Paramount resources ltd.

Annual Information Form
For the Year Ended December 31, 2018

March 6, 2019

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DEFINITIONS

In this annual information form, capitalized terms have the following meanings:

"2019 Notes" means the $450 million aggregate principal amount of 7⅝ percent senior unsecured notes of the Company that were formerly outstanding and due in 2019;

"2023 Notes" means the US$450 million aggregate principal amount of 6⅞ percent senior unsecured notes of the Company that were formerly outstanding and due in 2023;

"Apache Canada" means Apache Canada Ltd.;

"Cavalier Energy" means Paramount's wholly-owned subsidiary, Cavalier Energy Inc. and, unless otherwise specified or the context otherwise requires, its subsidiaries and partnerships;

"Cavalier Royalty" means a royalty that was sold by Cavalier Energy to an unrelated third-party on its oil sands properties in December 2016;

"COGE Handbook" means the Canadian Oil and Gas Evaluation Handbook;

"Common Shares" means class A common shares in the capital of the Company;

"Credit Facility" means Paramount's senior secured, financial covenant-based revolving bank credit facility;

"Fox Drilling" means Paramount's wholly-owned limited partnership, Fox Drilling Limited Partnership;

"IFRS" means International Financial Reporting Standards;

"McDaniel" means McDaniel & Associates Consultants Ltd.;

"McDaniel Report" means the report of McDaniel on Paramount's oil and gas reserves effective as of December 31, 2018 and dated and prepared as of March 6, 2019;

"Paramount" or the "Company" means Paramount Resources Ltd. and, unless otherwise specified or the context otherwise requires, its subsidiaries and partnerships;

"Seven Generations" means Seven Generations Energy Ltd.;

"Seven Generations Shares" means class A common shares in the capital of Seven Generations;

"Strath" means Strath Resources Ltd.;

"Trilogy" means Trilogy Energy Corp.;

"Trilogy 2019 Notes" means the $300 million principal amount of 7¼ percent senior unsecured notes of Trilogy that were formerly outstanding and due in 2019; and

"TSX" means the Toronto Stock Exchange.

Information herein is presented as at December 31, 2018, unless otherwise noted.

OIL AND NATURAL GAS MEASURES, ABBREVIATIONS AND TERMS

Oil and natural gas measures, abbreviations and terms used in this annual information form have the meanings set forth below.

Liquids	
Bbl	barrels
Bbl/d	barrels per day
MBbl	thousands of barrels
MMBbl	millions of barrels

Natural Gas	
Mcf	thousands of cubic feet
MMcf	millions of cubic feet
MMcf/d	millions of cubic feet per day
Bcf	billions of cubic feet
Btu	British thermal units
MMBtu	millions of British thermal units
GJ	gigajoule

Oil and Gas Equivalent	
Boe	barrels of oil equivalent
Boe/d	barrels of oil equivalent per day
MBoe	thousands of barrels of oil equivalent
MMBoe	millions of barrels of oil equivalent
Mcfe	thousands of cubic feet of natural gas equivalent

"Liquids" means oil and NGLs.

"Gross" means:

(i) in relation to wells, the total number of wells in which Paramount has an interest;

(ii) in relation to properties, the total area of properties in which Paramount has an interest; and

(iii) in relation to Paramount's interest in production or reserves, Paramount's working interest share before deduction of any royalties and without including Paramount's royalty interests.

"Net" means:

(i) in relation to wells, the number of wells obtained by aggregating Paramount's working interest in each of its gross wells;

(ii) in relation to Paramount's interest in a property, the total area in which Paramount has an interest multiplied by the working interest it owns; and

(iii) in relation to Paramount's interest in production or reserves, Paramount's working interest share after deduction of royalty obligations, plus Paramount's royalty interests.

"NGLs" means natural gas liquids, including pentanes-plus (or condensate) ($C5^{+}$), ethane (C2), propane (C3) and butane (C4).

All crude oil and natural gas information includes tight oil and shale gas, respectively, unless such product type is presented on a separate basis.

A ratio of six thousand cubic feet of natural gas to one barrel (6:1) is used when converting natural gas to Boe and a ratio of one barrel to six thousand cubic feet of natural gas (1:6) is used when converting NGLs to Mcfe. Equivalency measures such as Boe and Mcfe may be misleading, particularly if used in isolation. A conversion ratio of 6:1 for Boe or 1:6 for Mcfe is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. During the year ended December 31, 2018, the value ratio between six thousand cubic feet of natural gas and one barrel of crude oil was approximately 47:1. This value ratio is significantly different from the energy equivalency ratio of 6:1 for Boe and using such a ratio would be misleading as an indication of value.

RESERVES CATEGORIES AND DEFINITIONS

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, from a given date forward, based on: (i) analysis of drilling, geological, geophysical and engineering data; (ii) use of established technology; and (iii) specified economic conditions, which are generally accepted as being reasonable. The following definitions and assumptions form the basis of classification for reserves presented in the McDaniel Report:

Reserves are classified according to the degree of certainty associated with the estimates:

> **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.
>
> **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.

Each of the reserves categories (proved and probable) may be divided into developed and undeveloped categories:

> **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 (for example, when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing as follows:
>
>> **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.
>>
>> **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.

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 or probable) to which they are assigned.

In multi-well pools it may be appropriate to allocate total pool reserves between the developed and undeveloped categories or to subdivide the developed reserves for the pool between developed producing and developed non-producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

The qualitative certainty levels referred to in the definitions above are applicable to individual reserves entities (which refers to the lowest level at which reserves calculations are performed) and to reported reserves (which refers to the highest level sum of individual entity estimates for which reserves are presented). Reported reserves should target the following levels of certainty under a specific set of economic conditions: (i) at least a 90 per cent probability that the quantities actually recovered will equal or exceed the estimated proved reserves; and (ii) at least a 50 per cent probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of reserves estimates will be prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with reserves estimates and the effect of aggregation is provided in the COGE Handbook.

FINANCIAL INFORMATION AND NON-GAAP MEASURES

Unless otherwise specified, all dollar amounts are expressed in Canadian dollars and all references to "dollars" or "$" are to Canadian dollars and all references to "US$" are to United States dollars.

Unless otherwise indicated, all financial information included in this annual information form has been prepared in accordance with IFRS. Paramount's audited consolidated financial statements as at and for the year ended December 31, 2018 can be found under the Company's profile on the SEDAR website at www.sedar.com.

In this document, the terms "adjusted funds flow" and "netback" (collectively, the "Non-GAAP measures") are used and do not have any standardized meanings as prescribed by IFRS. Adjusted funds flow refers to cash from operating activities before net changes in operating non-cash working capital, geological and geophysical expenses, asset retirement obligation settlements and transaction and reorganization costs. Adjusted funds flow is commonly used in the oil and gas industry to assist management and investors in measuring the Company's ability to fund capital programs and meet financial obligations. Netback equals petroleum and natural gas sales less royalties, operating costs and transportation and NGLs processing costs. Netback is commonly used by management and investors to compare the results of the Company's oil and gas operations between periods. Non-GAAP measures should not be considered in isolation or construed as alternatives to their most directly comparable measure calculated in accordance with IFRS, or other measures of financial performance calculated in accordance with IFRS. The Non-GAAP measures are unlikely to be comparable to similar measures presented by other issuers.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this document constitute forward-looking information under applicable securities legislation. Forward-looking information typically contains statements with words such as "anticipate", "believe", "estimate", "will", "expect", "plan", "schedule", "intend", "propose", or similar words suggesting future outcomes or an outlook. Forward looking information in this document includes, but is not limited to:

- exploration, development and associated operational plans and strategies;
- estimated reserves and the undiscounted and discounted present value of future net revenues therefrom;
- future taxes payable or owing;
- the potential outcome and timing of any legal claims, audits, assessments or other regulatory matters or proceedings;
- the potential expiry of leases;
- the timing and cost of future abandonment and reclamation obligations;
- the potential for the imposition of additional regulatory requirements respecting abandonment and reclamation obligations;
- the expected availability and capacity of facilities; and
- general business strategies and objectives.

Such forward-looking information is based on a number of assumptions which may prove to be incorrect. Assumptions have been made with respect to the following matters, in addition to any other assumptions identified in this document:

- future natural gas, NGLs (including condensate), oil, and bitumen prices;
- royalty rates, taxes and capital, operating, general & administrative and other costs;
- foreign currency exchange rates and interest rates;
- general business, economic and market conditions;
- the availability of Paramount to obtain the required capital to finance its exploration, development and other operations and meet its commitments and financial obligations;
- the ability of Paramount to obtain equipment, services, supplies and personnel in a timely manner and at an acceptable cost to carry out its activities;
- the ability of Paramount to secure adequate product processing, transportation, de-ethanization, fractionation and storage capacity on acceptable terms;
- the ability of Paramount to market its natural gas, NGLs (including condensate), oil, and bitumen production to current and new customers;
- the ability of Paramount and its industry partners to obtain drilling success (including in respect of anticipated production volumes, reserves additions, Liquids yields and resource recoveries) and operational improvements, efficiencies and results consistent with expectations;
- the provisions and application of laws and regulations;
- the timely receipt of required governmental and regulatory approvals; and
- anticipated timelines and budgets being met in respect of drilling programs and other operations (including well completions and tie-ins and the construction, commissioning and start-up of new and expanded facilities).

Although Paramount believes that the expectations reflected in such forward-looking information are reasonable, undue reliance should not be placed on them as Paramount can give no assurance that such expectations will prove to be correct. Forward-looking information is based on expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by Paramount and described in the forward-looking information. The material risks and uncertainties include, but are not limited to:

- fluctuations in natural gas, NGLs (including condensate), oil and bitumen prices;
- changes in foreign currency exchange rates and interest rates;
- the uncertainty of estimates and projections relating to future revenue, production, reserves additions, Liquids yields (including condensate to natural gas ratios), resource recoveries, royalty rates, taxes and costs and expenses;
- the ability to secure adequate product processing, transportation, de-ethanization, fractionation and storage capacity on acceptable terms;
- operational risks in exploring for, developing and producing natural gas, NGLs (including condensate), oil, and bitumen;
- the ability to obtain equipment, services, supplies and personnel in a timely manner and at an acceptable cost;
- potential disruptions, delays or unexpected technical or other difficulties in designing, developing, expanding or operating new, expanded or existing facilities (including third-party facilities);
- processing, transportation, de-ethanization and fractionation outages, disruptions and constraints;
- risks and uncertainties involving the geology of oil and gas deposits;
- the uncertainty of reserves estimates;
- general business, economic and market conditions;
- the ability to generate sufficient cash flow from operations and obtain financing to fund planned exploration, development and operational activities and meet current and future commitments and obligations (including product processing, transportation, de-ethanization, fractionation and similar commitments and obligations);
- changes in, or in the interpretation of, laws, regulations or policies (including environmental laws);
- the ability to obtain required governmental or regulatory approvals in a timely manner, and to obtain and maintain leases and licenses;
- the effects of weather and other factors, including wildlife and environmental restrictions which affect field operations and access;
- the timing and cost of future abandonment and reclamation obligations and potential liabilities for environmental damage and contamination;
- uncertainties regarding aboriginal claims and in maintaining relationships with local populations and other stakeholders;
- the outcome of existing and potential lawsuits, regulatory actions, audits and assessments; and
- other risks and uncertainties described elsewhere in this document and in Paramount's other filings with Canadian securities authorities.

The foregoing list of risks is not exhaustive. For more information relating to risks, see the section titled "Risk Factors" in this annual information form. The forward-looking information contained in this document is made as of the date hereof and, except as required by applicable securities law, Paramount 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.

THE COMPANY

Paramount Resources Ltd. is incorporated under the *Business Corporations Act* (Alberta). The Company's corporate and registered office is located at Suite 2800, 421 – 7th Avenue SW, Calgary, Alberta T2P 4K9. The Common Shares are listed on the TSX under the symbol "POU".

The Company has various subsidiaries and partnerships, including Cavalier Energy and Fox Drilling. The Company's subsidiaries and partnerships each accounted for: (i) less than 10 percent of the Company's consolidated assets as at December 31, 2018; and (ii) less than 10 percent of the Company's consolidated revenues for the year ended December 31, 2018. In aggregate, the Company's subsidiaries and partnerships did not exceed 20 percent of the Company's total consolidated assets or total consolidated revenues as at and for the year ended December 31, 2018.

GENERAL DEVELOPMENT OF THE BUSINESS

Paramount is an independent, publicly traded, Liquids-focused Canadian energy company that explores for and develops both conventional and unconventional petroleum and natural gas resources. The Company also pursues long-term strategic exploration and pre-development plays and holds a portfolio of investments in other entities. Paramount commenced operations as a public company in 1978. It has adapted to a multitude of operating climates over the years, and has grown into a company with a market capitalization of approximately $1.2 billion as at March 5, 2019.

Paramount's operations have been organized into the following three regions:

- the Grande Prairie Region, located in the Peace River Arch area of Alberta, which is focused on Montney developments at Karr and Wapiti;
- the Kaybob Region, located in west-central Alberta, which is focused on Montney and Duvernay developments at Kaybob, Smoky River, Pine Creek and Ante Creek; and
- the Central Alberta and Other Region, which includes Duvernay development plays in southern Alberta at Willesden Green and the East Shale Basin, and lands and production in northern Alberta and British Columbia.

The Company's investments include: (i) investments in other entities (ii) investments in exploration and development stage assets, including oil sands and carbonate bitumen interests held by Cavalier Energy, and prospective shale gas acreage in the Liard and Horn River Basins; and (iii) drilling rigs owned by Fox Drilling.

Set forth below is a brief description of the events that have influenced the general development of Paramount's business over the past three fiscal years.

2016

In response to persistently low commodity prices, the Company implemented further cost cutting measures, in addition to measures implemented in 2015, including a five percent salary reduction for all employees, effective January 1, 2016 (including members of senior management who had received a five percent salary reduction in 2015), and a 15 percent reduction in annual retainers and fees payable to the Company's directors. In addition, the Company once again instituted unpaid Friday office closures during the summer months, resulting in a further 20 percent reduction in employee salaries during the summer months of 2016.

In April 2016, Paramount sold its Musreau complex, consisting of natural gas processing facilities having a capacity of 250 MMcf/d and related midstream assets, at the Musreau/Kakwa area in west central Alberta for net cash proceeds of approximately $560 million. In connection with the sale, Paramount entered into a long-term natural gas processing arrangement with the purchaser to secure priority access to the sold capacity at the Musreau complex in return for a fixed capital fee per Mcf of raw gas delivered to the Musreau complex, plus operating expenses. Proceeds from the sale were used to pay down indebtedness under Paramount's then existing bank credit facility.

In August 2016, Paramount sold the majority of its oil and gas properties in the Musreau/Kakwa area to Seven Generations. In connection with the sale, Seven Generations assumed Paramount's processing and transportation commitments relating to the assets, including the processing arrangement entered into with the purchaser of the Musreau complex. Paramount received total consideration of approximately $2.1 billion from Seven Generations for the Musreau/Kakwa oil and gas properties, consisting of: (i) $496 million in cash; (ii) 33.5 million Seven Generations Shares having a market value immediately prior to closing of approximately $972 million; (iii) the assumption by Seven Generations of all of the Company's 2023 Notes; and (iv) certain oil and gas properties of Seven Generations valued at approximately $6 million.

In connection with the sale of the Musreau/Kakwa oil and gas properties to Seven Generations, Paramount: (i) repaid the remaining balance owing on its then existing credit facility; (ii) paid $1.4 million to holders of its 2019 Notes that provided consent to the Musreau/Kakwa disposition; (iii) redeemed $163.4 million aggregate principal amount of its 2019 Notes, paying $169.6 million plus accrued and unpaid interest to the redemption date; and (iv) was discharged and released from all obligations and covenants under the 2023 Notes indenture and the 2023 Notes.

In December 2016, Paramount redeemed all remaining $286.6 million outstanding principal amount of its 2019 Notes at a redemption price of 102.5 percent of the principal amount of such notes.

In December 2016, Cavalier Energy sold the Cavalier Royalty for cash consideration of $100 million. For further details concerning the Cavalier Royalty see "*Narrative Description of the Business – Other Assets – Cavalier Energy*".

In 2016, Paramount realized net cash proceeds of approximately $861 million through the sale of 29.7 million of the Seven Generations Shares it received through the Musreau/Kakwa disposition. In December 2016, the Company declared a dividend of its remaining 3.8 million Seven Generations Shares, which were distributed to Paramount's shareholders in January 2017. For additional information concerning the dividend, see "*Dividends*".

Following the Musreau/Kakwa disposition, the Company reduced the size of its then existing bank credit facility to $100 million. The Company did not have any debt outstanding as at December 31, 2016 and had cash and cash equivalents of approximately $622 million.

2017

During the latter part of 2016 and the first half of 2017, Paramount focused its development efforts on a 27 (27.0 net) well horizontal Montney drilling and completion program at its Karr property in the Grande Prairie Region. Wells in this drilling program were designed with longer horizontal laterals, higher intensity completions, tighter frac spacing, and different completion fluids compared to prior years. Through this program, the Company grew its sales volumes at Karr to average approximately 26,600 Boe/d in October 2017. This contributed to the growth of the Company's total sales volumes from approximately 11,000 Boe/d immediately following the Musreau/Kakwa disposition to approximately 37,000 Boe/d by October 2017 (excluding the results of the Apache Canada acquisition and Trilogy merger described below), effectively returning the Company's production to the level it was at prior to the Musreau/Kakwa disposition.

