

2019

ANNUAL REPORT

EXCELLENCE. TRUST. RESPECT. RESPONSIBILITY.



INTERNATIONALLY DIVERSIFIED | SUSTAINABLE GROWTH AND INCOME

VERMILION
E N E R G Y



Front Cover Theme

As illustrated by the front cover photo of our operations in Germany, Vermilion's integration of sustainability throughout our business recognizes that we are part of a larger whole: the environments and communities in which we operate. We are therefore committed to conducting our activities in a manner that will protect the health and safety of both. This includes understanding our role in the evolving energy transition within the broader context of the United Nations Sustainable Development Goals ("SDGs"). We believe this approach, in which sustainability is embedded in our corporate strategy, supports Vermilion's long-term economic viability while building a better future for our stakeholders through enhanced economic, environmental and community wellbeing.

Disclaimer

Certain statements included or incorporated by reference in this document may constitute forward-looking statements or financial outlooks under applicable securities legislation. Such forward-looking statements or information typically contain statements with words such as "anticipate", "believe", "expect", "plan", "intend", "estimate", "propose", or similar words suggesting future outcomes or statements regarding an outlook. Forward looking statements or information in this document may include, but are not limited to: capital expenditures and Vermilion's ability to fund such expenditures; Vermilion's additional debt capacity providing it with additional working capital; the flexibility of Vermilion's capital program and operations; business strategies and objectives; operational and financial performance; estimated volumes of reserves and resources; petroleum and natural gas sales; future production levels and the timing thereof, including Vermilion's 2020 guidance, and rates of average annual production growth; the effect of changes in crude oil and natural gas prices, changes in exchange rates and significant declines in production or sales volumes due to unforeseen circumstances; the effect of possible changes in critical accounting estimates; statements regarding the growth and size of Vermilion's future project inventory, and the wells expected to be drilled in 2020; exploration and development plans and the timing thereof; Vermilion's ability to reduce its debt, including its ability to redeem senior unsecured notes prior to maturity; statements regarding Vermilion's hedging program, its plans to add to its hedging positions, and the anticipated impact of Vermilion's hedging program on project economics and free cash flows; the potential financial impact of climate-related risks; acquisition and disposition plans and the timing thereof; operating and other expenses, including the payment and amount of future dividends; royalty and income tax rates and Vermilion's expectations regarding future taxes and taxability; and the timing of regulatory proceedings and approvals.

Such forward-looking statements or information are based on a number of assumptions, all or any of which may prove to be incorrect. In addition to any other assumptions identified in this document, assumptions have been made regarding, among other things: the ability of Vermilion to obtain equipment, services and supplies in a timely manner to carry out its activities in Canada and internationally; the ability of Vermilion to market crude oil, natural gas liquids, and natural gas successfully to current and new customers; the timing and costs of pipeline and storage facility construction and expansion and the ability to secure adequate product transportation; the timely receipt of required regulatory approvals; the ability of Vermilion to obtain financing on acceptable terms; foreign currency exchange rates and interest rates; future crude oil, natural gas liquids, and natural gas prices; and management's expectations relating to the timing and results of exploration and development activities.

Although Vermilion believes that the expectations reflected in such forward-looking statements or information are reasonable, undue reliance should not be placed on forward-looking statements because Vermilion can give no assurance that such expectations will prove to be correct. Financial outlooks are provided for the purpose of understanding Vermilion's financial position and business objectives, and the information may not be appropriate for other purposes. Forward-looking statements or information are based on current expectations, estimates, and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by Vermilion and described in the forward-looking statements or information. These risks and uncertainties include, but are not limited to: the ability of management to execute its business plan; the risks of the oil and gas industry, both domestically and internationally, such as operational risks in exploring for, developing and producing crude oil, natural gas liquids, and natural gas; risks and uncertainties involving geology of crude oil, natural gas liquids, and natural gas deposits; risks inherent in Vermilion's marketing operations, including credit risk; the uncertainty of reserves estimates and reserves life and estimates of resources and associated expenditures; the uncertainty of estimates and projections relating to production and associated expenditures; potential delays or changes in plans with respect to exploration or development projects; Vermilion's ability to enter into or renew leases on acceptable terms; fluctuations in crude oil, natural gas liquids, and natural gas prices, foreign currency exchange rates and interest rates; health, safety, and environmental risks; uncertainties as to the availability and cost of financing; the ability of Vermilion to add production and reserves through exploration and development activities; the possibility that government policies or laws may change or governmental approvals may be delayed or withheld; uncertainty in amounts and timing of royalty payments; risks associated with existing and potential future law suits and regulatory actions against Vermilion; and other risks and uncertainties described elsewhere in this document or in Vermilion's other filings with Canadian securities regulatory authorities.

The forward-looking statements or information contained in this document are made as of the date hereof and Vermilion undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events, or otherwise, unless required by applicable securities laws.

All crude oil and natural gas reserve and resource information contained in this document has been prepared and presented in accordance with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities and the Canadian Oil and Gas Evaluation Handbook. Reserves estimates have been made assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability of funding required for such development. The actual crude oil and natural gas reserves and future production will be greater than or less than the estimates provided in this document.

Natural gas volumes have been converted on the basis of six thousand cubic feet of natural gas to one barrel of oil equivalent. Barrels of oil equivalent (boe) may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet to one barrel of oil is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

Financial data contained within this document are reported in Canadian dollars unless otherwise stated.

Abbreviations

\$M	thousand dollars
\$MM	million dollars
AECO	the daily average benchmark price for natural gas at the AECO 'C' hub in Alberta
bbl(s)	barrel(s)
bbls/d	barrels per day
boe	barrel of oil equivalent, including: crude oil, condensate, natural gas liquids, and natural gas (converted on the basis of one boe for six mcf of natural gas)
boe/d	barrel of oil equivalent per day
GJ	gigajoules
LSB	light sour blend crude oil reference price
mbbls	thousand barrels
mcf	thousand cubic feet
mmcf/d	million cubic feet per day
NBP	the reference price paid for natural gas in the United Kingdom at the National Balancing Point Virtual Trading Point.
NGLs	natural gas liquids, which includes butane, propane, and ethane
PRRT	Petroleum Resource Rent Tax, a profit based tax levied on petroleum projects in Australia
tCO ₂ e	tonnes of carbon dioxide equivalent
TTF	the price for natural gas in the Netherlands, quoted in megawatt hours of natural gas, at the Title Transfer Facility Virtual Trading Point
WTI	West Texas Intermediate, the reference price paid for crude oil of standard grade in US dollars at Cushing, Oklahoma

Highlights

- Fund flows from operations ("FFO") in Q4 2019 was \$216 million (\$1.38/basic share⁽¹⁾), which is in line with the previous quarter despite a significant inventory build in Australia. FFO in 2019 was a record \$908 million (\$5.87/basic share), representing an increase of 8% from the prior year primarily due to higher production, partially offset by lower commodity prices.
- Q4 2019 production averaged 97,875 boe/d, representing a 1% increase from the prior quarter, primarily due to higher performance in our US and Netherlands business units. Annual average production for 2019 increased by 15% year-over-year to a record 100,357 boe/d, reflecting a full-year contribution from the assets acquired in 2018 and organic growth from our Netherlands, Australia and US business units. Production per share increased by 5% in 2019.
- In the United States, Q4 2019 production averaged 5,683 boe/d, an increase of 15% from the prior quarter, primarily driven by contributions from our Q3 2019 drilling program.
- In the Netherlands, Q4 2019 production averaged 8,088 boe/d, an increase of 9% from the prior quarter, primarily due to the restoration of production following planned and unplanned facility downtime in Q3 2019. During the fourth quarter, we successfully drilled and completed the Weststellingwerf well (0.5 net), representing our first drilling activity in the Netherlands since 2017. We encountered three gas-bearing zones in the Vlieland, Zechstein and Rotliegend formations. The Weststellingwerf well flowed at an initial gross rate of 14.7 mmcf/d⁽²⁾ and is expected to be brought on production during 2020.
- In Canada, Q4 2019 production averaged 58,593 boe/d, up slightly from the prior quarter as strong results from new well completions more than offset natural decline. During the quarter, we drilled one of our best ever condensate-rich Lower Mannville wells in Drayton Valley, achieving an IP30 rate of 1,900 boe/d (60% liquids).
- Our 2019 reserves as evaluated by GLJ as at December 31, 2019 are as follows:
 - Proved plus probable ("2P") reserves increased 3% from year-end 2018 to 501.2⁽³⁾ mmbob. We replaced 120% of 2019 production through development activities and 136% including acquisitions. Our 2P finding and development ("F&D") cost⁽⁴⁾ was \$9.93 per bob, including future development capital ("FDC")⁽⁴⁾, resulting in an organic 2P Operating Recycle Ratio⁽⁵⁾ (including FDC) of 3.0x.
 - Proved ("1P") reserves increased 4% from year-end 2018 to 310.2⁽³⁾ mmbob. We replaced 121% of 1P reserves through development activities and 133% including acquisitions. Our 1P F&D cost was \$11.90 per bob, including FDC, resulting in an organic 1P Operating Recycle Ratio⁽⁵⁾ (including FDC) of 2.5x.
 - Proved developed producing ("PDP") reserves increased 4% from year-end 2018 to 200.0⁽³⁾ mmbob. We replaced 113% of PDP reserves through development activities and 122% including acquisitions. Our PDP F&D cost was \$12.71 per bob, including FDC, resulting in an organic PDP Operating Recycle Ratio⁽⁵⁾ (including FDC) of 2.3x.
- Vermilion's board of directors has approved a 50% reduction in our monthly dividend to \$0.115 per share in response to weakness in commodity prices and reduced global economic prospects following the outbreak of the novel coronavirus (COVID-19). The revised dividend will be effective for the March dividend payable on April 15, 2020.

⁽¹⁾ Non-GAAP Financial Measure. Please see the "Non-GAAP Financial Measures" section of the accompanying Management's Discussion and Analysis.

⁽²⁾ The Weststellingwerf flow rate was 14.7 mmcf/d gross over a 24 hour period at a wellhead pressure of 1,625 psi. Initial flow rates are not necessarily indicative of long-term performance or ultimate recovery.

⁽³⁾ Estimated company interest proved, developed and producing, total proved, and total proved plus probable reserves as evaluated by GLJ Petroleum Consultants Ltd. ("GLJ") in a report dated February 10, 2020 with an effective date of December 31, 2019 (the "2019 GLJ Reserves Report").

⁽⁴⁾ F&D (finding and development) and FD&A (finding, development and acquisition) costs are used as a measure of capital efficiency and are calculated by dividing the applicable capital expenditures for the period, including the change in undiscounted FDC (future development capital), by the change in the reserves, incorporating revisions and production, for the same period.

⁽⁵⁾ Operating Recycle Ratio is a measure of capital efficiency calculated by dividing the Operating Netback by the cost of adding reserves (F&D cost). Operating Netback is calculated as sales less royalties, operating expense, transportation costs, PRRT and realized hedging gains and losses presented on a per unit basis.

(\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Financial					
Petroleum and natural gas sales	388,802	391,935	456,939	1,689,863	1,678,117
Fund flows from operations	215,592	216,153	222,342	908,055	838,652
Fund flows from operations (\$/basic share) ⁽¹⁾	1.38	1.39	1.46	5.87	5.96
Fund flows from operations (\$/diluted share) ⁽¹⁾	1.38	1.39	1.44	5.82	5.89
Net earnings (loss)	1,477	(10,229)	323,373	32,799	271,650
Net earnings (loss) (\$/basic share)	0.01	(0.07)	2.12	0.21	1.93
Capital expenditures	100,625	127,879	163,580	523,164	518,214
Acquisitions	9,165	4,657	2,689	38,472	1,759,425
Asset retirement obligations settled	7,352	3,586	6,562	19,442	15,765
Cash dividends (\$/share)	0.690	0.690	0.690	2.760	2.715
Dividends declared	107,702	107,176	105,310	427,311	388,111
% of fund flows from operations	50%	50%	47%	47%	46%
Net dividends ⁽¹⁾	97,502	98,316	100,195	392,374	339,060
% of fund flows from operations	45%	45%	45%	43%	40%
Payout ⁽¹⁾	205,479	229,781	270,337	934,980	873,039
% of fund flows from operations	95%	106%	122%	103%	104%
Net debt	1,993,194	2,001,870	1,929,529	1,993,194	1,929,529
Net debt to four quarter trailing fund flows from operations	2.20	2.19	2.30	2.20	2.30
Operational					
Production					
Crude oil and condensate (bbls/d)	46,261	47,242	47,678	47,902	39,182
NGLs (bbls/d)	8,160	7,772	7,815	7,984	6,366
Natural gas (mmcf/d)	260.72	253.36	276.77	266.82	250.33
Total (boe/d)	97,875	97,239	101,621	100,357	87,270
Average realized prices					
Crude oil and condensate (\$/bbl)	71.25	73.45	66.19	74.42	79.16
NGLs (\$/bbl)	14.63	6.14	25.69	13.61	26.33
Natural gas (\$/mcf)	3.61	2.43	5.83	3.58	5.45
Production mix (% of production)					
% priced with reference to WTI	40%	39%	37%	39%	32%
% priced with reference to Dated Brent	17%	19%	18%	18%	20%
% priced with reference to AECO	26%	26%	26%	25%	26%
% priced with reference to TTF and NBP	17%	16%	19%	18%	22%
Netbacks (\$/boe)					
Operating netback ⁽¹⁾	27.53	28.22	27.58	29.25	31.59
Fund flows from operations netback	24.40	23.73	23.79	24.77	26.47
Operating expenses	12.52	11.55	12.04	12.01	11.26
General and administration expenses	1.88	1.50	1.37	1.61	1.64
Average reference prices					
WTI (US \$/bbl)	56.96	56.45	58.81	57.03	64.77
Edmonton Sweet index (US \$/bbl)	51.59	51.79	32.51	52.15	53.65
Saskatchewan LSB index (US \$/bbl)	51.58	52.01	44.03	52.50	56.46
Dated Brent (US \$/bbl)	63.25	61.94	67.76	64.30	71.04
AECO (\$/mcf)	2.48	1.06	1.56	1.76	1.50
NBP (\$/mcf)	5.38	4.50	11.03	5.90	10.35
TTF (\$/mcf)	5.36	4.40	10.91	5.90	10.23
Average foreign currency exchange rates					
CDN \$/US \$	1.32	1.32	1.32	1.33	1.30
CDN \$/Euro	1.46	1.47	1.51	1.49	1.53
Share information ('000s)					
Shares outstanding - basic	156,290	155,505	152,704	156,290	152,704
Shares outstanding - diluted ⁽¹⁾	159,912	159,260	156,173	159,912	156,173
Weighted average shares outstanding - basic	155,950	155,254	152,588	154,736	140,619
Weighted average shares outstanding - diluted ⁽¹⁾	156,180	155,421	153,880	156,094	142,335

⁽¹⁾ The above table includes non-GAAP financial measures which may not be comparable to other companies. Please see the "Non-GAAP Financial Measures" section of the accompanying Management's Discussion and Analysis.

Message to Shareholders

We are now in the sixth year of a period of reduced energy prices that began in the second half of 2014, with the novel coronavirus (COVID-19) being the latest event to produce a retracement in commodity markets. Throughout this period, we have maintained focus on profitability by grinding costs out of all phases of our business ranging from field operations to financing expense, upgrading our capital project slate, and adapting our capital markets model to focus even more acutely on returning capital to shareholders. In this environment, we have been unique among our traditional competitor group in maintaining our dividend while still providing a moderate level of growth. We have paid a monthly dividend (or distribution in the trust era) for the past 205 consecutive months, returning over \$40 per share to shareholders over this period. During the energy downturn, we have put more production, reserves and free cash flow behind each share despite dramatically lower capital budgets. While still modestly over 100%, we brought our total payout ratio down to 103% in 2019, representing our lowest total payout ratio since before the financial crisis in 2008. Moreover, we are phasing out the small level of remaining DRIP participation at the end of Q3 2020, resulting in 100% of dividends being paid in cash.

We are proud of this record of returning capital to shareholders while still providing per share growth. We think paying dividends is the right thing to do. This model has kept us disciplined in a capital-intensive industry and has put substantial cash back in the hands of investors. As we started 2020, our funding status continued to improve to a projected total payout ratio below 100%, driven by a significantly lower capital budget for 2020 as compared to 2019, and by a modestly positive trend for oil prices. In that environment, we were confident in our ability to continue our monthly dividend at \$0.23 while deleveraging our balance sheet. We were clear in stating that we would reevaluate the dividend in the event of a structural change in commodity prices that could affect our ability to self-fund our combination of capital expenditures and dividends, and that we would prioritize balance sheet strength over other objectives, including either growth or dividends.

The emergence of COVID-19 was an unanticipated event, and we do not claim any special expertise in assessing what the appropriate type or degree of public health responses are to the outbreak. Nonetheless, we must make an assessment of its current and probable future market and economic impacts. We observe that COVID-19 has dramatically altered individual, business and government behavior, and that these impacts are decidedly negative for the outlook for global economic growth, commodity prices in general, and oil demand and prices in particular. We do not believe that the long-term prospects for the oil and gas industry are likely to be significantly altered, and ultimately we expect a resumption of a positive trend for commodity prices. However, we do think the recovery in oil prices that we began to experience at the outset of 2020 will be pushed back for an unknown period. In the short-to-medium term, we believe COVID-19 represents a hard-to-quantify set of macro risks, probably lower in economic severity than the financial crisis of 2008, but of a type that is also likely unprecedented in our lifetimes.

We have maintained our dividend through a number of other periods of downside volatility since the commodity crash of 2014, making all of the necessary adjustments to costs and growth levels. During these periods, we continuously assessed our dividend policy in light of our top priority of balance sheet strength. As we consider today's economic and commodity outlook, we believe it is unlikely that we would achieve fully-funded status for our present dividend at a reasonable level of capital expenditures. Therefore, we have determined that a reduction to our dividend is the most prudent course of action at this time. Accordingly, our board of directors has approved a 50% reduction in our monthly dividend to \$0.115 per share, or \$1.38 on an annualized basis. The revised dividend will be effective for the March dividend payable on April 15, 2020. At the current forward commodity strip, we estimate a 2020 payout ratio of 99%, including previously declared dividends. Any excess cash generated beyond the dividend and capital requirements will be allocated towards debt reduction at this time, while retaining the option of buying back shares through our NCIB program in an improved macroeconomic environment.

We have had no operational impacts from COVID-19 to-date. We have business continuity plans for each of our business units and for our corporate center that can be invoked if the outbreak significantly worsens and threatens our supply chain or workforce capabilities.

During 2019, Vermilion generated record cash flow, production and reserves despite a continued environment of challenging commodity prices. We recorded FFO of \$908 million in 2019 on a capital program of \$523 million, which translated to free cash flow⁽¹⁾ generation of \$385 million, also the highest in our history. The resulting 2019 total payout ratio, after accounting for dividends and asset retirement obligations, was 103%. In Q4 2019, we generated \$216 million of FFO which was in line with the prior quarter despite a large inventory build in Australia due to the timing of crude liftings. Net debt in 2019 increased modestly to \$2.0 billion, however the net debt to trailing FFO ratio improved to 2.2x, compared to 2.3x in 2018. In addition to an improving leverage profile, we also enhanced the quality of our balance sheet over the past year. We have recently received commitments to extend our \$2.1 billion covenant-based credit facility, resulting in a new maturity date of May 2024. The closing of the extension remains subject to customary closing conditions. In addition, in June 2019, we executed a cross currency interest rate swap on our 2025 US\$300 million long-term senior notes, converting our 5.625% interest cost on these notes to 3.275% for the remainder of their term. As a result of these initiatives, our pre-tax cost of debt today is approximately 3.2% with a weighted-average remaining term of 4.4 years.

We delivered record production of 100,357 boe/d in 2019, representing year-over-year growth of 15%, or 5% on a per share basis. We achieved these results despite several unexpected operational challenges throughout the year, including a third-party refinery outage in France and uncharacteristic weather-driven delays in Canada. During the fourth quarter we tied-in two discoveries in Hungary and successfully drilled the Weststellingwerf well in the Netherlands, marking our first drilling activity in that country in two and a half years. In the US, new well completions from our Q3 2019 program

drove increased production from our North American region. Two months into the new year, the execution of our 2020 capital program is progressing as planned. To mitigate the risk of another season of post-breakup weather delays, which affected our results in 2019, we are front-loading our 2020 capital program by scheduling most of our North American drilling activity into the first quarter.

Proved plus probable reserves increased by 3% year-over-year to 501.2 mmboe. The large majority of our new reserve additions were through organic activities as we continue to enhance the recovery factor on existing assets and advanced resources to reserves in a number of our operating areas. We added these reserves at an organic F&D cost of \$9.93/boe, including FDC, resulting in an operating recycle ratio of 3.0x and funds flow recycle ratio of 2.5x. Our F&D costs have been below \$10.00/boe for the past three years (3-year average F&D of \$9.38, including FDC), while growing our liquids weighting. Driven by a capital-efficient project slate and a continued focus on cost improvements, our 3-year organic operating recycle ratio stands at 3.2x. Our contingent and prospective resource bases remain a source of reserve additions, with 31.8 mmboe of contingent and 5.0 mmboe of prospective resources converted to 2P reserves during 2019.

As we stated earlier, our top financial priority remains balance sheet strength. Both our debt-to-cash flow ratio and weighted-average interest rate decreased in 2019, and our debt exposures are fully termed-out via our covenant-based bank facility and long-term notes. Nonetheless, we will continue to be vigilant regarding commodity prices and resulting cash flows. It remains to be seen how long oil demand and economic growth will be suppressed by the global reaction to COVID-19. Should we experience an even more-pronounced and protracted commodity downturn due to COVID-19 or any other cause, we will be attentive to all forms of cash outlays, focusing first on capital investment levels, to protect the financial position of the company.

Q4 2019 Operations Review

Europe

In France, Q4 2019 production averaged 10,264 boe/d, representing a slight decrease from the prior quarter primarily due to weather-driven downtime in the Aquitaine Basin. Production in the Paris Basin was relatively consistent with the prior quarter.

In the Netherlands, Q4 2019 production averaged 8,088 boe/d, an increase of 9% from the prior quarter. The increase was primarily due to the restoration of production following planned and unplanned facility downtime in Q3 2019. During the quarter, we successfully drilled and completed the Weststellingwerf well (0.5 net), representing our first drilling activity in the Netherlands since 2017. We encountered three gas-bearing zones in the Vlieland, Zechstein and Rotliegend formations. The Weststellingwerf well flowed at an initial gross rate of 14.7 mmcf/d⁽²⁾ and is expected to be brought on production during 2020.

In Ireland, production averaged 42 mmcf/d (7,049 boe/d) in Q4 2019, a decrease of 2% from the prior quarter. The decrease was primarily due to natural decline, partially offset by higher uptime at the Corrib natural gas processing facility compared to the prior quarter. As disclosed in our Q3 2019 release, we had 10 days of unplanned downtime in one of the plant auxiliary systems, which occurred at the end of Q3 2019 and continued into Q4 2019. Since assuming operatorship of Corrib at the end of 2018, we have reduced operating costs by approximately 20% and continue to evaluate other optimization opportunities.

In Germany, Q4 2019 production averaged 3,373 boe/d, an increase of 3% from the prior quarter. The increase was primarily due to improved uptime on our operated oil and natural gas assets, partially offset by unplanned downtime on our non-operated oil assets. Following the successful drilling of the Burgmoor Z5 (46% working interest) well in 2019, the partner group has agreed to a tie-in plan which should allow for production early next year.

In Central and Eastern Europe ("CEE"), production averaged 276 boe/d following the tie-in of two discoveries from our 2019 drilling program late in the year. In Hungary, we tied-in the Mh-21 (0.3 net) and Battonya E-09 (1.0 net) wells, drilled in the second and third quarters of 2019, respectively. The wells were brought on production midway through the fourth quarter of 2019 at a restricted rate of approximately 600 boe/d net for the two wells combined. In addition, we were provisionally awarded the Kadarkút exploration license in western Hungary during the quarter and we expect to receive final government approvals in the first quarter of 2020. The license covers approximately 298,500 net acres and consists of primarily oil prospects. Most of the license is covered by 3D seismic. The license term covers a four year period, with the option to extend the license for a further two years. In Croatia, we continued to prepare for our 2020-2021 drilling programs, in addition to evaluating natural gas plant processing facility construction options, which we expect to allow tie-in of our 2019 natural gas discoveries next year.

North America

In Canada, production averaged 58,593 boe/d in Q4 2019, up slightly from the prior quarter. Strong results from new well completions in the quarter more than offset natural decline. We drilled or participated in 26 (16.8 net) wells in the fourth quarter of 2019, eight (8.0 net) of which were drilled in Alberta and 18 (8.8 net) drilled in Saskatchewan. During the quarter, we drilled one of our best ever condensate-rich Lower Mannville wells in Drayton Valley, Alberta, achieving an IP30 rate of approximately 1,900 boe/d (60% liquids). In Ferrier, we drilled a liquids-rich Upper Mannville well which delivered an IP30 rate of approximately 1,800 boe/d (15% liquids). We brought 33 (23.5 net) wells on production in Saskatchewan and four (4.0 net) wells on production in Alberta during the quarter. We are currently in the midst of a very active Q1 2020 drilling campaign in Canada, with rig activity in the quarter peaking at six rigs in Saskatchewan and four rigs in Alberta. We plan to complete the majority of our 2020 Canadian drilling program in the first quarter of the year in order to avoid potential delays from an extended spring break-up season or unseasonably wet summer weather.

In the United States, Q4 2019 production averaged 5,683 boe/d, representing an increase of 15% from the prior quarter. The increase was primarily due to a full quarter of contribution from the four wells we brought on production during the third quarter of 2019. These wells continue to perform in line with our type curves, achieving an average IP90 rate of approximately 450 boe/d. We also began drilling two (1.98 net) wells in December 2019, for which drilling finished in January 2020, and are currently undergoing completion. We currently have two rigs operating in our Hilight field in the Powder River Basin. Similar to our Canadian business unit, we plan to execute a front-end weighted capital program in the United States, completing our twelve (11.9 net) well 2020 drilling program in the first half of the year.

Australia

In Australia, production averaged 4,548 bbl/d in Q4 2019, a decrease of 18% from the previous quarter, primarily due to the planned shutdown of the Wandoo platform for eight days to perform facility upgrades and regular maintenance. We recently began the installation of electric submersible pumps on two wells and will continue to advance process optimization projects throughout 2020.

Dividend Reinvestment Plan

As previously announced, we are phasing out the Dividend Reinvestment Plan ("DRIP") in 2020 by prorating the available DRIP shares by 25% each quarter starting in Q1 2020. It is our intention to increase this proration each quarter throughout the year, such that the DRIP will be eliminated at the end of the third quarter of 2020.

Commodity Hedging

Vermilion hedges to manage commodity price exposures and increase the stability of our cash flows, providing additional certainty with regard to the execution of our dividend and capital programs. In aggregate, as of February 24, 2020, we currently have 51% of our expected net-of-royalty production hedged for Q1 2020. More than half of our Q1 2020 corporate hedge position consists of two-way collars and three-way structures, which allow participation in price increases up to contract ceilings. For 2020 as a whole, approximately 42% of our production is hedged, with 63% of our hedge position in participating structures.

With respect to individual products within our product mix, we have hedged 70% of anticipated European natural gas volumes for Q1 2020. We have also hedged 78% of our anticipated full-year 2020 European natural gas volumes at prices which are expected to provide for strong project economics and free cash flows. At present, 44% of our expected Q1 2020 oil production is hedged. For Q1 2020, 45% of our North American natural gas production is priced away from AECO, with a variety of contracts to sell gas at the SoCal Border, Henry Hub, Saskatchewan and Wyoming.

Sustainability

We delivered another year of industry-leading performance as indicated by a number of important ESG rankings. The Company received a top quartile ranking for our industry sector in SAM's 2019 Corporate Sustainability Assessment ("CSA"). The CSA analyzes sustainability performance across economic, environmental, governance, and social criteria, and is the basis of the Dow Jones Sustainability Indices. Vermilion was ranked second in our peer group in the Sustainability ESG (environment, social, governance) rankings. Vermilion's MSCI ESG rating increased to AA in 2019, and our Governance Metrics score ranked in the top decile globally. We received ISS QualityScore decile ratings of 1 for both Environmental and Social, which assess corporate disclosure and transparency practices in these areas, where 1 indicates the lowest risk. These rankings reflect our high degree of ESG focus, and we will strive to continue to this record of high performance as we move forward.

2019 Reserves and Resources

In 2019 we increased our reserves and resources predominantly through development activities. Based on the 2019 GLJ Reserves Report, our 2P reserves increased 3% from year-end 2018 to 501.2⁽³⁾ mmbob, while our 1P reserves increased 4% from year-end 2018 to 310.2⁽³⁾ mmbob in 2019. PDP reserves increased 4% from year-end 2018 to 200.0⁽³⁾ mmbob. Our PDP reserves represent 65% of our 1P reserves.

The following table provides a summary of company interest reserves by reserve category and country on an oil equivalent basis. Please refer to Vermilion's 2019 Annual Information Form for the year ending December 31, 2019 ("2019 Annual Information Form") for detailed by product type information.

BOE (mboe)	Proved Developed Producing	Proved Developed Non-Producing	Proved Undeveloped	Proved	Probable	Proved Plus Probable
Australia	8,608	—	—	8,608	4,552	13,160
Canada	111,738	7,125	72,764	191,627	109,262	300,889
CEE	228	1,503	—	1,731	972	2,703
France	35,109	934	4,920	40,963	18,729	59,692
Germany	9,694	2,930	1,157	13,781	12,959	26,740
Ireland	11,772	—	—	11,772	6,002	17,774
Netherlands	8,620	2,035	450	11,105	9,875	20,980
United States	14,222	515	15,886	30,623	28,673	59,296
Vermilion	199,991	15,042	95,177	310,210	191,024	501,233

Through development activities, we replaced 120% of 2P reserves, 121% of 1P reserves and 113% of PDP reserves, respectively. Including acquisitions, we replaced 136% of 2P reserves, 133% of 1P reserves and 122% of PDP reserves, respectively. Reserve additions included 15.0 million boe of positive technical revisions at the 1P level.

Our Operating Recycle Ratio⁽⁵⁾ (including FDC) at the 2P level was 3.0x in 2019. We have achieved F&D costs below \$10.00/boe for the past three years (3-year average F&D of \$9.38, including FDC) as a result of our highly capital-efficient project slate and continued focus on cost improvements.

The following table summarizes the finding and development costs and associated operating recycle ratios by reserve category for the year ending December 31, 2019:

	2019			3-Year Average		
	PDP	1P	2P	PDP	1P	2P
Finding and Development Costs, including FDC (F&D) ⁽⁴⁾ (\$/boe)	\$12.71	\$11.90	\$9.93	\$13.66	\$12.71	\$9.38
Finding, Development and Acquisition Costs, including FDC (FD&A) ⁽⁴⁾ (\$/boe)	\$12.69	\$11.82	\$9.85	\$19.31	\$17.48	\$13.84
F&D Operating Recycle Ratio ⁽⁵⁾ (x)	2.3	2.5	3.0	2.2	2.4	3.2
FD&A Operating Recycle Ratio ⁽⁵⁾ (x)	2.3	2.5	3.0	1.6	1.7	2.2

In addition to our reserve base, we report contingent and prospective resources. According to the 2019 GLJ Resources Report, risked low, best, and high estimates for our contingent resources in the Development Pending category were 139.0⁽⁶⁾ mmbob, 236.8⁽⁶⁾ mmbob, and 330.2⁽⁶⁾ mmbob, respectively. The 2019 GLJ Resources Report also indicates risked low, best, and high estimates for contingent resources in the Development Unclassified category of 10.8⁽⁶⁾ mmbob, 37.6⁽⁶⁾ mmbob, and 54.1⁽⁶⁾ mmbob, respectively. Over 86% of our best estimate risked contingent resources reside in the Development Pending category. Prospective resources were assessed at risked low, best and high estimates of 51.9⁽⁶⁾ mmbob, 179.2⁽⁶⁾ mmbob, and 330.2⁽⁶⁾ mmbob, respectively. Our contingent and prospective resource bases remain a source of reserve additions, with 31.8 mmbob of contingent and 5.0 mmbob of prospective resources converted to 2P reserves during 2019.

The following table provides a reconciliation of changes in company interest reserves by reserve category and country. Please refer to Vermilion's 2019 Annual Information Form for detailed by product type information.

1P (mboe)	Australia	Canada	CEE	France	Germany	Ireland	Netherlands	United States	Vermilion
December 31, 2018	9,668	181,938	131	43,467	12,990	13,094	11,804	25,146	298,236
Discoveries	—	491	1,725	—	844	—	—	—	3,060
Extensions & improved recovery	—	20,981	—	551	470	—	720	4,254	26,976
Technical revisions	1,007	7,019	(100)	806	743	1,511	1,601	2,368	14,955
Acquisitions	—	3,847	—	—	—	—	—	561	4,408
Dispositions	—	(13)	—	—	—	—	—	—	(13)
Economic factors	—	(744)	—	(40)	—	—	—	—	(784)
Production	(2,067)	(21,892)	(25)	(3,821)	(1,266)	(2,833)	(3,020)	(1,706)	(36,630)
December 31, 2019	8,608	191,627	1,731	40,963	13,781	11,772	11,105	30,623	310,210

2P (mboe)	Australia	Canada	CEE	France	Germany	Ireland	Netherlands	United States	Vermilion
December 31, 2018	14,480	284,835	190	63,918	25,733	20,576	22,200	56,213	488,145
Discoveries	—	1,044	2,686	—	1,250	—	—	—	4,980
Extensions & improved recovery	—	31,200	—	810	920	—	1,131	2,693	36,754
Technical revisions	747	1,190	(148)	(549)	103	31	669	1,143	3,186
Acquisitions	—	5,350	—	—	—	—	—	953	6,303
Dispositions	—	(428)	—	—	—	—	—	—	(428)
Economic factors	—	(410)	—	(666)	—	—	—	—	(1,076)
Production	(2,067)	(21,892)	(25)	(3,821)	(1,266)	(2,833)	(3,020)	(1,706)	(36,630)
December 31, 2019	13,160	300,889	2,703	59,692	26,740	17,774	20,980	59,296	501,233

Additional information about our 2019 GLJ Reserves Report and GLJ 2019 Resources Report can be found in our 2019 Annual Information Form on our website at www.vermilionenergy.com and on SEDAR at www.sedar.com.

(signed "Anthony Marino")

Anthony Marino
President & Chief Executive Officer
March 5, 2020

- (1) Non-GAAP Financial Measure. Please see the "Non-GAAP Financial Measures" section of the accompanying Management's Discussion and Analysis.
- (2) The Weststellingwerf flow rate was 14.7 mmcf/d gross over a 24 hour period at a wellhead pressure of 1,625 psi. Initial flow rates are not necessarily indicative of long-term performance or ultimate recovery.
- (3) Estimated company interest proved, developed and producing, total proved, and total proved plus probable reserves as evaluated by GLJ Petroleum Consultants Ltd. ("GLJ") in a report dated February 10, 2020 with an effective date of December 31, 2019 (the "2019 GLJ Reserves Report").
- (4) F&D (finding and development) and FD&A (finding, development and acquisition) costs are used as a measure of capital efficiency and are calculated by dividing the applicable capital expenditures for the period, including the change in undiscounted FDC (future development capital), by the change in the reserves, incorporating revisions and production, for the same period.
- (5) Operating Recycle Ratio is a measure of capital efficiency calculated by dividing the Operating Netback by the cost of adding reserves (F&D cost). Operating Netback is calculated as sales less royalties, operating expense, transportation costs, PRRT and realized hedging gains and losses presented on a per unit basis.
- (6) Vermilion retained GLJ to conduct an independent resource evaluation dated February 10, 2020 to assess contingent and prospective resources across all of the Company's key operating regions with an effective date of December 31, 2019 (the "GLJ 2019 Resources Report"). The aggregate associated chance of development for each of the low, best and high estimate for contingent resources in the Development Pending category are 83%, 81% and 81%, respectively. The aggregate associated chance of commerciality for each of the low, best and high estimate for prospective resources in the Prospect category are 24%, 24% and 24%, respectively. There is uncertainty that it will be commercially viable to produce any portion of the resources. Project maturity subclass development pending is defined as contingent resources where resolution of the final conditions for development is being actively pursued (high chance of development). Project maturity subclass development unclarified is defined as contingent resources when the evaluation is incomplete and there is ongoing activity to resolve any risks or uncertainties. Prospective resources are defined as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from unknown accumulations by application of future development projects. There is no certainty that it will be commercially viable to produce any portion of the

contingent resources or that Vermilion will produce any portion of the volumes currently classified as contingent resources. There is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the prospective resources or that Vermilion will produce any portion of the volumes currently classified as prospective resources. Please refer to Vermilion's 2019 Annual Information Form for further information on Vermilion's contingent resources and prospective resources.

