



ANNUAL INFORMATION FORM

For the Year Ended December 31, 2018

March 13, 2019

TABLE OF CONTENTS

GLOSSARY OF ABBREVIATIONS AND ADVISORIES.....	2
FORWARD-LOOKING STATEMENTS	3
CORPORATE STRUCTURE	5
Name, Address and Incorporation	5
Intercorporate Relationships.....	5
GENERAL DEVELOPMENT OF THE BUSINESS	5
Overview	5
Material Activities in 2016, 2017 and 2018.....	5
Description of Oil and Gas Properties	7
INDUSTRY CONDITIONS	10
Competition.....	10
Seasonality	10
Environmental Regulation.....	11
Personnel	11
Specialized Skills and Knowledge	11
Bankruptcies and Reorganizations	11
STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION.....	11
Presentation of Oil and Gas Information.....	11
Definitions and Notes to Reserve Data Tables	11
Reserves Data in Respect of Pine Cliff	13
PART 1 – DATE OF STATEMENT	14
PART 2 – DISCLOSURE OF RESERVE DATA	15
PART 3 – PRICING ASSUMPTIONS.....	17
PART 4 – RECONCILIATION OF CHANGES IN RESERVES.....	18
PART 5 – ADDITIONAL INFORMATION RELATED TO RESERVE DATA	19
PART 6 – OTHER OIL AND GAS INFORMATION	21
MINING ASSETS.....	25
RISK FACTORS	26
Risks Related to the Oil and Natural Gas Industry.....	26
Risk Factors Related to Pine Cliff	37
DIVIDENDS	40
DESCRIPTION OF SHARE CAPITAL	40
General Description of Share Capital	40
Common Shares	41
Preferred Shares.....	41
MARKET FOR SECURITIES.....	41
PRIOR SALES.....	41
DIRECTORS AND OFFICERS.....	42
CONFLICTS OF INTEREST	43
LEGAL PROCEEDINGS	44
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	44
TRANSFER AGENT AND REGISTRAR	44
MATERIAL CONTRACTS	44
INTERESTS OF EXPERTS.....	44
AUDIT COMMITTEE INFORMATION	45
ADDITIONAL INFORMATION	46
APPENDIX “A”	47
APPENDIX “B”	49
APPENDIX “C”	50

GLOSSARY OF ABBREVIATIONS AND ADVISORIES

Oil and Gas Abbreviations

Bbl	barrel	Mcf	thousand cubic feet
Bbl/d	barrels per day	Mcf/d	thousand cubic feet per day
Boe	barrel of oil equivalent	Mcfe	thousand cubic feet of natural gas equivalent
Boe/d	barrels of oil equivalent per day	MMBtu	million British thermal units
CBM	coal bed methane	MMcf	million cubic feet
GJ	gigajoule	M\$	thousands of dollars
MBbl	thousand barrels	NGLs	Natural gas liquids, including condensate, propane, butane and ethane
MBoe	thousand barrels of oil equivalent		

Other Abbreviations

AECO	physical storage and trading hub for natural gas on the TransCanada Alberta transmission system which is the delivery point for various benchmark Alberta index prices
WTI	West Texas Intermediate oil at Cushing, Oklahoma, the benchmark for North American crude oil pricing

Conversion and Units

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

To Convert From	To	Multiply By
Mcf	Cubic metres	28.174
Cubic metres	Cubic feet	35.494
GJ	Mcf	1.05
MMBtu	Mcf	0.95
MMBtu	GJ	1.054
Bbl	Cubic metres	0.159
Cubic metres	Bbl	6.290
Feet	Metres	0.305
Metres	Feet	3.281
Miles	Kilometres	1.609
Kilometres	Miles	0.621
Acres	Hectares	0.405
Hectares	Acres	2.471

In this annual information form (“**Annual Information Form**”) where amounts are expressed on a Boe basis, natural gas volumes have been converted to oil equivalence at six Mcf per one Bbl. The term Boe may be misleading, particularly if used in isolation. Natural gas liquids and oil volumes are recorded in Bbl and are converted to Mcfe using a ratio of six (6) thousand cubic feet to one Bbl of oil. The term Mcfe may be misleading, particularly if used in isolation. These conversion ratios are based on an energy equivalency conversion method primarily applicable at the burner tip and do not represent a value equivalency at the wellhead. Unless otherwise specified, references to oil include NGLs.

Where any disclosure of reserves data is made in this Annual Information Form that does not reflect all of the reserves of Pine Cliff Energy Ltd. (“**Pine Cliff**” or the “**Company**”) the reader should note that the estimates of reserves and future net revenue for individual properties or groups of properties may not reflect the same confidence level as estimates of the reserves and future net revenue for all properties, due to the effects of aggregation.

Non-GAAP Measures

This Annual Information Form uses the term “operating netback” which is not recognized under Generally Accepted Accounting Principles (“GAAP”) and may not be comparable to similar measures presented by other companies. The Company considers operating netback to be a key indicator of profitability relative to current commodity prices. Operating netback and operating netback per Boe and per Mcfe are calculated as oil and gas sales, less royalties and operating expenses on an absolute and a per Boe or per Mcfe basis, respectively. Management uses operating netback on a per Boe basis in operational and capital allocation decisions.

Currency

In this Annual Information Form, unless otherwise noted, all dollar amounts are expressed in Canadian dollars.

FORWARD-LOOKING STATEMENTS

This Annual Information Form contains forward-looking statements. These statements relate to future events or Pine Cliff’s future performance. All statements other than statements of historical fact may be forward-looking statements. In some cases, forward-looking statements can be identified by terminology such as “may”, “will”, “should”, “expect”, “plan”, “anticipate”, “believe”, “estimate”, “predict”, “potential”, “continue”, or the negative of these terms or other comparable terminology. These statements are only predictions. Actual events or results may differ materially. In addition, this Annual Information Form may contain forward-looking statements attributed to third party industry sources. Undue reliance should not be placed on these forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur. Forward-looking statements in this Annual Information Form include, but are not limited to, statements with respect to:

- the quantity and quality of the oil and natural gas, and mineral reserves;
- the performance and characteristics of Pine Cliff’s oil and natural gas properties;
- future development and exploration activities and the timing thereof;
- future land expiries;
- results of various projects of Pine Cliff;
- timing of receipt of regulatory approvals;
- timing of development of undeveloped reserves;
- the tax horizon and taxability of Pine Cliff;
- supply and demand for oil, NGLs, natural gas and minerals (including precious metals);
- expectations regarding the Company’s ability to raise capital and to continually add to reserves through acquisitions and development;
- the timing and amount of abandonment and reclamation costs;
- the impact of Canadian federal and provincial governmental regulation on Pine Cliff relative to other natural resource issuers of similar size;
- realization of the anticipated benefits of acquisitions and dispositions;
- weighting of production between different commodities;
- projections of commodity and minerals prices and costs;
- expected levels of royalty rates, operating costs, general and administrative costs, costs of services and other costs and expenses;
- capital expenditure programs and the timing and method of financing thereof; and
- treatment under government regulation and taxation regimes.

Although Pine Cliff believes that the expectations reflected in the forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. Pine Cliff cannot guarantee future results, levels of activity, performance, or achievements. Moreover, neither Pine Cliff nor any other person assumes responsibility for the outcome of the forward-looking statements. Many of the risks and other factors are beyond Pine Cliff's control, which could cause results to differ materially from those expressed in the forward-looking statements contained in this Annual Information Form. The risks and other factors include, but are not limited to:

- general economic conditions in Canada, the United States and globally, including reduced availability of debt and equity financing generally;
- industry conditions, including fluctuations in the price of oil, NGLs, natural gas and minerals (including precious metals);
- liabilities inherent in oil, natural gas and mineral operations;
- governmental regulation of the oil and gas, and mining industries, including environmental regulation;
- fluctuation in foreign exchange or interest rates;
- geological, technical, drilling and processing problems and other difficulties in producing reserves;
- unanticipated operating events which can reduce production or cause production to be shut in or delayed;
- failure to realize anticipated benefits of acquisitions;
- failure to obtain industry partner and other third party consents and approvals, when required;
- stock market volatility and market valuations;
- competition for, among other things, capital, acquisitions or reserves, undeveloped land and skilled personnel;
- competition for and inability to retain drilling rigs, production equipment and other services;
- rights to surface access;
- the need to obtain required approvals from regulatory authorities; and
- the other factors considered under "Risk Factors" in this Annual Information Form.

These factors should not be considered as exhaustive. Statements relating to "reserves" or "resources" are by their nature forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the resources and reserves described can be profitably produced in the future. With respect to forward-looking statements contained in this Annual Information Form, Pine Cliff has made assumptions regarding: future exchange rates; the impact of increasing competition; conditions in general economic and financial markets; availability of drilling and related equipment; availability of skilled labour; current technology; cash flow; production rates; timing and amount of capital expenditures; the prices and marketability of oil, NGLs, natural gas; royalty rates; effects of regulation by governmental agencies; future operating costs; and the Company's ability to obtain financing on acceptable terms. Readers are cautioned that the foregoing list of factors is not exhaustive.

The above summary of assumptions and risks related to forward-looking information has been provided in this Annual Information Form in order to provide readers with a more complete perspective on Pine Cliff's future operations. Readers are cautioned that this information may not be appropriate for other purposes.

The forward-looking statements contained in this Annual Information Form are expressly qualified by this cautionary statement. Pine Cliff is not under any duty to update or revise any of the forward-looking statements and does not intend to do so except as expressly required by applicable securities laws.

CORPORATE STRUCTURE

Name, Address and Incorporation

Pine Cliff Energy Ltd. ("**Pine Cliff**" or the "**Company**") was incorporated under the *Business Corporations Act* (Alberta) (the "**ABCA**") on November 10, 2004, by Certificate of Incorporation issued pursuant to the provisions of the ABCA, under the name "Pine Cliff Energy Ltd." Effective January 1, 2011, Pine Cliff amalgamated with its wholly-owned subsidiary, CanAmericas Energy Ltd., and its indirect wholly-owned subsidiary, CanAmericas (Chile) Energy Ltd., pursuant to the provisions of the ABCA. On October 1, 2013, Pine Cliff amalgamated with its wholly-owned subsidiary Skope Energy Inc. ("**Skope Energy**") pursuant to the provisions of the ABCA and, immediately prior to such amalgamation, Skope Energy amalgamated with its wholly-owned subsidiary Skope Energy International Inc. Where applicable, references to the "**Company**" and "**Pine Cliff**" in this Annual Information Form shall mean Pine Cliff, together with its direct and indirect subsidiaries.

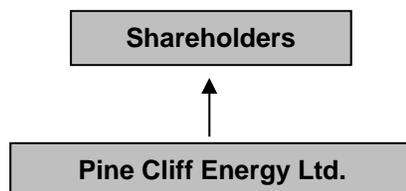
Pine Cliff is a "reporting issuer" in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and New Brunswick.

On March 3, 2016, Pine Cliff was listed on the Toronto Stock Exchange ("**TSX**") and de-listed from the TSX Venture Exchange ("**TSXV**"). The common shares of the Company ("**Common Shares**") are listed on the TSX under the symbol "PNE".

Pine Cliff's registered and head office is located at Suite 850, 1015 - 4th Street S.W., Calgary, Alberta T2R 1J4.

Intercorporate Relationships

The following diagram sets forth the organizational structure of Pine Cliff, which does not have any material subsidiaries as of the date hereof:



GENERAL DEVELOPMENT OF THE BUSINESS

Overview

Pine Cliff is an Alberta-based corporation primarily engaged in the business of exploration for, and acquisition, development and production of oil, natural gas and NGLs in the Western Canadian Sedimentary Basin (the "**WCSB**"). In order to create value for the holders of Common Shares ("**Shareholders**"), Pine Cliff is pursuing an integrated growth strategy that includes both development and exploration drilling as well as acquisitions.

Through its nonmaterial wholly-owned subsidiary, Geomark Exploration Ltd. ("**Geomark**"), Pine Cliff also owns interests in lands that are prospective for the exploration of precious metals located in Ontario, the Northwest Territories and Nunavut, all in Canada and Utah, United States.

Material Activities in 2016, 2017 and 2018

Year ended December 31, 2016

On June 30, 2016, the Company closed a disposition of its fee title land and other minor overriding royalty interests (the "**Royalty Assets**") for cash consideration of \$25 million, prior to any closing adjustments (the "**Royalty Assets Disposition**"). The Royalty Assets Disposition had an effective date of June 1, 2016 and included 99,930 net fee title acres.

On August 10, 2016, Pine Cliff completed a private placement of an aggregate of 30,000 units to the Alberta Investment Management Corporation (the "**2016 Private Placement**"), on behalf of certain of its clients, at a price of \$1,000 per unit ("**2016 Unit**") for aggregate gross proceeds of \$30 million. Each 2016 Unit is comprised of: (i) one promissory note with a par value of \$1,000 per Note and bearing interest at 6.75% per annum (collectively the "**\$30 Million 2020 Notes**"), which is payable semi-annually; and (ii) 150 Common Share purchase warrants (the "**2016 Warrants**"). The proceeds from the 2016 Private Placement were used to reduce bank indebtedness.

The \$30 Million 2020 Notes mature on September 30, 2020 and all or a portion of the principal amount outstanding thereunder can be repaid without penalty after August 10, 2017. Pine Cliff issued 4.5 million 2016 Warrants in connection with the 2016 Private Placement, with each 2016 Warrant entitling the holder to purchase one Common Share for \$1.38 until August 10, 2018, which reflected a 45% premium to the 10-day weighted average trading price of the Common Shares prior to, and including, the date of closing of the 2016 Private Placement. All of the 2016 Warrants expired without being exercised.

On August 10, 2016, the Company entered into a restated credit agreement with its banking syndicate for a \$85 million revolving credit facility, consisting of a \$75 million revolving credit facility and a \$10 million revolving operating facility (collectively, the "**2016 Credit Facility**"). The 2016 Credit Facility had a 364 day revolving period maturing July 28, 2017 and if it is not renewed it would have converted to a one day term loan due on July 29, 2017. The 2016 Credit Facility was renewed in 2017.

On December 7, 2016, the Company closed a disposition of non-core oil assets (the "**Oil Assets**") for \$31.6 million, prior to any closing adjustments (the "**Oil Asset Disposition**"), consisting of approximately \$26.7 million in cash and approximately \$4.9 million in TSX-listed common shares of the purchaser. The Oil Asset Disposition included approximately 500 barrels of oil equivalent per day of production weighted 94% to oil. The Oil Asset Disposition had an effective date of November 1, 2016 with the net proceeds used to pay down bank indebtedness. As a result of the Oil Asset Disposition, the 2016 Credit Facility was reduced to \$60 million, consisting of a \$50 million revolving credit facility and a \$10 million revolving operating facility.

Year ended December 31, 2017

On April 12, 2017, the Company entered into a restated credit agreement for a \$45 million revolving credit facility, consisting of a \$35 million revolving credit facility and a \$10 million revolving operating facility (collectively, the "**2017 Credit Facility**") and reduced the banking syndicate from five to four Canadian financial institutions. The Credit Facility had a 364 day revolving period maturing July 27, 2018, and if it is not renewed it would have converted to a one day term loan due on July 28, 2018. The 2017 Credit Facility was renewed in 2018.

On November 24, 2017, the 2017 Credit Facility was amended to consist of a \$30 million revolving credit facility and a \$15 million revolving operating facility.

Year ended December 31, 2018

On July 13, 2018, Pine Cliff completed a private placement of an aggregate of 19,000 units to the Alberta Investment Management Corporation (the "**2018 Private Placement**"), on behalf of certain of its clients, at a price of \$1,000 per unit ("**2018 Unit**") for aggregate gross proceeds of \$19 million. Each 2018 Unit is comprised of: (i) one promissory note with a par value of \$1,000 per Note and bearing interest at 7.05% per annum (collectively the "**\$19 Million 2022 Notes**"), which is payable semi-annually; and (ii) 150 Common Share purchase warrants ("**2018 Warrants**"). The proceeds from the 2018 Private Placement were used to reduce bank indebtedness.

The \$19 Million 2020 Notes mature on July 31, 2022 and all or a portion of the principal amount outstanding thereunder can be repaid without penalty after three years. Pine Cliff issued 2.85 million 2018 Warrants in connection with the 2018 Private Placement, with each 2018 Warrant entitling the holder to purchase one Common Share for \$0.51 until July 13, 2021, which reflected a 45% premium to the 10-day weighted average trading price of the Common Shares prior to, and including, the date of closing of the 2018 Private Placement.

On July 13, 2018, the Company entered into a restated credit agreement with its banking syndicate for an \$11 million revolving credit facility, consisting of a \$6 million revolving credit facility and a \$5 million revolving operating facility (collectively, the "**2018 Credit Facility**") and reduced the banking syndicate from four to three Canadian financial institutions. The 2018 Credit Facility has a 364 day revolving period maturing July 27, 2019 and if it is not renewed it will have convert to a one day term loan due on July 28, 2019.