In May 2017, Paramount sold non-core assets at Valhalla for cash consideration of approximately $150 million.

In July 2017, Paramount's then existing credit facility was increased from $100 million to $300 million following completion of the lender's annual review.

In August 2017, Paramount acquired all of the shares of Apache Canada, an indirect, wholly-owned subsidiary of Apache Corporation, a publicly traded U.S. based international oil and gas company, for cash consideration of $486.9 million. Through the Apache Canada acquisition, the Company acquired high quality Montney and Duvernay resource play opportunities in the Alberta Deep Basin, including a Montney resource play at Wapiti, immediately northwest of the Company's Karr lands, and Duvernay rights at Kaybob. In connection with such transaction, Paramount secured a processing arrangement that provides priority access to a 150 MMcf/d gas processing plant being constructed by a third party owner. In addition, the Apache Canada acquisition provided Paramount with a lower decline asset base in Central Alberta with exposure to East Shale Basin Duvernay, Ellerslie, Glauconite and Cardium plays.

In September 2017, Paramount merged with Trilogy, a Canadian publicly traded oil and gas company in which Paramount owned approximately 15% of the outstanding shares, through an arrangement under the *Business Corporations Act* (Alberta). On completion of this merger, the Company issued approximately 28.5 million Common Shares to acquire all of the outstanding Trilogy shares not owned by it. Through the Trilogy merger, the Company acquired additional Montney and Duvernay resource plays in the Alberta Deep Basin at Kaybob. Trilogy's Duvernay development at Smoky was immediately adjacent to a significant portion of the Duvernay rights Paramount acquired through the Apache Canada acquisition.

In November 2017, Paramount entered into the Credit Facility, which changed the previous facility from a reserves-based structure to a financial covenant-based structure and increased the borrowing limit from $300 million to $700 million.

2018

On January 1, 2018, Paramount amalgamated under the *Business Corporations Act* (Alberta) with Apache Canada and Trilogy, with the amalgamated corporation continuing as Paramount Resources Ltd.

In April 2018, Paramount redeemed all $300 million principal amount of outstanding Trilogy 2019 Notes, which had become the Company's obligation when it amalgamated with Trilogy on January 1, 2018, at a redemption price of 101.2 percent of the principal amount of such notes.

In July 2018, the Company sold its Resthaven / Jayar property in the Grande Prairie Region to Strath for gross proceeds of $340 million, consisting of $170 million in cash, 85 million Strath common shares and 10-year warrants to acquire 8.5 million Strath common shares. The cash consideration received was used to reduce outstanding indebtedness under the Credit Facility.

Amendments to the Credit Facility in 2018 increased the facility to $1.5 billion and extended the maturity date to November 2022. Additional information concerning the Credit Facility is included in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com

Paramount implemented a normal course issuer bid that commenced on December 22, 2017 and expired on December 21, 2018. Under this normal course issuer bid, Paramount acquired an aggregate of 4,239,359 Common Shares at an average price of $15.63 per share. Paramount implemented a renewed normal course issuer bid in January 2019. See "*Description of Share Capital – Normal Course Issuer Bid*".

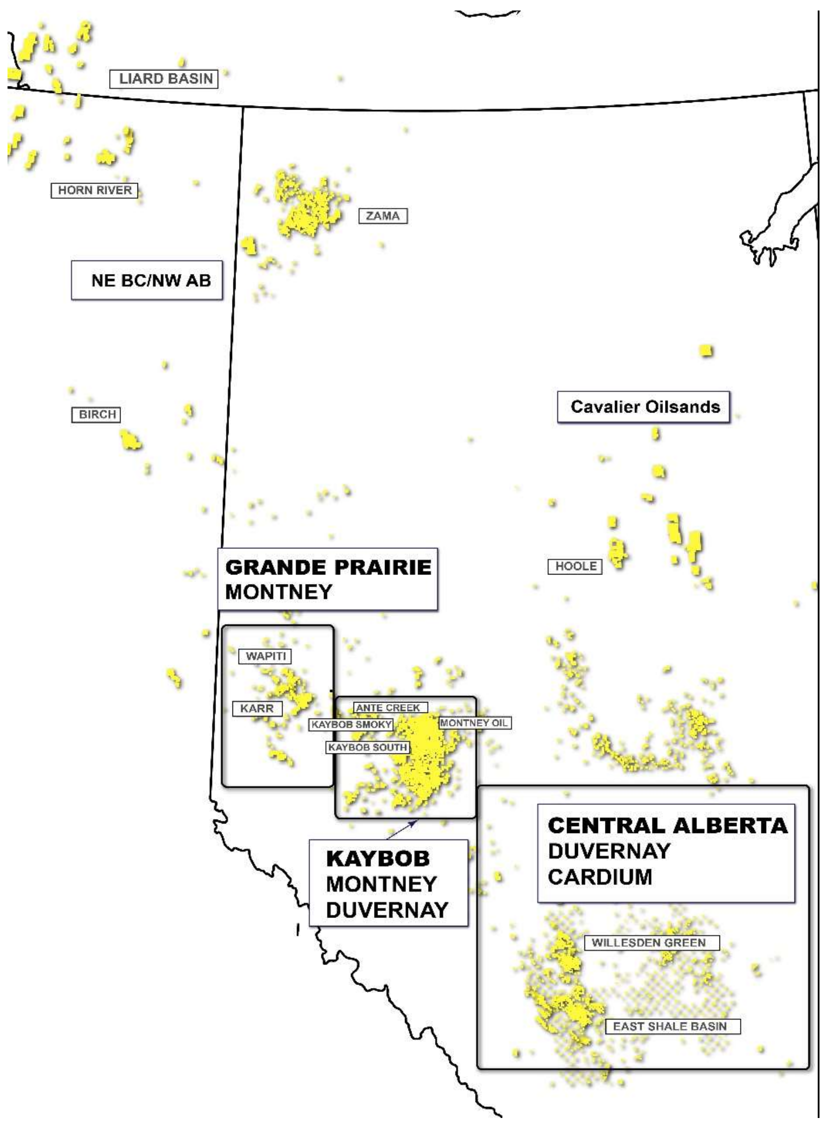
For reserves and related information as at December 31, 2018, see "*Reserves and Other Oil and Gas Information*".

NARRATIVE DESCRIPTION OF THE BUSINESS

OVERVIEW

Paramount's oil and gas properties are located primarily in Alberta and British Columbia. The Company's ongoing exploration, development and production activities are intended to discover new reserves, increase the productive capacity of existing fields and extract, process and sell the Company's natural gas, NGLs and oil economically and safely. From time-to-time, Paramount furthers its exploration, development and production activities through acquisitions of petroleum and natural gas assets and companies, farm-ins, farm-outs, joint ventures and dispositions.

As described above, Paramount's operations are organized into the Grande Prairie Region, the Kaybob Region and the Central Alberta and Other Region. The map below depicts the Company's properties and these Regions.



The Company's reserves, properties, production and material development plans and facilities are discussed in more detail below.

OIL AND GAS PROPERTIES

Paramount retained McDaniel, an independent qualified reserves evaluator, to prepare a report on the Company's natural gas, NGLs and crude oil reserves for 2018. McDaniel evaluated 100 percent of the proved plus probable reserves of the Company and its subsidiaries, other than Cavalier Energy, as at December 31, 2018 and reported on them in the McDaniel Report. At December 31, 2018, approximately 95 percent of Paramount's proved plus probable reserves were located in Alberta.

The Company's gross reserves volumes, production and petroleum and natural gas sales for the years ended December 31, 2018 and 2017 are summarized below. 2017 production volumes presented in the table below and elsewhere in this annual information form include production from Apache Canada only from the date of its acquisition in August 2017 and from Trilogy only from the date of its merger with the Company in September 2017.

	2018	2017
Oil, NGLs and Natural Gas Reserves		
Proved		
Shale Gas (Bcf)	1,078.3	986.0
Conventional Natural Gas (Bcf)	288.3	412.7
NGLs (MMBbl)	146.8	119.1
Tight Oil (MMBbl)	0.9	0.8
Light & Medium Crude Oil (MMBbl)	15.2	22.8
Total (MMBoe)	390.7	375.8
Proved plus Probable		
Shale Gas (Bcf)	1,765.3	1,611.7
Conventional Natural Gas (Bcf)	403.9	559.6
NGLs (MMBbl)	238.3	196.9
Tight Oil (MMBbl)	10.2	1.1
Light & Medium Crude Oil (MMBbl)	24.3	33.6
Total (MMBoe)	634.4	593.5
Production (1)		
Shale Gas (MMcf/d)	165.9	69.7
Conventional Natural Gas (MMcf/d)	160.0	91.5
NGLs (Bbl/d)	23,770	15,161
Light & Medium Crude Oil and Tight Oil (Bbl/d)	7,854	2,933
Total Production (Boe/d)	85,941	44,970
Petroleum and natural gas sales ($ millions)		
Shale gas revenue	119.3	60.9
Conventional natural gas revenue	147.8	71.9
NGLs revenue	498.4	286.5
Oil revenue	184.2	67.4
Royalty and sulphur revenue	15.8	4.7
Total Sales	965.5	491.4
Wells Drilled		
Gross	70	43
Net	51.5	36.2

(1) Sales volumes measured in marketable quantities, after processing and shrinkage.

Grande Prairie Region

As at December 31, 2018, Paramount had approximately 269,000 gross (181,000 net) acres of land in the Grande Prairie Region, including approximately 106,000 net acres of Montney rights and approximately 81,000 net acres of Deep Basin Cretaceous rights, which partially overlap the Montney rights. Approximately 110,000 net acres of the Company's land in this Region had no attributed reserves as at December 31, 2018.

The primary focus in the Grande Prairie Region is the Karr and Wapiti Montney properties, located southeast of Grande Prairie, Alberta, in the over-pressured, Liquids-rich Deep Basin Montney trend. Sales volumes for this Region averaged 26,059 Boe/d (51 percent Liquids) in 2018 and 21,480 Boe/d (51 percent Liquids) in 2017. Capital expenditures for the Grande Prairie Region were $301.6 million in 2018 and $369.6 million in 2017.

Karr

Paramount is developing its Liquids-rich Montney play at Karr, producing natural gas and Liquids from horizontal wells drilled on multi-well pads. Production volumes are gathered through a Company-owned gas gathering system and compressed and dehydrated at the Company's 6-18 compression and dehydration facility, which was expanded from 80 MMcf/d to 100 MMcf/d in 2018. Volumes are then shipped via pipeline to a third-party natural gas processing facility under a long-term firm-service arrangement to provide sales specification natural gas, condensate and C3+. The 6-18 facility has been configured to facilitate the trucking-out of Liquids so that a portion of volumes can also be transported to alternate locations.

In 2018, the Company drilled 10 (10.0 net) Montney wells on two multi-well pads at Karr, five of which were brought on production. In 2019, Paramount plans to complete and bring on production the second five-well pad from the 2018 program and drill, complete and bring on production 3 (3.0 net) Montney wells on a multi-well pad.

Wapiti

Paramount is developing a Liquids-rich Montney property at Wapiti, which is located to the northwest of the Karr development. The Company is applying the multi-well pad drilling and completion techniques at Wapiti that are being utilized at Karr.

The Company did not have significant production at Wapiti in 2018. Paramount's activities were focused on drilling and completing wells in advance of the startup of a new third-party natural gas processing plant, which is scheduled to be completed in mid-2019. Paramount has secured priority access to 150 MMcf/d of natural gas processing capacity at the plant. The plant has been designed to have capacity to process production from Liquids-rich Montney wells and includes water management facilities, which will reduce Paramount's ongoing water disposal costs.

In 2018, the Company drilled and completed 11 (11.0 net) wells on a multi-well pad and commenced the drilling of an additional 12 (12.0) wells on a second multi-well pad. In 2019, Paramount plans to bring the initial 11 well pad on production and complete the 12 well pad and commence production from it. The Company also plans to bring on production 1 (1.0 net) well previously drilled and completed in 2017.

Kaybob Region

As at December 31, 2018, Paramount had approximately 1.24 million gross (915,000 net) acres of land in the Kaybob Region, including approximately 290,000 net acres of Montney rights and approximately 219,000 net acres of Duvernay rights. Approximately 486,000 net acres of the Company's land in this Region had no attributed reserves as at December 31, 2018.

The primary development focus in the Kaybob Region is the Kaybob Montney Oil development and new developments targeting the Duvernay at Kaybob Smoky and Kaybob South Duvernay. Sales volumes for the Kaybob Region averaged 39,004 Boe/d (31 percent Liquids) in 2018 and 14,073 Boe/d (29 percent Liquids) in 2017. Capital expenditures for this region were $215.7 million in 2018 and $106.5 million in 2017.

In addition to the Kaybob Montney Oil and Kaybob South Duvernay planned drilling and development activities for 2019 described below, the Company plans to drill and case 1 (1.0 net) horizontal Duvernay well at Kaybob North Duvernay in 2019.

Kaybob Montney Oil

The Kaybob Montney Oil development includes approximately 150 producing wells drilled since 2011. Oil production is processed through Paramount's 12-10 oil battery, which has sour fluid handling capacity of 20,000 Bbl/d. Natural gas production is processed at Paramount's Kaybob 8-9 natural gas processing plant.

In 2018, Paramount drilled 12 (12.0 net) new wells at the Kaybob Montney Oil development. Ten of these wells, plus a well drilled in late-2017, were completed and brought on production in 2018. In 2019, Paramount brought the remaining two wells from the 2018 program on production and plans to drill, complete and bring on production 3 (3.0) net wells on a new multi-well pad.

Kaybob Smoky Duvernay

Paramount's initial multi-well pad was drilled at the Kaybob Smoky Duvernay development in 2018. The Company completed 4 (4.0) net wells on the pad and brought them on production through permanent production facilities in the fourth quarter of 2018. Natural gas volumes are processed through Paramount's owned and operated Smoky 6-16 natural gas processing plant. The 6-16 plant was expanded to 12 MMcf/d of capacity in 2018 by making use of existing equipment moved to Kaybob from Zama in northern Alberta. Liquids volumes are trucked to the Company's 12-10 oil battery, which is located about 24 kilometers to the east.

Kaybob South Duvernay

Paramount's working interest in the Kaybob South Duvernay development is approximately 51 percent. Production is focused at two multi-well pads, which were completed in 2017 and 2018. The Kaybob South Duvernay wells produce through third-party processing facilities under long-term firm-service agreements.

In 2018, 10 (5.1 net) wells were drilled at Kaybob South Duvernay, with 5 (2.5 net) of the wells being completed and brought on production. The remaining 5 (2.5 net) wells are scheduled to be completed and brought on production in 2019.

Central Alberta and Other Region

The Company's land base in the Central Alberta and Other Region includes multiple formation and resource potential, including within Willesden Green and East Shale Basin Duvernay and Cardium, Glauconite and Ellerslie. As at December 31, 2018, and not including lands held by Cavalier Energy, Paramount had approximately 2.9 million gross (1.5 million net) acres of land in the Region, plus approximately 180,000 acres of fee simple land. Approximately 1.3 million net acres of this land had no attributed reserves as at December 31, 2018.

Sales volumes for the Central Alberta and Other Region averaged 20,878 Boe/d (30 percent Liquids) in 2018 and 9,417 Boe/d (33 percent Liquids) in 2017. Capital expenditures for the region were $40.9 million in 2018 and $51.5 million in 2017.

Development activities in the Central and Other Region are focused on a Duvernay development at Willesden Green. The Company has drilled and completed 5 (5.0 net) horizontal wells to date to delineate the resource potential of the property.

In 2019, the Company plans to drill one tenure well in the East Shale Basin to preserve mineral rights.

BUSINESS STRATEGIES AND OBJECTIVES

The Company's business strategy is to achieve profitable growth through the low risk development of Liquids-rich resource plays in the Western Canadian Sedimentary Basin. Specifically, Paramount's growth plans are focused on five areas: Karr Montney, Wapiti Montney, Kaybob Montney Oil, Kaybob South Duvernay and Kaybob Smoky Duvernay, each of which is discussed above.

Paramount's objective is to provide long-term value creation for its stakeholders by capturing and controlling the best opportunities available to it and leveraging the Company's technical and managerial expertise to seek to maximize the economic returns from the production of its resources.

The Company's land acquisition strategy is to identify new opportunities at an early stage and capture large holdings at a low cost. Paramount targets contiguous acreage blocks that are prospective for multi-zone development and have high working interests to preserve operational control.

Paramount employs multi-well pad developments to realize the benefits of commercial economies of scale and control capital and operating costs. The Company continually works to enhance its horizontal wellbore economics by refining drilling techniques and completion designs. Paramount also invests in processing facilities and gathering infrastructure and enters into firm-service arrangements to secure processing and transportation capacity for its production.

In addition, the Company has, as part of its portfolio, emerging longer-term conventional and unconventional assets, including oil sands and carbonate bitumen interests and prospective shale gas acreage. These assets are discussed further below and are viewed by Paramount as longer-term prospects with potential for future revenue generation, spin-outs or dispositions.

The Company maintains capital discipline, directing investments towards the plays that exceed its economic hurdles, while balancing risks. Paramount manages liquidity in its capital structure to support growth initiatives and provide financial flexibility.

