2018 ANNUAL REPORT

# COMMITTED



BIRCHCLIFF ENERGY

#### FINANCIAL AND OPERATIONAL HIGHLIGHTS

	Three	Three months ended December 31,		months ende December 31
	2018	2017	2018	201
OPERATING				
Average daily production				
Light oil (bbls/d)	4,788	5,283	4,873	6,00
Natural gas (Mcf/d)	363,596	385,280	372,170	320,92
NGLs (bbls/d)	11,021	10,607	10,195	8,4
Total (boe/d)	76,408	80,103	77,096	67,96
Average sales price (CDN\$)(1)			,	
Light oil (per bbl)	41.39	68.58	68.66	61.4
Natural gas (per Mcf)	3.03	2.64	2.45	2.7
NGLs (per bbl)	34.73	40.08	44.66	33.3
Total (per boe)	<b>22.01</b>	<b>22.54</b>	22.08	<b>22.4</b>
NETBACK AND COST (\$/boe)	22101	22.54	22.00	
Petroleum and natural gas revenue <sup>(1)</sup>	22.01	22.55	22.08	22.4
Royalty expense	(0.96)	(1.26)	(1.36)	(1.16
Operating expense				-
	(3.51) (4.07)	(3.86) (3.52)	(3.52) (3.68)	(4.45)
Transportation and other expense  Operating netback (\$/boe)				
	13.47	13.91	13.52	13.9
General & administrative expense, net	(1.08)	(1.28)	(0.87)	(1.07
Interest expense	(1.06)	(0.97)	(0.99)	(1.14
Realized gain (loss) on financial instruments	0.24	1.46	(0.56)	1.0
Other income	0.03	0.04	0.02	0.0
Adjusted funds flow netback (\$/boe)	11.60	13.16	11.12	12.8
Other compensation expense, net	(0.78)	(0.13)	(0.27)	(0.16
Depletion and depreciation expense	(7.29)	(7.86)	(7.42)	(7.48
Accretion expense	(0.12)	(0.08)	(0.11)	(0.1
Amortization of deferred financing fees	(0.05)	(0.05)	(0.05)	(0.06
Gain (loss) on sale of assets	(0.26)	1.86	(0.36)	(7.50
Unrealized gain (loss) on financial instruments	11.02	(1.86)	2.28	0.2
Dividends on Series C preferred shares	(0.12)	(0.12)	(0.12)	(0.14
Income tax recovery (expense)	(3.77)	(1.42)	(1.44)	0.5
Net income (loss) (\$/boe)	10.23	3.50	3.63	(1.89
Dividends on Series A preferred shares	(0.14)	(0.14)	(0.15)	(0.17
Net income (loss) to common shareholders (\$/boe)	10.09	3.36	3.48	(2.06
FINANCIAL				
Petroleum and natural gas revenue (\$000s) <sup>(1)</sup>	154,720	166,149	621,421	556,94
Cash flow from operating activities (\$000s)	92,200	88,995	324,434	287,66
Adjusted funds flow (\$000s)	81,517	97,008	312,922	317,68
Per common share – basic (\$)	0.31	0.36	1.18	1.2
Per common share – diluted (\$)	0.30	0.36	1.17	1.1
Net income (loss) (\$000s)	71,947	25,820	102,212	(46,980
Net income (loss) to common shareholders (\$000s)	70,900	24,773	98,025	(51,027
Per common share – basic (\$)	0.27	0.09	0.37	(0.19
Per common share – diluted (\$)	0.27	0.09	0.37	(0.19
Common shares outstanding (000s)				
End of period – basic	265,911	265,797	265,911	265,79
End of period – diluted	284,699	282,895	284,699	282,89
Weighted average common shares for period – basic	265,910	265,792	265,852	265,18
Weighted average common shares for period – diluted	267,288	267,619	267,323	267,87
Dividends on common shares (\$000s)	6,648	6,644	26,586	26,52
		1,047	4,187	4,04
	1047			7,04
Dividends on Series A preferred shares (\$000s)	1,047 875			3 50
Dividends on Series A preferred shares (\$000s) Dividends on Series C preferred shares (\$000s)	875	875	3,500	
Dividends on Series A preferred shares (\$000s)  Dividends on Series C preferred shares (\$000s)  Total capital expenditures (\$000s)(2)	875 52,886	875 18,669	3,500 298,018	3,50 276,12 58713
Dividends on Series A preferred shares (\$000s)  Dividends on Series C preferred shares (\$000s)  Total capital expenditures (\$000s) <sup>(2)</sup> Long-term debt (\$000s)  Adjusted working capital deficit (\$000s)	875	875	3,500	

 $<sup>(1) \</sup>quad \text{Excludes the effects of hedges using financial instruments but includes the effects of fixed price physical delivery contracts.}$ 

<sup>(2)</sup> See "Advisories – Capital Expenditures" in this Annual Report.

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This Annual Report contains forward-looking statements and information within the meaning of applicable securities laws. Such forward-looking statements and information are based upor certain expectations and assumptions and actual results may differ materially from those expressed or implied by such forward-looking statements and information. For further information regarding the forward-looking statements and information contained herein, see "Advisories – Forward-Looking Statements" in this Annual Report. In addition, this Annual Report contains references to "adjusted funds flow", "adjusted funds flow per common share", "free funds flow", "operating netback", "adjusted funds flow netback", "adjusted working capital deficit" and "total debt", which do not have standardized meanings prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. For further information, see "Non-GAAP Measures" in this Annual Report and in the management's discussion and analysis for the year ended December 31, 2018 (the "MD&A"). Boe amounts in this Annual Report have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil.