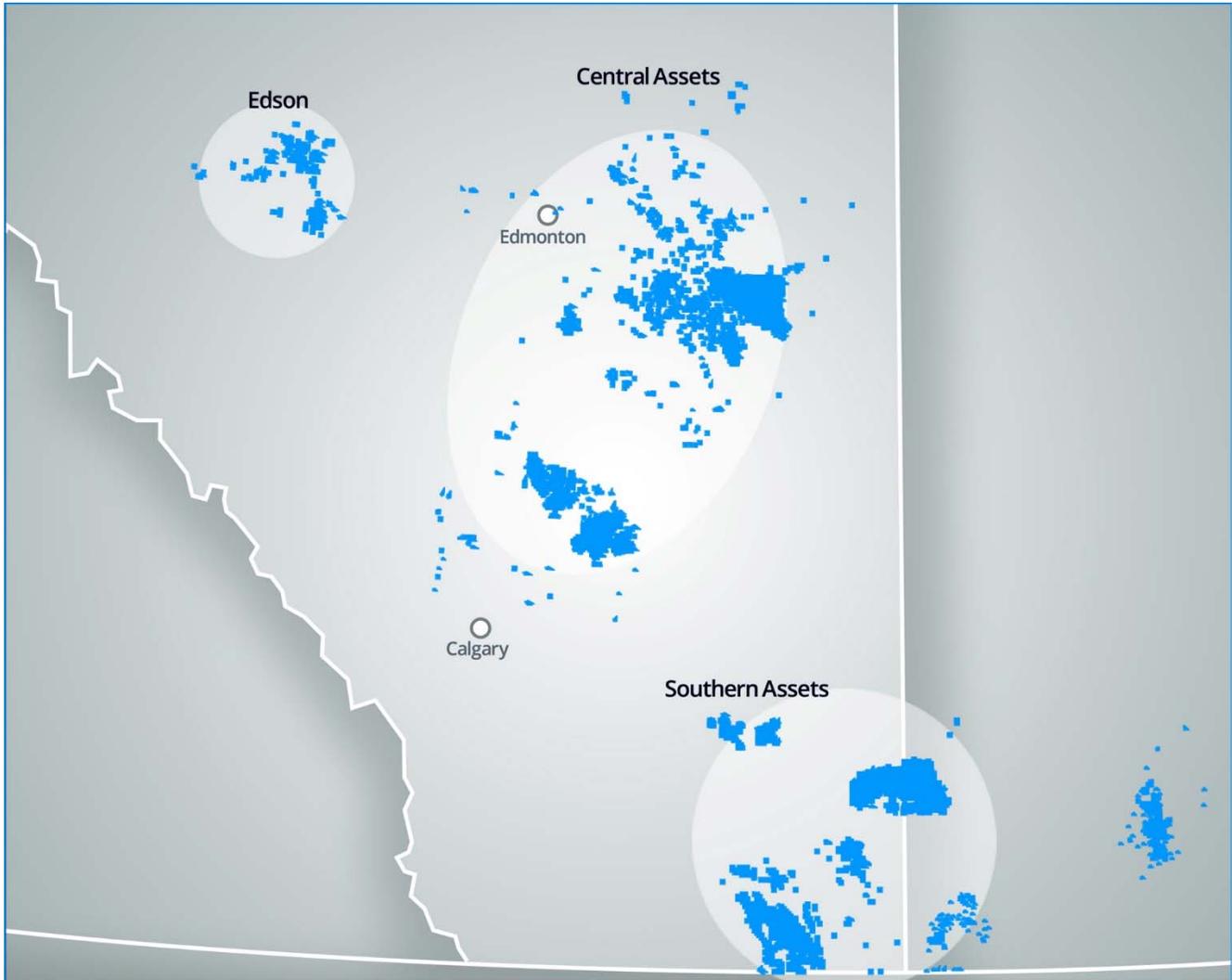
On July 29, 2016, the Company issued \$5.0 million in promissory notes maturing on July 29, 2018. On July 13 2018, these notes were amended to mature on September 30, 2020 and increased to \$6.0 million ("**\$6 Million 2020 Related Party Note**"). The \$6 Million 2020 Related Party Note bears interest at 0.25% less than the monthly average effective interest rate paid on the 2018 Credit Facility, payable monthly. The \$6 Million 2020 Note was issued to the Company's Chairman of the Board. The \$6 Million 2020 Note is secured by a \$6.0 million floating charge debenture over all of the Company's assets and is subordinated to any and all claims in favor of the 2018 Credit Facility and the \$30 Million 2020 Note and \$19 Million 2022 Note holders.

On July 29, 2016, the Company issued \$6.0 million in promissory notes maturing on July 29, 2018. On July 13 2018, these notes were amended to mature on September 30, 2020 ("**\$6 Million 2020 Notes**"). The \$6 Million 2020 Notes bear interest at 0.25% less than the monthly average effective interest rate paid on the 2018 Credit Facility, payable monthly. The \$6 Million 2020 Notes were issued to a shareholder and a relative of that shareholder, owning directly or by discretion and control, greater than 10% of the Common Shares. The \$6 Million 2020 Notes are secured by a \$6.0 million floating charge debenture over all of the Company's assets and are subordinated to any and all claims in favor of the 2018 Credit Facility and the \$30 Million 2020 Note and \$19 Million 2022 Note holders.

Description of Oil and Gas Properties

Pine Cliff's oil and gas properties at December 31, 2018 are located in Alberta and Saskatchewan where the Company operates or has ownership in facilities and other installations necessary to produce, transport and sell oil, natural gas and NGLs. A description of Pine Cliff's oil and gas properties and infrastructure is set out below.

The following map outlines the location of Pine Cliff's assets:



Central Alberta Assets

Pine Cliff owns high working interest, low-cost production with a long reserve life in the Ghost Pine and Viking areas of Central Alberta (the “**Central Alberta Assets**”). Pine Cliff has an 81% working interest in its Central Alberta Assets and operates 95% of the production.

Ghost Pine

Pine Cliff's Ghost Pine assets are located near the Town of Drumheller, Alberta and produce 89% natural gas. Ghost Pine production is from the late Cretaceous Horseshoe Canyon Edmonton group to the liquids rich Mannville and Mississippian formations. Pine Cliff owns and operates a majority of the infrastructure in this area including two licensed gas plants, numerous large nodal compressor stations and extensive gathering and sales pipeline networks.

Drilling and recompletion development in the Ghost Pine area is primarily focused on exploitation of many different productive intervals from surface to the base of the Mississippian. Pine Cliff owns, or has license rights to, 420 square kilometers of 3D and 813 kilometers of 2D seismic on its Central Alberta assets. Through analysis of this seismic, Pine Cliff identified 19 gross (15.8 net) horizontal Pekisko and Basal Quartz oil drilling opportunities with 3 gross (2.5 net) future drilling locations recognized in the Pine Cliff Reserve Report, as defined herein. In the fourth quarter of 2018, Pine Cliff drilled 1 gross (1.0 net) well targeting the Pekisko formation that was brought onto production in January 2019. Pine Cliff

currently plans on drilling an additional 1 gross (0.6 net) Pekisko oil well in 2019. Additionally, Pine Cliff has identified several development prospects in the Mannville formation for both liquids rich gas and oil.

Viking

Pine Cliff's Viking assets are located near the town of Viking, Alberta and produce 99% natural gas. The majority of this production comes from the Viking shore face sands composed of fine to coarse grained sandstone with inter-beds of conglomerate and cherty conglomeratic sandstone. There is upside potential in the Colorado shale which is a deep water siltstone equivalent to the Cardium shore face found in Western Alberta.

Development and production activities in the Viking area at this time are primarily directed toward exploitation and maintaining production. Pine Cliff has identified 138 gross (138.0 net) potential horizontal drilling opportunities in the Cardium Siltstone for which 24 gross (24.0 net) locations are recognized in the Pine Cliff Reserve Report. Pine Cliff controls most of the infrastructure in this area, including one licensed sweet gas plant, numerous large nodal compressor stations and an extensive gathering and sales pipeline network.

Southern Alberta and Southern Saskatchewan

Pine Cliff owns long-term, low decline producing shallow gas assets in Southern Alberta and Saskatchewan referred to as the Southern Assets. Pine Cliff has an 80% working interest in the Southern Assets and is the operator of 62% of the Company's production in the area.

The majority of the producing zones in these properties are from the upper Cretaceous Milk River, Medicine Hat and Second White Specks sands. These fields are characterized by their shallow depths and low-permeability clay-rich sands. The formations occur in broad sheet-like sands that are laterally extensive and have been regarded by many as offshore sands. Underlying structures create fracturing which enhances permeability in these shallow horizons.

Hatton

Pine Cliff's Hatton assets are located near the Town of Maple Creek, Saskatchewan and produce natural gas. Development and production activities in the Hatton area at this time are primarily directed toward exploitation and maintaining production. Pine Cliff controls most of the infrastructure in this area, which includes a gas gathering system and a major compressor station that delivers to a TransGas pipeline.

Many Islands/Long Valley

The Many Islands/Long Valley area is located east of the City of Medicine Hat, Alberta and produce natural gas. Development and production activities in the Many Islands/Long Valley area at this time are primarily directed toward exploitation and maintaining production. Pine Cliff controls most of the infrastructure in this area, which includes a gas gathering system, two field compressors and a 100% interest in a gas plant that delivers to a TransCanada pipeline. In 2017, Pine Cliff purchased 100% interest in a National Energy Board regulated sales gas export pipelines that permit Pine Cliff to transport Alberta produced gas to Saskatchewan.

Pendor/Black Butte

The Pendor/Black Butte area is located approximately 80 kilometers southwest of the City of Medicine Hat, Alberta and produces natural gas. Development and production activities in the Pendor/Black Butte area at this time are primarily directed toward exploitation and maintaining production. Pine Cliff controls most of the infrastructure in this area which includes a gas gathering system, two gas processing facilities and a 100% interest in a National Energy Board regulated sales gas export pipeline terminating in Montana, United States.

Tilley/Monogram

The Tilley/Monogram area is located approximately 40 kilometers northwest of the City of Medicine Hat, Alberta and produces natural gas. Development and production activities in the Tilley/Monogram area are currently directed toward

exploitation and maintaining production. Pine Cliff controls most of the infrastructure in the Monogram area, which includes a gas gathering system, one field compressor and a 90% interest in a gas plant that delivers to a third party pipeline that transports our gas to Saskatchewan. Tilley is not operated by Pine Cliff.

Eagle Butte

The Eagle Butte area is located approximately 24 kilometers southeast of the City of Medicine Hat, Alberta and produces natural gas. Development and production activities in the Eagle Butte area are currently directed towards exploitation and maintaining production. Pine Cliff controls most of the infrastructure in this area, which includes a gas gathering system, two field compressors and a 100% interest in a gas plant that delivers to a TransCanada pipeline.

Edson

Pine Cliff owns assets located near the town of Edson in Western Central Alberta, which produce liquids rich natural gas as well as a small amount of oil (the "**Edson Assets**"). Pine Cliff has a 42% average working interest in the Edson Assets and is the operator of approximately 39% of the Company's production in the area. The Edson Assets have multi-zone potential which can be further exploited using horizontal drilling technology.

Pine Cliff's acreage in the area is productive primarily from sands belonging to the middle Jurassic Rock Creek formation and the Lower Cretaceous Lower Manville Ellerslie. Secondary zones of interest in the area include sands belonging to the, Viking, Wilrich, Bluesky, Gething and Notikewin formations. Pine Cliff has identified 56 gross (13.6 net) potential drilling locations primarily in the liquids rich Gething, Willrich and Notekewin formations. In 2018, Pine Cliff drilled 6 gross (0.7 net) wells targeting the Gething formation.

The Rock Creek sands are interpreted to have been deposited in a shallow marine shelf environment where lateral thickness variations may be the result of paleotopographic variability or changes in depositional environment. The reservoir sands are comprised of fine to medium grained sands and siltstones, average approximately six metres in thickness and are encountered at an average drill depth of 2,425 m.

Unconformable overlying the Fernie Shale are the Lower Manville (basal quartz) equivalent sands. Derived from the Rocky Mountains to the west, these chert-rich sands were deposited by the northerly flowing Spirit River Channel system. The trapping mechanism for all the reservoirs in the Edson Assets is largely stratigraphic.

Non-core Areas

At December 31, 2018, Pine Cliff also has working interests in non-operated properties in the Sundance, Carstairs, Garrington and Harmattan areas of Alberta and the Cadillac area of Southern Saskatchewan, but does not consider any of these assets to be core areas of the Company at this time.

INDUSTRY CONDITIONS

Competition

The oil and natural gas industry is competitive in all the respective phases. Pine Cliff competes with numerous other participants in the search acquisition and exploitation of, oil and natural gas properties and in the production and marketing of oil and natural gas. Pine Cliff's competitors include resource companies which have greater financial resources, staff and facilities than those of Pine Cliff which could give them a competitive advantage. Competitive factors in the distribution and marketing of oil and natural gas include price, and methods and reliability of delivery. Pine Cliff believes that its competitive position is equivalent to that of companies of similar size and at a similar stage of development. See "*Risk Factors*".

Seasonality

The exploration for, and development of, oil and natural gas reserves is dependent on access to areas where production is to be conducted. Seasonal weather variations, including freeze-up and break-up, affect access and operational efficiencies in certain circumstances.

Environmental Regulation

The oil and natural gas industry is currently subject to environmental regulations pursuant to a variety of municipal, provincial and federal legislation. Compliance with such legislation can require significant expenditures or result in operational restrictions. Breach of such requirements may result in suspension or revocation of necessary licenses and authorizations, civil liability for pollution damage and the imposition of material fines and penalties, all of which might have a significant negative impact on earnings and overall competitiveness. See *“Risk Factors”*.

Personnel

As at December 31, 2018, Pine Cliff had 32 full-time employees at its head office and 54 full-time employees in the field. Pine Cliff has also entered into various contracting and consulting agreements with individuals to assist in the conduct of its business.

Specialized Skills and Knowledge

Pine Cliff believes that its success is dependent on the performance of its management and key employees, all of whom have specialized knowledge and skills relating to oil and natural gas operations. Pine Cliff believes it has, or will be able to attract, adequate personnel with the specialized skills required to successfully carry out its operations but the failure to attract or retain such personnel could have a material adverse impact on its business. See *“Risk Factors”*.

Bankruptcies and Reorganizations

There has not been any bankruptcy, receivership or similar proceedings against Pine Cliff or any of its subsidiaries, or any voluntary bankruptcy, receivership or similar proceedings by Pine Cliff or any of its subsidiaries, within the three most recently completed financial years or during or proposed for the current financial year. There has not been any material reorganization of Pine Cliff as a whole or any of its subsidiaries within the three most recently completed financial years or completed during or proposed for the current financial year.

STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION

Presentation of Oil and Gas Information

All oil and gas information contained in this Annual Information Form has been prepared and presented in accordance with National Instrument 51-101 – *Standards of Disclosure for Oil and Gas Activities* (“**NI 51-101**”). The actual oil and gas reserves and future production will be greater than or less than the estimates provided herein. The estimated value of future net revenue from the production of the disclosed oil and gas reserves does not represent the fair market value of these reserves. There is no assurance that the forecast prices and costs or other assumptions made in connection with the reserves disclosed herein will be attained and variances could be material.

Definitions and Notes to Reserve Data Tables

Certain terms used herein are defined in NI 51-101 or the Canadian Oil and Gas Evaluation Handbook (“**COGE Handbook**”) and, unless the context otherwise requires, shall have the same meanings in this Annual Information Form as in NI 51-101 or the COGE Handbook.

The following definitions form the basis of the classification of reserves and values presented in the Pine Cliff Reserve Report, as defined herein. They have been jointly prepared by the Canadian Institute of Mining, Metallurgy and Petroleum and the Society of Petroleum Evaluation Engineers and incorporated into the COGE Handbook and specified by NI 51-101. Reserve data tables may not add due to rounding.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recovered from known accumulations, from a given date forward, based on:

- analysis of drilling, geological, geophysical and engineering data;
- the use of established technology;
- specified economic conditions, which are generally accepted as being reasonable, and shall be disclosed; and
- a remaining reserve life of 50 years.

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

1. Proved Reserves

Proved reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

2. Probable Reserves

Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

3. Possible Reserves

Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated proved plus probable plus possible reserves. Possible reserves have not been considered in this Annual Information Form.

Other criteria that must also be met for categorization of reserves are provided in Section 5.5 of the COGE Handbook.

Each of the reserves categories (proved, probable and possible) may be divided into developed or undeveloped categories.

4. Developed Reserves

Developed reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing.

5. Developed Producing Reserves

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.

6. Developed Non-Producing Reserves

Developed non-producing reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

7. Undeveloped Reserves

Undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable or possible) 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 is typically 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.

8. Levels of Certainty for Reported Reserves

The qualitative certainty levels contained in the definitions in Sections 1, 2 and 3 above are applicable to individual reserves entities, which refers to the lowest level at which reserves estimates are made, and to reported reserves, which refers to the highest level sum of individual entity estimates for which reserve estimates are made.

Reported total reserves estimated by deterministic or probabilistic methods, whether comprised of a single reserves entity or an aggregate estimate for multiple entities, should target the following levels of certainty under a specific set of economic conditions:

- (a) there is a 90% probability that at least the estimated proved reserves will be recovered;
- (b) there is a 50% probability that at least the sum of the estimated proved reserves plus probable reserves will be recovered; and
- (c) there is a 10% probability that at least the sum of the estimated proved reserves plus probable reserves plus possible reserves will be recovered.

A quantitative measure of the probability associated with a reserves estimate is generated only when a probabilistic estimate is conducted. The majority of reserves estimates will be performed using deterministic methods that do not provide a 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 Section 5.5.3 of the COGE Handbook. Whether deterministic or probabilistic methods are used, evaluators are expressing their professional judgement as to what are reasonable estimates.

Reserves Data in Respect of Pine Cliff

All of Pine Cliff's oil and gas reserves are located in Canada. Pine Cliff conducts an annual independent evaluation of all of the Company's reserves. Pine Cliff engaged independent petroleum consultants McDaniel & Associates Consultants Ltd. ("McDaniel") to evaluate reserves for all of Pine Cliff's oil and gas properties effective December 31, 2018 (the "**Pine Cliff Reserve Report**"). The Pine Cliff Reserve Report has been prepared in accordance with the standards contained in the COGE Handbook and the reserve definitions contained in NI 51-101. McDaniel has reviewed and consented to the information contained herein.

