

FOR THE YEAR ENDED DECEMBER 31, 2019

# ANNUAL INFORMATION FORM

EXCELLENCE. TRUST. RESPECT. RESPONSIBILITY.



DATED MARCH 6, 2020

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.



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## Glossary

In addition to terms defined elsewhere in this annual information form, the following are defined terms used in this annual information form:

“**ABCA**” means the *Business Corporations Act* (Alberta), R.S.A. 2000, c. B-9, as amended, including the regulations promulgated thereunder.

“**AIF**” means this Annual Information Form and the appendices attached hereto.

“**Affiliate**” when used to indicate a relationship with a person or company, has the same meaning as set forth in the *Securities Act* (Alberta).

“**Common Shares**” means a common share in the capital of the Company.

“**Contingent Resources**” are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies.

“**Conversion Arrangement**” means the plan of arrangement effected on September 1, 2010 under section 193 of the ABCA pursuant to which the Trust converted from an income trust to a corporate structure, and Unitholders exchanged their Trust Units for common shares of the Company on a one-for-one basis and holders of exchangeable shares of Vermilion Resources Ltd., previously a subsidiary of the company (“VRL”), received 1.89344 common shares for each exchangeable share held.

“**Dividend**” means a dividend paid by Vermilion in respect of the common shares, expressed as an amount per common share.

“**GLJ**” means GLJ Petroleum Consultants Ltd., independent petroleum engineering consultants of Calgary, Alberta.

“**GLJ Report**” means the independent engineering reserves evaluation of certain oil, NGL and natural gas interests of the Company prepared by GLJ dated February 10, 2020 and effective December 31, 2019.

“**GLJ Resource Assessment**” means the independent engineering resource evaluation prepared by GLJ to assess contingent and prospective resources across all of the Company’s key operating regions with an effective date of December 31, 2019.

“**Prospective Resources**” are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects.

“**Shareholders**” means holders from time to time of the Company’s common shares.

“**Subsidiary**” means, in relation to any person, any body corporate, partnership, joint venture, association or other entity of which more than 50% of the total voting power of common shares or units of ownership or beneficial interest entitled to vote in the election of directors (or members of a comparable governing body) is owned or controlled, directly or indirectly, by such person.

“**Trust**” means Vermilion Energy Trust, an unincorporated open-ended investment trust governed by the laws of the Province of Alberta that was dissolved and ceased to exist pursuant to the Conversion Arrangement.

“**Trust Unit**” means units in the capital of the Trust.

“**Unitholders**” means former unitholders of the Trust.

“**Vermilion**” or the “**Company**” means Vermilion Energy Inc. and where context allows, its consolidated business enterprise, except that a reference to “Vermilion” prior to the date of the Conversion Arrangement means the consolidated business enterprise of the Trust, unless otherwise indicated.

## Conventions

Unless otherwise indicated, references herein to "\$" or "dollars" are to Canadian dollars.

Production numbers stated refer to Vermilion's working interest share before deduction of Crown, freehold, and other royalties. Reserve amounts are gross reserves, stated before deduction of royalties, as at December 31, 2019, based on forecast costs and price assumptions as evaluated in the GLJ Report.

## Abbreviations

\$M	thousand dollars
\$MM	million dollars
°API	An indication of the specific gravity of crude oil measured on the API (American Petroleum Institute) gravity scale
AECO	the daily average benchmark price for natural gas at the AECO 'C' hub in southeast 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)
mbbl	thousand barrels
mboe	thousand barrels of oil equivalent
mcf	thousand cubic feet
mcf/d	thousand cubic feet per day
mmboe	million barrels of oil equivalent
mmbtu	million British Thermal Units
mmcf	million 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 operated by National
TTF	the day-ahead price for natural gas at the Title Transfer Facility Virtual Trading Point operated by Dutch TSO Gas Transport Services
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma for crude oil of standard grade

## Conversions

The following table sets forth certain standard conversions from Standard Imperial Units to the International System of Units (or metric units):

To Convert From	To	Multiply By
mcf	Cubic metres	28.174
Cubic metres	Cubic feet	35.494
bbls	Cubic metres	0.159
Cubic metres	bbls oil	6.290
Feet	Metres	0.305
Metres	Feet	3.281
Miles	Kilometres	1.609
Kilometres	Miles	0.621
Acres	Hectares	0.405
Hectares	Acres	2.471

## Special Note Regarding Forward Looking Statements

Certain statements included or incorporated by reference in this annual information form 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 annual information form may include, but are not limited to:

- capital expenditures;
- business strategies and objectives;
- estimated reserve quantities and the discounted present value of future net cash flows from such reserves;
- petroleum and natural gas sales;
- future production levels (including the timing thereof) and rates of average annual production growth, estimated contingent and prospective resources;
- exploration and development plans;
- acquisition and disposition plans and the timing thereof;
- operating and other expenses, including the payment of future dividends;
- royalty and income tax rates; 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 the Company to obtain equipment, services and supplies in a timely manner to carry out its activities in Canada and internationally;
- the ability of the Company 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 the Company 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 development activities.

Although the Company 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 the Company can give no assurance that such expectations will prove to be correct. Financial outlooks are provided for the purpose of understanding the Company's financial strength 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 the Company 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 the Company's marketing operations, including credit risk;
- the uncertainty of reserves estimates and reserves life and estimates of contingent resources and estimates of prospective resources and associated expenditures;
- the uncertainty of estimates and projections relating to production, costs and expenses;
- potential delays or changes in plans with respect to exploration or development projects or capital expenditures;
- the Company'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 the Company to add production and reserves through exploration and development activities;
- general economic and business conditions;
- 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 the Company; and
- other risks and uncertainties described elsewhere in this annual information form or in the Company's other filings with Canadian securities authorities.

The forward-looking statements or information contained in this annual information form are made as of the date hereof and the Company 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.

# Presentation of Oil and Gas Information

## Oil and gas reserves and production

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All oil and natural gas reserve information contained in this annual information form is derived from the GLJ Report and has been prepared and presented in accordance with the *Canadian Oil and Gas Evaluation Handbook* ("COGEH") and *National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities* ("NI 51-101"). The actual oil and natural gas reserves and future production will be greater than or less than the estimates provided in this annual information form. The estimated future net revenue from the production of the disclosed oil and natural gas reserves does not represent the fair market value of these reserves.

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 of natural gas 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.

## Contingent resources

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"Contingent resources" are not, and should not be confused with, petroleum and natural gas reserves. "Contingent resources" are defined in COGEH as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingencies may include factors such as economic, legal, environmental, political and regulatory matters or a lack of markets. It is also appropriate to classify as contingent resource the estimated discovered recoverable quantities associated with a project in the early evaluation stage.

The primary contingencies which currently prevent the classification of Vermilion's contingent resource as reserves include but are not limited to:

- preparation of firm development plans, including determination of the specific scope and timing of projects;
- project sanction;
- access to capital markets;
- shareholder and regulatory approvals as applicable;
- access to required services and field development infrastructure;
- oil and natural gas prices in Canada and internationally in jurisdictions in which Vermilion operates;
- demonstration of economic viability;
- future drilling program and testing results;
- further reservoir delineation and studies;
- facility design work;
- corporate commitment;
- development timing;
- limitations to development based on adverse topography or other surface restrictions; and
- the uncertainty regarding marketing and transportation of petroleum from development areas.

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. The estimates of contingent resources involve implied assessment, based on certain estimates and assumptions, that the contingent resources described exists in the quantities predicted or estimated and that the contingent resources can be profitably produced in the future. **The estimated net present value of the future net revenue from the contingent resources does not represent the fair market value of the contingent resources.** Actual contingent resources (and any volumes that may be reclassified as reserves) and future production therefrom may be greater than or less than the estimates provided herein.

## Prospective resources

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"Prospective resources" are not, and should not be confused with, petroleum and natural gas reserves. "Prospective resources" are defined in COGEH as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects.



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. The estimates of prospective resources involve implied assessment, based on certain estimates and assumptions, that the resources described exists in the quantities predicted or estimated and that the resources can be profitably produced in the future. **The estimated net present value of the future net revenue from the prospective resources does not represent the fair market value of the prospective resources.** The recovery and resources estimates provided herein are estimates only. Actual prospective resources (and any volumes that may be reclassified as reserves or contingent resources) and future production from such prospective resources may be greater than or less than the estimates provided herein.

## Non-GAAP Measures

This AIF includes references to certain financial and performance measures which do not have standardized meanings prescribed by International Financial Reporting Standards ("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. Vermilion analyzes 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 the Company's ability to generate income necessary to pay dividends, repay debt, fund asset retirement obligations and make capital investments.
- **Netbacks:** Netbacks are per boe and per mcf performance measures used in the analysis of operational activities. Vermilion assesses 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 AIF 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. These non-GAAP financial measures include:

- **Cash dividends per share:** Represents actual cash dividends paid per share by the Company during the relevant periods.
- **Capital expenditures:** Represents the sum of drilling and development and exploration and evaluation. Vermilion considers capital expenditures to be a useful measure of its investment in the Company's existing asset base. Capital expenditures are also referred to as E&D capital.

## Vermilion's Organizational Structure

Vermilion Energy Inc. is the successor to the Trust, following the completion of the Conversion Arrangement whereby the Trust converted from an income trust to a corporate structure by way of a court approved plan of arrangement under the ABCA on September 1, 2010.

As at December 31, 2019, Vermilion had 790 full time employees of which 241 employees were located in its Calgary head office, 144 employees in its Canadian field offices, 148 employees in France, 69 employees in the Netherlands, 32 employees in Australia, 31 employees in the United States, 35 employees in Germany, 7 employees in Hungary, 2 employees in Croatia and 81 employees in Ireland.

Vermilion was incorporated on July 21, 2010 pursuant to the provisions of the ABCA for the purpose of facilitating the Conversion Arrangement. The registered and head office of Vermilion Energy Inc. is located at Suite 3500, 520 – 3rd Avenue S.W., Calgary, Alberta, T2P 0R3.

The following is a list of the Company's material subsidiaries and where each material subsidiary was incorporated or formed. The Company holds 100% of the votes attaching to all voting securities of each material subsidiary beneficially owned directly or indirectly by Vermilion.

- Vermilion Energy Australia Pty Ltd. (Australia)
- Vermilion Energy Canada Ltd. (Alberta)
- Vermilion Energy Germany GmbH & Co. KG (Germany)
- Vermilion Energy Ireland Limited (Ireland)
- Vermilion Energy Netherlands B.V. (Netherlands)
- Vermilion Energy USA LLC (United States)
- Vermilion Exploration and Production Ireland Limited (Ireland)
- Vermilion Exploration SAS (France)
- Vermilion Hungary Southern Battonya Concession Ltd. (Hungary)
- Vermilion Moraine SAS (France)
- Vermilion Pyrénées SAS (France)
- Vermilion Resources (Alberta)
- Vermilion Zagreb Exploration d.o.o. (Croatia)

## Description of the Business

Vermilion is an international energy producer that seeks to create value through the acquisition, exploration, development and optimization of producing properties in North America, Europe and Australia. Vermilion focuses on the exploitation of light oil and liquids-rich natural gas conventional resource plays in Canada and the United States, the exploration and development of high impact natural gas opportunities in the Netherlands and Germany, and oil drilling and workover programs in Germany, France and Australia. Vermilion also holds a 20% operated working interest in the Corrib gas field in Ireland.

Vermilion's priorities are health and safety, the environment, and profitability, in that order. Nothing is more important to us than the safety of the public and those who work with us, and the protection of our natural surroundings. Vermilion has been recognized as a top decile performer amongst Canadian publicly listed companies in governance practices, as a Climate "A" List performer by the CDP (formerly the Carbon Disclosure Project), and a Best Workplace in the Great Place to Work® Institute's annual rankings in Canada, the Netherlands and Germany. Vermilion emphasizes strategic community investment in each of our operating areas.

Vermilion has operations in three core areas: North America, Europe and Australia. Vermilion's business within these regions is managed at the country level through business units which form the basis of the Company's operating segments. These business units and the material oil and natural gas properties, facilities and installations in which Vermilion has an interest are discussed below.

The following table summarizes production, sales, proved reserves, and proved plus probable reserves for each of Vermilion's business units as at and for the year ended December 31, 2019:

Business Unit	Production (boe/d)	Oil sales (\$ millions)	NGL sales (\$ millions)	Natural gas sales (\$ millions)	Sales (\$ millions)	Gross Proved Reserves (mboe) <sup>(1)</sup>	Gross Proved Plus Probable Reserves (mboe) <sup>(1)</sup>
Canada	59,979	699,290	33,159	95,621	828,070	191,356	300,532
France	10,467	326,578	—	121	326,699	1,731	2,703
Netherlands	8,274	2,411	—	110,446	112,857	11,105	20,980
Germany	3,468	25,783	—	31,529	57,312	40,963	59,692
Ireland	7,762	27	—	104,247	104,274	11,772	17,774
Australia	5,662	184,490	—	—	184,490	8,608	13,160
United States	4,675	63,449	6,499	5,416	75,364	30,623	59,296
Central and Eastern Europe	70	—	—	797	797	13,781	26,740
<b>Total</b>	<b>100,357</b>	<b>1,302,028</b>	<b>39,658</b>	<b>348,177</b>	<b>1,689,863</b>	<b>309,939</b>	<b>500,876</b>

<sup>(1)</sup> "Gross Reserves" are Vermilion's working interest (operating or non-operating) share before deduction of royalty obligations and without including any royalty interests of Vermilion.

## Canada Business Unit

Vermilion's Canadian operations are primarily focused in the West Pembina region of West Central Alberta and in southeast Saskatchewan and Manitoba. In West Pembina, the company targets condensate-rich Mannville natural gas and Cardium light oil plays, while in southeast Saskatchewan and Manitoba the company targets light oil in the Mississippian Midale, Frobisher/Alida and Ratcliffe formations. West Pembina is the Company's main natural gas liquids ("NGL") producing area.

Vermilion holds an average 79% working interest in approximately 837,000 (665,300 net) acres of developed land, and an average 87% working interest in approximately 484,500 (423,200 net) acres of undeveloped land. Vermilion had 538 (439 net) producing natural gas wells and 4,049 (3,402 net) producing oil wells in Canada as at December 31, 2019.

Vermilion has access to ample facilities and processing capacity across the major plays in its Canadian portfolio. In Alberta, Vermilion's operations are concentrated in core geographic regions where the Company owns and operates the large majority of associated key infrastructure including pipelines, compressor stations, oil batteries and gas plants, many of which have surplus capacity for future production. Furthermore, the Company is interconnected in several locations with third party midstream infrastructure that provides significant capacity for growth. In Saskatchewan, where operations are focused on light oil, Vermilion owns and operates an extensive network of pipelines and oil batteries that also have surplus capacity for future production. This high degree of operating control and access to key infrastructure across Vermilion's Canadian properties allows the Company to drive operating efficiencies in the field while supporting future growth opportunities.

During 2019 Vermilion drilled or participated in 22 (21.5 net) wells in Alberta and 130 (110.5 net) wells in Saskatchewan. In 2020, we plan to drill or participate in 87 (76.3 net) light oil wells in Saskatchewan and 20 (19.2 net) wells in Alberta as we continue to develop our light oil projects in Saskatchewan and focus on our condensate-rich natural gas targets in the Mannville.

## France Business Unit

Vermilion entered France in 1997 and completed three additional acquisitions in subsequent years. Vermilion is the largest oil producer in the country with approximately three-quarters of the domestic market share. The Company's oil is priced with reference to Dated Brent.

Vermilion's main producing areas in France are located in the Aquitaine Basin which is southwest of Bordeaux, France and in the Paris Basin, located just east of Paris. The two major fields in the Paris Basin area are Champotran and Chaunoy and the two major fields in the Aquitaine Basin are Parentis and Cazaux. Vermilion operates several oil batteries in the country and, given the legacy nature of these assets, the throughput capability of these batteries exceeds any projected future requirements. Vermilion holds an average 96% working interest in 258,100 (248,900 net) acres of developed land and an average 91% working interest in 244,400 (222,100 net) acres of undeveloped land in the Aquitaine and Paris Basins. Vermilion had 340 (335 net) producing oil wells and two (2.0 net) producing gas wells in France as at December 31, 2019.

In 2019, Vermilion drilled four (4.0 net) wells in the Champotran field. In 2020, Vermilion intends to continue its ongoing program of workovers and well optimizations. By continuing to develop its inventory in France, while mitigating declines through workovers and optimizations, Vermilion seeks to maintain or moderately grow its French production over the long-term.

## Netherlands Business Unit

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Vermilion entered the Netherlands in 2004 and is the country's second largest onshore operator. Vermilion's natural gas production in the Netherlands is priced off of the TTF index.

Vermilion's Netherlands assets consist of 26 onshore concessions (all operated) and 17 offshore concessions (all non-operated). Production consists primarily of natural gas with a small amount of associated condensate. Vermilion's total land position in the Netherlands covers 1,927,300 (930,000 net) acres at an average 49% working interest, of which 92% is undeveloped. Vermilion had 98 (47 net) producing natural gas wells as at December 31, 2019.

Vermilion successfully drilled and completed the Weststellingwerf well (0.5 net) in 2019, representing our first drilling activity in the Netherlands since 2017. We encountered three gas bearing zones in the Vlieland, Zechstein and Rotliegend formations. Vermilion expects that its inventory of potentially high-impact exploration and development opportunities in the Netherlands will continue to support the Company's production growth in the country.

## Germany Business Unit

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Vermilion entered Germany in 2014 through the acquisition of a 25% non-operated interest in natural gas producing assets. In December 2016, Vermilion completed an acquisition of oil and gas producing properties that provided Vermilion with its first operated position in the country. Vermilion holds a significant undeveloped land base in Germany as a result of an extensive farm-in agreement the Company entered into in 2015. Vermilion's natural gas production in Germany is priced off the NCG and GPL indexes, which are both highly correlated to the TTF benchmark, and Vermilion's oil production is priced with reference to Dated Brent.

Vermilion's producing assets in Germany consist of operated and non-operated interests in seven natural gas fields and eight oil fields with extensive infrastructure in place. Vermilion had 133 (105 net) producing oil wells and 22 (8 net) producing natural gas wells as at December 31, 2019.

Vermilion's land position in northwest Germany is comprised of 88,600 (32,700 net) developed acres and 2,815,400 (1,151,200 net) undeveloped acres. The Company also holds a 0.4% equity interest in Erdgas Munster GmbH ("EGM"), a joint venture created in 1959 to jointly transport, process, and market gas in northwest Germany. This transportation interest allows for our proportionate share of produced volumes to be processed, blended, and transported to designated gas consumers through the EGM network of approximately 2,000 kilometres of pipeline. Furthermore, the Company holds a 50% equity interest in Hannoversche Erdölleitung GmbH ("HEG"), a joint venture company created in 1959 that collects and transports oil through a 185 km network of infrastructure from the Hannover region to rail loading facilities in Hannover.

During 2019, Vermilion successfully drilled, completed and tested the Burgmoor Z5 (46% working interest) well, which we expect to be tied-in in 2021. During 2020, the Company will continue investing in various well optimization initiatives and advance permitting, studies and other activities associated with the farm-in agreement signed in mid-2015.

## Ireland Business Unit

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Vermilion has a 20% operated interest in the offshore Corrib natural gas field located off the northwest coast of Ireland. Vermilion initially acquired an 18.5% non-operated interest in 2009. In 2018, Vermilion entered into a strategic partnership with the Canadian Pension Plan Investment Board ("CPPIB"), as a result of which Vermilion acquired an additional 1.5% working interest and assumed operatorship of Corrib.

Corrib first began natural gas flow in late December 2015. Production volumes reached full plant capacity of approximately 350 mmcf/d (gross) at the end of 2016. Production plateaued at this level until decline started at the beginning of 2018.

In 2020, Vermilion plans to continue to focus on facility maintenance and compression optimization.



## Australia Business Unit

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Vermilion holds a 100% operated working interest in the Wandoo offshore oil field and related production assets, located on Western Australia's northwest shelf. Vermilion acquired its interest over two acquisitions completed in 2005 and 2007. Production is sourced from 20 producing well-bores including five dual laterals that are tied into two platforms, Wandoo 'A' and Wandoo 'B'. Wandoo 'B' is permanently manned, houses the required production facilities and incorporates 400,000 bbls of oil storage within the platform's concrete gravity structure. The Wandoo 'B' facilities are capable of processing 208,000 bbl/d of total fluid to separate the oil from produced water. Vermilion's land position in the Wandoo field is comprised of 59,600 acres (gross and net).

Vermilion drilled two (2.0 net) wells in Australia between November 2018 and January 2019 and plans to drill wells approximately every two to three years. Vermilion intends to manage its Australian production and related capital investment programs to achieve corporate targets while meeting long-term supply requirements of our customers.

## United States Business Unit

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Vermilion entered the United States in 2014 through the acquisition of land and producing assets in the East Finn oil field in the Powder River Basin of northeastern Wyoming and expanded its position through the 2018 acquisition of mineral land and producing assets in the Hilight oil field located approximately 40 miles northwest of the East Finn assets. The Company's assets include 160,100 (144,600 net) acres of land in the Powder River basin, of which 69% is undeveloped. Vermilion had 192 (182 net) producing oil wells in the United States as at December 31, 2019. All of our working interest ownership in Wyoming is Company operated.

During 2019, Vermilion continued work on its early stage Turner Sand development in the Powder River Basin, drilling eight (8.0 net) wells on our Hilight asset, in addition to drilling two additional wells late in 2019, both of which were completed in early 2020. In 2020, Vermilion expects to drill twelve (11.9 net) wells on its Hilight assets.

## Central and Eastern Europe ("CEE") Business Unit

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Vermilion established its CEE Business unit in 2014 with a head office in Budapest, Hungary. The CEE business unit is responsible for business development in the CEE, including managing the exploration and development opportunities associated with the Company's land holdings in Hungary, Slovakia, Croatia and Ukraine.

Vermilion's land position in the CEE consists of 952,300 (951,900 net) acres in Hungary, 485,600 (242,800 net) acres in Slovakia and 2.2 million (2.2 million net) acres in Croatia. Currently, 99% of Vermilion's land position in the CEE is undeveloped.

During 2019, Vermilion drilled four (3.3 net) exploration wells in Hungary, the first of which was a dry hole. The remaining wells resulted in new gas discoveries and the Company brought two of the wells on production during the fourth quarter of 2019. In Croatia, Vermilion drilled its first two natural gas exploration wells (2.0 net) in the country which also resulted in new gas discoveries. During the third quarter of 2019, Vermilion was awarded two exploration licenses in Ukraine, subject to a final production sharing agreement, in a 50/50 partnership with Ukgazvydobuvannya ("UGV"), a Ukrainian state owned gas producer. The licenses cover approximately 500,000 gross acres situated in one of Europe's most prolific natural gas regions (Dnieper-Donets Basin). In 2020, Vermilion plans to continue our exploratory drilling activity in CEE by drilling two (1.5 net) wells in Croatia, one (1.0 net) well in Hungary and three (1.5 net) wells in Slovakia.

# General Development of the Business

## Three Year History and Outlook

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The following describes the development of Vermilion's business over the last three completed financial years.

With the exception of the acquisition of Spartan Energy Corp. ("Spartan") in May 2018, none of the acquisitions described below constituted a "significant acquisition" within the meaning of applicable securities laws. A Business Acquisition Report (Form 51-102F4) relating to the acquisition of Spartan was filed on July 30, 2018. A copy of this report is available on SEDAR at [www.sedar.com](http://www.sedar.com) under Vermilion's SEDAR profile.

### 2017

Vermilion achieved record annual production of 68,021 boe/d representing an increase of 7% as compared to 2016. Production growth in Canada, the US, Ireland and Germany more than offset lower production in France, Netherlands and Australia. Permitting delays significantly reduced Netherlands production volumes in 2017, while an unplanned 31-day downtime period at Corrib late in Q3 2017 reduced annual production by approximately 900 boe/d.

Vermilion maintained its monthly dividend at \$0.215 per share throughout 2017. Vermilion discontinued the Premium Dividend™ Component of its dividend reinvestment plan beginning with the July 2017 dividend payment.

In March 2017, Vermilion issued US\$300 million aggregate principal amount of eight-year senior unsecured notes bearing interest at a rate of 5.625% per annum. This issuance was completed by way of a private offering and represented Vermilion's first issuance in the US debt markets.

In April 2017, Vermilion extended the term of its credit facility with its banking syndicate to May 2021. Following a review of the Company's projected liquidity requirements and the receipt of proceeds from the US debt issuance, the total facility amount was reduced to \$1.4 billion from \$2.0 billion.

In July 2017, Vermilion and Canada Pension Plan Investment Board ("CPPIB") announced a strategic partnership in the Corrib Natural Gas Project in Ireland (Corrib), whereby CPPIB will acquire Shell E&P Ireland Limited's 45% interest in Corrib. As part of the transaction, Vermilion assumed operatorship of Corrib and received an additional 1.5% working interest in Corrib. The acquisition had an effective date of January 1, 2017 and closed in late 2018.

In December 2017, Vermilion was awarded a license for the Békéssámson concession in Hungary for a 4-year term. Located adjacent to the existing South Battonya concession in southeast Hungary, the Békéssámson concession covers 330,700 net acres (100% working interest) and more than doubled the size of the Company's total land position in the country.

Vermilion continued to be recognized for its commitment to being a leader on environmental, social and governance matters in 2017. The Company received a top quartile ranking for its industry sector in RobecoSAM's annual 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. The RobecoSAM assessment follows earlier recognition of Vermilion's sustainability performance, including placement on the CDP Climate "A" List as a global leader in environmental stewardship, and receipt of the French government's Circular Economy Award for Industrial and Regional Ecology for Vermilion's geothermal energy partnership in Parentis. Vermilion was also ranked 13th by Corporate Knights on the Future 40 Responsible Corporate Leaders in Canada list. This marked the fourth year in a row that Vermilion has been recognized by Corporate Knights as one of Canada's top sustainability performers. Vermilion's MSCI ESG (Environment, Social and Governance) rating increased from BBB to A for 2017 and our Governance Metrics score ranked in the 90th percentile globally.

### 2018

Vermilion achieved record annual production of 87,270 boe/d representing an increase of 28% as compared to 2017. Production in Canada reached record levels as the Company completed the most significant acquisition in its history, acquiring Spartan in May 2018 for total consideration of \$1.4 billion. Production also grew in the US due to an acquisition completed in August 2018 near Vermilion's existing assets in the Powder River Basin.

Vermilion increased its monthly dividend to \$0.23 per share from \$0.215 per share beginning with the April 2018 dividend. Upon closing the acquisition of Spartan, the 2% discount associated with our Dividend Reinvestment Plan was eliminated, beginning with the June 2018 dividend.

In February 2018, Vermilion closed an acquisition of a private southeast Saskatchewan producer. The acquisition added over 1,000 bbl/d of high netback 40° API oil and 42,600 net acres of land straddling the Saskatchewan and Manitoba border, near Vermilion's existing operations in southeast

Saskatchewan. Total consideration of \$91 million, which includes both cash paid to the shareholders of the acquired company and the assumption of long-term debt, was funded through the Company's revolving credit facility.