OTHER ASSETS

Investments in Securities

Paramount holds equity investments in a number of publicly-traded and private corporations as part of its portfolio of investments. The majority of these investments were received as consideration for properties sold to the entities. As of December 31, 2018, the Company held investments in the shares and warrants of Strath and in the shares of certain other public and private corporations, including MEG Energy Corp., Canadian Premium Sand Inc., Pipestone Energy Corp. (formerly Blackbird Energy Inc.) and Storm Resources Ltd. Additional information respecting the Company's investments is included in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

Cavalier Energy

Cavalier Energy was created in 2011 to develop the Company's oil sands lands. Cavalier Energy owned approximately 207,000 gross (207,000 net) acres of land in the Western Athabasca region of Alberta as at December 31, 2018.

Cavalier Energy's initial focus has been on the Grand Rapids formation in its 100 percent owned in-situ oil sands leases at Hoole, which is located 10 kilometers northeast of Wabasca-Desmarais, Alberta. Since 2004, approximately $115 million has been invested in land acquisitions, stratigraphic drilling, engineering studies, and environmental field programs to bring the Hoole project to a stage capable of development. Front-end engineering and design work for the initial 10,000 Bbl/d phase of the Hoole project, referred to as Hoole Grand Rapids Phase 1, has been completed and the Alberta Energy Regulator approved Hoole Grand Rapids Phase 1 in the second quarter of 2014. However, given the current commodity price environment, no significant additional expenditures are planned for Hoole Grand Rapids Phase 1 in the near term.

In December 2016, Cavalier Energy granted the Cavalier Royalty to an unrelated third-party for cash consideration of $100 million. The agreement governing the Cavalier Royalty does not impose any development commitments on Cavalier Energy in respect of the Hoole project or any of its other oil sands lands. Production from the oil sands lands subject to the Cavalier Royalty will not be subject to any royalty when the Western Canadian Select price is below US$50 per barrel. At a Western Canadian Select price of US$50 per barrel, the royalty rate will be 2 percent and the rate will increase linearly to a maximum of 20 percent at a Western Canadian Select price of US$140 per barrel. The Cavalier Royalty will be payable based on Cavalier Energy's realized bitumen price, net of diluent, transportation and storage costs. The Cavalier Royalty is secured by a lien over the applicable oil sands lands.

Cavalier's oil sands lands are prospective for in-situ bitumen recovery development but are at the early stages of their evaluation and development. The oil sands lands currently have no production and there are no assurances that any of Cavalier Energy's properties will commence production, generate earnings, operate profitably or provide a return on investment in the future.

Fox Drilling

Fox Drilling owns seven triple-sized rigs, including four walking rigs, that are used to drill Company wells. The walking rigs have the capability of moving across a lease with the derrick and drill pipe remaining vertical, significantly increasing efficiencies when drilling multi-well pads.

Shale Gas

Paramount's shale gas holdings in the Liard and Horn River Basins in northeast British Columbia and the Northwest Territories include approximately 135 net sections of land as at December 31, 2018, with potential for natural gas production from the Besa River shale formation. Paramount has drilled a total of 4 (4.0 net) exploration wells in the Liard Basin for delineation and land retention purposes.

RESERVES AND OTHER OIL AND GAS INFORMATION

The reserves information provided below is derived from the McDaniel Report. The McDaniel Report is effective as of December 31, 2018 and dated and prepared as of March 6, 2019. The evaluation by McDaniel was prepared in accordance with the standards included in the COGE Handbook and National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities.

The following tables summarize, as at December 31, 2018, Paramount's estimated crude oil, natural gas and NGLs reserves and the net present values of future net revenues for these reserves, using forecast prices and costs prior to provision for interest, general and administrative expenses, the impact of any hedging activities or the liability associated with abandonment and reclamation costs for facilities and pipelines, wells that have not been attributed reserves and the surface leases associated with such wells. Estimated future net revenues have been presented on a before-tax and after-tax basis. Columns and rows may not add due to rounding.

The estimates of future net revenues presented in the tables below do not represent the fair market value of the reserves. There is no assurance that the forecast prices and costs assumptions will be attained, and variances could be material. The recovery and reserves estimates of crude oil, natural gas and NGLs reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual crude oil, natural gas and NGLs reserves may be greater than or less than the estimates provided herein. See "Risk Factors – Reserves Estimates".

Readers should review the definitions and information the headings "*Oil and Natural Gas Measures Abbreviations and Terms*" and "*Reserves Categories and Definitions*" in conjunction with the following tables and notes.

Paramount's Reserves Committee, comprised of independent board members, reviews the qualifications and appointment of McDaniel, Paramount's independent qualified reserves evaluator. The Reserves Committee also reviews the procedures for providing information to the evaluator. The Report on Reserves Data by McDaniel on Form 51-101F2 and the Report of Management and Directors on Reserves Data and Other Information on Form 51-101F3 are attached as Appendices A and B, respectively, to this annual information form.

RESERVES INFORMATION

Reserves Data

The following table summarizes Paramount's reserves at December 31, 2018. Numbers may not add due to rounding.

Reserves Category	Light & Medium Oil Gross (MBbl)	Light & Medium Oil Net (MBbl)	Tight Oil Gross (MBbl)	Tight Oil Net (MBbl)	Natural Gas Liquids Gross (MBbl)	Natural Gas Liquids Net (MBbl)
Proved						
Developed Producing	8,307	7,365	901	772	28,534	22,400
Developed Non-Producing	96	83	-	-	4,814	4,071
Undeveloped	6,826	5,866	-	-	113,443	93,458
Total Proved	15,229	13,315	901	772	146,791	119,929
Total Probable	9,106	7,560	9,314	8,034	91,534	68,503
Total Proved & Probable	24,335	20,875	10,215	8,806	238,325	188,432

Reserves Category	Conventional Natural Gas Gross (MMcf)	Conventional Natural Gas Net (MMcf)	Shale Gas Gross (MMcf)	Shale Gas Net (MMcf)	Total Company Gross (MBoe)	Total Company Net (MBoe)
Proved						
Developed Producing	261,174	250,132	242,468	223,521	**121,682**	**109,480**
Developed Non-Producing	1,674	1,584	40,084	37,384	**11,870**	**10,648**
Undeveloped	25,488	23,962	795,709	728,518	**257,135**	**224,738**
Total Proved	288,336	275,678	1,078,261	989,422	**390,688**	**344,866**
Total Probable	115,553	109,101	687,018	610,392	**243,716**	**204,012**
Total Proved & Probable	403,888	384,779	1,765,279	1,599,814	**634,403**	**548,879**

Net Present Value of Future Net Revenue

The following table summarizes the net present values of future net revenue attributable to Paramount's reserves as at December 31, 2018 using forecast prices and costs. The net present values are reported before income tax and after income tax and have been discounted using rates of 0 percent, 5 percent, 10 percent, 15 percent and 20 percent and on a net unit value basis at a discount rate of 10 percent before income taxes. Future Net Revenue does not represent fair market value. Numbers may not add due to rounding.

	Net Present Values of Future Net Revenue										
	Before Income Taxes Discounted at (%/year)					After Income Taxes Discounted at (%/year)					
Reserves Category	**@0.0% (MM$)**	**@5.0% (MM$)**	**@10.0% (MM$)**	**@15.0% (MM$)**	**@20.0% (MM$)**	**@0.0% (MM$)**	**@5.0% (MM$)**	**@10.0% (MM$)**	**@15.0% (MM$)**	**@20.0% (MM$)**	**Unit Value Before Tax@10.0% ($/Boe)[1]**
Proved											
Developed Producing	608	666	662	636	604	608	666	662	636	604	6.04
Developed Non-Producing	273	217	181	157	139	273	217	181	157	139	17.00
Undeveloped	3,355	2,078	1,293	789	452	3,355	2,078	1,293	789	452	5.75
Total Proved	4,236	2,961	2,136	1,582	1,195	4,236	2,961	2,136	1,582	1,195	6.19
Probable											
Developed Producing	545	414	322	258	212	545	414	322	258	212	7.98
Developed Non-Producing	108	79	64	55	48	108	79	64	55	48	14.57
Undeveloped	4,086	2,456	1,613	1,129	829	2,951	1,595	918	554	345	8.08
Total Probable	4,739	2,949	1,998	1,442	1,089	3,605	2,088	1,304	866	605	9.80
Total Proved & Probable	8,975	5,910	4,134	3,023	2,284	7,841	5,048	3,440	2,448	1,800	7.53

(1) The unit values are based on net reserve volumes.

Future Net Revenue

The following table summarizes the total undiscounted future net revenue attributable to Paramount's reserves as at December 31, 2018.

Reserves Category	**Revenue[1] MM$**	**Royalties[2] MM$**	**Operating Costs MM$**	**Development Costs MM$**	**Abandonment & Reclamation Costs[3] MM$**	**Future Net Revenue Before Income Taxes MM$**	**Income Taxes[4] MM$**	**Future Net Revenue After Income Taxes MM$**
Total Proved Reserves	16,525	2,576	5,142	3,876	695	4,236	Nil	4,236
Total Proved & Probable Reserves	28,653	5,095	8,253	5,506	823	8,975	1,134	7,841

(1) Includes all product revenues and other revenues as forecast.
(2) Royalties includes any net profits interests paid, as well as the Saskatchewan Corporation Capital Tax Surcharge.
(3) See "Reserves and Other Oil and Gas Information – Other Oil and Gas Information" for further information regarding abandonment and reclamation costs.
(4) Estimates of the after income tax value of future net revenue have been prepared based on before income tax reserves information and include assumptions and estimates of Paramount's tax pools and the sequences of claims and rates of claim thereon.

Future Net Revenue by Product Type

The following table summarizes the net present value of future net revenue by product type and on a unit value basis, before income tax, attributable to Paramount's net reserves evaluated at December 31, 2018. Amounts have been discounted at 10 percent.

Reserves Category	Product Type (1)	Future Net Revenue Before Income Taxes (discounted @ 10%) MM$	Unit Value (2) $/Mcf $/Bbl
Total Proved Reserves	Light and Medium Oil	287	21.81
	Tight Oil	25	32.42
	Conventional Natural Gas	215	1.02
	Shale Gas	1,609	1.63
	Total	2,136	
Total Proved & Probable Reserves	Light and Medium Oil	492	23.80
	Tight Oil	103	11.71
	Conventional Natural Gas	311	1.11
	Shale Gas	3,228	2.05
	Total	4,134	

(1) Including solution gas and by-products in the case of Light and Medium Oil and Tight Oil and by-products in the case of Conventional Natural Gas and Shale Gas.
(2) Unit values are calculated by dividing net present value of future net revenue by product type by net reserves for that product type.

Summary of Pricing and Inflation Rate Assumptions

Pricing and inflation rate assumptions used in the McDaniel Report in calculating the net present value of future net revenue attributable to Paramount's reserves as of December 31, 2018 are set out in the table below and were an average of forecast prices and costs published by Sproule Associates Ltd. as at December 31, 2018 and GLJ Petroleum Consultants Ltd. and McDaniel as at January 1, 2019 (each of which is available on their respective websites at www.gljpc.com, www.sproule.com and www.mcdan.com). An inflation rate for forecasting costs of 2.0% was used for each year other than 2019.

Year	U.S. Henry Hub Gas $US/MMBtu	AECO Spot $Cdn/MMBtu	Alberta Average Plantgate $Cdn/MMBtu	WTI Crude Oil $US/Bbl	Edmonton Light Crude Oil $Cdn/Bbl	Edmonton Cond. & Natural Gasolines $Cdn/Bbl	Edmonton Ethane $Cdn/Bbl	Edmonton Propane $Cdn/Bbl	Edmonton Butane $Cdn/Bbl	Exchange Rate $US/$Cdn
2019	3.00	1.88	1.70	58.58	67.30	70.10	6.82	26.13	27.32	0.757
2020	3.13	2.31	2.10	64.60	75.84	79.21	8.40	31.27	41.10	0.782
2021	3.33	2.74	2.55	68.20	80.17	83.33	9.98	34.58	49.28	0.797
2022	3.51	3.05	2.85	71.00	83.22	86.20	11.22	37.25	55.65	0.803
2023	3.62	3.21	3.00	72.81	85.34	88.16	11.89	38.73	57.92	0.807
2024	3.70	3.31	3.10	74.59	87.33	90.20	12.22	39.75	59.27	0.808
2025	3.77	3.39	3.15	76.42	89.50	92.43	12.45	40.76	60.77	0.808
2026	3.85	3.46	3.25	78.40	91.89	94.87	12.71	41.93	62.37	0.808
Thereafter prices escalated at 2.0% per year and exchange rate of 0.808 applied.										

Paramount's 2018 weighted average realized prices, before the settlement of financially settled commodity contracts, were $2.25/Mcf for natural gas, $64.27/Bbl for oil and $57.44/Bbl for NGLs. Additional information respecting financial commodity contracts is included in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

The price of natural gas, NGLs and oil are determined by negotiations between buyers and sellers. The sales price received depends on quality, prices of competing fuels, distance to market, value of refined products, supply/demand balance and contract terms. The export of natural gas and oil is subject to rules and regulations set by the National Energy Board of Canada and the governments of Alberta and British Columbia.

Paramount's natural gas portfolio primarily consists of sales priced at the Alberta, California, Chicago, Ventura and Eastern Canada markets and is sold in a combination of daily and monthly contracts.

Paramount ships a portion of crude and condensate production on third-party pipelines for sale in Edmonton, Alberta, thereby accessing a more diversified group of purchasers and realizing higher netback prices. Some production continues to be sold to marketers at the lease due to premiums being paid for those volumes. Crude and condensate sales are priced off West Texas Intermediate and are adjusted for a grade differential, quality and transportation.

Paramount's NGLs production is sold under a variety of contracts with prices based on local supply and demand, or based on a weighted-average sales price received by the purchaser, adjusted for transportation and fractionation.

In addition, the Company may purchase and sell third-party products to provide operational flexibility in transportation, processing, or fractionation commitments, or at particular delivery points, and for customer diversification.

Reserves Reconciliation

The following table reconciles Paramount's gross reserves by principal product type for the year ended December 31, 2018 based on forecast prices and costs. Numbers may not add due to rounding.

	Shale Gas (Bcf)	Conventional Natural Gas (Bcf)	Light & Medium Oil (MBbl)	Tight Oil (MBbl)	Natural Gas Liquids (MBbl)	Total Reserves (MBoe)
PROVED						
December 31, 2017	**986.1**	**412.7**	**22,803**	**767**	**119,134**	**375,824**
Technical Revisions	8.1	(40.3)	(4,830)	(126)	10,391	**59**
Acquisition	-	-	-	-	-	**-**
Disposition	(3.1)	(18.4)	(118)	-	(2,046)	**(5,737)**
Economic Factors	(22.5)	(14.5)	53	(1)	(593)	**(6,699)**
Extension / Improved Recovery	170.3	7.2	45	404	28,581	**58,609**
Production	(60.6)	(58.4)	(2,724)	(143)	(8,676)	**(31,369)**
December 31, 2018	**1078.3**	**288.3**	**15,229**	**901**	**146,791**	**390,688**
PROBABLE						
December 31, 2017	**625.6**	**146.9**	**10,808**	**337**	**77,749**	**217,648**
Technical Revisions	(81.1)	(26.7)	(1,713)	(157)	(2,793)	**(22,637)**
Acquisition	-	-	-	-	-	**-**
Disposition	(0.9)	(6.4)	(41)	-	(698)	**(1,944)**
Economic Factors	5.1	(1.3)	40	5	(27)	**656**
Extension / Improved Recovery	138.3	3.0	11	9,129	17,303	**49,992**
December 31, 2018	**687.0**	**115.6**	**9,106**	**9,314**	**91,534**	**243,716**
PROVED PLUS PROBABLE						
December 31, 2017	**1,611.7**	**559.6**	**33,610**	**1,104**	**196,883**	**593,473**
Technical Revisions	(73.1)	(67.0)	(6,542)	(283)	7,598	**(22,578)**
Acquisition	-	-	-	-	-	**-**
Disposition	(3.9)	(24.8)	(158)	-	(2,744)	**(7,681)**
Economic Factors	(17.3)	(15.8)	94	4	(620)	**(6,043)**
Extension / Improved Recovery	308.5	10.3	56	9,533	45,884	**108,602**
Production	(60.6)	(58.4)	(2,724)	(143)	(8,676)	**(31,369)**
December 31, 2018	**1,765.3**	**403.9**	**24,335**	**10,215**	**238,325**	**634,403**

Additional Information Relating to Reserves Data

Developed and Undeveloped Reserves

The following table summarizes the Company's gross proved and proved plus probable developed reserves and undeveloped reserves as at December 31, 2018 and the net present value of future net revenue of such reserves before income taxes, undiscounted and discounted at 10%.

	Proved			Proved plus Probable		
Category	**Gross Reserves (MBoe)**	**NPV @0.0% (MM$)**	**NPV @10.0% (MM$)**	**Gross Reserves (MBoe)**	**NPV @0.0% (MM$)**	**NPV @10.0% (MM$)**
Developed	133,553	881	843	177,585	1,534	1,228
Undeveloped	257,135	3,355	1,293	456,818	7,441	2,906
Total	390,688	4,236	2,136	634,403	8,975	4,134

Proved Undeveloped Reserves

The following table summarizes the Company's gross proved undeveloped reserves that were first attributed in each of the three most recent financial years.