Management's Discussion and Analysis

The following is Management's Discussion and Analysis ("MD&A"), dated March 5, 2020, of Vermilion Energy Inc.'s ("Vermilion", "we", "our", "us" or the "Company") operating and financial results as at and for the three months and year ended December 31, 2019 compared with the corresponding periods in the prior year.

This discussion should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2019 and 2018, together with the accompanying notes. Additional information relating to Vermilion, including its Annual Information Form, is available on SEDAR at www.sedar.com or on Vermilion's website at www.vermilionenergy.com.

The audited consolidated financial statements for the year ended December 31, 2019 and comparative information have been prepared in Canadian dollars and in accordance with International Financial Reporting Standards ("IFRS" or, alternatively, "GAAP") as issued by the International Accounting Standards Board ("IASB").

This MD&A includes references to certain financial and performance measures which do not have standardized meanings prescribed by IFRS. These measures include:

- **Fund flows from operations:** Fund flows from operations is a measure of profit or loss in accordance with IFRS 8 "Operating Segments". Please see "Segmented Information" in the "Notes to the Consolidated Financial Statements" for a reconciliation of fund flows from operations to net earnings. We analyze fund flows from operations both on a consolidated basis and on a business unit basis in order to assess the contribution of each business unit to our ability to generate income necessary to pay dividends, repay debt, fund asset retirement obligations, and make capital investments.
- **Net debt:** Net debt is a capital management measure in accordance with IAS 1 "Presentation of Financial Statements". Net debt is comprised of long-term debt plus current liabilities less current assets and represents Vermilion's net financing obligations after adjusting for the timing of working capital fluctuations. Net debt excludes lease obligations which are secured by a corresponding right-of-use asset. Please see "Capital disclosures" in the "Notes to the Consolidated Financial Statements" for additional information.
- **Netbacks:** Netbacks are per boe and per mcf performance measures used in the analysis of operational activities. We assess netbacks both on a consolidated basis and on a business unit basis in order to compare and assess the operational and financial performance of each business unit versus other business units and also versus third-party crude oil and natural gas producers.

In addition, this MD&A includes references to certain financial measures which are not specified, defined, or determined under IFRS and are therefore considered non-GAAP financial measures. These non-GAAP financial measures are unlikely to be comparable to similar financial measures presented by other issuers. For a full description of these non-GAAP financial measures and a reconciliation of these measures to their most directly comparable GAAP measures, please refer to "Non-GAAP Financial Measures".

Condensate Presentation

We report our condensate production in Canada and the Netherlands business units within the crude oil and condensate production line. We believe that this presentation better reflects the historical and forecasted pricing for condensate, which is more closely correlated with crude oil pricing than with pricing for propane, butane, and ethane (collectively "NGLs" for the purposes of this report).

Guidance

On October 25, 2018, we released our 2019 capital budget and related guidance. On February 27, 2019, we deferred some activity to later in the year and reallocated capital between business units, although the 2019 total budget and production guidance remained unchanged. On October 31, 2019, we reduced our 2019 capital expenditure guidance to \$520 million and our 2019 annual production guidance to 100,000 to 101,000 boe/d. Actual 2019 capital spending of \$523 million was within 1% of our guidance and 2019 average production of 100,357 boe/d was approximately at the mid-point of our revised guidance range.

On October 31, 2019, we released our 2020 capital budget and associated production guidance.

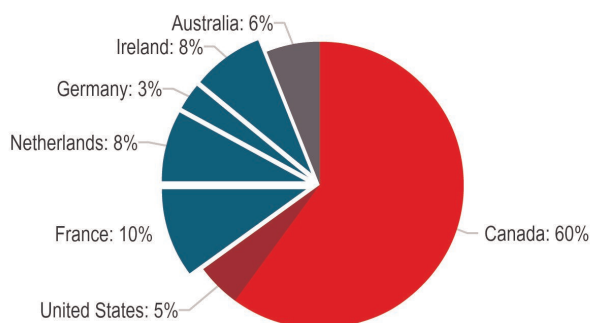
The following table summarizes our guidance:

	Date	Capital Expenditures (\$MM)	Production (boe/d)
2019 Guidance			
2019 Guidance	October 25, 2018	530	101,000 to 106,000
2019 Guidance	October 31, 2019	520	100,000 to 101,000
2019 Actual Results	March 6, 2020	523	100,357
2020 Guidance			
2020 Guidance	October 31, 2019	450	100,000 to 103,000

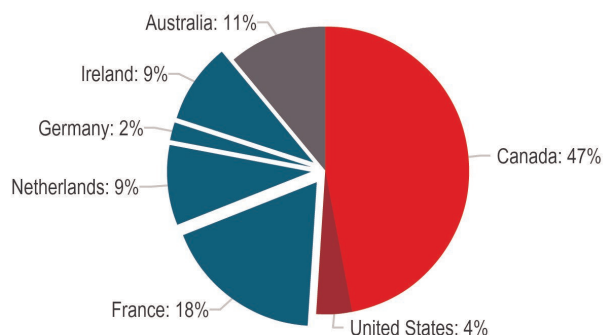
Vermilion's Business

Vermilion is a Calgary, Alberta based international oil and gas producer focused on the acquisition, exploration, development, and optimization of producing properties in North America, Europe, and Australia. We manage our business through our Calgary head office and our international business unit offices. This MD&A separately discusses each of our business units in addition to our corporate segment.

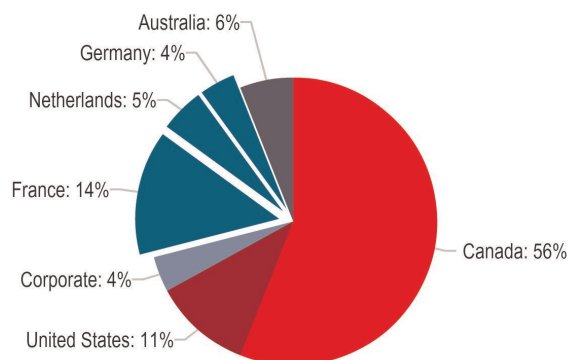
2019 production of 100,357 boe/d by business unit



2019 fund flows from operations of \$908MM by business unit



2019 capital expenditures of \$523MM by business unit



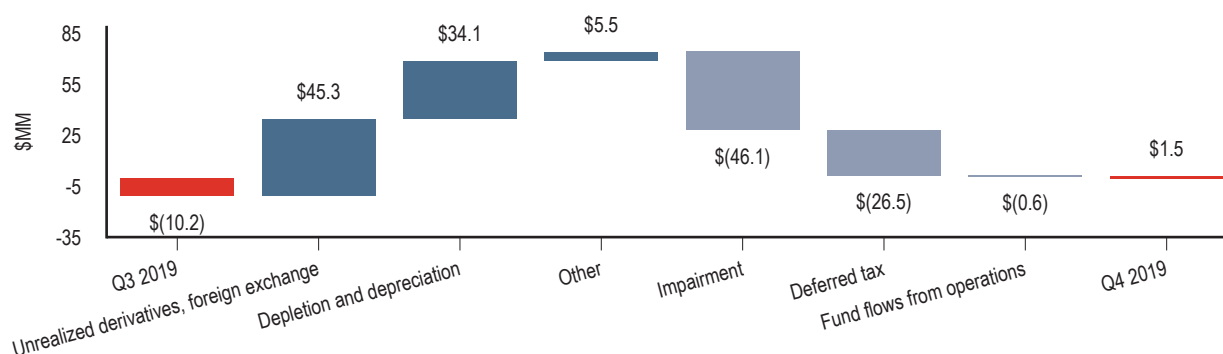
Consolidated Results Overview

	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production								
Crude oil and condensate (bbls/d)	46,261	47,242	47,678	(2.1)%	(3.0)%	47,902	39,182	22.3%
NGLs (bbls/d)	8,160	7,772	7,815	5.0%	4.4%	7,984	6,366	25.4%
Natural gas (mmcf/d)	260.72	253.36	276.77	2.9%	(5.8)%	266.82	250.33	6.6%
Total (boe/d)	97,875	97,239	101,621	0.7%	(3.7)%	100,357	87,270	15.0%
Sales								
Crude oil and condensate (bbls/d)	44,423	48,979	47,620	(9.3)%	(6.7)%	47,936	38,741	23.7%
NGLs (bbls/d)	8,160	7,772	7,815	5.0%	4.4%	7,984	6,366	25.4%
Natural gas (mmcf/d)	260.72	253.36	276.77	2.9%	(5.8)%	266.82	250.33	6.6%
Total (boe/d)	96,037	98,976	101,563	(3.0)%	(5.4)%	100,391	86,829	15.6%
Build (draw) in inventory (mbbls)	169	(159)	5			(12)	160	
Financial metrics								
Fund flows from operations (\$M)	215,592	216,153	222,342	(0.3)%	(3.0)%	908,055	838,652	8.3%
Per share (\$/basic share)	1.38	1.39	1.46	(0.7)%	(5.5)%	5.87	5.96	(1.5)%
Net earnings (loss) (\$M)	1,477	(10,229)	323,373	N/A	(99.5)%	32,799	271,650	(87.9)%
Per share (\$/basic share)	0.01	(0.07)	2.12	N/A	(99.5)%	0.21	1.93	(89.1)%
Net debt (\$M)	1,993,194	2,001,870	1,929,529	(0.4)%	3.3%	1,993,194	1,929,529	3.3%
Cash dividends (\$/share)	0.690	0.690	0.690	—%	—%	2.760	2.715	1.7%
Activity								
Capital expenditures (\$M)	100,625	127,879	163,580	(21.3)%	(38.5)%	523,164	518,214	1.0%
Acquisitions (\$M)	9,165	4,657	2,689			38,472	1,759,425	
Gross wells drilled	28.00	47.00	73.00			176.00	185.00	
Net wells drilled	17.25	45.31	45.08			153.38	147.93	

Financial performance review

Q4 2019 vs. Q3 2019

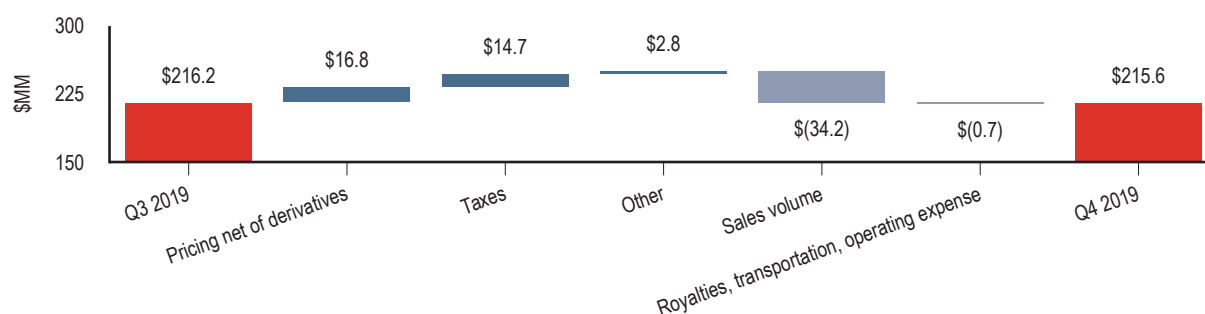
Net earnings of \$1.5MM in Q4 2019 compared to a net loss of \$10.2MM in Q3 2019



"Other" contains equity based compensation and unrealized other

- We recorded net earnings for Q4 2019 of \$1.5 million (\$0.01/basic share) compared to a net loss of \$10.2 million (\$0.07/basic share) in Q3 2019. This quarter-over-quarter increase in net earnings was primarily driven by a net unrealized gain on derivatives and foreign exchange of \$12.5 million (compared to a net unrealized loss of \$32.8 million in Q3 2019) and a decrease in depletion and depreciation expense of \$34.1 million. This increase to net earnings was partially offset by an increase in deferred tax expense of \$26.5 million and a \$46.1 million impairment charge recorded on our Corrib asset.

Fund flows from operations of \$215.6MM in Q4 2019 compared to \$216.2MM in Q3 2019

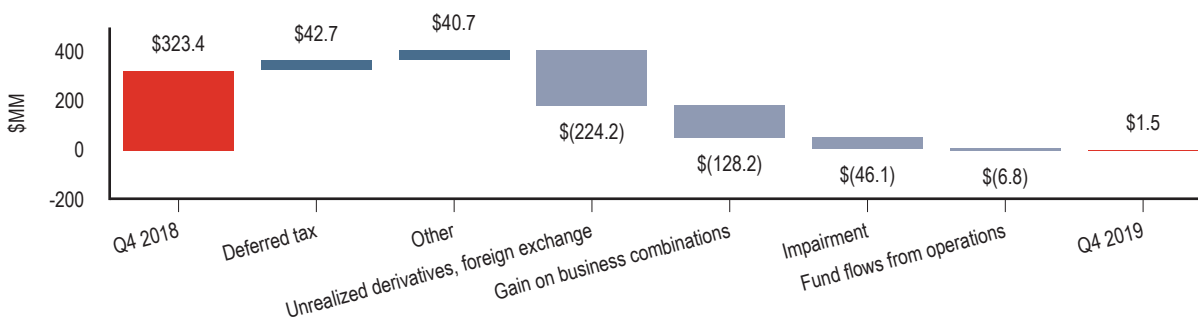


"Other" contains general and administration, interest, realized foreign exchange, and realized other

- Fund flows from operations of \$215.6 million during Q4 2019 was flat versus Q3 2019. We recorded lower sales volumes as the result of an Australian inventory build during the current quarter. This decrease was offset by stronger natural gas prices and a tax recovery in the Netherlands.

Q4 2019 vs. Q4 2018

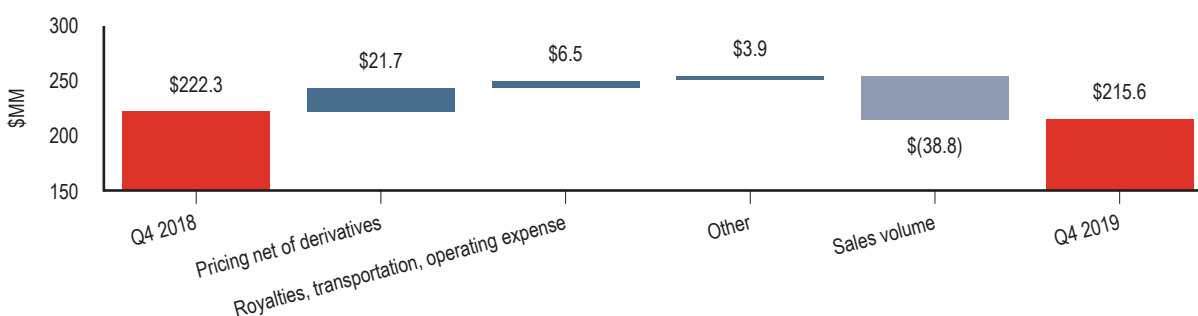
Net earnings of \$1.5MM in Q4 2019 compared to net earnings of \$323.4MM in Q4 2018



"Other" contains depletion and depreciation, equity based compensation, accretion, and unrealized other

- We recorded net earnings for Q4 2019 of \$1.5 million (\$0.01/basic share) compared to net earnings of \$323.4 million (\$2.12/basic share) in Q4 2018. This change was primarily driven by a smaller unrealized derivative gain in the current quarter of \$12.5 million (compared to an unrealized derivative gain of \$236.7 million in Q4 2018), the gain on business combinations of \$128.2 million recorded in Q4 2018, and an impairment charge of \$46.1 million in Q4 2019.

3% decrease in fund flows from operations from Q4 2018 to Q4 2019

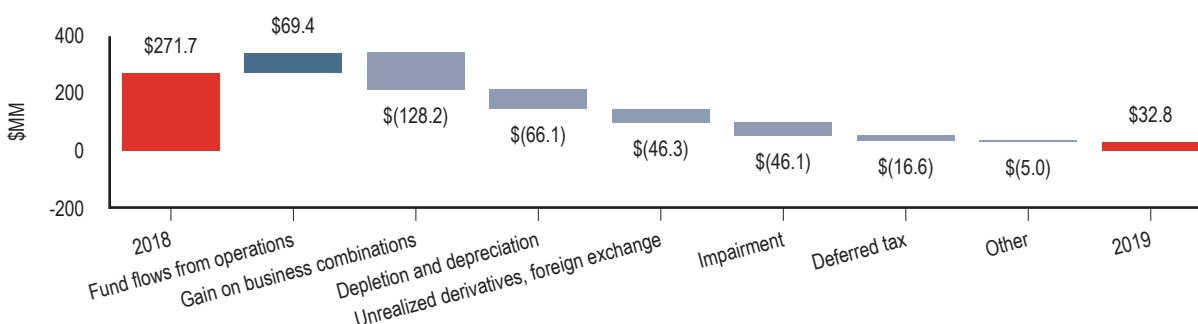


"Other" contains general and administration, corporate income taxes, interest, realized foreign exchange, and realized other

- We generated fund flows from operations of \$215.6 million in Q4 2019, a 3% decrease from \$222.3 million in Q4 2018 primarily due to lower sales volumes. This decrease was partially offset by increased pricing net of derivatives.
- Our consolidated realized price per boe decreased from \$48.90/boe to \$44.00/boe as a result of decreases in crude oil and European natural gas pricing. However, we were able to mitigate the impact of lower commodity prices with our hedge program, resulting in a net increase to fund flows from operations of \$21.7 million.

2019 vs. 2018

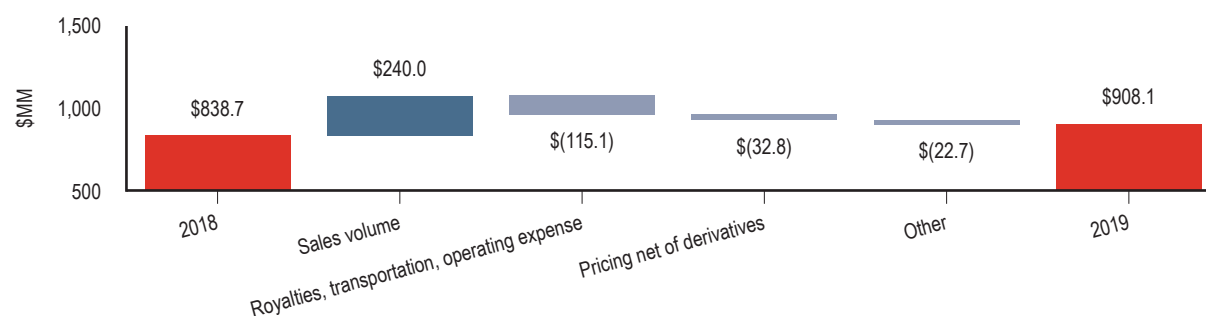
Net earnings of \$32.8MM in 2019 compared to net earnings of \$271.7MM in 2018



"Other" contains equity based compensation and accretion

- For the year ended December 31, 2019, net earnings of \$32.8 million were recorded compared to net earnings of \$271.7 million in 2018. The decrease in net earnings is attributable to the gain on business combinations recorded in 2018 of \$128.2 million, higher depletion and depreciation expense of \$66.1 million, an impairment charge recorded in 2019 of \$46.1 million, and higher non-cash expenses and net unrealized losses on derivatives and foreign exchange in the current year. The decreases were partially offset by a year-over-year increase in fund flows from operations of \$69.4 million.

8% increase in fund flows from operations from 2018 to 2019



"Other" contains general and administration, current income taxes, interest, realized foreign exchange and realized other

- Fund flows from operations increased 8% for the year ended December 31, 2019 versus the same period in 2018 due to a 16% increase in sales volumes, partially offset by related incremental expenses associated with the increased volumes.
- Our consolidated realized price decreased by 13% from \$52.95/boe to \$46.12/boe due to weaker crude oil and natural gas pricing. We were able to mitigate a portion of the impact of lower commodity prices with our hedge program. As a result, the \$6.83/boe reduction in our realized price was partially offset by a \$5.81/boe increase in realized derivative gains.

Production review

Q4 2019 vs. Q3 2019

- Consolidated average production of 97,875 boe/d during Q4 2019 increased by 1% compared to Q3 2019 production of 97,239 boe/d. Production increased in the United States from wells brought online late in Q3 2019 and in the Netherlands due to planned and unplanned downtime in the previous quarter. These increases were offset by lower production primarily due to the planned shutdown of the Wandoo platform in Australia for eight days to perform facility upgrades and regular maintenance and five days of Corrib downtime in Ireland.

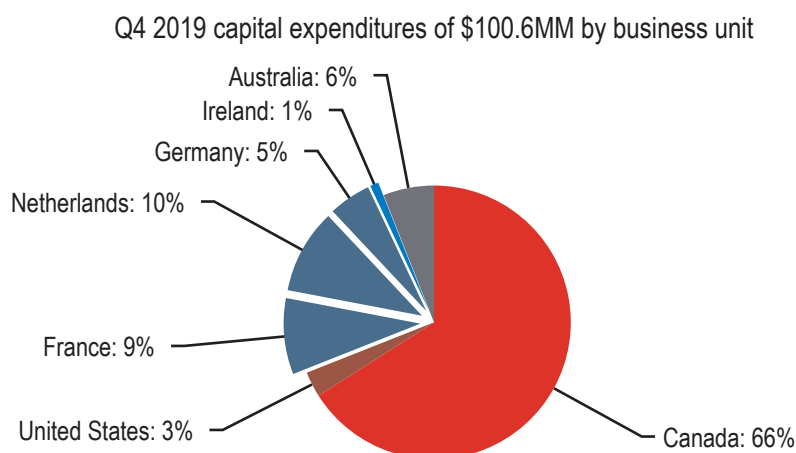
Q4 2019 vs. Q4 2018

- Consolidated average production of 97,875 boe/d in Q4 2019 represented a decrease of 4% from Q4 2018 primarily as a result of production decreases in Canada following delays in our 2019 capital program and natural decline in Ireland. These decreases were partially offset by continued organic growth in the United States.

2019 vs. 2018

- For the year ended December 31, 2019, consolidated average production of 100,357 boe/d represented an increase of 15% from the comparable period in 2018 due to growth in Canada, the United States, Australia, and the Netherlands. In Canada and the United States, production increased as a result of acquisitions in 2018 and continued organic growth. Production in Australia increased due to a successful two-well drilling program completed in Q1 2019. In the Netherlands, production increased as a result of a new well brought on production in Q3 2018 and from a successful workover program in the first half of 2019.

Activity review



- For the three months ended December 31, 2019, capital expenditures of \$100.6 million primarily related to activity in Canada, the Netherlands, and France. In Canada, capital expenditures of \$66.6 million included the drilling of 16 (15.2 net) operated wells in Alberta and Saskatchewan. Capital expenditures of \$9.7 million in the Netherlands related to drilling the Weststellingwerf well (0.5 net). In France, capital expenditures of \$8.7 million related to our workover and optimization programs in the Aquitaine and Paris Basins. In the United States, capital expenditures of \$3.1 million related to the drilling of two wells, which were rig released in the subsequent quarter.

Sustainability review

Dividends

- Declared dividends of \$0.23 per common share per month throughout 2019, resulting in total dividends declared of \$2.76 per common share for the year ended December 31, 2019.

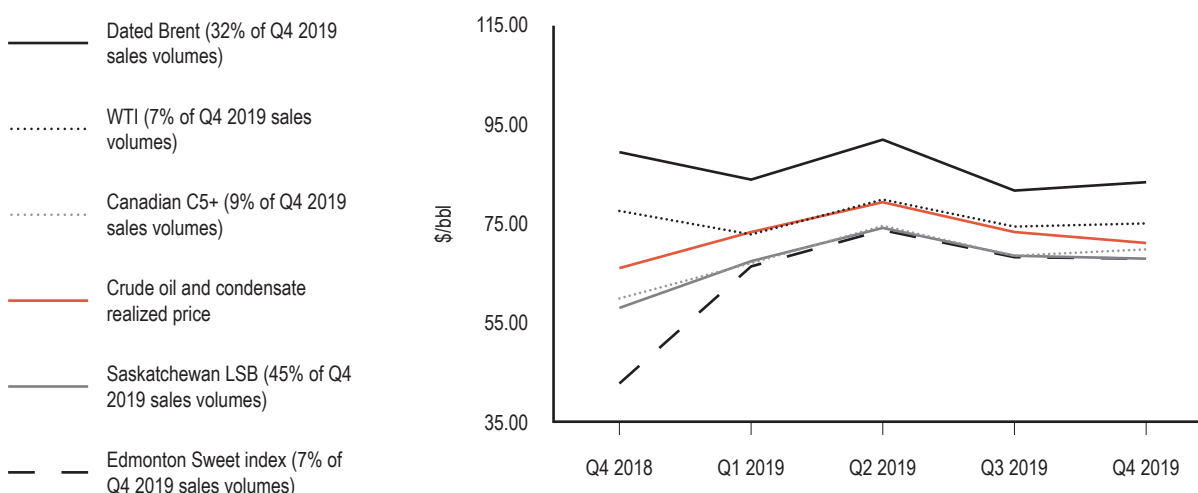
Long-term debt and net debt

- Long-term debt increased to \$1.9 billion as at December 31, 2019 from \$1.8 billion as at December 31, 2018. This increase was primarily a result of increased borrowings on the revolving credit facility.
- Net debt increased to \$2.0 billion as at December 31, 2019, from \$1.9 billion as at December 31, 2018, primarily due to increased borrowings on our revolving credit facility.
- The ratio of net debt to four quarter trailing fund flows from operations decreased to 2.20 (December 31, 2018 - 2.30) as the increase to net debt was offset by higher four quarter trailing fund flows from operations.

Benchmark Commodity Prices

	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Crude oil								
WTI (\$/bbl)	75.19	74.55	77.71	0.9%	(3.2)%	75.67	83.94	(9.9)%
WTI (US \$/bbl)	56.96	56.45	58.81	0.9%	(3.1)%	57.03	64.77	(11.9)%
Edmonton Sweet index (\$/bbl)	68.10	68.39	42.96	(0.4)%	58.5%	69.19	69.53	(0.5)%
Edmonton Sweet index (US \$/bbl)	51.59	51.79	32.51	(0.4)%	58.7%	52.15	53.65	(2.8)%
Saskatchewan LSB index (\$/bbl)	68.09	68.68	58.18	(0.9)%	17.0%	69.66	73.17	(4.8)%
Saskatchewan LSB index (US \$/bbl)	51.58	52.01	44.03	(0.8)%	17.1%	52.50	56.46	(7.0)%
Canadian C5+ Condensate index (\$/bbl)	69.97	68.70	60.08	1.8%	16.5%	70.13	79.08	(11.3)%
Canadian C5+ Condensate index (US \$/bbl)	53.01	52.02	45.47	1.9%	16.6%	52.86	61.02	(13.4)%
Dated Brent (\$/bbl)	83.49	81.80	89.54	2.1%	(6.8)%	85.31	92.07	(7.3)%
Dated Brent (US \$/bbl)	63.25	61.94	67.76	2.1%	(6.7)%	64.30	71.04	(9.5)%
Natural gas								
AECO (\$/mcf)	2.48	1.06	1.56	134.0%	59.0%	1.76	1.50	17.3%
NBP (\$/mcf)	5.38	4.50	11.03	19.6%	(51.2)%	5.90	10.35	(43.0)%
NBP (€/mcf)	3.68	3.07	7.31	19.9%	(49.7)%	3.97	6.76	(41.3)%
TTF (\$/mcf)	5.36	4.40	10.91	21.8%	(50.9)%	5.90	10.23	(42.3)%
TTF (€/mcf)	3.67	3.00	7.23	22.3%	(49.2)%	3.97	6.69	(40.7)%
Henry Hub (\$/mcf)	3.30	2.94	4.82	12.2%	(31.5)%	3.49	4.01	(13.0)%
Henry Hub (US \$/mcf)	2.50	2.23	3.65	12.1%	(31.5)%	2.63	3.09	(14.9)%
Average exchange rates								
CDN \$/US \$	1.32	1.32	1.32	—%	—%	1.33	1.30	2.3%
CDN \$/Euro	1.46	1.47	1.51	(0.7)%	(3.3)%	1.49	1.53	(2.6)%
Realized prices								
Crude oil and condensate (\$/bbl)	71.25	73.45	66.19	(3.0)%	7.6%	74.42	79.16	(6.0)%
NGLs (\$/bbl)	14.63	6.14	25.69	138.3%	(43.1)%	13.61	26.33	(48.3)%
Natural gas (\$/mcf)	3.61	2.43	5.83	48.6%	(38.1)%	3.58	5.45	(34.3)%
Total (\$/boe)	44.00	43.04	48.90	2.2%	(10.0)%	46.12	52.95	(12.9)%

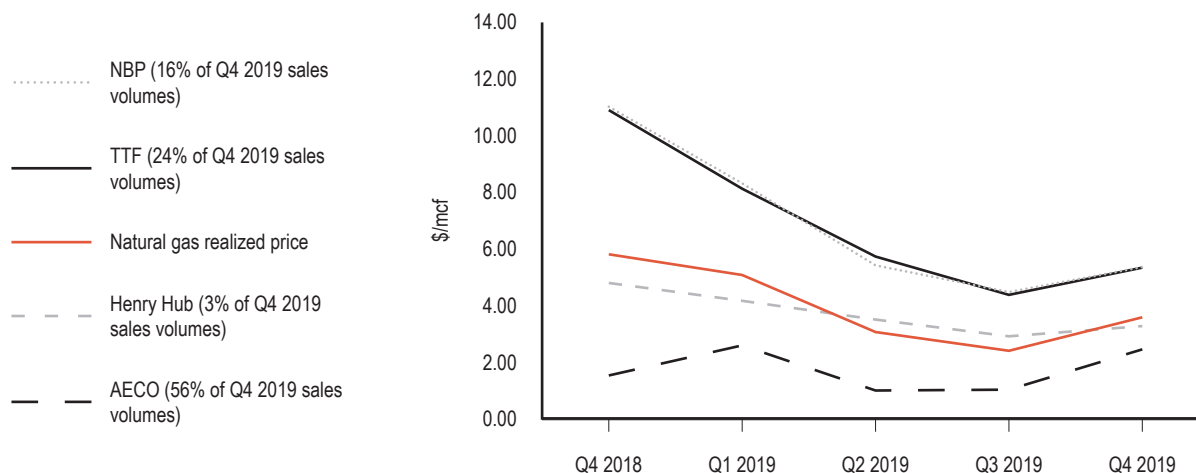
Q4 2019 realized crude oil and condensate price was a 5% premium to Edmonton Sweet Index



- Crude oil prices rose in Q4 2019 relative to Q3 2019, driven by improved sentiment on global oil demand growth, geopolitical risk events, and supportive OPEC policy. By the end of Q4 2019, quarter-over-quarter WTI and Brent prices increased by 0.9% and 2.1% respectively, in Canadian dollar terms. For the three months ended December 31, 2019, WTI and Brent prices in Canadian dollar terms decreased by 3.2% and 6.8%, respectively, versus the comparable period in the prior year.

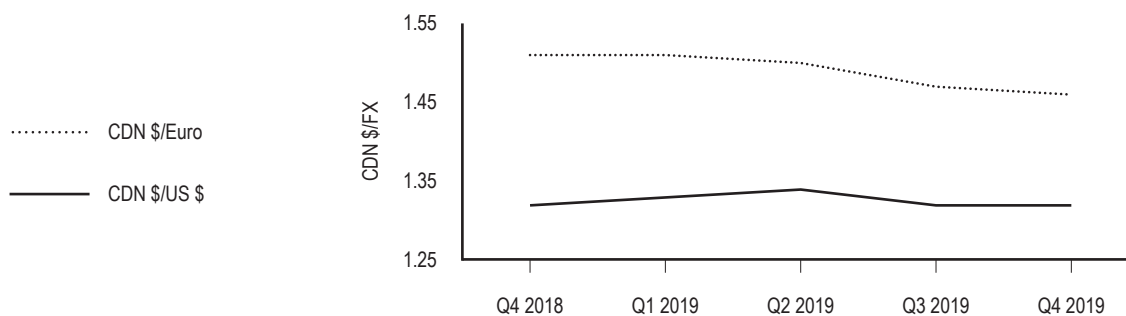
- In Canadian dollar terms, quarter-over-quarter, the Edmonton Sweet differential widened by \$0.93/bbl to a discount of \$7.09/bbl against WTI, and the Saskatchewan LSB differential widened by \$1.23/bbl to a discount of \$7.10/bbl against WTI. This was mainly driven by the broader market weakness experienced across all western Canadian grades in December 2019 due to the TC Energy Keystone pipeline spill announced on October 30th, 2019 and subsequent western Canada inventory build that followed.
- Vermilion's crude oil production benefits from light oil pricing and no exposure to significantly discounted heavy crude oil. Approximately 32% of our Q4 2019 crude oil and condensate production was priced at the Dated Brent index (which averaged a premium to WTI of US\$6.29/bbl), while the remainder of our crude oil and condensate production was priced at the Saskatchewan LSB, Canadian C5+, Edmonton Sweet, and WTI indices. Saskatchewan LSB, Canadian C5+, and Wyoming light-oil historically had lower differentials than the more significantly constrained WCS and MSW markers, making Vermilion's North American crude oil production price-advantaged relative to other North American benchmark prices.

Q4 2019 realized natural gas price was a \$1.13/mcf premium to AECO



- In Canadian dollar terms, market prices for European natural gas (TTF and NBP) increased by 21.8% and 19.6% respectively in Q4 2019 compared to Q3 2019 as demand shifted seasonally due to winter heating consumption.
- Natural gas prices at AECO in Q4 2019 increased by 134% compared to Q3 2019, due to both the seasonal shift to winter heating consumption as well as improved access to storage and export markets as a result of the Canada Energy Regulator approving TC Energy's Temporary Service Protocol.
- For Q4 2019, average European natural gas prices represented a \$2.89/mcf premium to AECO and a \$2.07/mcf premium to Henry Hub pricing. Approximately 40% of our natural gas production in Q4 2019 benefited from this premium European pricing. As a result, our consolidated natural gas realized price was a \$1.13/mcf premium to AECO.

Quarter-over-quarter, the Canadian dollar strengthened slightly versus the Euro and USD



- For the three months ended December 31, 2019, the Canadian dollar remained flat against the US dollar quarter-over-quarter. The annual average in 2019 was 2.3% weaker versus 2018.
- For the three months ended December 31, 2019, the Canadian dollar strengthened 0.7% against the Euro quarter-over-quarter. The annual average in 2019 was 2.6% stronger versus 2018.

Canada Business Unit

Overview

Production and assets focused in West Pembina near Drayton Valley, Alberta and in southeast Saskatchewan and Manitoba.