In May 2018, Vermilion acquired all of the issued and outstanding common shares of Spartan, a publicly traded southeast Saskatchewan oil producer. The acquisition added approximately 23,000 boe/d of high-netback, light oil production and approximately 480,000 net acres of land (80% average working interest), including 400,000 net acres in southeast Saskatchewan with multi-zone potential. In addition, the Spartan acquisition included approximately 80,000 net acres of land in other areas of Saskatchewan, Alberta and Manitoba. The Acquisition also includes ownership and control of producing infrastructure synergistic with Vermilion's existing assets, as well as significant 2D and 3D seismic data. Total consideration for the acquisition was \$1.4 billion consisting 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) and the assumption of approximately \$175 million of Spartan's outstanding debt at the time the transaction closed.

In August 2018, Vermilion acquired mineral land and producing assets in the Powder River Basin in Wyoming for total cash consideration of approximately \$189 million. The acquisition is comprised of low base decline, light oil-weighted production and high-quality mineral leasehold in the Powder River Basin in Campbell County, Wyoming, approximately 40 miles (65 kilometres) northwest of Vermilion's existing operations. The Assets include approximately 55,700 net acres of land (approximately 96% working interest) and approximately 2,500 boe/d (63% oil and NGLs) of production with an estimated annual base decline rate of 13%. Approximately half of the current production comes from three federal secondary recovery units in the Muddy formation, with the remainder coming from higher netback production from Turner Sand horizontal producers.

In December 2018, Vermilion closed the acquisition of an additional 1.5% working interest in the Corrib natural gas project bringing the Company's ownership interest in the project to 20%. Vermilion also assumed operatorship of Corrib resulting in a significant increase in the degree of operating control across the Company's portfolio.

Vermilion received a top quartile ranking for its industry sector in RobecoSAM's annual Corporate Sustainability Assessment. 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 11th by Corporate Knights on the Future 40 Responsible Corporate Leaders in Canada list. This marks the fifth year in a row that Vermilion has been recognized by Corporate Knights as one of Canada's top sustainability performers and we continue to be the highest ranked oil and gas company on the list. Vermilion's MSCI ESG (Environment, Social and Governance) received an A rating for the second consecutive year and the Company's Governance Metrics score ranked in the top decile globally. Vermilion scored 82 out of 100 on the annual ratings conducted by Sustainalytics, ranking at the top of its peer group. Sustainalytics rates the sustainability of participating companies based on their environmental, social and governance performance.

Further demonstrating Vermilion's commitment to being a leader in environmental, social and governance practices, the Board of Directors has established a Sustainability Committee to provide oversight with respect to sustainability policy and performance. Members of the committee are Tim Marchant (Chair), Carin Knickel, Steve Larke and Bill Roby, each an independent director.

## 2019

Vermilion achieved record annual production of 100,357 boe/d representing an increase of 15% compared to 2018. Production in Canada reached record levels as the Company benefitted from a full-year contribution from the Spartan assets acquired in May 2018, achieving average annual production of nearly 60,000 boe/d in 2019. Production also achieved record annual average levels in the Netherlands and in the United States.

Vermilion maintained its monthly dividend at \$0.23 per share throughout 2019. In July 2019, Vermilion received approval from the TSX for a normal course issuer bid ("NCIB"), allowing the Company to buy back up to 7.75 million shares. Vermilion intends to use the NCIB, in combination with debt reduction, when excess free cash flow is available (beyond dividends) to enhance per share growth. In October 2019, the Company announced its intention to phase out the Dividend Reinvestment Plan ("DRIP") in 2020 by prorating the available DRIP shares by 25% each quarter starting in Q1 2020. This proration is planned to increase each quarter throughout the year, such that the DRIP will be eliminated at the end of Q3 2020.

In June 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%.

During the third quarter of 2019, Vermilion was awarded two exploration licenses in Ukraine, subject to a final production sharing agreement, in a 50/50 partnership with Ukrgezvydobuvannya ("UGV"), a Ukrainian state-owned gas producer. The licenses cover approximately 500,000 gross acres situated in one of Europe's most prolific natural gas regions (Dnieper-Donets Basin).

Vermilion's ISS Governance QualityScore increased from 3 to 1 (where a decile score of 1 indicates lowest governance risk), while its Environment and Social QualityScores remained at 1 and 2 respectively in 2019. Vermilion was rated "AA" in MSCI's annual environmental, social and governance ("ESG") rankings for 2019, placing the Company in the top 19% of oil and gas companies worldwide. This rating is an improvement from "A" in the previous two years. Vermilion received top quartile rankings for 2019 for its industry sector in both the Sustainalytics ESG Rating and SAM (formerly known as RobecoSAM) annual Corporate Sustainability Assessment ("CSA"). These rankings are a reflection of Vermilion's continued commitment to ESG matters across the business, positioning Vermilion as one of the most responsible producers of energy in the industry.

## Outlook

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Vermilion's business model continues to allow for flexibility in response to volatile commodity prices and regulatory changes. The Company intends to maintain a low level of financial leverage and continue to fund dividends and exploration and development ("E&D") capital investment from internally generated fund flows from operations. Consistent with these objectives, in October 2019 Vermilion announced an E&D capital budget for 2020 of \$450 million with corresponding production guidance of between 100,000 to 103,000 boe/d. This budget is designed to deliver modest production growth of approximately 1% and also provides for strategic capital expenditures associated with early-stage exploration and development activities. These activities are designed to lay the groundwork for future development and production from a highly economic asset base.

<sup>TM</sup> denotes trademark of Canaccord Genuity Capital Corporation.



# Statement of Reserves Data and Other Oil and Gas Information

## Reserves and future net revenue

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The following is a summary of the oil and natural gas reserves and the value of future net revenue of Vermilion as evaluated by GLJ in a report dated February 10, 2020 with an effective date of December 31, 2019. Pricing used in the forecast price evaluations is set forth in the notes to the tables.

Reserves and other oil and gas information contained in this section is effective December 31, 2019 unless otherwise stated.

All evaluations of future net revenue set forth in the tables below are stated after overriding and lessor royalties, Crown royalties, freehold royalties, mineral taxes, direct lifting costs, normal allocated overhead and future capital investments, including abandonment and reclamation obligations. **Future net revenues estimated by the GLJ Report do not represent the fair market value of the reserves. Other assumptions relating to the costs, prices for future production and other matters are included in the GLJ Report. There is no assurance that the future price and cost assumptions used in the GLJ Report will prove accurate and variances could be material.**

Reserves are established using deterministic methodology. Total proved reserves are established at the 90 percent probability (P90) level. There is a 90 percent probability that the actual reserves recovered will be equal to or greater than the P90 reserves. Total proved plus probable reserves are established at the 50 percent probability (P50) level. There is a 50 percent probability that the actual reserves recovered will be equal to or greater than the P50 reserves.

The Report on Reserves Data by Independent Qualified Reserves Evaluator in Form 51-101F2 and the Report of Management and Directors on Oil and Gas Disclosure in Form 51-101F3 are contained in Schedules "B" and "C", respectively.

The following tables provide reserves data and a breakdown of future net revenue by component and product type using forecast prices and costs. For Canada, the tables following include Alberta Gas Cost Allowance.

The following tables may not total due to rounding.

Oil and gas reserves - Gross and net interest <sup>(2)</sup>, based on forecast prices and costs <sup>(1)</sup>

Proved Developed Producing <sup>(3) (5) (6)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	8,608	8,608	—	—	—	—	—	—
Canada	51,225	45,958	10	10	—	—	232,002	215,234
CEE	—	—	—	—	—	—	1,372	1,125
France	35,109	31,724	—	—	—	—	—	—
Germany	4,557	4,422	—	—	—	—	30,822	28,015
Ireland	—	—	—	—	—	—	70,633	70,633
Netherlands	—	—	—	—	—	—	50,917	50,451
United States	5,093	4,268	—	—	—	—	32,984	27,542
<b>Total Proved Developed Producing</b>	<b>104,591</b>	<b>94,981</b>	<b>10</b>	<b>10</b>	<b>—</b>	<b>—</b>	<b>418,730</b>	<b>393,000</b>
Proved Developed Producing <sup>(3) (5) (6)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	8,608	8,608
Canada	696	660	3,197	2,939	20,934	17,359	111,486	99,799
CEE	—	—	—	—	—	—	229	188
France	—	—	—	—	—	—	35,109	31,724
Germany	—	—	—	—	—	—	9,694	9,091
Ireland	—	—	—	—	—	—	11,772	11,772
Netherlands	—	—	—	—	134	133	8,620	8,542
United States	—	—	—	—	3,632	3,032	14,222	11,891
<b>Total Proved Developed Producing</b>	<b>696</b>	<b>660</b>	<b>3,197</b>	<b>2,939</b>	<b>24,701</b>	<b>20,524</b>	<b>199,740</b>	<b>181,615</b>

Proved Developed Non-Producing <sup>(3) (5) (7)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	5,092	4,195	—	—	—	—	7,237	6,465
CEE	—	—	—	—	—	—	9,016	7,393
France	934	818	—	—	—	—	—	—
Germany	772	751	—	—	—	—	12,949	11,310
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	11,964	11,895
United States	393	315	—	—	—	—	410	329
<b>Total Proved Developed Non-Producing</b>	<b>7,191</b>	<b>6,080</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>41,577</b>	<b>37,393</b>
Proved Developed Non-Producing <sup>(3) (5) (7)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	—	—	781	732	697	596	7,125	5,991
CEE	—	—	—	—	—	—	1,503	1,232
France	—	—	—	—	—	—	934	818
Germany	—	—	—	—	—	—	2,930	2,636
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	41	41	2,035	2,024
United States	—	—	—	—	54	43	515	413
<b>Total Proved Developed Non-Producing</b>	<b>—</b>	<b>—</b>	<b>781</b>	<b>732</b>	<b>792</b>	<b>680</b>	<b>15,042</b>	<b>13,114</b>

Proved Undeveloped <sup>(3) (8)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	38,586	33,036	77	66	—	—	121,858	111,376
CEE	—	—	—	—	—	—	—	—
France	4,920	4,379	—	—	—	—	—	—
Germany	743	728	—	—	—	—	2,482	2,071
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	2,700	2,700
United States	10,769	8,873	—	—	—	—	18,214	15,059
<b>Total Proved Undeveloped</b>	<b>55,017</b>	<b>47,016</b>	<b>77</b>	<b>66</b>	<b>—</b>	<b>—</b>	<b>145,253</b>	<b>131,206</b>
Proved Undeveloped <sup>(3) (8)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	—	—	259	207	13,730	12,019	72,745	63,718
CEE	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	4,920	4,379
Germany	—	—	—	—	—	—	1,157	1,073
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	450	450
United States	—	—	—	—	2,082	1,720	15,886	13,103
<b>Total Proved Undeveloped</b>	<b>—</b>	<b>—</b>	<b>259</b>	<b>207</b>	<b>15,811</b>	<b>13,739</b>	<b>95,157</b>	<b>82,724</b>

Proved <sup>(3)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	8,608	8,608	—	—	—	—	—	—
Canada	94,903	83,189	87	76	—	—	361,097	333,074
CEE	—	—	—	—	—	—	10,388	8,518
France	40,963	36,922	—	—	—	—	—	—
Germany	6,072	5,901	—	—	—	—	46,253	41,397
Ireland	—	—	—	—	—	—	70,633	70,633
Netherlands	—	—	—	—	—	—	65,581	65,046
United States	16,254	13,457	—	—	—	—	51,608	42,931
<b>Total Proved</b>	<b>166,799</b>	<b>148,077</b>	<b>87</b>	<b>76</b>	<b>—</b>	<b>—</b>	<b>605,560</b>	<b>561,599</b>
Proved <sup>(3)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	8,608	8,608
Canada	696	660	4,237	3,878	35,361	29,974	191,356	169,508
CEE	—	—	—	—	—	—	1,731	1,420
France	—	—	—	—	—	—	40,963	36,922
Germany	—	—	—	—	—	—	13,781	12,801
Ireland	—	—	—	—	—	—	11,772	11,772
Netherlands	—	—	—	—	175	174	11,105	11,015
United States	—	—	—	—	5,768	4,796	30,623	25,407
<b>Total Proved</b>	<b>696</b>	<b>660</b>	<b>4,237</b>	<b>3,878</b>	<b>41,304</b>	<b>34,944</b>	<b>309,939</b>	<b>277,453</b>

Probable <sup>(4)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	4,552	4,552	—	—	—	—	—	—
Canada	46,931	40,935	78	68	—	—	248,227	229,200
CEE	—	—	—	—	—	—	5,829	4,779
France	18,729	16,797	—	—	—	—	—	—
Germany	3,962	3,846	—	—	—	—	53,987	47,548
Ireland	—	—	—	—	—	—	36,013	36,013
Netherlands	—	—	—	—	—	—	58,475	55,086
United States	18,579	15,470	—	—	—	—	35,828	29,933
<b>Total Probable</b>	<b>92,753</b>	<b>81,600</b>	<b>78</b>	<b>68</b>	<b>—</b>	<b>—</b>	<b>438,359</b>	<b>402,559</b>
Probable <sup>(4)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	4,552	4,552
Canada	168	160	1,316	1,209	20,549	17,458	109,177	96,889
CEE	—	—	—	—	—	—	971	797
France	—	—	—	—	—	—	18,729	16,797
Germany	—	—	—	—	—	—	12,959	11,770
Ireland	—	—	—	—	—	—	6,002	6,002
Netherlands	—	—	—	—	128	121	9,874	9,302
United States	—	—	—	—	4,122	3,441	28,673	23,900
<b>Total Probable</b>	<b>168</b>	<b>160</b>	<b>1,316</b>	<b>1,209</b>	<b>24,800</b>	<b>21,021</b>	<b>190,937</b>	<b>170,010</b>

Proved Plus Probable <sup>(3) (4)</sup>	Light Crude Oil & Medium Crude Oil (mbbl)		Heavy Oil (mbbl)		Tight Oil (mbbl)		Conventional Natural Gas (mmcf)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	13,160	13,160	—	—	—	—	—	—
Canada	141,834	124,124	165	144	—	—	609,324	562,274
CEE	—	—	—	—	—	—	16,217	13,298
France	59,692	53,719	—	—	—	—	—	—
Germany	10,033	9,747	—	—	—	—	100,240	88,945
Ireland	—	—	—	—	—	—	106,647	106,647
Netherlands	—	—	—	—	—	—	124,056	120,132
United States	34,833	28,927	—	—	—	—	87,436	72,864
<b>Total Proved Plus Probable</b>	<b>259,552</b>	<b>229,677</b>	<b>165</b>	<b>144</b>	<b>—</b>	<b>—</b>	<b>1,043,919</b>	<b>964,158</b>
Proved Plus Probable <sup>(3) (4)</sup>	Shale Gas (mmcf)		Coal Bed Methane (mmcf)		Natural Gas Liquids (mbbl)		BOE (mboe)	
	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>	Gross <sup>(2)</sup>	Net <sup>(2)</sup>
Australia	—	—	—	—	—	—	13,160	13,160
Canada	864	820	5,553	5,087	55,910	47,432	300,532	266,397
CEE	—	—	—	—	—	—	2,703	2,216
France	—	—	—	—	—	—	59,692	53,719
Germany	—	—	—	—	—	—	26,740	24,571
Ireland	—	—	—	—	—	—	17,774	17,774
Netherlands	—	—	—	—	304	296	20,980	20,317
United States	—	—	—	—	9,890	8,237	59,296	49,308
<b>Total Proved Plus Probable</b>	<b>864</b>	<b>820</b>	<b>5,553</b>	<b>5,087</b>	<b>66,103</b>	<b>55,965</b>	<b>500,876</b>	<b>447,463</b>



Notes:

- (1) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (2) "Gross Reserves" are Vermilion's working interest (operating or non-operating) share before deduction of royalty obligations and without including any royalty interests of Vermilion. "Net Reserves" are Vermilion's working interest (operating or non-operating) share after deduction of royalty obligations, plus Vermilion's royalty interests in reserves.
- (3) "Proved" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- (4) "Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.
- (5) "Developed" reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g. when compared to the cost of drilling a well) to put the reserves on production.
- (6) "Developed Producing" reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
- (7) "Developed Non-Producing" reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.
- (8) "Undeveloped" reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable, possible) to which they are assigned.

Oil and gas reserves - Company Interest <sup>(2)</sup>, based on forecast prices and costs <sup>(1)</sup>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Proved Developed Producing <sup>(3) (5) (6)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	8,608	—	—	—	—	—	—	8,608
Canada	51,376	10	—	232,365	696	3,199	20,974	111,737
CEE	—	—	—	1,372	—	—	—	229
France	35,109	—	—	—	—	—	—	35,109
Germany	4,557	—	—	30,822	—	—	—	9,694
Ireland	—	—	—	70,633	—	—	—	11,772
Netherlands	—	—	—	50,917	—	—	134	8,620
United States	5,093	—	—	32,984	—	—	3,632	14,222
<b>Total Proved Developed Producing</b>	<b>104,742</b>	<b>10</b>	<b>—</b>	<b>419,094</b>	<b>696</b>	<b>3,199</b>	<b>24,741</b>	<b>199,991</b>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Proved Developed Non-Producing <sup>(3) (5) (7)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	5,092	—	—	7,237	—	781	697	7,125
CEE	—	—	—	9,016	—	—	—	1,503
France	934	—	—	—	—	—	—	934
Germany	772	—	—	12,949	—	—	—	2,930
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	11,964	—	—	41	2,035
United States	393	—	—	410	—	—	54	515
<b>Total Proved Developed Non-Producing</b>	<b>7,191</b>	<b>—</b>	<b>—</b>	<b>41,577</b>	<b>—</b>	<b>781</b>	<b>792</b>	<b>15,042</b>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Proved Undeveloped <sup>(3) (8)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	—	—	—	—	—	—	—	—
Canada	38,598	77	—	121,858	—	259	13,737	72,764
CEE	—	—	—	—	—	—	—	—
France	4,920	—	—	—	—	—	—	4,920
Germany	743	—	—	2,482	—	—	—	1,157
Ireland	—	—	—	—	—	—	—	—
Netherlands	—	—	—	2,700	—	—	—	450
United States	10,769	—	—	18,214	—	—	2,082	15,886
<b>Total Proved Undeveloped</b>	<b>55,030</b>	<b>77</b>	<b>—</b>	<b>145,254</b>	<b>—</b>	<b>259</b>	<b>15,818</b>	<b>95,176</b>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Proved <sup>(3)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	8,608	—	—	—	—	—	—	8,608
Canada	95,066	87	—	361,462	696	4,239	35,408	191,626
CEE	—	—	—	10,388	—	—	—	1,731
France	40,963	—	—	—	—	—	—	40,963
Germany	6,072	—	—	46,253	—	—	—	13,781
Ireland	—	—	—	70,633	—	—	—	11,772
Netherlands	—	—	—	65,581	—	—	175	11,105
United States	16,254	—	—	51,608	—	—	5,768	30,623
<b>Total Proved</b>	<b>166,962</b>	<b>87</b>	<b>—</b>	<b>605,925</b>	<b>696</b>	<b>4,239</b>	<b>41,351</b>	<b>310,210</b>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Probable <sup>(4)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	4,552	—	—	—	—	—	—	4,552
Canada	46,985	78	—	248,337	168	1,316	20,563	109,263
CEE	—	—	—	5,829	—	—	—	971
France	18,729	—	—	—	—	—	—	18,729
Germany	3,962	—	—	53,987	—	—	—	12,959
Ireland	—	—	—	36,013	—	—	—	6,002
Netherlands	—	—	—	58,475	—	—	128	9,874
United States	18,579	—	—	35,828	—	—	4,122	28,673
<b>Total Probable</b>	<b>92,807</b>	<b>78</b>	<b>—</b>	<b>438,469</b>	<b>168</b>	<b>1,316</b>	<b>24,813</b>	<b>191,023</b>

	Light Crude Oil & Medium Crude Oil (mbbl)	Heavy Oil (mbbl)	Tight Oil (mbbl)	Conventional Natural Gas (mmcf)	Shale Gas (mmcf)	Coal Bed Methane (mmcf)	Natural Gas Liquids (mbbl)	BOE (mboe)
Proved Plus Probable <sup>(3) (4)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>	Company Interest <sup>(2)</sup>
Australia	13,160	—	—	—	—	—	—	13,160
Canada	142,051	165	—	609,798	864	5,555	55,971	300,889
CEE	—	—	—	16,217	—	—	—	2,703
France	59,692	—	—	—	—	—	—	59,692
Germany	10,033	—	—	100,240	—	—	—	26,740
Ireland	—	—	—	106,647	—	—	—	17,774
Netherlands	—	—	—	124,056	—	—	304	20,980
United States	34,833	—	—	87,436	—	—	9,890	59,296
<b>Total Proved Plus Probable</b>	<b>259,769</b>	<b>165</b>	<b>—</b>	<b>1,044,394</b>	<b>864</b>	<b>5,555</b>	<b>66,164</b>	<b>501,233</b>

Notes:

- (1) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (2) "Company Interest Reserves" are Vermilion's interest (operating, non-operating, or royalty) share before deduction of royalty obligations.
- (3) "Proved" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- (4) "Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.
- (5) "Developed" reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g. when compared to the cost of drilling a well) to put the reserves on production.
- (6) "Developed Producing" reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
- (7) "Developed Non-Producing" reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

- (8) "Undeveloped" reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable, possible) to which they are assigned.



Net present value of future net revenue - Based on forecast prices and costs <sup>(1)</sup>

(\$M)	Before Deducting Future Income Taxes Discounted At					After Deducting Future Income Taxes Discounted At				
	0%	5%	10%	15%	20%	0%	5%	10%	15%	20%
<b>Proved Developed Producing <sup>(2) (4) (5)</sup></b>										
Australia	110,537	176,968	199,222	202,095	196,718	134,368	160,626	164,503	159,389	151,072
Canada	2,232,060	1,831,045	1,531,267	1,317,440	1,160,296	2,232,060	1,831,045	1,531,267	1,317,440	1,160,296
CEE	6,152	5,737	5,384	5,082	4,822	6,152	5,737	5,384	5,082	4,822
France	1,746,114	1,270,508	996,356	822,490	703,526	1,425,273	1,053,557	833,519	691,548	593,207
Germany	181,953	196,476	176,111	154,291	136,067	181,953	196,476	176,111	154,291	136,067
Ireland	328,547	309,972	284,374	259,383	237,177	328,547	309,972	284,374	259,383	237,177
Netherlands	144,080	145,324	143,210	139,286	134,492	126,698	128,573	127,033	123,633	119,320
United States	286,910	217,089	173,884	145,668	126,129	286,910	217,089	173,884	145,668	126,129
<b>Total Proved Developed Producing</b>	<b>5,036,354</b>	<b>4,153,117</b>	<b>3,509,807</b>	<b>3,045,735</b>	<b>2,699,227</b>	<b>4,721,961</b>	<b>3,903,074</b>	<b>3,296,075</b>	<b>2,856,434</b>	<b>2,528,091</b>
<b>Proved Developed Non-Producing <sup>(2) (4)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	224,965	143,652	100,503	75,216	59,114	224,965	143,652	100,503	75,216	59,114
CEE	33,057	27,600	23,278	19,811	16,997	28,008	23,240	19,473	16,461	14,023
France	37,890	27,103	20,823	16,675	13,770	28,035	19,684	14,872	11,709	9,500
Germany	86,482	69,188	55,841	44,874	36,258	86,482	69,188	55,841	44,874	36,258
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	60,511	58,670	55,035	50,946	46,953	33,304	33,963	32,454	30,186	27,769
United States	13,002	7,954	4,997	3,161	1,959	13,002	7,954	4,997	3,161	1,959
<b>Total Proved Developed Non-Producing</b>	<b>455,908</b>	<b>334,167</b>	<b>260,478</b>	<b>210,683</b>	<b>175,051</b>	<b>413,796</b>	<b>297,681</b>	<b>228,141</b>	<b>181,607</b>	<b>148,622</b>
<b>Proved Undeveloped <sup>(2) (7)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	1,816,807	1,121,401	750,231	530,401	389,585	1,569,870	993,411	679,753	489,634	365,025
CEE	—	—	—	—	—	—	—	—	—	—
France	220,719	166,101	125,515	96,721	75,849	159,414	119,212	87,816	65,636	49,745
Germany	48,967	36,721	27,860	21,439	16,758	37,961	30,854	24,606	19,570	15,649
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	11,979	9,826	8,099	6,733	5,653	7,847	6,206	4,897	3,878	3,088
United States	443,855	268,875	177,603	124,354	90,571	412,422	253,579	169,483	119,739	87,803
<b>Total Proved Undeveloped</b>	<b>2,542,328</b>	<b>1,602,924</b>	<b>1,089,307</b>	<b>779,649</b>	<b>578,417</b>	<b>2,187,514</b>	<b>1,403,261</b>	<b>966,556</b>	<b>698,457</b>	<b>521,311</b>
<b>Proved <sup>(2)</sup></b>										
Australia	110,537	176,968	199,222	202,095	196,718	134,368	160,626	164,503	159,389	151,072
Canada	4,273,832	3,096,097	2,382,001	1,923,057	1,608,995	4,026,896	2,968,107	2,311,523	1,882,291	1,584,436
CEE	39,210	33,336	28,662	24,894	21,820	34,160	28,976	24,857	21,543	18,845
France	2,004,723	1,463,712	1,142,694	935,887	793,145	1,612,722	1,192,452	936,207	768,894	652,453
Germany	317,401	302,385	259,812	220,604	189,083	306,395	296,518	256,558	218,735	187,974
Ireland	328,547	309,972	284,374	259,383	237,177	328,547	309,972	284,374	259,383	237,177
Netherlands	216,571	213,820	206,344	196,964	187,098	167,849	168,742	164,384	157,697	150,176
United States	743,767	493,919	356,484	273,182	218,659	712,333	478,623	348,365	268,567	215,890
<b>Total Proved</b>	<b>8,034,589</b>	<b>6,090,208</b>	<b>4,859,593</b>	<b>4,036,067</b>	<b>3,452,695</b>	<b>7,323,270</b>	<b>5,604,016</b>	<b>4,490,771</b>	<b>3,736,498</b>	<b>3,198,024</b>
<b>Probable <sup>(3)</sup></b>										
Australia	194,455	170,899	140,919	114,880	94,340	120,561	104,520	85,430	69,157	56,443
Canada	3,110,174	1,804,031	1,203,716	875,747	674,786	2,336,078	1,356,842	915,793	676,907	530,808
CEE	31,427	25,656	21,388	18,146	15,626	26,288	21,399	17,796	15,071	12,959
France	1,159,623	646,203	413,440	289,038	214,005	851,091	473,698	299,307	205,931	149,769
Germany	465,081	307,846	205,929	144,919	106,943	313,593	210,468	139,426	97,313	71,590
Ireland	238,036	167,187	117,992	85,582	64,142	238,036	167,187	117,992	85,582	64,142
Netherlands	290,974	221,381	173,228	138,250	112,241	183,238	134,018	100,987	77,475	60,331
United States	1,081,256	586,361	365,993	250,651	182,852	854,384	463,093	290,030	199,943	147,157
<b>Total Probable</b>	<b>6,571,024</b>	<b>3,929,564</b>	<b>2,642,606</b>	<b>1,917,213</b>	<b>1,464,936</b>	<b>4,923,268</b>	<b>2,931,223</b>	<b>1,966,762</b>	<b>1,427,380</b>	<b>1,093,200</b>

(\$M)	Before Deducting Future Income Taxes Discounted At					After Deducting Future Income Taxes Discounted At				
	0%	5%	10%	15%	20%	0%	5%	10%	15%	20%
<b>Proved Plus Probable <sup>(2) (3)</sup></b>										
Australia	304,992	347,866	340,142	316,976	291,058	254,929	265,146	249,933	228,546	207,515
Canada	7,384,007	4,900,128	3,585,717	2,798,804	2,283,781	6,362,973	4,324,949	3,227,317	2,559,197	2,115,244
CEE	70,636	58,993	50,049	43,040	37,446	60,448	50,375	42,653	36,614	31,804
France	3,164,346	2,109,914	1,556,134	1,224,925	1,007,151	2,463,812	1,666,149	1,235,514	974,825	802,222
Germany	782,482	610,231	465,741	365,523	296,027	619,988	506,986	395,984	316,048	259,565
Ireland	566,583	477,159	402,366	344,965	301,319	566,583	477,159	402,366	344,965	301,319
Netherlands	507,545	435,201	379,572	335,214	299,339	351,087	302,760	265,371	235,172	210,507
United States	1,825,023	1,080,280	722,478	523,833	401,511	1,566,718	941,715	638,395	468,510	363,048
<b>Total Proved Plus Probable</b>	<b>14,605,614</b>	<b>10,019,772</b>	<b>7,502,199</b>	<b>5,953,280</b>	<b>4,917,631</b>	<b>12,246,538</b>	<b>8,535,239</b>	<b>6,457,533</b>	<b>5,163,878</b>	<b>4,291,223</b>

Notes:

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- (6) "Developed Non-Producing" reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.
- (7) "Undeveloped" reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable, possible) to which they are assigned.

