mon	ths ended	Nine months ended		
(\$ millions)	Sept 30, 2018	Sept 30, 2017	Sept 30, 2018	Sept 30, 2017	
Proceeds from property dispositions (1)	9.6	449.8	17.5	791.8	

Proceeds are net of transaction costs, closing adjustments and, where applicable, deferred proceeds.

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

Year to date 2017 include proceeds from property dispositions from the sale of non-producing Montney lands at Bernadet in north eastern British Columbia, the sale of a 4.0 percent GORR interest on the Lindbergh thermal property and certain seismic assets, and the sale of Olds/Garrington and Swan Hills area.

At September 30, 2018, Pengrowth's accounts receivable included approximately \$9 million of deferred proceeds relating to 2017 dispositions. These deferred proceeds are expected to be collected within the next 4 months.

FINANCIAL RESOURCES AND LIQUIDITY

Capital Resources

At September 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 has met with representatives from the lead banks 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 and Pengrowth is targeting having a new facility in place by early 2019. Discussions are revolving around a new credit agreement that will 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 will likely result in Pengrowth receiving an offer for replacement debt at a higher cost than the current outstanding debt.

Debt Maturities

Pengrowth has no scheduled debt maturities in 2018. The available Credit Facility had drawings of \$158.5 million at September 30, 2018 (December 31, 2017 - \$109.0), and \$79.7 million of outstanding letters of credit (December 31, 2017 - \$69.4 million). During the third quarter of 2018 Pengrowth applied free funds flow together with the collection of deferred disposition proceeds to reduce drawings on the Credit Facility by \$20.5 million. Pengrowth expects to continue to apply free funds flow after capital expenditures together with the collection of the approximately \$9 million of remaining deferred disposition proceeds to decrease the outstanding debt. Pengrowth has set a cautious capital spending program of \$45 million in 2019 to maximize the amount of free funds flow directed to debt repayment. With the expiry of the existing WTI hedges at the end of 2018, Pengrowth is anticipating higher free funds flow in 2019. A prolonged or significant decrease in WTI or WCS pricing may not leave a significant level of free funds flow directed to debt repayment.

There are no term note maturities until October 2019 when Cdn\$56.7 million, as at September 30, 2018, is due.

Further information regarding the risk factors associated with the capital resources of Pengrowth may be found under the headings "Advisory Regarding Forward-Looking Statements" and "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.

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 the term notes, and expiring on March 31, 2019 in the case of the 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	_	-	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 fees and interest expense related to debt repaid with asset divestment proceeds. See table below for more information. Pengrowth's Interest Coverage ratio was 1.9 times at September 30, 2018, which was above the third quarter of 2018 covenant of 1.03 times.

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

Covenant Calculation

Twelve month trailing actual covenant (1):

Interest Coverage ratio at September 30, 2018	1.9
Minimum Interest Coverage compliance ratio required at September 30, 2018	1.03

Minimum Interest Coverage compliance ratio required at September 30, 2018	1.03
Twelve month trailing Adjusted Interest Expense (\$ millions):	Sept 30, 2018
Interest and financing charges	48.4
Less fees and interest on debt repaid with asset divestment proceeds (1)	(2.0
Adjusted Interest Expense	46.4
Twelve month trailing Adjusted EBITDA (\$ millions):	
Net income (loss)	(266.7
Add (deduct):	
Interest and financing charges	48.4
Deferred income tax expense (recovery)	(70.8
Depletion, depreciation, amortization and accretion	136.5
Impairment	130.0
(Gain) loss on disposition of properties	16.9
Change in fair value of commodity risk management contracts	19.9
Unrealized foreign exchange (gain) loss	(24.9
Non-cash share based compensation expense	1.8
Loss on extinguishment of debt	49.2
Foreign exchange derivative settlements	34.8
Restructuring costs	20.1
EBITDA related to material dispositions (1)	(4.9
Adjusted EBITDA	90.3

⁽¹⁾ 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 September 30, 2018 total debt before working capital of \$672.2 million comprised \$513.7 million of term notes, \$158.5 million drawn on the Credit Facility. Compared to December 31, 2017, total debt increased by \$61.7 million at September 30, 2018 as drawings on the Credit Facility increased and weakening Canadian dollar negatively impacted the balance.

As of September 30, 2018, Pengrowth's foreign denominated term notes comprised 73 percent of the total debt before working capital. Each term note is governed by a Note Purchase Agreement. See Note 4 to the September 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 September 30, 2018, Pengrowth had a working capital deficiency of \$216.2 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 September 30, 2018 unaudited Consolidated Financial Statements for additional information regarding the fair value of its financial instruments.

SUMMARY OF QUARTERLY RESULTS

	2018		2017				2016	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Oil and gas sales (\$ millions) (1)	147.9	146.4	125.2	130.5	125.1	197.9	219.9	169.2
Net income (loss) (\$ millions)	(1.6)	(27.5)	(27.2)	(210.4)	(144.7)	(242.4)	(86.3)	(92.4)
Net income (loss) per share (\$)	_	(0.05)	(0.05)	(0.38)	(0.26)	(0.44)	(0.16)	(0.17)
Net income (loss) per share - diluted (\$)	_	(0.05)	(0.05)	(0.38)	(0.26)	(0.44)	(0.16)	(0.17)
Adjusted funds flow (\$ millions) (2) (3) (4) (5)	15.6	10.1	7.2	13.5	(0.3)	29.3	26.9	111.7
Daily production (boe/d)	21,807	22,600	19,541	24,702	35,072	49,349	52,957	54,354
Produced petroleum revenue (\$/boe) (1) (5)	47.10	42.59	39.97	37.14	28.08	32.56	34.66	33.62
Operating netback (\$/boe) (5) (6)	18.44	16.00	16.08	16.06	11.06	13.16	13.43	30.60

- (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) 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.
- (3) First quarter of 2017 adjusted funds flow includes a \$12.7 million loss related to the early settlement of commodity risk management contracts.
- (4) 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.
- See definition under section "Non-GAAP Financial Measures".
- (6) Includes realized commodity risk management.

Pengrowth recorded a net loss of \$1.6 million in the third 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, losses on dispositions and higher adjusted funds flow.

Third quarter of 2018 adjusted funds flow increased from the preceding quarters of 2018, however decreased compared to the first half of 2017 and fourth quarter of 2016 primarily due to the absence of adjusted funds flow from divested properties. Higher realized bitumen prices and production, the favourable impact of the physical delivery fixed price differential contracts, combined with 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.

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

2018 quarterly production was lower than all of the preceding quarters in 2017 and 2016, as per the table above, resulting primarily from 2017 property dispositions and natural declines due to capital spending curtailments, partially offset by increased production from the Lindbergh wells drilled in late 2017 and higher production at Groundbirch driven by production from three new wells on production during 2018.

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 www.sedar.com and EDGAR at www.sedar.com and www.sedar.com<

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 September 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 September 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 in the process of performing detailed analysis on identified contracts, developing business and accounting processes, making applicable changes to the Corporation's internal controls and assessing the impact that the adoption of this standard will have on its financial statements. Pengrowth has elected to use the modified retrospective approach upon adoption and the actual full impact of adoption will depend on the Corporation's incremental borrowing rate, lease portfolio and practical expedients applied.

INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes to internal control over financial reporting ("ICFR") during the three and nine months ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, Pengrowth's internal control over financial reporting. Internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.