- Potential for three significant resource plays sharing the same surface infrastructure in the West Pembina region in Alberta:
 - Mannville condensate-rich gas (2,400 - 2,700m depth) - in development phase
 - Cardium light oil (1,800m depth) - modest investment at present
 - Duvernay condensate-rich gas (3,200 - 3,400m depth) - no investment at present
- Southeast Saskatchewan light oil development:
 - Targeting the Mississippian Midale (1,400 - 1,700m depth), Frobisher/Alida (1,200 - 1,400m depth) and Ratcliffe (1,800 - 1,900m) formations

Operational and financial review

Canada business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production and sales								
Crude oil and condensate (bbls/d)	27,399	27,682	29,557	(1.0)%	(7.3)%	28,266	21,154	33.6%
NGLs (bbls/d)	7,005	6,632	6,816	5.6%	2.8%	6,988	5,914	18.2%
Natural gas (mmcf/d)	145.14	145.14	146.65	—%	(1.0)%	148.35	129.37	14.7%
Total (boe/d)	58,593	58,504	60,814	0.2%	(3.7)%	59,979	48,630	23.3%
Production mix (% of total)								
Crude oil and condensate	47%	47%	49%			47%	43%	
NGLs	12%	12%	11%			12%	13%	
Natural gas	41%	41%	40%			41%	44%	
Activity								
Capital expenditures	66,643	69,963	90,211	(4.7)%	(26.1)%	293,744	277,857	5.7%
Acquisitions	5,003	1,746	12,233			24,064	1,573,964	
Gross wells drilled	26.00	40.00	72.00			152.00	173.00	
Net wells drilled	16.74	38.31	44.08			132.86	135.93	
Financial results								
Sales	206,897	188,073	186,308	10.0%	11.1%	828,070	671,172	23.4%
Royalties	(24,127)	(23,909)	(25,584)	0.9%	(5.7)%	(94,079)	(84,696)	11.1%
Transportation	(10,384)	(10,404)	(11,129)	(0.2)%	(6.7)%	(41,261)	(29,912)	37.9%
Operating	(60,931)	(57,851)	(62,064)	5.3%	(1.8)%	(242,790)	(177,499)	36.8%
General and administration	(7,424)	(5,793)	(2,150)	28.2%	245.3%	(23,341)	(6,057)	285.4%
Fund flows from operations	104,031	90,116	85,381	15.4%	21.8%	426,599	373,008	14.4%
Netbacks (\$/boe)								
Sales	38.38	34.94	33.30	9.8%	15.3%	37.82	37.81	—%
Royalties	(4.48)	(4.44)	(4.57)	0.9%	(2.0)%	(4.30)	(4.77)	(9.9)%
Transportation	(1.93)	(1.93)	(1.99)	—%	(3.0)%	(1.88)	(1.69)	11.2%
Operating	(11.30)	(10.75)	(11.09)	5.1%	1.9%	(11.09)	(10.00)	10.9%
General and administration	(1.38)	(1.08)	(0.38)	27.8%	263.2%	(1.07)	(0.34)	214.7%
Fund flows from operations netback	19.29	16.74	15.27	15.2%	26.3%	19.48	21.01	(7.3)%
Realized prices								
Crude oil and condensate (\$/bbl)	66.27	66.45	54.04	(0.3)%	22.6%	67.70	70.16	(3.5)%
NGLs (\$/bbl)	13.63	5.57	25.53	144.7%	(46.6)%	13.00	26.20	(50.4)%
Natural gas (\$/mcf)	2.33	1.16	1.73	100.9%	34.7%	1.77	1.54	14.9%
Total (\$/boe)	38.38	34.94	33.30	9.8%	15.3%	37.82	37.81	—%
Reference prices								
WTI (US \$/bbl)	56.96	56.45	58.81	0.9%	(3.1)%	57.03	64.77	(11.9)%
Edmonton Sweet index (\$/bbl)	68.10	68.39	42.96	(0.4)%	58.5%	69.19	69.53	(0.5)%
Saskatchewan LSB index (\$/bbl)	68.09	68.68	58.18	(0.9)%	17.0%	69.66	73.17	(4.8)%
Canadian C5+ Condensate index (\$/bbl)	69.97	68.70	60.08	1.8%	16.5%	70.13	79.08	(11.3)%
AECO (\$/mcf)	2.48	1.06	1.56	134.0%	59.0%	1.76	1.50	17.3%

Production

- Q4 2019 production increased slightly from the prior quarter as production from new well completions more than offset natural decline. In addition, production in Q3 2019 was negatively impacted by planned turnaround activity and other unplanned, weather-related downtime. Quarterly production decreased 4% year-over-year primarily due to delays in our 2019 capital program caused by abnormally wet weather in Alberta in Q3 2019.

Activity

Vermilion drilled 16 (15.2 net) operated wells and participated in the drilling of ten (1.6 net) non-operated wells in Canada during Q4 2019.

Alberta

- In Q4 2019, we drilled eight (8.0 net) operated wells, completed four (4.0 net) operated wells, and brought on production four (4.0 net) operated wells in Alberta.
- In 2019, we drilled or participated in 22 (21.5 net) wells in Alberta.

Saskatchewan

- In Q4 2019, we drilled eight (7.2 net) operated wells and participated in the drilling of ten (1.6 net) non-operated wells, completed twelve (11.8 net) operated wells and ten (1.6 net) non-operated wells, and brought 23 (21.9 net) operated wells and ten (1.6 net) non-operated wells on production in Saskatchewan.
- In 2019, we drilled or participated in 130 (111.4 net) wells in Saskatchewan.

Sales

- The realized price for our crude oil and condensate production in Canada is linked to WTI and is subject to market conditions in western Canada as reflected by the Saskatchewan LSB, Canadian Condensate C5+, and Edmonton Sweet index prices. The realized price of our natural gas in Canada is based on the AECO index.
- Q4 2019 sales increased 10% compared to Q3 2019 primarily due to higher realized natural gas and NGL prices. Quarter-over-quarter, our crude oil and condensate production mix remained stable at approximately 50% of production.
- Sales increased by 11% from Q4 2018 to Q4 2019 due to an increase in realized crude oil and condensate and natural gas prices partially offset by a decrease in realized NGL prices and production.
- For the year ended December 31, 2019 sales increased 23% compared to the prior year period primarily driven by a full-year impact to production from the Spartan assets.

Royalties

- Q4 2019 royalties as a percentage of sales of 11.7% decreased from 12.7% in Q3 2019 as a result of an adjustment related to gas cost allowance recorded in the prior quarter.
- For the three months and year ended December 31, 2019, royalties as a percentage of sales of 11.7% and 11.4%, decreased from 13.7% and 12.6% in the comparable prior year periods. This decrease was due to the manner in which Alberta crude royalties are calculated which deferred the royalty impact of lower oil prices in Q4 2018 into 2019, in addition to lower average royalty rates for new wells brought on production.

Transportation

- Q4 2019 transportation expense on a per unit basis remained relatively consistent compared to Q3 2019 and Q4 2018. Transportation expense on a dollar basis decreased in Q4 2019 as compared to Q4 2018 due to lower production.
- For the year ended December 31, 2019, transportation expense on a per unit basis increased versus 2018 due to an increased weighting towards crude oil production, which incurs higher transportation expense.

Operating

- Q4 2019 operating expense on a dollar and per unit basis increased compared to Q3 2019 largely due to an increase in project activity.
- Q4 2019 operating expense on a dollar and per unit basis remained relatively consistent compared to Q4 2018.
- For the year ended December 31, 2019, operating expense increased on a dollar and per unit basis versus the comparable period in 2018. On a dollar basis, the increase in operating expense was primarily due to higher production volumes during 2019. On a per unit basis, the increase in operating expense was primarily attributable to an increased weighting towards crude oil production which has a higher associated per unit operating expense.

General and administration

- For the three months and year ended December 31, 2019, general and administrative expenses increased versus all comparable periods primarily due to an increase in allocations from our Corporate segment and increased headcount costs.

France Business Unit

Overview

- Entered France in 1997.
- Largest oil producer in France, constituting approximately three-quarters of domestic oil production.
- Low base decline producing assets comprised of large conventional oil fields with high working interests located in the Aquitaine and Paris Basins.
- Identified inventory of workover, waterflood, and infill drilling opportunities.

Operational and financial review

France business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production								
Crude oil (bbls/d)	10,264	10,347	11,317	(0.8)%	(9.3)%	10,435	11,362	(8.2)%
Natural gas (mmcf/d)	—	—	0.82	—%	—%	0.19	0.21	—%
Total (boe/d)	10,264	10,347	11,454	(0.8)%	(10.4)%	10,467	11,396	(8.2)%
Sales								
Crude oil (bbls/d)	10,454	11,112	10,975	(5.9)%	(4.7)%	10,752	11,012	(2.4)%
Natural gas (mmcf/d)	—	—	0.82	—%	—%	0.19	0.21	—%
Total (boe/d)	10,454	11,112	11,111	(5.9)%	(5.9)%	10,783	11,047	(2.4)%
Inventory (mmbbls)								
Opening crude oil inventory	227	297	293			325	197	
Crude oil production	944	952	1,041			3,809	4,147	
Crude oil sales	(962)	(1,022)	(1,009)			(3,925)	(4,019)	
Closing crude oil inventory	209	227	325			209	325	
Activity								
Capital expenditures	8,745	18,139	17,008	(51.8)%	(48.6)%	74,641	79,758	(6.4)%
Gross wells drilled	—	—	—			4.00	5.00	
Net wells drilled	—	—	—			4.00	5.00	
Financial results								
Sales	77,781	81,676	85,889	(4.8)%	(9.4)%	326,699	360,602	(9.4)%
Royalties	(10,265)	(11,476)	(11,976)	(10.6)%	(14.3)%	(43,895)	(46,781)	(6.2)%
Transportation	(3,215)	(6,183)	(3,242)	(48.0)%	(0.8)%	(21,609)	(10,426)	107.3%
Operating	(16,142)	(15,098)	(14,015)	6.9%	15.2%	(61,281)	(54,690)	12.1%
General and administration	(4,821)	(3,379)	(3,792)	42.7%	27.1%	(15,406)	(14,170)	8.7%
Current income taxes	(4,966)	(3,419)	(884)	45.2%	461.8%	(21,431)	(15,084)	42.1%
Fund flows from operations	38,372	42,121	51,980	(8.9)%	(26.2)%	163,077	219,451	(25.7)%
Netbacks (\$/boe)								
Sales	80.87	79.89	84.02	1.2%	(3.7)%	83.01	89.44	(7.2)%
Royalties	(10.67)	(11.23)	(11.72)	(5.0)%	(9.0)%	(11.15)	(11.60)	(3.9)%
Transportation	(3.34)	(6.05)	(3.17)	(44.8)%	5.4%	(5.49)	(2.59)	112.0%
Operating	(16.78)	(14.77)	(13.71)	13.6%	22.4%	(15.57)	(13.56)	14.8%
General and administration	(5.01)	(3.31)	(3.71)	51.4%	35.0%	(3.91)	(3.51)	11.4%
Current income taxes	(5.16)	(3.34)	(0.86)	54.5%	500.0%	(5.45)	(3.74)	45.7%
Fund flows from operations netback	39.91	41.19	50.85	(3.1)%	(21.5)%	41.44	54.44	(23.9)%
Reference prices								
Dated Brent (US \$/bbl)	63.25	61.94	67.76	2.1%	(6.7)%	64.30	71.04	(9.5)%
Dated Brent (\$/bbl)	83.49	81.80	89.54	2.1%	(6.8)%	85.31	92.07	(7.3)%

Production

- Q4 2019 production decreased 1% from the prior quarter primarily due to weather-related downtime in the Aquitaine Basin. Production in the Paris Basin was relatively consistent with the prior quarter, benefitting from a full quarter of uninterrupted service at the Grandpuits refinery which restarted in mid-August.

Activity

- Our 2019 capital program included the drilling of four (4.0 net) wells in the Champotran field during the first half of the year. In addition to the drilling activity, we continued our workover and optimization programs in the Aquitaine and Paris Basins throughout 2019.

Sales

- Crude oil in France is priced with reference to Dated Brent.
- Q4 2019 sales decreased by 5% versus Q3 2019 primarily due to a decrease in sales volumes, partially offset by an increase in prices, consistent with the increase in the Dated Brent reference price.
- For the three months and year ended December 31, 2019, sales decreased 9% versus the comparable periods in the prior year due to a decrease in both the Dated Brent reference price and sales volumes.

Royalties

- Royalties in France relate to two components: RCDM (levied on units of production and not subject to changes in commodity prices) and R31 (based on a percentage of sales).
- For the three months ended December 31, 2019, royalties as a percentage of sales of 13.2% were slightly lower than the comparable periods due to an adjustment associated with the year-end royalty calculation which impacted Q4 2019.
- For the year ended December 31, 2019, royalties as a percentage of sales of 13.4% remained relatively consistent with the prior year.

Transportation

- Transportation expense decreased in Q4 2019 compared to Q3 2019 due to the use of alternate delivery points and transportation methods during the aforementioned third party refinery outage, which increased transportation costs in Q2 2019 and Q3 2019.
- Transportation expense for the year ended December 31, 2019 increased versus the comparable period in the prior year due to the refinery outage.

Operating

- For the three months and year ended December 31, 2019 operating expenses increased against all comparable periods on both a per unit and dollar basis. The increases were primarily due to higher electricity prices in the current year periods.

General and administration

- Fluctuations in general and administration expense for all comparable periods were due to the timing of expenditures and allocations from our corporate segment.

Current income taxes

- In France, current income taxes are applied to taxable income, after eligible deductions, at a statutory rate of 32.0%.
- Current income taxes for the year ended December 31, 2019 versus the comparative period were higher, mainly due to realized derivative gains.
- Current income taxes for Q4 2019 versus the comparative quarters were higher, mainly due to decreased tax deductions for depletion.
- On December 28, 2019, the French Parliament approved the Finance Bill for 2020. The Finance Bill for 2020 provides for a progressive decrease of the French corporate income tax rate for companies with sales below €250 million from 32.0% to 25.8% by 2022, with a reduction in 2020 to 28.9%.

Netherlands Business Unit

Overview

- Entered the Netherlands in 2004.
- Second largest onshore operator.
- Interests include 26 onshore licenses (all operated) and 17 offshore licenses (all non-operated).
- Licenses include more than 930,000 net acres of land, 90% of which is undeveloped.

Operational and financial review

Netherlands business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production and sales								
Condensate (bbls/d)	90	82	112	9.8%	(19.6)%	91	90	1.1%
Natural gas (mmcf/d)	47.99	44.08	51.82	8.9%	(7.4)%	49.10	46.13	6.4%
Total (boe/d)	8,088	7,429	8,749	8.9%	(7.6)%	8,274	7,779	6.4%
Activity								
Capital expenditures	9,651	3,028	2,454	218.7%	293.3%	23,605	17,483	35.0%
Acquisitions	—	—	(7,860)			908	(2,087)	
Gross wells drilled	2.00	—	—			2.00	—	
Net wells drilled	0.51	—	—			0.51	—	
Financial results								
Sales	25,215	18,729	52,937	34.6%	(52.4)%	112,857	165,916	(32.0)%
Royalties	(130)	(279)	(537)	(53.4)%	(75.8)%	(1,469)	(3,181)	(53.8)%
Operating	(9,758)	(6,396)	(6,765)	52.6%	44.2%	(32,125)	(26,681)	20.4%
General and administration	(763)	(300)	(709)	154.3%	7.6%	(2,659)	(1,947)	36.6%
Current income taxes	11,198	(462)	(7,492)	N/A	N/A	3,961	(16,561)	N/A
Fund flows from operations	25,762	11,292	37,434	128.1%	(31.2)%	80,565	117,546	(31.5)%
Netbacks (\$/boe)								
Sales	33.88	27.40	65.77	23.6%	(48.5)%	37.37	58.44	(36.1)%
Royalties	(0.17)	(0.41)	(0.67)	(58.5)%	(74.6)%	(0.49)	(1.12)	(56.3)%
Operating	(13.11)	(9.36)	(8.40)	40.1%	56.1%	(10.64)	(9.40)	13.2%
General and administration	(1.03)	(0.44)	(0.88)	134.1%	17.0%	(0.88)	(0.69)	27.5%
Current income taxes	15.05	(0.68)	(9.31)	N/A	N/A	1.31	(5.83)	N/A
Fund flows from operations netback	34.62	16.51	46.51	109.7%	(25.6)%	26.67	41.40	(35.6)%
Realized prices								
Condensate (\$/bbl)	73.51	69.12	69.95	6.4%	5.1%	72.44	74.85	(3.2)%
Natural gas (\$/mcf)	5.57	4.49	10.95	24.1%	(49.1)%	6.16	9.71	(36.6)%
Total (\$/boe)	33.88	27.40	65.77	23.6%	(48.5)%	37.37	58.44	(36.1)%
Reference prices								
TTF (\$/mcf)	5.36	4.40	10.91	21.8%	(50.9)%	5.90	10.23	(42.3)%
TTF (€/mcf)	3.67	3.00	7.23	22.3%	(49.2)%	3.97	6.69	(40.7)%

Production

- Q4 2019 production increased 9% from the prior quarter primarily due to the restoration of production following planned and unplanned facility downtime in Q3 2019. Quarterly production decreased 8% year-over-year primarily due to Q4 2018 benefitting from the first full quarter of production from the Eesveen-02 well, which was brought on production in September 2018, in addition to natural decline.

Activity

- During Q4 2019, we successfully drilled and completed the Weststellingwerf well (0.5 net), representing our first drilling activity in the Netherlands since 2017.

Sales

- The price of our natural gas in the Netherlands is based on the TTF index.
- Q4 2019 sales increased versus Q3 2019 consistent with increases in the TTF reference price and increased sales volumes.
- For the three months and year ended December 31, 2019, sales decreased versus comparable periods consistent with decreases in the TTF reference price.

Royalties

- In the Netherlands, certain wells are subject to overriding royalties while some wells are subject to royalties that take effect only when specified production levels are exceeded. As such, royalty expense may fluctuate from period to period depending on the amount of production from those wells.
- Royalties in Q4 2019 represented 0.5% of sales. Effective March 1, 2019, certain royalty rights were acquired which resulted in lower royalties.

Transportation

- Our production in the Netherlands is not subject to transportation expense as gas is sold at the plant gate.

Operating

- Operating expense on a per unit basis increased in Q4 2019 compared to Q3 2019 and Q4 2018 primarily as a result of the timing of activity.
- For the year ended December 31, 2019, operating expense per unit increased compared to the prior year as a result of increased maintenance activity, higher surface lease rentals and water disposal costs.

General and administration

- Fluctuations in general and administration expense for all comparable periods were due to the timing of expenditures and allocations from our corporate segment.

Current income taxes

- In the Netherlands, current income taxes are applied to taxable income, after eligible deductions and a 10% uplift deduction applied to operating expenses, eligible general and administration expenses, and tax deductions for depletion and asset retirement obligations, at a tax rate of 50%.
- Current income taxes for the year ended December 31, 2019 versus the comparative period were lower mainly due to decreased TTF prices resulting in decreased sales and other prior year adjustments.
- Current income taxes for Q4 2019 versus the comparative quarters were lower mainly due to increased tax deductions for depletion, asset retirement obligations, and other prior year adjustments.
- On December 17, 2019, the Dutch government approved the 2020 Tax Plan. The Bill provides for reduced corporate tax rates from 25.0% in 2020 to 21.7% by 2021. Due to the tax regime applicable to natural gas producers in the Netherlands, the reduction to the corporate tax rate is not expected to have a material impact to Vermilion taxes in the Netherlands.

Germany Business Unit

Overview

- Entered Germany in 2014 through the acquisition of a non-operated natural gas producing property.
- Executed a significant exploration license farm-in agreement in 2015 and acquired operated producing properties in 2016.
- Producing assets consist of seven gas and eight oil-producing fields with extensive infrastructure in place.
- Significant land position of approximately 1.2 million net acres (97% undeveloped).

Operational and financial review

Germany business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production								
Crude oil (bbls/d)	800	845	913	(5.3)%	(12.4)%	917	1,004	(8.7)%
Natural gas (mmcf/d)	15.44	14.54	16.94	6.2%	(8.9)%	15.31	15.66	(2.2)%
Total (boe/d)	3,373	3,269	3,736	3.2%	(9.7)%	3,468	3,614	(4.0)%
Sales								
Crude oil (bbls/d)	629	864	970	(27.2)%	(35.2)%	881	1,065	(17.3)%
Natural gas (mmcf/d)	15.44	14.54	16.94	6.2%	(8.9)%	15.31	15.66	(2.2)%
Total (boe/d)	3,202	3,287	3,794	(2.6)%	(15.6)%	3,432	3,675	(6.6)%
Production mix (% of total)								
Crude oil	24%	26%	24%			26%	28%	
Natural gas	76%	74%	76%			74%	72%	
Activity								
Capital expenditures	5,177	4,229	4,580	22.4%	13.0%	21,684	15,806	37.2%
Acquisitions	1,456	947	706			7,570	1,665	
Gross wells drilled	—	—	—			2.00	—	
Net wells drilled	—	—	—			0.71	—	
Financial results								
Sales	11,531	11,320	21,897	1.9%	(47.3)%	57,312	82,449	(30.5)%
Royalties	(587)	(952)	(1,190)	(38.3)%	(50.7)%	(5,264)	(6,626)	(20.6)%
Transportation	(963)	(1,709)	(1,452)	(43.7)%	(33.7)%	(5,117)	(6,420)	(20.3)%
Operating	(7,405)	(6,433)	(6,615)	15.1%	11.9%	(24,970)	(23,048)	8.3%
General and administration	(1,957)	(2,436)	(2,308)	(19.7)%	(15.2)%	(8,452)	(7,401)	14.2%
Fund flows from operations	619	(210)	10,332	N/A	(94.0)%	13,509	38,954	(65.3)%
Netbacks (\$/boe)								
Sales	39.14	37.43	62.74	4.6%	(37.6)%	45.75	61.47	(25.6)%
Royalties	(1.99)	(3.15)	(3.41)	(36.8)%	(41.6)%	(4.20)	(4.94)	(15.0)%
Transportation	(3.27)	(5.65)	(4.16)	(42.1)%	(21.4)%	(4.09)	(4.79)	(14.6)%
Operating	(25.14)	(21.27)	(18.95)	18.2%	32.7%	(19.93)	(17.18)	16.0%
General and administration	(6.64)	(8.05)	(6.61)	(17.5)%	0.5%	(6.75)	(5.52)	22.3%
Fund flows from operations netback	2.10	(0.69)	29.61	N/A	(92.9)%	10.78	29.04	(62.9)%
Realized prices								
Crude oil (\$/bbl)	77.58	76.51	75.53	1.4%	2.7%	80.22	84.14	(4.7)%
Natural gas (\$/mcf)	4.96	3.92	9.72	26.5%	(49.0)%	5.64	8.70	(35.2)%
Total (\$/boe)	39.14	37.43	62.74	4.6%	(37.6)%	45.75	61.47	(25.6)%
Reference prices								
Dated Brent (US \$/bbl)	63.25	61.94	67.76	2.1%	(6.7)%	64.30	71.04	(9.5)%
Dated Brent (\$/bbl)	83.49	81.80	89.54	2.1%	(6.8)%	85.31	92.07	(7.3)%
TTF (\$/mcf)	5.36	4.40	10.91	21.8%	(50.9)%	5.90	10.23	(42.3)%
TTF (€/mcf)	3.67	3.00	7.23	22.3%	(49.2)%	3.97	6.69	(40.7)%

Production

- Q4 2019 production increased 3% from the prior quarter due to better uptime on our operated oil and natural gas assets, partially offset by unplanned downtime on our non-operated oil assets. Quarterly production decreased 10% year-over-year due to unplanned downtime on our operated and non-operated oil and natural gas assets.

Activity

- During Q4 2019, we continued to evaluate tie-in alternatives for the Burgmoor Z5 (46% working interest) well, which was tested early in the third quarter of 2019. We expect production from this well to begin early next year. We also continued to evaluate and perform workover opportunities on our operated assets.

Sales

- The price of our natural gas in Germany is based on the NCG and GPL indexes, which are both highly correlated to the TTF benchmark. Crude oil in Germany is priced with reference to Dated Brent.
- Q4 2019 sales were consistent versus Q3 2019 due to increases in crude oil and natural gas reference prices offset by a decrease in sales volumes.
- For the three months and year ended December 31, 2019, sales decreased versus the comparable periods in 2018 due to decreases in crude oil and natural gas reference prices, as well as a decrease in sales volumes.

Royalties

- Our production in Germany is subject to state and private royalties on sales after certain eligible deductions.
- Royalties as a percentage of sales were lower in Q4 2019 versus Q3 2019 due to an adjustment in Q4 2019 related to prior periods.
- Royalties as a percentage of sales for the year ended December 31, 2019 compared to 2018 remained relatively consistent.

Transportation

- Transportation expense in Germany relates to costs incurred to deliver natural gas from the processing facility to the customer and deliver crude oil to the refinery.
- Transportation expense for the three months and year ended December 31, 2019 decreased compared to the prior periods due to the impact of prior period adjustments associated with final billings from the transportation systems operators.

Operating

- Operating expense for the three months and year ended December 31, 2019 increased versus the comparable periods due to higher costs associated with facility maintenance and repairs.

General and administration

- Fluctuations in general and administration expense for all comparable periods were due to the timing of expenditures and allocations from our corporate segment.

Current income taxes

- As a result of our tax pools in Germany, we did not incur current income taxes in the Germany Business Unit for the years ended December 31, 2019 and 2018.

Ireland Business Unit

Overview

- Entered Ireland in 2009 with an investment in the offshore Corrib gas field.
- The Corrib gas field is located offshore northwest Ireland and comprises of six offshore wells, offshore and onshore sales and transportation pipeline segments, as well as a natural gas processing facility.
- In Q4 2018, Vermilion assumed operatorship of the Corrib Natural Gas Project (the "Corrib Project") and increased its ownership stake by 1.5% to 20% following the completion of a strategic partnership with Canada Pension Plan Investment Board ("CPPIB").

Operational and financial review

Ireland business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production and sales								
Natural gas (mmcf/d)	42.30	43.21	52.03	(2.1)%	(18.7)%	46.57	55.17	(15.6)%
Total (boe/d)	7,049	7,202	8,672	(2.1)%	(18.7)%	7,762	9,195	(15.6)%
Activity								
Capital expenditures	923	354	140	160.7%	559.3%	1,372	224	512.5%
Acquisitions	—	—	(5,572)			—	(5,572)	
Financial results								
Sales	21,824	16,722	53,385	30.5%	(59.1)%	104,274	205,150	(49.2)%
Transportation	(1,008)	(1,130)	(1,115)	(10.8)%	(9.6)%	(4,459)	(5,129)	(13.1)%
Operating	(2,854)	(3,136)	(4,497)	(9.0)%	(36.5)%	(12,431)	(15,366)	(19.1)%
General and administration	(484)	(1,436)	(2,037)	(66.3)%	(76.2)%	(2,491)	(8,386)	(70.3)%
Fund flows from operations	17,478	11,020	45,736	58.6%	(61.8)%	84,893	176,269	(51.8)%
Netbacks (\$/boe)								
Sales	33.65	25.24	66.91	33.3%	(49.7)%	36.81	61.12	(39.8)%
Transportation	(1.55)	(1.71)	(1.40)	(9.4)%	10.7%	(1.57)	(1.53)	2.6%
Operating	(4.40)	(4.73)	(5.64)	(7.0)%	(22.0)%	(4.39)	(4.58)	(4.1)%
General and administration	(0.75)	(2.17)	(2.55)	(65.4)%	(70.6)%	(0.88)	(2.50)	(64.8)%
Fund flows from operations netback	26.95	16.63	57.32	62.1%	(53.0)%	29.97	52.51	(42.9)%
Reference prices								
NBP (\$/mcf)	5.38	4.50	11.03	19.6%	(51.2)%	5.90	10.35	(43.0)%
NBP (€/mcf)	3.68	3.07	7.31	19.9%	(49.7)%	3.97	6.76	(41.3)%

Production

- Q4 2019 production decreased 2% from the prior quarter due to natural decline, partially offset by less downtime at the Corrib natural gas processing facility compared to the prior quarter. Quarterly production decreased 19% year-over-year due to a combination of unplanned downtime and natural decline.

Activity

- Our 2019 capital program focused on planned turnarounds and optimization opportunities at the Corrib natural gas processing facility.

Sales

- The price of our natural gas in Ireland is based on the NBP index.
- Q4 2019 sales increased versus Q3 2019 primarily as a result of an increase in the NBP reference price.
- Sales for the three months and year ended December 31, 2019 decreased versus the comparable periods consistent with decreases in the NBP reference price and production volumes.

Royalties

- Our production in Ireland is not subject to royalties.

Transportation

- Transportation expense in Ireland relates to payments under a ship-or-pay agreement.
- Transportation expense for Q4 2019 versus Q3 2019 and Q4 2018 remained relatively consistent.
- Transportation expense for the year ended December 31, 2019 decreased versus the comparable period in the prior year due to a lower ship-or-pay obligation in the current year.

Operating

- For the three months and year ended December 31, 2019, operating expense decreased versus all comparable periods due to Vermilion's focus on cost management following our appointment as operator in December 2018.

General and administration

- Fluctuations in general and administration expense versus all comparable periods is primarily due to the timing of expenditures and allocations from our corporate segment.

Current income taxes

- Given the significant level of investment in Corrib and the resulting tax pools, we do not expect to incur current income taxes in the Ireland Business Unit for the foreseeable future.

Australia Business Unit

Overview

- Entered Australia in 2005.
- Hold a 100% operated working interest in the Wandoo field, located approximately 80 km offshore on the northwest shelf of Australia.
- Production is operated from two off-shore platforms and originates from 20 producing wells including five dual lateral wells for a total of 25 producing laterals.
- Wells that utilize horizontal legs (ranging in length from 500 to 3,000 plus metres) are located 600m below the seabed in approximately 55m of water depth.

Operational and financial review

Australia business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production								
Crude oil (bbls/d)	4,548	5,564	4,174	(18.3)%	9.0%	5,662	4,494	26.0%
Sales								
Crude oil (bbls/d)	2,691	6,517	4,401	(58.7)%	(38.9)%	5,416	4,342	24.7%
Inventory (mbbls)								
Opening crude oil inventory	108	196	210			189	134	
Crude oil production	418	512	384			2,067	1,640	
Crude oil sales	(247)	(600)	(405)			(1,977)	(1,585)	
Closing crude oil inventory	279	108	189			279	189	
Activity								
Capital expenditures	6,452	2,995	43,760	115.4%	(85.3)%	30,550	75,638	(59.6)%
Gross wells drilled	—	—	—			2.00	—	
Net wells drilled	—	—	—			2.00	—	
Financial results								
Sales	21,872	56,188	39,351	(61.1)%	(44.4)%	184,490	150,733	22.4%
Operating	(8,438)	(11,876)	(15,757)	(28.9)%	(46.4)%	(49,810)	(53,199)	(6.4)%
General and administration	(1,477)	(1,260)	(1,391)	17.2%	6.2%	(4,940)	(4,918)	0.4%
Current income taxes	(1,948)	(6,222)	2,206	(68.7)%	N/A	(34,354)	(11,419)	200.8%
Fund flows from operations	10,009	36,830	24,409	(72.8)%	(59.0)%	95,386	81,197	17.5%
Netbacks (\$/boe)								
Sales	88.35	93.71	97.19	(5.7)%	(9.1)%	93.33	95.11	(1.9)%
Operating	(34.09)	(19.81)	(38.92)	72.1%	(12.4)%	(25.20)	(33.57)	(24.9)%
General and administration	(5.97)	(2.10)	(3.44)	184.3%	73.5%	(2.50)	(3.10)	(19.4)%
PRRT	(5.87)	(9.72)	5.98	(39.6)%	N/A	(13.13)	(3.04)	331.9%
Corporate income taxes	(2.00)	(0.66)	(0.53)	203.0%	277.4%	(4.25)	(4.16)	2.2%
Fund flows from operations netback	40.42	61.42	60.28	(34.2)%	(32.9)%	48.25	51.24	(5.8)%
Reference prices								
Dated Brent (US \$/bbl)	63.25	61.94	67.76	2.1%	(6.7)%	64.30	71.04	(9.5)%
Dated Brent (\$/bbl)	83.49	81.80	89.54	2.1%	(6.8)%	85.31	92.07	(7.3)%

Production

- Q4 2019 production decreased 18% quarter-over-quarter primarily due to the planned shutdown of the Wandoo platform for eight days to perform facility upgrades and regular maintenance. Quarterly production increased 9% year-over-year primarily due to the production contribution from the two (2.0 net) well drilling program completed at the end of January 2019.
- Production volumes are managed to targets while meeting long-term supply requirements of our customers.

Activity

- Our 2019 capital program included the completion of our two (2.0 net) well drilling program at the end of January 2019, in addition to performing various asset optimization projects and proactive maintenance.

Sales

- Crude oil in Australia is priced with reference to Dated Brent and sold at an \$8.02 premium to Dated Brent during 2019.
- Q4 2019 sales decreased compared to Q3 2019 due to lower sales volumes resulting from more liftings in the prior quarter. This decrease in sales volumes was partially offset by higher sales per bbl due to an increase in the Dated Brent reference price and premium received.
- Sales increased for the three months and year ended December 31, 2019 versus the comparable periods in 2018, despite decreases in the Dated Brent reference pricing, due to the timing of sales in the relevant periods.

Royalties and transportation

- Our production in Australia is not subject to royalties or transportation expense as crude oil is sold directly at the Wandoo B platform.

Operating

- Q4 2019 operating expense decreased compared to Q3 2019 on a dollar basis due to lower sales volumes in the fourth quarter. Operating expenses are deferred on the balance sheet until oil is sold at which point the related expenses are recognized into income. On a per unit basis, operating expenses increased in Q4 2019 compared to Q3 2019 due to the timing of major project activity.
- For the year ended December 31, 2019, operating expense decreased on a per unit basis primarily due to lower diesel usage and helicopter costs, coupled with increased production.

General and administration

- Fluctuations in general and administration expense for all comparable periods are primarily due to the timing of expenditures and allocations from our corporate segment.

Current income taxes

- In Australia, current income taxes include both Petroleum Resource Rent Tax ("PRRT") and corporate income taxes. PRRT is a profit based tax applied at a rate of 40% on sales less eligible expenditures, including operating expenses and capital expenditures. Corporate income taxes are applied at a rate of 30% on taxable income after eligible deductions, which includes PRRT paid.
- Current income taxes for the year ended December 31, 2019 versus the comparative period were higher mainly due to increased production resulting in higher sales.
- Current income taxes for Q4 2019 versus Q3 2019 were lower mainly due to decreased sales. Current income taxes for Q4 2019 versus Q4 2018 were higher mainly due to increased Q4 2018 PRRT tax deductions for the capital expenditures related to the drilling campaign.

United States Business Unit

Overview

- Entered the United States in 2014 and acquired additional producing assets in the Hilight field in 2018.
- Interests include approximately 144,600 net acres of land (69% undeveloped) in the Powder River Basin of northeastern Wyoming.
- Tight oil development targeting the Turner Sands at depths of approximately 1,500m (East Finn) and 2,600m (Hilight).

Operational and financial review

United States business unit (\$M except as indicated)	Q4 2019	Q3 2019	Q4 2018	Q4/19 vs. Q3/19	Q4/19 vs. Q4/18	2019	2018	2019 vs. 2018
Production and sales								
Crude oil (bbls/d)	3,161	2,722	1,605	16.1%	96.9%	2,531	1,078	134.8%
NGLs (bbls/d)	1,156	1,140	998	1.4%	15.8%	996	452	120.4%
Natural gas (mmcf/d)	8.20	6.38	5.65	28.5%	45.1%	6.89	2.78	147.8%
Total (boe/d)	5,683	4,925	3,545	15.4%	60.3%	4,675	1,992	134.7%
Production mix (% of total)								
Crude oil	56%	55%	45%			54%	54%	
NGLs	20%	23%	28%			21%	23%	
Natural gas	24%	22%	27%			25%	23%	
Activity								
Capital expenditures	3,132	21,064	2,881	(85.1)%	8.7%	57,196	40,837	40.1%
Acquisitions	575	1,964	3,674			3,799	191,740	
Gross wells drilled	—	4.00	1.00			8.00	6.00	
Net wells drilled	—	4.00	1.00			8.00	6.00	
Financial results								
Sales	22,885	19,227	14,625	19.0%	56.5%	75,364	38,465	95.9%
Royalties	(5,316)	(4,874)	(4,053)	9.1%	31.2%	(18,706)	(10,070)	85.8%
Operating	(4,996)	(4,400)	(2,848)	13.5%	75.4%	(16,370)	(6,421)	154.9%
General and administration	(2,099)	(2,005)	(1,396)	4.7%	50.4%	(7,566)	(6,306)	20.0%
Fund flows from operations	10,474	7,948	6,328	31.8%	65.5%	32,722	15,668	108.8%
Netbacks (\$/boe)								
Sales	43.77	42.43	44.85	3.2%	(2.4)%	44.17	52.90	(16.5)%
Royalties	(10.17)	(10.76)	(12.43)	(5.5)%	(18.2)%	(10.96)	(13.85)	(20.9)%
Operating	(9.56)	(9.71)	(8.73)	(1.5)%	9.5%	(9.59)	(8.83)	8.6%
General and administration	(4.01)	(4.43)	(4.28)	(9.5)%	(6.3)%	(4.43)	(8.67)	(48.9)%
Fund flows from operations netback	20.03	17.53	19.41	14.3%	3.2%	19.19	21.55	(11.0)%
Realized prices								
Crude oil (\$/bbl)	66.65	68.91	70.78	(3.3)%	(5.8)%	68.67	79.18	(13.3)%
NGLs (\$/bbl)	20.69	9.44	26.81	119.2%	(22.8)%	17.88	28.02	(36.2)%
Natural gas (\$/mcf)	1.73	1.67	3.29	3.6%	(47.4)%	2.15	2.67	(19.5)%
Total (\$/boe)	43.77	42.43	44.85	3.2%	(2.4)%	44.17	52.90	(16.5)%
Reference prices								
WTI (US \$/bbl)	56.96	56.45	58.81	0.9%	(3.1)%	57.03	64.77	(11.9)%
WTI (\$/bbl)	75.19	74.55	77.71	0.9%	(3.2)%	75.67	83.94	(9.9)%
Henry Hub (US \$/mcf)	2.50	2.23	3.65	12.1%	(31.5)%	2.63	3.09	(14.9)%
Henry Hub (\$/mcf)	3.30	2.94	4.82	12.2%	(31.5)%	3.49	4.01	(13.0)%

Production

- Q4 2019 production increased 15% from the prior quarter due to a full quarter of contributions from the four wells we brought on production during the third quarter of 2019, in addition to better uptime across our asset base. Quarterly production increased 60% year-over-year primarily due to the contributions from our 2019 Hilight drilling program.