*Total future net revenue (undiscounted) - Based on forecast prices and costs <sup>(1)</sup>*

(\$M)	Revenue	Royalties	Operating Costs	Capital Development Costs	Abandonment and Reclamation Costs	Future Net Revenue Before Income Taxes	Future Income Taxes <sup>(4)</sup>	Future Net Revenue After Income Taxes
<b>Proved <sup>(2)</sup></b>								
Australia	772,191	—	394,259	41,769	225,625	110,537	(23,830)	134,368
Canada	11,096,365	1,726,372	3,702,416	1,072,086	321,659	4,273,832	246,937	4,026,896
CEE	84,621	15,232	17,184	12,714	281	39,210	5,049	34,160
France	4,049,809	394,071	1,256,082	144,840	250,093	2,004,723	392,001	1,612,722
Germany	860,128	49,819	294,221	37,372	161,315	317,401	11,006	306,395
Ireland	611,136	—	196,244	20,586	65,758	328,547	—	328,547
Netherlands	562,719	4,032	219,493	6,001	116,623	216,571	48,722	167,849
United States	1,972,813	536,691	434,714	231,965	25,676	743,767	31,434	712,333
<b>Total Proved</b>	<b>20,009,782</b>	<b>2,726,217</b>	<b>6,514,612</b>	<b>1,567,335</b>	<b>1,167,029</b>	<b>8,034,589</b>	<b>711,319</b>	<b>7,323,270</b>
<b>Proved Plus Probable <sup>(2) (3)</sup></b>								
Australia	1,214,497	—	617,469	52,482	239,554	304,992	50,063	254,929
Canada	17,666,033	2,712,303	5,583,901	1,595,574	390,248	7,384,007	1,021,034	6,362,973
CEE	134,503	24,211	26,639	12,714	303	70,636	10,188	60,448
France	6,120,688	606,389	1,781,120	267,442	301,390	3,164,346	700,533	2,463,812
Germany	1,737,365	118,540	502,409	119,229	214,705	782,482	162,494	619,988
Ireland	969,282	—	286,896	41,749	74,054	566,583	—	566,583
Netherlands	1,105,018	33,869	361,447	61,690	140,467	507,545	156,458	351,087
United States	4,221,183	1,134,862	775,020	449,385	36,893	1,825,023	258,305	1,566,718
<b>Total Proved Plus Probable</b>	<b>33,168,568</b>	<b>4,630,175</b>	<b>9,934,901</b>	<b>2,600,264</b>	<b>1,397,614</b>	<b>14,605,614</b>	<b>2,359,076</b>	<b>12,246,538</b>

Notes:

- <sup>(1)</sup> The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- <sup>(2)</sup> "Proved" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- <sup>(3)</sup> "Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.
- <sup>(4)</sup> "Future Income Taxes" are calculated using future net revenue before income taxes as shown, after incorporating Vermilion's existing tax pools, corporate charge-outs, and related expenditures. This calculation applies the year-end statutory rate, taking into account future tax rates already legislated.

Future net revenue by product type - Based on forecast prices and costs <sup>(1)</sup>

	Future Net Revenue Before Income Taxes <sup>(2)</sup> (Discounted at 10% Per Year) (\$M)	Unit Value (\$/boe)
<b>Proved Developed Producing</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	2,655,419	23.20
Heavy Oil <sup>(3)</sup>	243	15.45
Conventional Natural Gas <sup>(4)</sup>	853,479	12.83
Shale Gas	529	3.63
Coal Bed Methane	137	0.28
<b>Total Proved Developed Producing</b>	<b>3,509,807</b>	<b>19.33</b>
<b>Proved Developed Non-Producing</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	136,446	19.96
Heavy Oil <sup>(3)</sup>	—	—
Conventional Natural Gas <sup>(4)</sup>	123,592	20.08
Shale Gas	—	—
Coal Bed Methane	440	3.58
<b>Total Proved Developed Non-Producing</b>	<b>260,478</b>	<b>19.86</b>
<b>Proved Undeveloped</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	923,812	15.58
Heavy Oil <sup>(3)</sup>	622	5.94
Conventional Natural Gas <sup>(4)</sup>	164,868	7.08
Shale Gas	—	—
Coal Bed Methane	6	0.16
<b>Total Proved Undeveloped</b>	<b>1,089,307</b>	<b>13.17</b>
<b>Proved</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	3,710,377	20.55
Heavy Oil <sup>(3)</sup>	823	6.86
Conventional Natural Gas <sup>(4)</sup>	1,147,280	11.95
Shale Gas	544	3.73
Coal Bed Methane	568	0.87
<b>Total Proved</b>	<b>4,859,593</b>	<b>17.52</b>
<b>Probable</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	1,937,937	18.87
Heavy Oil <sup>(3)</sup>	1,396	12.83
Conventional Natural Gas <sup>(4)</sup>	701,923	10.48
Shale Gas	168	4.69
Coal Bed Methane	1,182	5.81
<b>Total Probable</b>	<b>2,642,606</b>	<b>15.54</b>
<b>Proved Plus Probable</b>		
Light Crude Oil & Medium Crude Oil <sup>(3)</sup>	5,652,853	19.96
Heavy Oil <sup>(3)</sup>	2,165	9.46
Conventional Natural Gas <sup>(4)</sup>	1,844,761	11.32
Shale Gas	719	3.96
Coal Bed Methane	1,701	1.98
<b>Total Proved Plus Probable</b>	<b>7,502,199</b>	<b>16.77</b>

Notes:

<sup>(1)</sup> The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.

<sup>(2)</sup> Other Company revenue and costs not related to a specific product type have been allocated proportionately to the specified product types. Unit values are based on Company net reserves. Net present value of reserves categories are an approximation based on major products.

<sup>(3)</sup> Including solution gas and other by-products.

<sup>(4)</sup> Including by-products but excluding solution gas.

Forecast prices used in estimates <sup>(1)(2)</sup>

Year	Light Crude Oil and Medium Crude Oil				Conventional Natural Gas						Inflation Rate	Exchange Rate	
	Crude Oil			Canada	Europe		Natural Gas Liquids						
	WTI Cushing Oklahoma (\$US/bbl)	Edmonton Par Price 40° API (\$Cdn/bbl)	Cromer Light 35° API (\$Cdn/bbl)	Brent Blend FOB North Sea (\$US/bbl)	AECO Gas Price (\$Cdn/mmbtu)	UK National Balancing Point (\$US/mmbtu)	Edmonton Ethane (\$Cdn/bbl)	Edmonton Propane (\$Cdn/bbl)	Edmonton Butane (\$Cdn/bbl)	Edmonton C5+ (\$Cdn/bbl)		Percent Per Year	USD/CAD
2019	57.05	69.22	69.69	64.33	1.70	4.85	9.38	12.45	19.55	70.16	1.90%	0.75	1.49
Forecast													
2020	61.00	72.64	72.16	66.33	2.04	5.68	6.42	26.36	42.09	76.83	—%	0.76	1.47
2021	63.75	76.06	75.23	67.94	2.32	6.08	7.41	29.80	47.03	79.82	1.70%	0.77	1.47
2022	66.18	78.35	77.50	70.06	2.62	6.46	8.33	32.94	50.66	82.30	2.00%	0.79	1.46
2023	67.91	80.71	79.83	71.66	2.71	6.83	8.65	34.00	52.21	84.72	2.00%	0.79	1.46
2024	69.48	82.64	81.76	73.27	2.81	7.04	8.98	34.89	53.48	86.71	2.00%	0.79	1.46
2025	71.07	84.60	83.69	74.57	2.89	7.26	9.24	35.78	54.77	88.73	2.00%	0.79	1.46
2026	72.68	86.57	85.66	76.22	2.96	7.43	9.46	36.69	56.07	90.77	2.00%	0.79	1.46
2027	74.24	88.49	87.57	77.83	3.03	7.55	9.67	37.57	57.32	92.76	2.00%	0.79	1.46
2028	75.73	90.31	89.37	79.36	3.10	7.66	9.89	38.41	58.50	94.65	2.00%	0.79	1.46
2029	77.24	92.17	91.21	80.92	3.17	7.77	10.12	39.26	59.71	96.57	2.00%	0.79	1.46
Thereafter	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	0.79	1.46

Notes:

- (1) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth above. The pricing assumptions above are the January 2020, 3 Consultants' Average pricing which were provided by GLJ, an independent qualified reserves evaluator appointed pursuant to NI 51-101. The consultants are GLJ, Sproule and McDaniel and Associates, all independent qualified reverse evaluators.
- (2) For light oil and medium crude oil, the pricing assumptions used are WTI, Edmonton Par Price, Cromer Medium, and Brent Blend. For conventional natural gas in Canada, the pricing assumptions used are AECO and for conventional natural gas in Europe, the pricing assumptions used are National Balancing Point.

For 2019, average realized prices before hedging were:

Country	Crude oil (\$/bbl)	NGLs (\$/bbl)	Natural gas (\$/mcf)
Australia	93.33	—	—
Canada	67.84	33.03	1.77
CEE	—	—	5.23
France	83.22	—	1.76
Germany	80.22	—	5.64
Ireland	—	—	6.13
Netherlands	—	72.44	6.16
United States	68.76	18.04	2.15

## Reconciliations of changes in reserves

The following tables set forth a reconciliation of the changes in Vermilion's gross light crude oil and medium crude oil, heavy oil, tight oil, conventional natural gas, coal bed methane, shale gas and NGLs reserves as at December 31, 2019 compared to such reserves as at December 31, 2018 based on the forecast price and cost assumptions set forth in note 3.

### Reconciliation of Company Gross Reserves by Principal Product Type - Based on Forecast Prices and Costs <sup>(3)</sup>

Australia	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	9,668	4,812	14,480	9,668	4,812	14,480	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	1,007	(260)	747	1,007	(260)	747	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(2,067)	—	(2,067)	(2,067)	—	(2,067)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>8,608</b>	<b>4,552</b>	<b>13,160</b>	<b>8,608</b>	<b>4,552</b>	<b>13,160</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Australia	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	—	—	—	—	—	—	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	—	—	—	—	—	—	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	—	—	—	—	—	—	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Australia	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	—	—	—	9,668	4,812	14,480
Discoveries	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—
Technical Revisions	—	—	—	1,007	(260)	747
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	—	—	—	(2,067)	—	(2,067)
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>8,608</b>	<b>4,552</b>	<b>13,160</b>



Canada	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	94,665	46,461	141,126	94,564	46,378	140,943	100	83	183	—	—	—
Discoveries	249	281	530	249	281	530	—	—	—	—	—	—
Extensions & Improved Recovery	8,166	3,200	11,366	8,166	3,200	11,366	—	—	—	—	—	—
Technical Revisions	2,125	(3,328)	(1,204)	2,124	(3,323)	(1,199)	—	(5)	(5)	—	—	—
Acquisitions	447	136	583	447	136	583	—	—	—	—	—	—
Dispositions	(7)	(3)	(11)	(7)	(3)	(11)	—	—	—	—	—	—
Economic Factors	(337)	263	(74)	(337)	263	(74)	—	—	—	—	—	—
Production	(10,317)	—	(10,317)	(10,304)	—	(10,304)	(13)	—	(13)	—	—	—
<b>At December 31, 2019</b>	<b>94,990</b>	<b>47,009</b>	<b>141,999</b>	<b>94,903</b>	<b>46,931</b>	<b>141,834</b>	<b>87</b>	<b>78</b>	<b>165</b>	<b>—</b>	<b>—</b>	<b>—</b>

Canada	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	321,074	215,089	536,163	318,340	212,020	530,360	1,828	2,856	4,683	906	213	1,120
Discoveries	1,025	1,122	2,148	1,025	1,122	2,148	—	—	—	—	—	—
Extensions & Improved Recovery	47,748	27,596	75,344	47,748	27,596	75,344	—	—	—	—	—	—
Technical Revisions	38,134	1,597	39,731	34,694	3,181	37,875	3,585	(1,540)	2,045	(145)	(45)	(190)
Acquisitions	14,093	5,187	19,280	14,093	5,187	19,280	—	—	—	—	—	—
Dispositions	(23)	(1,235)	(1,258)	(23)	(1,235)	(1,258)	—	—	—	—	—	—
Economic Factors	(1,872)	355	(1,517)	(1,872)	355	(1,517)	—	—	—	—	—	—
Production	(54,149)	—	(54,149)	(52,907)	—	(52,907)	(1,176)	—	(1,176)	(66)	—	(66)
<b>At December 31, 2019</b>	<b>366,030</b>	<b>249,712</b>	<b>615,741</b>	<b>361,097</b>	<b>248,227</b>	<b>609,324</b>	<b>4,237</b>	<b>1,316</b>	<b>5,553</b>	<b>696</b>	<b>168</b>	<b>864</b>

Canada	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	33,486	20,502	53,988	181,663	102,812	284,474
Discoveries	72	84	156	491	553	1,044
Extensions & Improved Recovery	4,857	2,420	7,277	20,981	10,219	31,200
Technical Revisions	(1,457)	(2,766)	(4,223)	7,023	(5,828)	1,195
Acquisitions	1,051	502	1,553	3,847	1,502	5,350
Dispositions	(1)	(206)	(208)	(13)	(415)	(428)
Economic Factors	(96)	13	(83)	(744)	335	(410)
Production	(2,551)	—	(2,551)	(21,892)	—	(21,892)
<b>At December 31, 2019</b>	<b>35,361</b>	<b>20,549</b>	<b>55,910</b>	<b>191,356</b>	<b>109,177</b>	<b>300,532</b>

CEE	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	—	—	—	—	—	—	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	—	—	—	—	—	—	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	—	—	—	—	—	—	—	—	—	—	—	—
At December 31, 2019	—	—	—	—	—	—	—	—	—	—	—	—

CEE	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	788	356	1,143	788	356	1,143	—	—	—	—	—	—
Discoveries	10,350	5,769	16,119	10,350	5,769	16,119	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	(598)	(296)	(893)	(598)	(296)	(893)	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(152)	—	(152)	(152)	—	(152)	—	—	—	—	—	—
At December 31, 2019	10,388	5,829	16,217	10,388	5,829	16,217	—	—	—	—	—	—

CEE	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	—	—	—	131	59	191
Discoveries	—	—	—	1,725	961	2,686
Extensions & Improved Recovery	—	—	—	—	—	—
Technical Revisions	—	—	—	(100)	(49)	(149)
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	—	—	—	(25)	—	(25)
At December 31, 2019	—	—	—	1,731	971	2,703

France	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	42,379	20,355	62,734	42,379	20,355	62,734	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	551	260	810	551	260	810	—	—	—	—	—	—
Technical Revisions	1,882	(1,260)	622	1,882	(1,260)	622	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	(40)	(626)	(666)	(40)	(626)	(666)	—	—	—	—	—	—
Production	(3,809)	—	(3,809)	(3,809)	—	(3,809)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>40,963</b>	<b>18,729</b>	<b>59,692</b>	<b>40,963</b>	<b>18,729</b>	<b>59,692</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

France	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	6,522	580	7,102	6,522	580	7,102	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	(6,453)	(580)	(7,033)	(6,453)	(580)	(7,033)	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(69)	—	(69)	(69)	—	(69)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

France	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	—	—	—	43,466	20,452	63,918
Discoveries	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	551	260	810
Technical Revisions	—	—	—	807	(1,357)	(550)
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	(40)	(626)	(666)
Production	—	—	—	(3,821)	—	(3,821)
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>40,963</b>	<b>18,729</b>	<b>59,692</b>

Germany	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	5,737	3,841	9,578	5,737	3,841	9,578	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	307	405	712	307	405	712	—	—	—	—	—	—
Technical Revisions	362	(284)	78	362	(284)	78	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(335)	—	(335)	(335)	—	(335)	—	—	—	—	—	—
At December 31, 2019	6,072	3,962	10,033	6,072	3,962	10,033	—	—	—	—	—	—

Germany	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	43,519	53,415	96,934	43,519	53,415	96,934	—	—	—	—	—	—
Discoveries	5,065	2,435	7,499	5,065	2,435	7,499	—	—	—	—	—	—
Extensions & Improved Recovery	980	270	1,250	980	270	1,250	—	—	—	—	—	—
Technical Revisions	2,276	(2,133)	144	2,276	(2,133)	144	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(5,587)	—	(5,587)	(5,587)	—	(5,587)	—	—	—	—	—	—
At December 31, 2019	46,253	53,987	100,240	46,253	53,987	100,240	—	—	—	—	—	—

Germany	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	—	—	—	12,990	12,743	25,734
Discoveries	—	—	—	844	406	1,250
Extensions & Improved Recovery	—	—	—	470	450	920
Technical Revisions	—	—	—	742	(640)	102
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	—	—	—	(1,266)	—	(1,266)
At December 31, 2019	—	—	—	13,781	12,959	26,740

Ireland	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	—	—	—	—	—	—	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	—	—	—	—	—	—	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	—	—	—	—	—	—	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Ireland	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	78,560	44,890	123,451	78,560	44,890	123,451	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	9,072	(8,877)	195	9,072	(8,877)	195	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(16,999)	—	(16,999)	(16,999)	—	(16,999)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>70,633</b>	<b>36,013</b>	<b>106,647</b>	<b>70,633</b>	<b>36,013</b>	<b>106,647</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Ireland	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	—	—	—	13,093	7,482	20,575
Discoveries	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—
Technical Revisions	—	—	—	1,512	(1,480)	32
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	—	—	—	(2,833)	—	(2,833)
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>11,772</b>	<b>6,002</b>	<b>17,774</b>

Netherlands	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	—	—	—	—	—	—	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	—	—	—	—	—	—	—	—	—	—	—	—
Technical Revisions	—	—	—	—	—	—	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	—	—	—	—	—	—	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Netherlands	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane			Shale Gas		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	69,706	61,527	131,233	69,706	61,527	131,233	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	4,222	2,432	6,654	4,222	2,432	6,654	—	—	—	—	—	—
Technical Revisions	9,572	(5,484)	4,088	9,572	(5,484)	4,088	—	—	—	—	—	—
Acquisitions	—	—	—	—	—	—	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(17,920)	—	(17,920)	(17,920)	—	(17,920)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>65,581</b>	<b>58,475</b>	<b>124,056</b>	<b>65,581</b>	<b>58,475</b>	<b>124,056</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Netherlands	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	185	140	325	11,802	10,395	22,197
Discoveries	—	—	—	—	—	—
Extensions & Improved Recovery	16	6	22	720	411	1,131
Technical Revisions	7	(18)	(10)	1,603	(932)	671
Acquisitions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	(33)	—	(33)	(3,020)	—	(3,020)
<b>At December 31, 2019</b>	<b>175</b>	<b>128</b>	<b>304</b>	<b>11,105</b>	<b>9,874</b>	<b>20,980</b>



United States	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	12,989	20,223	33,211	12,989	20,223	33,211	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	2,740	(907)	1,833	2,740	(907)	1,833	—	—	—	—	—	—
Technical Revisions	1,101	(974)	127	1,101	(974)	127	—	—	—	—	—	—
Acquisitions	348	238	586	348	238	586	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(924)	—	(924)	(924)	—	(924)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>16,254</b>	<b>18,579</b>	<b>34,833</b>	<b>16,254</b>	<b>18,579</b>	<b>34,833</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

United States	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane <sup>(5)</sup>			Shale Gas <sup>(5)</sup>		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	44,705	39,681	84,387	44,705	39,681	84,387	—	—	—	—	—	—
Discoveries	—	—	—	—	—	—	—	—	—	—	—	—
Extensions & Improved Recovery	5,446	(2,405)	3,041	5,446	(2,405)	3,041	—	—	—	—	—	—
Technical Revisions	3,203	(2,004)	1,200	3,203	(2,004)	1,200	—	—	—	—	—	—
Acquisitions	767	555	1,322	767	555	1,322	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—	—	—	—	—	—	—
Production	(2,514)	—	(2,514)	(2,514)	—	(2,514)	—	—	—	—	—	—
<b>At December 31, 2019</b>	<b>51,608</b>	<b>35,828</b>	<b>87,436</b>	<b>51,608</b>	<b>35,828</b>	<b>87,436</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

United States	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	4,707	4,231	8,939	25,147	31,068	56,214
Discoveries	—	—	—	—	—	—
Extensions & Improved Recovery	606	(252)	353	4,254	(1,561)	2,693
Technical Revisions	733	82	815	2,368	(1,226)	1,142
Acquisitions	85	61	146	561	392	953
Dispositions	—	—	—	—	—	—
Economic Factors	—	—	—	—	—	—
Production	(364)	—	(364)	(1,706)	—	(1,706)
<b>At December 31, 2019</b>	<b>5,768</b>	<b>4,122</b>	<b>9,890</b>	<b>30,623</b>	<b>28,673</b>	<b>59,296</b>

Total Company	Total Oil <sup>(4)</sup>			Light & Medium Crude Oil			Heavy Oil			Tight Oil		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)	(mbbl)
At December 31, 2018	165,437	95,691	261,129	165,337	95,609	260,946	100	83	183	—	—	—
Discoveries	249	281	530	249	281	530	—	—	—	—	—	—
Extensions & Improved Recovery	11,764	2,957	14,721	11,764	2,957	14,721	—	—	—	—	—	—
Technical Revisions	6,477	(6,106)	370	6,476	(6,101)	375	—	(5)	(5)	—	—	—
Acquisitions	795	374	1,169	795	374	1,169	—	—	—	—	—	—
Dispositions	(7)	(3)	(11)	(7)	(3)	(11)	—	—	—	—	—	—
Economic Factors	(377)	(363)	(740)	(377)	(363)	(740)	—	—	—	—	—	—
Production	(17,451)	—	(17,451)	(17,438)	—	(17,438)	(13)	—	(13)	—	—	—
<b>At December 31, 2019</b>	<b>166,886</b>	<b>92,830</b>	<b>259,717</b>	<b>166,799</b>	<b>92,753</b>	<b>259,552</b>	<b>87</b>	<b>78</b>	<b>165</b>	<b>—</b>	<b>—</b>	<b>—</b>

Total Company	Total Gas <sup>(4)</sup>			Conventional Natural Gas			Coal Bed Methane <sup>(5)</sup>			Shale Gas <sup>(5)</sup>		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmcf)
At December 31, 2018	564,874	415,539	980,413	562,140	412,470	974,610	1,828	2,856	4,683	906	213	1,120
Discoveries	16,440	9,326	25,766	16,440	9,326	25,766	—	—	—	—	—	—
Extensions & Improved Recovery	58,396	27,893	86,290	58,396	27,893	86,290	—	—	—	—	—	—
Technical Revisions	55,208	(17,777)	37,431	51,768	(16,192)	35,575	3,585	(1,540)	2,045	(145)	(45)	(190)
Acquisitions	14,859	5,743	20,602	14,859	5,743	20,602	—	—	—	—	—	—
Dispositions	(23)	(1,235)	(1,258)	(23)	(1,235)	(1,258)	—	—	—	—	—	—
Economic Factors	(1,872)	355	(1,517)	(1,872)	355	(1,517)	—	—	—	—	—	—
Production	(97,390)	—	(97,390)	(96,148)	—	(96,148)	(1,176)	—	(1,176)	(66)	—	(66)
<b>At December 31, 2019</b>	<b>610,493</b>	<b>439,844</b>	<b>1,050,336</b>	<b>605,560</b>	<b>438,359</b>	<b>1,043,919</b>	<b>4,237</b>	<b>1,316</b>	<b>5,553</b>	<b>696</b>	<b>168</b>	<b>864</b>

Total Company	Natural Gas Liquids			BOE		
Proved Probable P+P <sup>(1) (2)</sup>	Proved	Probable	P+P	Proved	Probable	P+P
Factors	(mbbl)	(mbbl)	(mbbl)	(mboe)	(mboe)	(mboe)
At December 31, 2018	38,378	24,874	63,252	297,960	189,822	487,783
Discoveries	72	84	156	3,060	1,920	4,980
Extensions & Improved Recovery	5,479	2,173	7,652	26,976	9,779	36,754
Technical Revisions	(716)	(2,702)	(3,418)	14,962	(11,771)	3,191
Acquisitions	1,136	563	1,700	4,408	1,894	6,302
Dispositions	(1)	(206)	(208)	(13)	(415)	(428)
Economic Factors	(96)	13	(83)	(784)	(291)	(1,076)
Production	(2,947)	—	(2,947)	(36,630)	—	(36,630)
<b>At December 31, 2019</b>	<b>41,304</b>	<b>24,800</b>	<b>66,103</b>	<b>309,939</b>	<b>190,937</b>	<b>500,876</b>

**Notes:**

- (1) "Proved" reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- (2) "Probable" reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.
- (3) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (4) For reporting purposes, "Total Oil" is the sum of Light and Medium Crude Oil, Heavy Oil and Tight Oil. For reporting purposes, "Total Gas" is the sum of Conventional Natural Gas, Coal Bed Methane and Shale Gas.

## Undeveloped reserves

Proved undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. These reserves have a 90% probability of being recovered. Vermilion's current plan is to develop these reserves in the following three years. The pace of development of these reserves is influenced by many factors, including but not limited to, the outcomes of yearly drilling and reservoir evaluations, changes in commodity pricing, changes in capital allocations, changing technical conditions, regulatory changes and impact of future acquisitions and dispositions. As new information becomes available these reserves are reviewed and development plans are revised accordingly.

Probable undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. These reserves have a 50% probability of being recovered. Vermilion's current plan is to develop these reserves over the next five years. In general, development of these reserves requires additional evaluation data to increase the probability of success to a level that favourably ranks the project against other projects in Vermilion's inventory. This increases the timeline for the development of these reserves. This timetable may be altered depending on outside market forces, changes in capital allocations and impact of future acquisitions and dispositions.