	2016		2017		2018	
Product Type	**First Attributed**	**Total at Year End**	**First Attributed**	**Total at Year End**	**First Attributed**	**Total at Year End**
Shale Gas (Bcf)	97.3	171.7	562.9	706.1	169.2	795.7
Conventional Natural Gas (Bcf)	-	-	42.3	42.3	-	25.5
Light and Medium Crude Oil (MBbl)	-	-	10,668.5	10,668.5	-	6,826.1
Tight Oil (MBbl)	-	-	-	-	-	-
NGLs (MBbl)	8,555.0	15,469.0	71,223.9	87,479.3	28,110.9	113,442.6

Reserves are classified as proved undeveloped if they meet the requirements prescribed by the COGE Handbook, and if they are expected to be recovered from known accumulations on previously undrilled acreage or they are reserves from existing wells where significant expenditure is required to render them capable of production.

Probable Undeveloped Reserves

The following table summarizes the Company's gross probable undeveloped reserves that were first attributed in each of the three most recent financial years.

	2016		2017		2018	
Product Type	**First Attributed**	**Total at Year End**	**First Attributed**	**Total at Year End**	**First Attributed**	**Total at Year End**
Shale Gas (Bcf)	176.7	208.4	458.5	540.9	138.0	593.8
Conventional Natural Gas (Bcf)	-	-	33.6	33.6	-	29.2
Light and Medium Crude Oil (MBbl)	-	-	7,006.1	7,006.1	-	6,420.4
Tight Oil (MBbl)	-	-	-	-	9,026.3	9,026.3
NGLs (MBbl)	13,259.0	16,140.0	60,168.0	67,913.8	17,121.2	80,401.2

Reserves are classified as probable undeveloped when they are less certain to be recovered than proved undeveloped reserves as prescribed by the COGE Handbook.

Plans for Developing Proved and Probable Undeveloped Reserves

Paramount's development plans for its properties take into account a number of factors, including estimated capital expenditures, the timing for access to required processing, transportation and fractionation capacity and the course of development necessary to optimize production, cost efficiency, safety and the environment over the life of the property. Based on these plans, Paramount plans to develop its proved undeveloped reserves within 5 years and its probable undeveloped reserves within 7 years.

The Company's undeveloped reserves are primarily related to wells in the Grande Prairie and Kaybob Regions. In 2019, development at Wapiti will be dependent on the startup of a new third-party natural gas processing plant, which is scheduled to be completed in mid-2019. In the following years, development at Grande Prairie will be dependent on increasing processing and transportation capacity to coincide with anticipated production growth.

The ultimate timing of the Company's undeveloped reserves development will be dependent on a number of factors, including prevailing commodity prices, capital expenditure levels and priorities, royalties and economic conditions, applicable regulations, costs, the evolution of development programs for key fields, changing technical conditions and the availability of transportation, processing and fractionation capacity.

Significant Factors or Uncertainties Affecting Reserves Data

Estimating reserves is a complex process requiring significant judgments based on available geological, geophysical, engineering and economic data. As additional data from development activities, including production results, becomes available and as internal or external economic conditions change, reserves estimates may change substantially. Paramount's reserves can be materially affected by changes in internal and external factors, including, without limitation: commodity prices; access to processing, fractionation and transportation capacity; well performance; royalties; capital, operating, transportation and other costs; regulatory approvals and requirements; and available capital.

Abandonment and reclamation costs affecting the reserves data are discussed under "Other Oil and Gas Information - Abandonment and Reclamation Costs" below.

See "*Risk Factors – Reserves Estimates*", in particular, as well as the other risk factors herein.

Future Development Costs

The following table provides the undiscounted estimated future development costs deducted in the estimation of future net revenue.

Development Cost Forecast (MM$)	2019	2020	2021	2022	2023	Remaining	Total
Total Proved							
Undiscounted	502	941	951	749	599	135	3,876
Total Proved & Probable							
Undiscounted	515	1,094	1,079	903	873	1,042	5,506

Paramount expects that funding for future development costs will come from the Company's cash and cash equivalents, adjusted funds flow, and if required, credit facilities, the sale of non-core assets and capital market transactions.

OTHER OIL AND GAS INFORMATION

Oil and Gas Properties and Wells

The table below sets out the number and status of producing and non-producing wells in which Paramount had a working interest as at December 31, 2018. Non-producing wells are wells which Paramount considers capable of production but which, for a variety of reasons including, but not limited to, economic conditions or lack of infrastructure, cannot be placed on production at the present time. The below table does not include wells in which Paramount has a working interest but are not producing or capable or production, including abandoned wells.

	Producing		Non-producing	
	Gross	Net	Gross	Net
Crude oil wells				
Alberta	670	457.0	668	454.5
Saskatchewan	-	-	1	1.0
Northwest Territories	-	-	7	5.7
Subtotal	670	457.0	676	461.2
Natural gas wells				
Alberta	1,826	1,371.3	1,172	869.2
British Columbia	83	39.9	59	34.6
Saskatchewan	-	-	3	3.0
Northwest Territories	-	-	31	22.0
Subtotal	1,909	1,411.2	1,265	928.7
Total	2,579	1,868.2	1,941	1,389.9

Properties Without Attributed Reserves and Expiries

As at December 31, 2018, Paramount's land base, not including lands held by Cavalier Energy, encompassed approximately 4.4 million gross (2.6 million net) acres in Western Canada, plus approximately 180,000 acres of fee simple land. Approximately 3.2 million gross (1.9 million net) acres of this land had no attributed reserves as at December 31, 2018.

As at December 31, 2018, Paramount held approximately 195,000 gross (142,000 net) acres of land due to expire in 2019. An additional 5,000 gross (5,000 net) acres held by Cavalier Energy is due to expire in 2019. The actual acreage that will expire in 2019 may be less than these amounts to the extent leases are continued through drilling, farm outs or other activities prior to their expiry.

In this annual information form, gross acreage is calculated only once per lease or license of petroleum and natural gas rights regardless of whether Paramount holds a working and/or royalty interest and whether or not the lease or license includes multiple prospective formations. If Paramount holds interests in different formations under the same surface area pursuant to separate leases or licenses, the acreage set out in each lease or license is counted.

Significant Factors or Uncertainties Relevant to Properties with No Attributed Reserves

Paramount's acreage with no attributed reserves in the Northwest Territories and shale gas acreage in the Liard and Horn River Basins, representing approximately 103,000 (86,000 net) acres, will require significant capital to develop. In addition, the Company may experience operational challenges and higher costs due to the geographic location, weather conditions, formation depths and limited infrastructure in this region.

There are no assurances that this acreage will ever be developed and, if they are, whether they will operate profitably or provide a return on investment. For additional information on the Company's shale gas holdings, see "*Narrative Description of the Business – Other Assets*".

Cavalier Energy's oil sands acreage with no attributed reserves will also require significant capital to develop. These assets are subject to similar risks as those described under "Risk Factors – Cavalier Energy's Oil Sands and Carbonate Bitumen Properties" for the Hoole project, plus additional risks associated with exploration, delineation, establishing technological and commercial feasibility and other steps that would be required to advance these assets to a stage ready for regulatory approvals to be sought and efforts made to secure necessary financing.

Abandonment and Reclamation Costs

Abandonment and reclamation costs related to Paramount's working interest in wells, facilities, pipelines, and associated surface leases are estimated by incorporating assumptions regarding expected costs of remediation, decommissioning, abandonment and reclamation and the timing thereof. Costs are estimated for individual assets and aggregated to determine the total net liability. In estimating these costs, reference is made to historical costs and values, internal estimates, third-party environmental reports, and publications including the Alberta Energy Regulator's Directives 006 and 011, as well as the Material Price Catalogue (published by the Petroleum Accountants Society of Canada).

The Company's estimates, as at December 31, 2018, of abandonment and reclamation costs for surface leases, wells, facilities, and pipelines are $1,785.1 million (undiscounted) and $610.8 million (discounted at 10 percent). Additional information concerning abandonment and reclamation costs is included in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

During 2018, Paramount incurred approximately $29.4 million on environmental, remediation, reclamation and regulatory compliance activities.

In estimating the future net revenue of the Company's reserves disclosed in this annual information form, the McDaniel Report deducted $823.4 million (undiscounted) and $156.4 million (discounted at 10 percent) for estimated down hole abandonment and surface reclamation costs for all wells (both existing and undrilled wells) that have been attributed proved or probable reserves. The McDaniel report did not include an allowance for abandonment and reclamation costs for any facilities or pipelines, any of the Company's wells that have not been attributed reserves or any surface leases associated with such wells.

Forward Contracts

The nature of Paramount's operations results in exposure to fluctuations in commodity prices, foreign exchange rates and interest rates. Paramount monitors and, from time-to-time, utilizes derivative financial instruments and/or physical forward delivery contracts to hedge its exposure to these risks. Paramount's derivative contracts and/or future commitments are disclosed in its audited consolidated financial statements as at and for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

Pipeline Transportation and Production Processing Commitments

As part of normal business operations, the Company has entered into firm-service agreements for the processing and transportation of natural gas, NGLs and oil. The Company renews or amends existing agreements and enters into new agreements from time-to-time based on forecast capacity requirements.

The Company's processing commitments do not exceed forecast production volumes in the McDaniel Report. The Company's transportation commitments exceed forecast production volumes of proved reserves in the McDaniel Report by an average of approximately 20,000 Boe/d per year. If the Company's actual sales volumes are equivalent to the forecast production of proved reserves, the aggregate fees that would be paid by the Company in respect of unused transportation capacity would average approximately $11 million per year over the next five years. If the Company's actual sales volumes are equivalent to the forecast production of proved plus probable reserves in the McDaniel Report, which is approximately 24 percent higher than forecast production from proved reserves, the aggregate fees that would be paid by the Company in respect of unused transportation capacity would average approximately $5 million per year over the next five years.

The production, processing and transportation of natural gas, NGLs and oil are interdependent and the Company's ability to fulfill each commitment could be impacted by well performance and disruptions and constraints at the Company's and/or at third-party facilities and pipelines. The Company could experience a financial loss and its operations could be adversely affected if Paramount is unable to fulfill its commitments through its operations or, where necessary, amend its commitments or assign any excess capacity to one or more third-parties. Additional disclosure related to such commitments can be found in the Company's audited consolidated financial statements as at and for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

Tax Horizon

Based on the current tax regime, current commodity prices, the Company's available tax pools, assumptions of production and anticipated future net revenue from such production and capital expenditures, Paramount does not expect to pay any material Canadian income taxes for at least the next 5 years. Taxable income varies depending on total income and expenses and Paramount's estimate is sensitive to assumptions regarding commodity prices, production, adjusted funds flow, capital spending levels and acquisition and disposition transactions. Changes in these factors from estimates used by Paramount could result in the Company paying income taxes earlier than expected.

Additional information concerning Paramount's tax pools is included in the Company's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018 which can be found under the Company's profile on the SEDAR website at www.sedar.com. Also, see "*Risk Factors – Government Regulation*".

Costs Incurred

The following table summarizes the costs incurred by Paramount for property acquisitions and exploration and development activities in 2018.

Cost Type ($ millions)	2018
Acquisitions	
Proved properties	3.0
Unproved properties	8.2
Exploration	12.6
Development (including facilities)	558.2
Total	**582.0**

Exploration and Development Activities

The following table summarizes the results of Paramount's drilling activity for the year ended December 31, 2018. The working interest in certain of these wells may change after payout.

	Gross	Net
Development Wells (1)		
Gas	53	35.2
Oil	17	16.3
Total Wells	70	51.5

(1) "Development Well" is a well drilled within or in close proximity to a discovered pool of petroleum or natural gas.

For a description of the Company's current and likely exploration and development activities, see "*Narrative Description of the Business – Oil and Gas Properties*".

Production Estimates

The following table summarizes the total estimated gross production for 2019 from the McDaniel Report.

	Estimated Production (Gross)	
	Proved	Probable
Shale Gas (MMcf)	65,902	5,836
Conventional Natural Gas (MMcf)	51,152	2,234
Oil (MBbl)	2,251	212
NGLs (MBbl)	9,464	1,053
Total Production (MBoe)	31,224	2,610

McDaniel's estimated gross production in 2019 from the Karr field is 8,330 MBoe (Proved) and 827 MBoe (Probable).

Production History

The following table summarizes daily sales volumes for Paramount before the deduction of royalties on a quarterly and annual basis for 2018.

Sales (1)	2018	Q4	Q3	Q2	Q1
Shale Gas (MMcf/d)	165.9	175.2	154.2	161.7	172.7
Conventional Natural Gas (MMcf/d)	160.0	140.0	149.6	172.4	178.4
Oil (Bbl/d)	7,854	7,145	7,216	8,481	8,597
NGLs (Bbl/d)	23,770	24,812	22,616	22,576	25,092
Total (Boe/d)	85,941	84,495	80,471	86,741	92,203

(1) Sales volumes measured in marketable quantities, after processing and shrinkage.

The following table summarizes Paramount's average per-unit netbacks, by principal product, on a quarterly and annual basis for 2018.

	Netback – 2018 (1)				
	2018	Q4	Q3	Q2	Q1
Shale gas (including by-products) (2) ($/Mcfe)					
Revenue	5.08	4.49	5.46	4.92	5.49
Royalties	(0.26)	(0.13)	(0.47)	(0.32)	(0.15)
Operating costs (3)	(1.63)	(2.17)	(1.51)	(1.33)	(1.47)
Transportation and NGLs processing costs	(0.36)	(0.36)	(0.27)	(0.16)	(0.64)
Netback	2.82	1.83	3.21	3.11	3.23
Conventional natural gas (2) (including by-products) ($/Mcfe)					
Revenue	4.45	4.35	4.70	4.24	4.51
Royalties	(0.33)	(0.14)	(0.35)	(0.42)	(0.38)
Operating costs (3)	(2.06)	(1.64)	(2.31)	(2.37)	(1.89)
Transportation and NGLs processing costs	(0.82)	(0.94)	(1.00)	(1.00)	(0.42)
Netback	1.24	1.63	1.03	0.45	1.82
Light and Medium Crude & Tight Oil (2) (including by-products) ($/Boe)					
Revenue	42.88	27.17	50.84	45.50	48.01
Royalties	(5.03)	(2.45)	(6.52)	(6.60)	(4.66)
Operating costs (3)	(20.09)	(22.63)	(19.57)	(19.17)	(19.07)
Transportation and NGLs processing costs	(0.60)	(0.83)	(0.63)	2.18	(3.44)
Netback	17.16	1.26	24.12	21.91	20.84

(1) The Company's production volumes are generally gathered and processed through common gathering systems, processing facilities and transportation pipelines. As a result, by-product sales volumes, royalties and operating and other costs have been allocated to each product type based on volume equivalencies and other reasonable methods of allocation.
(2) Based on sales volumes measured in marketable quantities, after processing and shrinkage.
(3) Operating costs include all costs related to the operation of wells and Paramount's facilities and gathering systems. Processing revenue earned from Company facilities has been deducted from these costs.

The Company incurred a realized loss of $76.5 million from the settlement of commodity contracts in 2018. This loss has not been reflected in the netback amounts above.

The following table summarizes the Company's total sales volumes for the year ended December 31, 2018, as well as for its Karr field separately.

	Shale Gas MMcf	Conventional Natural Gas MMcf	Natural Gas Liquids MBbl	Light & Medium Oil MBbl	Tight Oil MBbl	Total Company MBoe
Total:	**60,568**	**58,387**	**8,676**	**2,724**	**143**	**31,369**
Karr	23,149	-	4,467	-	-	8,325

GENERAL

Competitive Conditions, Seasonality, and Trends

Competitive conditions affecting Paramount are described under "*Risk Factors – Industry Competition*".

The development and exploration of oil and natural gas reserves, including the drilling, completion and tie-in of wells, and road, lease, facility and pipeline construction, is dependent on access to areas where operations are to be conducted. Winter-access areas, seasonal weather variations, including freeze-up, break-up and wet ground conditions, and other restrictions can affect access. In addition, the seasonal accessibility of certain locations increases competition for equipment and personnel during those periods.

The oil and gas industry continues to develop new technologies that increase the recoverability of natural gas, NGLs, oil and bitumen and/or improve returns, particularly longer multi-stage hydraulically-fractured horizontal wells incorporating higher intensities of proppant per stage and more fracs per well. Reservoir floods, polymer injection, water or oil based fractionation fluids, and carbon dioxide ("CO_2") injection techniques have also been used to increase recoveries.

Alberta Royalties

On January 1, 2017, the Government of Alberta implemented a modernized royalty framework (the "**Modernized Framework**") based on recommendations of the Royalty Review Advisory Panel. The Modernized Framework applies to all conventional wells spud on or after January 1, 2017. The Modernized Framework does not apply to oil sands production, which has its own separate royalty framework. Wells spud prior to July 13, 2016 continue to be subject to the previous royalty framework (the "**Old Framework**"). An election was available for wells spud between July 13, 2016 and December 31, 2016 to opt-in to the Modernized Framework if certain criteria were met. After December 31, 2026, all wells will be subject to the Modernized Framework.