### **OVERVIEW**

Birchcliff Energy Ltd. is an intermediate oil and gas company based in Calgary, Alberta, with operations concentrated within one core area, the Peace River Arch of Alberta.

Our strategy is to continue to develop and expand our large Montney/Doig Resource Play in the Peace River Arch, while maintaining low capital costs and operating costs. Our Montney/Doig Resource Play provides us with an extensive inventory of repeatable, low-cost drilling opportunities targeting natural gas, oil and NGLs. Birchcliff has the ability to grow when commodity prices warrant doing so while also having the ability to maintain production in low commodity price environments.

At December 31, 2018, 385 (380.6 net) Montney/Doig horizontal wells have been successfully drilled and cased on Birchcliff's lands. The majority of Birchcliff's natural gas is processed through our 100% owned and operated natural gas plant located in the Pouce Coupe area of Alberta (the **"Pouce Coupe Gas Plant"**). The Pouce Coupe Gas Plant has processing capacity of 340 MMcf/d and is the cornerstone of our strategy to develop our Montney/Doig Resource Play, to control and expand our production in the play and to further reduce our operating costs per boe.

We continue to operate essentially all of our high working interest production, which is surrounded by large contiguous blocks of high working interest lands where we own control and/or have long-term access to the infrastructure. Our operatorship, land position and infrastructure ownership gives us a competitive advantage in our areas of operation and supports our low F&D costs and low operating cost structure, which helps us to maximize our funds flow.

Our common shares are listed on the TSX under the symbol BIR and are included in the S&P/TSX Composite Index. Our Series A and Series C Preferred Shares are listed for trading on the TSX under the symbols BIR.PR.A and BIR.PR.C, respectively.

# **BY THE NUMBERS**

As at December 31, 2018

89%	Average working interest in undeveloped land
99%	Operated production
99%	New drilling initiated and controlled
385 380.6 NET	Horizontal wells drilled and cased on the Montney/Doig Resource Play

# **MESSAGE TO SHAREHOLDERS**

"In light of current economic conditions, we are dedicated to continued strict capital discipline."



#### Dear Fellow Shareholder,

In 2018, Birchcliff achieved record average annual production of 77,096 boe/d, generated significant adjusted funds flow, earnings, grew our reserves, and materially reduced our operating costs. In addition, Birchcliff paid a dividend of \$0.10 per common share. By any metric, Birchcliff had another excellent year. However, as a result of continued weak commodity prices, lack of pipeline access to traditional and new sales markets, and the continued rise in business costs, share prices of Canadian energy producers remained low as investors left the energy space.

We grew our production to record levels in 2018 and achieved annual average production of 77,096 boe/d, a 13% increase from 2017. Our proved developed producing reserves grew to approximately 204 MMboe at December 31, 2018, a 3% increase from December 31, 2017. In the third quarter of 2018, we brought our 80 MMcf/d Phase VI expansion of our Pouce Coupe Gas Plant on-stream which increased the processing capacity of the plant to 340 MMcf/d from 260 MMcf/d. Our operating costs for 2018 were 21% lower than in 2017. We continued to pay a sustainable quarterly dividend to our common shareholders in 2018, which we subsequently increased by 5% in February, 2019.

Due to the recent issues at AECO and the extremely volatile prices we saw throughout the year, we actively pursued various market diversification and hedging opportunities in order to reduce our exposure to AECO pricing. To diversify our natural gas sales points, we have agreements in place for the firm service transportation of an aggregate of 175,000 GJ/d of natural gas on TCPL's Canadian Mainline for a 10-year term, whereby natural gas is transported to the Dawn trading hub located in Southern Ontario. The first tranche of this service (120,000 GJ/d) became available to Birchcliff on November 1, 2017, and the second tranche became available on November 1, 2018 (30,000 GJ/d).

The final tranche will become available November 1, 2019 (25,000 GJ/d) bringing the total to 175,000 GJ/d. We expect that during 2019, approximately 65% of our natural gas will be effectively sold at prices that are not based on AECO.

In summary, in 2018 we strengthened Birchcliff by growing our production and reserves, maintained a healthy balance sheet and continued to reduce our operating costs. We are more focused, better financed and have added more production at lower costs across our very large contiguous land base on our Montney/Doig Resource Play.

#### **OUTLOOK**

Based on our 2019 budget, Birchcliff expects to generate approximately \$126 MM of free funds flow over and above the capital required to achieve production guidance. Birchcliff's focus will continue to be on protecting our balance sheet, improving our already-low cost structure and paying a sustainable quarterly dividend to our shareholders, while we maintain a prudent pace of development and continue to position Birchcliff for future growth.

In light of current economic conditions, we are dedicated to continued strict capital discipline. The 2019 capital program contemplates the drilling of a total of 17 net wells during 2019 and targets an annual average production rate of 76,000 to 78,000 boe/d. This program reflects our long-term plan to continue the exploration and development of our low-cost natural gas, crude oil and liquids-rich assets on the Montney/Doig Resource Play, increase our netbacks and maintain balance sheet strength. In particular, we will focus on the drilling of crude oil wells in Gordondale and condensate-rich natural gas wells in Pouce Coupe. Our capital program has been designed with financial and operational

flexibility with the potential to accelerate or decelerate capital expenditures throughout the year, depending on commodity prices and economic conditions. We expect that our 2019 F&D capital expenditures will be significantly less than our adjusted funds flow during 2019, which will help us to protect our balance sheet.