## Timing of initial undeveloped reserves assignment

### Undeveloped Reserves Attributed in Current Year

	Light Crude Oil & Medium Crude Oil		Conventional Natural Gas		Heavy Oil		Coal Bed Methane		Natural Gas Liquids		Total Oil Equivalent	
	First Attributed <sup>(1)</sup>	Booked (mmbbl)	First Attributed <sup>(1)</sup>	Booked (mmcf)	First Attributed <sup>(1)</sup>	Booked (mmcf)	First Attributed <sup>(1)</sup>	Booked (mmcf)	First Attributed <sup>(1)</sup>	Booked (mmbbl)	First Attributed <sup>(1)</sup>	Booked (mboe)
<b>Proved</b>												
Prior to 2016	25,459	68,207	119,492	760,729			13,467	62,714	9,057	22,508	56,676	227,956
2016	1,411	16,140	25,023	90,934	—	—	—	3,043	1,737	7,546	7,319	39,349
2017	2,221	16,816	36,709	99,458	—	—	—	2,023	3,988	9,133	12,327	42,863
2018	12,910	50,334	39,940	133,931	39	78	—	453	5,649	16,265	25,255	89,074
2019	7,220	55,017	28,369	145,253	—	77	—	259	3,080	15,811	15,029	95,157
<b>Probable</b>												
Prior to 2016	36,549	110,660	192,842	562,854			7,830	38,942	14,194	28,364	84,188	239,323
2016	4,918	27,863	66,129	167,973	—	—	—	3,328	1,611	10,506	17,551	66,919
2017	4,336	28,646	38,537	197,647	—	—	—	1,055	2,802	11,455	13,561	73,218
2018	12,521	57,802	49,186	247,148	61	72	—	78	5,556	18,176	26,336	117,254
2019	5,470	54,566	54,866	273,081	—	74	—	513	3,900	17,165	18,515	117,403

Note:

<sup>(1)</sup> "First Attributed" refers to reserves first attributed at year-end of the corresponding fiscal year.

## Future development costs

The table below sets out the future development costs deducted in the estimation of future net revenue attributable to total proved reserves and total proved plus probable reserves (using forecast prices and costs).

Vermilion expects to source its capital expenditure requirements from internally generated cash flow and, as appropriate, from Vermilion's existing credit facility or equity or debt financing. It is anticipated that costs of funding the future development costs will not impact development of its properties or Vermilion's reserves or future net revenue.

(\$M)	Total Proved Estimated Using Forecast Prices and Costs <sup>(1)</sup>	Total Proved Plus Probable Estimated Using Forecast Prices and Costs <sup>(1)</sup>
<b>Australia</b>		
2020	22,697	22,697
2021	2,852	2,852
2022	2,972	2,972
2023	3,153	3,153
2024	3,299	3,299
Remainder	6,797	17,509
<b>Australia total for all years undiscounted</b>	<b>41,769</b>	<b>52,482</b>
<b>Canada</b>		
2020	245,734	285,068
2021	309,739	383,382
2022	196,391	330,782
2023	126,049	251,420
2024	57,525	156,524
Remainder	136,648	188,398
<b>Canada total for all years undiscounted</b>	<b>1,072,086</b>	<b>1,595,574</b>
<b>CEE</b>		
2020	1,400	1,400
2021	11,314	11,314
2022	—	—
2023	—	—
2024	—	—
Remainder	—	—
<b>CEE total for all years undiscounted</b>	<b>12,714</b>	<b>12,714</b>
<b>France</b>		
2020	28,117	45,443
2021	31,852	60,639
2022	49,306	86,084
2023	16,500	51,567
2024	5,518	10,055
Remainder	13,547	13,655
<b>France total for all years undiscounted</b>	<b>144,840</b>	<b>267,442</b>
<b>Germany</b>		
2020	13,874	16,085
2021	5,191	7,806
2022	15,707	35,221
2023	1,726	13,658
2024	129	45,715
Remainder	744	744
<b>Germany for all years undiscounted</b>	<b>37,372</b>	<b>119,229</b>

(S\$M)	Total Proved Estimated Using Forecast Prices and Costs <sup>(1)</sup>	Total Proved Plus Probable Estimated Using Forecast Prices and Costs <sup>(1)</sup>
<b>Ireland</b>		
2020	1,913	1,913
2021	—	—
2022	—	21,162
2023	—	—
2024	—	—
Remainder	18,674	18,674
<b>Ireland total for all years undiscounted</b>	<b>20,586</b>	<b>41,749</b>
<b>Netherlands</b>		
2020	742	11,523
2021	3,672	11,100
2022	1,367	12,077
2023	220	14,197
2024	—	12,650
Remainder	—	143
<b>Netherlands total for all years undiscounted</b>	<b>6,001</b>	<b>61,690</b>
<b>United States</b>		
2020	57,846	57,846
2021	70,477	70,477
2022	51,194	98,241
2023	44,466	107,613
2024	7,983	115,208
Remainder	—	—
<b>United States total for all years undiscounted</b>	<b>231,965</b>	<b>449,385</b>
<b>Total Company</b>		
2020	372,323	441,975
2021	435,097	547,570
2022	316,937	586,539
2023	192,115	441,608
2024	74,454	343,450
Remainder	176,409	239,123
<b>Total for all years undiscounted</b>	<b>1,567,335</b>	<b>2,600,264</b>

Note:

<sup>(1)</sup> The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are detailed in "Forecast Prices used in Estimates".

## Oil and gas properties and wells

The following table sets forth the number of wells (based on wellbores) in which Vermilion held a working interest as at December 31, 2019:

	Oil				Gas			
	Producing		Non-Producing <sup>(4)</sup>		Producing		Non-Producing <sup>(4)</sup>	
	Gross Wells <sup>(2)</sup>	Net Wells <sup>(3)</sup>	Gross Wells <sup>(2)</sup>	Net Wells <sup>(3)</sup>	Gross Wells <sup>(2)</sup>	Net Wells <sup>(3)</sup>	Gross Wells <sup>(2)</sup>	Net Wells <sup>(3)</sup>
Canada								
Alberta	809	667	1,533	1,127	520	421	780	485
Saskatchewan	3,240	2,735	7,076	5,698	18	18	195	177
<b>Total Canada</b>	<b>4,049</b>	<b>3,402</b>	<b>8,609</b>	<b>6,825</b>	<b>538</b>	<b>439</b>	<b>975</b>	<b>662</b>
Australia <sup>(1)</sup>	17	17	3	3	—	—	1	1
Croatia	—	—	—	—	—	—	2	2
France	340	335	97	95	1	1	2	2
Germany	133	105	40	34	22	8	4	1
Hungary	—	—	—	—	2	1	1	1
Ireland <sup>(1)</sup>	—	—	—	—	6	1	—	—
Netherlands	—	—	—	—	98	47	106	48
United States (Wyoming)	132	128	60	54	—	—	—	—
<b>Total Vermilion</b>	<b>4,671</b>	<b>3,986</b>	<b>8,809</b>	<b>7,011</b>	<b>667</b>	<b>498</b>	<b>1,091</b>	<b>718</b>

### Notes:

<sup>(1)</sup> Wells for Australia and Ireland are located offshore.

<sup>(2)</sup> "Gross" refers to the total wells in which Vermilion has an interest, directly or indirectly.

<sup>(3)</sup> "Net" refers to the total wells in which Vermilion has an interest, directly or indirectly, multiplied by the percentage working interest owned by Vermilion, directly or indirectly, therein.

<sup>(4)</sup> Non-producing wells include wells which are capable of producing, but which are currently not producing, and are re-evaluated with respect to future commodity prices, proximity to facility infrastructure, design of future exploration and development programs, and access to capital.



## Costs incurred

The following table summarizes the capital expenditures made by Vermilion on oil and gas properties for the year ended December 31, 2019:

(\$M)	Acquisition Costs for Proved Properties	Acquisition Costs for Unproved Properties	Exploration Costs	Development Costs	Total Costs
Australia	—	—	—	30,550	30,550
Canada	24,064	—	—	293,744	317,808
Croatia	—	—	9,714	—	9,714
France	—	—	62	74,579	74,641
Germany	7,570	—	10,878	10,806	29,254
Hungary	2,131	—	11,458	(1,436)	12,153
Ireland	—	—	—	1,372	1,372
Netherlands	908	—	3,739	19,866	24,513
Slovakia	—	—	636	—	636
United States	3,799	—	—	57,196	60,995
<b>Total</b>	<b>38,472</b>	<b>—</b>	<b>36,487</b>	<b>486,677</b>	<b>561,636</b>

## Acreage

The following table summarizes the acreage for the year ended December 31, 2019:

	Developed <sup>(1)</sup>		Undeveloped		Total	
	Gross <sup>(2)</sup>	Net <sup>(3)</sup>	Gross <sup>(2)</sup>	Net <sup>(3)</sup>	Gross <sup>(2)(4)</sup>	Net <sup>(3)(4)</sup>
Australia	20,164	20,164	39,389	39,389	59,552	59,552
Canada	837,014	665,305	484,471	423,234	1,321,485	1,088,539
Croatia	1,800	1,800	2,215,647	2,215,647	2,217,447	2,217,447
France	258,125	248,873	244,354	222,126	502,479	470,999
Germany	88,603	32,662	2,815,399	1,151,203	2,904,002	1,183,865
Hungary	1,220	832	951,035	951,035	952,255	951,867
Ireland	7,200	1,440	—	—	—	—
Netherlands	194,423	80,953	1,732,877	849,047	1,927,300	930,000
Slovakia	—	—	485,591	242,796	485,591	242,796
United States	49,901	44,670	110,983	99,958	160,884	144,628
<b>Total</b>	<b>1,451,249</b>	<b>1,095,258</b>	<b>9,172,181</b>	<b>6,250,096</b>	<b>10,623,431</b>	<b>7,345,355</b>

### Notes:

- (1) "Developed" means the acreage assigned to productive wells based on applicable regulations.
- (2) "Gross" means the total acreage in which Vermilion has a working interest, directly or indirectly.
- (3) "Net" means the total acreage in which Vermilion has a working interest, directly or indirectly, multiplied by the percentage working interest of Vermilion.
- (4) When determining gross and net acreage for two or more leases covering the same lands but different rights, the acreage is reported for each lease. Where there are multiple discontinuous rights in a single lease, the acreage is reported only once.

## Exploration and development activities

The following table sets forth the number of development and exploration wells which Vermilion completed during its 2019 financial year:

	Exploration Wells		Development Wells	
	Gross <sup>(1)</sup>	Net <sup>(2)</sup>	Gross <sup>(1)</sup>	Net <sup>(2)</sup>
<b>Canada</b>				
Oil	—	—	130.0	111.4
Gas	—	—	22.0	21.5
Dry Holes	—	—	—	—
<b>Total Canada</b>	<b>—</b>	<b>—</b>	<b>152.0</b>	<b>132.9</b>
<b>Croatia</b>				
Oil	—	—	—	—
Gas	2.0	2.0	—	—
Dry holes	—	—	—	—
<b>Total Croatia</b>	<b>2.0</b>	<b>2.0</b>	<b>—</b>	<b>—</b>
<b>France</b>				
Oil	—	—	4.0	4.0
Gas	—	—	—	—
Dry Holes	—	—	—	—
<b>Total France</b>	<b>—</b>	<b>—</b>	<b>4.0</b>	<b>4.0</b>
<b>Germany</b>				
Oil	—	—	—	—
Gas	2.0	0.7	—	—
Dry Holes	—	—	—	—
<b>Total Germany</b>	<b>2.0</b>	<b>0.7</b>	<b>—</b>	<b>—</b>
<b>Hungary</b>				
Oil	—	—	—	—
Gas	3.0	2.3	—	—
Dry Holes	1.0	1.0	—	—
<b>Total Hungary</b>	<b>4.0</b>	<b>3.3</b>	<b>—</b>	<b>—</b>
<b>Ireland</b>				
Oil	—	—	—	—
Gas	—	—	—	—
Dry Holes	—	—	—	—
<b>Total Ireland</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Netherlands</b>				
Oil	—	—	—	—
Gas	—	—	2.0	0.5
Dry Holes	—	—	—	—
<b>Total Netherlands</b>	<b>—</b>	<b>—</b>	<b>2.0</b>	<b>0.5</b>
<b>United States</b>				
Oil	—	—	8.0	8.0
Gas	—	—	—	—
Dry Holes	—	—	—	—
<b>Total United States</b>	<b>—</b>	<b>—</b>	<b>8.0</b>	<b>8.0</b>
<b>Total Company</b>				
Oil	—	—	144.0	125.4
Gas	7.0	5.0	24.0	22.0
Dry Holes	1.0	1.0	—	—
<b>Total Company</b>	<b>8.0</b>	<b>6.0</b>	<b>168.0</b>	<b>147.4</b>

Notes:

(1) "Gross" refers to the total wells in which Vermilion has an interest, directly or indirectly.

(2) "Net" refers to the total wells in which Vermilion has an interest, directly or indirectly, multiplied by the percentage working interest owned by Vermilion, directly or indirectly therein.

## Properties with no attributed reserves

The following table sets out Vermilion's properties with no attributed reserves as at December 31, 2019:

Country	Gross Acres <sup>(1)</sup>	Net Acres <sup>(2)</sup>
Australia	39,389	39,389
Canada	50,170	43,648
Croatia	2,215,647	2,215,647
France	90,683	82,521
Germany	2,771,389	1,136,269
Hungary	950,253	950,253
Ireland	—	—
Netherlands	1,585,852	777,068
Slovakia	485,592	242,796
United States	64,592	58,132
<b>Total</b>	<b>8,253,567</b>	<b>5,545,724</b>

### Notes:

(1) "Gross" refers to the total acres in which Vermilion has an interest, directly or indirectly.

(2) "Net" refers to the total acres in which Vermilion has an interest, directly or indirectly, multiplied by the percentage working interest owned by Vermilion, directly or indirectly therein.

Vermilion expects its rights to explore, develop, and exploit approximately 111,968 (108,948 net) acres in Canada, 893,711 (893,711 net) acres in Croatia, 321,895 (321,895 net) acres in Hungary, 65,975 (65,975 net) acres in France, and 1,326 (1,326 net) acres in the United States to expire within one year, unless the Company initiates the capital activity necessary to retain the rights. Work commitments on these lands are categorized as seismic acquisition, geophysical studies, or well commitments. No such rights are expected to expire within one year for Australia, Germany, Ireland, the Netherlands, and Slovakia. Vermilion currently has no material work commitments in Australia, Canada, and the United States. Vermilion's work commitments with respect to its European lands held are estimated to be \$30.6 million in the next year.

During the third quarter of 2019, Vermilion was awarded two exploration licenses in Ukraine, subject to a final production sharing agreement, in a 50/50 partnership with Ukgazvydobuvannya ("UGV"), a Ukrainian state owned gas producer. The licenses, excluded from the table above, cover approximately 500,000 gross acres situated in one of Europe's most prolific natural gas regions (Dnieper-Donets Basin).

Vermilion's properties with no attributed reserves do not have any significant abandonment and reclamation costs. All properties with no attributed reserves do not have high expected development or operating costs or contractual sales obligations to produce and sell at substantially lower prices than could be realized.

## Production estimates

The following table sets forth the volume of production estimated for the year ended December 31, 2020 as reflected in the estimates of gross proved reserves and gross proved plus probable reserves in the GLJ Report:

	Light Crude Oil & Medium Crude Oil (bbl/d)	Heavy Oil (bbl/d)	Tight Oil (bbl/d)	Conventional Natural Gas (mcf/d)	Shale Natural Gas (mcf/d)	Coal Bed Methane (mcf/d)	Natural Gas Liquids (bbl/d)	BOE (boe/d)
<b>Australia</b>								
Proved	4,698	—	—	—	—	—	—	4,698
Probable	185	—	—	—	—	—	—	185
<b>Proved Plus Probable</b>	<b>4,883</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4,883</b>
<b>Canada</b>								
Proved	25,559	4	—	135,192	296	2,584	12,764	61,339
Probable	2,772	—	—	22,460	7	43	1,546	8,070
<b>Proved Plus Probable</b>	<b>28,331</b>	<b>5</b>	<b>—</b>	<b>157,653</b>	<b>303</b>	<b>2,628</b>	<b>14,310</b>	<b>69,409</b>
<b>CEE</b>								
Proved	—	—	—	1,965	—	—	—	327
Probable	—	—	—	254	—	—	—	42
<b>Proved Plus Probable</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2,219</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>370</b>
<b>France</b>								
Proved	10,228	—	—	—	—	—	—	10,228
Probable	511	—	—	—	—	—	—	511
<b>Proved Plus Probable</b>	<b>10,739</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>10,739</b>
<b>Germany</b>								
Proved	1,292	—	—	15,210	—	—	—	3,827
Probable	109	—	—	632	—	—	—	214
<b>Proved Plus Probable</b>	<b>1,400</b>	<b>—</b>	<b>—</b>	<b>15,843</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4,041</b>
<b>Ireland</b>								
Proved	—	—	—	38,392	—	—	—	6,399
Probable	—	—	—	825	—	—	—	138
<b>Proved Plus Probable</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>39,217</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>6,536</b>
<b>Netherlands</b>								
Proved	—	—	—	42,896	—	—	130	7,280
Probable	—	—	—	4,029	—	—	12	684
<b>Proved Plus Probable</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>46,925</b>	<b>—</b>	<b>—</b>	<b>143</b>	<b>7,963</b>
<b>United States</b>								
Proved	3,928	—	—	10,250	—	—	1,131	6,767
Probable	502	—	—	780	—	—	86	718
<b>Proved Plus Probable</b>	<b>4,430</b>	<b>—</b>	<b>—</b>	<b>11,030</b>	<b>—</b>	<b>—</b>	<b>1,217</b>	<b>7,485</b>
<b>Corporate</b>								
Total Proved	45,705	4	—	243,905	296	2,584	14,025	100,865
Probable	4,078	—	—	28,981	7	43	1,645	10,561
<b>Total Proved Plus Probable</b>	<b>49,783</b>	<b>5</b>	<b>—</b>	<b>272,886</b>	<b>303</b>	<b>2,628</b>	<b>15,670</b>	<b>111,427</b>

## Production history

The following table sets forth certain information in respect of production, product prices received, royalties, production costs, and netbacks received by Vermilion for each quarter of its most recently completed financial year:

	Three Months Ended March 31, 2019	Three Months Ended June 31, 2019	Three Months Ended September 31, 2019	Three Months Ended December 31, 2019
<b>Australia</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	5,862	6,689	5,564	4,548
Conventional Natural Gas (mmcf/d)	—	—	—	—
Natural Gas Liquids (bbl/d)	—	—	—	—
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	91.02	99.39	93.71	88.35
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	30.64	18.77	19.81	34.09
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	60.38	80.62	73.90	54.26
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
<b>Canada</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	25,067	23,973	23,610	23,259
Conventional Natural Gas (mmcf/d)	151.37	151.87	145.14	145.14
Natural Gas Liquids (bbl/d)	11,064	12,224	10,704	11,144
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	65.67	73.50	66.67	66.32
Conventional Natural Gas (\$/mcf)	2.47	1.12	1.16	2.33
Natural Gas Liquids (\$/bbl)	37.71	33.36	28.26	33.08
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	8.15	10.46	9.40	9.24
Conventional Natural Gas (\$/mcf)	0.13	(0.35)	0.09	0.05
Natural Gas Liquids (\$/bbl)	5.18	2.39	2.32	3.58
Transportation				
Light Crude Oil and Medium Crude Oil (\$/bbl)	1.75	1.46	1.73	1.59
Conventional Natural Gas (\$/mcf)	0.18	0.18	0.18	0.22
Natural Gas Liquids (\$/bbl)	0.77	0.75	0.79	0.76
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	9.23	8.51	8.70	8.98
Conventional Natural Gas (\$/mcf)	1.49	1.31	1.34	1.41
Natural Gas Liquids (\$/bbl)	4.07	4.34	3.94	4.30
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	46.54	53.06	46.84	46.51
Conventional Natural Gas (\$/mcf)	0.67	(0.02)	(0.45)	0.65
Natural Gas Liquids (\$/bbl)	27.68	25.88	21.21	24.43

	Three Months Ended March 31, 2019	Three Months Ended June 31, 2019	Three Months Ended September 31, 2019	Three Months Ended December 31, 2019
<b>France</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	11,342	9,800	10,347	10,264
Conventional Natural Gas (mmcf/d)	0.77	—	—	—
Natural Gas Liquids (bbl/d)	—	—	—	—
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	81.52	91.17	79.89	80.87
Conventional Natural Gas (\$/mcf)	1.76	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	11.14	11.72	11.18	10.68
Conventional Natural Gas (\$/mcf)	0.01	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Transportation				
Light Crude Oil and Medium Crude Oil (\$/bbl)	3.13	9.75	6.05	3.34
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	15.53	15.43	14.77	16.78
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	51.72	54.27	47.89	50.07
Conventional Natural Gas (\$/mcf)	1.75	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
<b>Germany</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	978	1,047	845	800
Conventional Natural Gas (mmcf/d)	16.71	14.56	14.54	15.44
Natural Gas Liquids (bbl/d)	—	—	—	—
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	78.50	87.05	76.51	77.58
Conventional Natural Gas (\$/mcf)	7.94	5.52	3.92	4.96
Natural Gas Liquids (\$/bbl)	—	—	—	—
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	5.83	3.64	2.50	2.21
Conventional Natural Gas (\$/mcf)	1.11	0.89	0.56	0.32
Natural Gas Liquids (\$/bbl)	—	—	—	—
Transportation				
Light Crude Oil and Medium Crude Oil (\$/bbl)	10.86	9.07	16.54	14.56
Conventional Natural Gas (\$/mcf)	0.43	(0.03)	0.30	0.08
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	27.52	20.67	25.75	30.08
Conventional Natural Gas (\$/mcf)	2.20	2.54	3.28	3.99
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	34.29	53.67	31.72	30.73
Conventional Natural Gas (\$/mcf)	4.20	2.12	(0.22)	0.57
Natural Gas Liquids (\$/bbl)	—	—	—	—



	Three Months Ended March 31, 2019	Three Months Ended June 31, 2019	Three Months Ended September 31, 2019	Three Months Ended December 31, 2019
<b>Hungary</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	—	—	—	—
Conventional Natural Gas (mmcf/d)	—	—	—	1.66
Natural Gas Liquids (bbl/d)	—	—	—	—
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	5.23
Natural Gas Liquids (\$/bbl)	—	—	—	—
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	0.39
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	4.84
Natural Gas Liquids (\$/bbl)	—	—	—	—
<b>Ireland</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	—	—	—	—
Conventional Natural Gas (mmcf/d)	51.71	49.21	43.21	42.30
Natural Gas Liquids (bbl/d)	—	—	—	—
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	8.55	5.79	4.20	5.61
Natural Gas Liquids (\$/bbl)	—	—	—	—
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Transportation				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	0.25	0.26	0.28	0.26
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	0.82	0.59	0.79	0.73
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	7.48	4.94	3.13	4.62
Natural Gas Liquids (\$/bbl)	—	—	—	—

	Three Months Ended March 31, 2019	Three Months Ended June 31, 2019	Three Months Ended September 31, 2019	Three Months Ended December 31, 2019
<b>Netherlands</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	—	—	—	—
Conventional Natural Gas (mmcf/d)	51.51	52.90	44.08	47.99
Natural Gas Liquids (bbl/d)	93	100	82	90
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	8.63	5.73	4.49	5.57
Natural Gas Liquids (\$/bbl)	67.10	79.10	69.12	73.51
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	0.13	0.09	0.07	0.03
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	1.79	1.60	1.58	2.21
Natural Gas Liquids (\$/bbl)	—	—	—	—
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	6.71	4.04	2.84	3.33
Natural Gas Liquids (\$/bbl)	67.10	79.10	69.12	73.51
<b>United States</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	1,750	2,421	2,717	3,149
Conventional Natural Gas (mmcf/d)	5.89	7.06	6.38	8.20
Natural Gas Liquids (bbl/d)	921	817	1,144	1,168
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	68.60	72.09	68.95	66.73
Conventional Natural Gas (\$/mcf)	3.80	1.74	1.67	1.73
Natural Gas Liquids (\$/bbl)	25.06	18.30	9.56	20.94
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	1.23	1.81	2.01	2.07
Conventional Natural Gas (\$/mcf)	1.09	0.40	0.43	0.44
Natural Gas Liquids (\$/bbl)	0.59	0.33	0.25	0.54
Transportation				
Light Crude Oil and Medium Crude Oil (\$/bbl)	—	—	—	—
Conventional Natural Gas (\$/mcf)	—	—	—	—
Natural Gas Liquids (\$/bbl)	—	—	—	—
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	7.11	6.65	7.21	7.16
Conventional Natural Gas (\$/mcf)	1.55	1.43	1.29	1.46
Natural Gas Liquids (\$/bbl)	3.74	2.25	3.04	2.65
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	60.26	63.63	59.72	57.51
Conventional Natural Gas (\$/mcf)	1.16	(0.09)	(0.05)	(0.17)
Natural Gas Liquids (\$/bbl)	20.73	15.72	6.27	17.75

	Three Months Ended March 31, 2019	Three Months Ended June 31, 2019	Three Months Ended September 31, 2019	Three Months Ended December 31, 2019
<b>Total Company</b>				
Average Daily Production				
Light Crude Oil and Medium Crude Oil (bbl/d)	45,001	43,938	43,084	42,024
Conventional Natural Gas (mmcf/d)	277.95	275.60	253.36	260.72
Natural Gas Liquids (bbl/d)	12,078	13,132	11,929	12,398
Average Net Prices Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	77.38	77.90	77.20	68.65
Conventional Natural Gas (\$/mcf)	5.10	3.09	2.43	3.61
Natural Gas Liquids (\$/bbl)	36.97	32.74	26.76	32.22
Royalties				
Light Crude Oil and Medium Crude Oil (\$/bbl)	14.62	17.41	16.77	16.17
Conventional Natural Gas (\$/mcf)	0.19	(0.12)	0.11	0.08
Natural Gas Liquids (\$/bbl)	5.77	2.72	2.57	4.13
Transportation Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	1.84	2.61	2.32	1.84
Conventional Natural Gas (\$/mcf)	0.17	0.14	0.17	0.17
Natural Gas Liquids (\$/bbl)	0.49	0.78	0.64	0.54
Production Costs				
Light Crude Oil and Medium Crude Oil (\$/bbl)	12.72	10.56	10.89	11.54
Conventional Natural Gas (\$/mcf)	1.47	1.30	1.40	1.60
Natural Gas Liquids (\$/bbl)	3.41	3.15	3.01	3.40
Netback Received				
Light Crude Oil and Medium Crude Oil (\$/bbl)	48.20	47.32	47.23	39.11
Conventional Natural Gas (\$/mcf)	3.27	1.77	0.75	1.76
Natural Gas Liquids (\$/bbl)	27.29	26.08	20.53	24.15

## Tax information

Vermilion pays current taxes in France, the Netherlands, and Australia.

In France, current income taxes are applied to taxable income after eligible deductions. Based on legislation passed in 2019, corporate tax rates in France are 32.0% for 2019, 28.9% for 2020, 27.4% for 2021, and 25.8% for 2022 forward.

In the Netherlands, current income taxes are applied to taxable income after eligible deductions at a tax rate of 50%.