Activity

- During Q4 2019, we began drilling two (1.98 net) Turner horizontal wells in the Hilight field, both of which were rig released in January 2020.
- In 2019, we drilled eight (8.0 net) Turner horizontal wells in the Hilight field.

Sales

- The price of our crude oil in the United States is directly linked to WTI and subject to local market differentials within the United States. The price of our natural gas in the United States is based on the Henry Hub index.
- For the three months and year ended December 31, 2019 versus all comparable periods, sales increased due to increased production, which more than offset the decrease in lower commodity prices.

Royalties

- Our production in the United States is subject to federal and private royalties, severance tax, and ad valorem tax. In Hilight, approximately 65% of the current production is subject to Fee royalties, 30% to Federal royalties and the remainder to State royalties. In East Finn, approximately 70% of the current production is subject to Federal royalties with the remainder split between State and Fee royalties.
- For the three months and year ended December 31, 2019, royalties as a percentage of sales remained relatively consistent.

Operating

- For the three months and year ended December 31, 2019 versus all comparable periods, operating expense increased primarily due to incremental expenses associated with the year-over-year production increase.

General and administration

- Fluctuations in general and administration expense for all comparable periods were due to the incremental staffing of the United States business unit, timing of expenditures, and allocations from our corporate segment.

Current income taxes

- As a result of our tax pools in the United States, we do not expect to incur current income taxes in the United States Business Unit for the foreseeable future.

Corporate

Overview

- Our Corporate segment includes costs related to our global hedging program, financing expenses, and general and administration expenses that are primarily incurred in Canada and are not directly related to the operations of our business units. Gains or losses relating to Vermilion's global hedging program are allocated to Vermilion's business units for statutory reporting and income tax purposes.
- Results of our activities in Central and Eastern Europe are also included in the Corporate segment.

Operational and financial review

Corporate (\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Production and sales					
Natural gas (mmcf/d)	1.66	—	2.86	0.42	1.02
Total (boe/d)	276	—	477	70	169
Activity					
Capital expenditures	(98)	8,107	2,546	20,372	10,611
Acquisitions	2,131	—	(492)	2,131	(285)
Gross wells drilled	—	3.00	—	6.00	1.00
Net wells drilled	—	3.00	—	5.30	1.00
Financial results					
Sales	797	—	2,547	797	3,630
Royalties	(254)	—	(534)	(253)	(813)
Sales of purchased commodities	74,951	41,449	—	221,274	—
Purchased commodities	(74,951)	(41,449)	—	(221,274)	—
Operating	(59)	(2)	91	(301)	(110)
General and administration recovery (expense)	2,456	2,957	969	5,879	(2,744)
Current income taxes	98	(250)	646	(406)	(513)
Interest expense	(19,169)	(19,661)	(20,827)	(81,377)	(72,759)
Realized gain (loss) on derivatives	22,712	36,968	(28,319)	84,219	(111,258)
Realized foreign exchange gain (loss)	2,013	(3,348)	5,894	(4,954)	243
Realized other income	253	372	275	7,700	883
Fund flows from operations	8,847	17,036	(39,258)	11,304	(183,441)

Production

- Q4 2019 production averaged 276 boe/d. In Hungary, we brought on production the Mh-21 (0.3 net) and Battonya E-09 (1.0 net) wells, drilled in the second and third quarters of 2019, respectively. The wells were brought on production mid-way through the fourth quarter of 2019.

Activity

- During the fourth quarter, we were provisionally awarded the Kadarkút exploration license in western Hungary. The license covers approximately 298,500 net acres and consists of primarily oil prospects. Most of the license is covered by existing 3D seismic and the agreement covers a four year period, with the option to extend the license for a further two years.

Sales, royalties, and operating expense

- Sales, royalties, and operating expense in the corporate segment in Q4 2019 and Q4 2018 relate to natural gas production in Hungary.
- Sales of natural gas in Hungary are priced with reference to the TTF index less adjustments for processing. During the quarter we realized a price of \$5.22/mcf versus the \$5.36/mcf benchmark price.
- The calculation for royalties on natural gas in Hungary incorporates the Dated Brent benchmark prices and as a result the quarterly realized royalty percentage will fluctuate depending on the relative pricing for TTF as compared to Dated Brent. As TTF weakened by 51% in Q4 2019 versus Q4 2018 while Dated Brent decreased 7% over the same period, our realized royalty rate increased to 32% in Q4 2019 versus 22% in Q4 2018.
- Operating expense relates to contract operating costs, which equated to \$2.30/boe during Q4 2019.

Purchased commodities

- Purchased commodities and the associated sales relate to amounts purchased from third parties, primarily to manage positions on pipelines. There is no net impact on fund flows from operations.

General and administration

- Fluctuations in general and administration expense for the year ended December 31, 2019 versus all comparable periods were due to allocations to the various business unit segments.

Current income taxes

- Taxes in our corporate segment relate to holding companies that pay current taxes in foreign jurisdictions.

Interest expense

- Interest expense in Q4 2019 remained relatively consistent compared to Q3 2019 and Q4 2018.
- For the year ended December 31, 2019, interest expense increased versus the comparative period in 2018 due to higher drawings on the revolving credit facility, partially offset by the impact of the USD-to-EUR cross-currency interest rate swaps entered into in Q2 2019.

Realized gain or loss on derivatives

- The realized gain on derivatives for the year ended December 31, 2019 is related primarily to receipts for European natural gas and crude oil hedges.
- A listing of derivative positions as at December 31, 2019 is included in "Supplemental Table 2" of this MD&A.

Realized other income

- Realized other income recognized in the year ended December 31, 2019, relates primarily to amounts received pursuant to a negotiated settlement of a legal matter in Canada.

Financial Performance Review

(\$M except per share)	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
Total assets	5,866,120	6,270,671	3,974,965
Long-term debt	1,924,665	1,796,207	1,270,330
Petroleum and natural gas sales	1,689,863	1,678,117	1,098,838
Net earnings	32,799	271,650	62,258
Net earnings per share			
Basic	0.21	1.93	0.52
Diluted	0.21	1.91	0.51
Cash dividends (\$/share)	2.76	2.72	2.58

(\$M except per share)	Q4 2019	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
Petroleum and natural gas sales	388,802	391,935	428,043	481,083	456,939	508,411	394,498	318,269
Net earnings (loss)	1,477	(10,229)	2,004	39,547	323,373	(15,099)	(61,364)	24,740
Net earnings (loss) per share								
Basic	0.01	(0.07)	0.01	0.26	2.12	(0.10)	(0.46)	0.20
Diluted	0.01	(0.07)	0.01	0.26	2.10	(0.10)	(0.46)	0.20

The following table shows the calculation of fund flows from operations:

	Q4 2019		Q3 2019		Q4 2018		2019		2018	
	\$M	\$/boe	\$M	\$/boe	\$M	\$/boe	\$M	\$/boe	\$M	\$/boe
Petroleum and natural gas sales	388,802	44.00	391,935	43.04	456,939	48.90	1,689,863	46.12	1,678,117	52.95
Royalties	(40,679)	(4.60)	(41,490)	(4.56)	(43,874)	(4.70)	(163,666)	(4.47)	(152,167)	(4.80)
Petroleum and natural gas revenues	348,123	39.40	350,445	38.48	413,065	44.20	1,526,197	41.65	1,525,950	48.15
Transportation	(15,570)	(1.76)	(19,426)	(2.13)	(16,938)	(1.81)	(72,446)	(1.98)	(51,887)	(1.64)
Operating	(110,583)	(12.52)	(105,192)	(11.55)	(112,470)	(12.04)	(440,078)	(12.01)	(357,014)	(11.26)
General and administration	(16,569)	(1.88)	(13,652)	(1.50)	(12,814)	(1.37)	(58,976)	(1.61)	(51,929)	(1.64)
PRRT	(1,453)	(0.16)	(5,826)	(0.64)	2,422	0.26	(25,947)	(0.71)	(4,824)	(0.15)
Corporate income taxes	5,835	0.66	(4,527)	(0.50)	(7,946)	(0.85)	(26,283)	(0.72)	(38,753)	(1.22)
Interest expense	(19,169)	(2.17)	(19,661)	(2.16)	(20,827)	(2.23)	(81,377)	(2.22)	(72,759)	(2.30)
Realized gain (loss) on derivative instruments	22,712	2.57	36,968	4.06	(28,319)	(3.03)	84,219	2.30	(111,258)	(3.51)
Realized foreign exchange gain (loss)	2,013	0.23	(3,348)	(0.37)	5,894	0.63	(4,954)	(0.14)	243	0.01
Realized other income	253	0.03	372	0.04	275	0.03	7,700	0.21	883	0.03
Fund flows from operations	215,592	24.40	216,153	23.73	222,342	23.79	908,055	24.77	838,652	26.47

Fluctuations in fund flows from operations may occur as a result of changes in production levels, commodity prices, and costs to produce petroleum and natural gas. In addition, fund flows from operations may be affected by the timing of crude oil shipments in Australia and France. When crude oil inventory is built up, the related operating expense, royalties, and depletion expense are deferred and carried as inventory on the consolidated balance sheet. When the crude oil inventory is subsequently drawn down, the related expenses are recognized.

The following table shows a reconciliation from fund flows from operations to net earnings (loss):

(\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Fund flows from operations	215,592	216,153	222,342	908,055	838,652
Equity based compensation	(11,233)	(15,564)	(16,979)	(64,233)	(60,746)
Unrealized (loss) gain on derivative instruments	(30,362)	17,817	273,096	(57,427)	109,326
Unrealized foreign exchange gain (loss)	42,848	(50,679)	(36,366)	57,225	(63,243)
Unrealized other expense	(204)	(347)	(204)	(825)	(801)
Accretion	(7,833)	(8,701)	(8,205)	(32,667)	(31,219)
Depletion and depreciation	(139,940)	(174,077)	(174,435)	(675,177)	(609,056)
Deferred tax	(21,335)	5,169	(64,084)	(56,096)	(39,471)
Gain on business combinations	—	—	128,208	—	128,208
Impairment	(46,056)	—	—	(46,056)	—
Net earnings (loss)	1,477	(10,229)	323,373	32,799	271,650

Fluctuations in net income from period-to-period are caused by changes in both cash and non-cash based income and charges. Cash based items are reflected in fund flows from operations. Non-cash items include: equity based compensation expense, unrealized gains and losses on derivative instruments, unrealized foreign exchange gains and losses, accretion, depletion and depreciation expense, and deferred taxes. In addition, non-cash items may also include gains resulting from business combinations or charges resulting from impairment or impairment reversals.

Equity based compensation

Equity based compensation expense relates primarily to non-cash compensation expense attributable to long-term incentives granted to directors, officers, and employees under security-based arrangements, including the Vermilion Incentive Plan ("VIP"), a security-based compensation arrangement ("Five-Year Compensation Arrangement"), and the Deferred Share Unit Plan ("DSU Plan").

Equity based compensation expense in Q4 2019 decreased compared to Q3 2019 and Q4 2018, primarily due to a revision of performance factor in Q4 2019. For the year ended December 31, 2019, equity based compensation expense increased versus the comparable period in 2018 primarily due to a higher value of outstanding share awards in 2019.

Unrealized gain or loss on derivative instruments

Unrealized gain or loss on derivative instruments arise as a result of changes in forecasts for future prices and rates. As Vermilion uses derivative instruments to manage the commodity price exposure of our future crude oil and natural gas production, we will normally recognize unrealized gains on derivative instruments when future commodity price forecasts decline and vice-versa. As derivative instruments are settled, the unrealized gain or loss previously recognized is reversed, and the settlement results in a realized gain or loss on derivative instruments.

For the three months and year ended December 31, 2019, we recognized an unrealized loss on derivative instruments of \$30.4 million and \$57.4 million respectively. Of those amounts, \$39.0 million and \$82.6 million relates to our crude oil commodity derivative instruments, offset by an unrealized gain of \$51.3 million and \$102.5 million on our European natural gas derivative instruments.

For the three months and year ended December 31, 2019 the unrealized loss also consists of an unrealized loss of \$42.5 million and \$74.2 million respectively from our USD-to-CAD cross currency interest rate swaps. These USD-to-CAD cross currency interest rate swaps are entered into on a monthly basis to hedge the foreign exchange movements on USD borrowings on our revolving credit facility. As such, unrealized gains and losses on our cross currency interest swaps are offset by unrealized losses and gains on foreign exchange relating to the underlying USD borrowings from our revolving credit facility.

Unrealized foreign exchange gains or losses

As a result of Vermilion's international operations, Vermilion has monetary assets and liabilities denominated in currencies other than the Canadian dollar. These monetary assets and liabilities include cash, receivables, payables, long-term debt, derivative instruments and intercompany loans. Unrealized foreign exchange gains and losses result from translating these monetary assets and liabilities from their underlying currency to the Canadian dollar.

In 2019, unrealized foreign exchange gains and losses primarily resulted from:

- The translation of Euro denominated intercompany loans from Vermilion Energy Inc. to our international subsidiaries. An appreciation in the Euro against the Canadian dollar will result in an unrealized foreign exchange gain (and vice-versa). Under IFRS, the offsetting foreign exchange loss or gain is recorded as a currency translation adjustment within other comprehensive income. As a result, consolidated

comprehensive income reflects the offsetting of these translation adjustments while net earnings reflects only the parent company's side of the translation.

- The translation of USD borrowings on our revolving credit facility. The unrealized foreign exchange gains or losses on these borrowings are offset by unrealized derivative gains or losses on associated USD-to-CAD cross currency interest rate swaps (discussed further above).
- The translation of our USD denominated senior unsecured notes for the period from December 31, 2018 to June 12, 2019. Effective June 12, 2019, the USD senior notes were hedged by a USD-to-CAD cross currency interest rate swap.

For the three months ended December 31, 2019, the impact of the Euro strengthening against the Canadian dollar resulted in a \$5.5 million unrealized gain on our intercompany loans. This was coupled with an unrealized gain of \$37.3 million on our USD borrowings from our revolving credit facility.

For the year ended December 31, 2019, the impact of the Euro weakening against the Canadian dollar resulted in a \$29.4 million unrealized loss on our intercompany loans. This was offset by a \$19.8 million unrealized gain on our USD denominated senior unsecured notes for the period from December 31, 2018 to June 12, 2019 (when the USD senior notes were hedged by a USD-to-EUR cross currency interest rate swap) and a \$66.8 million unrealized gain on our USD borrowings from our revolving credit facility.

As at December 31, 2019, a \$0.01 appreciation of the Euro against the Canadian dollar would result in a \$1.6 million increase to net earnings as a result of an unrealized gain on foreign exchange. In contrast, a \$0.01 appreciation of the US dollar against the Canadian dollar would result in a \$(5.6) million decrease to net earnings as a result of an unrealized loss on foreign exchange.

Accretion

Accretion expense is recognized to update the present value of the asset retirement obligation balance. Accretion expense in Q4 2019 was relatively consistent with Q3 2019 and Q4 2018. For the year ended December 31, 2019, accretion expense increased versus the comparable period in 2018, primarily attributable to new obligations recognized following acquisition activity in 2018.

Depletion and depreciation

Depletion and depreciation expense is recognized to allocate the cost of capital assets over the useful life of the respective assets. Depletion and depreciation expense per unit of production is determined for each depletion unit (which are groups of assets within a specific production area that have similar economic lives) by dividing the sum of the net book value of capital assets and future development costs by total proved plus probable reserves.

Fluctuations in depletion and depreciation expense are primarily the result of changes in produced crude oil and natural gas volumes and changes in depletion and depreciation per unit. Fluctuations in depletion and depreciation per unit are the result of changes in reserves, future development costs, and relative production mix.

Depletion and depreciation on a per boe basis for Q4 2019 of \$15.84 decreased from \$19.12 in Q3 2019 due to an increase in proved plus probable reserves. For the three months and year ended December 31, 2019, depletion and depreciation on a per boe basis of \$15.84 and \$18.43 respectively, decreased from \$18.67 and \$19.22 in the respective comparable periods in 2018 due to the increase in proved plus probable reserves in Q4 2019.

Deferred tax

Deferred tax assets arise when the tax basis of an asset exceeds its accounting basis (known as a deductible temporary difference). Conversely, deferred tax liabilities arise when the tax basis of an asset is less than its accounting basis (known as a taxable temporary difference). Deferred tax assets are recognized only to the extent that it is probable that there are future taxable profits against which the deductible temporary difference can be utilized. Deferred tax assets and liabilities are measured at the enacted or substantively enacted tax rate that is expected to apply when the asset is realized or the liability is settled.

As such, fluctuations in deferred tax expenses and recoveries primarily arise as a result of: changes in the accounting basis of an asset or liability without a corresponding tax basis change (e.g. when derivative assets and liabilities are marked-to-market or when accounting depletion differs from tax depletion), changes in available tax losses (e.g. if they are utilized to offset taxable income), changes in estimated future taxable profits resulting in a de-recognition or re-recognition of deferred tax assets, and changes in enacted or substantively enacted tax rates.

For the three months and year ended December 31, 2019, deferred tax expense of \$21.3 million and \$56.1 million, respectively, was recognized primarily related to the de-recognition of a portion of non-expiring tax loss pools in Ireland as there is uncertainty as to Vermilion's ability to fully utilize such losses based on commodity price forecasts as at December 31, 2019.

Impairment

Impairment losses are recognized when indicators of impairment arise and the carrying amount of a cash generating unit ("CGU") exceeds its recoverable amount, determined as the higher of fair value less costs of disposal or value-in-use. In 2019, as a result of declining European natural gas price forecasts a non-cash impairment charge of \$46.1 million was recorded in the Ireland CGU. The recoverable amount was determined using fair value less costs to sell, which considered future after-tax cash flows from proved plus probable reserves using forecast price and cost estimates and an after-tax discount rate of 9.0%.

Gain on business combinations

A gain on business combination is recognized when the total consideration paid in a business combination is less than the fair value of the net assets acquired. For the year ended December 31, 2018, gains of \$68.8 million and \$59.4 million were recognized on our purchases of Assets in Wyoming and Shell E&P Ireland Limited, respectively.

Taxes

Current income tax rates

Vermilion pays corporate income taxes in France, Netherlands, and Australia. In addition, Vermilion pays PRRT in Australia which is a profit based tax applied at a rate of 40% on sales less operating expenses, capital expenditures, and other eligible expenditures. PRRT is deductible in the calculation of taxable income in Australia.

For 2019 and 2018, taxable income was subject to corporate income tax at the following statutory rates:

Jurisdiction	2019	2018
Canada	26.7%	27.0%
France	32.0%	34.4%
Netherlands ⁽¹⁾	50.0%	50.0%
Germany	31.8%	30.2%
Ireland	25.0%	25.0%
Australia	30.0%	30.0%
United States	21.0%	21.0%

⁽¹⁾ In the Netherlands, an additional 10% uplift deduction is allowed against taxable income that is applied to operating expenses, eligible general and administration expenses, and tax deductions for depletion and abandonment retirement obligations.

Tax legislation changes

On June 28, 2019, the Alberta government enacted a Bill to gradually reduce the provincial corporate tax rate from 12% to 8% by 2022, with the first reduction to 11% effective July 1, 2019.

On December 28, 2019, the French Parliament approved the Finance Bill for 2020. The Finance Bill for 2020 provides for a progressive decrease of the French corporate income tax rate for companies with sales below €250 million from 32.0% to 25.8% by 2022, with a reduction in 2020 to 28.9%.

On December 17, 2019, the Dutch government approved the 2020 Tax Plan. The Bill provides for reduced corporate tax rates from 25.0% in 2020 to 21.7% by 2021. Due to the tax regime applicable to natural gas producers in the Netherlands, the reduction to the corporate tax rate is not expected to have a material impact to Vermilion taxes in the Netherlands.

Tax pools

As at December 31, 2019, we had the following tax pools:

(\$M)	Oil & Gas Assets	Tax Losses	Other	Total
Canada	2,096,939 ⁽¹⁾	1,221,855 ⁽⁴⁾	28,558	3,347,352
France	389,115 ⁽²⁾	—	—	389,115
Netherlands	52,452 ⁽³⁾	1,239 ⁽⁴⁾	—	53,691
Germany	161,888 ⁽³⁾	112,090 ⁽⁵⁾	9,828	283,806
Ireland	—	1,128,178 ⁽⁴⁾	—	1,128,178
Australia	252,581 ⁽¹⁾	—	—	252,581
United States	278,849 ⁽²⁾	62,295 ⁽⁶⁾	—	341,144
Total	3,231,824	2,525,657	38,386	5,795,867

⁽¹⁾ Deduction calculated using various declining balance rates.

⁽²⁾ Deduction calculated using a combination of straight-line over the assets life and unit of production method.

⁽³⁾ Deduction calculated using a unit of production method.

⁽⁴⁾ Tax losses can be carried forward and applied at 100% against taxable income.

⁽⁵⁾ Tax losses carried forward are available to offset the first €1 million of taxable income and 60% of taxable profits in excess each taxation year.

⁽⁶⁾ Tax losses created prior to January 1, 2018 are carried forward and applied at 100% against taxable income, tax losses created after January 1, 2018 are carried forward and applied to 80% of taxable income in each taxation year.

Financial Position Review

Balance sheet strategy

We believe that our balance sheet supports our defined growth initiatives and our focus is on managing and maintaining a conservative balance sheet. To ensure that our balance sheet continues to support our defined growth initiatives, we regularly review whether our forecast of fund flows from operations is sufficient to finance planned capital expenditures, dividends, and abandonment and reclamation expenditures. To the extent that fund flows from operations forecasts are not expected to be sufficient to fulfill such expenditures, we will evaluate our ability to finance any shortfall with debt (including borrowing using the unutilized capacity of our existing revolving credit facility), issue equity, or by reducing some or all categories of expenditures to ensure that total expenditures do not exceed available funds. To ensure that we maintain a conservative balance sheet, we monitor the ratio of net debt to fund flows from operations.

We remain focused on maintaining and strengthening our balance sheet by aligning our exploration and development capital budget with forecasted fund flows from operations to target a payout ratio (a non-GAAP financial measure) of approximately 100%. We continually monitor for changes in forecasted fund flows from operations as a result of changes to forward commodity prices and as appropriate, we will adjust our dividend policy and exploration and development capital plans. In the current economic and commodity outlook following the outbreak of novel coronavirus (COVID-19), there is uncertainty regarding our ability to achieve a 100% payout ratio at a reasonable level of capital expenditures. Therefore, effective for the March 2020 dividend (payable April 15, 2020), we reduced our monthly dividend by 50%.

As a result of our focus on this payout ratio target, we intend for the ratio of net debt to fund flows from operations to trend towards 1.5 over time.

Net debt

Net debt is reconciled to long-term debt, as follows:

(\$M)	As at	
	Dec 31, 2019	Dec 31, 2018
Long-term debt	1,924,665	1,796,207
Current liabilities	416,210	563,199
Current assets	(347,681)	(429,877)
Net debt	1,993,194	1,929,529
Ratio of net debt to four quarter trailing fund flows from operations	2.20	2.30

As at December 31, 2019, net debt increased to \$2.0 billion (December 31, 2018 - \$1.9 billion) primarily due to the impact of increased borrowings on the revolving credit facility to fund our capital program. The ratio of net debt to four quarter trailing fund flows from operations decreased to 2.20 (December 31, 2018 - 2.30) as the increase to net debt was offset by higher four quarter trailing fund flows from operations.

Long-term debt

The balances recognized on our balance sheet are as follows:

(\$M)	As at	
	Dec 31, 2019	Dec 31, 2018
Revolving credit facility	1,539,225	1,392,206
Senior unsecured notes	385,440	404,001
Long-term debt	1,924,665	1,796,207

Revolving Credit Facility

In Q2 2019, we negotiated an amendment to our \$2.1 billion revolving credit facility to extend the maturity to May 31, 2023. The amendment included changes to the financial covenants, as described below.

As at December 31, 2019, Vermilion had in place a bank revolving credit facility maturing May 31, 2023 with terms and outstanding positions as follows:

(\$M)	As at	
	Dec 31, 2019	Dec 31, 2018
Total facility amount	2,100,000	1,800,000
Amount drawn	(1,539,225)	(1,392,206)
Letters of credit outstanding	(10,230)	(15,400)
Unutilized capacity	550,545	392,394

As at December 31, 2019, the revolving credit facility was subject to the following financial covenants:

Financial covenant	Limit	As at	
		Dec 31, 2019	Dec 31, 2018
Consolidated total debt to consolidated EBITDA	Less than 4.0	1.94	1.72
Consolidated total senior debt to consolidated EBITDA	Less than 3.5	1.56	1.34
Consolidated EBITDA to consolidated interest expense	Greater than 2.5	13.46	14.57

In Q2 2019, our financial covenants were updated to replace the consolidated total senior debt to total capitalization covenant with an interest coverage covenant (calculated as consolidated EBITDA to consolidated interest expense) and to add provisions relating to our liability management ratings in Alberta and Saskatchewan. If our security adjusted liability management ratings fall below specified limits in a province, a portion of the asset retirement obligations are included in the definitions of consolidated total debt and consolidated total senior debt. An event of default occurs if our security adjusted liability management ratings breach additional lower limits for a period greater than 90 days. As of December 31, 2019, Vermilion's liability management ratings were higher than the specified levels and as such no amounts relating to asset retirement obligations were included in the calculation of consolidated total debt and consolidated total senior debt.

Our financial covenants include financial measures defined within our revolving credit facility agreement that are not defined under IFRS. These financial measures are defined by our revolving credit facility agreement as follows:

- Consolidated total debt: Includes all amounts classified as "Long-term debt", "Current portion of long-term debt", and "Lease obligations" (including the current portion included within "Accounts payable and accrued liabilities" but excluding operating leases as defined under IAS 17) on our balance sheet.
- Consolidated total senior debt: Defined as consolidated total debt excluding unsecured and subordinated debt.
- Consolidated EBITDA: Defined as consolidated net earnings before interest, income taxes, depreciation, accretion and certain other non-cash items, adjusted for the impact of the acquisition of a material subsidiary.
- Total interest expense: Includes all amounts classified as "Interest expense", but excluding interest on operating leases as defined under IAS 17.

Senior Unsecured Notes

On March 13, 2017, Vermilion issued US\$300.0 million of senior unsecured notes at par. The notes bear interest at a rate of 5.625% per annum, paid semi-annually on March 15 and September 15, and mature on March 15, 2025. As direct senior unsecured obligations of Vermilion, the notes rank equally in right of payment with existing and future senior indebtedness of the Company.

The senior unsecured notes were recognized at amortized cost and include the transaction costs directly related to the issuance.

Vermilion may, at its option, redeem the senior unsecured notes prior to maturity as follows:

- Prior to March 15, 2020, Vermilion may redeem up to 35% of the original principal amount of the senior unsecured notes with the proceeds of certain equity offerings by the Company at a redemption price of 105.625% of the principal amount, plus any accrued and unpaid interest to but excluding the applicable redemption date.
- Prior to March 15, 2020, Vermilion may redeem some or all of the senior unsecured notes at a price equal to 100% of the principal amount of the senior unsecured notes, plus a "make-whole" premium and any accrued and unpaid interest.
- On or after March 15, 2020, Vermilion may redeem some or all of the senior unsecured notes at the redemption prices set forth in the following table, plus any accrued and unpaid interest.

Year	Redemption price
2020	104.219%
2021	102.813%
2022	101.406%
2023 and thereafter	100.000%

Cross currency interest rate swaps

On June 12, 2019, Vermilion entered into a series of cross currency interest rate swaps with a syndicate of banks. The cross currency interest rate swaps mature March 15, 2025 and include regular cash receipts and payments on March 15 and September 15 of each year. On a net basis, the cross currency interest swaps result in Vermilion receiving US dollar interest and principal amounts equal to the interest and principal payments under the US \$300.0 million of senior unsecured notes. In exchange, Vermilion will make interest and principal payments equal to €265.0 million at a rate of 3.275%.

The cross currency interest rate swaps were executed as two separate sets of instruments, wherein Vermilion:

- Receives US dollar interest and principal amounts equal to US\$300.0 million of debt at 5.625% interest and pays Canadian dollar interest and principal amounts equal to \$398.5 million of debt at 5.40% interest.
- Receives Canadian dollar interest and principal amounts equal to \$398.5 million of debt at 5.40% interest and pays Euro interest and principal amounts equal to €265.0 million at a rate of 3.275%.

Shareholders' capital

In total, dividends declared for the year ended December 31, 2019 were \$427.3 million.

The following table outlines our dividend payment history:

Date	Monthly dividend per unit or share
January 2003 to December 2007	\$0.170
January 2008 to December 2012	\$0.190
January 2013 to December 2013	\$0.200
January 2014 to March 2018	\$0.215
April 2018 to February 2020	\$0.230
March 2020 onwards	\$0.115

Our policy with respect to dividends is to be conservative and maintain a low ratio of dividends to fund flows from operations. During low commodity price cycles, we will initially maintain dividends and allow the ratio to rise. Should low commodity price cycles remain for an extended period of time, we will evaluate the necessity of changing the level of dividends, taking into consideration capital development requirements, debt levels, and acquisition opportunities.

In the current economic and commodity outlook following the outbreak of novel coronavirus (COVID-19), there is uncertainty regarding our ability to achieve a 100% payout ratio at a reasonable level of capital expenditures. Therefore, effective for the March 2020 dividend (payable April 15, 2020), we reduced our monthly dividend by 50%. Although we expect to be able to maintain our dividend, fund flows from operations may not be sufficient to fund cash dividends, capital expenditures, and asset retirement obligations. We will evaluate our ability to finance any shortfall with debt, issuances of equity, or by reducing some or all categories of expenditures to ensure that total expenditures do not exceed available funds.

The following table reconciles the change in shareholders' capital:

Shareholders' Capital	Number of Shares ('000s)	Amount (\$M)
Balance at December 31, 2018	152,704	4,008,828
Shares issued for the Dividend Reinvestment Plan	1,417	34,937
Vesting of equity based awards	1,359	51,108
Equity based compensation	552	15,868
Share-settled dividends on vested equity based awards	258	8,290
Balance as at December 31, 2019	156,290	4,119,031

As at December 31, 2019, there were approximately 2.3 million equity based compensation awards outstanding. As at March 5, 2020, there were approximately 156.6 million common shares issued and outstanding.

We have a normal course issuer bid ("NCIB") approved by the Toronto Stock Exchange ("TSX") that allows us to purchase up to 7,750,000 common shares (representing approximately 5% of shares outstanding common shares) beginning August 9, 2019 and ending August 8, 2020. Any common shares that are purchased under the NCIB will be canceled upon their purchase. As at December 31, 2019, no shares have been purchased pursuant to the NCIB.

Contractual Obligations and Commitments

As at December 31, 2019, we had the following contractual obligations and commitments:

(\$M)	Less than 1 year	1 - 3 years	3 - 5 years	After 5 years	Total
Long-term debt ⁽¹⁾	63,948	127,896	1,577,713	399,179	2,168,736
Lease obligations	44,077	49,129	38,846	28,110	160,162
Processing and transportation agreements	30,529	47,688	12,774	3,004	93,995
Purchase obligations	27,220	9,856	557	—	37,633
Drilling and service agreements	16,071	58,398	21,207	—	95,676
Total contractual obligations and commitments	181,845	292,967	1,651,097	430,293	2,556,202

⁽¹⁾ Interest on revolving credit facility calculated assuming an annual interest rate of 3.35%.

⁽²⁾ Commitments denominated in foreign currencies have been translated using the related spot rates on December 31, 2019.

Asset Retirement Obligations

As at December 31, 2019, asset retirement obligations were \$618.2 million compared to \$650.2 million as at December 31, 2018.

The present value of the obligation is calculated using a credit-adjusted risk-free rate, calculated using a credit spread added to risk-free rates based on long-term, risk-free government bonds. The decrease in asset retirement obligations is largely attributable to an increase in the credit spread from December 31, 2018 to December 31, 2019.

The Euro weakening against the Canadian dollar also contributed to the decrease in the asset retirement obligations. This decrease was partially offset by changes in the estimated costs and accretion expense.

The risk-free rates used as inputs to discount the obligations were as follows:

	Dec 31, 2019	Dec 31, 2018	Change
Canada	1.7 %	2.2%	(0.5)%
France	0.9 %	1.6%	(0.7)%
Netherlands	(0.1)%	0.4%	(0.5)%
Germany	0.3 %	0.9%	(0.6)%
Ireland	0.6 %	1.6%	(1.0)%
Australia	1.6 %	2.6%	(1.0)%
United States	2.4 %	2.7%	(0.3)%
Credit spread	5.3 %	4.0%	1.3 %

Risks and Uncertainties

Crude oil and natural gas exploration, production, acquisition and marketing operations involve a number of risks and uncertainties that have affected the financial statements and are reasonably likely to affect them in the future. These risks and uncertainties are discussed further below.

Commodity prices

Crude oil and natural gas prices have fluctuated significantly in recent years due to supply and demand factors. Changes in crude oil and natural gas prices affect the level of revenue we generate, the amount of proceeds we receive and payments we make on our commodity derivative instruments, and the level of taxes that we pay. In addition, lower crude oil and natural gas prices would reduce the recoverable amount of our capital assets and could result in impairments or impairment reversals.

Exchange rates

Exchange rate changes impact the Canadian dollar equivalent revenue and costs that we recognize. The majority of our crude oil and condensate revenue stream is priced in US dollars and as such an increase in the strength of the Canadian dollar relative to the US dollar would result in the receipt of fewer Canadian dollars for our revenue. We also incur expenses and capital costs in US dollars, Euros and Australian dollars and thus a decrease in strength of the Canadian dollar relative to those currencies may result in the payment of more Canadian dollars for our expenditures.

In addition, exchange rate changes impact the Canadian equivalent carrying balances for our assets and liabilities. For foreign currency denominated monetary assets (such as cash and cash equivalents, long-term debt, and intercompany loans), the impact of changes in exchange rates is recorded in net earnings as a foreign exchange gain or loss.

Production and sales volumes

Our production and sales volumes affect the level of revenue we generate and correspondingly the royalties and taxes that we pay. In addition, significant declines in production or sales volumes due to unforeseen circumstances may also result in an indicator of impairment and potential impairment charges.

Interest rates

Changes in interest rates impact the amount of interest expense we pay on our variable rate debt and also our ability to obtain fixed rate financing in the future.

Tax and royalty rates

Changes in tax and royalty rates in the jurisdictions that we operate in would impact the amount of current taxes and royalties that we pay. In addition, changes to substantively enacted tax rates would impact the carrying balance of deferred tax assets and liabilities, potentially resulting in a deferred tax recovery or incremental deferred tax expense.

In addition to the above, we are exposed to risk factors that impact our company and business. For further information on these risk factors, please refer to our Annual Information Form, available on SEDAR at www.sedar.com or on our website at www.vermilionenergy.com.