I would like to thank our Board of Directors for their support and guidance throughout 2018. During 2018, we had one new addition to our Board, Stacey McDonald, who was appointed in December 2018. Stacey brings a wealth of knowledge and experience to the Board, especially in the area of capital markets.

I would also like to thank all of our staff for their excellent work and for helping us to deliver these strong results for 2018. Our staff are truly dedicated to help Birchcliff succeed and I believe that they are our best asset.

Lastly, I would like to thank all of our shareholders for their continued support. We continue to strive to deliver long-term value for all of you.

With respect,

A. Jeffery Tonken
President & Chief Executive Officer

Jy Tanlan

March 13, 2019

#### THE STRENGTH OF OUR PARTNERSHIP

# **EXECUTIVE TEAM**

Drawing on extensive backgrounds in the energy sector, our Executive Team brings a rich portfolio of skills and experience to Birchcliff's business operations.



MYLES BOSMAN
Vice-President, Exploration &
Chief Operating Officer

JEFF TONKEN
President &
Chief Executive Officer

Under the oversight of our Board of Directors, our Executive Team collectively drives our day-to-day pursuit of operational excellence, while identifying and pursuing responsible growth opportunities. Deeply invested in our success and unified by a genuine sense of camaraderie, our Executive Team works together to provide effective leadership and strategic direction.



**BRUNO GEREMIA**Vice-President &
Chief Financial Officer

**CHRIS CARLSEN**Vice-President, Engineering

**DAVE HUMPHREYS**Vice-President, Operations

#### OUR PEOPLE ARE OUR BEST ASSET

# **MANAGEMENT TEAM**

Birchcliff's management team is comprised of talented, high-performing individuals who are driven to help Birchcliff succeed.



**JEFF ROGERS**Facilities Manager



**RANDY ROUSSON**Drilling & Completions Manager



RYAN SLOAN
Health, Safety &
Environment Manager



**ROBYN BOURGEOIS**General Counsel & Corporate Secretary



**BRUCE PALMER**Manager of Geology



**GATES AURIGEMMA**Manager, General Accounting



VICTOR SANDHAWALIA

Manager of Finance



**ANDREW FULFORD**Surface Land Manager



**GEORGE FUKUSHIMA**Manager of Engineering

With guidance from our Executive Team, our management team is instrumental in executing our business strategy and managing our day-to-day operations.



**BRIAN RITCHIE**Asset Manager – Gordondale



**THEO VAN DER WERKEN**Asset Manager – Pouce Coupe



MICHELLE RODGERSON

Manager, Human Resources

& Corporate Services



**HUE TRAN**Business Development Manager



**JESSE DOENZ**Controller & Investor Relations Manager



**PAUL MESSER**Manager of Information Technology



**TYLER MURRAY**Mineral Land Manager



**DUANE THOMPSON**Production Manager

#### BUILDING ON OUR PAST

# **HISTORY**

Birchcliff was incorporated as a private corporation on July 6, 2004. Since our inception, we have invested approximately \$4.1 billion of capital in Alberta, primarily in the Montney/Doig Resource Play. These investments have generated \$4.0 billion in revenue, paid \$342 million in royalties to Albertans and delivered \$2.1 billion in adjusted funds flow.

The following describes the major events in our history:

#### JANUARY 19, 2005

Common shares commenced trading on the TSX Venture Exchange

#### **FEBRUARY 6, 2005**

Rig released first Montney/ Doig vertical exploration gas well drilled by Birchcliff in the Pouce Coupe area

#### **SEPTEMBER 22, 2007**

Rig released first Montney/ Doig horizontal natural gas well drilled by Birchcliff utilizing multi-stage fracture stimulation technology in the Pouce Coupe area

#### **OCTOBER 2012**

Phase III of the Pouce Coupe Gas Plant commenced operations with a combined processing capacity of 150 MMcf/d

# 2005

#### MAY 31, 2005

Completed acquisition of properties in the Peace River Arch for \$242.8 million, including a significant undeveloped land position on the Montney/Doig Resource Play

#### **JULY 21, 2005**

Common shares commenced trading on the TSX

#### **MARCH 2010**

Phase I of the Pouce Coupe Gas Plant commenced operations with a processing capacity of 30 MMcf/d

#### **NOVEMBER 2010**

Phase II of the Pouce Coupe Gas Plant commenced operations with a combined processing capacity of 60 MMcf/d At December 31, 2018, the net present value of the future net revenue attributable to our proved plus probable reserves (at a 10% discount rate, before income taxes) is \$6.1 billion as estimated by our independent qualified reserves evaluators.