In Australia, current taxes include both corporate income taxes and Petroleum Resource Rent Tax ("PRRT"). Corporate income taxes are applied at a rate of 30% on taxable income after eligible deductions, which include PRRT paid. PRRT is applied at a rate of 40% on sales less eligible expenditures, including operating expenses and capital expenditures.

As a function of the impact of Vermilion's tax pools, the Company does not presently pay current taxes in Canada, Germany, Hungary, Ireland, and the United States.

The following table sets forth Vermilion's tax pools as at December 31, 2019:

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

Notes:

(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.

## Marketing

The nature of Vermilion's operations results in exposure to fluctuations in commodity prices, interest rates, and foreign currency exchange rates. Vermilion monitors and, when appropriate, uses derivative financial instruments to manage its exposure to these fluctuations. All transactions of this nature entered into by Vermilion are related to an underlying financial position or to future crude oil and natural gas production. Vermilion does not use derivative financial instruments for speculative purposes. Vermilion has not obtained collateral or other security to support its financial derivatives as management reviews the creditworthiness of its counterparties prior to entering into derivative contracts.

During the normal course of business, Vermilion may also enter into fixed price arrangements to sell a portion of its production or purchase commodities for operational use.

Vermilion's outstanding risk management positions as at December 31, 2019 are summarized in Supplemental Table 2: Hedges, included in the Company's 2019 Management's Discussion and Analysis, dated March 5, 2020, available on SEDAR at [www.sedar.com](http://www.sedar.com), under Vermilion's SEDAR profile.

## Directors and Officers

As at January 31, 2020, the directors and officers of Vermilion beneficially owned, or controlled or directed, directly or indirectly, 4,001,330 common shares representing approximately 2.6% of the issued and outstanding common shares.

Set forth below is certain information respecting the current directors and officers of Vermilion. References to Vermilion in the following tables for dates prior to the Conversion Arrangement refer to VRL and to the Company following the date of the Conversion Arrangement.

### Board of Directors

Vermilion's Board of Directors currently consists of ten directors. The directors are nominated by the Company and elected annually by Shareholders and hold office until the next annual meeting of Shareholders, or until their successors are elected or appointed.

Name and Municipality of Residence	Committee(s)	Office Held	Year First Elected or Appointed as Director	Principal Occupation During the Past Five Years
Lorenzo Donadeo Calgary, Alberta Canada	(1)	Chairman of the Board	1994	Since March 1, 2016, Chairman of the Board of Vermilion March 2014 – March 1, 2016 Chief Executive Officer of Vermilion 2003 – March 2014, President and Chief Executive Officer of Vermilion Since January 2015, Managing Director of a group of private wealth management companies
Larry J. Macdonald Okotoks, Alberta Canada	(2) (4) (6) (8)	Lead Director	2002	Since March 1, 2016, Lead Director of Vermilion 2012 to March 1, 2016, Chairman of the Board of Vermilion 2012 to 2016, Chairman Northpoint Resources, a private oil and gas company Since June 2018, Chairman of the Board of United Way Canada Gives Across Borders, a non-profit organization 2003 to 2019, Chairman & Chief Executive Officer and Director of Point Energy Ltd., a private oil and gas company
Carin S. Knickel Golden, Colorado USA	(6) (8) (12)	Director	2018	Since 2015, Director of Hudbay Minerals, Inc., a public mining company Since 2015, Director of Whiting Petroleum Corporation, a public oil and gas company Since 2014, Director of National MS Society (Colorado/Wyoming Chapter), a non-profit organization 2012 to 2015, Director of Rosetta Resources Inc., a private oil and gas company 2013 to 2014, Director of University of Colorado Denver, a public research university
Stephen Larke Calgary, Alberta Canada	(4) (6) (12)	Director	2017	Since 2020, Director of Headwater Exploration Inc., a public oil and gas company Since 2019, Director of Topaz Energy Corp., a private energy company 2016 to 2018, Operating Partner and Advisory Board Member, Azimuth Capital Management, a private equity fund 2005 to 2015, Managing Director and Principal, Institutional Sales, and Executive Committee Member, Peters & Co., a private investment dealer
Loren M. Leiker McKinney, Texas USA	(10)	Director	2012	Since 2014, Director of Navitas Midstream Partners LLC Since 2012, Director of SM Energy, a public energy company 2012 to 2015, Director of Midstates Petroleum, a public exploration and production company

Timothy R. Marchant Calgary, Alberta Canada	(7) (10) (11)	Director	2010	Since 2015, Non-Executive Director, Valeura Energy Inc., a public oil and gas company Since 2013, Non-Executive Director of Cub Energy Inc., a public oil and gas company Since 2009, Adjunct Professor of Strategy and Energy Geopolitics, Haskayne School of Business
Anthony W. Marino Calgary, Alberta Canada		President & Chief Executive Officer and Director	2016	Since March 1, 2016, President and Chief Executive Officer of Vermilion March 2014 – March 1, 2016, President and Chief Operating Officer of Vermilion June 2012 – March 2014, Executive Vice President and Chief Operating Officer of Vermilion
Robert Michaleski Calgary, Alberta Canada	(4) (5)	Director	2016	2013 to 2018, Director of United Way of Calgary and Area, a non-profit organization Since 2012, Director of Essential Energy Services Ltd., a public oilfield services company Since 2003, Director of Coril Holdings Ltd., a private investment company Since 2000, Director of Pembina Pipeline Corporation
William Roby Katy, Texas USA	(8) (9) (12)	Director	2017	Since 2015, Chief Executive Officer, Shepherd Energy, LLC., a private energy efficiency services company 2013 to 2014, Chief Operating Officer, Sheridan Production Company, LLC., a private oil and gas company
Catherine L. Williams Calgary, Alberta Canada	(3) (6)	Director	2015	Since 2010, Chair of Human Resources and Compensation Committee, Enbridge Inc., a public energy transportation company Since 2007, Director of Enbridge Inc., a public energy transportation company Since 2007, Owner and Managing Director, Options Canada Ltd., a private investment company 2016 to 2017, Director of Enbridge Income Fund, an energy infrastructure asset investment vehicle 2015 to 2017, Director of Enbridge Pipelines Inc. and Enbridge Income Partners GP Inc., subsidiaries of Enbridge Inc., a public energy transportation company 2015 to 2017, Trustee of Enbridge Commercial Trust, a subsidiary of Enbridge Inc., a public energy transportation company 2009 to 2014, Director, Alberta Investment Management Corporation, an institutional investment fund manager

#### Committees:

- (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

Name and Municipality of Residence	Office Held	Principal Occupation During the Past Five Years
Anthony W. Marino Calgary, Alberta Canada	President & Chief Executive Officer	Since March 1, 2016, President and Chief Executive Officer of Vermilion March 2014 – March 1, 2016, President and Chief Operating Officer of Vermilion June 2012 – March 2014, Executive Vice President and Chief Operating Officer of Vermilion
Lars Glemser Calgary, Alberta Canada	Vice President & Chief Financial Officer	Since April 2018, Vice President and Chief Financial Officer of Vermilion December 2017 – April 2018, Director, Finance of Vermilion June 2015 – December 2017, Finance Professional of Vermilion January 2013 – June 2015, Treasurer Lightstream Resources Ltd, a public oil and gas company
Mona Jasinski Calgary, Alberta Canada	Executive Vice President People & Culture	Since February 2015, Executive Vice President, People and Culture of Vermilion 2011 to 2015, Executive Vice President People of Vermilion
Michael Kaluza Calgary, Alberta Canada	Executive Vice President & Chief Operating Officer	Since March 1, 2016, Executive Vice President and Chief Operating Officer of Vermilion May 2014 – March 1, 2016, Vice President, Canada Business Unit of Vermilion 2013 to 2014, Director Canada Business Unit of Vermilion
Anthony (Dion) Hatcher Calgary, Alberta Canada	Vice President Canada Business Unit	Since March 1, 2016, Vice President Canada Business Unit of Vermilion May 1, 2014 to March 1, 2016, Director Alberta Foothills – Canada Business Unit of Vermilion February 2013 to May 2014, Cardium / LRG Development Manager of Vermilion
Terry Hergott Calgary, Alberta Canada	Vice President Marketing	Since April 2012, Vice President, Marketing of Vermilion
Kyle Preston Calgary, Alberta Canada	Vice President Investor Relations	Since July 2019, Vice President, Investor Relations of Vermilion May 2016 to July 2019, Director, Investor Relations of Vermilion October 2011 to May 2016, Director, Oil & Gas Research, National Bank of Canada
Gerard Schut Den Haag The Netherlands	Vice President European Operations	Since July 2012, Vice President European Operations of Vermilion
Jenson Tan Calgary, Alberta Canada	Vice President Business Development	Since October 2017, Vice President, Business Development of Vermilion July 2016 to October 2017, Director, Business Development of Vermilion July 2013 to July 2016, Director, New Ventures of Vermilion
Robert J. Engbloom, Q.C. Calgary, Alberta Canada	Corporate Secretary	Since January 2015, senior partner with Norton Rose Fulbright Canada LLP, a law firm 2012 to 2014, partner with and Deputy Chair of Norton Rose Fulbright Canada LLP, a law firm

# Description of Capital Structure

## Credit ratings

Credit ratings affect the Company's ability to obtain short-term and long-term financing and the cost of such financing. Additionally, the ability of the Company to engage in certain collateralized business activities on a cost effective basis depends on the Company's credit ratings. A reduction in the credit rating of the Company or the Company's debt or a negative change in the Company's ratings outlook could adversely affect the Company's cost of financing and its access to sources of liquidity and capital. In addition, changes in credit ratings may affect the Company's ability to enter into ordinary course hedging arrangements or contracts with customers and suppliers.

Credit ratings are intended to provide investors with an independent measure of the credit quality of an issuer of securities. **The credit ratings accorded to the Senior Unsecured Notes and the Company are not recommendations to purchase, hold or sell such securities and are not a comment upon the market price of the Company's securities or their suitability for a particular investor.** There is no assurance that any rating will remain in effect for any given period of time or that any rating will not be revised or withdrawn entirely by a rating agency in the future if, in its judgment, circumstances so warrant. A revision or withdrawal of a credit rating could have a material adverse effect on the pricing or liquidity of the Senior Unsecured Notes or the common shares in any secondary markets. Vermilion does not undertake any obligation to maintain the ratings or to advise holders of the Senior Unsecured Notes or the common shares of any change in ratings. Each agency's rating should be evaluated independently of any other agency's rating.

As at March 5, 2020, Vermilion had the following credit ratings from Standard & Poors Ratings Services ("S&P"), Moody's Investors Service ("Moody's"), and Fitch Ratings ("Fitch"):

Rating Agency	Company Rating	Outlook	Senior Unsecured Notes
S&P <sup>(1)</sup>	BB- <sup>(1)</sup>	Stable	BB- <sup>(4)</sup>
Moody's <sup>(2)</sup>	Ba3 <sup>(2)</sup>	Stable	B2 <sup>(5)</sup>
Fitch <sup>(3)</sup>	BB- <sup>(3)</sup>	Stable	BB- <sup>(6)</sup>

### Notes:

- <sup>(1)</sup> S&P rates long-term corporate credit ratings by rating categories ranging from a high of "AAA" to a low of "D". Ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories. In addition, S&P may add a rating outlook of "positive", "negative" or "stable" which assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). An obligor rated "BB-" is characterized by S&P as less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitments.
- <sup>(2)</sup> Moody's corporate family ratings are on a rating scale that ranges from Aaa to C, which represents the highest to lowest opinions of creditworthiness. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa, 3 indicating a ranking in the lower end of the generic rating category. A rating of Ba3 by Moody's is within the fifth highest of nine categories. An obligor rated Ba3 is considered non-investment grade speculative and is subject to substantial credit risk.
- <sup>(3)</sup> Fitch's corporate credit rating categories range from "investment grade" for those with ratings of "AAA" to "BBB", and "speculative grade" for those with "BB" to "D" ratings. Modifiers may be used by Fitch within these rating categories, either (+) or (-), appended to a rating to indicate relative status within the major rating categories. Rating outlooks may be provided to direct where a rating may potentially move within the next year or two, and fall under four outlooks: "positive", "stable", "negative", or "evolving". A "BB-" rating for an obligor denotes an increased vulnerability to default risk, especially if experiencing adverse changes in economic or business conditions over time; conversely, there remains a financial or business flexibility that sustains the servicing of financial obligations.
- <sup>(4)</sup> S&P rates long-term debt instruments by rating categories ranging from a high of "AAA" to a low of "D". The ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories. An obligation rated "BB-" is characterized as less vulnerable to nonpayment than other speculative issues. However, an obligation rated "BB-" faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation. The "BB" category is the fifth highest of the ten available categories.
- <sup>(5)</sup> Moody's long-term obligations ratings are on a rating scale that ranges from Aaa to C, which represents the highest to lowest opinions of creditworthiness. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa, with 2 indicating a mid-range ranking within the generic rating category. A rating of B2 by Moody's is within the sixth highest of nine categories. Obligations rated B2 are considered non-investment grade speculative and are subject to substantial credit risk.
- <sup>(6)</sup> Fitch's long-term debt instrument ratings are categorized from "investment grade" for those with ratings of "AAA" to "BBB", and "speculative grade" for those with "BB" to "D" ratings. Modifiers may be used by Fitch within these rating categories, either (+) or (-), appended to a rating to indicate relative status within the major rating categories. A "BB-" rating for an obligor denotes an increased vulnerability to default risk, especially if experiencing adverse changes in economic or business conditions over time; conversely, there remains a financial or business flexibility that sustains the servicing of financial obligations.



## Common shares

The Company is authorized to issue an unlimited number of common shares. Each common share entitles the holder to receive notice of and to attend all meetings of Shareholders and to one vote at any such meeting. The holders of common shares are, at the discretion of the board and subject to applicable legal restrictions, entitled to receive any dividends declared by the board on the common shares. The holders of common shares will be entitled to share equally in any distribution of the assets of the Company upon the liquidation, dissolution, bankruptcy or winding-up of the Company or other distribution of its assets among the Shareholders for the purpose of winding-up the Company's affairs.

Awards pursuant to which a holder may receive Common Shares have been issued under certain Vermilion compensation arrangements. See Vermilion's annual financial statements as at and for the year ended December 31, 2019 (a copy of which is available on SEDAR at [www.sedar.com](http://www.sedar.com) under Vermilion's SEDAR profile) for further details regarding the amount and value of such awards.

## Dividend history

The Company currently pays dividends on a monthly basis. Solvency tests imposed by the ABCA on corporations for the declaration and payment of dividends must be satisfied prior to the declaration of a dividend. In addition, decisions with respect to the declaration of dividends on the common shares will be made by the Board of Directors on the basis of the Company's net earnings, financial requirements, and other conditions. Dividends are generally paid on the 15th day of the month following the month of declaration.

The following table sets forth the history of Vermilion's monthly dividend per share (pre-September 2010 distribution per unit):

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

The following table outlines dividends declared per share for each of the three most recently completed financial years:

Date	Dividends per common share
January 2017 to December 2017	\$2.58
January 2018 to December 2018	\$2.72
January 2019 to December 2019	\$2.76

## Dividend Reinvestment Plan

Under the Premium Dividend™ and Dividend Reinvestment Plan (the "Plan"), Eligible Shareholders who elect to participate in the Dividend Reinvestment Component can reinvest their dividends in common shares at the Average Market Price (with no broker commissions or trading costs).

From February 2015 to July 2017, Vermilion used the Premium Dividend™ Component of the Dividend Reinvestment Plan to provide access to low cost source of equity capital. Vermilion discontinued the Premium Dividend™ Component in July 2017.

Vermilion elected to phase out the Dividend Reinvestment Plan ("DRIP"), prorating the available DRIP shares by 25% each quarter starting in Q1 2020. The intention is to increase this proration each quarter throughout next year, such that the DRIP will be eliminated at the end of Q3 2020.

Participation in the Plan, which is explained in greater detail in the complete Plan document available on Vermilion's corporate website at [www.vermilionenergy.com](http://www.vermilionenergy.com) (under the heading "Investor Relations" subheading "DRIP"), is subject to eligibility restrictions, applicable withholding taxes, prorating as provided for in the Plan, and other limitations on the availability of common shares to be issued or purchased in certain events. Participation in the Plan is available to Canadian residents and non-U.S. resident foreign Shareholders who meet certain eligibility criteria as set forth in the complete Plan. U.S. resident Shareholders are not currently permitted to participate in the Plan due to the requirement, under U.S. securities regulations, to maintain a continuous shelf registration for issuance of new equity to U.S. Shareholders. At this time, Vermilion has not put in place the required shelf registration due to the high cost of establishing and maintaining such a shelf registration.

™ denotes trademark of Canaccord Genuity Capital Corporation.

## Market for Securities

The outstanding common shares of the Company are listed and posted for trading on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE") under the symbol VET. The following table sets forth the closing price range and trading volume of the common shares on the TSX for the periods indicated:

2019	High	Low	Close	Volume
January	\$33.46	\$27.87	\$32.20	19,161,582
February	\$34.48	\$30.73	\$33.66	15,499,462
March	\$36.04	\$32.63	\$32.99	19,330,980
April	\$36.83	\$32.29	\$34.21	22,515,096
May	\$34.21	\$28.02	\$28.34	23,195,870
June	\$29.33	\$26.54	\$28.45	19,270,343
July	\$29.19	\$21.97	\$23.65	33,967,364
August	\$23.49	\$18.28	\$18.95	29,268,596
September	\$24.47	\$18.18	\$22.07	34,552,859
October	\$22.51	\$17.13	\$17.40	38,646,103
November	\$20.84	\$17.52	\$19.10	44,410,760
December	\$21.93	\$18.06	\$21.23	31,876,009

# Audit Committee Matters

## Audit committee charter

Vermilion has established an audit committee (the "Audit Committee") to assist the board of directors in carrying out its oversight responsibilities with respect to, among other things, financial reporting, internal controls, and the external audit process of the Company. The Audit Committee Terms of Reference are set out in Schedule "D" to this annual information form.

## Composition of the Audit Committee

The following table sets forth the name of each current member of the Audit Committee, whether pursuant to applicable securities legislation, such member is considered independent, whether pursuant to applicable securities legislation, such member is considered financially literate and the relevant education and experience of such member.

Name	Independent	Financially Literate	Relevant Education and Experience
Catherine L. Williams (Chair)	Yes	Yes	Ms. Williams has a Bachelor of Arts degree from University of Western Ontario and a Masters in Business Administration from the Queen's University. Ms. Williams brings 32 years of oil and gas industry experience, with an extensive background in finance, mergers and acquisitions, and business management. Ms. Williams is currently the Owner and Managing Director of Options Canada Ltd. (since 2007) and serves as a Board member of Enbridge Inc. (since 2010) and Chairs its Human Resources and Compensation Committee. She was a Board member of Alberta Investment Management Corporation from 2009 to 2014 and Tim Hortons Inc. from 2009 to 2012. From 2003 to 2007, Ms. Williams held the role of Chief Financial Officer for Shell Canada Ltd., prior to which she held various positions with Shell Canada Limited, Shell Europe Oil Products, Shell Canada Oil Products and Shell International (1984 to 2003).
Stephen Larke	Yes	Yes	Mr. Larke holds a Bachelor of Commerce (Distinction) degree from the University of Calgary and is a Chartered Financial Analyst. He brings over 20 years of experience in energy capital markets, including research, sales, trading, and equity finance. From 2017 to 2018, he was Operating Partner and Advisory Board member with Azimuth Capital Management, an energy-focused private equity fund based in Calgary, Alberta. From 2005 to 2015, Mr. Larke was Managing Director and Executive Committee member with Peters & Co., an independent energy investment firm based in Calgary. From 1997 to 2005, he was Vice-President and Director with TD Newcrest, serving in the role of energy equity analyst.
Larry J. Macdonald	Yes	Yes	Mr. Macdonald holds a Bachelor of Science degree from the University of Alberta. He has more than 48 years of experience in the oil and gas industry, with an extensive background in leadership, strategy and growth, finance, exploration, corporate relations, and marketing. Mr. Macdonald completed the Executive Management Program at the Wharton Business School at the University of Pennsylvania in 1993 and attended a Financial Literacy Course at the Rotman Business School at the University of Toronto in coordination with the Institute of Corporate Directors. Currently, he is the Chairman and Chief Executive Officer (since 2003) of Point Energy Ltd., a private oil and gas exploration company. From 2012 to 2016, he was Chairman of Northpoint Resources. From 2003 to 2006, he was a Managing Director of Northpoint Energy Ltd., and from 2006 to 2013 a director of Sure Energy Inc. Previously, he was the Chairman and Chief Executive Officer of Pointwest Energy Inc. and President and Chief Operating Officer of Anderson Exploration Ltd. He began his career with PanCanadian Petroleum Limited in 1969 (until 1977) and later worked for several exploration firms.
Robert Michaleski	Yes	Yes	Mr. Michaleski holds a Bachelor of Commerce (Honours) degree from the University of Manitoba and is a Chartered Accountant. He has over 30 years of experience in various senior management and executive capacities at Pembina Pipeline Corporation. He was Chief Executive Officer from 2000 to 2013 and also President from 2000 to 2012. He was Vice President and Chief Financial Officer from 1997 to 2000, Vice President of Finance from 1992 to 1997, Controller from 1980 to 1992, and Manager of Internal Audit from 1978 to 1980. He has been a Director of Pembina since 2000, a Director of Essential Energy Services Ltd. since 2012, and a Director of Coril Holdings Ltd. since 2003. He is a member of the Institute of Corporate Directors.

## External audit service fees

Prior to the commencement of any work, fees for all audit and non-audit services provided by the Company's auditors must be approved by the Audit Committee.

During the years ended December 31, 2019 and 2018, Deloitte LLP, the auditors of the Company, received the following fees from the Company:

Item	2019		2018	
Audit fees <sup>(1)</sup>	\$	1,846,197	\$	1,934,531
Audit-related fees <sup>(2)</sup>	\$	34,500	\$	81,500
Tax fees <sup>(3)</sup>	\$	97,638	\$	800

### Notes:

- <sup>(1)</sup> Audit fees consisted of professional services rendered by Deloitte LLP for the audit of the Company's financial statements for the years ended December 31, 2019 and 2018.
- <sup>(2)</sup> Audit-related fees billed by Deloitte LLP for assurance and related services that are reasonably related to the performance of the audit or review of Vermilion's financial statements, but which are not included in the audit fees.
- <sup>(3)</sup> Tax fees consist of fees for tax compliance services in various jurisdictions.

## Conflicts of Interest

The directors and officers of Vermilion are engaged in and will continue to engage in other activities in the oil and natural gas industry and, as a result of these and other activities, the directors and officers of Vermilion may become subject to conflicts of interest. The ABCA provides that in the event that a director has an interest in a contract or proposed contract or agreement, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement unless otherwise provided under the ABCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the ABCA.

As at the date hereof, Vermilion is not aware of any existing or potential material conflicts of interest between Vermilion and a director or officer of Vermilion.

## Interest of Management and Others in Material Transactions

No director or officer of the Company, nor any other insider of the Company, nor their associates or affiliates has or has had, at any time within the three most recently completed financial years ending December 31, 2019, any material interest, direct or indirect, in any transaction or proposed transaction that has materially affected or would materially affect the Company.

## Legal Proceedings

The Company is not party to any significant legal proceedings as of March 5, 2020.

## Material Contracts

The Company has not entered into any material contracts outside its normal course of business.

## Interests of Experts

As at the date hereof, principals of GLJ, the independent engineers for the Company, personally disclosed in certificates of qualification that they neither had nor expect to receive any common shares. The principals of GLJ and their employees (as a group) beneficially own less than one percent of any of the Company's securities.

Deloitte LLP is the auditor of the Company and is independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of Alberta.

## Transfer Agent and Registrar

The transfer agent and registrar for the Company's common shares is Computershare Trust Company of Canada at its principal offices in Calgary, Alberta and Toronto, Ontario.

## Risk Factors

The following is a summary of certain risk factors relating to the business of the Company. The following information is a summary only of certain risk factors and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this AIF. Additional risks and uncertainties not currently known to Vermilion that it currently views as immaterial may also materially and adversely affect its business, financial condition and/or results of operations. Shareholders and potential Shareholders should carefully consider the information contained herein and, in particular, the following risk factors.

### Market risks

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#### *Volatility of oil and gas prices*

The Company's reserves, financial performance, financial position, and cash flows are dependent on the prices received for oil and natural gas production. Oil and natural gas prices have fluctuated materially during recent years and are determined by supply and demand factors. Supply factors can include availability (or lack thereof) of transportation capacity and production curtailments by independent producers or by OPEC members. Demand factors can be impacted by general economic conditions, supply chain requirements, environmental and other factors. Environmental and other factors include changes in weather, weather patterns, fuel conservation measures, alternative fuel requirements, increasing consumer demand for alternatives to oil and gas, and technology advances in fuel economy and energy generation devices. Shifts in supply and demand for certain commodities, products, and services may occur as climate-related risks are increasingly taken into account.

#### *Volatility of foreign exchange rates*

The Company's reserves, financial performance, financial position, and cash flows are affected by prevailing foreign exchange rates. An increase in the exchange rate for the Canadian dollar versus the U.S. dollar and Euro would reduce the Canadian equivalent cash receipts for Vermilion's production. Conversely, a decrease in the exchange rate for the Canadian dollar versus the U.S. dollar and Euro would increase the Canadian equivalent cash outflows for Vermilion's operating and capital expenditures.

#### *Volatility of market price of Common Shares*

The market price of Vermilion's Common Shares may be volatile and this volatility may affect the ability of Shareholders to sell Common Shares at an advantageous price. Market price fluctuations in the common shares may be due to: the Company's operating results or financial performance failing to meet the expectations of securities analysts or investors in any quarter; downward revision in securities analysts' estimates; governmental regulatory action; adverse change in general market conditions or economic trends; acquisitions, dispositions or other material public announcements by the Corporation or its competitors, along with a variety of additional factors, including, without limitation, those set forth under "Forward-Looking Statements" in this AIF. In addition, the market price for securities in stock markets including Common Shares may experience significant price and trading fluctuations. These fluctuations may result in volatility in the market prices of securities that may be unrelated or disproportionate to changes in the Company's operating and financial performance.

#### *Hedging arrangements*

Vermilion may enter into agreements to fix commodity prices, interest rates, and foreign exchange rates to offset the risks affecting the business. To the extent that Vermilion engages in price risk management activities to protect the Company from unfavourable fluctuations in prices and rates, the Company may also be prevented from realizing the full benefits of favourable fluctuations in prices and rates.

To the extent that risk management activities and hedging strategies are employed to address these risks, the Company would also be exposed to risks associated with such activities and strategies, including: counterparty risk, settlement risk, basis risk, liquidity risk and market risk. These risks could impact or negate any benefits of risk management activities and hedging strategies.

In addition, commodity hedging arrangements could expose the Company to the risk of financial loss if: production falls short of the hedged volumes; there is a widening of price-basis differentials between delivery points for production and the delivery point assumed in the hedge arrangements; or a sudden unexpected event materially impacts oil and natural gas prices.

## **Operational risks**

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### *Increase in operating costs or a decline in production level*

The Company's financial performance, financial position, and cash flows are affected by the Company's operating costs and production levels. Operating costs may increase and production levels may decline at rates greater than anticipated due to unforeseen circumstances, many of which are beyond Vermilion's control.