Financial Risk Management

To mitigate the risks affecting our business whenever possible, we seek to hire personnel with experience in specific areas. In addition, we provide continued training and development to staff to further develop their skills. When appropriate, we use third party consultants with relevant experience to augment our internal capabilities with respect to certain risks.

We consider our commodity price risk management program as a form of insurance that protects our cash flow and rate of return. The primary objective of the risk management program is to support our dividends and our internal capital development program. The level of commodity price risk management that occurs is dependent on the amount of debt that is carried. When debt levels are higher, we will be more active in protecting our cash flow stream through our commodity price risk management strategy.

When executing our commodity price risk management programs, we use derivative financial instruments encompassing over-the-counter financial structures as well as fixed and collar structures to economically hedge a part of our physical crude oil and natural gas production. We have strict controls and guidelines in relation to these activities and contract principally with counterparties that have investment grade credit ratings.

Critical Accounting Estimates

The preparation of financial statements in accordance with IFRS requires us to make estimates. Critical accounting estimates are those accounting estimates that require us to make assumptions about matters that are highly uncertain at the time the estimate is made and a different estimate could have been made in the current period or the estimate could change period-to-period.

The carrying amount of asset retirement obligations

The carrying amount of asset retirement obligations (\$618.2 million as at December 31, 2019) is the present value of estimated future costs, discounted from the estimated abandonment date using a credit-adjusted risk-free rate. Estimated future costs are based on our assessment of regulatory requirements and the present condition of our assets. The estimated abandonment date is based on the reserve life of the associated assets. The credit-adjusted risk-free rate is based on prevailing interest rates for the appropriate term, risk-free government bonds adjusted for our estimated credit spread (determined by reference to the trading prices for debt issued by similarly rated independent oil and gas producers, including our own senior unsecured notes). Changes in these estimates would result in a change in the carrying amount of asset retirement obligations and capital assets and, to a significantly lesser degree, future accretion and depletion expense.

The estimated abandonment date may change from period to period as the estimated abandonment date changes in response to new information, such as changes in reserve life assumptions or regulations. A one year increase or decrease in the estimated abandonment date would decrease or increase asset retirement obligations (with an offsetting increase to capital assets) by approximately \$27.5 million.

The estimated credit-adjusted risk-free rate may change from period to period in response to market conditions in Canada and the international jurisdictions that we operate in. A 0.5% increase or decrease in the credit-adjusted risk-free rate would decrease or increase asset retirement obligations by approximately \$52.7 million.

The recognition of deferred tax assets in Ireland

In Ireland, we have \$0.6 billion of non-expiring tax loss pools where \$152.9 million of deferred tax assets has not been recognized as there is uncertainty on our ability to fully use these losses based on estimated future taxable profits. Estimated future taxable profits are calculated using proved and probable reserves and forecast pricing for European natural gas.

As a result, the carrying value of deferred tax assets may change from period-to-period due to changes in forecast pricing for European natural gas. A 5% increase or decrease in proved and probable reserves in our Ireland segment would increase or decrease deferred tax assets (with a corresponding deferred tax recovery or expense) by approximately \$12.8 million. A €0.50/GJ increase or decrease in forecast European natural gas prices would increase or decrease deferred tax assets (with a corresponding deferred tax recovery or expense) by approximately \$22.1 million.

The estimated recoverable amount of cash generating units

Each reporting period, we assess our cash generating units for indicators of impairment or impairment reversal. If an indicator of impairment or impairment reversal is identified, we estimate the recoverable amount of the cash generating unit. As a result of declining European natural gas price forecasts during the year ended December 31, 2019 an indicator of impairment was identified in the Ireland cash generating unit. The recoverable amount was determined using fair value less costs to sell which considered future after-tax cash flows from proved plus probable reserves using forecast price and cost estimates and an after-tax discount rate of 9.0%. A non-cash impairment charge of \$46.1 million was recorded in the consolidated statement of net earnings.

Changes in any of the key judgments, such as a revision in reserves, changes in forecast commodity prices, foreign exchange rates, capital or operating costs would impact the estimated recoverable amount. As at December 31, 2019, a 1% increase in the assumed after-tax discount rate would reduce the estimated recoverable amount by \$14.7 million (resulting in a \$60.8 million impairment) while a 5% decrease in revenues (due to a decrease in commodity price forecasts or reserve estimates) would reduce the estimated recoverable amount by \$28.6 million (resulting in a \$74.7 million impairment).

Off Balance Sheet Arrangements

We have not entered into any guarantee or off balance sheet arrangements that would materially impact our financial position or results of operations.

Recently Adopted Accounting Pronouncements

Definition of a Business - Amendments to IFRS 3 "Business Combinations"

Vermilion elected to early adopt the amendments to IFRS 3 "Business Combinations" effective January 1, 2019, which will be applied prospectively to acquisitions that occur on or after January 1, 2019. The amendments introduce an optional concentration test, narrow the definitions of a business and outputs, and clarify that an acquired set of activities and assets must include an input and a substantive process that together significantly contribute to the ability to create outputs. These amendments did not result in changes to Vermilion's accounting policies for applying the acquisition method.

Health, Safety and Environment

We are committed to ensuring our activities are conducted in a manner that will protect the health and safety of our employees, contractors, and the public. Our health, safety, and environment ("HSE") vision is "Best in Class HSE", our mission is to fully integrate health, safety, and environment into our business, where our culture is recognized as a model by industry and stakeholders, resulting in a safe and healthy workplace. Our mantra is HSE: Everywhere. Everyday. Everyone.

We maintain health, safety and environmental practices and procedures in compliance with or exceeding regulatory requirements and industry standards. All of our personnel are expected to work safely and in accordance with established regulations and procedures, and we seek to reduce impacts to land, water and air. During 2019 we:

- Maintained clear priorities around 5 key focus areas of HSE Culture, Communication and Knowledge Management, Technical Safety Management, Incident Prevention and Operational Stewardship & Sustainability;
- Initiated a strategic review of current HSE program and long-term plan;
- Continued comprehensive investigations of our incidents and near misses to ensure root causes were identified and corrective actions effectively implemented;
- Completed our HSE Perception Survey, which we conduct every three years. Our results all factored in the favorable range. A plan was developed to address areas for further improvement;
- Expanded our Emergency Response Plan capabilities to align with our Central and Eastern European drilling and completions activity;
- Completed a comprehensive assessment of our Event Management Information System to prepare for an upgrade in 2020 that will add environmental data management;
- Completed numerous corporate standard/practice updates related to operational risk management, contractor management, marine transportation, and environmental management;
- Continued reinforcement of the "Vermilion High 5", an individual safety awareness initiative aimed at keeping front-line workers safe;
- Further developed and validated critical procedures and initiated competency assessments as part of fit-for-purpose training and competency programs;
- Continued comprehensive HSE integration plan for Vermilion's new and emerging operations (includes Central and Eastern Europe, Germany, United States, Ireland and Canada expansion);
- Initiated data gathering and quantification to meet the CDP Water reporting requirements for the 2019 data set;
- Managed our waste products by reducing, recycling and recovering;
- Reduced long-term environmental liabilities through decommissioning, abandoning and reclaiming well leases and facilities;
- Further refined and expanded our enterprise wide corporate risk register;
- Expanded our company-wide HSE leadership training program to improve hazard identification and risk reduction;
- Continued the development of a robust hazard identification and risk mitigation program specific to environmentally sensitive areas;
- Continued the development of our Corporate Process Safety Management System with emphasis on Process Hazards Analysis and risk reduction measures;
- Performed auditing, management inspections and workforce observations to measure compliance and identify potential hazards and apply risk reduction measures; and
- Developed, communicated and measured against leading and lagging HSE key performance indicators.

We are a member of several organizations concerned with environment, health and safety, including numerous regional co-operatives and synergy groups. In the area of stakeholder relations, we work to build long-term relationships with environmental stakeholders and communities.

Environmental, Social and Governance (ESG)

Furthering our focus on sustainability (ESG) strategy, in 2019 we continued to support the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), including in our reporting, focusing on climate but also on sustainability issues and opportunities in a wider context. In 2019, our Board of Directors and senior management participated in a robust scenario analysis process based on reporting from the World Economic Forum. This included analyzing factors such as the influence of new technologies, technology growth, government policy, and emerging markets that will impact the speed of the energy transition, and the resulting risks and opportunities for Vermilion. Our 2019 performance in sustainability rankings such as CDP, SAM, and Sustainalytics continued to be in the top quartile of our peer group.

Sustainability

As a responsible oil and gas producer, we consistently seek to deliver long-term shareholder value by operating in an economically, environmentally and socially sustainable manner that is recognized as a model in our industry.

Vermilion understands our stakeholders' expectations that we deliver strong financial results in a responsible and ethical way. As a result, we align our strategic priorities in the following order:

- the safety and health of our staff and those involved directly or indirectly in our operations;
- our responsibility to protect the environment. We follow the Precautionary Principle introduced in 1992 by the United Nations "Rio Declaration on Environment and Development" by using environmental risk as part of our development decision criteria, and by continually seeking improved environmental performance in our operations; and
- economic success through a focus on operational excellence across our business, which includes technical and process excellence, efficiency, expertise, stakeholder relations, and respectful and fair treatment of staff, contractors, partners and suppliers.

Reflecting these priorities, we have positioned Vermilion purposefully within the energy transition. Predictions differ about the manner and speed of the transition, but our own scenario analyses are clear that Vermilion can best contribute by focusing on producing energy responsibly: reliably, cost-effectively and safely. We also believe those stakeholders who are concerned about sustainability, including investors, governments, regulators, communities and citizens, should turn to best-in-class operators such as Vermilion. Our crude oil and natural gas assets are strategic resources that can, and should, be deployed in the service of the transition and, indeed, of the framework for the planet's health and wellbeing represented by the United Nations Sustainable Development Goals (SDGs).

To support our strategy, we regularly communicate with our stakeholders, including through our sustainability reporting. In 2018, reflecting our review of TCFD recommendations, we updated our engagement to include a broader inclusion of sustainability in regulatory reporting; we have continued this approach in 2019.

For more information, please see references to sustainability throughout this document, including the Climate Risk discussion. For additional context, our Sustainability Report is available online at www.vermilionenergy.com (under the heading "Our Responsibility").

Vermilion's sustainability performance and reporting have earned consistently strong recognition from external stakeholders:

Accomplishments

- The Company received a top quartile ranking for our industry sector in SAM's 2019 Corporate Sustainability Assessment ("CSA"). The CSA analyzes sustainability performance across economic, environmental, governance, and social criteria, and is the basis of the Dow Jones Sustainability Indices.
- Vermilion was ranked second in our peer group in the Sustainalytics ESG (environment, social, governance) rankings.
- Vermilion's MSCI ESG rating increased to AA in 2019, and our Governance Metrics score ranked in the top decile globally.
- We received ISS QualityScore decile ratings of 1 for both Environmental and Social, which assess corporate disclosure and transparency practices in these areas, where 1 indicates the lowest risk.

Climate-related Disclosures

Vermilion has publicly released our identified climate risks and opportunities since our first annual CDP Climate Response in 2014. In alignment with recommendations from the TCFD and under the TCFD's Strategy category, we are also including a summary of them in this document. For more information on our sustainability-related governance, strategy, risk management, and metrics and targets, including those related to climate, please see our 2020 Proxy Statement and Information Circular, and our online sustainability reporting, particularly the Performance Metrics section and our 2019 CDP Response, which includes detailed information on the following risk and opportunity summaries.

Risk / Opportunity	Description of Impacts ^{1,2} - Risk Category - Risk Timeframe	Potential Financial Impact	Management Context
Increased Pricing of GHG Emissions e.g. Carbon Tax	- Policy and Legal - Medium-term In April 2019, our Saskatchewan operations became subject to the federal Greenhouse Gas Pollution Pricing Act, with carbon tax rates set at \$20 per tonne of CO₂e in 2019, rising to \$50 by 2022. Our Alberta operations are subject to the fuel charge element of the Act beginning in January 2020.	Beginning in 2019, the direct and indirect impact of carbon taxes on the Canada Business Unit is estimated at approximately \$2.3MM. For European operations, our Carbon Liability Assessment Tool indicates carbon tax is not forecasted to exceed \$0.5MM per annum.	The potential financial impact is based on proposed changes to carbon pricing in our operating regions out to 2023, resulting in expansion of emission sources covered, and does not account for Vermilion's proactive programs to manage emissions. This estimate is based on the probable cost scenario identified in our Carbon Liability Assessment Tool.
Enhanced Emissions Reporting Obligations	- Policy and Legal - Short-term Emissions reporting obligations are an ongoing risk and can change due to political and regulatory evolution. The impact to Vermilion would be a decreased netback on a per BOE basis, due to increased expenditures for personnel time and system development and implementation, to allow for more robust emissions quantification.	Based on our current output in Canada and Europe, current regulated thresholds, and growth, we anticipate that cost associated with meeting emission reporting obligations will increase in the short-term, likely as a small increase in operational costs.	Regulations in all of our business units are monitored on an ongoing basis, and assumptions/ scenario planning is used annually to assess risk. Vermilion also engages stakeholders relating to emissions reporting obligations. Management of this risk is built into Vermilion's operations and our Enterprise Risk Matrix.
Mandates on and Regulation of Existing Products and Services	- Policy and Legal; Technology - Short-term Vermilion's operations are subject to regional regulatory changes that result in changes to equipment requirements such as engineering and equipment modifications to reduce carbon emissions and / or emissions of criteria air contaminants.	The operational changes to comply with methane reduction regulations is expected at approximately \$1.5MM in the short term, with those associated with eliminating routine flaring in France not expected to exceed \$0.5MM. Costs associated with the Netherlands MJA3 program are built into our operating costs and no significant expenditures are anticipated in the short term.	Vermilion's participation in the MJA3 program in the Netherlands since 2005, for example, has resulted in projects that have reduced our operations energy intensity by 76%. We have allocated resources to complete methane reduction on a planned program basis, as opposed to a single reactive replacement program, resulting in an overall reduction in associated costs.
Changes in Emissions Regulations	- Policy and Legal - Medium-term The risk associated with a change in emission regulations in one or more of our business units is accounted for by Vermilion's Enterprise Risk Matrix, with mitigation measures being reviewed, updated, and implemented on an annual basis. A shift in international regulations may also result in an impact to Vermilion's supply chain, resulting in a limitation of market access or direct impact to the price of our products. As Vermilion maintains a diversified asset base, we believe the risk to the marketability of our products is low.	Following the COP21 conference, the importance of sustainable development and reduction of emission levels was confirmed by the commitments made by national governments. Based on the anticipated changes in the various regulatory regimes under which Vermilion operates, the financial impact due to a regulatory change over the next 3 years is anticipated to be less than \$2.0MM. This does not include the cost associated with emission reduction projects completed on an annual basis, or previous projects that have annual emissions reductions.	The formalization of Integrated Sustainability as a strategic objective in Vermilion's long-term strategic plan allows us to better understand, identify, proactively respond, and manage the potential risk and uncertainty inherent in an evolving sustainability framework, both at a regional and corporate level. As an example, beginning in 2017, Vermilion added requirements to assess capital expenditures for potential sustainability-related impacts; in 2018, we established a Sustainability Committee at the Board of Directors level, and a Sustainability Steering Committee at the senior management level.
Changes in Temperature Extremes	- Physical - Long-term A decrease in temperature extremes experienced in the winter months (i.e. lower seasonal lows) could increase the amount of fuel gas used by a variety of equipment essential for safe production. Additional equipment could also be required (e.g. building heaters, line heaters) to ensure safe and efficient operation, thus increasing our carbon footprint and costs. Temperature extremes could also increase capital costs associated with drilling, completion and workover operations due to increased timelines, decreased productivity, equipment breakdown, etc. For example, warmer winters would have a direct impact on Vermilion's more northern operations, through a decreased ability to access lands and increased construction capital requirements.	The financial implications on an annual basis are difficult to quantify; however, based on Vermilion's experience, the most significant financial implications would result from shutdowns in drilling or completions locations. The estimated cost of this would be \$0.5MM per day of delay.	As extreme weather cannot be controlled, Vermilion uses our various Management Systems and processes to protect the health and safety of our workers, contractors and the public, and to protect the environment from adverse effect. As an example of how we have reduced the potential impact related to access in remote assets, we use multi-well pads wherever possible, with multiple horizontal wells drilled from a single location. This reduces the aerial impact of these activities on the environment, habitat fragmentation and carbon emissions associated with lease construction and equipment mobilization/demobilization. Using multi-well locations would significantly decrease capital considerations in the event that limited frost days were realized in the coming years.
Changes In Precipitation Patterns and Extreme Variability in Weather Patterns	- Physical - Long-term Vermilion holds assets inland, in coastal regions, and offshore. A change in precipitation in any of these locations could have a negative impact on operations due to drought or flooding. Flooding could result in limited access to locations / facilities, and poses a risk to our corporate headquarters. Alternatively, drought conditions could impact the availability of surface and / or groundwater, which Vermilion, in part, relies on for drilling and completion activities. This could negatively impact forecasted growth by increasing the timelines and capital costs to bring new infrastructure onto production.	The financial implications of a single time event (e.g. wildfire) and continued strain event (e.g. drought) have been assessed on a case-specific basis, and the financial implications of these events is believed to be manageable (impact under \$10.0MM). Vermilion maintains insurance to mitigate the potential impact of precipitation extreme events (e.g. flooding). Insurance for locations that have been identified as potentially being impacted by drought-induced events (e.g. wildfire) is estimated at \$0.5MM per annum.	As these incidents are beyond Vermilion's control, we take measures to ensure effective emergency response to extreme weather events, to protect the health and safety of our workers, contractors and the public, to protect the environment, and to limit the financial impact of the event. In the case of a longer term extreme precipitation event or drought, Vermilion has implemented water management programs to reduce our reliance on fresh water sources.
Rising Sea Levels	- Physical - Long-term Vermilion owns and operates assets in the Netherlands. We have identified and assessed the potential risk associated with rising sea levels here, as it has the potential to physically impact our operations due to issues such as flooding, transportation difficulties and supply chain interruptions. Rising sea levels also pose a threat related to the salinization of groundwater.	Vermilion reviews the potential impact of rising sea levels annually as part of our Enterprise Risk Matrix. We estimate the potential total financial implication to be \$153.0MM, before mitigation measures, in our Netherlands operations.	There is no measure available to protect Vermilion's Netherlands assets in the event that water levels rise to a level that would impact facilities below sea level. Salinization of the groundwater regime would impact the entire region; similarly, no measures are currently available to protect against this. Based on Vermilion's assessment of the probability of these events occurring over the next 5 years being less than 0.5%, we have accepted this level of risk exposure.

Risk / Opportunity	Description of Impacts ^{1,2} - Risk Category - Risk Timeframe	Potential Financial Impact	Management Context
Increased Severity of Extreme Weather Events such as Cyclones and Floods	- Physical - Medium-term Vermilion owns and operates an offshore platform in the Wandoo field off northwestern Australia, and co-owns and operates the Corrib project off the Irish coast. Extreme weather events have the potential to directly impact our offshore operations resulting in down time or damage to infrastructure, and can impact the downstream handling capacity of our partners, resulting in a limitation to the distribution and sale of our products.	Based on the value of the Wandoo Platform and a 1-in-2000 year cyclonic event, the financial implications associated with damage due to a severe weather event is estimated at \$179.0MM (total impact before insurance). The third-party costs associated with potential damages from extreme weather events are not tracked by Vermilion.	Vermilion maintains insurance as a mitigative measure to reduce the financial impact associated with damage to our assets due to severe weather events. We also have protocols for monitoring and preparing for cyclones, and have invested in our emergency response capabilities in the event of damage to our assets as a result of a severe weather event. Operational changes are made as required to ensure (in order of priority) worker health and safety, protection of the environment, and protection of Vermilion's assets.
Changing Customer Behaviour	- Market; Reputational - Long-term As consumers and governments become more socially aware of the sources of their energy, negative perceptions of organizations or production methods have the potential to impact energy sector companies through company valuations, restricted licensing and permitting, and stakeholder opposition.	The impact of decreased consumer confidence and perception is not calculable. On a per share basis, the market impact of the loss of \$1 per share would be approximately \$156.0MM. The direct cost of Vermilion's operating excellence and risk management cannot be quantified on a single risk basis.	Vermilion is positioned within the evolving energy transition, with an unwavering commitment to our priorities of health and safety, environmental protection, and economic prosperity. We believe that those commitments, and our contributions to the UN SDGs constitute qualitative advantages that set us apart from our competitors. Sustainable practices are ingrained into the way we operate, and we will continue to focus on our Integrated Sustainability strategic objective. We believe this advantage attracts investors to Vermilion and will continue to give Vermilion a competitive advantage in the future.
Opportunity: Participation in Carbon Market	- Financial - Medium-term The European Union Emissions Trading Scheme (ETS) allows for the generation and movement of certified carbon credits from emissions-saving projects around the world. With the revisions pending in Phase 4, it is anticipated that there will be an active market and consumers for the offset credits generated at some of our sustainability initiatives around the world, likely providing opportunities for Vermilion to generate certified energy reduction and offset credits.	Vermilion is not accounting for any short term financial impact. It is estimated that following the change to the EU ETS in Phase 4, the carbon price will stabilize at between approximately €15 and €30 per tCO ₂ e. The financial impact to Vermilion annually is estimated to be up to \$1.0MM.	We are currently evaluating the benefit that certified offset credits from various emission reduction projects across our operations could provide. Examples of projects with this potential include our Tomato Greenhouse Cogeneration project in France, our partnerships for geothermal applications in residential neighborhoods in France, and our developing geothermal projects in the Netherlands. Vermilion's project assessment framework is applied to each identified opportunity, including considerations associated with emissions offset.
Opportunity: Development of New Products and Services through R&D and Innovation	- Products - Short-term As Vermilion has developed our emissions quantification programs across the globe, we have developed more robust methods for sharing of technologies and techniques from across our operations, both internally and externally. Our increased focus on tracking emissions has supported the assessment of opportunities across business units and sharing of technical expertise.	As this opportunity is in the early stage of assessment, it is difficult to quantify the financial impact, but it is estimated at up to \$2.0MM per year. Potential also exists for significant cost adjustments, as assets slated for abandonment could be repurposed to generate geothermal energy.	We have technical experts who provide input into potential geothermal projects as they are identified. These teams are supported by corporate sustainability staff in connecting internal and external stakeholders. These teams have responsibilities specific to geothermal opportunities as these projects move through their preliminary stages. To further support identification of opportunities, and engagement with stakeholders, Vermilion has appointed sustainability leads in all our business units.
Opportunity: Shift in Consumer Preferences	- Products, Reputational - Long-term Under the Canadian Environmental Protection Act and based on commitments made by the Canadian and Alberta governments relating to COP21, there is a commitment to reduce emissions for coal-fired power generation. Based on this and with a number of power generating facilities in Alberta nearing the end of their service life, the demand for natural gas is likely to increase due to increased use of combined cycle gas turbine (CCGT) power generation. Alberta has also committed to significantly reducing its demand for coal for power generation by 2050.	The short term impact on gas pricing is anticipated to be low, increasing to medium in the mid to long term. Once the regulations are implemented, there is a potential for an increase in the demand and pricing for natural gas, from which Vermilion would benefit. Based on current estimates, an increase in gas price of \$1 per mcf would result in a positive impact to sales of approximately \$35.0MM.	As we move further into the energy transition, we foresee natural gas playing an impactful role as a less carbon intense fuel than other options (i.e. coal). Vermilion continues to focus on the identification of resources and assets where we have the opportunity to apply our industry leading expertise to optimize production while reducing emissions. An example of our strategy to realize this opportunity is our asset base in Alberta, which currently includes a large liquids rich gas play. Vermilion's marketing team is also actively pursuing options for our natural gas production that will enable Vermilion to achieve the best netbacks on production.
Opportunity: Ability to Diversify Business Activities	- Products - Long-term Vermilion maintains a diverse, stable global portfolio of oil and gas assets. Our strong record of safe and socially conscious development of energy resources has provided opportunities to access and develop these resources. We see our commitment to sustainability as core to our business, which has provided important organizational focus on emissions quantification and management. As consumers become more aware of and involved in the selection of their energy sources and associated carbon intensity, we believe that Vermilion will continue to be a top quartile choice, providing us with opportunities not available to peer organizations.	The financial impact of changing consumer preferences is difficult to quantify. We foresee opportunities in two distinct areas: first, in consumers selecting premium energy products (top quartile, low carbon intensity), with these products demanding a higher price than other energy sources on the market. Currently we estimate the potential impact of premium pricing in the long term to be \$1-5 per boe (\$24.8MM based on \$1 per boe). The second opportunity, which we are already receiving benefit from, is access to more stringent markets, supported by our environmental and sustainability performance, such as our entry into German, Hungarian and Croatian oil and gas operations in the last several years.	Vermilion made the organizational change to established Integrated Sustainability as one of our strategic objectives in 2015. This provided important organizational focus on matters such as environmental performance, including climate change. Our strategy is to continue to support Integrated Sustainability, with personnel who are experts in their field, as well as financially supporting programs and projects that reduce emissions while optimizing production. An example of this is the addition of personnel who have specific responsibilities associated with sustainability in our business units, including study and feasibility assessment of green energy generation.

Risk / Opportunity	Description of Impacts ^{1,2}		Potential Financial Impact	Management Context
	- Risk Category	- Risk Timeframe		
Opportunity: Shift Toward Decentralized Energy Generation	- Products, Reputational - Long-term The carbon intensity of energy used around the world has a direct relationship to where the energy product was generated. Vermilion's business unit structure supports production and distribution of energy products into local markets. This strategy results in the significant reduction of the carbon footprint of our energy when compared to non-local sources.		On an operating netback (sales) basis, based on current estimates, the financial premium of our non-Canadian assets was \$340.8MM. The potential future advantage is anticipated to increase as we expand production in markets outside North America and provide sources of energy to local markets. The costs associated with adjustment of our organizational structure are built into our costs across the company.	Vermilion continues to assess where we can access local markets for our production, while exploring regions to expand our operations. The actions taken in the past several years to realize this opportunity include alterations to our structure, our strategic objectives and our operational development plans to support Vermilion as a distributed energy provider, and exploration and development programs in regions with relatively low energy production as compared to consumption (i.e. Hungary).

Notes:

(1) Short-term (0 to 3 years); Medium-term (3 to 6 years); Long-term (6 to 50 years).

(2) Risk summary is based on our fiscal year 2018 environmental reporting through CDP. Fiscal year 2019 environmental reporting will be available in mid-2020.

Corporate Governance

We are committed to a high standard of corporate governance practices, a dedication that begins at the Board level and extends throughout the Company. We believe good corporate governance is in the best interest of our shareholders, and that successful companies are those that deliver growth and a competitive return along with a commitment to the environment, to the communities where they operate, and to their employees.

We comply with the objectives and guidelines relating to corporate governance adopted by the Canadian Securities Administrators and the Toronto Stock Exchange ("TSX"). In addition, the Board monitors and considers the implementation of corporate governance standards proposed by various regulatory and non-regulatory authorities in Canada. A discussion of corporate governance policies is included each year in our proxy materials for our annual general meeting of shareholders, copies of which are available on SEDAR (www.sedar.com).

As a Canadian reporting issuer with securities listed on the TSX and the New York Stock Exchange ("NYSE"), Vermilion is required to comply with all applicable Canadian requirements adopted by the Canadian Securities Administrators and the TSX, and applicable rules for foreign private issuers adopted by the U.S. Securities and Exchange Commission that give effect to the provisions of the *Sarbanes-Oxley Act of 2002*.

Our corporate governance practices also incorporate many "best practices" derived from those required to be followed by US domestic companies under the NYSE listing standards. We are required by Section 303A.11 of the NYSE Listed Company Manual to identify any significant ways in which our corporate governance practices differ from those required to be followed by US domestic companies under NYSE listing standards. We believe that there are no such significant differences in our corporate governance practices, except as follows:

- *Shareholder Approval of Equity Compensation Plans.* Section 303A.8 of the NYSE Listed Company Manual requires shareholder approval of all "equity compensation plans" and material revisions to those plans. The definition of "equity compensation plans" covers plans that provide for the delivery of newly issued securities, and also plans which rely on securities reacquired on the market by the issuing company for the purpose of redistribution to employees and directors. The TSX rules provide that equity compensation plans and material amendments thereto require shareholder approval only if they involve newly issued securities and the amendments are not otherwise addressed in the plan's amendment procedures. In addition, the TSX rules require that every three years after institution, all unallocated options, rights or other entitlements under equity compensation plans which do not have a fixed maximum aggregate of securities issuable must be approved by shareholders. Vermilion follows the TSX rules with respect to shareholder approval of equity compensation plans and material revisions to those plans.

Disclosure Controls and Procedures

Our officers have established and maintained disclosure controls and procedures and evaluated the effectiveness of these controls in conjunction with our filings.

As of December 31, 2019, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded and certified that our disclosure controls and procedures are effective.

Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

The Chief Executive Officer and the Chief Financial Officer of Vermilion have assessed the effectiveness of Vermilion's internal control over financial reporting as defined in Rule 13a-15 under the US Securities Exchange Act of 1934 and as defined in Canada by National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings. The assessment was based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Chief Executive Officer and the Chief Financial Officer of Vermilion have concluded that Vermilion's internal control over financial reporting was effective as of December 31, 2019. The effectiveness of Vermilion's internal control over financial reporting as of December 31, 2019 has been audited by Deloitte LLP, as reflected in their report included in the 2019 audited annual financial statements filed with the US Securities and Exchange Commission. No changes were made to Vermilion's internal control over financial reporting during the year ended December 31, 2019, that have materially affected, or are reasonably likely to materially affect, the internal controls over financial reporting.

Supplemental Table 1: Netbacks

The following table includes financial statement information on a per unit basis by business unit. Liquids includes crude oil, condensate, and NGLs. Natural gas sales volumes have been converted on a basis of six thousand cubic feet of natural gas to one barrel of oil equivalent.

	Q4 2019			2019			Q4 2018	2018
	Liquids \$/bbl	Natural Gas \$/mcf	Total \$/boe	Liquids \$/bbl	Natural Gas \$/mcf	Total \$/boe	Total \$/boe	Total \$/boe
Canada								
Sales	55.55	2.33	38.38	56.92	1.77	37.82	33.30	37.81
Royalties	(7.41)	(0.05)	(4.48)	(7.40)	0.02	(4.30)	(4.57)	(4.77)
Transportation	(2.35)	(0.22)	(1.93)	(2.40)	(0.19)	(1.88)	(1.99)	(1.69)
Operating	(13.28)	(1.41)	(11.30)	(13.02)	(1.39)	(11.09)	(11.09)	(10.00)
Operating netback	32.51	0.65	20.67	34.10	0.21	20.55	15.65	21.35
General and administration			(1.38)			(1.07)	(0.38)	(0.34)
Fund flows from operations netback			19.29			19.48	15.27	21.01
France								
Sales	80.87	—	80.87	83.22	1.76	83.01	84.02	89.44
Royalties	(10.68)	—	(10.67)	(11.17)	(0.73)	(11.15)	(11.72)	(11.60)
Transportation	(3.34)	—	(3.34)	(5.51)	—	(5.49)	(3.17)	(2.59)
Operating	(16.78)	—	(16.78)	(15.62)	—	(15.57)	(13.71)	(13.56)
Operating netback	50.07	—	50.08	50.92	1.03	50.80	55.42	61.69
General and administration			(5.01)			(3.91)	(3.71)	(3.51)
Current income taxes			(5.16)			(5.45)	(0.86)	(3.74)
Fund flows from operations netback			39.91			41.44	50.85	54.44
Netherlands								
Sales	73.51	5.57	33.88	72.44	6.16	37.37	65.77	58.44
Royalties	—	(0.03)	(0.17)	—	(0.08)	(0.49)	(0.67)	(1.12)
Operating	—	(2.21)	(13.11)	—	(1.79)	(10.64)	(8.40)	(9.40)
Operating netback	73.51	3.33	20.60	72.44	4.29	26.24	56.70	47.92
General and administration			(1.03)			(0.88)	(0.88)	(0.69)
Current income taxes			15.05			1.31	(9.31)	(5.83)
Fund flows from operations netback			34.62			26.67	46.51	41.40
Germany								
Sales	77.58	4.96	39.14	80.22	5.64	45.75	62.74	61.47
Royalties	(2.21)	(0.32)	(1.99)	(3.75)	(0.73)	(4.20)	(3.41)	(4.94)
Transportation	(14.56)	(0.08)	(3.27)	(12.43)	(0.20)	(4.09)	(4.16)	(4.79)
Operating	(30.08)	(3.99)	(25.14)	(25.64)	(2.99)	(19.93)	(18.95)	(17.18)
Operating netback	30.73	0.57	8.74	38.40	1.72	17.53	36.22	34.56
General and administration			(6.64)			(6.75)	(6.61)	(5.52)
Fund flows from operations netback			2.10			10.78	29.61	29.04
Ireland								
Sales	—	5.61	33.65	—	6.13	36.81	66.91	61.12
Transportation	—	(0.26)	(1.55)	—	(0.26)	(1.57)	(1.40)	(1.53)
Operating	—	(0.73)	(4.40)	—	(0.73)	(4.39)	(5.64)	(4.58)
Operating netback	—	4.62	27.70	—	5.14	30.85	59.87	55.01
General and administration			(0.75)			(0.88)	(2.55)	(2.50)
Fund flows from operations netback			26.95			29.97	57.32	52.51

	Q4 2019			2019			Q4 2018	2018
	Liquids \$/bbl	Natural Gas \$/mcf	Total \$/boe	Liquids \$/bbl	Natural Gas \$/mcf	Total \$/boe	Total \$/boe	Total \$/boe
Australia								
Sales	88.35	—	88.35	93.33	—	93.33	97.19	95.11
Operating	(34.09)	—	(34.09)	(25.20)	—	(25.20)	(38.92)	(33.57)
PRRT ⁽¹⁾	(5.87)	—	(5.87)	(13.13)	—	(13.13)	5.98	(3.04)
Operating netback	48.39	—	48.39	55.00	—	55.00	64.25	58.50
General and administration			(5.97)			(2.50)	(3.44)	(3.10)
Current income taxes			(2.00)			(4.25)	(0.53)	(4.16)
Fund flows from operations netback			40.42			48.25	60.28	51.24
United States								
Sales	54.34	1.73	43.77	54.33	2.15	44.17	44.85	52.90
Royalties	(12.55)	(0.44)	(10.17)	(13.43)	(0.56)	(10.96)	(12.43)	(13.85)
Operating	(9.81)	(1.46)	(9.56)	(9.92)	(1.43)	(9.59)	(8.73)	(8.83)
Operating netback	31.98	(0.17)	24.04	30.98	0.16	23.62	23.69	30.22
General and administration			(4.01)			(4.43)	(4.28)	(8.67)
Fund flows from operations netback			20.03			19.19	19.41	21.55
Total Company								
Sales	62.46	3.61	44.00	65.73	3.58	46.12	48.90	52.95
Realized hedging gain (loss)	2.60	0.42	2.57	1.78	0.49	2.30	(3.03)	(3.51)
Royalties	(8.03)	(0.08)	(4.60)	(7.72)	(0.06)	(4.47)	(4.70)	(4.80)
Transportation	(2.38)	(0.17)	(1.76)	(2.77)	(0.16)	(1.98)	(1.81)	(1.64)
Operating	(14.94)	(1.60)	(12.52)	(14.68)	(1.44)	(12.01)	(12.04)	(11.26)
PRRT ⁽¹⁾	(0.30)	—	(0.16)	(1.27)	—	(0.71)	0.26	(0.15)
Operating netback	39.41	2.18	27.53	41.07	2.41	29.25	27.58	31.59
General and administration			(1.88)			(1.61)	(1.37)	(1.64)
Interest expense			(2.17)			(2.22)	(2.23)	(2.30)
Realized foreign exchange loss			0.23			(0.14)	0.63	0.01
Other income			0.03			0.21	0.03	0.03
Corporate income taxes			0.66			(0.72)	(0.85)	(1.22)
Fund flows from operations netback			24.40			24.77	23.79	26.47

⁽¹⁾ Vermilion considers Australian PRRT to be an operating item and, accordingly, has included PRRT in the calculation of operating netbacks. Current income taxes presented above excludes PRRT.

Supplemental Table 2: Hedges

The prices in these tables may represent the weighted averages for several contracts with foreign currency amounts translated to the disclosure currency using forward rates as at the month-end date. The weighted average price for the portfolio of options listed below may not have the same payoff profile as the individual contracts. As such, the presentation of the weighted average prices is purely for indicative purposes.