The reserves data summarizes the oil, natural gas and NGLs reserves of Pine Cliff and the net present values of future net revenue for these reserves using forecast prices and costs. The reserves data conforms to the requirements of NI 51-101. Additional information not required by NI 51-101 has been presented to provide continuity and additional information which the Company believes is important to the readers of this information. Pine Cliff engaged McDaniel to provide an evaluation of proved and proved plus probable reserves and no attempt was made to evaluate possible reserves.

All evaluations of future net production revenue set forth in the tables below are based on the average forecast prices of McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants Ltd. and Sproule Associates Limited as of January 1, 2019 and are stated for Pine Cliff's working interest share of reserves (referred to as "Gross" in NI 51-101) in accordance with the COGE Handbook. Pine Cliff's net interest share is after deduction for royalty burdens payable and receivable. It should not be assumed that the discounted future net production revenue estimated by the Pine Cliff Reserve Report represents the fair market value of the reserves. There is no assurance that the future price and cost assumptions used in the Pine Cliff Reserve Report will prove accurate and variances could be material. The recovery and reserve estimates of oil, natural gas and NGLs reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual oil, natural gas and NGLs reserves may be greater than or less than the estimates provided herein. Tables may not add due to rounding.

Estimates of reserves and future net revenue have been made assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability to Pine Cliff of adequate liquidity and capital resources required for that development to occur.

Pine Cliff's Reserves Committee reviews the qualifications and appointment of the independent qualified reserves evaluators and the procedures for providing information to the evaluators. The Pine Cliff board of directors has reviewed and approved the Pine Cliff Reserve Report.

In accordance with the requirements of NI 51-101, the Report on Reserves Data by Independent Qualified Reserves Evaluator in Form 51-101F2 and the Report of Management and Directors on Oil and Gas Disclosure in Form 51-101F3 are attached as Appendices A and B hereto, respectively.

PART 1 – DATE OF STATEMENT

Relevant dates:

- (1) Statement date is February 12, 2019
- (2) Effective date is December 31, 2018
- (3) Preparation date is February 12, 2019

PART 2 – DISCLOSURE OF RESERVE DATA

**SUMMARY OF OIL AND GAS RESERVES
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**

Reserve Category:	Light and Medium Crude Oil Combined		Heavy Oil		Conventional Natural Gas	
	Gross	Net	Gross	Net	Gross	Net
	(MBbl)	(MBbl)	(MMcf)	(MMcf)	(MMcf)	(MMcf)
Proved						
Developed Producing	446.7	398.1	45.7	40.3	240,538.7	220,740.9
Developed Non-Producing	73.8	69.8	12.5	10.8	995.9	932.8
Undeveloped	185.8	174.7	-	-	5223.4	4843.8
Total Proved	706.2	642.6	58.2	51.2	246,758.0	226,517.5
Probable	306.0	266.7	14.4	12.1	68,530.8	63,370.1
Total Proved plus Probable	1,012.1	909.3	72.6	63.3	315,288.8	289,887.6

Reserve Category:	Coal Bed Methane		Natural Gas Liquids		Total Oil Equivalent	
	Gross	Net	Gross	Net	Gross	Net
	(MMcf)	(MMcf)	(MBbl)	(MBbl)	(MBoe)	(MBoe)
Proved						
Developed Producing	19,974.1	18,286.6	2,843.4	2,113.3	46,754.6	42,389.6
Developed Non-Producing	-	-	39.1	31.1	291.4	267.2
Undeveloped	-	-	174.0	150.7	1,230.4	1,132.7
Total Proved	19,974.1	18,286.6	3,056.4	2,295.1	48,276.2	43,789.6
Probable	3,256.3	2,977.5	1,018.3	848.0	13,303.2	12,184.7
Total Proved plus Probable	23,230.4	21,264.1	4,074.7	3,143.1	61,579.4	55,974.4

**FUTURE NET REVENUE
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**
**Net Present Values of Future Net Revenue ⁽¹⁾
Before AND After Income Taxes**

(\$ millions)	Discounted at (% per year)					Unit Value
	0%	5%	10%	15%	20%	Before Tax @10% ⁽²⁾
Reserve Category:						\$/Boe
Proved						
Developed Producing	43,390.8	79,280.2	88,066.3	87,002.5	82,477.7	2.08
Developed Non-Producing	6,677.9	5,235.0	4,313.2	3,680.9	3,221.7	16.14
Undeveloped	16,057.9	9,224	5,362.9	2,990.3	1,427.6	4.73
Total Proved	66,126.6	93,739.7	97,742.4	93,673.7	87,127.0	2.23
Total Probable	114,902.5	77,299.5	53,027.8	37,415.1	27,109.1	4.35
Total Proved plus Probable	181,029.2	171,039.2	150,770.3	131,088.8	114,236.2	2.69

⁽¹⁾ Net of abandonment and reclamation costs.

⁽²⁾ The unit values are based on net reserve volumes.

**TOTAL FUTURE NET REVENUE
(UNDISCOUNTED)
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**

(\$ millions)	Revenue ⁽¹⁾	Royalties ⁽²⁾	Operating Costs	Development Costs	Abandonment and Reclamation Costs	Future Net Revenue Before Income Taxes	Income Taxes	Future Net Revenue After Income Taxes
Proved	1,141,488	90,084	762,588	31,849	190,841	66,127	-	66,127
Proved plus Probable	1,509,209	117,128	943,246	68,258	199,548	181,029	-	181,029

⁽¹⁾ Includes all product revenues and other revenues as forecast.

⁽²⁾ Royalties include any net profits interests paid, as well as the Saskatchewan Corporation Capital Tax Surcharge.

**NET PRESENT VALUE OF FUTURE NET REVENUE
BY PRODUCT TYPE
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**

(\$ millions)	Reserve Category:	Product	Future Net Revenue Before Income Taxes (Discounted at 10% per year) (M\$)	Unit Value Before Income Taxes (Discounted at 10% per year) \$/Boe
Proved		Light and Medium Crude Oil Combined ⁽¹⁾	11,973	26.78
		Heavy Oil ⁽¹⁾	1,715	33.53
		Conventional Natural Gas ⁽²⁾	75,160	0.33
		Coal Bed Methane ⁽²⁾	8,894	0.49
		Total	97,742	
Proved plus Probable		Light and Medium Crude Oil Combined ⁽¹⁾	16,477	29.01
		Heavy Oil ⁽¹⁾	2,003	31.65
		Conventional Natural Gas ⁽²⁾	121,235	0.42
		Coal Bed Methane ⁽²⁾	11,056	0.52
		Total	150,770	

⁽¹⁾ Including solution gas and by-products.

⁽²⁾ Including by-products.

PART 3 – PRICING ASSUMPTIONS

**SUMMARY OF PRICING AND INFLATION RATE ASSUMPTIONS
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**

McDaniel has used a three consultant (McDaniel & Associates Consultants Ltd., GLJ Petroleum Consultants Ltd. and Sproule Associates Limited) average price forecast in the preparation of the Pine Cliff Reserve Report:

	WTI Crude Oil	Edmonton Light Crude Oil	Edmonton Cond % Natural Gasolines	Edmonton Ethane	Edmonton Propane	Edmonton Butanes	Alberta AECO Spot Price	\$C to \$US Exchange Rate
	\$US/Bbl	\$C/Bbl	\$/Bbl	\$/Bbl	\$/Bbl	\$/Bbl	\$C/MMBtu	
2019	58.58	67.30	70.10	6.82	26.13	27.32	1.88	0.757
2020	64.60	75.84	79.21	8.40	31.27	41.10	2.31	0.782
2021	68.20	80.17	83.33	9.98	34.58	49.28	2.74	0.797
2022	71.00	83.22	86.20	11.22	37.25	55.65	3.05	0.803
2023	72.81	85.34	88.16	11.89	38.73	57.92	3.21	0.807
2024	74.59	87.33	90.20	12.22	39.75	59.27	3.31	0.808
2025	76.42	89.50	92.43	12.45	40.76	60.77	3.39	0.808
2026	78.40	91.89	94.87	12.71	41.93	62.37	3.46	0.808
2027	79.98	93.76	96.80	12.96	42.84	63.65	3.54	0.808
2028	81.59	95.68	98.79	13.28	43.80	64.97	3.62	0.808
2029	83.22	97.60	100.76	13.54	44.68	66.27	3.69	0.808
2030	84.89	99.55	102.78	13.81	45.57	67.60	3.77	0.808
2031	86.58	101.54	104.83	14.09	46.48	68.95	3.84	0.808
2032	88.31	103.57	106.93	14.37	47.41	70.33	3.92	0.808
2033	90.08	105.64	109.07	14.66	48.36	71.74	4.00	0.808
Thereafter	+2%/year	+2%/year	+2%/year	+2%/year	+2%/year	+2%/year	+2%/year	0.808

- Pine Cliff's weighted average realized sale price for the year ended December 31, 2018 was \$59.74 per Bbl for crude oil, \$53.33 per Bbl for NGLs and \$2.07 per Mcf (\$1.97 per MMBtu) for natural gas.

PART 4 – RECONCILIATION OF CHANGES IN RESERVES

**RECONCILIATION OF PINE CLIFF'S GROSS RESERVES
(BEFORE ROYALTY) BY PRINCIPAL PRODUCT TYPE
AS OF DECEMBER 31, 2018
FORECAST PRICES AND COSTS**

	Light and Medium Crude Oil Combined			Heavy Oil			Conventional Natural Gas		
	Proved (MBbl)	Probable (MBbl)	Proved Plus	Proved (MBbl)	Probable (MBbl)	Proved Plus	Proved (MMcf)	Probable (MMcf)	Proved Plus
			Probable (MBbl)			Probable (MMcf)			
December 31, 2017	384.6	189.6	574.2	79.5	17.6	97.1	266,973.7	74,831.0	341,804.7
Extension and Improved Recovery	250.7	129.2	379.9	-	-	-	1,189.3	1,474.4	2,663.7
Technical Revisions	147.9	(8.3)	139.6	14.1	2.7	16.8	34,184.6	(5,563.2)	28,621.4
Acquisitions	-	-	-	-	-	-	3.5	(0.6)	2.9
Change in Working Interest	-	(4.0)	(4.0)	(27.1)	(6.1)	(33.2)	(599.8)	(835.7)	(1,435.5)
Economic Factors	(2.6)	(0.2)	(2.8)	0.2	0.2	0.4	(16,912.4)	(1,375.3)	(18,287.7)
Total Changes	396.0	116.7	512.7	(12.8)	(3.2)	(16.0)	17,865.2	(6,300.4)	11,564.8
Production	(74.2)	-	(74.2)	(8.2)	-	(8.2)	(38,080.8)	-	(38,080.8)
December 31, 2018	706.2	306.0	1,012.1	58.2	14.4	72.6	246,758.0	68,530.8	315,288.8

	Coal Bed Methane			Natural Gas Liquids			Boe		
	Proved (MMcf)	Probable (MMcf)	Proved Plus	Proved (MBbl)	Probable (MBbl)	Proved Plus	Proved (MBoe)	Probable (MBoe)	Proved Plus
			Probable (MMcf)			Probable (MBoe)			
December 31, 2017	21,134.8	14,492.0	35,626.8	2,590.7	1,050.9	3,641.6	51,072.9	16,145.3	67,218.2
Extension and Improved Recovery	-	-	-	50.2	63.0	113.2	499.1	437.9	937.1
Technical Revisions	2,150.6	(143.9)	2,006.7	880.3	(50.3)	830.0	7,098.2	(1,007.1)	6,091.1
Acquisitions	-	-	-	-	0.5	0.5	0.6	0.4	1.0
Changes in Working Interest	-	-	-	(29.8)	(45.4)	(75.2)	(156.9)	(194.8)	(351.7)
Economic Factors	(836.9)	(11,092.0)	(11,928.9)	(92.1)	0.1	(92.0)	(3,052.7)	(2,077.8)	(5,130.5)
Total Changes	1,313.7	(11,235.9)	(9,922.2)	808.6	(32.1)	776.5	4,388.3	(2,841.3)	1,547.0
Production	(2,474.4)	-	(2,474.4)	(343.2)	-	(343.2)	(7,184.8)	-	(7,184.8)
December 31, 2018	19,974.1	3,256.3	23,230.4	3,056.4	1,018.3	4,074.7	48,276.2	13,303.2	61,579.4

PART 5 – ADDITIONAL INFORMATION RELATED TO RESERVE DATA

Undeveloped Reserves

Undeveloped reserves were attributed in accordance with the standards and procedures in the COGE Handbook. The following chart shows the Company's gross reserves, first attributed by year.

	Light and Medium Crude Oil Combined (MBbl)		Heavy Oil (MBbl)		Conventional Natural Gas (MMcf)		Coal Bed Methane (MMcf)	
	First Attributed	Total at Year End	First Attributed	Total at Year End	First Attributed	Total at Year End	First Attributed	Total at Year End
Proved Undeveloped Reserves								
Prior	-	14.3	-	-	189.8	6,759.2	-	-
2016	-	26.2	-	-	169.8	4,731.8	-	-
2017	-	4.5	27.1	27.1	2,364.0	5,054.3	-	-
2018	180.1	185.8	-	-	823.9	5,223.4	-	-
Probable Undeveloped Reserves								
Prior	-	97.7	-	-	12,967.7	21,696.8	10,558.0	10,558.0
2016	23.5	129.0	-	-	1,856.9	22,160.6	-	10,406.2
2017	22.0	115.6	6.6	6.6	1,092.5	24,331.3	-	10,984.6
2018	98.9	192.7	-	-	1,317.4	24,764.4	-	-

	Natural Gas Liquids (MBbl)		MBoe (MBbl)	
	First Attributed	Total at Year End	First Attributed	Total at Year End
Proved Undeveloped Reserves				
Prior	1.1	477.7	32.7	1,618.5
2016	1.4	287.4	29.7	1,102.2
2017	103.8	152.7	524.9	1,026.7
2018	35.9	174.0	353.3	1,230.4
Probable Undeveloped Reserves				
Prior	10.6	394.5	3,931.6	5,868.0
2016	46.9	343.1	379.9	5,899.9
2017	47.5	562.4	258.2	6,570.6
2018	57.1	490.2	375.6	4,810.3

Proved undeveloped reserves comprise approximately 2.5% of Pine Cliff's total proved reserves on a Boe basis. Proved undeveloped reserves of 1,230.4 MBoe were assigned by McDaniel in accordance with NI 51-101. In general, proved undeveloped reserves were assigned to certain properties as a result of Pine Cliff's capital program. Pine Cliff plans to convert the proved undeveloped reserves to proved developed producing reserves over the next three years through future capital spending.

Probable undeveloped reserves were assigned by McDaniel in accordance with NI 51-101 requirements and standards. Pine Cliff's probable undeveloped reserves amount to 4,810.3 MBoe and represent about 79.6% of the total proved plus probable undeveloped reserves. Probable undeveloped reserves are assigned for similar reasons and generally to the same properties as proved undeveloped reserves, but also meet the requirements of the reserve classification to which they belong. Probable undeveloped reserves are those reserves that are less certain to be recovered than proved reserves and are expected to be recovered from known accumulations. Pine Cliff plans to convert the probable undeveloped reserves to proved developed producing reserves over the next five years as a result of historical and future capital spending.

Significant Factors or Uncertainties

The process of estimating reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering or economic data. These estimates may change substantially as additional data from ongoing development activities and production performance become available and as economic conditions impacting oil and gas prices and costs change. The reserve estimates contained herein are based on forecast prices, production forecasts, prices and economic conditions.

As circumstances change and additional data becomes available, reserve estimates also change. Estimates made are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, prices, economic conditions and governmental restrictions.

Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. As a result, the subjective decisions, new geological or production information and a changing environment may impact these estimates. Revisions to reserve estimates can arise from changes in year-end oil and gas prices, and reservoir performance. Such revisions can either be positive or negative.

Future Development Costs

The following table outlines development costs deducted in the Pine Cliff Reserve Report in the estimation of future net revenue attributable to proved reserves and proved plus probable reserves, in each instance using forecast prices and costs.

(M\$)	Total Proved	Total Proved plus Probable
2019	7,696	9,821
2020	9,638	12,118
2021	3,207	18,578
2022	2,052	10,459
2023	2,005	10,030
Remainder	7,251	7,251
Total for all years undiscounted	31,849	68,258
Total for all years discounted at 10% per year	25,233	53,595

Undeveloped Locations

Undeveloped locations consist of drilling and recompletion locations booked in the Pine Cliff Reserve Report and unbooked drilling and recompletion locations. Booked locations are proposed proved and probable locations identified in the Pine Cliff Reserve Report. Unbooked drilling and recompletion locations are internal estimates based on an evaluation of geology, volumetrics and analogs evaluation of geologic, reserves and spacing based on industry practice. As outlined in the following table, Pine Cliff has identified 757 gross (443.6 net) undeveloped locations of which 10 gross (4.2 net) are proved drilling locations, 42 gross (29.1 net) are probable drilling locations, and 705 gross (411.3 net) are unbooked drilling and recompletion locations.