Production levels may decline due to an inability for Vermilion to market oil and natural gas production. This could result from the availability, proximity and capacity of gathering systems, pipelines and processing facilities that Vermilion depends on in the jurisdictions in which it operates.

Operating costs could increase as a result of blowouts, environmental damage, unforeseen circumstances related to climate-change, and other unexpected and dangerous conditions which could result from a number of operating and natural hazards associated with Vermilion's operations. In addition to higher costs, Vermilion may have a potential liability to regulators and third parties as a result. Vermilion maintains liability insurance, where available, in amounts consistent with industry standards. Business interruption insurance may also be purchased for selected operations, to the extent that such insurance is commercially viable. Vermilion may become liable for damages arising from such events against which it cannot insure or against which it may elect not to insure because of high premium costs or other reasons.

### *Operator performance and payment delays*

Continuing production from a property are dependent upon the ability of the operator of the property, and the operator may fail to perform these functions properly. Payments from production generally flow through the operator and there is a risk of delay and additional expense in receiving such revenues if the operator becomes insolvent. Although satisfactory title reviews are generally conducted in accordance with industry standards, such reviews do not guarantee or certify that a defect in the chain of title may not arise to defeat the claim of Vermilion or its subsidiaries to certain properties.

In addition to the usual delays in payment by purchasers of oil and natural gas to the operators of the properties, and by the operator to Vermilion, payments between any of such parties may also be delayed by restrictions imposed by lenders, delays in the sale or delivery of products, delays in the connection of wells to a gathering system, blowouts or other accidents, recovery by the operator of expenses incurred in the operation of the properties or the establishment by the operator of reserves for such expenses.

### *Weather conditions*

Vermilion's operations may be impacted by changing weather conditions, which may include: changes in temperature extremes, changes in precipitation patterns (including drought and flooding), rising sea levels, and increased severity of extreme weather events such as cyclones or floods. These events can impact Vermilion's operations, causing shutdowns and increased costs. In the Netherlands, rising water levels could impact facilities below sea level and in Australia a severe cyclonic event could cause damage to the Company's Wandoo platform.

### *Cost of new technology*

The oil and natural gas industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other oil and natural gas companies may have greater financial, technical and personnel resources that provide them with technological advantages and may in the future allow them to implement new technologies before Vermilion does. There can be no assurance that Vermilion will be able to respond to such competitive pressures and implement such technologies on a timely basis or at an acceptable cost. One or more of the technologies currently utilized by the Company or implemented in the future may become obsolete.

## Regulatory and political risks

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### *Tax, royalty, and other government legislation*

Income tax laws, royalty and other government legislation relating to the oil and gas industry in the jurisdictions in which the Company operates may change in a manner that adversely affects Vermilion.

### *Government regulations*

Vermilion's operations are governed by many levels of governments in which jurisdiction the Company operates. Vermilion is subject to laws and regulations regarding environment, health and safety issues, lease interests, taxes and royalties, among others. Failure to comply with the applicable laws can result in significant increases in costs, penalties and even losses of operating licenses. The regulatory process involved in each of the countries in which Vermilion operates is not uniform and regulatory regimes vary as to complexity, timeliness of access to, and response from, regulatory bodies and other matters specific to each jurisdiction. If regulatory approvals or permits are delayed, not obtained, or revoked, there can also be delays or abandonment of projects, decreases in production and increases in costs, and Vermilion may not be able to fully execute its strategy. Governments may also amend or create new legislation and regulatory bodies may also amend regulations or impose additional requirements which could result in reduced production and increased capital, operating and compliance costs.

### *Policy and legal risks*

Policy actions that attempt to constrain actions that contribute to the adverse effects of climate change or policy actions that seek to promote adaptation to climate change continue to evolve. Policy changes could include implementing carbon-pricing mechanisms to reduce GHG emissions, shifting energy-efficient solutions, and promoting more sustainable land-use practices. The risks and financial impact of policy changes depend on the nature and timing of the policy change.

Vermilion may be exposed to increased litigation risk relating to climate change. The oil and gas industry has seen an increase in climate-related litigation claims being brought before the courts by property owners, municipalities, and public interest organizations. Some of these claims include the failure of organizations to mitigate the impacts of climate change, failure to adapt to climate change, and the insufficiency of disclosure around material financial risks. As the value of loss and damage arising from climate change increases, litigation risk will also grow.

### *Political events and terrorist attacks*

Political events throughout the world that cause disruptions in the supply of oil affect the marketability and price of oil and natural gas acquired or discovered by Vermilion. Political developments arising in the countries in which Vermilion operates have a significant impact on the price of oil and natural gas.

Vermilion's oil and natural gas properties, wells and facilities could be subject to a terrorist attack. If any of Vermilion's properties, wells or facilities or any infrastructure on which the Company relies are the subject of a terrorist attack, such attack may have a material adverse effect on Vermilion's financial performance, financial position, and cash flows.

## Financing risks

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### *Discretionary nature of dividends*

The declaration and payment (including the amount thereof) of future cash dividends, if any, is subject to the discretion of the Board of Directors of the Company and may vary depending on a variety of factors and conditions, including the satisfaction of the liquidity and solvency tests under the ABCA for the declaration and payment of dividends and the amount of the Company's cash flows. The Company's cash flows may be impacted by risks affecting the Company's business including: fluctuations in commodity prices, foreign exchange and interest rates; production and sales volume levels; production costs; capital expenditure requirements; royalty and tax burdens; external financing availability, and debt service requirements.

Depending on these and other factors considered relevant to the declaration and payment of dividends by the Board of Directors and management of the Company, the Company may change its dividend policy from time to time. Any reduction of dividends may adversely affect the market price or value of Common Shares.



## *Additional financing*

Vermilion's credit facility and any replacement credit facility may not provide sufficient liquidity. The amounts available under Vermilion's credit facility may not be sufficient for future operations, or Vermilion may not be able to obtain additional financing on attractive economic terms, if at all.

To the extent that external sources of capital, including the issuance of additional Common Shares, become limited or unavailable, Vermilion's ability to make the necessary capital investments to maintain or expand its oil and natural gas reserves may be impaired. To the extent the Company is required to use cash flow to finance capital expenditures or property acquisitions, the level of cash available that may be declared payable as dividends will be reduced.

## *Debt service*

Vermilion may finance a significant portion of its operations through debt. Amounts paid in respect of interest and principal on debt incurred by Vermilion may impair Vermilion's ability to satisfy its other obligations. Variations in interest rates and scheduled principal repayments could result in significant changes in the amount required to be applied to debt service before payment by Vermilion of its debt obligations.

Lenders may be provided with security over substantially all of the assets of Vermilion and its Subsidiaries. If Vermilion becomes unable to pay its debt service charges or otherwise commits an event of default such as bankruptcy, a lender may be able to foreclose on or sell the assets of Vermilion and/or its Subsidiaries.

## *Variations in interest rates and foreign exchange rates*

An increase in interest rates could result in a significant increase in the amount the Company pays to service debt. A decrease in the exchange rate of the Canadian dollar versus the Euro would result in higher interest and ultimate principle payment on the Company's Senior Unsecured Notes, which are denominated in US dollar but have been swapped to a Euro equivalent obligation.

## **Environmental risks**

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### *Environmental legislation*

The oil and natural gas industry is subject to environmental regulation pursuant to local, provincial, state and federal legislation. A breach of such legislation may result in the imposition of fines, the issuance of clean up orders in respect of Vermilion or its assets, or the loss or suspension of regulatory approvals. Such legislation may include carbon taxes, enhanced emissions reporting obligations, mandates on the equipment specifications, and emissions regulations. Such legislation may be changed to impose higher standards and potentially more costly obligations on Vermilion. In addition, such legislation may inhibit Vermilion's ability to operate the Company's assets and may make it more difficult for Vermilion to compete in the acquisition of new property rights. Presently, the Company does not believe the financial impact of these regulations on capital expenditures and earnings will be material. However, the Company actively monitors and assesses its exposure to this legislation.

Vermilion expects to incur abandonment and reclamation costs in the ordinary course of business as existing oil and gas properties are abandoned and reclaimed. These costs may materially differ from the Company's estimates due to changes in environmental regulations.

Vermilion's exploration and production facilities and other operations and activities emit some amount of greenhouse gases, which may be subject to legislation regulating emissions of greenhouse gases. This may result in a requirement to reduce emissions or emissions intensity from Vermilion's operations and facilities. It is possible that future regulations may require further reductions of emissions or emissions intensity.

### *Hydraulic fracturing regulations*

Hydraulic fracturing involves the injection of water, sand and small amounts of additives under pressure into rock formations to stimulate oil and natural gas production. Hydraulic fracturing is used to produce commercial quantities of oil and natural gas from reservoirs that were previously unproductive. Hydraulic fracturing has featured prominently in recent political, media and activist commentary on the subject of water usage and environmental damage. Any new laws, regulations or permitting requirements regarding hydraulic fracturing could lead to operational delays, increased operating costs, third party or governmental claims, and could increase Vermilion's costs of compliance and doing business as well as delay the development of oil and natural gas resources from shale formations, which are not commercial without the use of hydraulic fracturing. Restrictions on hydraulic fracturing could also reduce the amount of oil and natural gas that the Company is ultimately able to produce from its reserves, as well as increase costs.



With activist groups expressing concern about the impact of hydraulic fracturing on the environment and water supplies, Vermilion's corporate reputation may be negatively affected by the negative public perception and public protests against hydraulic fracturing. In addition, concerns regarding hydraulic fracturing may result in changes in regulations that delay the development of oil and natural gas resources and adversely affect Vermilion's costs of compliance and reputation. Changes in government may result in new or enhanced regulatory burdens in respect of hydraulic fracturing which could affect Vermilion's business.

### *Climate change*

In addition to other climate-related risks discussed elsewhere in this AIF, Vermilion faces transition risks and physical risks.

Transition risks are risks that relate to the transition to a lower-carbon economy. Transition risks impact the volatility of oil and gas prices (as consumer demand for oil and gas may decrease); environmental legislation and hydraulic fracturing regulations (which may delay or restrict the development of oil and gas); the ability to obtain additional financing (as sources of financing for oil and gas development may become more restricted); and the reliance on key personnel, management, and labour (as the workforce may transition to other sources of energy development). Practices and disclosures relating to environmental matters, including climate change, are attracting increasing scrutiny by stakeholders. Vermilion's response to addressing environmental matters can impact the Company's reputation and affect the Company's ability to hire and retain employees; to compete for reserve acquisitions, exploration leases, licenses and concessions; and to receive regulatory approvals required to execute operating programs.

Physical risks relate to the physical impact of climate change, which can be event driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks can have financial implications for the Company, such as direct damage to assets and indirect impacts from production disruptions. Physical risks may also increase Vermilion's operating costs.

## **Acquisition and expansion risks**

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### *Competition*

Vermilion actively competes for reserve acquisitions, exploration leases, licences, concessions and skilled industry personnel with a substantial number of other oil and gas companies, some of which have significantly greater financial resources than Vermilion. Vermilion's competitors include major integrated oil and natural gas companies and numerous other independent oil and natural gas companies and individual producers and operators.

Vermilion's ability to successfully bid on and acquire additional property rights, to discover reserves, to participate in drilling opportunities and to identify and enter into commercial arrangements with customers will be dependent upon developing and maintaining close working relationships with its future industry partners and joint operators and its ability to select and evaluate suitable properties and to consummate transactions in a highly competitive environment.

### *International operations and future geographical/industry expansion*

The operations and expertise of Vermilion's management are currently focused primarily on oil and natural gas production, exploration and development in three geographical regions, North America, Europe and Australia. In the future Vermilion may acquire or move into new industry related activities, enter into new geographical areas, or acquire different energy related assets. These actions may result in unexpected risks or alternatively, significantly increase the Company's exposure to one or more existing risk factors.

### *Acquisition assumptions*

When making acquisitions, Vermilion estimates the future performance of the assets to be acquired. These estimates are subject to inherent risks associated with predicting the future performance of those assets. These estimates may not be realized over time. As such, assets acquired may not possess the value Vermilion attributed to them.

### *Failure to realize anticipated benefits of prior acquisitions*

Vermilion may complete one or more acquisitions for various strategic reasons including to strengthen its position in the oil and natural gas industry and to create the opportunity to realize certain benefits. In order to achieve the benefits of any future acquisitions, Vermilion will be dependent upon its ability to successfully consolidate functions and integrate operations, procedures and personnel in a timely and efficient manner and to realize the anticipated growth opportunities and synergies from combining the acquired assets and operations with those of the Company. The integration of acquired assets and operations requires the dedication of management effort, time and resources, which may divert management's focus and resources from other strategic opportunities and from operational matters during the process. The integration process may result in the disruption of ongoing business and customer relationships that may adversely affect Vermilion's ability to achieve the anticipated benefits of such prior acquisitions.

## **Reserves and resource estimates**

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### *Reserve estimates*

Reserves and estimated future net revenue to be derived from reserves are estimates and have been independently evaluated by GLJ. The estimation of reserves is a complex process and requires significant judgment. Actual production and ultimate reserves will vary from those estimates and these variations may be material.

Assumptions incorporated into the estimation of reserves are based on information available when the estimate was prepared. These assumptions are subject to change and many are beyond the Company's control. These assumptions include: initial production rates; production decline rates; ultimate recovery of reserves; timing and amount of capital expenditures; marketability of production; future prices of crude oil and natural gas; operating costs; well abandonment costs; royalties, taxes, and other government levies that may be imposed over the producing life of the reserves.

In addition, estimates of reserves that may be developed and produced in the future are often based on methods other than actual production history, including: volumetric calculations, probabilistic methods, and upon analogy to similar types of reserves. Estimates based on these methods are generally less reliable than those based on actual production history. Subsequent evaluation of the same reserves based upon production history will result in variations, which may be material, in the estimated reserves. As such, reserve estimates may require revision based on actual production experience.

The present value of estimated future net revenue referred to in this annual information form should not be construed as the fair market value of estimated crude oil and natural gas reserves attributable to the Company's properties. The estimated discounted future revenue from reserves are based upon price and cost estimates which may vary from actual prices and costs and such variance could be material. Actual future net revenue will also be affected by factors such as the amount and timing of actual production, supply and demand for crude oil and natural gas, curtailments or increases in consumption by purchasers and changes in governmental regulations and taxation.

### *Contingent and prospective resource estimates*

Information regarding quantities of contingent and prospective resources included in Appendix A to this Annual Information Form are estimates only. References to "contingent resources" and "prospective resources" do not constitute, and should be distinguished from, references to "reserves". The same uncertainties inherent in estimating quantities of reserves apply to estimating quantities of contingent resources. In addition, there are contingencies that prevent resources from being classified as reserves. There is no certainty that it will be commercially viable to produce any portion of the contingent resources due to one or more contingencies. Contingencies may include factors such as economic, legal, environmental, political and regulatory matters or a lack of markets. Actual results may vary significantly from these estimates and such variances may be material.

## Other risks

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### *Cyber security*

Vermilion manages cyber security risk by ensuring appropriate technologies, processes and practices are effectively designed and implemented to help prevent, detect and respond to threats as they emerge and evolve. The primary risks to Vermilion include, loss of data, destruction or corruption of data, compromising of confidential customer or employee information, leaked information, disruption of business, theft or extortion of funds, regulatory infractions, loss of competitive advantage and damage to the Company's reputation. Vermilion relies upon a variety of advanced controls as protection from such attacks including:

- a) Enterprise class firewall infrastructure, secure network architecture and anti-malware defense systems to protect against network intrusion, malware infection and data loss.
- b) Regularly conducted comprehensive third party reviews and vulnerability assessments to ensure that information technology systems are up-to-date and properly configured, to reduce security risks arising from outdated or misconfigured systems and software.
- c) Disaster recovery planning, ongoing monitoring of network traffic patterns to identify potential malicious activities or attacks.

Incident response processes are in place to isolate and control potential attacks. Data backup and recovery processes are in place to minimize risk of data loss and resulting disruption of business. Through ongoing vigilance and regular employee awareness, Vermilion has not experienced a cyber security event of a material nature. As it is difficult to quantify the significance of such events, cyber attacks such as, security breaches of company, customer, employee, and vendor information, as well as hardware or software corruption, failure or error, telecommunications system failure, service provider error, intentional or unintentional personnel actions, malicious software, attempts to gain unauthorized access to data and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and the corruption of data, may in certain circumstances be material and could have an adverse effect on Vermilion's business, financial condition and results of operations. As result of the unpredictability of the timing, nature and scope of disruptions from such attacks, Vermilion could potentially be subject to production downtimes, operational delays, the compromising of confidential or otherwise protected information, destruction or corruption of data, security breaches, other manipulation or improper use of its systems and networks or financial losses, any of which could have a material adverse effect on Vermilion's competitive position, financial condition or results of operations.

### *Accounting adjustments*

The presentation of financial information in accordance with IFRS requires that management apply certain accounting policies and make certain estimates and assumptions which affect reported amounts in Vermilion's consolidated financial statements. The accounting policies may result in non-cash charges to net income and write-downs of net assets in the consolidated financial statements and such adjustments may be viewed unfavourably by the market and may result in an inability to borrow funds or a decline in price of Common Shares.

### *Ineffective internal controls*

Effective internal controls are necessary for Vermilion to provide reliable financial reports and to help prevent fraud. Although the Company has undertaken and will undertake a number of procedures in order to help ensure the reliability of its financial reports, including those that may be imposed on Vermilion under Canadian Securities Laws and applicable U.S. federal and state securities laws, Vermilion cannot be certain that such measures will ensure that the Company will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm Vermilion's results of operations or cause the Company to fail to meet its reporting obligations. Additionally, implementing and monitoring effective internal controls can be costly. If Vermilion or its independent auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in Vermilion's consolidated financial statements and may result in a decline in the price of Common Shares.

### *Reliance on key personnel, management, and labour*

Vermilion's success depends in large measure on certain key personnel. The loss of the services of such key personnel may have a material adverse effect on the Company's business, financial condition, results of operations and prospects. Vermilion does not have any key person insurance in effect. The contributions of Vermilion's existing management team to immediate and near term operations are likely to be of central importance. In addition, the labour force in certain areas in which the Company operates is limited and the competition for qualified personnel in the oil and natural gas industry is intense. Vermilion expects that similar projects or expansions will proceed in the same area during the same time frame as the Company's projects. Vermilion's projects require experienced employees, and such competition may result in increases in compensation paid to such personnel or in a lack of qualified personnel. There can be no assurance that the Company will be able to continue to attract and retain all personnel necessary for the development and operation of the business.

## *Potential conflicts of interest*

Circumstances may arise where members of the board of directors or officers of Vermilion are directors or officers of companies which compete with Vermilion. No assurances can be given that opportunities identified by such persons will be provided to Vermilion.

## *Brexit*

On June 23, 2016, the United Kingdom ("UK") held a referendum where voters decided to leave the European Union ("Brexit"). Effective January 31, 2020, the United Kingdom is no longer a member of the European Union ("EU") and has entered an 11-month transition period. During the transition, the UK effectively remains in the EU's customs union and single market and continues to comply with EU rules.

At the date of this AIF, there remains uncertainty regarding the form of Brexit as a result of these pending negotiations for future trade agreements. Brexit may result in interruptions to Vermilion's business and expose Vermilion to financial volatility, with risks including: disruption in the delivery of supplies to the Company's operations in Ireland, administrative delays to day-to-day banking activities, and foreign exchange volatility.

Vermilion's operations in Ireland are supported by contractors and suppliers, some of whom operate in the UK. Vermilion currently believes that the ability to mobilize contractor personnel from the UK to Ireland will not be impacted by Brexit. Vermilion has reviewed all of its UK based suppliers and has identified certain products that are presently sourced from the UK that may be impacted by Brexit related delays.

Vermilion recently awarded our production chemicals contract to an Irish-based supplier. The only remaining production critical supplier based in the UK is our odorant vendor. We have increased our odorant inventory prior to the January 31, 2020 Brexit deadline and have identified alternate EU based suppliers if required.

In the event of a supply disruption, Vermilion has developed contingency plans that include ensuring that the Company has maintained adequate inventory of supplies and has alternate sourcing plans from EU based suppliers.

Brexit has resulted in uncertainty and volatility for the Euro and British Pound Sterling ("GBP") as compared to each other and other currencies. This volatility is expected to continue as negotiations continue. Vermilion's natural gas produced in Ireland is priced based on the NBP index, which is denominated in GBP. Thus, a weakening of the GBP against the Canadian dollar could result in Vermilion receiving fewer Canadian equivalent dollars for its production. However, due to the interconnected nature of the UK and European natural gas markets, changes in the exchange ratio for the Euro and GBP are expected to result in offsetting changes to related commodity prices.

## **Additional Information**

Additional information relating to the Company may be found on SEDAR at [www.sedar.com](http://www.sedar.com) under Vermilion's SEDAR profile. Additional information related to the remuneration and indebtedness of the directors and officers of the Company, and the principal holders of common shares and Rights to purchase common shares and securities authorized for issuance under the Company's equity compensation plans, where applicable, are contained in the information circular of the Company in respect of its most recent annual meeting of Shareholders involving the election of directors. Additional financial information is provided in the Company's audited financial statements and management's discussion and analysis for the year ended December 31, 2019.

# Appendix A

## Contingent resources

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Summary information regarding contingent resources and net present value of future net revenues from contingent resources are set forth below and are derived, in each case, from the GLJ Resources Assessment. The GLJ Resources Assessment was prepared in accordance with COGEH and NI 51-101 by GLJ, an independent qualified reserve evaluator. All contingent resources evaluated in the GLJ Resources Assessment were deemed economic at the effective date of December 31, 2019. Contingent resources are in addition to reserves estimated in the GLJ Report.

A range of contingent resources estimates (low, best and high) were prepared by GLJ. See notes 6 to 8 of the tables below for a description of low estimate, best estimate and high estimate.

The GLJ Resources Assessment estimated gross risked contingent resources with a project maturity subclass of “Development Pending” of 139.0 million boe (low estimate) to 330.2 million boe (high estimate), with a best estimate of 236.8 million boe. Contingent resources are in addition to reserves estimated in the GLJ Report.

The GLJ Resources Assessment estimated gross risked contingent resources with a project maturity subclass of “Development Unclassified” of 10.8 million boe (low estimate) to 54.1 million boe (high estimate), with a best estimate of 37.6 million boe.

**An estimate of risked net present value of future net revenue of contingent resources is preliminary in nature and is provided to assist the reader in reaching an opinion on the merit and likelihood of the company proceeding with the required investment. It includes contingent resources that are considered too uncertain with respect to the chance of development to be classified as reserves. There is uncertainty that the risked net present value of future net revenue will be realized.**

Summary of risked oil and gas contingent resources as at December 31, 2019 <sup>(1) (2)</sup> - Forecast prices and costs <sup>(3) (4)</sup>

	Light & Medium Crude Oil		Conventional Natural Gas		Shale Gas		Natural Gas Liquids		BOE		Chance of Dev. % <sup>(9)</sup>	Unrisked BOE	
	Gross (mbbl)	Net (mbbl)	Gross (mmcf)	Net (mmcf)	Gross (mmcf)	Net (mmcf)	Gross (mbbl)	Net (mbbl)	Gross (mboe)	Net (mboe)		Gross (mboe)	Net (mboe)
Development Pending <sup>(10)</sup>													
<b>Contingent (1C) - Low Estimate</b>													
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	39,909	30,966	229,050	213,267	—	—	18,284	16,188	96,368	82,695	81%	118,801	101,028
CEE	—	—	1,544	1,466	—	—	—	—	257	244	90%	286	272
France	11,987	11,053	2,555	2,288	—	—	—	—	12,413	11,435	87%	14,212	13,093
Germany	—	—	18,920	16,109	—	—	—	—	3,153	2,685	80%	3,935	3,348
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	61	61	15,138	15,138	—	—	12	12	2,596	2,596	73%	3,567	3,567
USA	17,869	14,962	21,008	17,625	—	—	2,879	2,413	24,250	20,313	90%	26,944	22,570
<b>Total</b>	<b>69,827</b>	<b>57,041</b>	<b>288,216</b>	<b>265,891</b>			<b>21,175</b>	<b>18,613</b>	<b>139,037</b>	<b>119,970</b>	<b>83%</b>	<b>167,745</b>	<b>143,878</b>
<b>Contingent (2C) - Best Estimate <sup>(10)</sup></b>													
Australia	3,240	3,240	—	—	—	—	—	—	3,240	3,240	80%	4,050	4,050
Canada	59,298	46,295	410,828	381,439	—	—	30,982	26,946	158,754	136,817	80%	199,669	171,088
CEE	—	—	3,484	3,310	—	—	—	—	581	552	90%	645	613
France	27,123	24,854	3,177	2,905	—	—	—	—	27,653	25,338	85%	32,491	29,761
Germany	82	82	36,731	31,746	—	—	—	—	6,204	5,373	78%	7,993	6,929
Ireland	—	—	6,715	6,715	—	—	—	—	1,119	1,119	70%	1,599	1,599
Netherlands	121	121	30,553	30,553	—	—	26	26	5,239	5,239	73%	7,153	7,153
United States	25,000	20,929	29,679	24,894	—	—	4,102	3,438	34,048	28,516	90%	37,832	31,685
<b>Total</b>	<b>114,864</b>	<b>95,521</b>	<b>521,167</b>	<b>481,562</b>			<b>35,113</b>	<b>30,411</b>	<b>236,838</b>	<b>206,193</b>	<b>81%</b>	<b>291,432</b>	<b>252,878</b>
<b>Contingent (3C) - High Estimate</b>													
Australia	4,386	4,386	—	—	—	—	—	—	4,386	4,386	80%	5,483	5,483
Canada	74,469	57,594	573,921	531,588	—	—	43,064	36,625	213,189	182,815	79%	269,056	229,538
CEE	—	—	6,615	6,284	—	—	—	—	1,103	1,047	90%	1,225	1,164
France	42,131	38,552	2,664	2,386	—	—	—	—	42,575	38,949	84%	50,591	46,261
Germany	112	112	67,206	58,081	—	—	—	—	11,313	9,792	77%	14,716	12,749
Ireland	—	—	9,285	9,285	—	—	—	—	1,547	1,547	70%	2,211	2,211
Netherlands	242	242	52,124	52,124	—	—	42	42	8,971	8,971	74%	12,077	12,077
USA	34,546	28,912	40,814	34,218	—	—	5,729	4,800	47,077	39,415	90%	52,308	43,794
<b>Total</b>	<b>155,886</b>	<b>129,800</b>	<b>752,629</b>	<b>693,964</b>			<b>48,837</b>	<b>41,466</b>	<b>330,161</b>	<b>286,927</b>	<b>81%</b>	<b>407,666</b>	<b>353,278</b>