#### **JULY 13, 2016**

Closed equity financings for total gross proceeds of \$690.8 million

#### **JULY 28, 2016**

Completed acquisition of assets at Gordondale for approximately \$613.5 million

#### **APRIL 3, 2018**

Announced new long-term processing arrangement at Altagas' deep-cut processing facility in Gordondale

#### **AUGUST 2018**

Phase VI of the Pouce Coupe Gas Plant commenced operations with a combined processing capacity of 340 MMcf/d

# 2018

#### **SEPTEMBER 2014**

Phase IV of the Pouce Coupe Gas Plant commenced operations with a combined processing capacity of 180 MMcf/d

#### **MARCH 31, 2017**

Paid first quarterly dividend to common shareholders

#### SEPTEMBER 2017

Phase V of the Pouce Coupe Gas Plant commenced operations with a combined processing capacity of 260 MMcf/d

#### NOVEMBER 14, 2018

Announced entering into a definitive purchase and sale agreement to acquire 18 gross (15.1 net) contiguous sections of Montney land between Pouce Coupe and Gordondale for \$39 million (subsequently closed on January 3, 2019)

#### **DECEMBER 31, 2018**

385 (380.6 net) Montney/Doig horizontal wells successfully drilled and cased to date

# **2018 ACCOMPLISHMENTS**



Achieved record annual average production of **77,096 boe/d** (13% growth year-over-year)



Drilled 36 wells, consisting of 19 Montney/Doig horizontal natural gas wells at Pouce Coupe and 17 Montney horizontal oil wells at Gordondale, all at 100% working interest



**Delivered reserves growth** year-over-year



Continued to reduce exposure to AECO natural gas market with a total of **150,000 GJ/d of egress** to the Dawn market beginning November 1, 2018



Continued to pay quarterly dividend to common shareholders

# **2019 KEY OBJECTIVES**



Preserve and protect the balance sheet spending within adjusted funds flow



Further exploration and delineation of the Montney/Doig Resource Play in Pouce Coupe and Gordondale



Initiate the engineering and planning of a 20,000 bbls/d inlet liquids-handling facility at the Pouce Coupe Gas Plant (anticipated completion in 2020) to increase condensate production capability to 10,000 bbls/d at Pouce Coupe



Optionality on commodity type allows us to focus on Gordondale oil & Pouce Coupe condensate wells while limiting dry gas drilling in the current commodity environment to maximize our returns



Continued commitment to **science and technology** to drive operational excellence and further our learnings on field development planning



Continue to focus on **full cycle profitability** while paying a sustainable quarterly dividend to common shareholders



Drill, case and complete a total of 17 wells consisting of 9 Montney condensate-rich horizontal natural gas wells at Pouce Coupe and 8 Montney horizontal oil wells at Gordondale, all at 100% working interest



Bring on a **total of 26 wells** including 9 wells drilled in late 2018 with the 2019 capital acceleration

# "WE HAVE OUR BEST ASSET IN PLACE, WHICH IS OUR PEOPLE."

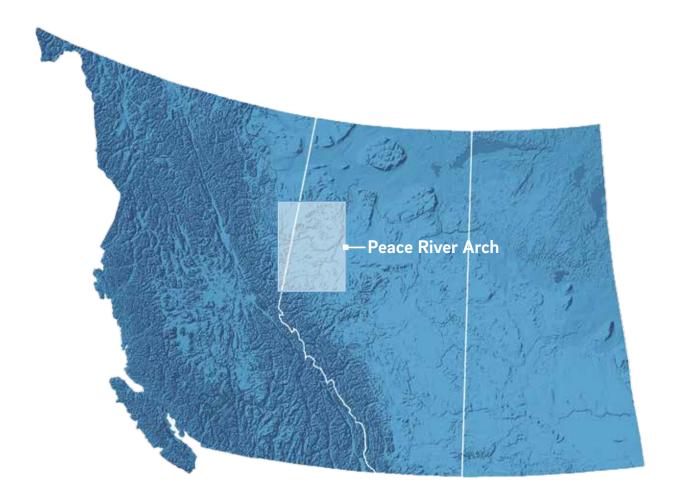
- A. JEFFERY TONKEN
President & Chief Executive Officer



# **ONE CORE AREA**

### **PEACE RIVER ARCH**

Our operations are concentrated within our one core area, the Peace River Arch, which is centered northwest of Grande Prairie, Alberta, adjacent to the Alberta/British Columbia border. The Peace River Arch is considered by management to be one of the most desirable natural gas and light oil drilling areas in North America.



The Peace River Arch is one of the most prolific natural gas and light oil producing areas of the Western Canadian Sedimentary Basin and is generally characterized by multiple horizons with a myriad of structural, stratigraphic and hydrodynamic traps. The Peace River Arch is highlighted by the Deep Basin hydrocarbon trapping phenomena. The Deep Basin is a hydrodynamic or permeability trap where the water in the updip position cannot travel through the fine grained reservoirs with characteristics that include overpressured reservoirs, continuous hydrocarbon columns, low water production and long-life reserves with low terminal declines. The Peace River Arch provides all-season access that allows the Corporation to drill, equip and tie-in wells on an almost continuous basis. In addition, Birchcliff has excellent control of and/or long-term access to infrastructure in the Peace River Arch, which helps us to control our costs and expand our production when market conditions recover.

#### LOW RISK DEVELOPMENT

# **MONTNEY/DOIG RESOURCE PLAY**

# We are focused on the **Montney/Doig Resource Play** within the **Peace River Arch.**

#### **ESTABLISHED MONTNEY/DOIG RESOURCE PLAY**

Birchcliff characterizes its Montney/Doig Resource Play as a regionally pervasive, continuous, low-permeability hydrocarbon accumulation or system that typically requires intensive stimulation to produce. The production characteristics of this play generally include steep initial declines that rapidly trend to much lower decline rates, yielding long-life production and reserves. The play exhibits a statistical distribution of estimated ultimate recoveries and therefore provides a repeatable distribution of drilling opportunities. Birchcliff's Montney/Doig Resource Play is ideally suited for the application of horizontal drilling and multi-stage fracture stimulation technology.