The following tables outline Vermilion's outstanding risk management positions as at December 31, 2019:

	Unit	Currency	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
Dated Brent										
Q1 2020	bbl	USD	3,000	62.25	3,000	67.39	3,000	55.58	—	—
Q2 2020	bbl	USD	3,000	62.25	3,000	67.39	3,000	55.58	—	—
WTI										
Q1 2020	bbl	USD	9,750	54.18	6,000	60.95	9,750	46.23	1,500	59.17
Q2 2020	bbl	USD	7,250	53.07	4,000	60.23	7,250	44.86	—	—
Q3 2020	bbl	USD	500	57.00	500	61.25	500	52.00	—	—
Q4 2020	bbl	USD	500	57.00	500	61.25	500	52.00	—	—
AECO										
Q1 2020	mcf	CAD	10,426	1.58	10,426	2.56	—	—	—	—
Q2 2020	mcf	CAD	—	—	—	—	—	—	10,426	1.39
Q3 2020	mcf	CAD	—	—	—	—	—	—	10,426	1.39
Q4 2020	mcf	CAD	—	—	—	—	—	—	3,513	1.39
AECO Basis (AECO less NYMEX Henry Hub)										
Q1 2020	mcf	USD	—	—	—	—	—	—	32,500	(0.94)
Q2 2020	mcf	USD	—	—	—	—	—	—	52,500	(1.12)
Q3 2020	mcf	USD	—	—	—	—	—	—	50,000	(1.12)
Q4 2020	mcf	USD	—	—	—	—	—	—	36,739	(1.11)
Q1 2021	mcf	USD	—	—	—	—	—	—	30,000	(1.11)
Q2 2021	mcf	USD	—	—	—	—	—	—	45,000	(1.08)
Q3 2021	mcf	USD	—	—	—	—	—	—	45,000	(1.08)
Q4 2021	mcf	USD	—	—	—	—	—	—	35,054	(1.09)
Q1 2022	mcf	USD	—	—	—	—	—	—	30,000	(1.10)
Q2 2022	mcf	USD	—	—	—	—	—	—	35,000	(1.09)
Q3 2022	mcf	USD	—	—	—	—	—	—	35,000	(1.09)
Q4 2022	mcf	USD	—	—	—	—	—	—	11,793	(1.09)
NYMEX Henry Hub										
Q1 2020	mcf	USD	10,000	2.75	10,000	3.10	10,000	2.25	—	—

	Unit	Currency	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
NBP										
Q1 2020	mcf	EUR	49,135	5.27	49,135	5.83	49,135	3.98	—	—
Q2 2020	mcf	EUR	41,765	5.21	41,765	5.53	41,765	3.83	—	—
Q3 2020	mcf	EUR	41,765	5.21	41,765	5.52	41,765	3.83	—	—
Q4 2020	mcf	EUR	61,419	5.28	63,875	5.77	61,419	3.90	—	—
Q1 2021	mcf	EUR	54,048	5.44	56,505	5.85	54,048	3.94	—	—
Q2 2021	mcf	EUR	46,678	5.42	46,678	5.80	46,678	3.92	—	—
Q3 2021	mcf	EUR	46,678	5.42	46,678	5.77	46,678	3.92	—	—
Q4 2021	mcf	EUR	54,048	5.44	54,048	5.72	54,048	3.94	—	—
Q1 2022	mcf	EUR	19,654	5.42	19,654	6.30	19,654	3.79	—	—
Q2 2022	mcf	EUR	12,284	5.33	12,284	6.03	12,284	3.60	—	—
NBP Basis (NBP less NYMEX Henry Hub)										
Q1 2020	mcf	USD	17,500	2.74	17,500	3.99	—	—	—	—
Q2 2020	mcf	USD	15,000	2.61	15,000	3.98	—	—	—	—
Q3 2020	mcf	USD	15,000	2.61	15,000	3.98	—	—	—	—
Q4 2020	mcf	USD	10,000	3.24	10,000	3.98	—	—	—	—
TTF										
Q1 2020	mcf	EUR	7,370	5.37	7,370	6.25	7,370	3.81	—	—
Q2 2020	mcf	EUR	13,512	5.36	9,827	6.15	13,512	3.73	4,913	5.54
Q3 2020	mcf	EUR	13,512	5.36	9,827	6.15	13,512	3.73	3,258	5.45
Q4 2020	mcf	EUR	7,370	5.37	7,370	6.25	7,370	3.81	—	—
TTF Basis (TTF less NYMEX Henry Hub)										
Q2 2020	mcf	USD	2,500	3.50	2,500	4.00	—	—	5,000	3.21
Q3 2020	mcf	USD	2,500	3.50	2,500	4.00	—	—	5,000	3.21
Cross Currency Interest Rate			Receive Notional Amount		Receive Rate		Pay Notional Amount		Pay Rate	
Swap	Jan 2020 - Mar 2025		300,000,000	USD	5.625%		265,048,910	EUR	3.275%	
Swap	Q1 2020		1,735,895,470	USD	LIBOR + 1.70%		2,304,900,000	CAD	CDOR + 1.25%	
VET Equity Swaps							Initial Share Price		Share Volume	
Swap	Jan 2020 - Sep 2021						20.9788	CAD	2,250,000	
Swap	Jan 2020 - Oct 2021						22.4587	CAD	1,500,000	

The following sold option instruments allow the counterparties, at the specified date, to enter into a derivative instrument contract with Vermilion at the detailed terms:

Period if Option Exercised	Unit	Currency	Option Expiration Date	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
Dated Brent											
Feb 2020 - Jan 2021	bbl	USD	28-Jan-20	—	—	—	—	—	—	500	63.00
Feb 2020 - Jan 2021	bbl	USD	31-Jan-20	—	—	—	—	—	—	3,000	62.00
Mar 2020 - Feb 2021	bbl	USD	28-Feb-20	—	—	—	—	—	—	4,500	62.71
Apr 2020 - Mar 2021	bbl	USD	31-Mar-20	—	—	—	—	—	—	3,500	63.32
Apr 2020 - Mar 2021	bbl	USD	31-Mar-20	1,000	64.00	1,000	69.00	1,000	59.00	—	—
May 2020 - Apr 2021	bbl	USD	30-Apr-20	—	—	—	—	—	—	4,000	62.63
NBP											
Oct 2020 - Jun 2022	mcf	EUR	30-Jun-20	—	—	—	—	—	—	2,457	5.86
Jan 2021 - Sep 2022	mcf	EUR	30-Jun-20	—	—	—	—	—	—	2,457	5.86
Jan 2021 - Sep 2022	mcf	USD	30-Jun-20	—	—	—	—	—	—	2,457	6.45
Jan 2022 - Dec 2022	mcf	USD	30-Jun-20	—	—	—	—	—	—	9,827	6.45
Oct 2020 - Jun 2022	mcf	EUR	30-Sep-20	—	—	—	—	—	—	2,457	6.15

Supplemental Table 3: Capital Expenditures and Acquisitions

By classification (\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Drilling and development	97,114	117,123	160,359	486,677	503,842
Exploration and evaluation	3,511	10,756	3,221	36,487	14,372
Capital expenditures	100,625	127,879	163,580	523,164	518,214

Acquisitions	9,165	4,657	(31,314)	38,472	276,308
Shares issued for acquisition	—	—	—	—	1,235,221
Contingent consideration	—	—	2	—	2
Long-term debt net of working capital assumed	—	—	34,005	—	247,898
Acquisitions	9,165	4,657	2,689	38,472	1,759,425

By category (\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Drilling, completion, new well equip and tie-in, workovers	72,515	93,681	151,511	411,390	434,875
Production equipment and facilities	29,221	28,722	9,166	87,711	62,496
Seismic, studies, land and other	(1,111)	5,476	2,903	24,063	20,843
Capital expenditures	100,625	127,879	163,580	523,164	518,214
Acquisitions	9,165	4,657	2,689	38,472	1,759,425
Total capital expenditures and acquisitions	109,790	132,536	166,269	561,636	2,277,639

Capital expenditures by country (\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Canada	66,643	69,963	90,211	293,744	277,857
France	8,745	18,139	17,008	74,641	79,758
Netherlands	9,651	3,028	2,454	23,605	17,483
Germany	5,177	4,229	4,580	21,684	15,806
Ireland	923	354	140	1,372	224
Australia	6,452	2,995	43,760	30,550	75,638
United States	3,132	21,064	2,881	57,196	40,837
Corporate	(98)	8,107	2,546	20,372	10,611
Total capital expenditures	100,625	127,879	163,580	523,164	518,214

Acquisitions by country (\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Canada	5,003	1,746	12,233	24,064	1,573,964
Netherlands	—	—	(7,860)	908	(2,087)
Germany	1,456	947	706	7,570	1,665
Ireland	—	—	(5,572)	—	(5,572)
United States	575	1,964	3,674	3,799	191,740
Corporate	2,131	—	(492)	2,131	(285)
Total acquisitions	9,165	4,657	2,689	38,472	1,759,425

In 2019, included in cash expenditures on acquisitions of \$38.5 million is: \$16.0 million net paid to vendors in relation to the purchase of assets from other oil and gas producers; \$4.7 million in asset improvements incurred subsequent to acquisitions for compliance with safety, environmental, and Vermilion's operating standards; \$6.2 million paid to acquire land; \$0.9 million paid to acquire royalty interests, and \$10.6 million relating to the carry component of farm-in arrangements.

Supplemental Table 4: Production

	Q4/19	Q3/19	Q2/19	Q1/19	Q4/18	Q3/18	Q2/18	Q1/18	Q4/17	Q3/17	Q2/17	Q1/17
Canada												
Crude oil & condensate (bbls/d)	27,399	27,682	28,844	29,164	29,557	28,477	17,009	9,272	9,703	9,288	9,205	7,987
NGLs (bbls/d)	7,005	6,632	7,352	6,968	6,816	6,126	5,589	5,106	5,235	4,891	3,745	2,670
Natural gas (mmcf/d)	145.14	145.14	151.87	151.37	146.65	136.77	127.32	106.21	107.91	103.92	93.68	85.74
Total (boe/d)	58,593	58,504	61,507	61,360	60,814	57,397	43,817	32,078	32,923	31,499	28,563	24,947
% of consolidated	61%	60%	60%	59%	60%	59%	55%	46%	45%	46%	43%	38%
France												
Crude oil (bbls/d)	10,264	10,347	9,800	11,342	11,317	11,407	11,683	11,037	11,215	10,918	11,368	10,834
Natural gas (mmcf/d)	—	—	—	0.77	0.82	—	—	—	—	—	—	0.01
Total (boe/d)	10,264	10,347	9,800	11,470	11,454	11,407	11,683	11,037	11,215	10,918	11,368	10,836
% of consolidated	10%	11%	10%	11%	11%	12%	14%	16%	15%	16%	17%	17%
Netherlands												
Condensate (bbls/d)	90	82	100	93	112	84	87	77	105	74	104	76
Natural gas (mmcf/d)	47.99	44.08	52.90	51.51	51.82	44.37	43.49	44.79	55.66	34.90	31.58	39.92
Total (boe/d)	8,088	7,429	8,917	8,677	8,749	7,479	7,335	7,541	9,381	5,890	5,368	6,729
% of consolidated	8%	8%	9%	8%	9%	8%	9%	11%	13%	9%	8%	10%
Germany												
Crude oil (bbls/d)	800	845	1,047	978	913	1,019	1,008	1,078	1,148	1,054	1,047	989
Natural gas (mmcf/d)	15.44	14.54	14.56	16.71	16.94	14.88	14.63	16.19	18.19	20.12	19.86	19.39
Total (boe/d)	3,373	3,269	3,474	3,763	3,736	3,498	3,447	3,777	4,180	4,407	4,357	4,220
% of consolidated	3%	3%	3%	4%	4%	4%	4%	5%	6%	7%	6%	7%
Ireland												
Natural gas (mmcf/d)	42.30	43.21	49.21	51.71	52.03	51.38	56.56	60.87	56.23	49.04	63.81	64.82
Total (boe/d)	7,049	7,202	8,201	8,619	8,672	8,563	9,426	10,144	9,372	8,173	10,634	10,803
% of consolidated	7%	7%	8%	8%	9%	9%	12%	14%	13%	12%	16%	17%
Australia												
Crude oil (bbls/d)	4,548	5,564	6,689	5,862	4,174	4,704	4,132	4,971	4,993	5,473	6,054	6,581
% of consolidated	5%	6%	6%	6%	4%	5%	5%	7%	7%	8%	9%	10%
United States												
Crude oil (bbls/d)	3,161	2,722	2,483	1,742	1,605	1,461	655	574	667	880	747	365
NGLs (bbls/d)	1,156	1,140	754	929	998	714	62	20	43	56	76	24
Natural gas (mmcf/d)	8.20	6.38	7.06	5.89	5.65	4.82	0.40	0.15	0.29	0.64	0.44	0.20
Total (boe/d)	5,683	4,925	4,414	3,653	3,545	2,979	784	618	758	1,043	896	422
% of consolidated	6%	5%	4%	4%	3%	3%	1%	1%	1%	2%	1%	1%
Corporate												
Natural gas (mmcf/d)	1.66	—	—	—	2.86	1.17	—	—	—	—	—	—
Total (boe/d)	276	—	—	—	477	195	—	—	—	—	—	—
% of consolidated	—	—	—	—	—	—	—	—	—	—	—	—
Consolidated												
Liquids (bbls/d)	54,421	55,014	57,071	57,078	55,493	53,991	40,225	32,134	33,109	32,634	32,346	29,526
% of consolidated	56%	57%	55%	55%	55%	56%	50%	46%	45%	48%	48%	46%
Natural gas (mmcf/d)	260.72	253.36	275.60	277.96	276.77	253.38	242.40	228.20	238.28	208.62	209.36	210.07
% of consolidated	44%	43%	45%	45%	45%	44%	50%	54%	55%	52%	52%	54%
Total (boe/d)	97,875	97,239	103,003	103,404	101,621	96,222	80,625	70,167	72,821	67,403	67,240	64,537

	2019	2018	2017	2016	2015	2014
Canada						
Crude oil & condensate (bbls/d)	28,266	21,154	9,051	9,171	11,357	12,491
NGLs (bbls/d)	6,988	5,914	4,144	2,552	2,301	1,233
Natural gas (mmcf/d)	148.35	129.37	97.89	84.29	71.65	55.67
Total (boe/d)	59,979	48,630	29,510	25,771	25,598	23,001
% of consolidated	60%	56%	45%	40%	46%	47%
France						
Crude oil (bbls/d)	10,435	11,362	11,084	11,896	12,267	11,011
Natural gas (mmcf/d)	0.19	0.21	—	0.44	0.97	—
Total (boe/d)	10,467	11,396	11,085	11,970	12,429	11,011
% of consolidated	10%	13%	16%	19%	23%	22%
Netherlands						
Condensate (bbls/d)	91	90	90	88	99	77
Natural gas (mmcf/d)	49.10	46.13	40.54	47.82	44.76	38.20
Total (boe/d)	8,274	7,779	6,847	8,058	7,559	6,443
% of consolidated	8%	9%	10%	13%	14%	13%
Germany						
Crude oil (bbls/d)	917	1,004	1,060	—	—	—
Natural gas (mmcf/d)	15.31	15.66	19.39	14.90	15.78	14.99
Total (boe/d)	3,468	3,614	4,291	2,483	2,630	2,498
% of consolidated	3%	4%	6%	4%	5%	5%
Ireland						
Natural gas (mmcf/d)	46.57	55.17	58.43	50.89	0.03	—
Total (boe/d)	7,762	9,195	9,737	8,482	5	—
% of consolidated	8%	11%	14%	13%	—	—
Australia						
Crude oil (bbls/d)	5,662	4,494	5,770	6,304	6,454	6,571
% of consolidated	6%	5%	8%	10%	12%	13%
United States						
Crude oil (bbls/d)	2,531	1,078	666	393	231	49
NGLs (bbls/d)	996	452	50	29	7	—
Natural gas (mmcf/d)	6.89	2.78	0.39	0.21	0.05	—
Total (boe/d)	4,675	1,992	781	457	247	49
% of consolidated	5%	2%	1%	1%	—	—
Corporate						
Natural gas (mmcf/d)	0.42	1.02	—	—	—	—
Total (boe/d)	70	169	—	—	—	—
% of consolidated	—	—	—	—	—	—
Consolidated						
Liquids (bbls/d)	55,886	45,548	31,915	30,433	32,716	31,432
% of consolidated	56%	52%	47%	48%	60%	63%
Natural gas (mmcf/d)	266.82	250.33	216.64	198.55	133.24	108.85
% of consolidated	44%	48%	53%	52%	40%	37%
Total (boe/d)	100,357	87,270	68,021	63,526	54,922	49,573

Supplemental Table 5: Segmented Financial Results

(\$M)	Three Months Ended December 31, 2019								Total
	Canada	France	Netherlands	Germany	Ireland	Australia	USA	Corporate	
Drilling and development	66,643	8,807	6,571	6,355	923	6,452	3,132	(1,769)	97,114
Exploration and evaluation	—	(62)	3,080	(1,178)	—	—	—	1,671	3,511
Crude oil and condensate sales	167,045	77,781	608	4,491	11	21,872	19,381	—	291,189
NGL sales	8,784	—	—	—	—	—	2,200	—	10,984
Natural gas sales	31,068	—	24,607	7,040	21,813	—	1,304	797	86,629
Sales of purchased commodities	—	—	—	—	—	—	—	74,951	74,951
Royalties	(24,127)	(10,265)	(130)	(587)	—	—	(5,316)	(254)	(40,679)
Revenue from external customers	182,770	67,516	25,085	10,944	21,824	21,872	17,569	75,494	423,074
Purchased commodities	—	—	—	—	—	—	—	(74,951)	(74,951)
Transportation	(10,384)	(3,215)	—	(963)	(1,008)	—	—	—	(15,570)
Operating	(60,931)	(16,142)	(9,758)	(7,405)	(2,854)	(8,438)	(4,996)	(59)	(110,583)
General and administration	(7,424)	(4,821)	(763)	(1,957)	(484)	(1,477)	(2,099)	2,456	(16,569)
PRRT	—	—	—	—	—	(1,453)	—	—	(1,453)
Corporate income taxes	—	(4,966)	11,198	—	—	(495)	—	98	5,835
Interest expense	—	—	—	—	—	—	—	(19,169)	(19,169)
Realized gain on derivative instruments	—	—	—	—	—	—	—	22,712	22,712
Realized foreign exchange gain	—	—	—	—	—	—	—	2,013	2,013
Realized other income	—	—	—	—	—	—	—	253	253
Fund flows from operations	104,031	38,372	25,762	619	17,478	10,009	10,474	8,847	215,592

(\$M)	Year Ended December 31, 2019								Total
	Canada	France	Netherlands	Germany	Ireland	Australia	USA	Corporate	
Total assets	3,088,947	841,875	226,834	261,712	470,316	233,581	421,609	321,246	5,866,120
Drilling and development	293,744	74,579	19,866	10,806	1,372	30,550	57,196	(1,436)	486,677
Exploration and evaluation	—	62	3,739	10,878	—	—	—	21,808	36,487
Crude oil and condensate sales	699,290	326,578	2,411	25,783	27	184,490	63,449	—	1,302,028
NGL sales	33,159	—	—	—	—	—	6,499	—	39,658
Natural gas sales	95,621	121	110,446	31,529	104,247	—	5,416	797	348,177
Sales of purchased commodities	—	—	—	—	—	—	—	221,274	221,274
Royalties	(94,079)	(43,895)	(1,469)	(5,264)	—	—	(18,706)	(253)	(163,666)
Revenue from external customers	733,991	282,804	111,388	52,048	104,274	184,490	56,658	221,818	1,747,471
Purchased commodities	—	—	—	—	—	—	—	(221,274)	(221,274)
Transportation	(41,261)	(21,609)	—	(5,117)	(4,459)	—	—	—	(72,446)
Operating	(242,790)	(61,281)	(32,125)	(24,970)	(12,431)	(49,810)	(16,370)	(301)	(440,078)
General and administration	(23,341)	(15,406)	(2,659)	(8,452)	(2,491)	(4,940)	(7,566)	5,879	(58,976)
PRRT	—	—	—	—	—	(25,947)	—	—	(25,947)
Corporate income taxes	—	(21,431)	3,961	—	—	(8,407)	—	(406)	(26,283)
Interest expense	—	—	—	—	—	—	—	(81,377)	(81,377)
Realized gain on derivative instruments	—	—	—	—	—	—	—	84,219	84,219
Realized foreign exchange loss	—	—	—	—	—	—	—	(4,954)	(4,954)
Realized other income	—	—	—	—	—	—	—	7,700	7,700
Fund flows from operations	426,599	163,077	80,565	13,509	84,893	95,386	32,722	11,304	908,055

Non-GAAP Financial Measures

This MD&A includes references to certain financial measures which do not have standardized meanings and may not be comparable to similar measures presented by other issuers. These financial measures include fund flows from operations, a measure of profit or loss in accordance with IFRS 8 "Operating Segments" (please see Segmented Information in the Notes to the Consolidated Financial Statements) and net debt, a measure of capital in accordance with IAS 1 "Presentation of Financial Statements" (please see Capital Disclosures in the Notes to the Consolidated Financial Statements).

In addition, this MD&A includes financial measures which are not specified, defined, or determined under IFRS and are therefore considered non-GAAP financial measures and may not be comparable to similar measures presented by other issuers. These non-GAAP financial measures include:

Acquisitions: The sum of acquisitions from the Consolidated Statements of Cash Flows, Vermilion common shares issued as consideration, the estimated value of contingent consideration, the amount of acquiree's outstanding long-term debt assumed plus or net of acquired working capital deficit or surplus. We believe that including these components provides a useful measure of the economic investment associated with our acquisition activity.

Capital expenditures: The sum of drilling and development and exploration and evaluation from the Consolidated Statements of Cash Flows. We consider capital expenditures to be a useful measure of our investment in our existing asset base. Capital expenditures are also referred to as E&D capital.

Cash dividends per share: Represents cash dividends declared per share and is a useful measure of the dividends a common shareholder was entitled to during the period.

Covenants: The financial covenants on our revolving credit facility contain non-GAAP measures. The definitions for these financial covenants are included in Financial Position Review.

Diluted shares outstanding: The sum of shares outstanding at the period end plus outstanding awards under the VIP, based on current estimates of future performance factors and forfeiture rates.

Free cash flow: Represents fund flows from operations in excess of capital expenditures. We use free cash flow to determine the funding available for investing and financing activities, including payment of dividends, repayment of long-term debt, reallocation to existing business units, and deployment into new ventures. We also assess free cash flow as a percentage of fund flows from operations, which is a measure of the percentage of fund flows from operations that is retained for incremental investing and financing activities.

Fund flows from operations per basic and diluted share: Management assesses fund flows from operations on a per share basis as we believe this provides a measure of our operating performance after taking into account the issuance and potential future issuance of Vermilion common shares. Fund flows from operations per basic share is calculated by dividing fund flows from operations by the basic weighted average shares outstanding as defined under IFRS. Fund flows from operations per diluted share is calculated by dividing fund flows from operations by the sum of basic weighted average shares outstanding and incremental shares issuable under the equity based compensation plans as determined using the treasury stock method.

Net dividends: We define net dividends as dividends declared less proceeds received for the issuance of shares pursuant to the Dividend Reinvestment Plan. Management monitors net dividends and net dividends as a percentage of fund flows from operations to assess our ability to pay dividends.

Operating netback: Sales less royalties, operating expense, transportation costs, PRRT, and realized hedging gains and losses presented on a per unit basis. Management assesses operating netback as a measure of the profitability and efficiency of our field operations. In contrast, fund flows from operations netback also includes general and administration expense, corporate income taxes, and interest. Fund flows from operations netback is used by management to assess the profitability of our business units and Vermilion as a whole.

Payout: We define payout as net dividends plus drilling and development costs, exploration and evaluation costs, and asset retirement obligations settled. Management uses payout and payout as a percentage of fund flows from operations (also referred to as the **payout or sustainability ratio**) to assess the amount of cash distributed back to shareholders and re-invested in the business for maintaining production and organic growth.

Return on capital employed (ROCE): ROCE is a measure that we use to analyze our profitability and the efficiency of our capital allocation process. ROCE is calculated by dividing net earnings before interest and taxes ("EBIT") by average capital employed over the preceding twelve months. Capital employed is calculated as total assets less current liabilities while average capital employed is calculated using the balance sheets at the beginning and end of the twelve-month period.

The following tables reconcile net dividends, payout, and diluted shares outstanding from their most directly comparable GAAP measures as presented in our financial statements:

(\$M)	Q4 2019	Q3 2019	Q4 2018	2019	2018
Dividends declared	107,702	107,176	105,310	427,311	388,111
Shares issued for the Dividend Reinvestment Plan	(10,200)	(8,860)	(5,115)	(34,937)	(49,051)
Net dividends	97,502	98,316	100,195	392,374	339,060
Drilling and development	97,114	117,123	160,359	486,677	503,842
Exploration and evaluation	3,511	10,756	3,221	36,487	14,372
Asset retirement obligations settled	7,352	3,586	6,562	19,442	15,765
Payout	205,479	229,781	270,337	934,980	873,039
% of fund flows from operations	95%	106%	122%	103%	104%

('000s of shares)	Q4 2019	Q3 2019	Q4 2018
Shares outstanding	156,290	155,505	152,704
Potential shares issuable pursuant to the VIP	3,622	3,755	3,469
Diluted shares outstanding	159,912	159,260	156,173

The following tables reconciles the calculation of return on capital employed:

(\$M)	Twelve Months Ended	
	Dec 31, 2019	Dec 31, 2018
Net earnings	32,799	271,650
Taxes	108,326	83,048
Interest expense	81,377	72,759
EBIT	222,502	427,457
Average capital employed	5,578,691	4,659,566
Return on capital employed	4%	9%

Management's Report to Shareholders

Management's Responsibility for Financial Statements

The accompanying consolidated financial statements of Vermilion Energy Inc. are the responsibility of management and have been approved by the Board of Directors of Vermilion Energy Inc. The consolidated financial statements have been prepared in accordance with the accounting policies detailed in the notes to the consolidated financial statements and are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. Where necessary, management has made informed judgments and estimates of transactions that were not yet completed at the balance sheet date. Financial information throughout the Annual Report is consistent with the consolidated financial statements.

Management ensures the integrity of the consolidated financial statements by maintaining high-quality systems of internal control. Procedures and policies are designed to provide reasonable assurance that assets are safeguarded and transactions are properly recorded, and that the financial records are reliable for preparation of the consolidated financial statements. Deloitte LLP, Vermilion's Independent Registered Public Accounting Firm, have conducted an audit of the consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and have provided their report.

The Board of Directors is responsible for ensuring that management fulfills its responsibility for financial reporting and internal control. The Board carries out this responsibility principally through the Audit Committee, which is appointed by the Board and is comprised entirely of independent Directors. The Committee meets periodically with management and Deloitte LLP to satisfy itself that each party is properly discharging its responsibilities and to review the consolidated financial statements, Management's Discussion and Analysis and the Report of the Independent Registered Public Accounting Firm before they are presented to the Board of Directors.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining an adequate system of internal control over financial reporting. Management, under the supervision and with the participation of the principal executive officer and principle financial officer, conducted an evaluation of the effectiveness of the system of internal control over financial reporting based on the criteria established in *"Internal Control - Integrated Framework (2013)"* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has assessed the effectiveness of Vermilion's internal control over financial reporting as defined in Rule 13a-15(f) and 15d-15(f) under the US Securities Exchange Act of 1934 and as defined in Canada by National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings. Management concluded that Vermilion's internal control over financial reporting was effective as of December 31, 2019.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and even those systems determined to be effective can provide only reasonable assurance with respect to the financial statement preparation and presentation.

The effectiveness of Vermilion's internal control over financial reporting as of December 31, 2019 has been audited by Deloitte LLP, the Company's Independent Registered Public Accounting Firm, who also audited the Company's consolidated financial statements for the year ended December 31, 2019.

(*"Anthony Marino"*)

Anthony Marino
President & Chief Executive Officer
March 5, 2020

(*"Lars Glemser"*)

Lars Glemser
Vice President & Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Vermilion Energy Inc.:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Vermilion Energy Inc. and subsidiaries (the "Company") as of December 31, 2019, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Company and our report dated March 5, 2020, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report to Shareholders. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

/s/ Deloitte LLP

Chartered Professional Accountants
Calgary, Canada
March 5, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Vermilion Energy Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Vermilion Energy Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of net earnings and comprehensive (loss) income, consolidated statements of cash flows, and consolidated statements of changes in shareholders' equity for the years then ended and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and its financial performance and its cash flows for the years then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 5, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Deferred Taxes - Refer to Notes 2 and 11 to the Financial Statements

Critical Audit Matter Description

The Company recognizes deferred income taxes for differences between the financial statement and tax basis of assets and liabilities at enacted or substantively enacted statutory tax rates that are expected to be in effect when the temporary differences are expected to reverse. Deferred income tax assets are reduced to the amounts expected to be realized based on forecasts of future taxable profits, specifically forecasts of future revenue (future commodity price forecasts and estimates of reserves). The Company recorded a deferred income tax asset for the Canada and Ireland segments primarily arising from past taxable losses in these jurisdictions.

In order to determine whether it is probable that the deferred income tax assets in the Canada and Ireland segments will be realized, management makes assumptions related to the forecasts of future taxable income, specifically forecasts of future revenue (future commodity price forecasts and estimates of reserves). The Company's management engages an expert, an independent engineering firm ("management's expert"), to determine the estimates of reserves. As such, auditing the probability of the deferred income tax assets being realized and management's future commodity price forecasts and estimates of reserves involved a high degree of auditor judgement as the estimations made by management contain significant measurement uncertainty. This resulted in an increased extent of audit effort, which included the need to involve specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to assessing the probability of the deferred income tax assets being realized and management's forecasts of taxable profit, specifically forecasts of future revenue (future commodity price forecasts and estimates of reserves) to evaluate the deferred income tax assets in the Canada and Ireland segments included the following, among others:

- Evaluated the effectiveness of relevant controls, including those over the determination of the forecasts of future revenue.
- Evaluated management's ability to accurately forecast future revenue by comparing management's assumptions to historical data and available market trends.
- Evaluated the reasonableness of management's forecasts of future revenue by:
 - Evaluating whether management's estimates of future commodity price forecasts and estimates of reserves were consistent with the requirements of IAS 12 relating to the probability of forecasted future revenue and the length of the forecast period.
 - Evaluating the experience, qualifications and objectivity of management's expert.
 - Performing analytical procedures on the estimates of reserves developed by management's expert.
- With the assistance of fair value specialists, evaluated the future commodity price forecasts used in the estimate of future cash flow by:
 - Comparing the forecasts prepared by management's expert to third party forecasts.
 - Comparing the differential between the index commodity prices and the future commodity prices to actual historical results.
- With the assistance of an income tax specialist, evaluated the probability of the deferred tax asset being realized.

/s/ Deloitte LLP

Chartered Professional Accountants
Calgary, Canada
March 5, 2020

We have served as the Company's auditor since 2000.

Consolidated Financial Statements

Consolidated Balance Sheet

thousands of Canadian dollars

	Note	December 31, 2019	December 31, 2018
Assets			
Current			
Cash and cash equivalents	19	29,028	26,809
Accounts receivable		211,409	260,322
Crude oil inventory		29,389	27,751
Derivative instruments	9	55,645	95,667
Prepaid expenses		22,210	19,328
Total current assets		347,681	429,877
Derivative instruments	9	20,127	1,215
Deferred taxes	11	196,543	219,411
Exploration and evaluation assets	7	286,149	303,295
Capital assets	6	5,015,620	5,316,873
Total assets		5,866,120	6,270,671
Liabilities			
Current			
Accounts payable and accrued liabilities		312,442	449,651
Dividends payable	13	35,947	35,122
Derivative instruments	9	62,405	41,016
Income taxes payable		5,416	37,410
Total current liabilities		416,210	563,199
Derivative instruments	9	24,358	17,527
Long-term debt	12	1,924,665	1,796,207
Lease obligations	10	93,072	108,189
Asset retirement obligations	8	618,201	650,164
Deferred taxes	11	336,309	318,134
Total liabilities		3,412,815	3,453,420
Shareholders' Equity			
Shareholders' capital	13	4,119,031	4,008,828
Contributed surplus		75,735	78,478
Accumulated other comprehensive income		49,578	118,182
Deficit		(1,791,039)	(1,388,237)
Total shareholders' equity		2,453,305	2,817,251
Total liabilities and shareholders' equity		5,866,120	6,270,671

Approved by the Board

(Signed "Catherine L. Williams")

Catherine L. Williams, Director

(Signed "Anthony Marino")

Anthony Marino, Director

Consolidated Statements of Net Earnings and Comprehensive (Loss) Income

thousands of Canadian dollars, except share and per share amounts

		Year Ended	
	Note	Dec 31, 2019	Dec 31, 2018
Revenue			
Petroleum and natural gas sales		1,689,863	1,678,117
Royalties		(163,666)	(152,167)
Sales of purchased commodities		221,274	—
Petroleum and natural gas revenue		1,747,471	1,525,950
Expenses			
Purchased commodities		221,274	—
Operating	19	440,078	357,014
Transportation		72,446	51,887
Equity based compensation	15	64,233	60,746
(Gain) loss on derivative instruments	9	(26,792)	1,932
Interest expense		81,377	72,759
General and administration	19	58,976	51,929
Foreign exchange (gain) loss		(52,271)	63,000
Other income		(6,875)	(82)
Accretion	8	32,667	31,219
Depletion and depreciation	6, 7	675,177	609,056
Impairment	6	46,056	—
Gain on business combination	5	—	(128,208)
		1,606,346	1,171,252
Earnings before income taxes		141,125	354,698
Taxes			
	11		
Deferred		56,096	39,471
Current		52,230	43,577
		108,326	83,048
Net earnings		32,799	271,650
Other comprehensive (loss) income			
Currency translation adjustments		(81,042)	46,353
Unrealized gain on derivatives designated as cash flow hedges, net of tax	9, 12	11,295	—
Unrealized gain on derivatives designated as net investment hedges, net of tax	9, 12	1,143	—
Comprehensive (loss) income		(35,805)	318,003
Net earnings per share			
	16		
Basic		0.21	1.93
Diluted		0.21	1.91
Weighted average shares outstanding ('000s)			
	16		
Basic		154,736	140,619
Diluted		156,095	142,335

Consolidated Statements of Cash Flows

thousands of Canadian dollars

		Year Ended	
	Note	Dec 31, 2019	Dec 31, 2018
Operating			
Net earnings		32,799	271,650
Adjustments:			
Accretion	8	32,667	31,219
Depletion and depreciation	6, 7	675,177	609,056
Impairment	6	46,056	—
Gain on business combinations	5	—	(128,208)
Unrealized loss (gain) on derivative instruments	9	57,427	(109,326)
Equity based compensation	15	64,233	60,746
Unrealized foreign exchange (gain) loss		(57,225)	63,243
Unrealized other expense		825	801
Deferred taxes	11	56,096	39,471
Asset retirement obligations settled	8	(19,442)	(15,765)
Changes in non-cash operating working capital	19	(65,148)	(6,876)
Cash flows from operating activities		823,465	816,011
Investing			
Drilling and development	6	(486,677)	(503,842)
Exploration and evaluation	7	(36,487)	(14,372)
Acquisitions	5	(38,472)	(276,308)
Changes in non-cash investing working capital	19	(57,072)	55,491
Cash flows used in investing activities		(618,708)	(739,031)
Financing			
Borrowings on the revolving credit facility	12	214,895	251,155
Payments on lease obligations	10	(26,354)	(18,884)
Cash dividends	13	(391,549)	(330,194)
Cash flows used in financing activities		(203,008)	(97,923)
Foreign exchange gain on cash held in foreign currencies		470	1,191
Net change in cash and cash equivalents		2,219	(19,752)
Cash and cash equivalents, beginning of year		26,809	46,561
Cash and cash equivalents, end of year	19	29,028	26,809
Supplementary information for cash flows from operating activities			
Interest paid		73,783	70,049
Income taxes paid		84,224	45,228

Consolidated Statements of Changes in Shareholders' Equity

thousands of Canadian dollars

	Note	Year Ended	
		Dec 31, 2019	Dec 31, 2018
Shareholders' capital	13		
Balance, beginning of year		4,008,828	2,650,706
Shares issued for acquisition		—	1,234,676
Shares issued for the Dividend Reinvestment Plan		34,937	49,051
Vesting of equity based awards		51,108	54,057
Equity based compensation		15,868	12,565
Share-settled dividends on vested equity based awards		8,290	7,773
Balance, end of year		4,119,031	4,008,828
Contributed surplus			
Balance, beginning of year		78,478	84,354
Equity based compensation		48,365	48,181
Vesting of equity based awards		(51,108)	(54,057)
Balance, end of year		75,735	78,478
Accumulated other comprehensive income			
Balance, beginning of year		118,182	71,829
Currency translation adjustments		(81,042)	46,353
Gain on derivatives designated as cash flow hedges, net of tax	9, 12	19,659	—
Amount reclassified from cash flow hedge reserve to net earnings, net of tax		(8,364)	—
Loss on derivatives designated as net investment hedges, net of tax	9, 12	(3,513)	—
Amount reclassified from net investment hedge reserve to net earnings, net of tax		4,656	—
Balance, end of year		49,578	118,182
Deficit			
Balance, beginning of year		(1,388,237)	(1,264,003)
Net earnings		32,799	271,650
Dividends declared	13	(427,311)	(388,111)
Share-settled dividends on vested equity based awards		(8,290)	(7,773)
Balance, end of year		(1,791,039)	(1,388,237)
Total shareholders' equity		2,453,305	2,817,251

Description of equity reserves

Shareholders' capital

Represents the recognized amount for common shares when issued, net of equity issuance costs and deferred taxes.