	Light & Medium Crude Oil		Conventional Natural Gas		Shale Gas		Natural Gas Liquids		BOE		Chance of Dev. % <sup>(9)</sup>	Unrisked BOE	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		Gross	Net
Development Unclarified <sup>(11)</sup>	(mmbbl)	(mmbbl)	(mmcf)	(mmcf)	(mmcf)	(mmcf)	(mmbbl)	(mmbbl)	(mboe)	(mboe)		(mmbbl)	(mmbbl)
Contingent (1C) - Low Estimate													
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	3,022	2,778	27,440	24,978	—	—	914	751	8,509	7,692	59%	14,481	13,117
CEE	—	—	—	—	—	—	—	—	—	—	—	—	—
France	1,227	1,140	—	—	—	—	—	—	1,227	1,140	40%	3,086	2,868
Germany	—	—	—	—	—	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	6,192	6,192	—	—	—	—	1,032	1,032	51%	2,023	2,023
USA	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4,248	3,918	33,632	31,170	—	—	914	751	10,767	9,864	55%	19,590	18,008
Contingent (2C) - Best Estimate													
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	4,414	4,068	58,276	52,934	60,886	57,639	7,300	6,536	31,574	29,033	47%	67,476	62,329
CEE	—	—	—	—	—	—	—	—	—	—	—	—	—
France	2,385	2,217	—	—	—	—	—	—	2,385	2,217	44%	5,433	5,050
Germany	—	—	1,496	1,190	—	—	—	—	249	198	35%	712	566
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	20,083	19,509	—	—	32	16	3,379	3,267	50%	6,719	6,441
USA	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6,798	6,285	79,854	73,633	60,886	57,639	7,331	6,552	37,587	34,715	47%	80,340	74,386
Contingent (3C) - High Estimate													
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	5,588	5,122	85,971	77,683	77,410	72,759	11,273	9,697	44,091	39,893	47%	94,223	85,511
CEE	—	—	—	—	—	—	—	—	—	—	—	—	—
France	3,400	3,160	—	—	—	—	—	—	3,400	3,160	45%	7,541	7,010
Germany	—	—	2,327	1,850	—	—	—	—	388	308	—%	1,108	881
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	36,751	35,869	—	—	49	24	6,174	6,002	53%	11,605	11,177
USA	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	8,988	8,282	125,049	115,402	77,410	72,759	11,322	9,721	54,053	49,364	47%	114,477	104,579

Summary of risked net present value of future net revenues as at December 31, 2019 - Forecast prices and costs <sup>(3)</sup>

(\$M)	Before Income Taxes, Discounted at <sup>(5)</sup>					After Income Taxes, Discounted at <sup>(5)</sup>				
	0%	5%	10%	15%	20%	0%	5%	10%	15%	20%
<b>Contingent (1C) - Low Estimate <sup>(6)</sup></b>										
<b>Development Pending <sup>(10)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	2,208,363	1,162,874	652,620	385,547	237,138	1,626,120	836,415	454,292	257,331	150,070
CEE	8,635	6,932	5,697	4,775	4,068	6,801	5,439	4,447	3,705	3,137
France	637,391	369,606	225,434	142,870	93,319	474,132	267,069	157,407	95,721	59,428
Germany	24,776	15,432	7,723	1,953	(2,208)	13,732	7,069	1,218	(3,223)	(6,407)
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	108,637	68,849	45,257	30,705	21,360	57,418	35,682	22,521	14,390	9,206
USA	793,000	388,426	205,782	115,523	67,626	624,170	305,749	161,413	90,060	52,254
<b>Total</b>	<b>3,780,802</b>	<b>2,012,119</b>	<b>1,142,512</b>	<b>681,372</b>	<b>421,303</b>	<b>2,802,371</b>	<b>1,457,423</b>	<b>801,298</b>	<b>457,985</b>	<b>267,688</b>
<b>Contingent (2C) - Best Estimate <sup>(7)</sup></b>										
<b>Development Pending <sup>(10)</sup></b>										
Australia	112,417	79,594	56,684	40,557	29,073	26,395	13,398	4,863	(695)	(4,284)
Canada	3,706,038	1,897,823	1,058,611	627,676	388,666	2,746,264	1,376,659	744,767	424,214	249,379
CEE	22,782	17,506	14,077	11,699	9,962	17,973	13,790	11,064	9,171	7,789
France	1,444,024	813,191	488,761	307,703	200,555	1,073,099	586,772	340,210	205,078	126,762
Germany	118,768	88,059	64,830	47,729	35,153	77,382	56,292	39,767	27,503	18,519
Ireland	2,968	3,518	1,172	(50)	(455)	(3,088)	1,060	144	(486)	(639)
Netherlands	219,258	138,586	91,969	63,495	45,238	117,670	71,733	45,170	29,150	19,084
USA	1,361,462	647,347	345,351	199,423	121,791	1,073,270	510,776	272,256	156,954	95,640
<b>Total</b>	<b>6,987,717</b>	<b>3,685,623</b>	<b>2,121,455</b>	<b>1,298,234</b>	<b>829,982</b>	<b>5,128,965</b>	<b>2,630,482</b>	<b>1,458,241</b>	<b>850,890</b>	<b>512,250</b>
<b>Contingent (3C) - High Estimate <sup>(8)</sup></b>										
<b>Development Pending <sup>(10)</sup></b>										
Australia	222,923	164,131	123,059	93,870	72,748	76,449	51,150	34,153	22,602	14,652
Canada	5,348,716	2,624,350	1,454,319	872,641	552,960	3,969,895	1,917,543	1,038,108	604,746	369,667
CEE	46,435	34,597	27,597	22,967	19,662	36,653	27,291	21,743	18,071	15,451
France	2,463,466	1,377,601	833,187	532,062	353,753	1,829,413	1,000,387	589,396	365,281	234,665
Germany	313,224	234,347	178,401	138,455	109,373	210,946	157,243	118,272	90,291	69,952
Ireland	20,457	7,293	1,255	(435)	(684)	9,342	4,002	247	(741)	(766)
Netherlands	426,236	268,900	180,938	127,821	93,722	230,704	142,453	93,124	63,593	44,873
USA	2,180,550	980,609	515,604	298,965	184,986	1,718,962	774,085	406,926	235,789	145,763
<b>Total</b>	<b>11,022,006</b>	<b>5,691,829</b>	<b>3,314,359</b>	<b>2,086,346</b>	<b>1,386,520</b>	<b>8,082,365</b>	<b>4,074,153</b>	<b>2,301,970</b>	<b>1,399,633</b>	<b>894,256</b>
<b>Contingent (1C) - Low Estimate <sup>(6)</sup></b>										
<b>Development Unclassified <sup>(11)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	128,865	65,958	35,940	20,591	12,252	101,369	50,469	26,446	14,399	8,018
CEE	—	—	—	—	—	—	—	—	—	—
France	89,459	51,674	31,328	19,761	12,877	64,024	36,555	21,850	13,560	8,678
Germany	—	—	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	21,932	13,102	7,584	4,129	1,953	12,814	6,947	3,270	1,008	(367)
USA	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>240,256</b>	<b>130,734</b>	<b>74,852</b>	<b>44,481</b>	<b>27,081</b>	<b>178,207</b>	<b>93,970</b>	<b>51,566</b>	<b>28,968</b>	<b>16,329</b>
<b>Contingent (2C) - Best Estimate <sup>(7)</sup></b>										
<b>Development Unclassified <sup>(11)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	449,262	221,217	111,659	55,519	25,209	328,331	154,765	71,445	29,218	6,897
CEE	—	—	—	—	—	—	—	—	—	—
France	162,175	87,407	50,069	30,055	18,716	117,524	62,140	34,767	20,296	12,235
Germany	130	470	505	429	323	(704)	(231)	(91)	(82)	(119)
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	109,118	66,146	41,311	26,385	17,081	62,354	36,176	21,016	12,021	6,547
United States	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>720,685</b>	<b>375,239</b>	<b>203,544</b>	<b>112,388</b>	<b>61,328</b>	<b>507,503</b>	<b>252,849</b>	<b>127,136</b>	<b>61,454</b>	<b>25,561</b>
<b>Contingent (3C) - High Estimate <sup>(8)</sup></b>										
<b>Development Unclassified <sup>(11)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	817,260	416,944	236,010	144,272	93,319	594,942	297,097	161,937	93,815	56,482
CEE	—	—	—	—	—	—	—	—	—	—
France	248,467	129,091	72,734	43,384	27,000	181,230	92,680	51,229	29,889	18,143
Germany	4,227	3,745	3,116	2,529	2,034	2,169	2,087	1,758	1,400	1,083
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	261,111	147,395	90,475	58,912	40,033	151,082	82,646	48,649	30,061	19,154
United States	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>1,331,065</b>	<b>697,175</b>	<b>402,335</b>	<b>249,096</b>	<b>162,386</b>	<b>929,423</b>	<b>474,511</b>	<b>263,573</b>	<b>155,165</b>	<b>94,861</b>



Notes:

- (1) Contingent resources are defined in the COGEH as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not currently considered to be commercially recoverable due to one or more contingencies. There is uncertainty 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. The estimates of contingent resources involve implied assessment, based on certain estimates and assumptions, that the resources described exists in the quantities predicted or estimated, as at a given date, and that the resources can be profitably produced in the future. The risked net present value of the future net revenue from the contingent resources does not represent the fair market value of the contingent resources. Actual contingent resources (and any volumes that may be reclassified as reserves) and future production therefrom may be greater than or less than the estimates provided herein.
- (2) GLJ prepared the estimates of contingent resources shown for each property using deterministic principles and methods. Probabilistic aggregation of the low and high property estimates shown in the table might produce different total volumes than the arithmetic sums shown in the table.
- (3) The forecast price and cost assumptions utilized in the year-end 2019 reserves report were also utilized by GLJ in preparing the GLJ Resource Assessment. See "Forecast Prices Used in Estimates" in this AIF.
- (4) "Gross" contingent resources are Vermilion's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Vermilion. "Net" contingent resources are Vermilion's working interest (operating or non-operating) share after deduction of royalty obligations, plus Vermilion's royalty interests in contingent resources.
- (5) The risked net present value of future net revenue attributable to the contingent resources does not represent the fair market value of the contingent resources. Estimated abandonment and reclamation costs have been included in the evaluation.
- (6) This is considered to be a conservative estimate of the quantity that will actually be recovered. It is likely that the actual remaining quantities recovered will exceed the low estimate. If probabilistic methods are used, there should be at least a 90 percent probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- (7) This is considered to be the best estimate of the quantity that will actually be recovered. It is equally likely that the actual remaining quantities recovered will be greater or less than the best estimate. If probabilistic methods are used, there should be at least a 50 percent probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- (8) This is considered to be an optimistic estimate of the quantity that will actually be recovered. It is unlikely that the actual remaining quantities recovered will exceed the high estimate. If probabilistic methods are used, there should be at least a 10 percent probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
- (9) The Chance of Development (CoDev) is the estimated probability that, once discovered, a known accumulation will be commercially developed. Five factors have been considered in determining the CoDev as follows:
  - $CoDev = Ps(\text{Economic Factor}) \times Ps(\text{Technology Factor}) \times Ps(\text{Development Plan Factor}) \times Ps(\text{Development Timeframe Factor}) \times Ps(\text{Other Contingency Factor})$  wherein
  - Ps is the probability of success
  - Economic Factor – For reserves to be assessed, a project must be economic. With respect to contingent resources, this factor captures uncertainty in the assessment of economic status principally due to uncertainty in cost estimates and marketing options. Economic viability uncertainty due to technology is more aptly captured with the Technology Factor. The Economic Factor will be 1 for reserves and will often be 1 for development pending projects and for projects with a development study or pre-development study with a robust rate of return. A robust rate of return means that the project retains economic status with variation in costs and/or marketing plans over the expected range of outcomes for these variables.
  - Technology Factor - For reserves to be assessed, a project must utilize established technology. With respect to contingent resources, this factor captures the uncertainty in the viability of the proposed technology for the subject reservoir, namely, the uncertainty associated with technology under development. By definition, technology under development is a recovery process or process improvement that has been determined to be technically viable via field test and is being field tested further to determine its economic viability in the subject reservoir. The Technology Factor will be 1 for reserves and for established technology. For technology under development, this factor will consider different risks associated with technologies being developed at the scale of the well versus the scale of a project and technologies which are being modified or extended for the subject reservoir versus new emerging technologies which have not previously been applied in any commercial application. The risk assessment will also consider the quality and sufficiency of the test data available, the ability to reliably scale such data and the ability to extrapolate results in time.
  - Development Plan Factor – For reserves to be assessed, a project must have a detailed development plan. With respect to contingent resources, this factor captures the uncertainty in the project evaluation scenario. The Development Plan Factor will be 1 for reserves and high, approaching 1, for development pending projects. This factor will consider development plan detail variations including the degree of delineation, reservoir specific development and operating strategy detail (technology decision, well layouts (spacing and pad locations), completion strategy, start-up strategy, water source and disposal, other infrastructure, facility design, marketing plans) and the quality of the cost estimates as provided by the developer.
  - Development Timeframe Factor – In the case of major projects, for reserves to be assessed, first major capital spending must be initiated within 5 years of the effective date. The Development Timeframe Factor will be 1 for reserves and will often be 1 for development pending projects provided the project is planned on-stream based on the same criteria used in the assessment of reserves. With respect to contingent resources, the factor will approach 1 for projects planned on-stream with a timeframe slightly longer than the limiting reserves criteria.
  - Other Contingency Factor – For reserves to be assessed, all contingencies must be eliminated. With respect to contingent resources, this factor captures major contingencies, usually beyond the control of the operator, other than those captured by economic status, technology status, project evaluation scenario status and the development timeframe. The Other Contingency Factor will be 1 for reserves and for development pending projects and less than 1 for on hold. Provided all contingencies have been identified and their resolution is reasonably certain, this factor would also be 1 for development unclarified projects.
  - These factors may be inter-related (dependent) and care has been taken to ensure that risks are appropriately accounted.

(10) Summary of risks for development pending contingent resources at December 31, 2019<sup>(a)</sup>

Development Pending <sup>(b)(c)(d)</sup>	Risk Volume	Risk Estimated Development Cost <sup>(f)</sup>	Development Timing
	Gross <sup>(e)</sup> (mboe)	Gross (\$M)	(yrs)
<b>Contingent (2C) - Best Estimate</b>			
Australia	3,240	186,353	2 to 6
Canada	158,754	1,754,103	1 to 12
CEE	581	1,139	—
France	27,653	591,562	2 to 14
Germany	6,204	86,238	3 to 5
Ireland	1,119	15,015	17
Netherlands	5,239	60,339	1 to 6
United States	34,048	398,569	6 to 10
<b>Total</b>	<b>236,838</b>	<b>3,093,318</b>	<b>1 to 17</b>

- (a) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (b) 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).
- (c) Risked development pending best estimate contingent resources for each business unit have been estimated based on the continued drilling in our active core asset (see "Description of Properties" section of this AIF) using established recovery technologies.
- (d) The specific contingencies for these resources are corporate commitment and development timing.
- (e) "Gross" contingent resources are Vermilion's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Vermilion.
- (f) The risked estimated cost to bring these contingent resources on commercial production.

(11) Summary of risks for development unclarified contingent resources at December 31, 2019<sup>(a)</sup>

Development Unclarified <sup>(b)(c)(d)</sup>	Risk Volume	Risk Estimated Development Cost <sup>(f)</sup>	Development Timing
	Gross <sup>(e)</sup> (mboe)	Gross (\$M)	(yrs)
<b>Contingent (2C) - Best Estimate</b>			
Australia	—	—	—
Canada	31,574	406,445	2 to 14
CEE	—	—	—
France	2,385	41,088	6 to 8
Germany	249	4,501	3
Ireland	—	—	—
Netherlands	3,379	56,025	3
United States	—	—	—
<b>Total</b>	<b>37,587</b>	<b>508,059</b>	<b>2 to 14</b>

- (a) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (b) 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.
- (c) Risked development unclarified best estimate contingent resources for each business unit have been estimated based on the continued drilling in our active core asset (see "Description of Properties" section of this AIF) using established recovery technologies.
- (d) The specific contingencies for these resources are corporate commitment and development timing.
- (e) "Gross" contingent resources are Vermilion's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Vermilion.
- (f) The risked estimated cost to bring these contingent resources on commercial production.

## Prospective resources

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Summary information regarding prospective resources and net present value of future net revenues from prospective resources are set forth below and are derived, in each case, from the GLJ Resources Assessment. The GLJ Resources Assessment was prepared in accordance with COGEH and NI 51-101 by GLJ, an independent qualified reserve evaluator. All prospective resources evaluated in the GLJ Resources Assessment were deemed economic at the effective date of December 31, 2019. Prospective resources are in addition to reserves estimated in the GLJ Report.

A range of prospective resources estimates (low, best and high) were prepared by GLJ. See notes 6 to 8 of the tables below for a description of low estimate, best estimate and high estimate.

The GLJ Resources Assessment estimated gross risked prospective resources of 51.9 million boe (low estimate) to 330.2 million boe (high estimate), with a best estimate of 179.2 million boe.

**An estimate of risked net present value of future net revenue of prospective resources is preliminary in nature and is provided to assist the reader in reaching an opinion on the merit and likelihood of the company proceeding with the required investment. It includes prospective resources that are considered too uncertain with respect to the chance of development and chance of discovery to be classified as reserves. There is uncertainty that the risked net present value of future net revenue will be realized.**

Summary of risked oil and gas prospective resources as at December 31, 2019 <sup>(1) (2)</sup> - Forecast prices and costs <sup>(3) (4)</sup>

Prospect <sup>(10)</sup>	Light & Medium Crude Oil		Conventional Natural Gas		Shale Gas		Natural Gas Liquids		BOE		Chance of Commerciality % <sup>(9)</sup>	Unrisked BOE	
	Gross (mmbbl)	Net (mmbbl)	Gross (mmcf)	Net (mmcf)	Gross (mmcf)	Net (mmcf)	Gross (mmbbl)	Net (mmbbl)	Gross (mboe)	Net (mboe)		Gross (mboe)	Net (mboe)
Prospective - Low Estimate													
Australia	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	496	476	57,718	53,365	—	—	4,068	3,447	14,183	12,818	32%	44,537	40,283
CEE	1,872	1,491	2,877	2,675	—	—	—	—	2,352	1,937	25%	9,411	7,679
France	2,808	2,651	—	—	—	—	—	—	2,808	2,651	42%	6,716	6,321
Germany	341	341	147,069	125,573	—	—	—	—	24,853	21,270	30%	82,420	71,015
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	46,193	43,171	—	—	48	44	7,746	7,240	11%	73,308	68,454
USA	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5,517	4,958	253,859	224,785	—	—	4,115	3,492	51,942	45,914	24%	216,392	193,752
Prospective - Best Estimate <sup>(10)</sup>													
Australia	529	529	—	—	—	—	—	—	529	529	48%	1,103	1,103
Canada	2,263	2,047	165,748	151,888	112,623	106,207	25,303	22,095	73,960	67,160	24%	313,816	286,672
CEE	7,134	5,714	9,481	8,728	38,233	37,469	—	—	15,086	13,414	25%	61,193	53,830
France	9,945	9,039	—	—	—	—	—	—	9,945	9,039	31%	31,737	28,348
Germany	1,050	1,002	327,821	281,402	—	—	—	—	55,686	47,902	32%	175,511	151,870
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	58	58	86,032	80,794	—	—	88	83	14,485	13,607	11%	136,635	128,222
USA	6,305	5,269	11,506	9,615	—	—	1,261	1,054	9,483	7,925	49	19,453	16,256
Total	27,284	23,659	600,587	532,427	150,857	143,676	26,652	23,232	179,177	159,577	24%	739,448	666,301
Prospective - High Estimate													
Australia	1,182	1,182	—	—	—	—	—	—	1,182	1,182	48%	2,463	2,463
Canada	3,064	2,738	249,104	227,353	147,282	137,249	39,048	32,704	108,175	96,210	24%	450,444	400,956
CEE	26,185	21,084	18,130	16,713	92,308	90,462	—	—	44,592	38,946	23%	192,249	166,212
France	23,612	21,633	—	—	—	—	—	—	23,612	21,633	32%	74,374	66,765
Germany	1,753	1,659	643,031	553,839	—	—	—	—	108,925	93,965	32%	337,136	292,810
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	278	278	164,708	153,139	—	—	168	156	27,897	25,957	11%	262,592	244,009
USA	10,545	8,813	19,245	16,084	—	—	2,109	1,763	15,862	13,256	49	32,538	27,193
Total	66,619	57,386	1,094,218	967,127	239,590	227,711	41,326	34,623	330,247	291,151	24%	1,351,795	1,200,407

Summary of risked net present value of future net revenues as at December 31, 2019 - Forecast prices and costs <sup>(3)</sup>

(M\$)	Before Income Taxes, Discounted at <sup>(5)</sup>					After Income Taxes, Discounted at <sup>(5)</sup>				
	0%	5%	10%	15%	20%	0%	5%	10%	15%	20%
<b>Prospective (Pr1) - Low Estimate <sup>(6)</sup></b>										
<b>Prospect <sup>(10)</sup></b>										
Australia	—	—	—	—	—	—	—	—	—	—
Canada	220,271	91,627	39,029	16,348	6,190	174,813	70,287	28,005	10,206	2,558
CEE	71,886	53,665	40,924	31,758	24,998	54,427	39,882	29,762	22,523	17,215
France	96,308	48,377	24,174	11,772	5,341	71,407	33,437	14,806	5,667	1,224
Germany	380,135	220,652	117,106	57,767	24,596	261,903	157,839	81,413	36,354	11,166
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	300,584	119,627	57,334	31,005	18,180	158,876	57,396	23,129	9,631	3,725
USA	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>1,069,184</b>	<b>533,950</b>	<b>278,566</b>	<b>148,650</b>	<b>79,304</b>	<b>721,426</b>	<b>358,841</b>	<b>177,115</b>	<b>84,381</b>	<b>35,888</b>
<b>Prospective (Pr2) - Best Estimate <sup>(7)</sup></b>										
<b>Prospect <sup>(10)</sup></b>										
Australia	35,757	24,539	17,183	12,256	8,892	13,332	8,795	5,903	4,024	2,783
Canada	1,366,100	561,708	242,049	104,861	42,684	954,528	374,898	147,106	52,259	11,557
CEE	524,383	322,112	214,029	150,168	109,551	364,233	224,054	147,334	101,567	72,380
France	359,962	197,960	114,560	69,477	43,919	240,496	125,168	68,003	38,465	22,539
Germany	1,472,961	741,197	386,910	207,470	111,978	1,072,877	541,851	277,846	143,447	72,301
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	706,276	307,665	163,421	97,807	63,250	381,328	160,125	80,725	45,630	27,820
USA	305,647	90,172	28,302	8,505	1,865	240,685	70,003	21,086	5,651	648
<b>Total</b>	<b>4,771,086</b>	<b>2,245,354</b>	<b>1,166,454</b>	<b>650,545</b>	<b>382,139</b>	<b>3,267,480</b>	<b>1,504,894</b>	<b>748,004</b>	<b>391,043</b>	<b>210,028</b>
<b>Prospective (Pr3) - High Estimate <sup>(8)</sup></b>										
<b>Prospect <sup>(10)</sup></b>										
Australia	101,130	70,051	49,614	35,846	26,367	40,789	27,910	19,524	13,932	10,122
Canada	2,508,723	1,039,136	485,448	245,851	131,257	1,733,676	695,544	309,072	145,696	70,213
CEE	1,979,450	1,143,078	741,517	516,836	378,263	1,396,429	820,028	534,387	371,908	270,858
France	1,238,728	654,583	371,593	224,134	142,236	894,660	459,442	253,330	148,517	91,714
Germany	3,448,586	1,689,888	885,088	486,827	276,491	2,518,791	1,233,547	638,697	344,034	189,127
Ireland	—	—	—	—	—	—	—	—	—	—
Netherlands	1,498,855	676,946	372,501	230,115	153,086	815,896	362,053	194,685	117,533	76,520
USA	739,264	241,241	93,417	40,339	18,732	584,019	190,286	73,461	31,566	14,553
<b>Total</b>	<b>11,514,735</b>	<b>5,514,922</b>	<b>2,999,177</b>	<b>1,779,947</b>	<b>1,126,431</b>	<b>7,984,259</b>	<b>3,788,810</b>	<b>2,023,156</b>	<b>1,173,186</b>	<b>723,107</b>

Notes:

- (1) Prospective resources are defined in the COGEH as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from unknown accumulations by application of future development projects. Prospective resources have both an associated chance of discovery (CoDis) and a chance of development (CoDev). 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. The estimates of prospective resources involve implied assessment, based on certain estimates and assumptions, that the resources described exists in the quantities predicted or estimated, as at a given date, and that the resources can be profitably produced in the future. The risked net present value of the future net revenue from the prospective resources does not represent the fair market value of the prospective resources. Actual prospective resources (and any volumes that may be reclassified as reserves) and future production therefrom may be greater than or less than the estimates provided herein.
- (2) GLJ prepared the estimates of prospective resources shown for each property using deterministic principles and methods. Probabilistic aggregation of the low and high property estimates shown in the table might produce different total volumes than the arithmetic sums shown in the table.
- (3) The forecast price and cost assumptions utilized in the year-end 2019 reserves report were also utilized by GLJ in preparing the GLJ Resource Assessment. See "GLJ December 31, 2019 Forecast Prices" in this AIF.
- (4) "Gross" prospective resources are Vermilion's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Vermilion. "Net" prospective resources are Vermilion's working interest (operating or non-operating) share after deduction of royalty obligations, plus Vermilion's royalty interests in prospective resources.
- (5) The risked net present value of future net revenue attributable to the prospective resources does not represent the fair market value of the prospective resources. Estimated abandonment and reclamation costs have been included in the evaluation.
- (6) This is considered to be a conservative estimate of the quantity that will actually be recovered. It is likely that the actual remaining quantities recovered will exceed the low estimate. If probabilistic methods are used, there should be at least a 90 percent probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- (7) This is considered to be the best estimate of the quantity that will actually be recovered. It is equally likely that the actual remaining quantities recovered will be greater or less than the best estimate. If probabilistic methods are used, there should be at least a 50 percent probability (P50) that the quantities actually recovered will equal or exceed the best estimate.

- (8) This is considered to be an optimistic estimate of the quantity that will actually be recovered. It is unlikely that the actual remaining quantities recovered will exceed the high estimate. If probabilistic methods are used, there should be at least a 10 percent probability (P10) that the quantities actually recovered will equal or exceed the high estimate.
- (9) The chance of commerciality is defined as the product of the CoDis and the CoDev. CoDis is defined in COGEH as the estimated probability that exploration activities will confirm the existence of a significant accumulation of potentially recoverable petroleum. CoDev is defined as the estimated probability that, once discovered, a known accumulation will be commercially developed.