	Total Locations		Booked Locations	
	Gross	Net	Gross	Net
Carrot Creek Ellerslie	17	4.9	4	1.4
Edson Rock Creek	3	1.1	3	1.1
Carrot Creek Ostracod	1	0.4	1	0.4
Pine Creek/McLeod Ellerslie	26	5.4	4	0.5
Pine Creek Bluesky	6	2.2	6	2.2
Ghost Pine Pekisko oil	8	6.5	2	1.5
Ghost Pine Basal Quartz oil	11	9.4	1	1.0
Ghost Pine Basal Quartz gas	4	3.4	0	0
Ghost Pine Sparky Gas	6	5.6	0	0
Recompletions (Viking, Mannville, Belly River, CBM)	15	12.5	0	0
Viking Colorado	138	138.0	24	24.0
Three Hills Creek CBM – Crown	416	207.0	0	0
Three Hills Creek CBM – Freehold	99	46.0	0	0
Willrich	7	1.1	7	1.1
Total	757	443.5	52	33.2

There is no guarantee that Pine Cliff will drill any or all of the undrilled locations and there is no certainty that the drilling of these locations will result in additional reserves or production or achieve expected rates of return. Pine Cliff's drilling activity depends on availability of capital, regulatory approvals, commodity prices, drilling costs and other factors. As such, Pine Cliff's actual drilling activities may materially differ from those presently identified, which could adversely affect Pine Cliff's business.

Pine Cliff estimates that its internally generated cash flow and unused bank credit facilities will be sufficient to fund the future development costs disclosed above. Pine Cliff typically has available three sources of funding to finance its capital expenditure program: internally generated cash flow from operating activities; debt financing when appropriate; and new equity issues, if available on favorable terms.

PART 6 – OTHER OIL AND GAS INFORMATION

Well Count

The wells in which Pine Cliff had an interest in as at December 31, 2018 are set out in the following table:

	Oil Wells		Gas Wells		Total Wells	
	Gross	Net	Gross	Net	Gross	Net
Producing wells						
Alberta	113	52	6,089	4,223	6,202	4,275
Saskatchewan	-	-	1,457	1,396	1,457	1,396
Total producing	113	52	7,546	5,619	7,659	5,671
Non-producing wells						
Alberta	103	43	1,065	729	1,168	772
Saskatchewan	1	1	289	255	290	256
Total non-producing	104	44	1,354	984	1,458	1,028
Total	217	96	8,900	6,603	9,117	6,699

Additionally, the Company has 853 gross (623.7 net) wells in the Province of Alberta that are abandoned and not yet reclaimed.

Marketing and Forward Contracts

The Corporation is currently sells its natural gas at the AECO, Dawn, Empress and TEP trading points. The Corporation has used fixed price, daily and monthly physical sales contracts to manage the risks related to fluctuating commodity prices and may continue to use these and various types of derivative financial instruments in the future. For details of the Company's physical sales contracts, please refer to Note 7 – Risk Management of the Company's audited annual financial statements for the year ended December 31, 2018.

Abandonment and Reclamation Costs

Pine Cliff uses its internal historical costs to estimate its abandonment and reclamation costs when available. The costs are estimated on an area by area basis and are calibrated to industry's historical costs, when applicable. If representative comparisons are not readily available, an estimate is prepared based on the various regulatory abandonment requirements. Cost estimates adhere in all material respects to the "best practices" recommended in the COGE handbook. The

abandonment and reclamation costs included in the Pine Cliff Reserve Report for 5,535.5 net proved producing wells and 5,539.8 net proved plus probable wells are as follows:

(M\$)	Total Proved	Total Proved Plus Probable
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	3,351	3,351
Remainder	187,490	196,197
Total for all years undiscounted	190,841	199,548
Total for all years discounted at 10% per year	57,322	52,426

Certain costs related to the abandonment and reclamation of non-reserve wells, gathering systems and production facilities have been excluded from the estimation of future net revenue. Reclamation costs for reserve wells have been included in the Pine Cliff Reserve Report. At December 31, 2018, Pine Cliff estimates the costs to abandon and reclaim wells and facilities that are not in the Pine Cliff Reserve Report to be \$64.7 million, uninflated and undiscounted. Pine Cliff expects to incur approximately \$2.5 million of these costs on an annual basis for the next four years.

Tax Horizon

Pine Cliff does not expect to pay income tax in the 2019 fiscal year. Depending on production, commodity prices and capital spending levels, Pine Cliff does not expect to pay cash income taxes until sometime beyond 2025.

The Company has the following tax pools, which may be used to reduce taxable income in future years, limited to the applicable rates of utilization:

(M\$)	Rate of Utilization (%)	2018
Undepreciated capital costs	4 - 100	34,726
Canadian oil and gas property expenditures	10	226,174
Canadian development expenditures	30	12,760
Canadian exploration expenditures	100	167
Share issue costs	20	1,680
Non-capital losses carried forward ⁽¹⁾	100	109,941
Capital losses carried forward ⁽²⁾		4,119
Total		389,567

¹ Non-capital losses expire between the years 2030 and 2038.

² The capital losses carried forward can only be claimed against taxable capital gains.

Costs Incurred

The following table summarizes petroleum and natural gas capital expenditures incurred by the Company on acquisitions, dispositions, land, seismic, exploration and development drilling and production facilities for the year ended December 31, 2018:

(M\$)	
Property acquisition costs – proved	307
Property disposition proceeds – proved	(285)
Exploration	93
Development	10,333
Net oil and natural gas capital expenditures	10,448

Exploration and Development Activities

The following table summarizes Pine Cliff's gross and net drilling activity and success in the year ended December 31, 2018:

	Development		Exploratory		Total	
	Gross	Net	Gross	Net	Gross	Net
Oil	1	1.0	-	-	1	1.0
Gas	6	0.7	-	-	6	0.7
Dry Holes	-	-	2	0.3	2	0.3
Total	7	1.7	2	0.3	9	2.0
Success Rate	100%	100%	0%	0%	78%	85%

In 2018, Pine Cliff drilled 6 gross (0.7 net) Gething gas wells in the Edson Assets with a 100% success rate, 1 gross (1.0 net) Pekisko oil well in the Central Alberta Assets that was successful and 2 gross (0.3 net) Ellerslie oil wells in the Central area that were not successful. Pine Cliff's development drilling activities in 2019 are expected to be focused on oil and liquids drilling in the Edson Assets, oil drilling and recompletions in the Central Alberta Assets.

Production Estimates

The following table summarizes the estimated 2019 production reflected in the estimates of future net revenue disclosed under Part 2 in the Pine Cliff Reserve Report:

	Gross Daily Production Total
Total Proved	
Light, Medium and Heavy Oil Combined (Bbl/d)	323.6
Natural Gas (Boe/d)	17,502.8
Natural Gas Liquids (Bbl/d)	912.1
Total (Boe/D)	18,738.5
Total Proved plus Probable	
Light, Medium and Heavy Oil Combined (Bbl/d)	382.7
Natural Gas (Boe/d)	17,776.0
Natural Gas Liquids (Bbl/d)	946.8
Total (Boe/d)	19,105.5

Production History

	Quarter ended March 31, 2018	Quarter ended June 30, 2018	Quarter ended September 30, 2018	Quarter ended December 31, 2018	Year ended December 31, 2018
Average daily production					
Natural gas volumes (Mcf/d)	112,871	110,242	111,067	110,295	111,110
NGLs (Bbl/d)	977	967	861	957	940
Light, Medium and Heavy oil (Bbl/d)	219	216	231	236	226
Combined (BOE/d)	20,008	19,557	19,603	19,576	19,684
Light, Medium and Heavy oil netbacks (\$/Bbl)					
Average sales price	63.21	71.19	74.15	32.15	59.74
Royalty expense	(2.84)	(3.78)	(3.51)	(1.94)	(3.00)
Operating expenses	(8.58)	(8.19)	(7.78)	(8.62)	(8.29)
Operating netback	51.79	59.22	62.86	21.59	48.45
Natural Gas netbacks (\$/Mcf)					
Average sales price	2.36	1.55	1.88	2.52	2.08
Royalty expense	(0.14)	-	0.02	(0.04)	(0.04)
Transportation expenses	(1.60)	(1.69)	(1.88)	(1.80)	(1.74)
Operating expenses	(1.56)	(1.51)	(1.54)	(1.74)	(1.59)
Operating netback	(0.94)	(1.65)	(1.52)	(1.06)	(1.29)
NGLs netbacks (\$/Bbl)					
Average sales price	51.45	56.74	61.05	44.85	53.33
Royalty expense	(13.77)	(16.25)	(20.03)	(14.19)	(15.96)
Operating expenses	(9.61)	(9.17)	(8.35)	(10.65)	(9.47)
Operating netback	28.07	31.32	32.67	20.01	27.90
Combined netbacks (\$/Boe)					
Average sales price	16.50	12.33	14.21	16.72	14.95
Royalty expense	(1.47)	(0.85)	(0.82)	(0.95)	(1.02)
Transportation expenses	(1.60)	(1.69)	(1.88)	(1.80)	(1.74)
Operating expenses	(9.39)	(9.07)	(9.17)	(10.41)	(9.51)
Operating netback	4.04	0.72	2.34	3.56	2.68

The following table provides a summary of the average production volumes from Pine Cliff's main producing areas:

	Quarter ended March 31, 2018	Quarter ended June 30, 2018	Quarter ended September 30, 2018	Quarter ended December 31, 2018	Year ended December 31, 2018
Light, Medium and Heavy					
Crude Oil (Bbl/d)					
Central Alberta Assets	150	145	114	143	138
Southern Assets	5	3	7	6	5
Edson Assets	64	68	110	87	83
Total	219	216	231	236	226
Natural Gas (Mcf/d)					
Central Alberta Assets	8,891	8,448	8,605	8,450	8,598
Southern Assets	8,347	8,439	8,519	8,508	8,453
Edson Assets	1,574	1,487	1,387	1,425	1,467
Total	18,812	18,374	18,511	18,383	18,518
Natural Gas Liquids (Bbl/d)					
Central Alberta Assets	504	460	511	504	495
Southern Assets	5	2	5	3	4
Edson Assets	468	505	345	450	441
Total	977	967	861	957	940
Total (Boe/d)					
Central Alberta Assets	9,545	9,053	9,230	9,097	9,231
Southern Assets	8,357	8,444	8,531	8,517	8,462
Edson Assets	2,106	2,060	1,842	1,962	1,991
Total	20,008	19,557	19,603	19,576	19,684

Lease Holdings

Pine Cliff's December 31, 2018 holdings of petroleum and natural gas leases and rights are as follows:

	Developed Acres		Undeveloped Acres		Total	
	Gross	Net	Gross	Net	Gross	Net
Area:						
Viking	637,623	542,500	95,046	64,356	732,669	606,856
Ghost Pine	311,166	239,381	10,347	7,353	321,513	246,734
Pendor/Black Butte	310,500	294,417	12,160	9,517	322,660	303,934
Many Islands/Long Valley	218,628	209,648	5,251	5,011	223,879	214,659
Hatton	124,132	113,044	85,180	24,503	209,312	137,547
Tilley/Monogram	169,478	63,564	3,840	-	173,318	63,564
Edson	86,240	40,834	30,720	8,659	116,960	49,493
Eagle Butte	51,443	50,907	1,922	1,922	53,365	52,829
Wymark/Vidora	45,598	39,940	2,560	2,240	48,158	42,180
Other	93,284	84,833	9,914	6,948	103,198	91,781
Total	2,048,092	1,679,068	256,940	130,509	2,305,032	1,809,577

There are no attributed reserves assigned to 103,198 gross (91,780 net) acres in the "other" areas or in the 48,185 gross (42,180 net) acres in the Wymark/Vidora area. The Company has interests in 6,400 gross (5,108.2 net) acres that will expire within one year.

MINING ASSETS

Through its non-material wholly-owned subsidiary, Geomark, Pine Cliff holds mining assets, including certain mineral leases and claims located in Ontario, the Northwest Territories, Nunavut and Utah. None of the mineral leases and claims are

presently material to Pine Cliff from an accounting or securities perspective. The Company does not plan to incur any capital expenditures on the properties in 2019.

RISK FACTORS

The following is a summary of certain risk factors relating to the business of Pine Cliff. The following information is only a summary of certain risk factors and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this Annual Information Form. Shareholders and potential Shareholders should consider carefully the information contained herein and, in particular, the following risk factors. If any of these risks occur, Pine Cliff's production, revenues and financial conditions could be materially harmed, with a resulting decrease in the market price of the Common Shares.

Risks Related to the Oil and Natural Gas Industry

Operational Risks

Oil and natural gas development and exploration operations are subject to all the risks and hazards typically associated with such operations, including hazards such as fire, explosion, blowouts, cratering and hydrocarbon spills, each of which could result in substantial damage to oil and natural gas wells, producing facilities, other property and the environment or in personal injury. In accordance with industry practice, Pine Cliff is not fully insured against all of these risks, nor are all such risks insurable. Although Pine Cliff maintains liability insurance in an amount which it considers adequate, the nature of these risks is such that liabilities could exceed policy limits, in which event Pine Cliff could incur significant costs that could have a material adverse effect upon its financial condition. Oil and natural gas production operations are also subject to all the risks typically associated with such operations, including premature decline of reservoirs and the invasion of water into producing formations that could impede or prohibit hydrocarbon production.

Oil and natural gas exploration and development activities are dependent on the availability of drilling and related equipment and skilled personnel in the particular areas where such activities will be conducted. Demand for such qualified personnel, limited equipment and skilled personnel or access restrictions may affect the availability of such equipment to Pine Cliff and may delay exploration and development activities.

To the extent Pine Cliff will not be the operator of its oil and gas properties, Pine Cliff will be dependent on such operators for the timing of activities related to such properties and will be largely unable to direct or control the activities of the operators. Payments from production generally flow through the operator and there is a risk of delay and additional expense in receiving such revenues if the operator becomes insolvent.

In addition, the success of Pine Cliff will be largely dependent upon the performance of its management and key employees. Pine Cliff does not currently have any key person insurance policies and, therefore, there is a risk that the death or departure of any member of management or any key employee could have a material adverse effect on Pine Cliff.

Pine Cliff's ability to market oil and natural gas from its wells also depends upon numerous other factors beyond its control, including, among other things, the availability of natural gas processing and storage capacity, the availability of pipeline capacity, the price of oilfield services and the effects of inclement weather. Because of these factors, Pine Cliff may be unable to market some or all of the oil, natural gas and NGLs it produces or to obtain favourable prices for such production.

A small portion of Pine Cliff's natural gas is directly exported from Canada to the United States and is subject to regulation by the National Energy Board. The current natural gas export permit ends on January 31, 2020 and if not renewed, Pine Cliff may be unable to find an alternative market for this portion of its natural gas production.

Weakness in the Oil and Gas Industry

Recent market events and conditions, including an excess in global oil and natural gas supply, recent actions taken by the Organization of the Petroleum Exporting Countries ("OPEC"), slowing growth in China and other emerging economies, market volatility and disruptions in Asia, sovereign debt levels and political instability in various countries, protectionist trade practices, and increased oil and natural gas production from competing markets, have caused significant weakness

and volatility in commodity prices. These events and conditions have caused a significant decrease in the valuation of oil and gas companies. These difficulties have been exacerbated in North America by political and regulatory developments at a federal level in both Canada and the United States and, in the case of the Provinces of Alberta and Saskatchewan, the provincial and municipal level, and the resultant uncertainty surrounding regulatory, tax and royalty changes that may be implemented in the future. In addition, the inability to get the necessary approvals to build pipelines and other facilities to provide better access to markets for the oil and gas industry in Western Canada has led to additional uncertainty and a decrease in the price of oil, natural gas and NGLs produced in Western Canada.

Additionally, lower commodity prices have reduced, and may continue to reduce, Pine Cliff's cash flow which could result in a reduced capital expenditure budget and, as a result, Pine Cliff may not be able to replace its production with additional reserves and both the Company production and reserves could be reduced.

Given the current market conditions, Pine Cliff may have difficulty raising additional funds in the future or if it is able to do so, it may be on unfavourable or highly dilutive terms.

Reserve Estimates

There are numerous uncertainties inherent in estimating quantities of reserves and potential cash flows to be derived therefrom, including many factors beyond the control of Pine Cliff. The reserve and cash flow information set forth in this Annual Information Form represent estimates only. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, future prices of oil and natural gas, operating costs and royalties and other government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of Pine Cliff. Actual production and cash flows derived therefrom will vary from these evaluations, and such variations could be material. These evaluations are based in part on the assumed success of exploitation activities intended to be undertaken in future years. The reserves and estimated cash flows to be derived therefrom contained in such evaluations will be reduced to the extent that such exploitation activities do not achieve the level of success assumed in the evaluations.

Reserve Replacement

Pine Cliff's future oil and natural gas production and cash flows are dependent on successfully acquiring or discovering new reserves. Without the continual addition of new reserves, any existing reserves and production will decline over time as such existing reserves are exploited. A future increase in reserves will depend not only on Pine Cliff's ability to develop any properties it may have from time to time, but also on its ability to select and acquire suitable producing properties or prospects. There can be no assurance that Pine Cliff's future exploration and development efforts will result in the discovery and development of additional commercial accumulations of oil and natural gas. The Common Shares may decrease in value as reserves from Pine Cliff's properties can no longer be economically produced.

Industry Regulation and Competition

There is strong competition relating to all aspects of the oil and natural gas industry. Pine Cliff will actively compete for capital, skilled personnel, undeveloped land, reserve acquisitions, access to drilling rigs, service rigs and other equipment, access to processing facilities, pipeline and refining capacity, and in all other aspects of its operations with a substantial number of other organizations, many of which may have greater technical and financial resources than Pine Cliff. Some of those organizations not only explore for, develop and produce oil and natural gas but also carry on refining operations and market petroleum and other products on a world-wide basis and as such have greater and more diverse resources on which to draw.