Contributed surplus

Represents the recognized value of unvested equity based awards that will be settled in shares. Once vested, the value of the awards are transferred to shareholders' capital.

Accumulated other comprehensive income

Represents currency translation adjustments and changes in the fair value of derivative financial instruments in designated hedging relationships.

Currency translation adjustments result from translating the balance sheets of subsidiaries with a foreign functional currency to Canadian dollars at period-end rates. These amounts may be reclassified to net earnings if there is a disposal or partial disposal of a subsidiary.

The effective portion of the change in fair value related to cash flow and net investment hedges are recognized in other comprehensive income, net of tax and reclassified to the consolidated statement of net earnings in the same period in which the transaction associated with the hedged item occurs. Upon discontinuation of hedge accounting, the reserve amounts will be reclassified to net earnings.

Deficit

Represents the cumulative net earnings less distributed earnings of Vermilion Energy Inc.

Notes to the Consolidated Financial Statements for the year ended December 31, 2019 and 2018

tabular amounts in thousands of Canadian dollars, except share and per share amounts

1. Basis of presentation

Vermilion Energy Inc. and its subsidiaries (the “Company” or “Vermilion”) are engaged in the business of petroleum and natural gas exploration, development, acquisition, and production.

Vermilion was incorporated in Canada and the Company’s registered office and principal place of business is located at 3500, 520, 3rd Avenue SW, Calgary, Alberta, Canada.

These consolidated financial statements were approved and authorized for issuance by Vermilion’s Board of Directors on March 5, 2020.

2. Significant accounting policies

Accounting framework

The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

Principles of consolidation

The consolidated financial statements include the accounts of Vermilion Energy Inc. and its subsidiaries. Vermilion’s subsidiaries include entities in each of the jurisdictions that Vermilion operates as described in Note 4 (Segmented information) including: Canada, France, Netherlands, Germany, Ireland, Australia, the United States, and Central and Eastern Europe (Hungary, Slovakia, and Croatia). Vermilion Energy Inc. directly or indirectly through holding companies owns all of the voting securities of each material subsidiary. Transactions between Vermilion Energy Inc. and its subsidiaries have been eliminated.

Vermilion accounts for joint operations by recognizing the Company’s share of assets, liabilities, income, and expenses.

Exploration and evaluation assets

Vermilion classifies costs as exploration and evaluation (“E&E”) assets when they relate to exploring and evaluating an area for which the Company has the license or right to explore and extract resources. E&E costs may include: geological and geophysical costs; land and license acquisition costs; and costs for the drilling, completion, and testing of exploration wells.

E&E costs are reclassified to capital assets if the technical feasibility and commercial viability of the area can be determined. E&E assets are assessed for impairment prior to any reclassification. The technical feasibility and commercial viability of extracting the reserves is considered to be determinable when proved and probable reserves are identified.

Costs incurred prior to the acquisition of the legal rights to explore an area are expensed as incurred. If reserves are not found within the license area or the area is abandoned, the related E&E costs are depreciated over a period not greater than five years. If an exploration license expires prior to the commencement of exploration activities, the cost of the exploration license is written off through depreciation in the year of expiration.

Capital assets

Vermilion recognizes capital assets at cost less accumulated depletion, depreciation, and impairment losses. Costs include directly attributable costs incurred for the drilling, completion, and tie-in of wells and the construction of production and processing facilities.

When components of capital assets are replaced, disposed of, or no longer in use, they are derecognized. Gains and losses on disposal of capital assets are determined by comparing the proceeds of disposal compared to the carrying amount.

Depletion and depreciation

Capital assets are grouped into depletion units, which are groups of assets within a specific production area that have similar economic lives. Depletion units represent the lowest level of disaggregation for which costs are accumulated for the purposes of calculating depletion and depreciation.

The net carrying value of each depletion unit is depleted using the unit of production method by reference to the ratio of production in the period to the total proved and probable reserves, taking into account the future development costs necessary to bring the applicable reserves into production.

For the purposes of the depletion calculations, oil and gas reserves are converted to a common unit of measure on the basis of their relative energy content based on a conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent.

Impairment of capital assets and exploration and evaluation assets

Depletion units are aggregated into cash generating units ("CGUs") for impairment testing. CGUs are the lowest level for which there are identifiable cash inflows that are largely independent of cash inflows of other groups of assets. CGUs are reviewed for indicators of potential impairment at each reporting date.

E&E assets are tested for impairment when reclassified to capital assets or when indicators of potential impairment are identified. E&E assets are reviewed for indicators of potential impairment at each reporting date. If indicators of potential impairment are identified, E&E assets are tested for impairment as part of the CGU attributable to the jurisdiction in which the exploration area resides.

If an indicator of potential impairment exists, the CGU's carrying value is compared to its recoverable amount. A CGU's recoverable amount is the higher of its fair value less costs of disposal and its value-in-use. If the carrying amount of a CGU exceeds its recoverable amount, an impairment loss is recognized to reduce the carrying value of the CGU to its recoverable amount.

If an impairment loss has been recognized in a prior period, an assessment is performed at each reporting date to determine if there are indicators that the circumstances which led to the impairment loss have reversed. If the change in circumstances results in the recoverable amount being higher than the carrying value after the impairment loss, then the impairment loss (net of depletion that would otherwise have been recorded) is reversed.

Lease obligations and right-of-use assets

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At the lease commencement date, a lease obligation is recognized at the present value of future lease payments, typically using the applicable incremental borrowing rate. A corresponding right-of-use asset is recognized at the amount of the lease obligation, adjusted for lease incentives received and initial direct costs. Vermilion does not recognize leases for short-term leases with a lease term of 12 months or less, or leases for low-value assets.

Payments are applied against the lease obligation and interest expense is recognized on the lease obligations using the effective interest rate method. Depreciation is recognized on the right-of-use asset over the lease term.

Cash and cash equivalents

Cash and cash equivalents include cash on deposit with financial institutions and guaranteed investment certificates.

Crude oil inventory

Crude oil inventory is valued at the lower of cost or net realizable value. The cost of crude oil inventory produced includes related operating expense, royalties, and depletion determined on a weighted-average basis.

Asset retirement obligations

Vermilion recognizes a provision for asset retirement obligations when an event occurs giving rise to an obligation of uncertain timing or amount. Asset retirement obligations are recognized on the consolidated balance sheet as a long-term liability with a corresponding increase to E&E or capital assets.

Asset retirement obligations reflect the present value of estimated future settlement costs. The discount rate used to calculate the present value is specific to the jurisdiction the obligation relates to and is reflective of current market assessment of the time value of money and risks specific to the liabilities that have not been reflected in the cash flow estimates.

Asset retirement obligations are remeasured at each reporting period to reflect changes in market rates and estimated future settlement costs. Asset retirement obligations are increased each reporting period to reflect the passage of time with a corresponding charge to accretion expense.

Revenue recognition

Revenue associated with the sale of crude oil and condensate, natural gas, and natural gas liquids is measured based on the consideration specified in contracts with customers.

Revenue from contracts with customers is recognized when or as Vermilion satisfies a performance obligation by transferring control of crude oil and condensate, natural gas, or natural gas liquids to a customer at contractually specified transfer points. This transfer coincides with title passing to the customer and the customer taking physical possession of the commodity. Vermilion principally satisfies its performance obligations at a point in time and the amounts of revenue recognized relating to performance obligations satisfied over time are not significant.

Vermilion invoices customers for delivered products monthly and payment occurs shortly thereafter. Vermilion does not have any contracts where the period between the transfer of control of the commodity to the customer and payment by the customer exceeds one year. As a result, Vermilion does not adjust its revenue transactions to reflect significant financing components.

Financial instruments

On initial recognition, financial instruments are measured at fair value. Measurement in subsequent periods depends on the classification of the financial instrument as described below:

- Fair value through profit or loss ("FVTPL"): Financial instruments under this classification include cash and cash equivalents and derivative assets and liabilities.
- Fair value through other comprehensive income ("FVTOCI"): Financial instruments under this classification include derivative assets and liabilities where hedge accounting is applied.
- Amortized cost: Financial instruments under this classification include accounts receivable, accounts payable and accrued liabilities, dividends payable, lease obligations, and long-term debt.

Accounts receivable are measured net of a loss allowance equal to the lifetime expected credit loss.

Hedge accounting

Hedge accounting is applied to financial instruments designated as hedging instruments in qualifying hedging relationships. Qualifying hedge relationships may include cash flow hedges, fair value hedges, and hedges of net investments in foreign operations. The purpose of hedge accounting is to represent the effect of Vermilion's risk management activities to manage exposures arising from specific risks that affect net earnings such as foreign currency risk.

In order to apply hedge accounting, the eligible hedging instrument must be highly effective in offsetting the exposure to changes in the eligible hedged item. This effectiveness is assessed at inception and at the end of each reporting period thereafter. At inception, formal designation and documentation of the hedging relationship, risk management objective and strategy is required for undertaking the hedge.

For cash flow and net investment hedges, gains and losses on the hedging instrument are recognized in the consolidated statement of earnings in the same period in which the transaction associated with the hedged item occurs. Where the hedging instrument is a derivative instrument, a derivative asset or liability is recognized on the balance sheet at fair value (included in "Derivative instruments") with the effective portion of the gain or loss recorded to other comprehensive income. Any gain or loss associated with the ineffective portion of the hedging relationship is recognized in the consolidated statement of net earnings as other income or expense.

If a hedging relationship no longer qualifies for hedge accounting, any gain or loss resulting from the discontinuation of hedge accounting is deferred in other comprehensive income until the forecasted transaction date. If the forecasted transaction is no longer expected to occur, any gain or loss resulting from the discontinuation of hedge accounting is immediately recognized in the consolidated statement of net earnings.

Equity based compensation

Equity based compensation expense results from equity-settled awards issued under Vermilion's long-term share-based compensation plans as well as the grant date fair value of Vermilion common shares issued under the Company's bonus and employee share savings plans.

Vermilion's long-term share-based compensation plans consist of the Vermilion Incentive Plan ("VIP"), the "Five-Year Compensation Arrangement", and the Deferred Share Unit Plan ("DSU"). Equity-settled awards issued under the VIP vest over a period of one to three years, awards issued under the Five-Year Compensation Arrangement vest in the fifth year following the grant date, and awards issued under the DSU vest immediately upon granting. Awards issued under the VIP and Five-Year Compensation Arrangement plans are adjusted upon vesting by a performance factor determined by the Company's Board of Directors.

Equity based compensation expense for equity-settled plans is recognized over the vesting period with a corresponding adjustment to contributed surplus. The expense recognized is based on the grant date fair value of the awards, an estimate of the performance factor that will be achieved (if applicable), and an estimate of forfeiture rates based on historical vesting data. Dividends notionally accrue to the VIP and Five-Year Compensation Arrangement and are excluded in the determination of grant date fair values. When the awards are converted to Vermilion common shares, the amount recognized in contributed surplus is reclassified to shareholders' capital.

The grant date fair value of awards or Vermilion common shares issued is determined as the closing price of Vermilion's common shares on the Toronto Stock Exchange on the grant date.

Per share amounts

Basic net earnings per share is calculated by dividing net earnings by the weighted-average number of shares outstanding during the period.

Diluted net earnings per share is calculated by dividing net earnings by the diluted weighted-average number of shares outstanding during the period. The diluted weighted-average number of shares outstanding is the sum of the basic weighted-average number of shares outstanding and (to the extent inclusion reduces diluted net earnings per share) the number of shares issuable for equity-settled awards determined using the treasury stock method. The treasury stock method assumes that the unrecognized equity based compensation expense are deemed proceeds used to repurchase Vermilion common shares at the average market price during the period.

Foreign currency translation

Vermilion Energy Inc.'s functional and presentation currency is the Canadian dollar. Vermilion has subsidiaries that transact and operate in countries other than Canada and have functional currencies other than the Canadian dollar.

Foreign currency translation includes the translation of foreign currency transactions and the translation of foreign operations.

Foreign currency transaction translation occurs when translating transactions and balances in foreign currencies to the applicable functional currency of Vermilion Energy Inc. and its subsidiaries. Gains and losses from foreign currency transactions are recorded as foreign exchange gains or losses in the statement of net earnings. Foreign currency transaction translation occurs as follows:

- Income and expenses are translated at the prevailing rates on the date of the transaction.
- Non-monetary assets or liabilities are carried at the prevailing rates on the date of the transaction.
- Monetary items, including intercompany loans that are not deemed to represent net investments in a foreign subsidiary, are translated at the prevailing rates at the balance sheet date.

Foreign operation translation occurs when translating the financial statements of non-Canadian functional currency subsidiaries to the Canadian dollar and when translating intercompany loans that are deemed to represent net investments in a foreign subsidiary. Gains and losses from foreign operation translations are recorded as currency translation adjustments. Foreign operation translation occurs as follows:

- Income and expenses are translated at the average exchange rates for the period.
- Assets and liabilities are translated at the prevailing rates on the balance sheet date.

Income taxes

Deferred tax assets and liabilities are calculated using the balance sheet method. Deferred tax assets and liabilities are recognized for the estimated effect of any temporary differences between the amounts recognized on Vermilion's consolidated balance sheet and the respective tax basis. This calculation uses enacted or substantively enacted tax rates that are expected to be in effect when the temporary differences are expected to reverse. The effect of a change in tax rates on deferred taxes is recognized in the period the related legislation is substantively enacted.

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences can be used. Deferred tax assets are reviewed at each reporting date and are reduced to the extent it is no longer probable that the related tax benefit will be realized.

Business combinations

Acquisitions of corporations or groups of assets are accounted for as business combinations using the acquisition method if the acquired assets constitute a business. Under the acquisition method, assets acquired and liabilities assumed in a business combination (with the exception of deferred tax assets and liabilities) are measured at their fair value. Deferred tax assets or liabilities arising from the assets acquired and liabilities assumed are measured in accordance with the policies described in "Income taxes" above.

If applicable, the excess or deficiency of the fair value of net assets acquired compared to consideration paid is recognized as a gain on business combination or as goodwill on the consolidated balance sheet. Acquisition-related costs incurred to effect a business combination are expensed in the period incurred.

As part of the assessment to determine if the acquisition constitutes a business, Vermilion may elect to apply the concentration test on a transaction by transaction basis. The test is met if substantially all of the fair value related to the gross assets acquired is concentrated in a single identifiable asset (or group of similar assets) resulting in the acquisition not being deemed a business and recorded as an asset acquisition.

Segmented information

Vermilion has a decentralized business unit structure designed to manage assets in each country the Company operates. Each of Vermilion's operating segments derives its revenues solely from the production and sale of petroleum and natural gas.

Vermilion's Corporate segment aggregates costs incurred at the Company's Corporate head office located in Calgary, Alberta, Canada as well as costs incurred relating to Vermilion's exploration and production activities in Hungary, Slovakia, and Croatia (Central and Eastern Europe). These operating segments have similar economic characteristics as they do not currently generate material revenue.

Vermilion's chief operating decision maker regularly reviews fund flows from operations generated by each of Vermilion's operating segments. Fund flows from operations is a measure of profit or loss that provides the chief operating decision maker with the ability to assess the profitability of each operating segment and, correspondingly, the ability of each operating segment to fund its share of dividends, asset retirement obligations, and capital investments.

Management judgments and estimation uncertainty

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgments, estimates, and assumptions that affect the reported amount of assets, liabilities, income, and expenses. Actual results could differ significantly from these estimates. Key areas where management has made judgments, estimates, and assumptions are described below.

The measurement of the fair value of capital assets acquired in a business combination and the determination of the recoverable amount of cash generating units:

- Calculating the fair value of capital assets acquired in a business combination and the recoverable amount of cash generating units (in the assessment of impairments or reversals of previous impairments if indicators of impairment or impairment reversal are identified) are based on estimated future commodity prices, discount rates and estimated reserves and resources. Reserve and resource estimates are based on: engineering data, estimated future commodity prices, expected future rates of production, and assumptions regarding the timing and amount of future expenditures. Changes in these estimates and assumptions can directly impact the calculated fair value of capital assets acquired (and thus the resulting goodwill or gain on business combination) and the recoverable amount of a CGU (and thus the resulting impairment loss or recovery).
- In addition, the recoverable amount of a CGU is impacted by the composition of CGUs, which are subject to management's judgment of the lowest level at which there are identifiable cash inflows that are largely independent of the cash inflows of other groups of assets. The factors used by Vermilion to determine CGUs vary by jurisdiction due to their unique operating and geographic conditions. In general, Vermilion will assess the following factors: geographic proximity of the assets within a group to one another, geographic proximity of the group of assets to other groups of assets, homogeneity of the production from the group of assets and the sharing of infrastructure used to process and/or transport production. Changes in these judgments can directly impact the calculated recoverable amount of a CGU (and thus the resulting impairment loss or recovery).

The measurement of the carrying value of asset retirement obligations on the balance sheet, including the fair value and subsequent carrying value of asset retirement obligations assumed in a business combination:

- Asset retirement obligations are based on judgments regarding regulatory requirements, estimates of future costs, assumptions on the expected timing of expenditures, and estimates of the underlying risk inherent to the obligation. The carrying balance of asset retirement obligations and accretion expense may differ due to changes in: laws and regulations, technology, the expected timing of expenditures, and market conditions affecting the discount rate applied.

The recognition and measurement of deferred tax assets and liabilities:

- Tax interpretations, regulations, and legislation in the various jurisdictions in which Vermilion and its subsidiaries operate are subject to change and interpretation. Changes in laws and interpretations can affect the timing of the reversal of temporary tax differences, the tax rates in effect when such differences reverse and Vermilion's ability to use tax losses and other tax pools in the future. The Company's income tax filings are subject to audit by taxation authorities in numerous jurisdictions and the results of such audits may increase or decrease the tax liability. The determination of tax amounts recognized in the consolidated financial statements are based on management's assessment of the tax positions, which includes consideration of their technical merits, communications with tax authorities and management's view of the most likely outcome.
- The extent to which deferred tax assets are recognized are based on estimates of future profitability. These estimates are based on estimated future commodity prices and estimates of reserves. Judgments, estimates, and assumptions inherent in reserve estimates are described above.

The measurement of lease obligations and corresponding right-of-use assets:

- The measurement of lease obligations are subject to management's judgments of the applicable incremental borrowing rate and the expected lease term. The carrying balance of the right-of-use assets, lease obligations, and the resulting interest and depletion and depreciation expense, may differ due to changes in the market conditions and expected lease terms. Applicable incremental borrowing rates are based on judgments of the economic environment, term, currency, and the underlying risk inherent to the asset. Lease terms are based on assumptions regarding cancellation and extension terms that allow for operational flexibility based on future market conditions.

3. Changes in accounting pronouncements

Definition of a Business - Amendments to IFRS 3 "Business Combinations"

Vermilion elected to early adopt the amendments to IFRS 3 "Business Combinations" effective January 1, 2019, which will be applied prospectively to acquisitions that occur on or after January 1, 2019. The amendments introduce an optional concentration test, narrow the definitions of a business and outputs, and clarify that an acquired set of activities and assets must include an input and a substantive process that together significantly contribute to the ability to create outputs. These amendments did not result in changes to Vermilion's accounting policies for applying the acquisition method.

4. Segmented information

Substantially all sales in the France, Netherlands, and Ireland operating segments for the years ended December 31, 2019 and 2018 were to one customer in each respective segment. In 2019, France contributed more than 10% of Vermilion's consolidated revenues. In 2018, France, Netherlands, and Ireland each contributed more than 10% of Vermilion's consolidated revenues.

(\$M)	Year Ended December 31, 2019								Total
	Canada	France	Netherlands	Germany	Ireland	Australia	USA	Corporate	
Total assets	3,088,947	841,875	226,834	261,712	470,316	233,581	421,609	321,246	5,866,120
Drilling and development	293,744	74,579	19,866	10,806	1,372	30,550	57,196	(1,436)	486,677
Exploration and evaluation	—	62	3,739	10,878	—	—	—	21,808	36,487
Crude oil and condensate sales	699,290	326,578	2,411	25,783	27	184,490	63,449	—	1,302,028
NGL sales	33,159	—	—	—	—	—	6,499	—	39,658
Natural gas sales	95,621	121	110,446	31,529	104,247	—	5,416	797	348,177
Sales of purchased commodities	—	—	—	—	—	—	—	221,274	221,274
Royalties	(94,079)	(43,895)	(1,469)	(5,264)	—	—	(18,706)	(253)	(163,666)
Revenue from external customers	733,991	282,804	111,388	52,048	104,274	184,490	56,658	221,818	1,747,471
Purchased commodities	—	—	—	—	—	—	—	(221,274)	(221,274)
Transportation	(41,261)	(21,609)	—	(5,117)	(4,459)	—	—	—	(72,446)
Operating	(242,790)	(61,281)	(32,125)	(24,970)	(12,431)	(49,810)	(16,370)	(301)	(440,078)
General and administration	(23,341)	(15,406)	(2,659)	(8,452)	(2,491)	(4,940)	(7,566)	5,879	(58,976)
PRRT	—	—	—	—	—	(25,947)	—	—	(25,947)
Corporate income taxes	—	(21,431)	3,961	—	—	(8,407)	—	(406)	(26,283)
Interest expense	—	—	—	—	—	—	—	(81,377)	(81,377)
Realized gain on derivative instruments	—	—	—	—	—	—	—	84,219	84,219
Realized foreign exchange loss	—	—	—	—	—	—	—	(4,954)	(4,954)
Realized other income	—	—	—	—	—	—	—	7,700	7,700
Fund flows from operations	426,599	163,077	80,565	13,509	84,893	95,386	32,722	11,304	908,055

(\$M)	Year Ended December 31, 2018								Total
	Canada	France	Netherlands	Germany	Ireland	Australia	USA	Corporate	
Total assets	3,060,291	918,398	277,348	284,063	709,585	263,739	407,323	349,924	6,270,671
Drilling and development	277,857	79,451	17,963	10,863	224	75,638	40,837	1,009	503,842
Exploration and evaluation	—	307	(480)	4,943	—	—	—	9,602	14,372
Crude oil and condensate sales	541,844	360,471	2,462	32,704	—	150,733	31,142	—	1,119,356
NGL sales	56,554	—	—	—	—	—	4,622	—	61,176
Natural gas sales	72,774	131	163,454	49,745	205,150	—	2,701	3,630	497,585
Royalties	(84,696)	(46,781)	(3,181)	(6,626)	—	—	(10,070)	(813)	(152,167)
Revenue from external customers	586,476	313,821	162,735	75,823	205,150	150,733	28,395	2,817	1,525,950
Transportation	(29,912)	(10,426)	—	(6,420)	(5,129)	—	—	—	(51,887)
Operating	(177,499)	(54,690)	(26,681)	(23,048)	(15,366)	(53,199)	(6,421)	(110)	(357,014)
General and administration	(6,057)	(14,170)	(1,947)	(7,401)	(8,386)	(4,918)	(6,306)	(2,744)	(51,929)
PRRT	—	—	—	—	—	(4,824)	—	—	(4,824)
Corporate income taxes	—	(15,084)	(16,561)	—	—	(6,595)	—	(513)	(38,753)
Interest expense	—	—	—	—	—	—	—	(72,759)	(72,759)
Realized loss on derivative instruments	—	—	—	—	—	—	—	(111,258)	(111,258)
Realized foreign exchange gain	—	—	—	—	—	—	—	243	243
Realized other income	—	—	—	—	—	—	—	883	883
Fund flows from operations	373,008	219,451	117,546	38,954	176,269	81,197	15,668	(183,441)	838,652

Reconciliation of fund flows from operations to net earnings:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Fund flows from operations	908,055	838,652
Accretion	(32,667)	(31,219)
Depletion and depreciation	(675,177)	(609,056)
Impairment	(46,056)	—
Gain on business combinations	—	128,208
Unrealized (loss) gain on derivative instruments	(57,427)	109,326
Equity based compensation	(64,233)	(60,746)
Unrealized foreign exchange gain (loss)	57,225	(63,243)
Unrealized other expense	(825)	(801)
Deferred tax	(56,096)	(39,471)
Net earnings	32,799	271,650

5. Business combinations

Private Producer in Southeast Saskatchewan and Southwest Manitoba

On February 15, 2018, Vermilion acquired all of the issued and outstanding common shares of a private producer with assets in southeast Saskatchewan and southwest Manitoba. The acquisition comprised of light oil producing fields near Vermilion's existing operations in southeast Saskatchewan. The acquisition complements Vermilion's existing southeast Saskatchewan operations and aligns with the Company's sustainable growth-and-income model. The acquisition was funded through Vermilion's revolving credit facility.

The total consideration paid and the fair value of the assets acquired and liabilities assumed at the date of acquisition are detailed in the table below:

	Consideration
Cash paid to vendor	53,288
Total consideration	53,288

	Allocation of consideration
Capital assets	67,549
Deferred tax assets	26,914
Acquired working capital	1,577
Long-term debt	(38,300)
Asset retirement obligations	(4,452)
Net assets acquired	53,288

For the year ended December 31, 2018, the acquisition contributed revenues of \$18.7 million and net earnings of \$6.7 million. Had the acquisition occurred on January 1, 2018, revenues would have increased by \$2.9 million and net earnings would have increased by \$1.0 million for the year ended December 31, 2018.

Spartan Energy Corp.

On May 28, 2018, Vermilion acquired all of the issued and outstanding common shares of Spartan Energy Corp., a publicly traded oil and gas producer with light oil producing properties in southeast Saskatchewan as well as other areas in Saskatchewan, Alberta, and Manitoba. The acquisition increased Vermilion's position in southeast Saskatchewan and aligned with the Company's sustainable growth-and-income model.

Consideration consisted of the issuance of 27.9 million Vermilion common shares valued at approximately \$1.2 billion (based on the closing price per Vermilion common share of \$44.30 on the Toronto Stock Exchange on May 28, 2018). Acquisition-related costs of \$1.3 million were incurred in the year ended December 31, 2018.

The total consideration paid and the fair value of the assets acquired and liabilities assumed as at the date of the acquisition are detailed in the table below:

	Consideration
Shares issued for acquisition	1,235,221
Total consideration	1,235,221

	Allocation of consideration
Capital assets	1,401,686
Deferred tax assets	123,813
Long-term debt	(150,196)
Asset retirement obligations	(92,149)
Lease obligations	(25,455)
Assumed working capital deficit	(22,478)
Net assets acquired	1,235,221

For the year ended December 31, 2018, the acquisition contributed revenues of \$242.1 million and net earnings of \$45.1 million. Had the acquisition occurred on January 1, 2018, revenues would have increased by \$182.4 million and net earnings would have increased by \$35.0 million for the year ended December 31, 2018.

Assets in Wyoming

In August 2018, Vermilion acquired oil and gas producing assets and mineral leasehold land from a private oil company for total cash consideration of \$189.0 million. The assets are located in Campbell County, Wyoming in the Powder River Basin, approximately 65 kilometres northwest of Vermilion's existing operations. The acquired assets complement Vermilion's existing Powder River operations and align with the Company's sustainable growth-and-income model. The acquisition was funded through Vermilion's revolving credit facility.

The total consideration paid and the fair value of the assets acquired and liabilities assumed at the date of acquisition are detailed in the table below:

	Consideration
Cash paid to vendor	189,014
Total consideration	189,014

	Allocation of consideration
Capital assets	284,333
Deferred tax liability	(19,019)
Asset retirement obligations	(4,821)
Assumed working capital deficit	(2,651)
Net assets acquired	257,842
Gain on business combination	(68,828)
Total net assets acquired, net of gain on business combination	189,014

The gain on the business combination primarily resulted from the recognition of additional reserve value when the acquisition closed compared to the estimated value when Vermilion entered into the purchase and sale agreement and the acquisition price was determined.

For the year ended December 31, 2018, the acquisition contributed revenues of \$11.6 million and net earnings of \$0.3 million. Had the acquisition occurred on January 1, 2018, revenues would have increased by \$11.1 million and net earnings would have decreased by \$0.1 million for the year ended December 31, 2018.

Shell E&P Ireland Limited

In December 2018, Vermilion acquired all of the issued and outstanding common shares of Shell E&P Ireland Limited, along with an incremental 1.5% working interest in the Corrib Natural Gas Project ("Corrib") in Ireland from Nephin Energy Holdings Limited, a wholly owned subsidiary of Canada Pension Plan Investment Board. The acquisition increased Vermilion's total ownership in Corrib to 20% and aligns with the Company's sustainable growth-and-income model. In addition to this transaction, Vermilion assumed operatorship of Corrib.

The total consideration paid and the fair value of the assets acquired and liabilities assumed as at the date of the acquisition are detailed in the table below:

(\$M)	Consideration
Cash paid to vendor	40,805
Cash acquired	(82,116)
Contingent consideration	290
Total consideration	(41,021)

(\$M)	Allocation of consideration
Capital assets	53,368
Deferred tax assets	4,239
Assumed working capital deficit	(35,449)
Lease obligations	(2,234)
Asset retirement obligations	(1,565)
Net assets acquired	18,359
Gain on business combination	(59,380)
Total net assets acquired, net of gain on business combination	(41,021)

The fair value of the contingent consideration obligation is estimated to be approximately \$0.3 million based on estimated future commodity prices and estimated reserves. Maximum contingent payments are €5.8 million (approximately \$9.1 million) through 2025.

The gain on the business combination primarily resulted from increases in working capital and the fair value of capital assets from when the purchase and sale agreement was entered into in July 2017 and when the acquisition closed in December 2018.

For the year ended December 31, 2018, the acquisition contributed revenues of \$1.3 million and net earnings of \$0.4 million. Had the acquisition occurred on January 1, 2018, revenues would have increased by \$15.2 million and net earnings would have increased by \$4.3 million for the year ended December 31, 2018.

Minor acquisitions

Vermilion completed a number of minor acquisitions during the year ended December 31, 2018 for total cash consideration of \$56.0 million, in which \$147.4 million of capital assets, \$28.6 million of exploration and evaluation assets, and \$104.0 million of asset retirement obligations were recognized.

6. Capital assets

The following table reconciles the change in Vermilion's capital assets:

	2019	2018
Balance at January 1	5,316,873	3,337,965
Acquisitions	38,472	1,975,327
Additions	486,677	503,842
Increase in right-of-use assets	12,348	98,343
Transfers from exploration and evaluation assets	27,918	29,615
Impairment	(46,056)	—
Depletion and depreciation	(657,863)	(605,994)
Changes in asset retirement obligations	(10,354)	(100,876)
Foreign exchange	(152,395)	78,651
Balance at December 31	5,015,620	5,316,873
Cost	9,604,933	9,202,604
Accumulated depletion, depreciation, and impairment	(4,589,313)	(3,885,731)
Carrying amount at December 31	5,015,620	5,316,873

Right-of-use assets

The following table discloses the carrying balance and depreciation charge relating to right-of-use assets by class of underlying asset as at and for the year ended December 31, 2019:

(\$M)	As at Dec 31, 2019		As at Dec 31, 2018	
	Depreciation	Balance	Depreciation	Balance
Office space	9,745	53,777	9,119	62,279
Gas processing facilities	7,089	34,701	5,491	41,788
Oil storage facilities	2,633	16,803	2,728	20,758
Vehicles and equipment	3,209	10,327	2,020	9,121
Total	22,676	115,608	19,358	133,946

2019 impairment

As a result of declining natural gas price forecasts in Ireland during the year ended December 31, 2019 an indication of impairment was identified in the Ireland CGU. This resulted in the performance of an impairment test whereby the Company determined that the carrying amount exceeded its recoverable amount. A non-cash impairment charge of \$46.1 million was recorded in the consolidated statement of net earnings.

The recoverable amount was determined using fair value less costs to sell, which considered future after-tax cash flows from proved plus probable reserves using forecasted price and cost estimates and an after-tax discount rate of 9.0%.

The following price estimates as issued by Sproule and effective January 1, 2020 were applied:

NBP (€/mmbtu)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Sproule	5.58	5.51	5.54	5.65	5.77	5.88	6.00	6.12	6.24	6.37

Changes in any of the key judgments, such as a revision in reserves, changes in forecast commodity prices, foreign exchange rates, capital or operating costs would impact the estimated recoverable amount. As at December 31, 2019, a 1% increase in the assumed after-tax discount rate would reduce the estimated recoverable amount by \$14.7 million (resulting in a \$60.8 million impairment) while a 5% decrease in revenues (due to a decrease in commodity price forecasts or reserve estimates) would reduce the estimated recoverable amount by \$28.6 million (resulting in a \$74.7 million impairment).

7. Exploration and evaluation assets

The following table reconciles the change in Vermilion's exploration and evaluation assets:

	2019	2018
Balance at January 1	303,295	292,278
Acquisitions	—	28,572
Additions	36,487	14,372
Changes in asset retirement obligations	36	629
Transfers to capital assets	(27,918)	(29,615)
Depreciation	(18,689)	(5,942)
Foreign exchange	(7,062)	3,001
Balance at December 31	286,149	303,295
Cost	371,632	371,015
Accumulated depreciation	(85,483)	(67,720)
Carrying amount at December 31	286,149	303,295

8. Asset retirement obligations

The following table reconciles the change in Vermilion's asset retirement obligations:

	2019	2018
Balance at January 1	650,164	517,180
Additional obligations recognized	7,595	211,580
Changes in estimated abandonment timing and costs	39,722	(98,158)
Obligations settled	(19,442)	(15,765)
Accretion	32,667	31,219
Changes in discount rates	(57,635)	(6,646)
Foreign exchange	(34,870)	10,754
Balance at December 31	618,201	650,164

Vermilion has estimated the asset retirement obligations based on current cost estimates of \$1.8 billion (2018 - \$1.8 billion).

Current cost estimates are inflated to the estimated time of abandonment using inflation rates of between 0.4% and 2.7% (2018 - between 0.5% and 2.9%), resulting in inflated cost estimates of \$2.6 billion (2018 - \$2.6 billion). These payments are expected to be made between 2020 and 2073, with the majority of costs occurring between 2030 and 2040 (\$0.7 billion), 2048 to 2055 (\$0.9 billion), and 2060 and 2073 (\$0.7 billion).

Vermilion calculated the present value of the obligations using a credit-adjusted risk-free rate, calculated using a credit spread of 5.3% (2018 - 4.0%) added to risk-free rates based on long-term, risk-free government bonds.

The risk-free rates used as inputs to discount the obligations were as follows:

	Dec 31, 2019	Dec 31, 2018
Canada	1.7 %	2.2%
France	0.9 %	1.6%
Netherlands	(0.1)%	0.4%
Germany	0.3 %	0.9%
Ireland	0.6 %	1.6%
Australia	1.6 %	2.6%
United States	2.4 %	2.7%

A 0.5% increase/decrease in the discount rate applied to asset retirement obligations would decrease/increase asset retirement obligations by approximately \$52.7 million. A one-year increase/decrease in the expected timing of abandonment spend would decrease/increase asset retirement obligations by approximately \$27.5 million.