CoDev is the estimated probability that, once discovered, a known accumulation will be commercially developed. Five factors have been considered in determining the CoDev as follows:

- Ps is the probability of success
- Economic Factor – For reserves to be assessed, a project must be economic. With respect to prospective resources, this factor captures uncertainty in the assessment of economic status principally due to uncertainty in cost estimates and marketing options. Economic viability uncertainty due to technology is more aptly captured with the Technology Factor. The Economic Factor will be 1 for reserves and will often be 1 for development pending and for projects with a development study or pre-development study with a robust rate of return. A robust rate of return means that the project retains economic status with variation in costs and/or marketing plans over the expected range of outcomes for these variables.
- Technology Factor - For reserves to be assessed, a project must utilize established technology. With respect to prospective resources, this factor captures the uncertainty in the viability of the proposed technology for the subject reservoir, namely, the uncertainty associated with technology under development. By definition, technology under development is a recovery process or process improvement that has been determined to be technically viable via field test and is being field tested further to determine its economic viability in the subject reservoir. The Technology Factor will be 1 for reserves and for established technology. For technology under development, this factor will consider different risks associated with technologies being developed at the scale of the well versus the scale of a project and technologies which are being modified or extended for the subject reservoir versus new emerging technologies which have not previously been applied in any commercial application. The risk assessment will also consider the quality and sufficiency of the test data available, the ability to reliably scale such data and the ability to extrapolate results in time.
- Development Plan Factor – For reserves to be assessed, a project must have a detailed development plan. With respect to prospective resources, this factor captures the uncertainty in the project evaluation scenario. The Development Plan Factor will be 1 for reserves and high, approaching 1, for development pending projects. This factor will consider development plan detail variations including the degree of delineation, reservoir specific development and operating strategy detail (technology decision, well layouts (spacing and pad locations), completion strategy, start-up strategy, water source and disposal, other infrastructure, facility design, marketing plans etc.) and the quality of the cost estimates as provided by the developer.
- Development Timeframe Factor – In the case of major projects, for reserves to be assessed, first major capital spending must be initiated within 5 years of the effective date. The Development Timeframe Factor will be 1 for reserves and will often be 1 for development pending provided the project is planned on-stream based on the same criteria used in the assessment of reserves. With respect to prospective resources, the factor will approach 1 for projects planned on-stream with a timeframe slightly longer than the limiting reserves criteria.
- Other Contingency Factor – For reserves to be assessed, all contingencies must be eliminated. With respect to prospective resources, this factor captures major contingencies, usually beyond the control of the operator, other than those captured by economic status, technology status, project evaluation scenario status and the development timeframe. The Other Contingency Factor will be 1 for reserves and for development pending and less than 1 for on hold. Provided all contingencies have been identified and their resolution is reasonably certain, this factor would also be 1 for development unclarified.
- These factors may be inter-related (dependent) and care has been taken to ensure that risks are appropriately accounted.

CoDis is defined in COGEH as the estimated probability that exploration activities will confirm the existence of a significant accumulation of potentially recoverable petroleum. Five factors have been considered in determining the CoDis as follows:

- $CoDis = Ps(\text{Source}) \times Ps(\text{Timing and Migration}) \times Ps(\text{Trap}) \times Ps(\text{Seal}) \times Ps(\text{Reservoir})$  wherein
- Ps is the probability of success
- Source – For a significant accumulation of potentially recoverable petroleum, a viable source rock capable of generating hydrocarbons must exist. The probability of a source rock investigates stratigraphic presence and location, volumetric adequacy and organic richness of the proposed source rock. In proven hydrocarbon systems, this factor will be a 1. This factor becomes critical when looking at frontier basins.
- Timing and Migration - For a significant accumulation of potentially recoverable petroleum, the source rock must reach thermal maturity to generate the hydrocarbons and have a conduit with which to fill the closures that existed at the time of migration. The probability of timing and migration investigates the movement of hydrocarbons from the source rock to the trap. This factor evaluates the pathways and/or carrier beds, including fault systems, which can transport buoyant hydrocarbons from the source kitchen to the prospect area at a time that the trap existed. This factor is often 1 in producing trends, but there is a possibility of migration shadows where the conduits do not fill a viable trap, which would decrease this factor.
- Trap - For a significant accumulation of potentially recoverable petroleum, a reservoir must be present in a structural or stratigraphic closure. The trap factor looks at the definition of the geometry of the accumulation, which is determined using seismic, gravity and/or magnetic techniques and surrounding well logs to determine the probability of a significant accumulation. The risking of this includes examining data quality (e.g. 2D vs 3D seismic coverage) and potential depth conversion possibilities which give confidence in the mapped trap. Stratigraphic trap definition is used for volumetric calculations, but it is given a 1 for this chance factor as the stratigraphic risk will be captured in seal.
- Seal - For a significant accumulation of potentially recoverable petroleum, a reservoir must be sealed both on the top and laterally by a lithology that contains the hydrocarbon accumulation within the reservoir. It is also necessary that these accumulated hydrocarbons have been preserved from flushing or leakage. Factors that affect top, seat and lateral seals are fluid viscosity, bed thickness, natural continuity of sealing facies, differential permeability, fault history and reservoir pressures needed to maintain a hydrocarbon column. The probability that the accumulation is not able to be contained by the surrounding rocks is captured in this chance factor.

- Reservoir - For a significant accumulation of potentially recoverable petroleum, a reservoir rock must be present and have sufficient porosity and permeability and be of a sufficient thickness to produce quantities of mobile hydrocarbon. Under this approach, encountering wet, commercial quality and quantity sandstones would not be a failure in the reservoir category, but rather in one of the other factors. It is the reservoir along with the trap which determine the volumetrics of the accumulation.
- Serial multiplication of these five decimal fractions representing the five geologic chance factors can be done as they are considered independent of each other.

(10) Summary of risks for prospect prospective resources at December 31, 2019<sup>(a)</sup>

Prospect <sup>(b)(c)</sup>	Risk Volume Gross <sup>(d)</sup> (mboe)	Development Risks	Discovery Risks	Chance of Development Aggregate %	Chance of Discovery Aggregate %	Chance of Commerciality Aggregate %	Risk Estimated Development Cost <sup>(e)</sup> Gross (\$M)	Development Timing (yrs)
<b>Prospective (Pr2) - Best Estimate</b>								
Australia	529	Development timing	Reservoir	80%	60%	48%	16,150	6
Canada	73,960	Development timing, economics	Reservoir	27%	87%	24%	1,062,708	4 to 16
CEE	15,086	Development timing	Reservoir, seal, source, trap	82%	30%	25%	156,757	1 to 9
France	9,945	Development timing	Reservoir, seal, trap,	69%	45%	31%	362,136	4 to 12
Germany	55,686	Development timing	Reservoir, seal, source, trap	70%	45%	32%	394,810	4 to 8
Ireland	—	—	—	—	—	—	—	—
Netherlands	14,485	Development timing, permitting	Reservoir, seal, source, timing and migration	27%	39%	11%	120,169	4 to 13
United States	9,483	Development timing	Reservoir, source, maturity	75%	65%	49%	233,371	10 to 16
<b>Total</b>	<b>179,177</b>			<b>45%</b>	<b>54%</b>	<b>24%</b>	<b>2,346,101</b>	<b>1 to 16</b>

- (a) The pricing assumptions used in the GLJ Report with respect to net present value of future net revenue (forecast) as well as the inflation rates used for operating and capital costs are set forth in "Forecast Prices used in Estimates". GLJ is an independent qualified reserves evaluator appointed pursuant to NI 51-101.
- (b) GLJ has sub-classified the best estimate prospective resources by maturity status, consistent with the requirements of the COGE Handbook. These prospective resources have been sub-classified as "Prospect" which the COGE Handbook defines as a potential accumulation within a play that is sufficiently well defined to present a viable drilling target.
- (c) Risked prospect best estimate prospective resources for each business unit have been estimated based on the continued drilling in our active core asset (see "Description of Properties" section of this AIF) using established recovery technologies.
- (d) "Gross" prospective resources are Vermilion's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Vermilion.
- (e) The risked estimated cost to bring these prospective resources on commercial production.



## Appendix B

### REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR AUDITOR (FORM 51-101F2)

To the Board of Directors of Vermilion Energy Inc. (the "Company"):

1. We have evaluated the Company's reserves data as at December 31, 2019. The reserves data are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2019, estimated using forecast prices and costs.
2. The reserves data are the responsibility of the Company's management. Our responsibility is to express an opinion on the reserves data based on our evaluation.
3. We carried out our evaluation in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook as amended from time to time (the "COGE Handbook") maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter).
4. Those standards require that we plan and perform an evaluation to obtain reasonable assurance as to whether the reserves data are free of material misstatement. An evaluation also includes assessing whether the reserves data are in accordance with principles and definitions presented in the COGE Handbook.
5. The following table shows the net present value of future net revenue (before deduction of income taxes) attributed to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the reserves data of the Company evaluated for the year ended December 2019, and identifies the respective portions thereof that we have evaluated and reported on to the Company's board of directors:

Independent Qualified Reserves Evaluator	Effective Date of Evaluation Report	Location of Reserves (Country or Foreign Geographic Area)	Net Present Value of Future Net Revenue (before income taxes, 10% discount rate - \$M)			
			Audited	Evaluated	Reviewed	Total
GLJ Petroleum Consultants	December 31, 2019	Australia	—	340,142	—	340,142
GLJ Petroleum Consultants	December 31, 2019	Canada	—	3,585,717	—	3,585,717
GLJ Petroleum Consultants	December 31, 2019	CEE	—	50,049	—	50,049
GLJ Petroleum Consultants	December 31, 2019	France	—	1,556,134	—	1,556,134
GLJ Petroleum Consultants	December 31, 2019	Germany	—	465,741	—	465,741
GLJ Petroleum Consultants	December 31, 2019	Ireland	—	402,366	—	402,366
GLJ Petroleum Consultants	December 31, 2019	Netherlands	—	379,572	—	379,572
GLJ Petroleum Consultants	December 31, 2019	United States	—	722,478	—	722,478
<b>Total</b>			<b>—</b>	<b>7,502,199</b>	<b>—</b>	<b>7,502,199</b>

6. In our opinion, the reserves data evaluated by us have, in all material respects, been determined and are in accordance with the COGE Handbook, consistently applied. We express no opinion on the reserves data that we reviewed but did not audit or evaluate.
7. We have no responsibility to update our reports referred to in paragraph 5 for events and circumstances occurring after the effective date of our reports.
8. Because the reserves data are based on judgments regarding future events, actual results will vary and the variations may be material.

EXECUTED as to our reports referred to above:

GLJ Petroleum Consultants Ltd., Calgary, Alberta, Canada, February 10, 2020

*"Jodi L. Anhorn"*

Jodi L. Anhorn, M.Sc., P.Eng.

Executive Vice President & COO





## APPENDIX B - PART 2

### REPORT ON CONTINGENT RESOURCES DATA AND PROSPECTIVE RESOURCES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR AUDITOR (FORM 51-101F2)

To the board of directors of Vermilion Energy Inc. (the "Company"):

1. We have evaluated the Company's contingent resources data and prospective resources data as at December 31, 2019. The contingent resources data and prospective resources data are risked estimates of volume of contingent resources and prospective resources and related risked net present value of future net revenue as at December 31, 2019, estimated using forecast prices and costs.
2. The contingent resources data and prospective resources data are the responsibility of the Company's management. Our responsibility is to express an opinion on the contingent resources data and prospective resources data based on our evaluation.
3. We carried out our evaluation in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook as amended from time to time (the "COGE Handbook") maintained by the Society of Petroleum Evaluation Engineers (Calgary Chapter).
4. Those standards require that we plan and perform an evaluation to obtain reasonable assurance as to whether the contingent resources data and prospective resources data are free of material misstatement. An evaluation also includes assessing whether the contingent resources data and prospective resources data are in accordance with principles and definitions presented in the COGE Handbook.
5. The following tables set forth the risked volume and risked net present value of future net revenue of contingent resources and prospective resources (before deduction of income taxes) attributed to contingent resources and prospective resources, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the Company's statement prepared in accordance with Form 51-101F1 and identifies the respective portions of the contingent resources data and prospective resources data that we have evaluated and reported on to the Company's board of directors:

#### Contingent Resources

Classification	Independent Qualified Reserves Evaluator or Auditor	Effective Date of Evaluation Report	Location of Resources Other than Reserves (Country or Foreign Geographic Area)	Risked Volume (mboe)	Net Present Value of Future Net Revenue (before income taxes, 10% discount rate - \$M)		
					Audited	Evaluated	Total
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Australia	3,240	—	56,684	56,684
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Canada	158,754	—	1,058,611	1,058,611
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	CEE	581	—	14,077	14,077
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	France	27,653	—	488,761	488,761
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Germany	6,204	—	64,830	64,830
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Netherlands	5,239	—	91,969	91,969
Development Pending Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	USA	34,048	—	345,351	345,351
<b>Total</b>				<b>236,838</b>	<b>—</b>	<b>2,121,455</b>	<b>2,121,455</b>

Classification	Independent Qualified Reserves Evaluator or Auditor	Effective Date of Evaluation Report	(Country or Foreign Geographic Area)	Risked Volume (mboe)
Development Unclarified Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Canada	31,574
Development Unclarified Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	France	2,385
Development Unclarified Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Germany	249
Development Unclarified Contingent Resources (2C)	GLJ Petroleum Consultants	December 31, 2019	Netherlands	3,379
<b>Total</b>				<b>37,587</b>

### Prospective Resources

Classification	Independent Qualified Reserves Evaluator or Auditor	Effective Date of Evaluation Report	(Country or Foreign Geographic Area)	Risk Volume (mboe)
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	Australia	529
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	Canada	73,960
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	CEE	15,086
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	France	9,945
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	Germany	55,686
Prospect Prospective Resources	GLJ Petroleum Consultants	December 31, 2019	Netherlands	14,485
<b>Total</b>				<b>179,177</b>

6. In our opinion, the contingent resources data and prospective resources data respectively evaluated by us have, in all material respects, been determined and are in accordance with the COGE Handbook, consistently applied. We express no opinion on the contingent resources data and prospective resources that we reviewed but did not audit or evaluate.
7. We have no responsibility to update our reports referred to in paragraph 5 for events and circumstances occurring after the effective date of our reports.
8. Because the contingent resources data and prospective resources data are based on judgments regarding future events, actual results will vary and the variations may be material.

EXECUTED as to our reports referred to above:

GLJ Petroleum Consultants Ltd., Calgary, Alberta, Canada, February 10, 2020

*"Jodi L. Anhorn"*

Jodi L. Anhorn, M.Sc., P.Eng.

Executive Vice President & COO



## Appendix C

### REPORT OF MANAGEMENT AND DIRECTORS ON RESERVES DATA AND OTHER INFORMATION (FORM 51-101F3)

*Terms to which a meaning is ascribed in National Instrument 51-101 have the same meaning herein.*

Management of Vermilion Energy Inc. (the "Company") are responsible for the preparation and disclosure, or arranging for the preparation and disclosure of information with respect to the Company's oil and gas activities in accordance with securities regulatory requirements. This information includes reserves data, and includes contingent resources data and prospective resources data, which are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2019, estimated using forecast prices and costs.

Independent qualified reserves evaluators have evaluated the Company's reserves data, contingent resources data and prospective resources data. The report of the independent qualified reserves evaluators is presented in Appendix A to the Annual Information Form of the Company for the year ended December 31, 2019.

The Independent Reserves Committee of the Board of Directors of the Company has:

- (a) reviewed the Company's procedures for providing information to the independent qualified reserves evaluators;
- (b) met with the independent qualified reserves evaluators to determine whether any restrictions affected the ability of the independent qualified reserves evaluators to report without reservation; and
- (c) reviewed the reserves data, contingent resources data and prospective resources data with Management and the independent qualified reserves evaluators.

The Independent Reserves Committee of the Board of Directors has reviewed the Company's procedures for assembling and reporting other information associated with oil and gas activities and has reviewed that information with Management. The Board of Directors has, on the recommendation of the Audit and Independent Reserves Committees, approved:

- (a) the content and filing with securities regulatory authorities of Form 51-101F1 containing reserves data, contingent resources data and prospective resources data and other oil and gas information;
- (b) the filing of Form 51-101F2 which is the report of the independent qualified reserves evaluators on the reserves data; and
- (c) the content and filing of this report.

Because the reserves data, contingent resources data and prospective resources data are based on judgments regarding future events, actual results will vary and the variations may be material.

"Anthony Marino"

Anthony Marino, President & Chief Executive Officer

"Lars Glemser"

Lars Glemser, Vice President and Chief Financial Officer

"Lorenzo Donadeo"

Lorenzo Donadeo, Director and Chairman of the Board

"William Roby"

William Roby, Director

March 5, 2020

## Appendix D

### Terms of reference for the Audit Committee

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#### I. PURPOSE

The primary function of the Audit Committee (the "Committee") is to assist the Board in fulfilling its oversight responsibilities with respect to the Company's accounting and financing reporting processes and the audit of the Company's financial statements, including oversight of:

- A. the integrity of the Company's financial statements;
- B. the Company's compliance with legal and regulatory requirements;
- C. the independent auditors' qualifications and independence;
- D. the financial information that will be provided to the Shareholders and others;
- E. the Company's systems of disclosure controls and internal controls regarding finance, accounting, legal compliance and ethics, which management and the Board have established;
- F. the performance of the Company's audit processes; and
- G. such other matters required by applicable laws and rules of any stock exchange on which the Company's shares are listed for trading.

While the Committee has the responsibilities and powers set forth in its terms of reference, it is not the duty of the Committee to prepare financial statements, plan or conduct audits or to determine that the Company's financial statements and disclosures are complete and accurate and are in accordance with International Financial Reporting Standards and applicable rules and regulations. Primary responsibility for the financial reporting, information systems, risk management, and disclosure controls and internal controls of the Company is vested in management.

#### II. COMPOSITION AND OPERATIONS

- A. The Committee shall be composed of not fewer than three directors and not more than five directors, all of whom are "independent"<sup>1</sup> under the requirements or guidelines for audit committee service under applicable securities laws and rules of any stock exchange on which the Company's shares are listed for trading.
- B. All Committee members shall be "financially literate,"<sup>2</sup> and at least one member shall have "accounting or related financial expertise" as such terms are interpreted by the Board in its business judgment in light of, and in accordance with, the requirements or guidelines for audit committee service under applicable securities laws and rules of any stock exchange on which the Company's shares are listed for trading. The Committee may include a member who is not financially literate, provided he or she attains this status within a reasonable period of time following his or her appointment and providing the Board has determined that including such member will not materially adversely affect the ability of the Committee to act independently.
- C. No Committee member shall serve on the audit committees of more than two other public issuers without prior determination by the Board that such simultaneous service would not impair the ability of such member to serve effectively on the Committee.
- D. The Committee shall operate in a manner that is consistent with the Committee Guidelines outlined in Tab 8 of the Board Manual.
- E. The Company's auditors shall be advised of the names of the Committee members and will receive notice of and be invited to attend meetings of the Committee, and to be heard at those meetings on matters relating to the auditor's duties.
- F. The Committee may request any officer or employee of the Company, or the Company's legal counsel, or any external or internal auditors to attend a meeting of the Committee to provide such pertinent information as the Committee requests or to meet with any members of, or consultants to the Committee. The Committee has the authority to communicate directly with the internal and external auditors as it deems appropriate to consider any matter that the Committee or auditors determine should be brought to the attention of the Board or Shareholders.
- G. The Committee shall have the authority to select, retain, terminate and approve the fees and other retention terms of special independent legal counsel and other consultants or advisers to advise the Committee, as it deems necessary or appropriate, at the Company's expense.

<sup>1</sup> Committee members must be "independent", as defined in Sections 1.4 and 1.5 of National Instrument 52-110 and "independent" under the requirements of Rule 10A-3 of the Securities Exchange Act of 1934, as amended, and Section 303A.06 of the NYSE Listed Company Manual.

<sup>2</sup> The Board has adopted the NI 52-110 definition of "financial literacy", which is an individual is financially literate if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the issuer's financial statements.

- H. The Company shall provide for appropriate funding, as determined by the Committee, for payment of (i) compensation to the independent auditors engaged for the purpose of preparing or issuing an audit report or performing other audit review or attest services for the Company, (ii) compensation to any advisers employed by the Committee and (iii) ordinary administrative expenses of the Committee that are necessary or appropriate for carrying out its duties.
- I. The Committee shall meet at least four times each year.

### III. DUTIES AND RESPONSIBILITIES

Subject to the powers and duties of the Board, the Committee will perform the following duties:

#### A. Financial Statements and Other Financial Information

The Committee will review and recommend for approval to the Board financial information that will be made publicly available. This includes the responsibility to:

- i) review and recommend approval of the Company's annual financial statements, MD&A and earnings press release and report to the Board of Directors before the statements are approved by the Board of Directors;
- ii) review and recommend approval for release the Company's quarterly financial statements, MD&A and press releases, as well as financial information and earnings guidance provided to analysts and rating agencies;
- iii) satisfy itself that adequate procedures are in place for the review of the public disclosure of financial information extracted or derived from the Company's financial statements, other than the public disclosure referred to in items (i) and (ii) above, and periodically assess the adequacy of those procedures; and
- iv) review the Annual Information Form and any Prospectus/Private Placement Memorandums.

Review, and where appropriate, discuss:

- v) the appropriateness of critical accounting policies and financial reporting practices used by the Company;
- vi) major issues regarding accounting principles and financial statement presentations, including any significant proposed changes in financial reporting and accounting principles, policies and practices to be adopted by the Company and major issues as to the adequacy of the Company's internal controls and any special audit steps adopted in light of material control deficiencies;
- vii) analyses prepared by management or the external auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative International Financial Reporting Standards ("IFRS") methods on the financial statements of the Company and any other opinions sought by management from an independent or other audit firm or advisor with respect to the accounting treatment of a particular item;
- viii) any management letter or schedule of unadjusted differences provided by the external auditor and the Company's response to that letter and other material written communication between the external auditor and management;
- ix) any problems, difficulties or differences encountered in the course of the audit work including any disagreements with management or restrictions on the scope of the external auditor's activities or on access to requested information and management's response thereto;
- x) any new or pending developments in accounting and reporting standards that may affect the Company;
- xi) the effect of regulatory and accounting initiatives, as well as any off-balance sheet structures on the financial statements of the Company and other financial disclosures;
- xii) any reserves, accruals, provisions or estimates that may have a significant effect upon the financial statements of the Company;
- xiii) the use of special purpose entities and the business purpose and economic effect of off balance sheet transactions, arrangements, obligations, guarantees and other relationships of Company and their impact on the reported financial results of the Company;
- xiv) the use of any "pro forma" or "adjusted" information not in accordance with generally accepted accounting principles;
- xv) any litigation, claim or contingency, including tax assessments, that could have a material effect upon the financial position of the Company, and the manner in which these matters may be, or have been, disclosed in the financial statements; and
- xvi) accounting, tax and financial aspects of the operations of the Company as the Committee considers appropriate.

## B. Risk Management, Internal Control and Information Systems

The Committee will review and discuss with management, and obtain reasonable assurance that the risk management, internal control and information systems are operating effectively to produce accurate, appropriate and timely management and financial information. This includes the responsibility to:

- i) review the Company's risk management controls and policies with specific responsibility for Credit & Counterparty, Market & Financial, Political and Strategic & Repatriation risks;
- ii) obtain reasonable assurance that the information systems are reliable and the systems of internal controls are properly designed and effectively implemented through separate and periodic discussions with and reports from management, the internal auditor and external auditor; and
- iii) review management steps to implement and maintain appropriate internal control procedures including a review of policies.

## C. External Audit

The external auditor is required to report directly to the Committee, which will review the planning and results of external audit activities and the ongoing relationship with the external auditor. This includes:

- i) review and recommend to the Board, for Shareholder approval, the appointment of the external auditor;
- ii) review and approve the annual external audit plan, including but not limited to the following:
  - a) engagement letter between the external auditor and financial management of the Company;
  - b) objectives and scope of the external audit work;
  - c) procedures for quarterly review of financial statements;
  - d) materiality limit;
  - e) areas of audit risk;
  - f) staffing;
  - g) timetable; and
  - h) compensation and fees to be paid by the Company to the external auditor.
- iii) meet with the external auditor to discuss the Company's quarterly and annual financial statements and the auditor's report including the appropriateness of accounting policies and underlying estimates;
- iv) maintain oversight of the external auditor's work and advise the Board, including but not limited to:
  - a) the resolution of any disagreements between management and the external auditor regarding financial reporting;
  - b) any significant accounting or financial reporting issue;
  - c) the auditors' evaluation of the Company's system of internal controls, procedures and documentation; the post audit or management letter containing any findings or recommendation of the external auditor, including management's response thereto and the subsequent follow-up to any identified internal control weaknesses;
  - d) any other matters the external auditor brings to the Committee's attention; and
  - e) evaluate and assess the qualifications and performance of the external auditors for recommendation to the Board as to the appointment or reappointment of the external auditor to be proposed for approval by the Shareholders, and ensuring that such auditors are participants in good standing pursuant to applicable regulatory laws.
- v) review the auditor's report on all material subsidiaries;
- vi) review and discuss with the external auditors all significant relationships that the external auditors and their affiliates have with the Company and its affiliates in order to determine the external auditors' independence, including, without limitation:
  - a) requesting, receiving and reviewing, on a periodic basis, a formal written statement from the external auditors, including a list of all relationships between the external auditor and the Company that may reasonably be thought to bear on the independence of the external auditors with respect to the Company;
  - b) discussing with the external auditors any disclosed relationships or services that the external auditors believe may affect the objectivity and independence of the external auditors; and
  - c) recommending that the Board take appropriate action in response to the external auditors' report to satisfy itself of the external auditors' independence.
- vii) annually request and review a report from the external auditor regarding (a) the external auditor's quality-control procedures, (b) any material issues raised by the most recent quality-control review, or peer review, of the external auditor, or by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the firm, and (c) any steps taken to deal with any such issues;
- viii) review and pre-approve any non-audit services to be provided to the Company or any affiliates by the external auditor's firm or its affiliates (including estimated fees), and consider the impact on the independence of the external audit;
- ix) review the disclosure with respect to its pre-approval of audit and non-audit services provided by the external auditors; and
- x) meet periodically, and at least annually, with the external auditor without management present.

## **D. Compliance**

The Committee shall:

- i) Ensure that the external auditor's fees are disclosed by category in the Annual Information Form in compliance with regulatory requirements;
- ii) Disclose any specific policies or procedures adopted for pre-approving non-audit services by the external auditor including affirmation that they meet regulatory requirements;
- iii) Assist the Governance and Human Resources Committee with preparing the Company's governance disclosure by ensuring it has current and accurate information on:
  - a) the independence of each Committee member relative to regulatory requirements for audit committees;
  - b) the state of financial literacy of each Committee member, including the name of any member(s) currently in the process of acquiring financial literacy and when they are expected to attain this status; and
  - c) the education and experience of each Committee member relevant to his or her responsibilities as Committee member.
- iv) Disclose, if required, if the Company has relied upon any exemptions to the requirements for committees under applicable securities laws and rules of any stock exchange on which the Company's shares are listed for trading.

## **E. Other**

The Committee shall:

- i) establish and periodically review procedures for:
  - a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
  - b) the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters or other matters that could negatively affect the Company, such as violations of the Code of Business Conduct and Ethics.
- ii) review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor;
- iii) review insurance coverage of significant business risks and uncertainties;
- iv) review material litigation and its impact on financial reporting;
- v) review policies and procedures for the review and approval of officers' expenses and perquisites;
- vi) review the policies and practices concerning the expenses and perquisites of the Chairman, including the use of the assets of the Company;
- vii) review with external auditors any corporate transactions in which directors or officers of the Company have a personal interest; and
- viii) review the terms of reference for the Committee at least annually and otherwise as it deems appropriate, and recommend changes to the Board as required. The Committee shall evaluate its performance with reference to the terms of reference annually.

## **IV. ACCOUNTABILITY**

- A.** The Committee Chair has the responsibility to make periodic reports to the Board, as requested, on financial and other matters considered by the Committee relative to the Company.
- B.** The Committee shall report its discussions to the Board by maintaining minutes of its meetings and providing an oral report at the next Board meeting.



## 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**  
ENERGY



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