The marketability of oil, natural gas and NGLs acquired or discovered will be affected by numerous factors beyond the control of Pine Cliff. These factors include reservoir characteristics, market fluctuations, the proximity and capacity of oil and natural gas pipelines and processing equipment and government regulation. Oil and natural gas operations (exploration, production, pricing, marketing and transportation) are subject to extensive controls and regulations imposed by various levels of government which may be amended from time to time. Pine Cliff's oil and natural gas operations are also subject

to compliance with federal, provincial and local laws and regulations controlling the discharge of materials into the environment or otherwise relating to the protection of the environment.

Royalty Regimes

Pine Cliff's cash flows may be directly affected by changes to royalty regimes. The governments of the Provinces of Alberta and Saskatchewan receive royalties on the production of hydrocarbons from lands in which they respectively own the mineral rights. Government regulation of Crown royalties is subject to change for a number of reasons, including, among other things, political factors. Royalties are typically calculated based on benchmark prices, productivity per well, location, date of discovery, recovery method, well depth and the nature and quality of petroleum product produced. There is also a mineral tax in each province levied on hydrocarbon production from lands in which the Crown does not own the mineral rights. The potential for changes in the royalty and mineral tax regimes applicable in the provinces in which Pine Cliff operates creates uncertainty relating to the ability to accurately estimate future Crown burdens.

Alberta Royalty Review

On January 1, 2017, the Government of the Province 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. Wells spud prior to July 13, 2016 will continue to operate under the previous royalty framework (the "**Old Framework**"). Wells spud between such dates may elect to opt-in to the Modernized Framework if certain criteria are 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. The formula is based on the industry's average drilling and completion costs as determined by the Alberta Energy Regulator ("**AER**"). The cost component attempts to incentivize innovation to reduce costs by allowing wells that operate under the average cost 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 AER. After payout, producers pay an increased post-payout royalty on revenues determined by reference to the then current commodity prices of the various hydrocarbons. 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 will be 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 Province of Alberta government announced two new strategic royalty programs to encourage oil and gas producers to boost 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.

Further changes to any of the royalty regimes in the Province of Alberta, changes to the existing royalty regime in the Province of Saskatchewan, changes to how existing royalty regimes are interpreted and applied by the applicable governments, or an increase in disclosure obligations for the Company could have a significant impact on the Company's financial condition, results of operations and cash flows. An increase in the royalty rates in either of the Provinces of Alberta or Saskatchewan would reduce the Company's earnings and could make, in the respective province, future capital expenditures or existing operations uneconomic. A material increase in royalties or mineral taxes may reduce the value of the Company's associated assets.

Liability Management Rating Programs

Province of Alberta

In Alberta, the AER implements the Licensee Liability Rating ("**LLR**") program, which is a liability management program governing most conventional upstream oil and gas wells, facilities and pipelines. The *Oil and Gas Activities Act* establishes an Orphan Well Fund (the "**Orphan Well Fund**"), managed by the industry-funded Orphan Well Association ("**OWA**"), to pay the costs to suspend, abandon, remediate and reclaim a well, facility or pipeline included in the LLR program if a licensee or working interest participant becomes defunct. The Orphan Well Fund is funded by licensees in the LLR program through a levy administered by the AER. The LLR program is designed to minimize the risk to the Orphan Well Fund posted by unfunded liabilities of licensees and prevent taxpayers in Alberta from incurring abandonment and reclamation ("**A&R**") costs. The LLR program requires a licensee whose deemed liabilities exceed its deemed assets to provide the AER with a security deposit. The ratio of deemed liabilities to deemed assets for each license is assessed once each month and failure to post the required security deposit may result in the initiation of enforcement action by the AER.

On January 31, 2019, the Supreme Court of Canada released its decision in the case of Redwater Energy Corporation ("**Redwater**"). Reversing the decisions of the Alberta Court of Queen's Bench (the "**Redwater QB Decision**") and Alberta Court of Appeal, the Supreme Court of Canada held that trustees and receivers of insolvent parties cannot disclaim or renounce uneconomic oil and gas assets to the AER before commencing the sales process for an insolvent party's assets. Following this ruling, corporations that become insolvent will generally be required to apply the value of any remaining assets to satisfy the liabilities associated with their A&R obligations in priority to the claims of secured and unsecured creditors.

While it is not yet clear how market participants will respond to the Supreme Court of Canada's decision in Redwater, the decision is anticipated to reduce the availability and increase the cost of credit for oil and gas corporations with relatively high levels of A&R obligations within their asset bases, like Pine Cliff. It may also cause creditors to impose additional covenants on borrowers with respect to compliance with their A&R obligations.

On June 20, 2016, as part of its response to the Redwater QB Decision, the AER released Bulletin 2016-16: Licensee Eligibility - Alberta Energy Regulator Measures to Limit Environmental Impacts Pending Regulatory Changes to Address the Redwater Decision ("**Bulletin 2016-16**") that implements three important changes to the LLR program and the related regulatory regime, which were effective immediately and remain in effect following Redwater.

The first change is the AER will consider and process all applications for license eligibility under Directive 067: Applying for Approval to Hold EUB Licenses as non-routine and may exercise its discretion to refuse an application or impose terms and conditions on a license eligibility approval if appropriate in the circumstances. The second is that for holders of existing but previously unused license eligibility approvals, prior to approval of any application (including license transfer applications), the AER may require evidence that there have been no material changes since approving the license eligibility. This may include evidence that the holder continues to maintain adequate insurance and that the directors, officers, and/or shareholders are substantially the same as when license eligibility was originally granted. The third is, as a condition of transferring existing AER licenses, approvals, and permits, the AER will require all transferees to demonstrate that they have a liability management ratio ("**LMR**") of 2.0 or higher immediately following the transfer. Previously, the ratio threshold was 1.0. As of the date of this Annual Information Form, Pine Cliff's LMR is 1.29. These changes may impact the Company's ability to transfer its licenses, approvals or permits, and which may further result in increased costs, delays and abandonment or restructuring of projects and transactions.

As a result of the current economic environment, the number of orphaned wells in Alberta has increased significantly and, accordingly, the aggregate value of the A&R liabilities assumed by the OWA has increased and may continue to increase. While the Supreme Court of Canada's decision in Redwater may reduce the A&R liabilities ultimately assumed by the OWA in the long-term, the OWA's A&R liabilities will remain at elevated levels until a significant number of orphaned wells are decommissioned by the OWA. As a result, the OWA may seek additional funding for such liabilities from industry participants, including Pine Cliff, through an increase in its annual levy, further changes to regulations or other means. While the impact on Pine Cliff of any legislative, regulatory or policy decisions as a result of the Redwater decision cannot be reliably or accurately estimated, any cost recovery or other measures taken by applicable regulatory bodies may impact

Pine Cliff and materially and adversely affect, among other things, the business, financial condition, results of operations and cash flows.

The AER has also implemented the inactive well compliance program to address the growing inventory of inactive wells in Alberta and to increase the AER's surveillance and compliance efforts under Directive 013 - Suspension Requirements for Wells ("**Directive 013**"). This program applies to all inactive wells that are noncompliant with Directive 013 as of April 1, 2015. The objective is to bring all inactive noncompliant wells into compliance with the requirements of Directive 013 within five years. As of April 1, 2015, each licensee is required to bring 20% of its inactive wells into compliance every year, either by reactivating or suspending the wells in accordance with Directive 013 or by abandoning them in accordance with Directive 020 - Well Abandonment. The list of current wells subject to the AER's inactive well compliance program is available on the AER's Digital Data Submission system. Pine Cliff is in Compliance with Directive 013.

Province of Saskatchewan

In Saskatchewan, the Ministry of Economy implements its own LLR. The Saskatchewan LLR is designed to assess and manage the financial risk that a licensee's well and facility abandonment and reclamation liabilities pose to an orphan fund established under *The Oil and Gas Conservation Act*. The Saskatchewan orphan fund is responsible for carrying out the abandonment and reclamation of wells and facilities contained within the LLR when a licensee or working interest partner is defunct or missing. The Saskatchewan LLR requires a licensee whose deemed liabilities exceed its deemed assets to post a security deposit. The ratio of deemed liabilities to deemed assets is assessed once each month for all licensees of oil, gas and service wells and upstream oil and gas facilities. As of the date of this Annual Information Form, Pine Cliff's LLR ratio in Saskatchewan is 1.19.

Volatility of Oil and Gas Prices and Markets

Oil, NGLs and natural gas prices are unstable and are subject to fluctuation. Any material decline in prices will result in a reduction of Pine Cliff's net production revenue. The economics of producing from some wells may change as a result of lower prices, which could result in a reduction in the volumes of Pine Cliff's reserves. Pine Cliff might also elect not to produce from certain wells at lower prices. All of these factors could result in a material decrease in Pine Cliff's net production revenue causing a reduction in its oil and gas acquisition and development activities. In addition, bank borrowings available to Pine Cliff are in part determined by Pine Cliff's borrowing base. A sustained material decline in prices from historical average prices could further reduce its borrowing base, therefore reducing the bank credit available and could require that a portion of Pine Cliff's bank debt be repaid. From time to time, Pine Cliff may enter into agreements to receive fixed prices on its oil, NGLs or natural gas production to offset the risk of revenue losses if commodity prices decline; however, if commodity prices increase beyond the levels set in such agreements, Pine Cliff would not benefit from such increases.

The marketability and price of oil, NGLs and natural gas that may be acquired or discovered by Pine Cliff are and will continue to be affected by political events throughout the world that cause disruptions in the supply of oil and natural gas. Conflicts, or conversely peaceful developments, arising in certain areas of the world have a significant impact on the price of oil and natural gas. Any particular event could result in a material decline in prices and therefore result in a reduction of Pine Cliff's revenue and consequently the market price of the Common Shares.

Seasonality

The level of activity in the Canadian oil and gas industry is influenced by seasonal weather patterns. Wet weather and spring thaw may make the ground unstable. Consequently, municipalities and provincial transportation departments enforce road bans that restrict the movement of rigs and other heavy equipment during certain time in a year, thereby reducing activity levels. Also, certain oil and gas producing areas are located in areas that are inaccessible other than during the winter months because the ground surrounding the sites in these areas consists of swampy terrain. There can be no assurance that these seasonal factors will not adversely affect the timing and scope of Pine Cliff's exploration and development activities, which could in turn have a material adverse impact on Pine Cliff's business, operations and prospects.

Variations in Foreign Exchange Rates and Interest Rates

Pine Cliff's expenses are denominated in Canadian dollars, while the price of oil and natural gas will generally be denominated in United States dollars or impacted by the Canadian dollar to United States dollar exchange rate. As the exchange rate for the Canadian dollar versus the United States dollar increases, Pine Cliff will generally receive fewer Canadian dollars for its production. If the value of the Canadian dollar against the United States dollar increases, the financial results of Pine Cliff may be negatively affected. Pine Cliff's management may initiate certain hedges to mitigate these risks but there are no guarantees that such efforts will result in a better financial position for Pine Cliff than not initiating such hedges. Future fluctuations in foreign exchange rates may impact the future value of Pine Cliff's reserves as determined by independent evaluators. In addition, variations in interest rates could result in a significant change in the amount Pine Cliff will pay to service debt, potentially adversely affecting the value of the Common Shares.

Environmental Regulations

All phases of the crude oil, natural gas and refining operations are subject to environmental regulation pursuant to a variety of federal, provincial, territorial, and municipal laws and regulations (collectively, "**Environmental Regulations**"). Environmental Regulations require that wells, facility sites, refineries and other properties associated with Pine Cliff's operations be constructed, operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. In addition, certain types of operations, including exploration and development projects and changes to certain existing projects, may require the submission and approval of environmental impact assessments or permit applications. Environmental Regulations imposes, among other things, restrictions, liabilities and obligations in connection with the generation, handling, use, storage, transportation, treatment and disposal of hazardous substances and waste and in connection with spills, releases and emissions of various substances to the environment. It also imposes restrictions, liabilities and obligations in connection with the management of fresh or potable water sources that are being used, or whose use is contemplated, in connection with oil and gas operations. Compliance with Environmental Regulations can require significant expenditures, including expenditures for clean-up costs and damages arising out of contaminated properties and failure to comply with Environmental Regulations may result in the imposition of fines and penalties. Although it is not expected that the costs of complying with Environmental Regulations will have a material adverse effect on Pine Cliff's financial condition or results of operations, no assurance can be made that the costs of complying with Environmental Regulations in the future will not have such an effect. The implementation of new regulations or the modification of existing regulations affecting the crude oil and natural gas industry generally could reduce demand for crude oil and natural gas and increase Pine Cliff's costs.

Federal Government of Canada

Pursuant to the *Prosperity Act*, the Government of Canada amended or repealed several pieces of federal environmental legislation and in addition, created a new federal environment assessment regime that came in to force on July 6, 2012. The changes to the environmental legislation under the *Prosperity Act* are intended to provide for more efficient and timely environmental assessments of projects that previously had been subject to overlapping legislative jurisdiction.

Province of Alberta

Alberta's Land-Use Framework has been Implemented under the Alberta Land Stewardship Act ("**ALSA**") which sets out the Government of Alberta's approach to managing Alberta's land and natural resources to achieve long-term economic, environmental and social goals. In some cases, ALSA amends or extinguishes previously Issued consents such as regulatory permits, licenses, approvals and authorizations in order to achieve or maintain an objective or policy resulting from the implementation of a regional plan.

On August 22, 2012, the Government of Alberta approved the Lower Athabasca Regional Plan ("**LARP**") which came into effect on September 1, 2012. The LARP is the first of seven regional plans developed under the ALUF. LARP covers approximately 93,212 square kilometers, is in the north east corner of Alberta and includes a substantial portion of the Athabasca oil sands area, which contains approximately 82% of the province's oil sands resources and much of the Cold Lake oil sands area. LARP establishes six new conservation areas and nine new provincial recreation areas. In conservation and provincial recreation areas, conventional oil and gas companies with pre-existing tenure may continue to operate. Any new

petroleum and gas tenure issued in conservation and provincial recreation areas will include a restriction that prohibits surface access. In contrast, oil sands companies' tenure has been (or will be) cancelled in conservation areas and no new oil sands tenure will be issued. While new oil sands tenure will be issued in provincial recreation areas, new and existing oil sands tenure will prohibit surface access.

In July 2014, the Government of Alberta approved the South Saskatchewan Regional Plan ("**SSRP**") which came into force on September 1, 2014. The SSRP is the second regional plan developed under the ALUF. The SSRP covers approximately 83,764 square kilometers and includes 44% of the province's population.

The SSRP creates four new and four expanded conservation areas, and two new and six expanded provincial parks and recreational areas. Similar to LARP, the SSRP will honor existing petroleum and natural gas tenure in conservation and provincial recreational areas. However, any new petroleum and natural gas tenures sold in conservation areas, provincial parks and recreational areas will contain prohibited surface access. Oil and gas companies must continue to minimize impacts of activities on the natural landscape, historic resources, wildlife, fish and vegetation when exploring, developing and extracting the resources. With the implementation of the new Alberta regulatory structure under the AER, the Alberta Environment and Sustainable Resources Development will remain responsible for development and implementation of regional plans, however, the AER will take on some responsibility for implementing regional plans in respect of energy related activities.

The Government of Alberta has commenced development of its North Saskatchewan Regional Plan ("**NSRP**") which may affect Pine Cliff's operations in Central Alberta. No assurance can be given that the NSRP, or any future regional plans developed and implemented by the Governments of Alberta and/or Saskatchewan, will not materially impact Pine Cliff's current or future operations.

Province of Saskatchewan

In May 2011, Saskatchewan passed changes to *The Oil and Gas Conservation Act* ("**SKOGCA**"), the act governing the regulation of resource development operations in the province. Although the associated bill received Royal Assent on May 18, 2011, it was not proclaimed into force until April 1, 2012, in conjunction with the release of *The Oil and Gas Conservation Regulations, 2012* ("**OGCR**") and *The Petroleum Registry and Electronic Documents Regulations* ("**Registry Regulations**"). The aim of the amendments to the SKOGCA, and the associated regulations, is to provide resource companies investing in Saskatchewan's energy and resource industries with the best support services and business and regulatory systems available. With the enactment of the Registry Regulations and the OGCR, Saskatchewan has implemented a number of operational aspects, including the increased demand for record-keeping, increased testing requirements for injection wells and increased investigation and enforcement powers; and, procedural aspects including those related to Saskatchewan's participation as partner in the Petroleum Registry of Alberta.

Climate Change Regulations

Federal (Canada) - International Initiatives

Internationally, Canada is a signatory to the United Nations Framework Convention on Climate Change (the "**UNFCCC**"). All entities that are parties to the UNFCCC are represented at the Conference of Parties ("**Conference of Parties**"). The main objective of the Conference of Parties is to adopt and review legal instruments and strategies to implement goals to stabilize greenhouse gas ("**GHG**") concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. In December 2015, UNFCCC members met in Paris, France and agreed to a new climate agreement (the "**Paris Agreement**"). Canada ratified the Paris Agreement in October 2016 and the Paris Agreement came into force on November 4, 2016. As of January 1, 2019, 184 of the 197 parties to the convention have ratified the Paris Agreement.

In preparation for the Paris conference, the former Canadian Environment Minister submitted Canada's plans to reduce GHG emissions by 30% below Canada's 2005 levels by 2030. Under the Paris Agreement, Canada is legally bound to report and monitor its GHG emissions, but its emissions reduction target is not legally binding. Signatory countries agreed to meet every five years to review their individual progress on GHG emissions reductions and consider amendments to their targets.