As more wells are drilled into a resource play, there is a substantial decrease in both the geological and technical risks. Over the past 14 years, Birchcliff has worked to de-risk its Montney/Doig Resource Play by drilling both vertical and horizontal exploration wells in order to develop an in-depth understanding of the oil and gas pools, rock properties and petrophysical characteristics and reservoir parameters. Birchcliff designs, tests and

**DRILLED AND CASED** 

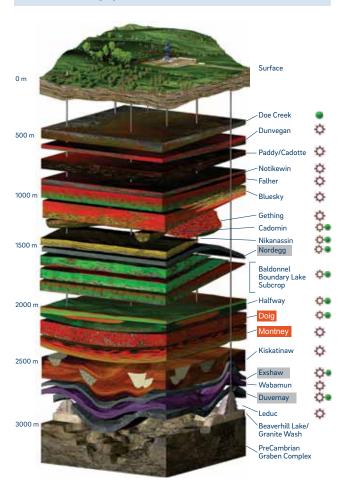
385
(380.6 net)

MONTNEY/ DOIG HORIZONTAL WELLS

AT DECEMBER 31, 2018

evaluates its drilling, completion and production technologies and practices to achieve continual improvements in productivity and expected ultimate recoveries in order to drive down capital and operating costs. Birchcliff's pool delineation strategy de-risks future development and helps to reduce future costs as new well pads and infrastructure are designed and built to support multiple horizontal well locations and increased production.

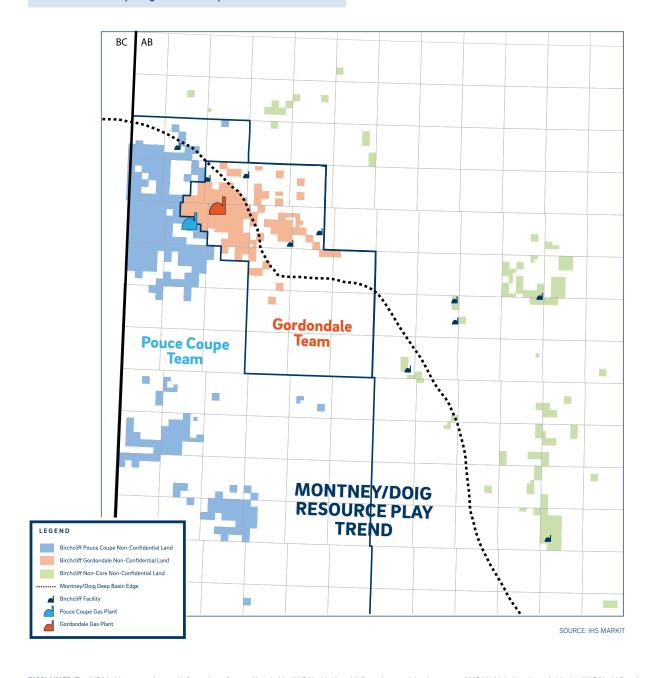
#### Stratigraphic Column and Production Zones



#### **BIRCHCLIFF OPERATIONS IN THE PEACE RIVER ARCH**

The Montney/Doig Resource Play is managed by two technical teams at Birchcliff: the Pouce Coupe Team and the Gordondale Team. These teams each have a full complement of highly skilled technical professionals, including engineers, geoscientists and landmen.

#### Birchcliff Montney/Doig Resource Play in the Peace River Arch

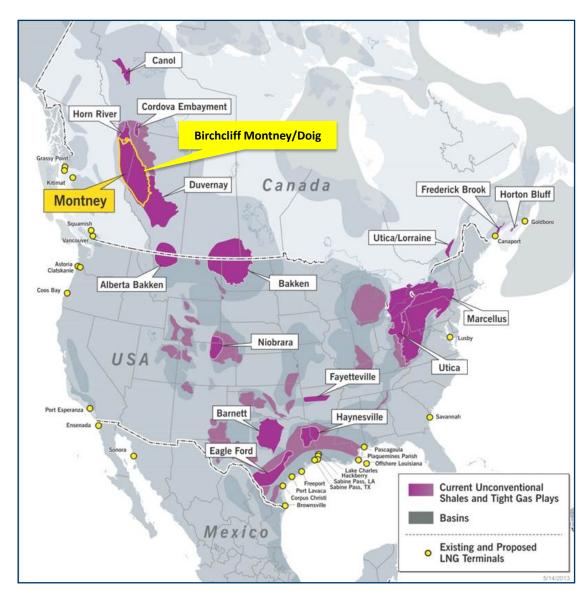


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Our Montney/Doig Resource Play is centred approximately 95 km northwest of Grande Prairie, Alberta, Canada and, in the opinion of Birchcliff, is one of the most sought after resource plays in North America. Within the Montney/Doig Resource Play, Birchcliff is focused on two key operating areas: Pouce Coupe and Gordondale.

There are a number of attributes that the Montney/Doig Resource Play has that contribute to it being a world class resource play, including resource density, large areal extent, exceptional "fracability", high fracture stability and high permeability, as discussed in further detail on the next page.