Under the Modernized Framework, royalties are determined on a “revenue-minus-costs” basis, with the cost component based on a drilling and completion cost allowance formula for each well, which is dependent on the vertical depth and horizontal length of the well and proppant placed. The formula is based on the industry's average drilling and completion costs as determined by the Alberta Department of Energy (“**ADOE**”) on an annual basis. The cost component attempts to incentivize innovation to reduce costs by allowing wells with below average costs to remain at a lower rate of royalty even after recovering actual costs. Producers pay a flat royalty rate of five percent of gross revenue from each well that is subject to the Modernized Framework until the well reaches payout. Payout for a well is the point at which cumulative revenues from the well equals the drilling and completion cost allowance for the well set by the ADOE. After payout, producers pay an increased post-payout royalty on revenues determined by reference to the then current commodity prices of the various hydrocarbons and rates of production from the well. Similar to the Old Framework, the post-payout royalty rate under the Modernized Framework varies with commodity prices. Once production in a mature well drops below a threshold level where the rate of production is too low to sustain the full royalty burden, its royalty rate is adjusted downward as the mature well's production declines, to a minimum of five percent. The drilling and completion cost allowance formula, post-payout royalty rates and production thresholds for mature wells came into effect on January 1, 2017.

As part of the Modernized Framework, the Alberta government announced two new strategic royalty programs to encourage oil and gas producers to increase production and explore resources in new areas: the Enhanced Hydrocarbon Recovery Program and the Emerging Resources Program. These programs take into account the higher costs associated with development of emerging resources and enhanced recovery methods when calculating royalty rates.

Employees

At December 31, 2018, Paramount had 349 full-time head office employees and 233 full-time field employees. In addition, Fox Drilling had 64 employees and Cavalier Energy had 9 employees at December 31, 2018.

ENVIRONMENT, HEALTH AND SAFETY

Regulatory Requirements

Paramount's oil and gas operations are governed by environmental requirements under Canadian federal, provincial, territorial and municipal laws and regulations that, among other things, restrict and/or prohibit the release of emissions or pollutants, regulate the storage, handling, transportation and disposal of various substances produced or utilized in association with oil and gas industry operations, and require Paramount to remedy the effect of its activities on the environment at current and former operating sites (including through the proper abandonment and decommissioning of wells, pipelines, facilities, and roads and the remediation and reclamation of associated lands). Paramount is also required to comply with a wide range of regulatory requirements designed to ensure the health and safety of its workers and other stakeholders who may be impacted by its operations.

Abandonment and Reclamation Costs

The Company's estimates, as at December 31, 2018, of abandonment and reclamation costs for surface leases, wells, facilities and pipelines are described under "*Reserves and Other Oil and Gas Information – Other Oil and Gas Information – Abandonment and Reclamation Costs*". During 2018, Paramount incurred approximately $29.4 million on environmental, remediation, reclamation and regulatory compliance activities.

Paramount is voluntarily participating in the Area Based Closure program of the Alberta Energy Regulator, which allows for increased abandonment and reclamation efficiencies to meet the Alberta Energy Regulator's objective to reduce oil and gas industry liabilities.

In a public statement issued on January 31, 2019 following the decision of the Supreme Court of Canada in *Orphan Well Association* v. *Grant Thornton Ltd*. (known as the Redwater decision), the Alberta Energy Regulator indicated that it was reviewing the implications of the decision and that it was developing a framework to assess risk using financial, behavioural, and inventory risk factors to identify which companies might be unable to meet their abandonment and reclamation obligations. No further announcement from the Alberta Energy Regulator respecting these matters has been made as of the date of this annual information form, but additional regulatory requirements concerning abandonment and reclamation obligations may be forthcoming.

Risks

Paramount is subject to numerous risks associated with environment, health and safety matters, including those described under "*Risk Factors – Operating Risks and Insurance*", "*Risk Factors – Environmental, Health and Safety Laws and Regulations*" and "*Risk Factors – Hydraulic Fracturing*".

Policies and Procedures

Paramount has implemented monitoring, reporting and compliance programs to address environmental, health and safety issues in its operations, and conducts ongoing inspections and assessments in an effort to ensure that applicable regulatory standards are met. In addition, contingency and response plans have been put in place to deal with environmental incidents and other emergency situations

Paramount has a Health, Safety and Environment Policy (the "**HSE Policy**") which forms an integral part of the business operations of the Company. The HSE Policy together with the Paramount Operations Excellence Management System (**POEMS**) provide the framework pursuant to which the Company has developed a comprehensive operations management system. One component of POEMS is the health, safety and environmental management system (the "**HSE Management System**") which contains specific policies and procedures to address environmental, health and safety matters associated with Paramount's operations. The Company is committed to the prevention of incidents in all phases of its operations that could cause harm to people, property loss or an adverse impact on the environment.

Paramount's HSE Policy and HSE Management System emphasize the Company's responsibility to make environmental, health and safety protection a consistent component of its decision-making processes and requires its management, employees, contractors, consultants and other parties performing work on behalf of Paramount to act in accordance with the HSE Policy and HSE Management System. Paramount's managers and supervisors are required to assess the potential effects of their projects and to integrate protective measures to prevent environmental, health or safety incidents from occurring as a result of Paramount's business activities. Managers and supervisors also are expected to provide training and to be prepared to respond safely and effectively to environmental, health or safety incidents. An HSE Steering Committee, comprised of Paramount operations management and reporting to the Executive Vice President of Operations, has been established to ensure the proper implementation and functioning of the HSE Management System, and to endeavor to achieve continuous improvement on environmental, health and safety matters.

Key accomplishments pursuant to the HSE Management System in 2018 included the implementation of a chemical risk mitigation management system and the development of an incident management governance document and reporting database.

Board of Directors Oversight

Paramount's environmental, health and safety policies and programs are overseen by the Environmental, Health and Safety Committee of the Board of Directors. The members of the Environmental, Health and Safety Committee are Dirk Junge (Chairman), Keith MacLeod and James Riddell. The duties and responsibilities of the Environmental, Health and Safety Committee are to:

- review and monitor the environmental, health and safety policies and activities of Paramount on behalf of the Board of Directors;
- recommend actions for developing policies, programs and procedures to ensure that the principles contained in the HSE Policy are being adhered to and achieved;
- review with management any material environmental, health and safety issues that have arisen in the course of the Company's operations to determine, on behalf of the Board of Directors, that Paramount is taking all necessary steps and exercising all necessary due diligence both in respect of these specific issues and in carrying out its environmental, health and safety responsibilities generally; and
- review and report to the Board of Directors on the sufficiency of the resources available to fulfill the environmental, health and safety responsibilities of the Company.

The Environmental, Health and Safety Committee meets at least semi-annually in May and November of each year and receives reports from management with respect to the above matters and, in particular, relative to Paramount's compliance with health, safety and environmental laws and regulations and the Company's management of its ongoing abandonment, reclamation, remediation and similar obligations. The written charter of the Environmental, Health and Safety Committee is available on the Company's website at www.paramountres.com.

GREENHOUSE GAS COMPLIANCE AND REPORTING OBLIGATIONS

Alberta

The Alberta government currently imposes greenhouse gas ("**GHG**") emission intensity limits on industrial facilities that emit more than 100,000 tonnes of Carbon dioxide equivalent ("**tCO_{2e}**") per year pursuant to the Carbon Competitiveness Incentive Regulation ("**CCIR**"), which became effective on January 1, 2018. As Paramount does not currently operate any facilities that emit more than 100,000 tCO_{2e} per year it does not have any compliance obligations under these regulations.

In 2016, the Alberta government passed the *Carbon Leadership Act* and enacted the *Carbon Leadership Regulation* pursuant to which an economy-wide carbon tax on emissions from transportation and heating fuels has been imposed effective January 1, 2017. The current tax rate is $30 per tCO_{2e}.

Emissions from flaring at oil and gas wells, pipelines and facilities, and from produced natural gas that is used by oil and gas companies as fuel gas in operating oil and gas wells, pipelines and facilities, will become subject to the $30 per tCO_{2e} tax commencing January 1, 2023 (unless the facility is already subject to compliance obligations under the CCIR, in which case the facility operator will receive a rebate in respect of any carbon levies paid).

Methane emission reduction in the oil and gas industry is also a key element of Alberta's GHG reduction plan. Under Directive 60 released by the Alberta Energy Regulator on December 13, 2018, oil and gas companies are required to detect and repair fugitive leaks of methane and other hydrocarbons. In addition, the Alberta government has set a target of reducing methane emissions from the oil and gas industry by 45 percent from 2014 levels by 2025. This target is to be achieved by:

- putting in place more stringent methane emissions design standards for new oil and gas facilities;
- improving measurement and reporting of methane emissions as well as enforcing the leak detection and repair requirement; and
- developing a joint initiative on methane reduction and verification for existing facilities, and backstopping this with regulated standards that take effect in 2020, to ensure the 2025 target is met.

A further component of Alberta's climate change strategy is the imposition of a 100 megatonne limit on GHG emissions from provincial oil sands production. This limit has been given force of law in the *Oil Sands Emissions Limit Act*, but until regulations setting out how the emissions cap will work are enacted it is unclear how it might impact the future development of the oil sands properties held by Cavalier Energy. Currently, emissions from the province's oil sands sector are well below the 100 megatonne limit.

In 2017, the Alberta government amended the *Specified Gas Reporting Regulation* to require companies to report the annual GHG emissions from facilities emitting more than 10,000 tCO_{2e} per year. The previous threshold was 50,000 tCO_{2e} per year. Paramount has additional reporting obligations as a result of this change, namely 13 facilities reporting versus only 1 facility in 2016.

British Columbia

In 2008, British Columbia implemented a carbon tax that applies to the purchase or use of fossil fuels by end users in the province and is designed to encourage individuals, businesses and industries to consume less fossil fuel and thus reduce the emission of GHG. Accordingly, to the extent Paramount consumes fossil fuel as part of its exploration, development and production operations in British Columbia, the Company is required to pay a carbon tax. British Columbia's carbon tax rate was increased to \$35 per tCO_{2e} on April 1, 2018. The tax will increase to \$40 per tCO_{2e} in April 2019 and continue to increase by \$5 per tCO_{2e} per year until it reaches \$50 per tCO_{2e} in April 2021.

Federal

In November 2015, Canada participated in the twenty first session of the Conference of the Parties of the United Nations Framework Convention on Climate Change in Paris, France, which resulted in the adoption of the Paris Agreement. The Paris Agreement is intended to provide the foundation for coordinated international action to attempt to hold the increase in the global average temperature to well below 2°C above pre-industrial levels, and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

On June 29, 2016, Canada announced that it had agreed with the United States and Mexico to reduce methane emissions from the oil and gas sector by up to 45 percent by 2025 by developing and implementing federal regulations for both existing and new sources of vented and fugitive methane emissions. The final regulations were published on April 26, 2018. The *Canadian Environmental Protection Act* (**CEPA**) allows for flexibility via equivalency and other collaborative agreements to be negotiated with individual provinces and territories, if CEPA minimum requirements are met by the provincial regulations. The Government of Alberta is working towards a negotiated equivalency agreement with the federal government; however, no equivalency agreement has been made to date.

The *Greenhouse Gas Pollution Pricing Act* received Royal Assent on June 21, 2018. That Act introduces a federal carbon pollution pricing system with two components that came into effect on January 1, 2019: a regulatory charge on fuel of \$20 per tCO_{2e} in 2019, rising by \$10 per tCO_{2e} annually to \$50 per tCO_{2e} in 2022, and a regulatory trading system for large industry called the output-based pricing system. Provinces and territories were asked to clarify their carbon pricing plans by September 1, 2018, and the stringency of each system was assessed against the federal benchmark. On October 23, 2018, the Government of Canada announced that: (i) Alberta's output-based pricing system and carbon levy on fuels meets the federal benchmark stringency requirements and the federal system will not apply in the province and (ii) British Columbia's pollution pricing system meets the federal benchmark stringency requirements and the federal system will not apply in the province. Alberta has withdrawn from increasing its carbon levy pending progress on the Trans Mountain Pipeline Expansion project and there is a risk that, in the future, the Company may find itself subject to payment obligations under the federal carbon tax system that are incremental to those imposed under the Alberta *Carbon Leadership Regulation*.

Similar to Alberta, the federal government has lowered the threshold for reporting GHG emissions from facilities under its Greenhouse Gas Reporting Program from 50,000 tCO_{2e} to 10,000 tCO_{2e} per year.

DIRECTORS AND EXECUTIVE OFFICERS

The following information is provided for each director and executive officer of Paramount as at the date of this annual information form. Each director will serve until the next annual meeting of shareholders or until his or her respective successor is elected or appointed.

DIRECTORS

Name and Municipality of Residence	Director Since	Principal Occupation for Past Five Years
James H.T. Riddell (4) (6) Calgary, Alberta, Canada	2000	President and Chief Executive Officer and Chairman of the Board of Directors of Paramount; previously President and Chief Operating Officer of Paramount
James G.M. Bell (1) (2) (3) Calgary, Alberta, Canada	2011	President and Chief Executive Officer, Founders Advantage Capital Corp. (a TSX Venture Exchange listed company); previously General Counsel, Olympia Financial Group Inc. (a TSX listed company) and Olympia Trust Company (a non-deposit taking trust company)
Wilfred A. Gobert (1) (3) (5) Calgary, Alberta, Canada	2017	Independent Businessman
John C. Gorman (2) (3) (5) Calgary, Alberta, Canada	2002	Independent Businessman
Dirk Jungé, CFA (3) (4) Bryn Athyn, Pennsylvania, United States	2000	Chairman of the Board, Pitcairn Trust Company (a private trust company)
Robert M. Macdonald (2) (3) Oakville, Ontario, Canada	2017	Independent Businessman
R. Keith MacLeod (3) (4) (5) (7) Calgary, Alberta, Canada	2017	Independent Businessman
Susan L. Riddell Rose Calgary, Alberta, Canada	2000	President and Chief Executive Officer, Perpetual Energy Inc. (a TSX listed company)
John B. Roy (1) (2) (3) Calgary, Alberta, Canada	1981	Independent Businessman

(1) Member of the Compensation Committee.
(2) Member of the Audit Committee.
(3) Member of the Corporate Governance Committee.
(4) Member of the Environmental, Health and Safety Committee.
(5) Member of the Reserves Committee.
(6) Mr. J. H. T. Riddell was a director of Sonde Resources Corp. ("Sonde") and Great Prairie Energy Services Inc. ("Great Prairie"), both public oil and gas companies, within one year of Sonde becoming bankrupt and Great Prairie having a receiver-manager appointed to manage its assets, undertakings and properties.
(7) Mr. MacLeod was a Director of Manitok Energy Inc. (“Manitok”), a public oil and gas exploration and production company, within one year of Manitok filing a Notice of Intention to Make a Proposal under the Bankruptcy and Insolvency Act.

EXECUTIVE OFFICERS

Name and Municipality of Residence	Office	Principal Occupation for Past Five Years
James H.T. Riddell Calgary, Alberta, Canada	President and Chief Executive Officer and Chairman	President and Chief Executive Officer and Chairman of the Board of Directors of Paramount; previously President and Chief Operating Officer of Paramount
Bernard K. Lee Calgary, Alberta, Canada	Executive Vice President, Finance and Chief Financial Officer	Chief Financial Officer of Paramount; also appointed Executive Vice President, Finance in September 2017
D. Blake Reid Calgary, Alberta, Canada	Executive Vice President, Operations	Executive Vice President, Operations of Paramount; previously Managing Director of Energy Engineering Inc.
John B. Williams Calgary, Alberta, Canada	Executive Vice President, Kaybob Region	Executive Vice President, Kaybob, previously President and Chief Operating Officer of Trilogy Energy Corp.
E. Mitchell Shier Calgary, Alberta, Canada	General Counsel, Corporate Secretary and Vice President Land	General Counsel and Corporate Secretary; also appointed Vice President, Land in June 2018
Paul R. Kinvig Calgary, Alberta, Canada	Vice President Finance, Capital Markets	Vice President Finance, Capital Markets; previously Vice President Finance and Controller
Rodrigo R. Sousa Calgary, Alberta, Canada	Vice President, Corporate Development	Vice President, Corporate Development; previously Vice President, Corporate Development of Athabasca Oil Corporation

As at December 31, 2018, the directors and executive officers of the Company as a group beneficially owned, controlled or directed, directly or indirectly, 45,513,102 Common Shares, representing approximately 34.8 percent of the 130,898,988 Common Shares outstanding at such date.

Certain directors and officers of Paramount are also directors and/or officers and/or significant shareholders of other companies or entities engaged in the oil and gas business generally and which, in certain cases, own interests in oil and gas properties in which Paramount holds, or may in the future, hold an interest. As a result, situations may arise where such individuals have a conflict of interest. Such conflicts of interest will be resolved in accordance with Paramount's governing corporate statute, the *Business Corporations Act* (Alberta), and Paramount's internal policies respecting conflicts of interest. The *Business Corporations Act* (Alberta) requires that a director or officer of a corporation who is party to a material contract or proposed material contract with the corporation, or is a director or an officer of or has a material interest in any person who is a party to a material contract or proposed material contract with the corporation, disclose in writing to the corporation or request to have entered into the minutes of meetings of directors the nature and extent of the director's or officer's interest; and, if a director, that he or she not vote on any resolution to approve the contract, except in certain circumstances. The *Business Corporations Act* (Alberta) also requires that a corporation's directors and officers act honestly and in good faith with a view to the best interest of the corporation. Paramount's internal policies respecting conflicts of interest require that directors and officers of Paramount avoid putting themselves in a conflict of interest position and, if such a position arises, that disclosure of such position be made so that Paramount can approve or disapprove such position, with disapproved conflict of interest positions requiring immediate cessation by the director or officer.