The Paris Agreement's main goal is to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C" overall, though individual country targets designed to meet these levels are not legally binding. Additionally, the Paris Agreement contemplates the parties will develop a new market-based mechanism related to carbon trading by 2020. It is expected that this mechanism will largely be based on the best practices and lessons learned from the Kyoto protocol's clean development mechanism and joint implementation regimes. As described in more detail below, in October, 2016, the Canadian federal government announced a new national carbon pricing regime that will help Canada meet its goals under the Paris Agreement.

On February 12, 2016 at the North American Energy Ministers' meeting, energy ministers from Canada, Mexico and the United States signed a memorandum of understanding on climate change and energy collaboration, and launched a website where information related to the North American energy industry will be aggregated and shared with the public. That memorandum of understanding provides that the signatories will collaborate and share information on six key areas: (i) experience and knowledge in the development of reliable, resilient and low-carbon electricity grids; (ii) modeling, deploying and accelerating innovation of clean energy technologies, including renewables; (iii) exchanging information in order to improve energy efficiency for equipment, appliances, industries and buildings, including energy management systems; (iv) exchanging information and promoting joint action to advance the deployment of carbon capture, use and storage; (v) identifying trilateral activities to further climate change adaptation and resilience; and (vi) sharing best practices and seeking methods to reduce emissions from the oil and gas sector, including methane and black carbon.

In March 2016, Canada and the United States announced a joint statement to commit to reduce methane emissions by 40-45% below 2012 levels by 2025 from the oil and gas sector, and explore new opportunities for additional methane reductions.

On October 15, 2016, Canada and nearly 200 member countries of the United Nations met in Kigali, Rwanda and agreed to reduce Hydrofluorocarbons ("HFCs"). This agreement supports the Paris Agreement's goals to reduce GHGs internationally by developing countries starting to phase down HFCs by 2019. Developing countries will follow with a freeze of HFCs consumption levels in 2024, with some countries freezing consumption in 2028. By the late 2040s, all countries are expected to consume no more than 15-20% of their respective baselines.

Canada is also part of a global initiative called the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants, supported by the United Nations Environment Programme. Their mandate is to address short-lived climate pollutants (e.g., black carbon, methane, tropospheric ozone, and hydrofluorocarbons), which exist in the atmosphere from between a few days to a few decades, in order to protect human health, the environment and to slow the rate of climate change within the first half of this century.

Federal (Canada) - Domestic Initiatives

Domestically, in December 2014, the Canadian government published Canada's Action on Climate Change, declaring its intention to take action on climate change by reducing GHG emissions through a sector-by-sector regulatory approach to protect the environment and support economic prosperity. To date, Canada has implemented GHG reducing regulations for renewable fuels, transportation, and coal-fired electricity.

Canada has sought to reduce short-lived climate pollutants through air emissions standards for new heavy-duty diesel vehicles and the national Air Quality Management System ("AQMS"). AQMS is a collaboration between the federal, provincial (excluding Quebec), and territorial governments to improve Canadian air quality. Under AQMS, governments at every level collaborate with the Canadian Council of Ministers of the Environment in order to set and review the Canadian Ambient Air Quality Standards ("CAAQS"), which are numerical values of outdoor air concentrations of pollutants. CAAQS cover both fine particulate matter and ozone, with the current focus being on developing standards for nitrogen dioxide and sulphur dioxide. On May 25, 2013, the federal government incorporated CAAQS under sections 54 and 55 of the *Canadian Environmental Protection Act, 1999* (Canada).

Under AQMS, each province and territory is committed to monitoring the air quality within its jurisdiction. Using the CAAQS as a baseline, each province and territory will then assess the level of management required to address current air quality levels. Provinces and territories will produce air zone reports, which include information regarding air management. Once assessed, the provinces and territories provide air quality management levels for defined zones, ranging from 'Green'

(maintain good air quality through proactive air management measures) to 'Red' (achieve air zone CAAQS through advanced air zone management actions).

In 2016, the Multi-sector Air Pollutants Regulations introduced mandatory national performance standards for nitrogen oxides and sulphur dioxide emissions from large boilers, heaters, stationary spark-ignition engines that combust gaseous fuels and cement manufacturing facilities. These regulations apply specifically to oil and gas and oil sands facilities and require ongoing emissions testing and reporting, although these obligations have a long-term implementation schedule.

On December 29, 2016, the Ozone-depleting Substances and Halocarbon Alternatives Regulations came into force, replacing the Ozone-depleting Substances Regulations, 1998. This regulation aims to control the level of production and consumption of certain ozone-depleting substances through a permitting and reporting system for HFCs, as well as a system for phasing out the importation and manufacturing of hydrochlorofluorocarbons in Canada, with an ultimate goal of complete prohibition by January 1, 2030 (subject to certain exemptions). Amendments to the regulation made in April 2018 added limitations on the importation of products containing HFC's and the destruction of HFC's, created consumption allowances for HFC's and elaborated on the restrictions regarding manufacturing HFC's.

On December 9, 2016, the Government of Canada released the Pan-Canadian Framework on Clean Growth and Climate Change (the "**Framework**"). The Framework provides for a carbon-pricing strategy, with a carbon tax starting at \$10/tonne, increasing annually until it reaches \$50/tonne in 2022. The Framework was given legislative effect when the *Greenhouse Gas Pollution Pricing Act* received royal assent on June 21, 2018, which provides a national carbon-pricing system that applies to greenhouse gas emissions from various sources.

On October 23, 2018, pursuant to the *Greenhouse Gas Pollution Pricing Act*, the federal government announced that a federal backstop carbon price (the "**federal backstop standard**") would apply to any province or territory that fails to meet the federal benchmark carbon price. The federal backstop standard has two parts. First, there is a carbon levy on fossil fuels. This levy applies to prescribed liquid, gas, and solid fossil fuels at a rate of \$10 per tonne of carbon dioxide in 2018. This will increase each year until 2022 at a rate of \$50 per tonne of carbon dioxide. Second, there is an output-based pricing system for industrial facilities which reported emissions of 50,000 or more tonnes of carbon dioxide per year during any year between 2014 and 2017. There is also an opt-in provision for facilities that report emissions between 10,000 and 50,000 tonnes of carbon dioxide per year for any year starting with 2017. Seven provinces and territories have introduced carbon-pricing systems that comply with federal requirements (Alberta, British Columbia, Quebec, Prince Edward Island, Nova Scotia, Newfoundland and Labrador and the Northwest Territories). The federal carbon-pricing regime will take effect in Saskatchewan, Manitoba, Ontario and New Brunswick in April 2019; it will take effect in the Yukon and Nunavut in July 2019. Saskatchewan and Ontario have challenged the constitutionality of the Federal Government's pricing regime; New Brunswick has intervened in Saskatchewan's constitutional challenge. In October 2018, the Federal Government announced an alternative pricing scheme for large electricity generators designed to incentivize a reduction in emissions intensity, rather than encouraging a reduction in generation rates.

On April 26, 2018, the Federal Government passed the Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) (the "**Federal Methane Regulations**"). The Federal Methane Regulations seek to reduce emissions of methane from the crude oil and natural gas sector, but will not come into force until January 1, 2020. By introducing a number of new control measures, the Federal Methane Regulations aim to reduce unintentional leaks and intentional venting of methane, as well as ensuring that crude oil and natural gas operations use low-emission equipment and processes. Among other things, the Federal Methane Regulations limit the amount of methane that upstream oil and gas facilities are permitted to vent. These facilities would need to capture the gas and either re-use it, re-inject it, send it to a sales pipeline, or route it to a flare. In addition, in provinces other than Alberta and British Columbia (which already regulate such activities), well completions by hydraulic fracturing would be required to conserve or destroy gas instead of venting. The Federal Government anticipates that these actions will reduce annual GHG emissions by approximately 20 megatonnes by 2030.

Province of Alberta

In Alberta, GHG emissions are regulated under the Specified Gas Reporting Regulation ("**SGRR**") and the Carbon Competitiveness Incentive Regulation ("**CCIR**") pursuant to the *Climate Change and Emissions Management Act (Alberta)*. The SGRR requires facilities that emit 10,000 tonnes or more of GHG per year to report their emissions to Alberta Environment and Parks ("**AEP**"). The CCIR, which replaced the Specified Gas Emitters Regulation on January 1, 2018, requires facilities that emit more than 100,000 tonnes of GHG per year (or facilities that opt-in so they may apply for a carbon levy exemption) to meet product specific emissions intensity benchmarks. Most benchmarks are based on an 80% production-weighted average emissions intensity. For in situ and mined bitumen, a top quartile production-based benchmark applies. Where emissions exceed the benchmark, the facility must reduce its net emissions by applying emissions offsets, emissions performance credits or fund credits against its actual emissions level. The use of fund credits is unlimited; however, the use of other credits is capped, such that a facility may address only 50-60% of its excess emissions through performance credits and emissions offsets.

In August 2015, the Alberta Government appointed a Climate Leadership Panel to provide advice to the government on the development of a comprehensive climate change strategy and to provide the AEP advice on a comprehensive set of policy measures to reduce GHG emissions in Alberta. In November 2015, the Government released the Panel's report and announced that it would implement the Climate Leadership Plan (the "**Plan**"), including the Panel's recommendations on phasing out coal-fired power production, replacing two-thirds of that production with renewable energy and imposing a new economy-wide price on GHG emissions of \$20 per tonne on January 1, 2017, rising to \$30 per tonne on January 1, 2018. The Alberta Government also announced a new overall annual emissions limit of 100 megatonnes for the oil sands industry. On November 1, 2016, the provincial government introduced Bill 25 - the *Oil Sands Emissions Limit Act*, which serves to implement the 100 megatonne limit for emissions from oil sands operations. It provides further clarity regarding the types of emissions that will be included and exempted from the calculation of the 100 megatonne limit, and gives the Lieutenant Governor in Council the ability to establish a system of GHG emission allowances and a regime for purchasing and trading the allowances. The emission limit applies only to oil sands operations, and is not expected to increase the Company's operating costs.

Methane emission reduction in the oil and gas industry is also a key to Alberta's new GHG emission plan, with a goal of reducing oil and gas methane emissions by 45% by 2025. The Panel made two recommendations in this regard. First, create new design specifications for oil and gas wells, pipelines and facilities as well as standards for key equipment and operational best practices. Fugitive emission standards would be included in the regulatory requirements, requiring increased standards for performance, monitoring, measurement and reporting. Second, the Panel recommended that regulators, the oil and gas industry, independent experts and environmental groups collaborate to develop and oversee a multi-year plan for updating or retrofitting methane emitting equipment in existing facilities before the end of the equipment's useful life. Alberta released a draft of the proposed methane regulations in April 2018. The proposed regulations would restrict the emission of methane through measures such as a reduction in the permitted amount of vented methane and the addition of mandatory annual inspections. Feedback on the proposed regulations closed in May 2018; however, no further action on this matter has been taken as of the date hereof.

The *Climate Leadership Act ("CLA")*, was one of the first steps of the Plan. The *CLA* establishes the legislative framework for carbon pricing in Alberta. The Climate Leadership Act came into force on January 1, 2017 and enabled a carbon levy that increased from \$20 to \$30 per tonne on January 1, 2018. While the levy is anticipated to increase further in 2021 in line with federal legislation, the Alberta government has announced it will not proceed with the scheduled 2021 increase unless the expansion to the Trans Mountain Pipeline proceeds. The development of the *CLA*'s carbon pricing regime may increase Pine Cliff's operating costs. As Alberta's carbon price currently meets the federal benchmark carbon price, the federal backstop standard does not apply.

Curtailment

On December 2, 2018 the Government of Alberta announced that, commencing January 1, 2019, it would mandate an 8.7% short-term reduction in provincial crude oil and crude bitumen production. Such announcement was implemented by an Order in Council issued on December 3, 2018 approving Alta Reg 214/2018 (the "**Curtailment Rules**"). Under the Curtailment Rules, the Government of Alberta will, on a monthly basis, direct oil producers producing more than 10,000 Bbl/d to curtail their production according to a pre-determined formula that apportions production limits proportionately

amongst those operators subject to a curtailment order. The first curtailment order took effect on January 1, 2019 limiting province-wide production of crude oil and crude bitumen to 3.56 million Bbl/d - a reduction of approximately 8.7% of total daily average oil production in Alberta during December 2018. The Government of Alberta has indicated that it expects the curtailment rate to gradually decline over the course of 2019. As a result of decreasing price differentials and volumes of crude oil and crude bitumen in storage, the Government of Alberta announced on January 30, 2019, that it would ease the mandatory production curtailment beginning February 1, 2019, increasing the allowable production cap by 75,000 Bbl/d to a maximum output of approximately 3.63 million Bbl/d. Pine Cliff is not impacted by the Curtailment Rules.

Delay in Cash Receipts

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

Impact of Future Capital Expenditures

The reserve value of Pine Cliff's properties, as estimated by independent engineering consultants, is based in part on cash flows to be generated in future years as a result of future capital expenditures. The reserve value of Pine Cliff's properties as estimated by independent engineering consultants, will be reduced to the extent that such capital expenditures on such properties do not achieve the level of success assumed in such engineering reports.

Risks Relating to Hedging Activities

Any substantial and extended decline in the price of oil, NGLs or natural gas would have an adverse effect on the carrying value of Pine Cliff's proved and probable reserves, borrowing capacity, revenues, profitability and cash flows from operating activities. Pine Cliff may manage the risk associated with changes in commodity prices by entering into oil or natural gas price hedges. If Pine Cliff hedges its commodity price exposure, it may forego some of the benefits it would otherwise experience if commodity prices were to increase. In addition, commodity hedging activities could expose Pine Cliff to losses. To the extent Pine Cliff engages in risk management activities related to commodity prices, it will be subject to credit risks associated with counterparties with which it contracts. Pine Cliff continually evaluates the use of, and may employ derivative structures to hedge commodity, interest rate and foreign exchange risk. Risks associated with such products, include but are not limited to counterparty risk, settlement risk, basis risk, liquidity risk and market risk which could impair or negate the hedging strategy with a consequential negative impact on earnings and cash flow.

Availability of Skilled Personnel, Drilling Equipment and Access

Oil and natural gas exploration and development activities are dependent on the availability of skilled personnel and drilling and related equipment in the particular areas where such activities will be conducted. Demand for such limited skilled personnel and equipment or access restrictions may affect the availability of such personnel or equipment to Pine Cliff and may delay exploration and development activities.

Expiration of Licenses and Leases

Pine Cliff's properties are held in the form of licenses and leases and working interests in licenses and leases. If Pine Cliff or the holder of the license or lease fails to meet the specific requirement of a license or lease, the license or lease may terminate or expire. There can be no assurance that any of the obligations required to maintain each license or lease will be met. The termination or expiration of Pine Cliff's licenses or leases or the working interests relating to a license or lease may have a material adverse effect on results of operations and business.

Permits and Licenses

The operations of Pine Cliff may require licenses and permits from various governmental authorities. There can be no assurance that Pine Cliff will be able to obtain all necessary licenses and permits that may be required to carry out exploration and development at its projects.

Title to Properties

Although title reviews may be done according to industry standards prior to the purchase of certain oil and natural gas producing properties or the commencement of drilling wells as determined appropriate by management, such reviews do not guarantee or certify that an unforeseen defect in the chain of title will not arise to defeat a claim of Pine Cliff which could result in a reduction of the revenue received by Pine Cliff.

Aboriginal Claims

Aboriginal peoples have claimed aboriginal title and rights to resources and various properties in western Canada. Management is not aware that any claims have been made in respect of Pine Cliff's property or assets; however, a claim, if one arose in relation to any of Pine Cliff's lands, if successful, could have an adverse effect on the Company's operations.

Risk Factors Related to Pine Cliff

Corporate

Pine Cliff is subject to many risks, all of which are common to such enterprises, including under-capitalization, cash shortages and limitations with respect to personnel, financial and other resources and the lack of revenues. There is no assurance that Pine Cliff will be successful in achieving a return on shareholders' investment and its likelihood of success must be considered in light of its size and early stage of operations. There can be no assurance that Pine Cliff will be able to obtain adequate financing in the future or that the terms of any financing obtained will be favourable.

Substantial Capital Requirements, Asset Retirement Obligations and Liquidity

Pine Cliff may have to make substantial capital expenditures for the acquisition of, exploration for, development and production of its oil and natural gas and mining assets in the future. If revenues or reserves decline, Pine Cliff may have a limited ability to expend the capital necessary to undertake or complete future drilling programs. Pine Cliff will also need to make substantial capital expenditures with regard to abandonment and reclamation costs related to the Company's wells and facilities. There can be no assurance that debt or equity financing or cash generated by operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to Pine Cliff. Moreover, future activities may require Pine Cliff to alter its capitalization significantly. The inability of Pine Cliff to access sufficient capital for its operations could have a material adverse effect on its financial condition, results of operations or prospects.

Price Volatility of Publicly Traded Securities

In recent years, the securities markets in Canada and the United States have experienced a high level of price and volume volatility, and the market price of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in price will not occur. It is likely that the market price for the Common Shares will be subject to market trends generally, notwithstanding the financial and operational performance of Pine Cliff.

Dividends

To date, Pine Cliff has not paid any dividends on its outstanding Common Shares. If Pine Cliff should ever institute a dividend policy, there is no guarantee or assurance that the Company will be able to maintain such a policy going forward.

Management of Growth

Pine Cliff has grown significantly since 2013 and has reported average sales volumes of 19,684 Boe/d in 2018, 21,408 Boe/d in 2017, 22,495 Boe/d in 2016, 12,854 Boe/d in 2015 and 7,899 Boe/d in 2014 as compared to 4,787 Boe/d in 2013. Pine Cliff may continue to grow the business which would subject the Company to further growth-related risks including capacity constraints and pressure on its internal systems and controls. To manage its growth effectively, Pine Cliff will be required to continue to implement and improve its operational and financial systems and to expand, train and manage its employee and consultant base. Any failure to implement cohesive management and operating systems, add or retain resources on a cost effective basis or properly manage its expansion could have a material adverse impact on its business, operations and prospects.