#### Select Unconventional Plays in North America



SOURCE: RBC RUNDLE

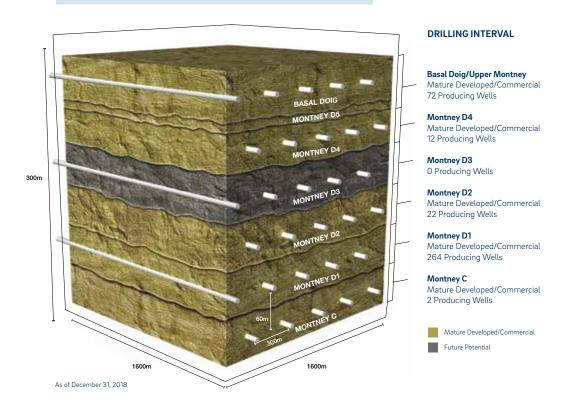
#### **GEOLOGY**

The Montney/Doig Resource Play in Birchcliff's area of operations is approximately 300 metres (1,000 feet) thick. The play has a large areal extent covering in excess of 50,000 square miles. The Montney/Doig is composed of a high percentage of hard minerals and a very low percentage of clay minerals resulting in exceptional "fracability". This, combined with the current stress regime, results in the rock shattering more like glass in a complex fracture style versus a simple bi-wing style. The rock parameters also yield exceptional fracture stability; the fractures stay open due to low proppant embedment. This is a key contributing factor to the low terminal declines and large estimated ultimate recoveries of the play. Unlike most shale plays that are predominantly shale, the Montney/Doig is classified by management as a hybrid resource play because it is comprised of hydrocarbon-saturated rock with both tight silt and sand reservoir rock interlayered with shale source rock. This results in relatively high permeability and productivity rates.

Hydrodynamics is another important attribute for resource plays. A large portion of the Montney/Doig Resource Play is over-pressured which reduces the potential for significant water production. The Pouce Coupe and Gordondale areas are predominantly over-pressured which also results in higher hydrocarbons in-place. The Montney and a majority of the Doig were deposited in a lower to middle shore face environment that is regionally extensive and results in a widespread style deposit that provides for more repeatable results.

The Montney/Doig Resource Play exists in two geological formations (the Montney and the Doig) and Birchcliff has divided the geologic column in its areas of operations into six drilling intervals from the youngest (top) to the oldest (bottom): (i) the Basal Doig/Upper Montney; (ii) the Montney D4; (iii) the Montney D3; (iv) the Montney D2; (v) the Montney D1; and (vi) the Montney C. We have drilled wells in each of the Basal Doig/ Upper Montney, the Montney D4, the Montney D2, the Montney D1 and the Montney C intervals. To date, we have not drilled any wells in the Montney D3 interval.

#### Birchcliff Montney/Doig Resource Play Full Development Plan: Hexastack





#### **OUR OPERATIONS**

At December 31, 2018, Birchcliff has successfully drilled and cased an aggregate of 385.0 (380.6 net) horizontal wells on the Montney/Doig Resource Play. Of these wells, an aggregate of 372 (367.6 net) wells have been completed and brought on production (including 87 (81.8 net) wells that were acquired in connection with the Gordondale acquisition), consisting of 72 (71.3 net) wells in the Basal Doig/Upper Montney interval, 12 (12.0 net) wells in the Montney D4 interval, 22 (22.0 net) wells in the Montney D1 interval and 2 (2.0 net) wells in the Montney D1 interval and 2 (2.0 net) wells in the Montney C interval. To date, the Corporation has not drilled any wells in the Montney D3 interval.

#### **2018 DRILLING AND COMPLETIONS**

Birchcliff drilled a total of 36 (36.0 net) wells during 2018. Of the 36 (36.0 net) wells, 17 (17.0 net) were Montney horizontal oil wells drilled in the Gordondale area and 19 (19.0 net) were Montney/Doig horizontal natural gas wells drilled in the Pouce Coupe area. A total of 28 (28.0 net) wells were brought on production during 2018. Our 2018 capital program included the capital associated with the completion, equipping and tie-in of one well drilled in 2017, which was brought on production in the first quarter of 2018.

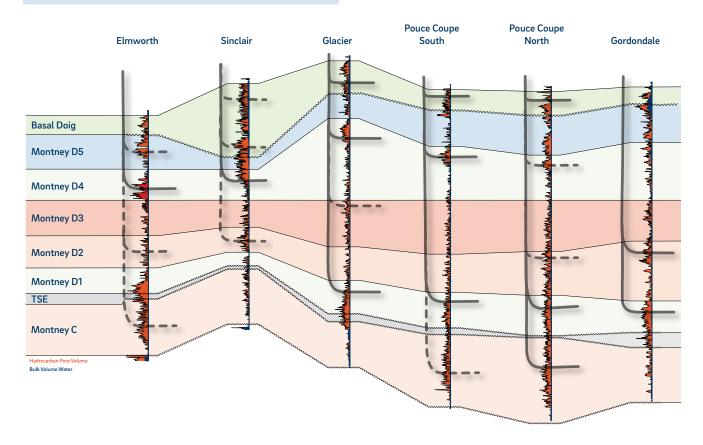
All wells drilled in 2018 were drilled on multi-well pads, which allows us to reduce our per well costs and our environmental footprint. In addition, we actively employ the evolving technology utilized by the industry regarding horizontal well drilling and the related multi-stage fracture stimulation technology.