AUDIT COMMITTEE INFORMATION

AUDIT COMMITTEE CHARTER

The full text of the audit committee's charter is included in Appendix C of this annual information form.

COMPOSITION OF THE AUDIT COMMITTEE

The audit committee consists of four members, all of whom are independent and financially literate. The relevant education and experience of each audit committee member is outlined below:

John C. Gorman

Mr. Gorman has been a director of the Company since 2002. He is an independent businessman. Mr. Gorman was the President and CEO of an energy trading, marketing and financial services company from 1996 to 2000 and a corporate banker with the Bank of Montreal (a Canadian chartered bank) from 1972 to 1996, retiring as Senior Vice President, Natural Resources Group. Mr. Gorman obtained a Bachelor of Arts degree from the University of Ottawa and a Master of Business Administration degree from the University of Western Ontario.

James G. M. Bell

Mr. Bell has been a director of the Company since 2011. Mr. Bell is currently President and Chief Executive Officer of Founders Advantage Capital Corp., a public investment company listed on the TSX Venture Exchange. From 2010 to 2016, Mr. Bell was General Counsel for Olympia Financial Group Inc. (a TSX listed company) and its wholly-owned subsidiary Olympia Trust Company (a non-deposit taking trust company). Prior thereto, Mr. Bell practiced securities and corporate commercial law as Partner at an international law firm until December 31, 2009. Mr. Bell has acted as legal counsel in connection with private placements, prospectus offerings, take-over bids, plans of arrangement and general securities and corporate finance matters. Mr. Bell graduated from the University of Saskatchewan with a Bachelor of Laws degree in 1999.

Robert M. MacDonald

Mr. MacDonald is an oil and gas banking professional with 15 years of experience as a corporate director and 27 years of experience as a senior officer of several Canadian chartered banks, including 18 years in Alberta and 9 years in the United States. He has expertise in oil and gas banking/financing, having handled and provided advisory services on strategic alternatives for senior and bridge debt structuring, project financing, mezzanine debt structuring, portfolio management, financial analysis and loan re-structuring. From 1998 to 2003, he was a Director, Oil & Gas, Commercial Banking, with CIBC World Markets Inc. From 1993 to 1998, Mr. MacDonald was Vice President, Oil & Gas Group with CIBC. Mr. MacDonald graduated from the University of Saskatchewan (Regina Campus) with a Bachelor of Business Administration degree (major in Economics and Finance and minor in Accounting). He is a Fellow of the Institute of Canadian Bankers and has completed the academic requirements for the Director Education Program of the Institute of Corporate Directors.

John B. Roy

Mr. Roy has been a director of the Company since 1981. He is an independent businessman. Prior to December 1, 2003, he served as the Vice-President and Director, Investment Banking of Jennings Capital Inc. (a private investment banking firm). From 1970 to 1996, he held various positions at Greenshields Incorporated and its successor, Richardson Greenshields of Canada Ltd. (a private investment banking firm). Mr. Roy graduated from Queen's University with a Bachelor of Science degree in Mechanical Engineering and received a Diploma in Management from McGill University. He is a member of the Association of Professional Engineers and Geoscientists of Alberta.

PRE-APPROVAL POLICIES AND PROCEDURES

The Company's audit committee has adopted a policy with respect to the pre-approval of audit and permitted non-audit services to be provided by its independent auditor. Pursuant to the policy, the audit committee has identified certain services that have been granted pre-approval and which the independent auditors may provide. The policy also establishes procedures by which permitted audit and permitted non-audit services proposed to be performed by the Company’s independent auditors may be pre-approved.

The audit committee has delegated authority to the Chairman of the audit committee to pre-approve permitted audit and permitted non-audit services to be provided by the independent auditor that have not otherwise been pre-approved by the full audit committee, including the fees and terms of the proposed services. All pre-approvals granted pursuant to this delegated authority must be presented by the Chairman of the audit committee to the full audit committee at its next meeting.

All fees payable in connection with services provided by the independent auditor must be pre-approved by either the full audit committee or the Chairman of the audit committee pursuant to his delegated authority.

EXTERNAL AUDITOR SERVICE FEES

The following table provides information about the fees billed to the Company for professional services rendered by Ernst & Young LLP in respect of the financial years ended December 31, 2018 and December 31, 2017:

($ thousands)	2018	2017
Audit Fees (1)	325	359
Audit-Related Fees (2)	30	663
Tax Fees (3)	-	-
All Other Fees (4)	8	7
Total	363	1,029

(1) Represents the aggregate fees of the Company’s auditors for audit services in respect of the financial year.

(2) Represents the aggregate fees billed for assurance and related services by the Company’s auditors that are reasonably related to the performance of the audit or review of the Company’s financial statements and are not included under "Audit Fees". In 2018, fees primarily related to the audit of a subsidiary. In 2017, fees primarily related to the Company’s corporate acquisitions.

(3) Represents the aggregate fees billed in each of the last two fiscal years for professional services rendered by the Company’s auditors for tax compliance, tax advice and tax planning.

(4) Represents the aggregate fees billed for products and services provided by the Company’s auditors other than those services reported under "Audit Fees" and "Audit Related Fees".

DESCRIPTION OF SHARE CAPITAL

The Company's authorized share capital as of the date hereof consists of an unlimited number of Common Shares and an unlimited number of preferred shares, issuable in series. As of December 31, 2018, 130,898,988 Common Shares were issued and outstanding and no preferred shares were issued and outstanding.

COMMON SHARES

The holders of Common Shares are entitled to receive dividends if, as and when declared by the board of directors of the Company. The holders of Common Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company. Holders of Common Shares are entitled to one (1) vote in respect of each Common Share held at all meetings of the shareholders of the Company (except meetings at which only holders of another specified class or series of shares of the Company are entitled to vote separately as a class or series at such meeting) provided that if the Company fails to pay the full amount of any dividend declared by the board of directors of the Company on the Common Shares on the date specified for payment of such dividend, then, for so long as any dividends remain in arrears on the Common Shares, the holders of Common Shares shall be entitled to two (2) votes in respect of each Common Share held at all meetings of the shareholders of the Company. In the event of liquidation, dissolution or winding up of the Company or other distributions of assets of the Company among its shareholders for the purpose of winding up its affairs, the holders of Common Shares will be entitled, subject to preferences accorded to holders of any class or series of preferred shares, to participate ratably in any distribution of the assets of the Company.

PREFERRED SHARES, ISSUABLE IN SERIES

Preferred shares are non-voting and may be issued in one or more series. The board of directors may determine the designation, rights, privileges, restrictions and conditions attached to each series of preferred shares before the issue of such series. As of December 31, 2018, no preferred shares were issued and outstanding.

NORMAL COURSE ISSUER BID

Paramount implemented a normal course issuer bid in January 2019. The normal course issuer bid will terminate on the earlier of: (i) January 3, 2020; and (ii) the date on which the maximum number of Common Shares that can be acquired pursuant to the normal course issuer bid are purchased. Purchases of Common Shares under the normal course issuer bid will be effected through the facilities of the TSX or alternative Canadian trading systems at the market price at the time of purchase. Paramount may purchase up to 7,110,667 Common Shares under the normal course issuer bid. Pursuant to the rules of the TSX, the maximum number of Common Shares that the Company may purchase under the normal course issuer bid in any one day is 96,491 Common Shares. Paramount may also make one block purchase per calendar week which exceeds such daily purchase restriction, subject to the rules of the TSX. Any Common Shares purchased pursuant to the normal course issuer bid will be cancelled by the Company. Any shareholder may obtain, for no charge, a copy of the notice in respect of the normal course issuer bid filed with the TSX by contacting the Company at 403-290-3600.

Under Paramount's previous normal course issuer bid, which expired on December 21, 2018, Paramount acquired an aggregate of 4,239,359 Common Shares at an average price of $15.63 per share.

CREDIT RATINGS

The following table outlines the credit ratings for the Company as of the date of this annual information form:

	Standard & Poor's Rating Services
Corporate Credit Rating	B+
Outlook	Negative

Credit ratings are intended to provide investors an independent assessment of the credit quality of the issuer of securities or issue, and do not address the suitability of securities for any particular issuer.

The long-term credit ratings of Standard & Poor's Rating Services ("**S&P**") are on a scale that ranges from "AAA" to "D", which represents the range from highest to lowest opinions of creditworthiness. According to the S&P rating system, obligations rated "BB", "B", "CCC", "CC" and "C" are regarded as having significant speculative characteristics. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposure to adverse conditions. An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitments on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments on the obligation. The ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or a minus (–) sign to show relative standing within the rating categories. In addition, S&P may add a rating outlook of "positive", "negative", "stable", "developing" or "not meaningful" which assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). In determining a rating outlook, consideration is given to any changes in economic and/or fundamental business conditions. An outlook is not necessarily a precursor of a rating change.

The credit ratings accorded by S&P are not recommendations to purchase, hold or sell securities and such ratings do not comment as to market price or 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.

In 2017 and 2018, the Company made payments to S&P in connection with annual monitoring and surveillance fees.

MARKET FOR SECURITIES

Paramount's Common Shares are listed on the TSX under the trading symbol "POU". The following table outlines the trading price range and volume of the Common Shares traded by month in 2018.

	Price Range ($ per share)		
2018	**High**	**Low**	**Trading Volume**
January	20.26	17.82	8,752,419
February	19.08	14.39	6,532,764
March	18.43	14.46	8,722,438
April	18.69	13.93	7,998,810
May	18.43	13.80	14,012,246
June	16.32	14.31	9,613,845
July	15.62	13.99	9,385,932
August	15.15	12.72	8,372,958
September	15.16	12.26	5,834,164
October	15.84	9.35	7,271,822
November	10.72	6.95	10,290,664
December	8.07	5.75	14,999,563

DIVIDENDS

In December 2016, the Company's board of directors declared a dividend of 3.8 million Seven Generations Shares to holders of record of Common Shares on January 9, 2017, resulting in an entitlement of approximately 0.036 of a Seven Generations Share for each Common Share, subject to rounding for fractions. The dividend was paid on January 16, 2017. The closing trading price of the Seven Generations Shares on the TSX on January 13, 2017, the last trading day before the dividend was paid, was $26.27 per share.

Other than the dividend of the Seven Generations Shares, Paramount has not declared a dividend in the last three fiscal years. Paramount currently has no plans to pay a dividend in the future. Any future dividends will be dependent upon the financial requirements of the Company to reinvest earnings, the financial condition of the Company and other factors which the board of directors of the Company may consider appropriate.

LEGAL PROCEEDINGS

The Company is involved in various claims and litigation arising in the normal course of business both as a plaintiff and defendant. The Company does not currently believe that the outcome of any pending or threatened proceedings, individually or collectively, or the amounts which the Company may be required to pay by reason thereof, would be material to the Company.

RISK FACTORS

Investors should carefully consider the risk factors set out below and consider all other information contained herein and in the Company's other public filings before making an investment decision. The risks set out below are not an exhaustive list and should not be taken as a complete summary or description of all the risks associated with the Company's business and the oil and natural gas business generally.

VOLATILITY OF OIL, NGLS AND NATURAL GAS PRICES AND PRICE DIFFERENTIALS

Paramount's financial performance and condition are dependent on the prices received by it for oil, NGLs and natural gas and declines in such prices may have a material adverse effect on the Company's business, financial condition, results of operations and prospects. Any substantial and extended decline in the price of oil, NGLs or natural gas would have an adverse effect on the Company's revenues, profitability, cash flows from operations and borrowing capacity. The economics of producing from some wells may change because of lower prices, which could result in reduced production of oil, NGLs or natural gas and a reduction in the volumes and the value of the Company's reserves, which in turn could require a write down of the carrying value of the Company's oil and gas assets on its balance sheet and the recognition of an impairment charge in its income statement.

Prices for oil, NGLs and natural gas are volatile and affected by factors outside of Paramount's control. In the case of oil and NGLs, such factors include, but are not limited to, international and domestic supply and demand, the actions of the Organization of Petroleum Exporting Countries and other major exporters, world economic conditions, government regulation (including government ordered production curtailments), geopolitical tension, speculative positioning, the price of foreign imports, the availability and pricing of alternate fuel sources, transportation and infrastructure constraints and weather conditions. In the case of natural gas, such factors include, but are not limited to, North American supply and demand, government regulation (including government ordered production curtailments), the availability and pricing of alternate fuel sources, transportation and infrastructure constraints and weather conditions. In the longer term, prices for fossil fuels could be impacted by global climate change initiatives that have the stated goal of transitioning the world to a low carbon energy system.

Canadian producers of oil, NGLs and natural gas currently receive discounted prices for their production relative to certain international prices due to constraints on their ability to transport and sell such production to international markets. The magnitude of these discounts is highly variable. A failure to alleviate these constraints will result in Canadian producers continuing to be subject to discounted commodity prices. In addition, the prices individual producers, including Paramount, receive could be subject to additional discounts as a result of various factors including regional supply and demand issues, regional infrastructure capacity and transportation constraints, location and quality.

Oil, NGLs and natural gas prices, and the discounts against international prices received by Canadian producers, may remain volatile due to a number of factors, including market uncertainty over supply and demand, economic, regulatory and political uncertainty, increased growth of production in the United States, the actions of the Organization of Petroleum Exporting Countries and other major exporters, sanctions imposed on certain oil producing nations by other countries and uncertainty respecting the progress of major pipeline and infrastructure projects. Volatile oil, NGLs and natural gas prices make it difficult to estimate the value of producing properties for acquisitions and often cause disruption in the market for oil, NGLs and natural gas producing properties, as buyers and sellers have difficulty agreeing on price. Price volatility also makes it difficult to budget for, and project the return on, acquisitions and development and exploitation projects.

EXPLORATION FOR AND DEVELOPMENT OF OIL, NGLs AND NATURAL GAS RESERVES

Paramount's future success depends upon its ability to successfully find and develop oil, NGLs and natural gas reserves that are economically recoverable. If Paramount is unable to increase its reserves, the Company's business will be adversely affected because it will eventually deplete its current reserves.

The cost of drilling, completing and operating wells is often uncertain. The Company may experience unexpected cost increases, overruns, delays or cancellations of projects as a result of numerous factors, many of which are beyond its control, including, but not limited to, increased labour costs, higher costs of inputs, technical complexities, weather conditions, required compliance with laws and regulations, the ability to obtain stakeholder support and approvals, and shortages or delays in the delivery of equipment and services.

The North American oil and gas industry has achieved significant reductions in its cost structure in response to the material and sustained decline in commodity prices that has been experienced in recent years. If third-party service and other costs materially increase, this could adversely affect the Company. There is the risk that Paramount's exploration activities will not encounter commercially productive reservoirs, that Paramount will not recover all or any portion of its investment, and that Paramount's reserves, revenues and cash flow will decline. Paramount cannot provide any assurances that it will be able to find and develop additional reserves at an acceptable cost or at all.

The successful development of oil, NGLs and natural gas properties requires an assessment of recoverable reserves, future oil, NGLs and natural gas prices, operating and capital costs, potential environmental and other liabilities and the expected productivity of future wells. These assessments are inexact and, if actual results differ materially from these assessments, the Company may not recover the purchase price or development costs of a property.

ACCESS TO NECESSARY INFRASTRUCTURE AND INFRASTRUCTURE COMMITMENTS

Paramount's ability to produce and sell its oil, NGLs and natural gas requires it to have access to both Company constructed and owned, as well as third-party, infrastructure, including gathering systems, compression and dehydration facilities, processing facilities, pipelines and NGLs fractionation facilities. The costs and timing of constructing, expanding and maintaining such infrastructure, is often uncertain. Construction projects may experience unexpected cost increases, overruns and delays as a result of numerous factors, including, but not limited to, labour shortages, increased labour costs, higher cost of inputs, weather conditions, required compliance with laws and regulations, the ability to obtain stakeholder support and approvals, and shortages or delays in the delivery of equipment and services.

There is also the risk that infrastructure may not operate as designed or at expected capacity levels and that actual operating and other costs are materially higher than estimated due to maintenance issues or for other reasons. In addition, there is a risk that commodities delivered to processing facilities may not meet the specifications of the facility, that processing facilities may be unable to produce products that meet the specification requirements of pipelines or interconnected facilities or that there is a limited or no market for products produced. Maintenance of, or repairs to, Company and third-party infrastructure (as well as apportionments and other capacity constraints) may result in unbudgeted or unexpected costs and lower production and cash flow.

Paramount has entered into firm-service processing, transportation and NGLs fractionation commitments covering a substantial portion of its production. If Paramount is unable to meet its obligations under these firm-service agreements, it will be required to pay for the unutilized capacity thereunder, and may be exposed to other liabilities. To the extent Paramount does not either currently, or in the future, have sufficient Company-owned or firm-service capacity in place, it will have to utilize interruptible capacity on third-party infrastructure (and/or in the case of insufficient Liquids transportation capacity, trucking or rail options). There is no guarantee that such interruptible capacity, or other Liquids transportation options, will be available, or if they are, that they can be obtained or utilized at a reasonable cost. For additional information, see "*Reserves and Other Oil and Gas Information*".