Potential Future Drilling Locations

Pine Cliff's identified potential future drilling locations represent a significant part of the Company's growth strategy. The Company's ability to drill and develop these locations depends on a number of uncertainties and factors, including, but not limited to, the availability of capital, equipment and personnel, oil and natural gas prices, capital and operating costs, inclement weather, seasonal restrictions, drilling results, additional geological, geophysical and reservoir information that is obtained, production rate recovery, gathering system and transportation constraints, net price received for commodities produced, regulatory approvals, regulatory changes. As a result of these uncertainties, there can be no assurance that the potential future drilling locations Pine Cliff has identified will ever be drilled or if the Company will be able to produce natural gas, oil, or NGLs from these or any other potential future drilling locations. As such, the Company's actual drilling activities may materially differ from those presently identified, which could adversely affect the Company's business.

Failure to Realize Benefits of Acquisitions

Pine Cliff may complete acquisitions to strengthen its position in the oil and gas industry and to create the opportunity to realize certain benefits including, among other things, potential cost savings. The acquisition of oil and gas companies and assets is subject to substantial risks, including the failure to identify material problems during due diligence, the risk of over-paying for assets, and the inability to arrange financing for an acquisition as may be required or desired. Achieving the benefits of any future acquisitions depends, in part, on successfully consolidating functions and integrating operations, procedures and personnel in a timely and efficient manner, as well as Pine Cliff's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with its own. The integration of acquired businesses requires the dedication of substantial management effort, time and resources which may divert management's focus and resources from other strategic opportunities and from operational matters during this process. The integration process may result in the loss of key employees and the disruption of ongoing business and employee relationships that may adversely affect Pine Cliff's ability to achieve the anticipated benefits of these and future acquisitions.

Third Party Credit Risk

Pine Cliff is, or may be exposed to, third party credit risk through its contractual arrangements with its current or future joint venture partners, marketers of its petroleum and natural gas production and other parties. In the event such entities fail to meet their contractual obligations to Pine Cliff, such failures could have a material adverse effect on Pine Cliff and its cash flow from operations. In addition, poor credit conditions in the industry and of joint venture partners may impact a joint venture partner's willingness to participate in Pine Cliff's ongoing capital program, potentially delaying the program and the results of such program until Pine Cliff finds a suitable alternative partner.

Canadian Tax Considerations

As Pine Cliff is engaged in the oil and natural gas industry, its operations are subject to certain unique provisions of the *Income Tax Act* (Canada) (the "**Tax Act**") and applicable provincial income tax legislation relating to characterization of costs incurred in their businesses which effects whether such costs are deductible and, if deductible, the rate at which they may be deducted for the purposes of calculating taxable income. Pine Cliff has reviewed its historical income tax returns with respect to the characterization of the costs incurred in the oil and natural gas business as well as other matters generally applicable to all corporations including the ability to offset future income against prior year losses. Pine Cliff has filed or will

file all required income tax returns and believes that it is in full compliance with the provisions of the Tax Act and applicable provincial income tax legislation, but such returns are subject to reassessment. In the event of a successful reassessment of Pine Cliff, the Company may be subject to a higher than expected past or future income tax liability as well as potential interest and penalties and such amount could be material.

Refinancing Risk

Pine Cliff currently has a \$11.0 million revolving credit facility with a syndicate of three Canadian Financial Institutions of which no amount was drawn at December 31, 2018. Repayments of principal are not required during the commitment term, provided that Pine Cliff remains compliant with all covenants under the credit agreement and does not exceed the authorized borrowing amount. The credit facility matures on July 27, 2019 and is reviewed semi-annually on May 31st and November 30th, and if it is not renewed on May 31, 2019 it will become payable on July 28, 2019. There is also a risk that the credit facility will not be renewed for the same term or on the same terms. Any of these events could affect Pine Cliff's ability to fund ongoing operations.

Pine Cliff is required to comply with covenants under the credit facility. In the event that Pine Cliff does not comply with covenants under the credit facility, Pine Cliff's access to capital could be restricted or repayment could be required.

Additionally, Pine Cliff currently has the \$30 Million 2020 Notes, the \$6 Million 2020 Related Party Note and the \$6 Million 2020 Notes that all mature on September 30, 2020 and the \$19 million 2022 Notes that mature on July 31, 2022. There can be no assurance that debt or equity financing or cash flow from operations will be available, sufficient or on terms acceptable to Pine Cliff to meet these obligations. The inability of Pine Cliff to access sufficient capital on favorable terms to repay or refinance any of these debt obligations could have a material adverse effect on the Company.

Issuance of Debt

From time to time, Pine Cliff may enter into transactions to acquire assets or shares of other companies. These transactions may be financed partially or wholly through debt, which may increase debt levels above industry standards. Pine Cliff's articles and bylaws do not limit the amount of indebtedness it may incur. The level of Pine Cliff's indebtedness from time to time could impair its ability to obtain additional financing in the future on a timely basis in order to take advantage of business opportunities that may arise.

Dilution

Common Shares, including rights, warrants, special warrants, stock options, subscription receipts and other securities to purchase, convert into or exchange into Common Shares, may be created, issued, sold and delivered on such terms and conditions and at such times as the Pine Cliff board of directors may determine. In addition, Pine Cliff may issue additional Common Shares from time to time pursuant to the incentive stock options granted to directors, officers, employees and consultants of Pine Cliff. The issuance of these Common Shares would result in dilution to Shareholders.

Net Asset Value

Pine Cliff's net asset value will vary depending upon a number of factors beyond the control of Pine Cliff's management, including oil, NGLs and natural gas prices.

Reliance on Management of Pine Cliff

Shareholders will be dependent on the management of Pine Cliff in respect of the administration and management of all matters relating to Pine Cliff and its properties and operations. Investors who are not willing to rely on the management of Pine Cliff should not invest in the Common Shares.

Failure to Maintain Listing of the Common Shares

The Common Shares are currently listed and posted for trading on the facilities of the TSX. The failure of Pine Cliff to meet the applicable listing or other requirements of the TSX in the future may result in the Common Shares ceasing to be listed

and posted for trading on the TSX, which would have a material adverse effect on the value of the Common Shares. There can be no assurance that the Common Shares will continue to be listed and posted for trading on the TSX for the life of the Common Shares.

Structure of Pine Cliff

From time to time, Pine Cliff may take steps to organize its affairs in a manner that minimizes taxes and other expenses payable with respect to the operation of Pine Cliff and its subsidiaries. If the manner in which Pine Cliff structures its affairs is successfully challenged by taxation or other authority, Pine Cliff and Shareholders may be adversely affected.

Changes in Legislation or Income Tax Laws

It is possible that the Canadian and US federal, provincial and/or state governments could choose to change the federal income tax laws, royalty regimes, environmental laws or other laws applicable to oil and gas or mining companies and that any such changes could materially adversely affect Pine Cliff, the Shareholders and the market value of the Common Shares.

Conflicts of Interest

Certain of the directors of Pine Cliff are also directors, officers or shareholders of other companies. Such associations may give rise to conflicts of interest from time to time. The directors of Pine Cliff are required by law to act honestly and in good faith with a view to the best interests of Pine Cliff and to disclose any interest which they may have in any project or opportunity of Pine Cliff. If a conflict of interest arises at a meeting of the Pine Cliff board of directors, any director in a conflict situation will be required to disclose his or her interest and generally abstain from voting in connection with the matter giving rise to the conflict. In determining whether or not Pine Cliff will participate in any project or opportunity, its directors will primarily consider the degree of risk to which Pine Cliff may be exposed and its financial position at the relevant time.

United States Trade Risk relating to United States-Mexico-Canada Agreement

On November 30, 2018, representatives from the United States, Canada and Mexico signed an authorization for a new trade agreement, referred to as the United States-Mexico-Canada Agreement ("**USMCA**"), that is intended to replace the North American Free Trade Agreement ("**NAFTA**"). However, as of the date hereof, NAFTA remains in force until the respective legislative bodies of the United States, Canada and Mexico ratify the text of the USMCA. Given recent political changes in Mexico and the United States, as well as general political uncertainty in all three signatory countries, it is unclear when the USMCA will come into effect, if ever. As the United States remains Canada's largest trading partner and the largest international market for the export of crude oil from Canada, the implementation of the USMCA, including any amendments thereto, would have a significant effect on the Canadian oil and gas industry in general, including Pine Cliff's business.

DIVIDENDS

To date, Pine Cliff has not paid any dividends on its Common Shares. There are no restrictions on paying dividends and the Pine Cliff board of directors will determine the actual timing, payment and amount of dividends, if any, that may be paid from time to time based upon, among other things, cash flow, financial conditions, the need for funds to finance ongoing operations and other business considerations.

DESCRIPTION OF SHARE CAPITAL

General Description of Share Capital

Pine Cliff is authorized to issue an unlimited number of Common Shares without nominal or par value and an unlimited number of Class B shares (the "**Preferred Shares**"), issuable in series. A brief summary of the characteristics of the shares is set forth below. As of the date hereof, 307,075,787 Common Shares and no Preferred Shares were issued and outstanding. As of the date hereof, 20,545,804 options to acquire Common Shares ("**Options**") were outstanding. As of the date hereof, 2,800,000 2018 Warrants to acquire Common Shares were outstanding.

Common Shares

The Shareholders are entitled to receive notice of and to attend any meeting of the Shareholders and are entitled to one vote for each Common Share held (except at meetings at which only the holders of another class of shares are entitled to vote). The Shareholders are entitled to receive dividends, on a pro rata basis, if, as and when declared by the Pine Cliff board of directors and, subject to prior satisfaction of all preferential rights, to participate rateably in the net assets of Pine Cliff in the event of any liquidation, dissolution or winding-up of Pine Cliff, whether voluntary or involuntary, or other distribution of assets of Pine Cliff among Shareholders for the purpose of winding up its affairs.

Preferred Shares

The Preferred Shares may be issued in one or more series and the Pine Cliff board of directors may, by resolution, fix the number of shares in each series and determine the designation, rights, privileges, restrictions and conditions to be attached to shares of each series. The holders of the Preferred Shares are entitled to dividends as and when declared by the Pine Cliff board of directors, and to receive out of the net assets of Pine Cliff in the event of any liquidation, dissolution or winding-up of Pine Cliff, payment in full of the respective amounts which each holder of Preferred Shares is entitled, in preference and priority to any dividend or payment on the Common Shares.

MARKET FOR SECURITIES

The following table sets forth the reported high and low sales prices (which are not necessarily the closing prices) and the trading volumes for the Common Shares on the TSX, as applicable, as reported by sources Pine Cliff believes to be reliable for the most recently completed financial year:

Date	Pricing Range (\$)		Trading Volume
	High	Low	
2018			
January	0.59	0.32	41,072,757
February	0.34	0.29	11,684,127
March	0.315	0.265	4,719,311
April	0.35	0.295	4,480,322
May	0.35	0.295	4,382,100
June	0.39	0.31	3,590,935
July	0.45	0.33	7,256,678
August	0.415	0.355	2,268,262
September	0.375	0.30	2,389,244
October	0.365	0.28	4,759,602
November	0.355	0.27	6,861,565
December	0.31	0.215	3,826,794

PRIOR OPTION GRANTS AND SALES

The following table sets forth, for each class of securities of the Company that is outstanding but not listed or quoted on a marketplace, the price at which securities of the class have been issued during the financial year ended December 31, 2018 and the number of securities of the class issued at that price and the date on which the securities were issued.

Date of Issue	Securities	Price per Security	Number of Securities
May 15, 2018	Options	\$0.33 ⁽¹⁾	7,309,300
September 24, 2018	Options	\$0.31 ⁽¹⁾	187,500
December 3, 2018	Options	\$0.315 ⁽¹⁾	201,000

(1) Represents the exercise price per Option.

DIRECTORS AND OFFICERS

The following table lists the names of the directors and officers of Pine Cliff, their province and country of residence, their positions and offices with Pine Cliff and their principal occupations. All directors have been elected to serve as such until Pine Cliff's next annual meeting of Shareholders, or until their successor is duly elected, unless their office is vacated earlier in accordance with the by-laws of Pine Cliff or applicable law.

Name, Province and Country of Residence	Positions and Offices with the Company	Principal Occupation During the Past Five Years
Gary J. Drummond ⁽¹⁾ Saskatchewan, Canada	Director since 2004	Mr. Drummond is a private investor and a director of Bonterra Energy Corp., a TSX listed resource company.
George F. Fink Alberta, Canada	Chairman; Director since 2004	Chairman, Chief Executive Officer and Director of Bonterra Energy Corp. a TSX listed resource company and Chairman of the Pine Cliff board of directors
Philip B. Hodge Alberta, Canada	President and Chief Executive Officer; Director since 2011	President and Chief Executive Officer of Pine Cliff since January 2012.
Randy M. Jarock ⁽¹⁾ Alberta, Canada	Director since 2012	Mr. Jarock is a private investor and director of Bonterra Energy Corp.
William S. Rice, Q.C. ⁽¹⁾ Alberta, Canada	Director since 2016	Mr. Rice is a private investor and was Chair and Chief Executive Officer of the Alberta Securities Commission from 2005 to 2015 and Chair of the Canadian Securities Administrators from 2011 to 2015.
Cheryne A. Lowe Alberta, Canada	Chief Financial Officer and Corporate Secretary	Chief Financial Officer and Corporate Secretary of Pine Cliff since January 2017. Ms. Lowe joined Pine Cliff in October 2015 as the Interim Chief Financial Officer and was appointed to the position of Vice President, Finance in November 2016. Ms. Lowe is a Chartered Accountant and held the Vice President, Finance and Chief Financial Officer position at Orlen Upstream Canada Ltd. and its predecessor TriOil Resources Ltd from January 2010 to June 2015.
Terry L. McNeill Alberta, Canada	Chief Operating Officer	Chief Operating Officer of Pine Cliff since January 2015 and prior thereto the Vice President Operations of Pine Cliff from April 2014. Prior thereto, from January 2013 to March 2014, Director of Engineering and Operations of AltaGas Ltd., a public oil and gas company.
Heather A. Isidoro Alberta, Canada	Vice President, Business Development	Vice President, Business Development of Pine Cliff since November 2016 and prior thereto Manager of Business Development of Pine Cliff since September 2013. Prior thereto from July 2011 to Sept 2013 a consulting Business Development Engineer for North American Oil and P1 Energy.
Christopher S. Lee Alberta, Canada	Vice President, Geology	Vice President, Geology of Pine Cliff since November 2017 and prior thereto Senior Geologist of Pine Cliff since March 2012.
Alan MacDonald Alberta, Canada	Interim Chief Financial Officer and Corporate Secretary	Mr. MacDonald joined Pine Cliff in September 2017 as Interim Chief Financial Officer and Corporate Secretary and resigned his position in September 2018. Prior thereto, from October 2013 to December 2015, Mr. MacDonald was Chief Financial Officer at United Hydrocarbon International Corp., a private oil and gas company.

(1) Member of the Audit Committee, Reserves Committee, and Governance, Nomination and Compensation Committee.

As at the date hereof, the current directors and officers of the Company, as a group, owned, or controlled or directed, directly or indirectly 42,630,068 Common Shares or approximately 13.9% of the issued and outstanding Common Shares. The information as to the number of Common Shares beneficially owned has been furnished by the respective directors and officers of the Company.

Cease Trade Orders

To the best of Pine Cliff's knowledge, no director or executive officer is, or within the ten years prior to the date hereof has been, a director, chief executive officer or chief financial officer of any corporation (including the Company) that: (i) while that person was acting in that capacity, was subject to a cease trade or similar order or an order that denied such corporation access to any exemptions under securities legislation, that was in effect for a period of more than 30 consecutive days; or (ii) was subject to a cease trade or similar order or an order that denied such corporation access to any exemptions under

securities legislation, that was in effect for a period of more than 30 consecutive days that was issued after that person ceased to act in such capacity and which resulted from an event that occurred while that person was acting in such capacity.

Bankruptcies

To the best of Pine Cliff's knowledge, no director or executive officer of the Company, or Shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company: (i) is, as at the date of this Annual Information Form, or has been within the past 10 years, a director or executive officer of any corporation (including the Company) that while the person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within the past 10 years before the date of this Annual Information Form become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Penalties or Sanctions

To the best of Pine Cliff's knowledge, no director or executive officer of the Company, or Shareholder holding sufficient securities of the Company to affect materially the control of the Company, has been subject to: (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor making an investment decision.

CONFLICTS OF INTEREST

Pine Cliff's directors and officers may serve as directors or officers of other companies or have significant shareholdings in other resource companies and, to the extent that such other companies may participate in ventures in which Pine Cliff may participate, the directors of Pine Cliff may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that such a conflict of interest arises at a meeting of Pine Cliff's directors, a director who has such a conflict will generally abstain from voting for or against the approval of such participation or the terms of such participation. From time to time, several companies may participate in the acquisition, exploration and development of natural resource properties, thereby allowing for their participation in larger programs, the involvement in a greater number of programs or a reduction in financial exposure in respect of any one program. It may also occur that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment. In accordance with the laws of Canada, the directors of Pine Cliff are required to act honestly, in good faith and in the best interests of Pine Cliff. In determining whether or not Pine Cliff will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which Pine Cliff may be exposed and the financial position at that time.