9. Derivative instruments

The following table reconciles the change in the fair value of Vermilion's derivative instruments:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Fair value of contracts, beginning of year	38,339	(70,713)
Reversal of opening contracts settled during the year	(62,735)	57,719
Assumed in acquisitions	—	(274)
Realized gain (loss) on contracts settled during the year	84,219	(111,258)
Unrealized gain during the year on contracts outstanding at the end of the year	5,308	51,607
Net receipt from counterparties on contract settlements during the year	(84,219)	111,258
Unrealized loss on derivatives designated as cash flow hedges	(1,071)	—
Unrealized gain on derivatives designated as net investment hedges	9,168	—
Fair value of contracts, end of year	(10,991)	38,339
Comprised of:		
Current derivative asset	55,645	95,667
Current derivative liability	(62,405)	(41,016)
Non-current derivative asset	20,127	1,215
Non-current derivative liability	(24,358)	(17,527)
Fair value of contracts, end of year	(10,991)	38,339

The (gain) loss on derivative instruments for 2019 and 2018 were comprised of the following:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Realized (gain) loss on contracts settled during the year	(84,219)	111,258
Reversal of opening contracts settled during the year	62,735	(57,719)
Unrealized gain on contracts outstanding at the end of the year	(5,308)	(51,607)
(Gain) loss on derivative instruments	(26,792)	1,932

Please refer to Note 19 (Supplemental information) for a listing of Vermilion's outstanding derivative instruments as at December 31, 2019.

10. Leases

Vermilion had the following future commitments associated with its lease obligations:

(\$M)	As at	
	Dec 31, 2019	Dec 31, 2018
Less than 1 year	29,217	30,641
1 - 3 years	46,501	50,024
3 - 5 years	38,177	34,313
After 5 years	26,168	42,739
Total lease payments	140,063	157,717
Amounts representing interest	(23,309)	(24,583)
Present value of net lease payments	116,754	133,134
Current portion of lease obligations	(23,682)	(24,945)
Non-current portion of lease obligations	93,072	108,189
Total cash outflow	33,276	27,468
Interest on lease liabilities	6,984	7,185

11. Taxes

The following table reconciles Vermilion's deferred tax asset and liability:

	As at	
	Dec 31, 2019	Dec 31, 2018
Deferred tax assets:		
Capital assets	(296,793)	(296,591)
Non-capital losses	454,339	487,398
Asset retirement obligations	36,170	38,429
Derivative contracts	2,712	(11,937)
Unrealized foreign exchange	(3,034)	(1,873)
Other	3,149	3,985
Deferred tax assets	196,543	219,411
Deferred tax liabilities:		
Capital assets	262,669	319,553
Non-capital losses	(48,007)	(57,785)
Asset retirement obligations	123,257	51,031
Unrealized foreign exchange	—	10,715
Other	(1,610)	(5,380)
Deferred tax liabilities	336,309	318,134

Income tax expense differs from the amount that would have been expected if the reported earnings had been subject only to the statutory Canadian income tax rate as follows:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Earnings before income taxes	141,125	354,698
Canadian corporate tax rate ⁽¹⁾	26.72%	27.00%
Expected tax expense	37,709	95,768
Increase (decrease) in taxes resulting from:		
Petroleum resource rent tax rate (PRRT) differential ⁽²⁾	17,455	5,349
Foreign tax rate differentials ^{(2) (3)}	5,543	3,086
Equity based compensation expense	3,733	13,883
Amended returns and changes to estimated tax pools and tax positions	(24,387)	(873)
Statutory rate changes and the estimated reversal rates associated with temporary differences ⁽⁴⁾	9,543	—
Derecognition (recognition) of deferred tax assets	65,522	(26,931)
Adjustment for uncertain tax positions	3,659	8,080
Gain on business combinations	—	(28,812)
Other non-deductible items	(10,451)	13,498
Provision for income taxes	108,326	83,048

⁽¹⁾ In Canada, the lower tax rate is a result of reductions to the Alberta corporate tax rate from 12% to 8% over four years.

⁽²⁾ In Australia, current taxes include both corporate income tax rates and PRRT. Corporate income tax rates were applied at a rate of 30% and PRRT was applied at a rate of 40%.

⁽³⁾ The applicable tax rates for 2019 were: 32.0% in France, 50.0% in the Netherlands, 31.8% in Germany, 25.0% in Ireland, and 21.0% in the United States (2018: 34.4% in France, 50.0% in the Netherlands, 30.2% in Germany, 25.0% in Ireland, and 21.0% in the United States).

⁽⁴⁾ On December 28, 2019, the French Parliament approved the Finance Bill for 2020. The Finance Bill for 2020 provides for a progressive decrease of the French corporate income tax rate for companies with sales below €250 million from 32.0% to 25.8% by 2022. Effective July 1, 2019, Alberta decreased its corporate tax rate from 12% to 11% for 2019 with further 1% rate reductions every year on January 1 until the general corporate tax rate is 8% on January 1, 2022.

At December 31, 2019, Vermilion had \$2.5 billion (2018 - \$2.6 billion) of unused tax losses of which \$1.2 billion (2018 - \$1.1 billion) relates to Vermilion's Canada segment and expire between 2025 and 2040. The majority of the remaining unused tax losses relates to Vermilion's Ireland segment and do not expire.

At December 31, 2019, Vermilion derecognized \$65.5 million (2018 - recognized \$26.9 million) of deferred income assets relating to the aforementioned non-expiring tax loss in Ireland as there is uncertainty as to the Company's ability to fully utilize such losses based on the forecasted commodity prices in effect as at December 31, 2019.

The aggregate amount of temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognized as at December 31, 2019 is approximately \$0.5 billion (2018 – approximately \$0.5 billion).

12. Long-term debt

The following table summarizes Vermilion's outstanding long-term debt:

	As at	
	Dec 31, 2019	Dec 31, 2018
Revolving credit facility	1,539,225	1,392,206
Senior unsecured notes	385,440	404,001
Long-term debt	1,924,665	1,796,207

The fair value of the revolving credit facility is equal to its carrying value due to the use of short-term borrowing instruments at market rates of interest. The fair value of the senior unsecured notes as at December 31, 2019 was \$366.4 million.

The following table reconciles the change in Vermilion's long-term debt:

	2019	2018
Balance at January 1	1,796,207	1,270,330
Borrowings on the revolving credit facility	207,787	251,155
Assumed on acquisitions ⁽¹⁾	—	188,496
Amortization of transaction costs and prepaid interest	4,379	2,286
Foreign exchange	(83,708)	83,940
Balance at December 31	1,924,665	1,796,207

⁽¹⁾ Pursuant to the acquisitions described in Note 5 (Business combinations), Vermilion assumed the credit facilities of the acquired companies and immediately extinguished them following the respective acquisitions using proceeds from Vermilion's revolving credit facility.

Revolving credit facility

At December 31, 2019, Vermilion had in place a bank revolving credit facility maturing May 31, 2023 with the following terms:

	As at	
	Dec 31, 2019	Dec 31, 2018
Total facility amount	2,100,000	1,800,000
Amount drawn	(1,539,225)	(1,392,206)
Letters of credit outstanding	(10,230)	(15,400)
Unutilized capacity	550,545	392,394

The facility can be extended from time to time at the option of the lenders and upon notice from Vermilion. If no extension is granted by the lenders, the amounts owing pursuant to the facility are due at the maturity date. The facility is secured by various fixed and floating charges against the subsidiaries of Vermilion.

The facility bears interest at a rate applicable to demand loans plus applicable margins.

As at December 31, 2019, the revolving credit facility was subject to the following financial covenants:

Financial covenant	Limit	As at	
		Dec 31, 2019	Dec 31, 2018
Consolidated total debt to consolidated EBITDA	Less than 4.0	1.94	1.72
Consolidated total senior debt to consolidated EBITDA	Less than 3.5	1.56	1.34
Consolidated EBITDA to consolidated interest expense	Greater than 2.5	13.46	14.57

The financial covenants include financial measures defined within the revolving credit facility agreement that are not defined under IFRS. These financial measures are defined by the revolving credit facility agreement as follows:

- Consolidated total debt: Includes all amounts classified as "Long-term debt" and "Lease obligations" (including the current portion included within "Accounts payable and accrued liabilities" but excluding operating leases as defined under IAS 17) on the balance sheet.
- Consolidated total senior debt: Defined as consolidated total debt excluding unsecured and subordinated debt.
- Consolidated EBITDA: Defined as consolidated net earnings before interest, income taxes, depreciation, accretion and certain other non-cash items, adjusted for the impact of the acquisition of a material subsidiary.
- Consolidated total interest expense: Includes all amounts classified as "Interest expense", but excluding interest on operating leases as defined under IAS 17.

As at December 31, 2019 and 2018, Vermilion was in compliance with the above covenants.

Senior unsecured notes

On March 13, 2017, Vermilion issued US \$300.0 million of senior unsecured notes at par. The notes bear interest at a rate of 5.625% per annum, to be paid semi-annually on March 15 and September 15. The notes mature on March 15, 2025. As direct senior unsecured obligations of Vermilion, the notes rank equally with existing and future senior unsecured indebtedness of the Company.

The senior unsecured notes were recognized at amortized cost and include the transaction costs directly related to the issuance.

Vermilion may, at its option, redeem the notes prior to maturity as follows:

- Prior to March 15, 2020, Vermilion may redeem up to 35% of the original principal amount of the senior unsecured notes with the proceeds of certain equity offerings by the Company at a redemption price of 105.625% of the principal amount plus any accrued and unpaid interest to the applicable redemption date.
- Prior to March 15, 2020, Vermilion may redeem some or all of the senior unsecured notes at a price equal to 100% of the principal amount of the senior unsecured notes, plus an applicable premium and any accrued and unpaid interest.
- On or after March 15, 2020, Vermilion may redeem some or all of the senior unsecured notes at the redemption prices set forth in the following table plus any accrued and unpaid interest.

Year	Redemption price
2020	104.219%
2021	102.813%
2022	101.406%
2023 and thereafter	100.000%

Cross currency interest rate swaps

On June 12, 2019, Vermilion entered into a series of cross currency interest rate swaps with a syndicate of banks. Vermilion applied hedge accounting to these derivative instruments. The cross currency interest rate swaps mature March 15, 2025 and include regular cash receipts and payments on March 15 and September 15 of each year. On a net basis, the cross currency interest swaps result in Vermilion receiving US dollar interest and principal amounts equal to the interest and principal payments under the US \$300.0 million of senior unsecured notes. In exchange, Vermilion will make interest and principal payments equal to €265.0 million at a rate of 3.275%.

The cross currency interest rate swaps were executed as two separate sets of instruments:

- US dollar to Canadian dollar ("USD-to-CAD") cross currency interest rate swaps: Vermilion receives US dollar interest and principal amounts equal to US\$300.0 million of debt at 5.625% interest and pays Canadian dollar interest and principal amounts equal to \$398.5 million of debt at 5.40% interest.
- Canadian dollar to Euro ("CAD-to-EUR") cross currency interest rate swaps: Vermilion receives Canadian dollar interest and principal amounts equal to \$398.5 million of debt at 5.40% interest and pays Euro interest and principal amounts equal to €265.0 million at a rate of 3.275%.

The USD-to-CAD cross currency interest swaps have been designated as the hedging instrument in a cash flow hedge to mitigate the risk of the fluctuation of interest and principal cash flows due to changes in foreign currency rates related to the Senior Unsecured Notes described above. The forward element of the swap contract is treated as the excluded component and is initially recognized within other comprehensive income. The excluded component is amortized to net earnings in interest expense on a systematic basis. As the timing and amount of the cash flows received on the USD-to-CAD cross currency interest rate swaps offset the timing and amount of the cash flows paid on the senior unsecured notes, the economic relationship is expected to be highly effective. The change in the value of the hedged item associated with a change in spot foreign exchange rates is initially recognized in other comprehensive income. This change is reclassified from other comprehensive income to net earnings (and recorded as an foreign exchange gain or loss) to offset the associated foreign exchange gain or loss recognized on the senior unsecured notes.

The CAD-to-EUR cross currency interest rate swaps have been designated as the hedging instrument in a net investment hedge to mitigate the effective change in exchange rates on our net investments in Euro denominated foreign subsidiaries. The change in the value of the hedged item associated with a change in spot foreign exchange rates is initially recognized in other comprehensive income. This change is reclassified from other comprehensive income to net earnings (and recorded as a foreign exchange gain or loss) only if the net investment is disposed of by sale. The forward element of the swap contract is treated as the excluded component and is initially recognized within other comprehensive income. The excluded component is amortized to net earnings in interest expense on a systematic basis.

13. Shareholders' capital

The following table reconciles the change in Vermilion's shareholders' capital:

Shareholders' capital	2019		2018	
	Shares ('000s)	Amount (\$M)	Shares ('000s)	Amount (\$M)
Balance at January 1	152,704	4,008,828	122,119	2,650,706
Shares issued for acquisition	—	—	27,883	1,234,676
Shares issued for the Dividend Reinvestment Plan	1,417	34,937	1,179	49,051
Vesting of equity based awards	1,359	51,108	1,025	54,057
Shares issued for equity based compensation	552	15,868	314	12,565
Share-settled dividends on vested equity based awards	258	8,290	184	7,773
Balance at December 31	156,290	4,119,031	152,704	4,008,828

Vermilion is authorized to issue an unlimited number of common shares with no par value.

Dividends are approved by the Board of Directors and are paid monthly. Dividends declared to shareholders for the year ended December 31, 2019 were \$427.3 million or \$2.76 per common share (2018 - \$388.1 million or \$2.72 per common share).

Subsequent to the end of year-end and prior to the consolidated financial statements being authorized for issue on March 5, 2020, Vermilion declared dividends of \$72.0 million or \$0.23 per share for each of January and February of 2020.

14. Capital disclosures

Vermilion defines capital as net debt (long-term debt plus net working capital) and shareholders' capital. Vermilion excludes from its definition of capital any obligations secured by an offsetting asset, such as lease obligations.

Vermilion monitors the ratio of net debt to fund flows from operations. As at December 31, 2019, our ratio of net debt to trailing fund flows from operations is 2.20 (2018 - 2.30). Vermilion manages the ratio of net debt to fund flows from operations (refer to Note 4 - Segmented information) by monitoring capital expenditures, dividends, and asset retirement obligations with expected fund flows from operations. Vermilion intends for the ratio of net debt to fund flows from operations to trend towards 1.5 over time.

The following table calculates Vermilion's ratio of net debt to fund flows from operations:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Long-term debt	1,924,665	1,796,207
Current liabilities	416,210	563,199
Current assets	(347,681)	(429,877)
Net debt	1,993,194	1,929,529
Ratio of net debt to four quarter trailing fund flows from operations	2.20	2.30

15. Equity based compensation

The following table summarizes the number of awards outstanding under the VIP and the Five-Year Compensation Arrangement:

Number of VIP and Five Year Compensation Awards ('000s)	2019	2018
Opening balance	1,931	1,685
Granted	1,193	932
Vested	(688)	(520)
Forfeited	(168)	(166)
Closing balance ⁽¹⁾	2,268	1,931

⁽¹⁾ As at December 31, 2019, 51,860 awards (2018 - 36,845 awards) are included in the closing balance related to the Five-Year Compensation Arrangement.

For the year ended December 31, 2019, the awards had a weighted average grant date fair value of \$30.92 (2018 - \$40.57). Equity based compensation expense for the awards is calculated based on the number of awards outstanding multiplied by the estimated performance factor that will be realized upon vesting (2019 - 1.7; 2018 - 1.9) adjusted by an estimated annual forfeiture rate (2019 - 5.2%; 2018 - 4.6%). Equity based compensation expense of \$46.6 million was recorded during the year ended December 31, 2019 (2018 - \$48.2 million) relating to the awards.

For the year ended December 31, 2019, there were 72,191 DSUs granted and outstanding with a weighted average grant date fair value of \$25.25. Equity based compensation expense of \$1.8 million was recorded during the year ended December 31, 2019 relating to the DSUs.

16. Per share amounts

Basic and diluted net earnings per share have been determined based on the following:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Net earnings	32,799	271,650
Basic weighted average shares outstanding ('000s)	154,736	140,619
Dilutive impact of equity based compensation ('000s)	1,359	1,716
Diluted weighted average shares outstanding ('000s)	156,095	142,335
Basic earnings per share	0.21	1.93
Diluted earnings per share	0.21	1.91

17. Financial instruments

Classification of financial instruments

The following table summarizes the carrying value relating to Vermilion's financial instruments:

(\$M)	As at Dec 31, 2019				As at Dec 31, 2018			
	FVTPL	FVTOCI	Amortized Cost	Total	FVTPL	FVTOCI	Amortized Cost	Total
Cash and cash equivalents	29,028	—	—	29,028	26,809	—	—	26,809
Derivative assets	64,135	11,637	—	75,772	96,882	—	—	96,882
Derivative liabilities	(83,223)	(3,540)	—	(86,763)	(58,543)	—	—	(58,543)
Accounts receivable	—	—	211,409	211,409	—	—	260,322	260,322
Accounts payable and accrued liabilities	—	—	(312,442)	(312,442)	—	—	(449,651)	(449,651)
Dividends payable	—	—	(35,947)	(35,947)	—	—	(35,122)	(35,122)
Lease obligations	—	—	(93,072)	(93,072)	—	—	(108,189)	(108,189)
Long-term debt ⁽¹⁾	—	—	(1,924,665)	(1,924,665)	—	—	(1,796,207)	(1,796,207)

⁽¹⁾ The carrying value of the above equals fair value except for long-term debt. The fair value of long-term debt was \$1,905,588 (2018 - \$1,781,809).

The carrying value of accounts receivable, accounts payable and accrued liabilities, dividends payable and lease obligations are a reasonable approximation of their fair value due to the short maturity of these financial instruments. The carrying value of long-term debt outstanding on the revolving credit facility approximates its fair value due to the use of short-term borrowing instruments at market rates of interest.

Fair value measurements are categorized into a fair value hierarchy based on the lowest level input that is significant to the fair value measurement:

- Level 1 inputs are determined by reference to unadjusted quoted prices in active markets for identical assets or liabilities. Inputs used in fair value measurement of cash and cash equivalents, the revolving credit facility, and the senior unsecured notes are categorized as Level 1.
- Level 2 inputs are determined based on inputs other than unadjusted quoted prices that are observable, either directly or indirectly. The fair value of Vermilion's derivative assets and liabilities are determined using pricing models that incorporate future price forecasts (supported by prices from observable market transactions) and credit risk adjustments.
- Level 3 inputs are not based on observable market data. Vermilion does not have any financial instruments classified as Level 3.

There were no transfers between levels in the hierarchy in the years ended December 31, 2019 and 2018.

Nature and Extent of Risks Associated with Financial Instruments

Vermilion is exposed to financial risks from its financial instruments. These financial risks include: market risk (includes commodity price risk, interest rate risk, and currency risk), credit risk, and liquidity risk.

Commodity price risk

Vermilion is exposed to commodity price risk on its derivative assets and liabilities which are used as part of the Company's risk management program to mitigate the effects of changes in commodity prices on future cash flows. While transactions of this nature relate to future petroleum and natural gas production, Vermilion does not designate these derivative assets and liabilities as accounting hedges. As such, changes in commodity prices impact the fair value of derivative instruments and the corresponding gains or losses recognized on derivative instruments.

Currency risk

Vermilion is exposed to currency risk on its financial instruments denominated in foreign currencies. These financial instruments include cash and cash equivalents, accounts receivables, accounts payables, lease obligations, long-term debt, derivative assets and derivative liabilities. These financial instruments are primarily denominated in the US dollar and the Euro. Vermilion monitors its exposure to currency risk and reviews whether the use of derivative financial instruments is appropriate to manage potential fluctuations in foreign exchange rates.

Interest rate risk

Vermilion is exposed to interest rate risk on its revolving credit facility, which consists of short-term borrowing instruments that bear interest at market rates. Thus, changes in interest rates could result in an increase or decrease in the amount paid by Vermilion to service this debt.

The following table summarizes the increase (positive values) or decrease (negative values) to net earnings before tax due to a change in the value of Vermilion's financial instruments as a result of a change in the relevant market risk variable. This analysis does not attempt to reflect any interdependencies between the relevant risk variables.

(\$M)	Dec 31, 2019	Dec 31, 2018
Currency risk - Euro to Canadian dollar		
\$0.01 increase in strength of the Canadian dollar against the Euro	(1,599)	(2,205)
\$0.01 decrease in strength of the Canadian dollar against the Euro	1,599	2,205
Currency risk - US dollar to Canadian dollar		
\$0.01 increase in strength of the Canadian dollar against the US \$	(5,594)	2,981
\$0.01 decrease in strength of the Canadian dollar against the US \$	5,594	(2,981)
Commodity price risk - Crude oil		
US \$5.00/bbl increase in crude oil price used to determine the fair value of derivatives	(44,106)	(18,421)
US \$5.00/bbl decrease in crude oil price used to determine the fair value of derivatives	47,777	17,351
Commodity price risk - European natural gas		
€ 0.5/GJ increase in European natural gas price used to determine the fair value of derivatives	(28,192)	(36,508)
€ 0.5/GJ decrease in European natural gas price used to determine the fair value of derivatives	22,670	33,005

Credit risk:

Vermilion is exposed to credit risk on accounts receivable and derivative assets in the event that customers, joint operation partners, or counterparties fail to discharge their contractual obligations. As at December 31, 2019, Vermilion's maximum exposure to receivable credit risk was \$287.2 million (December 31, 2018 - \$357.2 million) which is the value of accounts receivable and derivative assets on the balance sheet.

Vermilion's accounts receivable primarily relates to customers and joint operations partners in the petroleum and natural gas industry. These amounts are subject to normal industry payment terms and credit risks. Vermilion manages these risks by monitoring the creditworthiness of customers and joint operations partners and, where appropriate, obtaining assurances such as parental guarantees and letters of credit. Vermilion determines the lifetime expected credit losses recognized on accounts receivable using a provision matrix. In preparing the provision matrix, the Company takes into account historical credit loss experience based on the aging of accounts receivable, adjusted as necessary for current and future petroleum and natural gas prices to the extent that changes in pricing may negatively impact the Company's customers and joint operations partners. The lifetime expected credit losses on accounts receivable as at December 31, 2019 and 2018 is not material. As at the balance sheet date, approximately 3.6% (2018 - 0.7%) of the accounts receivable balance was outstanding for more than 90 days. Vermilion considers the balance of accounts receivable to be collectible.

Vermilion's derivative assets primarily relates to the fair value of financial instruments used as part of the Company's risk management program to mitigate the effects of changes in commodity prices on future cash flows. Vermilion manages this risk by monitoring the creditworthiness of counterparties, transacting primarily with counterparties that have investment grade third party credit ratings, and by limiting the concentration of financial exposure to individual counterparties. As a result, Vermilion has not obtained collateral or other security to support its financial derivatives.

Vermilion's cash deposited in financial institutions and guaranteed investment certificates are also subject to counterparty credit risk. Vermilion mitigates this risk by transacting with financial institutions with high third party credit ratings.

Liquidity risk:

Liquidity risk is the risk that Vermilion will encounter difficulty in meeting obligations associated with its financial liabilities. Vermilion does not consider this to be a significant risk as its financial position and available committed borrowing facility provide significant financial flexibility and allow Vermilion to meet its obligations as they come due.

The following table summarizes Vermilion's undiscounted non-derivative financial liabilities and their contractual maturities:

(\$M)	1 month	1 month to 3 months	3 months to 1 year	1 year to 5 years
December 31, 2019	134,502	208,752	5,136	1,608,435
December 31, 2018	167,491	306,927	10,355	1,472,087

18. Related party disclosures

The compensation of directors and management is reviewed annually by the independent Governance and Human Resources Committee against industry practices for oil and gas companies of similar size and scope.

The following table summarizes the compensation of directors and other members of key management personnel during the years ended December 31, 2019 and 2018:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Short-term benefits	8,084	6,018
Equity based compensation	16,296	16,309
	24,380	22,327
Number of individuals included in the above amounts	19	18

During the year ended December 31, 2019, Vermilion recorded \$0.2 million of office rent recoveries (2018 - \$0.2 million) relating to an office sub-lease to a company whose Managing Director is also a member of Vermilion's Board of Directors. This related party transaction is provided in the normal course of business under the same commercial terms and conditions as transactions with unrelated companies and is recorded at the exchange amount.

19. Supplemental information

Changes in non-cash working capital was comprised of the following:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Changes in:		
Accounts receivable	48,913	(94,562)
Crude oil inventory	(1,638)	(10,646)
Prepaid expenses	(2,882)	(4,896)
Accounts payable and accrued liabilities	(137,209)	230,567
Income taxes payable	(31,994)	(1,651)
Working capital assumed in acquisitions	—	(58,841)
Initial recognition of IFRS 16 liability	—	(10,483)
Foreign exchange	2,590	(873)
Changes in non-cash working capital	(122,220)	48,615
Changes in non-cash operating working capital	(65,148)	(6,876)
Changes in non-cash investing working capital	(57,072)	55,491
Changes in non-cash working capital	(122,220)	48,615

Cash and cash equivalents was comprised of the following:

	As at	
	Dec 31, 2019	Dec 31, 2018
Cash on deposit with financial institutions	28,898	26,604
Guaranteed investment certificates	130	205
Cash and cash equivalents	29,028	26,809

Wages and benefits included in operating expenses and general and administration expenses were:

	Year Ended	
	Dec 31, 2019	Dec 31, 2018
Operating expense	77,868	66,095
General and administration expense	47,310	42,496
Wages and benefits	125,178	108,591

The following tables summarize Vermilion's outstanding risk management positions as at December 31, 2019:

	Unit	Currency	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
Dated Brent										
Q1 2020	bbl	USD	3,000	62.25	3,000	67.39	3,000	55.58	—	—
Q2 2020	bbl	USD	3,000	62.25	3,000	67.39	3,000	55.58	—	—
WTI										
Q1 2020	bbl	USD	9,750	54.18	6,000	60.95	9,750	46.23	1,500	59.17
Q2 2020	bbl	USD	7,250	53.07	4,000	60.23	7,250	44.86	—	—
Q3 2020	bbl	USD	500	57.00	500	61.25	500	52.00	—	—
Q4 2020	bbl	USD	500	57.00	500	61.25	500	52.00	—	—
AECO										
Q1 2020	mcf	CAD	10,426	1.58	10,426	2.56	—	—	—	—
Q2 2020	mcf	CAD	—	—	—	—	—	—	10,426	1.39
Q3 2020	mcf	CAD	—	—	—	—	—	—	10,426	1.39
Q4 2020	mcf	CAD	—	—	—	—	—	—	3,513	1.39
AECO Basis (AECO less NYMEX Henry Hub)										
Q1 2020	mcf	USD	—	—	—	—	—	—	32,500	(0.94)
Q2 2020	mcf	USD	—	—	—	—	—	—	52,500	(1.12)
Q3 2020	mcf	USD	—	—	—	—	—	—	50,000	(1.12)
Q4 2020	mcf	USD	—	—	—	—	—	—	36,739	(1.11)
Q1 2021	mcf	USD	—	—	—	—	—	—	30,000	(1.11)
Q2 2021	mcf	USD	—	—	—	—	—	—	45,000	(1.08)
Q3 2021	mcf	USD	—	—	—	—	—	—	45,000	(1.08)
Q4 2021	mcf	USD	—	—	—	—	—	—	35,054	(1.09)
Q1 2022	mcf	USD	—	—	—	—	—	—	30,000	(1.10)
Q2 2022	mcf	USD	—	—	—	—	—	—	35,000	(1.09)
Q3 2022	mcf	USD	—	—	—	—	—	—	35,000	(1.09)
Q4 2022	mcf	USD	—	—	—	—	—	—	11,793	(1.09)
NYMEX Henry Hub										
Q1 2020	mcf	USD	10,000	2.75	10,000	3.10	10,000	2.25	—	—

	Unit	Currency	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
NBP										
Q1 2020	mcf	EUR	49,135	5.27	49,135	5.83	49,135	3.98	—	—
Q2 2020	mcf	EUR	41,765	5.21	41,765	5.53	41,765	3.83	—	—
Q3 2020	mcf	EUR	41,765	5.21	41,765	5.52	41,765	3.83	—	—
Q4 2020	mcf	EUR	61,419	5.28	63,875	5.77	61,419	3.90	—	—
Q1 2021	mcf	EUR	54,048	5.44	56,505	5.85	54,048	3.94	—	—
Q2 2021	mcf	EUR	46,678	5.42	46,678	5.80	46,678	3.92	—	—
Q3 2021	mcf	EUR	46,678	5.42	46,678	5.77	46,678	3.92	—	—
Q4 2021	mcf	EUR	54,048	5.44	54,048	5.72	54,048	3.94	—	—
Q1 2022	mcf	EUR	19,654	5.42	19,654	6.30	19,654	3.79	—	—
Q2 2022	mcf	EUR	12,284	5.33	12,284	6.03	12,284	3.60	—	—
NBP Basis (NBP less NYMEX Henry Hub)										
Q1 2020	mcf	USD	17,500	2.74	17,500	3.99	—	—	—	—
Q2 2020	mcf	USD	15,000	2.61	15,000	3.98	—	—	—	—
Q3 2020	mcf	USD	15,000	2.61	15,000	3.98	—	—	—	—
Q4 2020	mcf	USD	10,000	3.24	10,000	3.98	—	—	—	—
TTF										
Q1 2020	mcf	EUR	7,370	5.37	7,370	6.25	7,370	3.81	—	—
Q2 2020	mcf	EUR	13,512	5.36	9,827	6.15	13,512	3.73	4,913	5.54
Q3 2020	mcf	EUR	13,512	5.36	9,827	6.15	13,512	3.73	3,258	5.45
Q4 2020	mcf	EUR	7,370	5.37	7,370	6.25	7,370	3.81	—	—
TTF Basis (TTF less NYMEX Henry Hub)										
Q2 2020	mcf	USD	2,500	3.50	2,500	4.00	—	—	5,000	3.21
Q3 2020	mcf	USD	2,500	3.50	2,500	4.00	—	—	5,000	3.21
Cross Currency Interest Rate			Receive Notional Amount		Receive Rate		Pay Notional Amount		Pay Rate	
Swap	Jan 2020 - Mar 2025		300,000,000	USD	5.625%		265,048,910	EUR	3.275%	
Swap	Q1 2020		1,735,895,470	USD	LIBOR + 1.70%		2,304,900,000	CAD	CDOR + 1.25%	
VET Equity Swaps							Initial Share Price		Share Volume	
Swap	Jan 2020 - Sep 2021						20.9788	CAD	2,250,000	
Swap	Jan 2020 - Oct 2021						22.4587	CAD	1,500,000	

The following sold option instruments allow the counterparties, at the specified date, to enter into a derivative instrument contract with Vermilion at the detailed terms:

Period if Option Exercised	Unit	Currency	Option Expiration Date	Bought Put Volume	Weighted Average Bought Put Price	Sold Call Volume	Weighted Average Sold Call Price	Sold Put Volume	Weighted Average Sold Put Price	Swap Volume	Weighted Average Swap Price
Dated Brent											
Feb 2020 - Jan 2021	bbl	USD	28-Jan-20	—	—	—	—	—	—	500	63.00
Feb 2020 - Jan 2021	bbl	USD	31-Jan-20	—	—	—	—	—	—	3,000	62.00
Mar 2020 - Feb 2021	bbl	USD	28-Feb-20	—	—	—	—	—	—	4,500	62.71
Apr 2020 - Mar 2021	bbl	USD	31-Mar-20	—	—	—	—	—	—	3,500	63.32
Apr 2020 - Mar 2021	bbl	USD	31-Mar-20	1,000	64.00	1,000	69.00	1,000	59.00	—	—
May 2020 - Apr 2021	bbl	USD	30-Apr-20	—	—	—	—	—	—	4,000	62.63
NBP											
Oct 2020 - Jun 2022	mcf	EUR	30-Jun-20	—	—	—	—	—	—	2,457	5.86
Jan 2021 - Sep 2022	mcf	EUR	30-Jun-20	—	—	—	—	—	—	2,457	5.86
Jan 2021 - Sep 2022	mcf	USD	30-Jun-20	—	—	—	—	—	—	2,457	6.45
Jan 2022 - Dec 2022	mcf	USD	30-Jun-20	—	—	—	—	—	—	9,827	6.45
Oct 2020 - Jun 2022	mcf	EUR	30-Sep-20	—	—	—	—	—	—	2,457	6.15

DIRECTORS

Lorenzo Donadeo ¹
Calgary, Alberta

Larry J. Macdonald ^{2, 4, 6, 8}
Chairman & CEO, Point Energy Ltd.
Calgary, Alberta

Carin Knickel ^{6, 8, 12}
Golden, Colorado

Stephen P. Larke ^{4, 6, 12}
Calgary, Alberta

Loren M. Leiker ¹⁰
McKinney, Texas

Timothy R. Marchant ^{7, 10, 11}
Calgary, Alberta

Anthony Marino
Calgary, Alberta

Robert Michaleski ^{4, 5}
Calgary, Alberta

William Roby ^{8, 9, 12}
Katy, Texas

Catherine L. Williams ^{3, 6}
Calgary, Alberta

¹ Chairman of the Board

² Lead Director

³ Audit Committee Chair (Independent)

⁴ Audit Committee Member

⁵ Governance and Human Resources Committee Chair (Independent)

⁶ Governance and Human Resources Committee Member

⁷ Health, Safety and Environment Committee Chair (Independent)

⁸ Health, Safety and Environment Committee Member

⁹ Independent Reserves Committee Chair (Independent)

¹⁰ Independent Reserves Committee Member

¹¹ Sustainability Committee Chair (Independent)

¹² Sustainability Committee Member

OFFICERS AND KEY PERSONNEL CANADA

Anthony Marino
President & Chief Executive Officer

Lars Glemser
Vice President & Chief Financial Officer

Mona Jasinski
Executive Vice President, People and Culture

Michael Kaluza
Executive Vice President & Chief Operating Officer

Dion Hatcher
Vice President Canada Business Unit

Terry Hergott
Vice President Marketing

Kyle Preston
Vice President Investor Relations

Jenson Tan
Vice President Business Development

Daniel Goulet
Director Corporate HSE

Jeremy Kalanuk
Director Operations Accounting

Bryce Kremnica
Director Field Operations - Canada Business Unit

Steve Reece
Director Information Technology & Information Systems

Tom Rafter
Director Land - Canada Business Unit

Adam Iwanicki
Director Marketing

Robert (Bob) J. Engbloom
Corporate Secretary

UNITED STATES

Scott Seatter
Managing Director - U.S. Business Unit

Timothy R. Morris
Director U.S. Business Development - U.S.
Business Unit

EUROPE

Gerard Schut
Vice President European Operations

Sylvain Nothhelfer
Managing Director - France Business Unit

Sven Tummers
Managing Director - Netherlands Business Unit

Bill Liutkus
Managing Director - Germany Business Unit

Darcy Kerwin
Managing Director - Ireland Business Unit

Bryan Sralla
Managing Director - Central & Eastern Europe Business Unit

AUSTRALIA

Bruce D. Lake
Managing Director - Australia Business Unit

AUDITORS

Deloitte LLP
Calgary, Alberta

BANKERS

The Toronto-Dominion Bank

Bank of Montreal

Canadian Imperial Bank of Commerce

Export Development Canada

National Bank of Canada

Royal Bank of Canada

The Bank of Nova Scotia

Wells Fargo Bank N.A., Canadian Branch

HSBC Bank Canada

Bank of America N.A., Canada Branch

Citibank N.A., Canadian Branch - Citibank Canada

JPMorgan Chase Bank, N.A., Toronto Branch

La Caisse Centrale Desjardins du Québec

Alberta Treasury Branches

Canadian Western Bank

Goldman Sachs Lending Partners LLC

Barclays Bank PLC

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EXCELLENCE

We aim for exceptional results in everything we do.

TRUST

At Vermilion, we operate with honesty and fairness, and can be counted on to do what we say we will.

RESPECT

We embrace diversity, value our people and believe every employee and business associate worldwide deserves to be treated with the utmost dignity and respect.

RESPONSIBILITY

Vermilion continually shows its commitment to the care of our people and environment, and enrichment of the communities in which we live and work.

VERMILION
E N E R G Y



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