INDUSTRY COMPETITION

The oil and gas industry is highly competitive. Paramount competes with other industry participants in searching for, acquiring and developing oil, NGLs and natural gas reserves, and processing, transporting and marketing these products. Competition is particularly intense in the acquisition of prospective oil and natural gas properties and reserves and in pursuing technological advancements to enhance well productivity and reduce costs. Other oil and gas companies may have greater financial, technical and human resources than Paramount that gives them a competitive advantage over the Company in these areas.

OPERATING RISKS AND INSURANCE

There are many operating hazards in exploring for, developing and producing oil, NGLs and natural gas, including, but not limited to, unexpected formations, blowouts, accidents, equipment failures (including computer hardware and software systems), spills, releases, pipeline failures, environmental damage or other unexpected or dangerous conditions that could result in damage to Paramount, injury or death (including employees or contractors), damage to equipment and facilities, suspension or revocation of regulatory approvals, environmental contamination and potential liability to third-parties (including government bodies). Also, a significant event may result in lost revenue and/or profit.

The Company cannot fully protect against all of these potential risks. Some of them cannot be insured against, and the coverage that can be obtained with respect to those that are insurable will be subject to exclusions, deductibles and coverage limits. Accordingly, Paramount may be exposed to liabilities that are outside the scope of its insurance, are only partially covered by it, or that Paramount could not insure against (either at all or because of high premium costs or for other reasons). In addition, the costs of maintaining insurance have increased in recent years and may continue to increase, which may adversely affect Paramount's financial position.

The occurrence of a significant event against which Paramount is not fully insured could have a material adverse effect on the Company.

GOVERNMENT REGULATION

Paramount's operations are governed by numerous laws and regulations at the municipal, provincial, territorial and federal levels. These laws and regulations cover a wide range of issues including, without limitation, royalties, taxes (including income taxes), land tenure, drilling practices and obligations, production rates, the development and abandonment of oil and gas fields, the export of petroleum and natural gas and environmental protection. Governments may order the curtailment or restriction of production of oil, NGLs or natural gas and any such curtailments or restrictions may limit the Company's production of such commodities or the demand for certain of its products, including condensate for use as diluent for bitumen.

Regulatory approval processes often involve numerous stakeholders including aboriginal groups (who must be consulted with respect to potential impacts on treaty or other actual or asserted aboriginal rights) and other resource and surface rights holders. Changes to, or the failure to comply with, laws and regulations, potential regulatory and court interventions by stakeholders and delays in obtaining regulatory approvals could have a material adverse effect on the Company.

Recently, challenges and delays to regulatory approvals to build pipelines and other infrastructure to provide better access to markets for the oil and natural gas industry in Western Canada and uncertainty respecting the application of future proposed regulations, including the *Impact Assessment Act* (Bill C-69), have led to additional downward price pressure on oil, NGLs and natural gas produced in Western Canada and uncertainty and reduced confidence in the oil and natural gas industry in Western Canada. A continuation of these conditions could have a material adverse effect on the Company, including on its ability to raise additional capital.

Paramount's income tax and royalty filings are subject to subsequent audit and potential reassessment by government entities. The reassessment of filings could result, among other things, in additional obligations for income tax, royalties, interest and penalties which could have a material adverse effect on the Company.

ENVIRONMENTAL, HEALTH AND SAFETY LAWS AND REGULATIONS

Paramount's operations are subject to extensive federal, provincial, territorial and local laws and regulations that address environmental, health and safety matters relating to the exploration, development and production of oil and gas including the release of emissions or pollutants, the storage, handling, transportation and disposal of hazardous and other substances, the remediation of environmental damage, the protection of environmentally sensitive areas and of endangered and protected species and worker and operational safety. Compliance with these laws and regulations may impose substantial costs on Paramount and may subject Paramount to significant potential liabilities. Future changes in such legislation could result in stricter standards and enforcement, larger fines and increased costs of compliance, all of which could have a material adverse effect on Paramount's financial condition or results of operations.

Environmental laws may require parties to undertake or pay for remedial action or to pay damages regardless of fault. Environmental laws may also impose liability with respect to divested or terminated operations, even if the operations were divested or terminated many years ago.

In Alberta, Paramount is subject to regulations and directives of the Alberta Energy Regulator which require licensees of wells, pipelines and facilities to contribute to the Orphan Well Fund to cover the costs of suspending, abandoning, remediating and reclaiming wells, pipelines or other facilities when the licensees of those facilities become defunct or insolvent. In addition, the Alberta Energy Regulator has implemented requirements respecting the liability management ratings of prospective transferees of licenses for wells, pipelines and facilities that may limit the number of potential buyers of assets and, in turn, adversely affect the Company's ability to sell certain assets or the price obtained for assets it does sell. The Alberta Energy Regulator has indicated that it is developing a risk assessment framework to identify which companies might be unable to meet their abandonment and reclamation obligations. Regulatory changes to implement this framework are currently anticipated to come into effect in 2020. It is impossible to know what impact this new framework could have on the Company until further details of it are made public, but it is possible that it could adversely affect the Company in a number of ways, including by requiring the Company to accelerate the pace of its spending on abandonment and reclamation activities and imposing security requirements in respect of (and other restrictions on) the acquisition of properties and the licensing of wells and facilities.

Paramount's operations may result in the occurrence of spills, pipeline releases, or the discharge of hazardous materials which could result in the Company being subject to remediation and clean-up obligations and exposure to potential liabilities for personal injuries and property and environmental claims. Environmental laws and standard contractual provisions on the acquisition of properties impose liability on Paramount for environmental damages caused by previous owners. As a result, substantial liabilities may be incurred, and the payment of such liabilities could have a material adverse effect on Paramount's financial condition and results of operations. In addition, the release of harmful substances in the environment or other environmental damage caused by Paramount's activities could result in the suspension or revocation of operating and environmental permits.

CREDIT FACILITY AND INDEBTEDNESS

The Credit Facility, or any replacement credit arrangements, may not provide sufficient liquidity. The amounts available under the Credit Facility may not be sufficient for future operations and the Company may not be able to obtain additional financing on favourable terms or at all. There is a risk that the Credit Facility, on maturity, will not be renewed for the same amount or on the same terms and, as a result, may restrict the Company's liquidity.

The Credit Facility is a covenant-based facility that includes certain financial ratio tests. These financial ratio tests, from time to time, either affect the availability, or price, of additional funding and in the event that the Company does not comply with these covenants, the Company's access to capital could be restricted or repayment could be required. Events beyond the Company's control may contribute to the failure of the Company to comply with such covenants. A failure to comply with covenants could result in default under the Credit Facility, which could result in the Company being required to repay amounts owing thereunder. The acceleration of the Company's indebtedness under one agreement may permit acceleration of indebtedness under other agreements, including the Credit Facility, that contain cross default or cross-acceleration provisions. In addition, the Credit Facility may impose operating and financial restrictions on the Company that could include, among others, restrictions on the payment of dividends or other distributions, the repurchase of the Company's securities, the incurring of additional indebtedness, the provision of guarantees, the assumption of loans or the entering into of amalgamations, mergers, take-over bids or asset dispositions.

If the Company's lenders require repayment of all or portion of the amounts outstanding under the Credit facilities for any reason, including for a default of a covenant, there is no certainty that the Company would be in a position to make such repayment. Even if the Company is able to obtain new financing in order to make any required repayment under the Credit Facilities, it may not be on commercially reasonable terms or terms that are acceptable to the Company. If the Company is unable to repay amounts owing under the Credit Facility, the lenders under the Credit Facility could proceed to foreclose or otherwise realize upon the collateral granted to them to secure the indebtedness.

The decision of the Supreme Court of Canada in Orphan Well Association v. Grant Thornton Ltd. (known as the Redwater decision) may adversely impact the amounts, and terms on which, lenders are willing to lend to Canadian exploration and production companies, including Paramount.

The Company's level of indebtedness from time to time under the Credit Facility, or any other credit arrangement that may be implemented, may adversely affect its operations by increasing the portion of cash flow required to service indebtedness, reducing the Company's competitiveness compared to similar companies with less debt, limiting its ability to obtain future financing and increasing its vulnerability to general adverse economic and industry conditions.

FUNDING OF EXPENDITURES

Paramount may not be able to obtain, through its operations or through financings, credit facilities, asset dispositions or other means, on terms acceptable to Paramount or at all, the necessary capital to fund future exploration and development activities and other operations. Such a failure to obtain necessary capital when required could result in the Company being unable to develop existing reserves, discover new reserves and make acquisitions. It could also, among other things, result in Paramount being unable to retain oil and gas licenses and leases, and satisfy contractual commitments to third-parties.

CREDIT RATINGS

Paramount, and any debt it may issue, may be rated from time to time by various credit rating agencies and there is a risk that credit ratings may be downgraded. These ratings may affect the Company's ability to gain access to debt financing and the price of such financing. In addition, Paramount's credit ratings may be important to customers or counterparties when Paramount seeks to engage in certain transactions.

MARKET PRICE OF COMMON SHARES

The trading price of Paramount's Common Shares, and other securities of the Company outstanding from time to time, have experienced significant historical volatility and the prices of such securities could be subject to significant volatility in the future. Market price fluctuations in Paramount's securities may occur due to factors both related and unrelated to the Company, including but not limited to the Company's operating and financial results, the Company's financial condition, the Company's business prospects, the Company's results failing to meet forecasts or the expectations of analysts or investors, downward revisions in analysts' estimates, governmental regulatory action, adverse changes in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by the Company or its competitors, macroeconomic developments, domestic and global commodity prices, current perceptions of the oil and gas industry and other factors, including, without limitation, those set forth above under the section titled "*Note Regarding Forward-Looking Statements*".

DEPENDENCE ON SENIOR OFFICERS

Paramount is highly dependent on its President and Chief Executive Officer. The loss of this officer, or other senior officers, could impede the achievement of Paramount's objectives and could adversely affect Paramount's business and results of operations.

CARBON PRICING AND GREENHOUSE GASES

As discussed under "*Reserves and Other Oil and Gas Information - Greenhouse Gas Compliance and Reporting Obligations*", both the Alberta and British Columbia governments have imposed carbon taxes and taken other steps to regulate GHG emissions and the Government of Canada has introduced its own carbon taxes that will apply in the event that provincial requirements do not meet federal benchmarks. In addition, the Alberta and federal governments have set a target of reducing methane emissions from upstream oil and gas operations by 45 percent from 2014 levels by 2025.

These provincial and federal GHG reduction measures, together with any further regulatory steps Alberta, British Columbia and the federal government may choose to take in this area, could materially impact the oil and gas industry, including Paramount. Further, the imposition of carbon taxes could put the Company at a disadvantage with competitors operating in jurisdictions where there are less costly or no such carbon regulations.

In addition, the ability of Cavalier Energy to develop its oil sands properties could be impacted by the 100 megatonne limit the Alberta government has imposed on GHG emissions from the oil sands sector.

CLIMATE CHANGE

The direct or indirect costs of laws, regulations and policies intended to address climate change and GHG emissions may have a material adverse effect on the Company's business, financial condition, results of operations and prospects. In addition, concerns about the potential impact of such laws, regulations and policies on the oil and gas industry may deter future investment. The timing and scope of such laws, regulations and policies, and their impact on the Company, can not be predicted with certainty.

HYDRAULIC FRACTURING

The Company utilizes horizontal, multi-stage hydraulic fracturing, and other technologies in its drilling and completion activities. Public concern over the hydraulic fracturing process has focused on a number of issues including the completion fluids used in the fracturing process and their potential effect on fresh water aquifers, the use and disposal of water in connection with fracturing operations and the potential for fracturing operations to contribute to low level seismic events (particularly in proximity to existing faults). The Canadian Association of Petroleum Producers, an industry group, has issued guidelines on hydraulic fracturing in shale gas and other tight gas or oil reservoirs.

Due to seismic activity reported in the Fox Creek area of Alberta in 2015, the Alberta Energy Regulator announced a number of seismic monitoring and reporting measures for fracturing operations in the Duvernay zone in this area. These include requirements to assess the potential for induced seismicity prior to operations, to have a response plan in place to address potential events and to suspend operations if a seismic event above a prescribed threshold occurs. The Alberta Energy Regulator continues to monitor seismic activity around the province and may extend these requirements to other areas if that is deemed to be necessary.

In British Columbia, the BC Oil and Gas Commission has completed two reports on seismic events related to fracturing and has imposed mitigation measures, including requirements to shut down operations if seismic activity reaches a certain threshold. In addition, the British Columbia government has appointed a three person panel to conduct a scientific review of hydraulic fracturing (including issues relating to induced seismicity), which review was to be completed by the end of 2018. The results of the review have not been published as of the date of this annual information form.

Regulations regarding the disposal of fluids used in Paramount's operations may increase the Company's costs of compliance or subject it to regulatory penalties or litigation. The safe disposal of the hydraulic fracturing fluids (including additives) and water recovered from oil and natural gas wells is subject to ongoing regulatory review by the federal and provincial governments, including its effect on fresh water supplies and the ability of such water to be recycled, amongst other things. While it is difficult to predict the impact of any regulations that may be enacted in response to such review, the implementation of stricter laws and regulations may increase the Company's costs of compliance.

If new regulations are enacted that impose new requirements for, or restrictions on, hydraulic fracturing, the Company may experience increases in its costs, and have its assets, operations and prospects negatively impacted.

SURFACE ACCESS

The development and exploration of natural gas, NGLs and oil reserves requires ongoing access to sites where wells are to be drilled and produced, and where gathering systems, pipelines and other facilities and infrastructure are to be constructed and operated. In recent years, the regulatory process for obtaining surface access rights for Crown land has become increasingly complex and time consuming, particularly in environmentally sensitive areas and where stakeholder consultation (including with aboriginal groups) is required. In addition, surface access rights may be granted subject to conditions that restrict operations to prescribed areas or times of year for various environmental reasons (including the protection of wildlife and wildlife habitat). There is a risk that certain areas may be completely closed to oil and gas activity due to environmental concerns. Road bans are frequently imposed during the spring breakup period and at other times because of wet conditions, snow, mud and rock slides, wild fires, wildlife migrations and other events, which can result in the Company being temporarily unable to access well sites and production facilities. If Paramount is unable to obtain required surface access rights on a timely basis, and on acceptable terms, or such access is restricted, interrupted or terminated, this could have a material adverse effect on the Company.

CONTROL OF OPERATIONS

Paramount does not operate all of its properties, and to the extent a third-party operator fails to conduct operations in a timely or proper manner, Paramount could be adversely affected.

ESSENTIAL EQUIPMENT AND PERSONNEL

Oil and natural gas exploration and development activities depend upon the availability of qualified personnel and drilling and related equipment. Shortages of qualified personnel or equipment may delay Paramount's exploration and development activities.

RESERVES ESTIMATES

The reserves information contained herein and in the McDaniel Report are only estimates and the actual production and ultimate recovery of oil, NGLs and natural gas from the Company's properties may be greater or less than such estimates prepared by McDaniel.

Estimates of oil, NGLs and natural gas reserves require numerous assumptions including, but not limited to, the price at which such commodities can be sold, the costs of recovering, processing, transporting and selling such commodities, the availability of enhanced recovery techniques and governmental and other regulatory factors, such as royalty rates, taxes and environmental laws. A change in one or more of these factors, or other factors, could result in quantities of natural gas, NGLs, and oil previously estimated as reserves becoming unrecoverable.

The McDaniel Report has been prepared using certain forecast commodity price assumptions (See "*Reserves and Other Oil and Gas Information - Reserves Information - Summary of Pricing and Inflation Rate Assumptions*"). If Paramount realizes lower prices for crude oil, NGLs and natural gas and they are substituted for the price assumptions utilized in the McDaniel Report, the present value of estimated future net revenues for the Company's reserves would be reduced and the reduction could be significant. A decline in the market price of oil, NGLs and natural gas to an amount that is less than the cost of recovering them at a particular location would make the production of the affected oil, NGLs and natural gas reserves commercially uneconomic.

The estimates contained herein and in the McDaniel Report are based in part on the timing and success of activities the Company intends to undertake in future years. The reserves and estimated future net revenues contained herein and in the McDaniel Report will be reduced in future years to the extent that such activities do not achieve the production performance set forth herein and in the McDaniel Report, do not occur or occur later than assumed in the McDaniel Report.

In addition, if estimates of reserves and the anticipated future net revenues associated with them are prepared by different independent engineers, or by the same engineers at different times, the results may vary substantially.

Furthermore, under IFRS, Paramount could be required to write-down the carrying value of its oil and natural gas properties if future oil, NGLs and natural gas oil prices become depressed, if cost estimates increase or if there are substantial downward revisions to Paramount's quantities of reserves. A write-down would result in a charge to net income and a reduction of shareholders' equity. Write-downs may also be required to be reversed if there is an increase in future oil, NGLs and natural gas oil prices, if cost estimates decrease or if there are substantial upward revisions to Paramount's quantities of reserves. Additional information on write-downs is included in the Company's audited consolidated financial statements and Management Discussion and Analysis for the year ended December 31, 2018, which can be found under the Company's profile on the SEDAR website at www.sedar.com.