The directors and officers of Pine Cliff are aware of the existence of laws governing the accountability of directors and officers for corporate opportunity and requiring disclosure by the directors of conflicts of interest and Pine Cliff will rely upon such laws in respect of any directors and officers conflicts of interest or in respect of any breaches of duty by any of its directors and officers. All such conflicts will be disclosed by such directors or officers in accordance with the ABCA and they will govern themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law. Other than as disclosed above, the directors and officers of Pine Cliff are not aware of any such conflicts of interest in any existing or contemplated contracts with or transactions involving Pine Cliff.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

To the knowledge of the Company, there are no legal proceedings that the Company is or was a party to or of which any of its properties is or was the subject of, during the most recently completed financial year, nor are there any such proceedings known to the Company to be contemplated, which involve a claim for damages, exclusive of interest and costs, that may exceed 10% of the current assets of the Company.

There were no: (i) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the most recently completed financial year; (ii) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision; and (iii) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during the most recently completed financial year.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed in this Annual Information Form, Management is not aware of any material interests, direct or indirect, of any directors or executive officers of the Company, any person or company which beneficially owns or controls or directs, directly or indirectly, more than 10% of the outstanding Common Shares, or any known associate or affiliate of such persons, in any transaction within the last three financial years of the Company, or during the current financial year which has materially affected or is reasonably expected to materially affect the Company.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Shares of Pine Cliff is Odyssey Trust Company at its principal office in Calgary, Alberta.

MATERIAL CONTRACTS

Except for contracts entered into in the ordinary course of business, the material contracts entered into by Pine Cliff since the beginning of the two most recently completed financial years and still in effect as at the date hereof that can be reasonably regarded as presently material are:

- i) the Floating Charge Debenture in favour of her Majesty the Queen in Right of Alberta dated July 13, 2018 for \$49 million;
- ii) the \$11 million restated credit facility dated July 13, 2018 between Pine Cliff and a syndicate of three Canadian Financial Institutions;
- iii) the Amended and Restated Floating Charge Debenture in favour of George F. Fink dated July 13, 2018 for \$6.0 million; and
- iv) the Amended and Restated Floating Charge Debentures in favour of Haywood Securities Inc. ITF Robert Disbrow dated July 13, 2018 for \$5.0 million.

All of the above contracts are available on Pine Cliff's SEDAR profile at www.sedar.com.

INTERESTS OF EXPERTS

There is no person or company whose profession or business gives authority to a statement made by such person or company and who is named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under NI 51-102 by Pine Cliff during, or related to, the two most recently completed financial years other than McDaniel, Pine Cliff's independent qualified reserves evaluator and Deloitte LLP, Chartered Accountants, Pine Cliff's auditor. None of the designated professionals of McDaniel had any registered or beneficial interests, direct or indirect, in any securities or other property of Pine Cliff or of Pine Cliff's associates or affiliates either at the time they prepared the statement, report or valuation prepared by it, at any time thereafter or to be received by them. Deloitte LLP have advised that they are independent with respect to Pine Cliff within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Alberta.

AUDIT COMMITTEE INFORMATION

The following information is provided in accordance with Form 52-110F1 under National Instrument 52-110 *Audit Committees* (“NI 52-110”).

Audit Committee Charter

The Audit Committee Charter is attached as Appendix “C” to this Annual Information Form.

Composition of the Audit Committee

The Audit Committee is currently comprised of Messrs. Drummond, Jarock and Rice. Mr. Jarock is the Chairman of the Audit Committee. Each member of the Audit Committee has been determined to be financially literate, as defined in NI 52-110. Messrs. Drummond, Jarock and Rice are independent members of the Audit Committee as such term is defined by NI 52-110.

Relevant Education and Experience

Each member of the Audit Committee is financially literate i.e. has the ability to read and understand financial statements. Pine Cliff’s board of directors believes that collectively, the Audit Committee has the education and experience to fulfill the responsibilities outlined in the Audit Committee Charter. The education and current and past experience of each Audit Committee member that is relevant to the performance of his responsibilities as an Audit Committee member is summarized below:

Name	Education and Experience
Randy M. Jarock	<ul style="list-style-type: none">• Bachelor of Science in Petroleum Engineering.• Director of Bonterra Energy Corp.• Over 30 years of extensive experience related to all aspects of reading, reviewing and understanding financial statements and matters.• Former President of Bonterra.• Former Chief Operating Officer of Pine Cliff.
Gary J. Drummond	<ul style="list-style-type: none">• Lawyer, businessman.• Director of several public corporations, including Bonterra.• Over 35 years of extensive experience directly related to all aspects of reading and understanding financial statements and matters.• Former Chairman of Universal Energy Group.• Former President and Chief Executive Officer of Direct Energy Marketing Limited (public resource company).• BA (Economics) and Law Degree.
William S. Rice	<ul style="list-style-type: none">• Securities/corporate lawyer for many years, including five years as national managing partner of Bennett Jones LLP.• Chair and Chief Executive of the Alberta Securities Commission for 10 years.• Served as a director of several public companies.• Over 40 years of extensive experience related to all aspects of reading, reviewing and understanding financial statements of public companies.

Audit Committee Oversight

At no time since the commencement of the Company's most recently completed financial year has a recommendation of the Audit Committee to nominate or compensate an external auditor not been adopted by the Pine Cliff board of directors.

Reliance on Certain Exemptions

At no time since the commencement of the Company's most recently completed financial year has the Company relied on any exemption from NI 52-110, including Section 2.4 *De Minimis Non-audit Services* of NI 52-110, or an exemption from NI 52-110, in whole or in part, granted under Part 8 *Exemptions* of NI 52-110.

Pre-Approval Policies and Procedures

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as described above under the heading "Duties and Responsibilities of the Committee" in the Audit Committee Charter as attached as Appendix "C".

External Auditor Service Fees (By Category)

The fees for auditor services billed by the Company's external auditors in each of the last two fiscal years are as follows:

Financial Year Ending December 31	Audit Fees	Audit-related Fees	Tax Fees	All Other Fees
2018	\$160,000	\$51,000 ⁽¹⁾	nil	\$35,000 ⁽²⁾⁽³⁾
2017	\$162,000	\$51,000 ⁽¹⁾	nil	\$25,000 ⁽²⁾

⁽¹⁾ Quarterly reviews of the financial statements.

⁽²⁾ Internal Control review.

⁽³⁾ Adoption if new IFRS 16 standard.

ADDITIONAL INFORMATION

Additional information about the Company can be found on SEDAR at www.sedar.com and on the Company's website at www.pinecliffenergy.com

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Common Shares and securities authorized for issuance under equity compensation plans, is contained in the Company's management information circular relating to its most recent annual meeting of Shareholders held on May 17, 2018.

Additional financial information is provided in the Company's consolidated financial statements and management's discussion and analysis for the year ended December 31, 2018.

Additional copies of this Annual Information Form, the materials listed in the preceding paragraph, and any interim financial statements which have been issued by the Company will be available upon request by contacting the Company at Suite 850, 1015 – 4th Street S.W., Calgary, Alberta T2R 1J4, Telephone: (403) 269-2289.

APPENDIX "A"
FORM 51-101F2
REPORT ON RESERVES DATA
BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR AUDITOR

February 12, 2019

Pine Cliff Energy Ltd.
850, 1015 – 4th Street SW
Calgary, Alberta
T2R 1J4

Attention: The Board of Directors of Pine Cliff Energy Ltd.

Re: **Form 51-101F2**
Report on Reserves Data by Independent Qualified Reserves Evaluator
of Pine Cliff Energy Ltd. (the "Company")

To the Board of Directors of Pine Cliff Energy 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 + 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	-	150,770	-	150,770

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.

“Signed C. B. Kowalski”

C. B. Kowalski, P. Eng.

Vice President

Calgary, Alberta, Canada

February 12, 2019

APPENDIX "B"
FORM 51-101F3
REPORT OF MANAGEMENT AND DIRECTORS
ON OIL AND GAS DISCLOSURE

Report of Management and Directors on Reserves Data and Other Information

Management of Pine Cliff Energy Ltd. (the "**Company**") are 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 which are estimates of proved reserves and probable reserves and related future net revenue as at December 31, 2018, estimated using forecast prices and costs.

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 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 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 approved:

- a) the content and filing with securities regulatory authorities of Form 51-101F1 containing 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 judgements regarding future events, actual results will vary and the variations may be material.

"Signed Philip B. Hodge"
Philip B. Hodge, President and Chief Executive Officer

"Signed Cheryne Lowe"
Cheryne Lowe, Chief Financial Officer and Corporate Secretary

"Signed George F. Fink"
George F. Fink, Director

"Signed Randy M. Jarock"
Randy M. Jarock, Director

March 13, 2019

APPENDIX "C"
AUDIT COMMITTEE CHARTER
of
PINE CLIFF ENERGY LTD.

Approved by the Board of Directors on May 18, 2017

1. Establishment of the Audit Committee

It is the policy of Pine Cliff Energy Ltd. (the "**Corporation**") to establish and maintain an Audit Committee (the "**Committee**") to assist the Board of Directors of the Corporation (the "**Board**") in the exercise of its duties and responsibilities.

2. Composition of the Committee

The membership of the Committee shall be as follows:

- (a) the Committee shall consist of a minimum of three directors of the Corporation;
- (b) each of the members of the Committee must be "independent" within the meaning of National Instrument 52-110 – *Audit Committees*;
- (c) all members of the Committee shall be "financially literate" in that they must be 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 the issues that can reasonably be expected to be raised by the Corporation's financial statements;
- (d) members of the Committee shall be appointed annually by the Board, at the first meeting of the Board after the annual general meeting of shareholders of the Corporation, from among directors of the Corporation;
- (e) the chair (the "Chair") of the Committee shall be appointed by the Board;
- (f) a member of the Committee shall *ipso facto* cease to be a member of the Committee upon ceasing to be a director of the Corporation; and
- (g) any member of the Committee may be removed or replaced at any time by resolution of the directors of the Corporation. If and whenever a vacancy shall exist on the Committee, the remaining members may exercise all its powers so long as a quorum remains.

3. Meetings of the Committee

Subject to the following requirements, the Committee may determine its own meeting procedures:

- (a) The Committee shall convene at such dates, times and places as may be designated or approved by the Chair whenever a meeting is requested by the Board, a member of the Committee, the Corporation's external auditors (the "Auditors"), the Chief Executive Officer of the Corporation (the "CEO") or a senior executive of the Corporation. The Committee shall convene a minimum of four times per year to correspond with the review of the annual and quarterly financial statements;
- (b) Notice of each meeting shall be given to each member of the Committee, the Chairman of the Board, the CEO, the Auditors and all other persons the Committee determines should be provided with notice of the meeting;
- (c) Notice of a meeting of the Committee shall:

- (i) be in writing;
 - (ii) state the nature of the business to be transacted at the meeting in reasonable detail;
 - (iii) provide the location of the meeting and instructions how to participate remotely if required;
 - (iv) to the extent practicable, be accompanied by copies of documentation to be considered at the meeting; and
 - (v) be given at least two business days prior to the time stipulated for the meeting or such shorter period as the members of the Committee may permit;
- (d) A quorum for the transaction of business at a meeting of the Committee shall consist of a majority of its members. Every motion at the Committee meeting shall be decided by a majority of votes cast; in the event of a tie vote on any matters, such matters shall be presented to the Board for its consideration and determination;
- (e) Any member of the Committee may participate in a meeting of the Committee by means of such telephonic, electronic or other communication facilities as permit all persons participating in the meeting to communicate adequately with each other, and a member participating in such a meeting by any such means is deemed to be present at the meeting;
- (f) In the absence of the Chair, the members of the Committee shall choose one of the members present to be chair of the meeting. In addition, the members of the Committee shall choose one of the persons present to be the secretary of the meeting;
- (g) The Chairman of the Board, the CEO, senior financial Management and other parties may attend meetings of the Committee; however, the Committee: (i) shall meet with the Auditors independent of Management; and (ii) may meet separately with Management;
- (h) The Committee shall meet in a separate, non-Management, in camera session at each meeting. The Committee may invite such officers, directors and employees of the Corporation or affiliates as it see fit from time to time to attend meetings of the Committee and to assist thereat in the discussion of matters being considered by the Committee;
- (i) Minutes shall be kept of all meetings of the Committee and shall be signed by the chair and the secretary of the meeting; and
- (j) Minutes of Committee meetings will be sent to all Board members and relevant Management. Reports on the conduct of the meetings will be made to the Board by the Chair or in their absence, by the chair of the meeting.

4. **Duties and Responsibilities of the Committee**

The Committee's primary duties and responsibilities are to assist the Board with the following:

- (a) providing an open avenue of communication among Management, the Auditors and the Board;
- (b) monitoring the adequacy of this Charter and recommending any proposed changes to the Board;
- (c) reviewing the appointments of the Corporation's Chief Financial Officer and any other key financial executives involved in the financial reporting process;
- (d) identifying and monitoring the Management of the principal risks that could impact the financial reporting of the Corporation;

- (e) reviewing with Management and the Auditors the adequacy and effectiveness of the Corporation's accounting and financial controls and overseeing the integrity, adequacy and timeliness of its financial reporting processes. The Committee shall review to ensure, to its satisfaction, that adequate procedures are in place for the review of the Corporation's disclosure of financial information extracted or derived from the Corporation's financial statements and will periodically assess the adequacy of those procedures;
- (f) reviewing with Management and the external auditors the audited annual financial statements and related documents and review with Management the unaudited quarterly financial statements and related documents, prior to filing or distribution, including matters required to be reviewed under applicable legal or regulatory requirements, for submission to the Board of Directors for approval;
- (g) reviewing with Management, where appropriate and prior to release, any news releases that disclose annual or interim financial results or contain other significant financial information that has not previously been released to the public;
- (h) reviewing the Corporation's financial reporting and accounting standards and principles and significant changes in such standards or principles or in their application, including key accounting decisions affecting the financial statements, alternatives thereto and the rationale for decisions made;
- (i) reviewing the quality and appropriateness of the accounting policies and the clarity of financial information and disclosure practices adopted by the Corporation, including consideration of the Auditors' judgment about the quality and appropriateness of the Corporation's accounting policies. This review may include discussions with the external auditors without the presence of Management;
- (j) reviewing with Management and the Auditors, significant related party transactions and potential conflicts of interest;
- (k) pre-approving all non-audit services in excess of \$20,000 to be provided to the Corporation by the Auditors and applicable fees;
- (l) if deemed necessary, inspecting any and all of the books and records of the Corporation, its subsidiaries and affiliates;
- (m) discussing with Management, its subsidiaries and affiliates and staff of the Corporation, any affected party, contractors and consultants of the Corporation and the external auditors, such accounts, records and other matters as any member of the Committee considers necessary and appropriate;
- (n) when there is to be a change of Auditors, reviewing all issues and provide documentation related to the change, including the information to be included in the Notice of Change of Auditors and documentation required pursuant to National Instrument 51-102 (or any successor legislation) of the Canadian Securities Administrators and the planned steps for an orderly transition;
- (o) reviewing all securities offering documents (including the documents incorporated therein by reference) of the Corporation;
- (p) reviewing findings, if any, from examinations performed by regulatory agencies with respect to financial matters;
- (q) reviewing and overseeing Management's procedure for monitoring the Corporation's compliance with laws and regulations related to financial reporting;
- (r) reviewing current and expected future compliance with covenants under financing agreements;

- (s) reviewing the proposed issuance of debt and equity instruments including public and private debt, equity and hybrid securities, credit facilities with banks and others, and other credit arrangements such as material capital and operating leases. When applicable, the Committee shall review the related securities;
- (t) monitoring and overseeing the independence of the Auditors by reviewing all relationships between the Auditors and the Corporation and all non-audit work performed for the Corporation by the Auditors;
- (u) establishing and reviewing the Corporation's procedures for the:
 - (i) receipt, retention and treatment of complaints regarding accounting, financial disclosure, internal controls or auditing matters; and
 - (ii) confidential, anonymous submission by employees of the Corporation regarding questionable accounting, auditing and financial reporting and disclosure matters.
- (v) reviewing and approving the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former Auditors of the Corporation;
- (w) conducting or authorizing investigations into any matters that the Committee believes is within the scope of its responsibilities;
- (x) performing such other functions and exercise such other powers as are prescribed from time to time for the audit committee of a reporting issuer in Parts 2 and 4 of NI 52-110, all other applicable laws and policies and procedures of all applicable regulatory authorities, the Business Corporations Act (Alberta) and the By-laws of the Corporation; and
- (y) performing any other activities consistent with this Charter as the Committee or the Board deems necessary or appropriate.

5. **Management and Auditor's Role**

Management is responsible for preparing the Corporation's financial statements and other financial information and for the fair presentation of the information set forth in the financial statements in accordance with International Financial Reporting Standards. Management is also responsible for establishing internal controls and procedures and for maintaining the appropriate accounting and financial reporting principles and policies designed to assure compliance with accounting standards and all applicable laws and regulations.

The Auditors' responsibility is to express an opinion on the Corporation's financial statements, based on their audit conducted in accordance with generally accepted auditing standards.

6. **Reporting**

At the earliest reasonable opportunity after each meeting, the Committee shall report to the Board the results of its activities and any reviews undertaken and make recommendations to the Board as deemed appropriate.

7. **Access to Outside Advisors**

The Committee has the authority to retain independent counsel, accountants or other advisors to assist it, as it considers necessary, to carry out its duties, and to set and pay the compensation of such advisors at the expense of the Corporation. If these costs exceed \$10,000 per annum for a Committee member, such member will obtain prior approval from the Board for the amount exceeding \$10,000 per annum. The Committee, and any outside advisors retained by it, will have access to all records and information relating to the Corporation and its subsidiaries which it deems relevant to the performance of its duties.