#### **2018 ACQUISITIONS AND DISPOSITIONS**

During 2018, Birchcliff completed various non-core asset sales for total proceeds of approximately \$5.0 million and completed various minor acquisitions for total consideration of approximately \$1.5 million.

On November 14, 2018, Birchcliff announced that it had entered into a definitive purchase and sale agreement to acquire 18 gross (15.1 net) contiguous sections of Montney land located between the Corporation's existing Pouce Coupe and Gordondale properties, as well as various other non-Montney lands and other assets, for total cash consideration of \$39 million

#### Birchcliff Montney/Doig Multi-Layer Opportunity



(the "**Acquisition**"). Closing of the Acquisition occurred on January 3, 2019 and further consolidated Birchcliff's land position in the area. Subsequent to year-end 2018, Birchcliff commenced the drilling of a 6-well pad on these lands which is targeting condensate-rich natural gas wells.

#### SIGNIFICANT FUTURE DRILLING OPPORTUNITIES

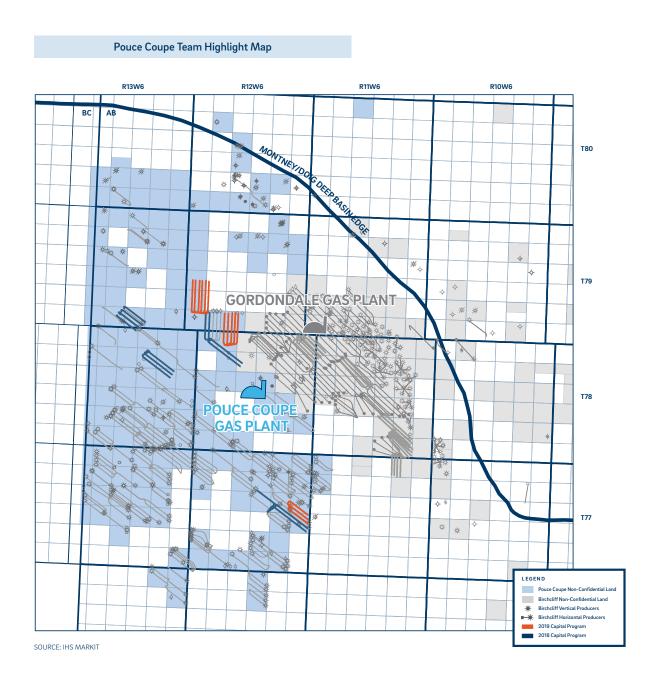
As at December 31, 2018, Birchcliff held 367.4 sections of land that have potential for the Montney/Doig Resource Play. Of these lands, 362.4 (340.3 net) sections have potential for the Basal Doig/Upper Montney interval, 343.9 (336.2 net) sections have potential for the Montney D1 interval, 345.4 (337.7 net) sections have potential for the Montney D2 interval, 343.9 (336.2 net) sections have potential for the Montney C interval. As at December 31, 2018, Birchcliff's total land holdings on these five intervals were 1,739.5 (1,686.6 net) sections. Assuming full development of four horizontal wells per section per drilling interval, Birchcliff has 6,746.4 net existing horizontal wells and potential net future horizontal drilling locations in respect of the Basal Doig/Upper Montney and the Montney D1, D2, D4 and C intervals as at December 31, 2018. With 385.0 (380.6 net) horizontal locations drilled at the end of 2018, there remains 6,365.8 potential net future horizontal drilling locations as at December 31, 2018, up from 4,710.0 at year-end 2017. This increase is largely due to the exploration and delineation success of the Montney C interval as such interval is now considered commercial by Birchcliff.

Birchcliff's consolidated reserves report effective December 31, 2018 attributed proved reserves to 888.8 net existing wells and potential net future horizontal drilling locations (of which 521.6 net wells are potential future drilling locations) and proved plus probable reserves to 1,121.8 net existing wells and potential net future horizontal drilling locations (of which 754.3 net wells are potential future drilling locations). The remaining 5,624.6 potential net future horizontal drilling locations have not yet had any proved or probable reserves attributed to them by Birchcliff's independent qualified reserves evaluators.

# **POUCE COUPE TEAM**

Birchcliff's Pouce Coupe area is located west and northwest of Grande Prairie, Alberta and consists of Birchcliff's properties in Pouce Coupe and Elmworth. At December 31, 2018, Birchcliff held an aggregate of 350.9 (331.6 net) sections of land in the Pouce Coupe area. Annual average production in 2018 for the Pouce Coupe area was 48,943 boe/d (48,734 boe/d in Pouce Coupe and 209 boe/d in Elmworth).

Birchliff was active in the Pouce Coupe area during 2018, drilling a total of 19 (19.0 net) wells and completing Phase VI of the Pouce Coupe Gas Plant.



#### **DRILLING AND DEVELOPMENT**

During 2018, Birchcliff was focused on the drilling of liquids-rich natural gas wells and the pursuit of condensate and other NGLs in several different Montney/Doig intervals, including the Montney D1, D2 and C. Birchcliff drilled 19 (19.0 net) horizontal wells and brought 15 (15.0 net) wells on production in Pouce Coupe in 2018.