THIRD PARTY CREDIT RISK

Paramount is exposed to third-party credit risk through its contractual arrangements, including in respect agreements with marketers and purchasers of its oil, NGLs and natural gas production, agreements with current and future joint venture partners, hedging arrangements and of its investments of cash and equivalents. If any of these third-parties fail or are unable to meet their contractual obligations to the Company, this could have a material adverse effect on the Company. In addition, poor credit conditions in the industry may affect a joint venture partner's willingness to participate in the Company's capital programs, potentially delaying such programs and impacting the results thereof.

INVESTMENT RISK

Paramount holds investments in the shares of both public and private entities. Any adverse change in the financial position, business or operations of the entities in which Paramount holds an investment may have a material adverse effect on the value of such investments. There is no assurance as to the ability of Paramount to sell these investments or the price it would receive if and when it chooses to sell such investments. Decreases in the value of Paramount's investments or the inability to sell investments could have a material adverse effect on the Company.

HEDGING, INTEREST RATES AND FOREIGN EXCHANGE RATES

The nature of Paramount's operations and capital structure exposes it to risks from fluctuations in commodity prices, foreign exchange rates and interest rates. Paramount monitors and, from time-to-time, utilizes derivative and/or physical forward delivery contracts to manage its exposure to these risks. Paramount could be required to make cash payments to settle outstanding contracts or lose the cost of derivative premiums paid. In addition, contracts with a fixed or ceiling price or rate could result in Paramount not receiving the full benefit of commodity price increases, changes in the value of the Canadian dollar or changes in interest rates. Paramount may suffer financial loss if it is unable to produce sufficient natural gas or oil to fulfill its obligations under commodity hedging arrangements, and may be required to pay royalties based on a market or reference price that is higher than the fixed or ceiling price under such arrangements. Paramount may also be required to pay margin calls under, or amounts to settle, derivative contracts. In addition, Paramount may be exposed to credit related losses in the event of non-performance by a counterparty to a derivative contract.

Changes in commodity prices and changes in the US$/CDN$ dollar exchange rate can have a material impact on the Company's revenues. Changes in market interest rates can have a material impact on interest expense related to any floating rate debt and the market value of any fixed rate debt outstanding from time to time. Changes in the US$/CDN$ dollar exchange rate may also impact the Company's Canadian dollar equivalent interest costs related to any US$ denominated debt outstanding from time to time and the principal amount of such debt, which may have a material impact on the Company's debt service costs and the cost of repaying principal amounts.

INFORMATION SECURITY

The Company's information technology systems are subject to cyber security risks. While the Company invests in security systems to prevent and detect inappropriate or illegal access to its key systems and regularly reviews its policies, procedures and protocols for data and system integrity, there can be no assurance that critical systems will not be breached or compromised. Targeted attacks on Paramount's systems (or on systems of third-parties that it relies on), the failure or non-availability of a key information technology system or a breach of security measures designed to protect Paramount's information technology systems could result in the theft, misuse, modification or destruction of information, including trade secrets and confidential business information, and cause disruptions to various systems and equipment (which could potentially include wells, production facilities or pipelines, creating risks of production loss, environmental damage and personal injury).

UNFORESEEN TITLE DEFECTS, EXPIRATION OF LICENSES AND LEASES, AND LAND CLAIMS

Unforeseen title defects may result in the loss of entitlement to production and reserves. The Company conducts title reviews in accordance with industry practice when it acquires oil and gas properties, however such reviews do not guarantee that an unforeseen defect in the chain of title will not arise and defeat the Company's title to the assets.

The Company's properties are held in the form of working interests in oil and gas licenses and leases. Failure to meet the rental, drilling and other requirements of such licenses or leases will result in their termination or expiry. To the extent Paramount fails, or is financially unable, to continue prospective oil and gas licenses this could have a material adverse effect on the Company.

Aboriginal groups have recognized aboriginal rights over a significant portion of Paramount's oil and gas properties. Accordingly, consultation with such groups is required in connection with Paramount's exploration and development activities, and in certain cases accommodations may be required for infringements of these aboriginal rights. In addition, there are outstanding claims to aboriginal title affecting areas in Northeast British Columbia and the Northwest Territories where Paramount's Liard Basin shale gas properties are located. If these claims are successful, it is possible that Paramount's interests in these properties could be adversely affected.

ROYALTY REGULATION

On several occasions over the past decade, the Governments of Alberta and British Columbia have amended their legislation governing Crown royalties paid by oil and natural gas producers. Any further changes to this legislation that increases royalties would reduce the Company's cash flow and earnings, and could make future capital investments, or the Company's operations and assets, less economic.

VANDALISM AND TERRORISM

Oil and gas industry participants, including Paramount, are a potential target for vandals and terrorists. The possibility that the Company's or third-party facilities or infrastructure may be direct targets of, or indirect casualties of, an act of vandalism or terrorism and the implementation of security measures as a precaution against such attacks may result in increased cost to the Company's business. If any of the Company's properties, wells, facilities or infrastructure or those of third-parties that the Company utilizes are the subject of a serious act of vandalism, or a terrorist attack, it may have a material adverse effect on the Company.

LITIGATION

In the normal course of Paramount's operations, the Company may become involved in, named as a party to, or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions. The outcome of outstanding, pending or future proceedings cannot be predicted with certainty and may be determined adversely to the Company and as a result, could have a material adverse effect on the Company. Even if Paramount prevails in any such legal proceedings, they could be costly and time-consuming and divert the attention of management and key personnel from the Company's core business operations.

CAVALIER ENERGY'S OIL SANDS AND CARBONATE BITUMEN PROPERTIES

Cavalier Energy's oil sands and carbonate bitumen properties are prospective for in-situ bitumen recovery development, but are at the early stages of their evaluation and development. Cavalier's properties currently have no production and there are no assurances that any of these properties will commence production, generate earnings, operate profitably or provide a return on investment at any time in the future. Any decision to develop any portion of Cavalier Energy's properties will be dependent on prevailing bitumen prices.

TRANSFER AGENT AND REGISTRAR

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

INTEREST OF EXPERTS

The Company's auditors are Ernst & Young LLP, Chartered Professional Accountants, Suite 2200, 215 – 2nd Street SW, Calgary, Alberta, T2P 1M4. Ernst & Young LLP is independent in accordance with the Rules of Professional Conduct of the Chartered Professional Accountants of Alberta.

Information relating to Paramount's reserves in this annual information form was prepared by McDaniel as an independent qualified reserves evaluator. The principals of McDaniel own beneficially, directly or indirectly, less than one percent of any class of Paramount's securities.

ADDITIONAL INFORMATION

Additional information relating to Paramount is available via the System for Electronic Document Analysis and Retrieval (SEDAR) at www.sedar.com.

Additional information, including directors' and officers' remuneration, principal holders of Paramount's securities, and options to purchase securities, is included in the information circular for Paramount's most recent annual meeting of shareholders that involves the election of directors. Additional financial information is contained in Paramount's audited consolidated financial statements and Management's Discussion and Analysis for the year ended December 31, 2018.

APPENDIX A
REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR

To the board of directors of Paramount Resources Ltd. (the "Company"):

1. We have evaluated the Company's reserves data as at December 31, 2018. The reserves data are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2018 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 31, 2018, and identifies the respective portions thereof that we have evaluated and reported on to the Company's Management:

Independent Qualified Reserves Evaluator	Effective Date of Evaluation Report	Location of Reserves	Net Present Value of Future Net Revenue - $M (before income taxes, 10% discount rate)			
			Audited	Evaluated	Reviewed	Total
McDaniel & Associates	December 31, 2018	Canada	-	4,134,307	-	4,134,307

6. In our opinion, the reserves 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 reserves data that we reviewed but did not audit or evaluate.
7. We have no responsibility to update our report referred to in paragraph 5 for events and circumstances occurring after the effective date of our report.
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 report referred to above:

MCDANIEL & ASSOCIATES CONSULTANTS LTD.

/s/ C.B. Kowalski, P. Eng
Vice President

Calgary, Alberta
March 6, 2019

APPENDIX B
REPORT OF MANAGEMENT AND DIRECTORS ON RESERVES DATA AND OTHER INFORMATION

Management of Paramount Resources Ltd. (the "Company") is responsible 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.

An independent qualified reserves evaluator has evaluated the Company's reserves data. The report of the independent qualified reserves evaluator will be filed with securities regulatory authorities concurrently with this report.

The 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 evaluator;

(b) met with the independent qualified reserves evaluator to determine whether any restrictions affected the ability of the independent qualified reserves evaluator to report without reservation; and

(c) reviewed the reserves data with management and the independent qualified reserves evaluator.

The Reserves Committee of the board of directors of the Company 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 Reserves Committee, approved:

(a) the content and filing with securities regulatory authorities of Form 51-101F1 containing the reserves data and other oil and gas information;

(b) the filing of Form 51-101F2 which is the report of the independent qualified reserves evaluator on the reserves data; and

(c) the content and filing of this report.

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

/s/ James H.T. Riddell
President and Chief Executive Officer

/s/ Bernard K. Lee
Executive Vice President, Finance and
Chief Financial Officer

/s/ R. Keith MacLeod
Director

/s/ John C. Gorman
Director

March 6, 2019

APPENDIX C
AUDIT COMMITTEE CHARTER

(Adopted by the Board of Directors on May 19, 2005 with revisions to and including September 14, 2017)

A. PURPOSE

The overall purpose of the Audit Committee (the "Committee") is to ensure that management of Paramount Resources Ltd. (the "Corporation") has designed and implemented an effective system of internal financial controls and disclosure controls and procedures, to review and report on the integrity of the consolidated financial statements of the Corporation and to review the Corporation's compliance with regulatory and statutory requirements as they relate to financial statements, taxation matters and disclosure of material facts.

B. COMPOSITION, PROCEDURES AND ORGANIZATION

1. The Committee shall consist of at least three members of the Board of Directors (the "Board") of the Corporation, all of whom shall be "independent", as that term is defined in Sections 1.4 and 1.5 of National Instrument 52-110, Audit Committees.

2. All of the members of the Committee shall be "financially literate" (i.e. able 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 those of the Corporation and that can be reasonably expected to be raised by the Corporation's financial statements).

3. The Board shall appoint the members of the Committee. The Board may at any time remove or replace any member of the Committee and may fill any vacancy in the Committee.

4. Unless the Board shall have appointed a chair of the Committee, the members of the Committee shall elect a chair from among their members.

5. The Corporate Secretary of the Corporation shall be the secretary of the Committee, unless otherwise determined by the Committee.

6. The quorum for meetings shall be a majority of the members of the Committee, present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak and to hear each other.

7. The Committee shall have access to such officers and employees of the Corporation and to the Corporation's external auditors, and to such information respecting the Corporation, as it considers necessary or advisable in order to perform its duties and responsibilities.

8. Meetings of the Committee shall be conducted as follows:

    (a) the Committee shall meet at least four times annually at such times and at such locations as may be requested by the chair of the Committee. The external auditors, the Chief Executive Officer or any member of the Committee may request a meeting of the Committee;

    (b) the external auditors shall receive notice of and have the right to attend all meetings of the Committee;

    (c) the following management representatives shall be invited to attend all meetings, except executive sessions and private sessions with the external auditors:

President and Chief Executive Officer
Chief Financial Officer
Controller
Corporate Secretary

(d) other management representatives shall be invited to attend as necessary or desirable

(e) as necessary or desirable but in any case at least quarterly, the Committee will meet with members of management and representatives of the external auditors, in separate executive sessions to discuss any matters that the Committee or any of these groups believes should be discussed privately; and

(f) the Committee shall meet in camera, without management, during or after any Committee meeting.

9. The external auditors shall report directly to the Committee and the external auditors and internal auditors (if any) shall have a direct line of communication to the Committee through its chair and may bypass management if deemed necessary. The Committee, through its chair, may contact directly any employee of the Corporation as it deems necessary, and any employee may bring before the Committee any matter involving questionable, illegal or improper financial practices or transactions.

10. The Committee may retain, at the Corporation's expense, special legal, accounting or other consultants or experts it deems necessary in the performance of its duties and may set and pay the compensation for any advisor engaged. The Committee will notify the Chairman of the Corporate Governance Committee whenever independent consultants are engaged.

C. ROLES AND RESPONSIBILITIES

1. The overall duties and responsibilities of the Committee shall be as follows:

(a) to assist the Board in the discharge of its responsibilities relating to the Corporation's accounting principles, reporting practices and internal controls and its approval of the Corporation's annual and quarterly consolidated financial statements and management's discussion and analysis;

(b) to establish and maintain a direct line of communication with the Corporation's internal (if any) and external auditors and assess their performance;

(c) to ensure that the management of the Corporation has designed, implemented and is maintaining an effective system of internal financial controls and disclosure controls and procedures;

(d) to periodically review the audit and non-audit services pre-approval policy and recommend to the Board any changes which the Committee deems appropriate;

(e) to periodically consider whether there is a need to outsource internal audit functions or create an internal audit department;

(f) to receive and review complaints received pursuant to the Corporation's Whistleblower Policy and oversee and provide direction on the investigation and resolution of such concerns and to periodically review the said policy and recommend to the Board changes which the Committee may deem appropriate;

(g) to report regularly to the Board on the fulfillment of its duties and responsibilities;

(h) to identify and monitor the management of the principal risks that could impact the financial reporting of the Corporation; and

(i) review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Corporation.

2. The duties and responsibilities of the Committee as they relate to the external auditors shall be as follows:

(a) to be directly responsible for overseeing the work of the external auditors engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Corporation, including the resolution of disagreements between management and the external auditors regarding financial reporting;

(b) to recommend to the Board a firm of external auditors to be nominated for appointment by the shareholders of the Corporation, and to monitor and verify the independence of such external auditors;

(c) to review and approve the fee, scope and timing of the audit and other related services rendered by the external auditors;

(d) review the audit plan of the external auditors prior to the commencement of the audit;

(e) to review with the external auditors, upon completion of their audit:

(I) contents of their report;

(II) scope and quality of the audit work performed;

(III) adequacy of the Corporation's financial and auditing personnel;

(IV) co-operation received from the Corporation's personnel during the audit;

(V) internal resources used;

(VI) significant transactions outside of the normal business of the Corporation;

(VII) significant proposed adjustments and recommendations for improving internal accounting controls, accounting principles or management systems; and

(VIII) the non-audit services provided by the external auditors, as pre-approved pursuant to the audit and non-audit services pre-approval policy;

(f) to discuss with the external auditors the quality and not just the acceptability of the Corporation's accounting principles;

(g) to review any unresolved issues between management and the external auditors that could affect the financial reporting or internal controls of the Corporation; and

(h) to implement structures and procedures to ensure that the Committee meets the external auditors on a regular basis in the absence of management.

3. The duties and responsibilities of the Committee as they relate to the internal control procedures of the Corporation are to:

   (a) review the appropriateness and effectiveness of the Corporation's policies and business practices which impact on the financial integrity of the Corporation, including those relating to insurance, accounting, information services and systems and financial controls, management reporting and risk management;

   (b) review compliance under the Corporation's Code of Business Conduct Policy with those matters addressed in the policy which affect the financial integrity of the Corporation and to periodically review this policy and recommend to the Board changes which the Committee may deem appropriate; and

   (c) periodically review the Corporation's financial and auditing procedures and the extent to which recommendations made by the internal accounting staff or by the external auditors have been implemented.

4. The Committee is also charged with the responsibility to:

   (a) review and recommend to the Board for its approval, the Corporation's and its subsidiaries, partnerships and joint venturers, as applicable, annual financial statements, management's discussion and analysis, annual information form and annual earnings press releases before the Corporation publicly discloses this information;

   (b) review and approve the Corporation's and its subsidiaries, partnerships and joint venturers, as applicable, interim financial statements, interim management's discussion and analysis including the impact of unusual items and changes in accounting principles and estimates and report to the Board in due course with respect thereto and to review and approve the Corporation's interim earnings press releases before the Corporation publicly discloses this information;

   (c) review and approve the financial sections of:

      (I) the annual report to shareholders;

      (II) the annual information form;

      (III) prospectuses;

      (IV) other public reports requiring approval by the Board; and

      (V) press releases related thereto,

   and report to the Board with respect thereto;

   (d) review regulatory filings and decisions as they relate to the Corporation's consolidated financial statements;

   (e) review the appropriateness of the policies and procedures used in the preparation of the Corporation's consolidated financial statements and other required disclosure documents, and consider recommendations for any material change to such policies;

   (f) review and report on the integrity of the Corporation's consolidated financial statements;

   (g) review the minutes of any audit committee meeting of any subsidiary of the Corporation;

(h) review with management, the external auditors and, if necessary, with legal counsel, any litigation, claim or other contingency, including tax assessments that could have a material effect upon the financial position or operating results of the Corporation and the manner in which such matters have been disclosed in the consolidated financial statements;

(i) review the Corporation’s compliance with regulatory and statutory requirements as they relate to financial statements, tax matters and disclosure of material facts; and

(j) develop a calendar of activities to be undertaken by the Committee for each ensuing year related to the Committee’s duties and responsibilities as set forth in this Charter and to submit the calendar in the appropriate format to the Board within a reasonable period of time following each annual general meeting of shareholders.

D. ANNUAL REVIEW AND ASSESSMENT

The Committee shall conduct an annual review and assessment of its performance, including compliance with this Charter and its role, duties and responsibilities, and submit such report to the Board.