# SCIENCE AND TECHNOLOGY MULTI-WELL PAD PROGRAM

As part of Birchcliff's commitment to continuous performance improvement, it designed and executed on its science and technology pad in 2018, which involved the drilling of one vertical well and four horizontal wells in three different intervals (one Montney C, one Montney D2 and two Montney D1 wells). Using the pad, Birchcliff has been able to acquire high-quality subsurface and operational data and thus gain important insights into reservoir behaviour, including fracture initiation and propagation, inter-well fracture communication, well productivity by cluster, the role of natural fractures on production and optimal well spacing by and between zones. Birchcliff has also been able to increase its knowledge regarding field development, including well landing depths, well spacing both laterally and vertically and completion, cluster and stage spacing.

In addition, a permanent fibre optic cable installed in one of the horizontal wells allows Birchcliff to observe how wells interact in the subsurface over time. Ultimately, the knowledge gained from the science and technology pad has helped Birchcliff to improve and refine its best practices at the well, pad and field levels in order to optimize field development.

Birchcliff is focused on continuous improvements in all aspects of its business. In 2019, Birchcliff will continue to pilot innovative technologies in its completions operations in order to achieve better well results, including zipper fracturing, plug and perf technology as well as fluid additives to enhance its condensate production and recoveries. Birchcliff's operations team is focused on maximizing fracture pumping time through surface manifolds, which allows for a quick change over from well to well on multi-well pads and on utilizing new smart coil tubing units for wellbore milling operations post fracture treatment. Regarding drilling in 2019, Birchcliff has modified its drill bit, drilling fluid and downhole motor selection to reduce drill times and has trialled the use of rotary steerable technology for smoother well trajectories. Birchcliff continues to utilize compressed natural gas in 2019 to displace diesel from its operations for both drilling and completions, which has helped to reduce costs and lessen Birchcliff's environmental footprint. Several of these initiatives are a result of the important insights that Birchcliff has been able to gain from the science and technology pad it completed in 2018.





#### **POUCE COUPE GAS PLANT**

Our 100% owned and operated Pouce Coupe Gas Plant located in the Pouce Coupe area of Alberta is strategically situated in the heart of our Montney/Doig Resource Play, enabling us to process natural gas at a lower cost than that borne by others who rely on third-party processing. The Pouce Coupe Gas Plant is the cornerstone of our strategy to develop our Montney/Doig Resource Play, to control and expand our production in the play and to further reduce our operating costs on a per boe basis.

In 2010, we began executing on our "build & fill" strategy with the construction of the Pouce Coupe Gas Plant. During 2010, we constructed Phases I and II of our Pouce Coupe Gas Plant with 60 MMcf/d of natural gas processing capacity. Processing capacity at the Pouce Coupe Gas Plant was subsequently increased to 150 MMcf/d (Phase III) in 2012, to 180 MMcf/d (Phase IV) in 2014, to 260 MMcf/d (Phase V) in 2017 and to 340 MMcf/d (Phase VI) in 2018.

In Q4 2018, Birchcliff completed the re-configuration of Phases V and VI to provide for shallow-cut capability. This shallow-cut capability allows Birchcliff to extract propane plus (C3+) from the natural gas stream, further enhancing Birchcliff's ability to maximize its liquids production.

During 2019, due to increased condensate volumes from Pouce Coupe, Birchcliff has committed to the construction of a 20,000 bbls/d (10,000 bbls/d condensate and 10,000 bbls/d water) inlet liquids-handling facility at its Pouce Coupe Gas Plant. This facility is anticipated to be online in Q3 2020 and will give Birchcliff the ability to grow its condensate production from 3,000 to 10,000 bbls/d in Pouce Coupe. Birchcliff plans on spending approximately \$9.5 million on the associated engineering and long-lead equipment for this facility in 2019.

THE POUCE COUPE GAS PLANT IS

100% OWNED AND OPERATED

enabling us to process natural gas at a lower cost than that borne by others who rely on third-party processing



# **2019 OUTLOOK**

Birchcliff plans to invest approximately \$100 million in Pouce Coupe during 2019. Key focus areas for Pouce Coupe in 2019 will be the drilling of Montney/Doig condensate-rich horizontal natural gas wells and the further exploitation and delineation of condensate-rich trends in the Montney D1, D2 and C intervals.

#### DRILLING AND DEVELOPMENT

Birchcliff plans to drill 9 (9.0 net) condensate-rich horizontal natural gas wells, consisting of 6 (6.0 net) Montney D1 wells, 2 (2.0 net) Montney D2 wells and 1 (1.0 net) Montney C well, all of which will be drilled on multi-well pads. This includes a 6 well pad on the lands that Birchcliff recently acquired pursuant to the Acquisition. Birchcliff believes that the acquired lands are located on a significant condensate-rich trend and are highly prospective in the Montney D1, D2, C and Basal Doig/Upper Montney intervals. The lands are strategically located near Birchcliff's science and technology pad in Pouce Coupe where Birchcliff drilled four successful horizontal wells in 2018 (two in the Montney D1, one in the Montney D2 and one in the Montney C intervals).

#### **FACILITIES AND INFRASTRUCTURE**

Birchcliff plans to invest in facilities and other strategic infrastructure during 2019, including approximately \$9.5 million directed towards associated engineering and long-lead equipment for the 20,000 bbls/d inlet liquids-handling facility at the Pouce Coupe Gas Plant. This facility is anticipated to be online in the third quarter of 2020 and will give the Corporation the ability to grow its condensate production in Pouce Coupe to 10,000 bbls/d.

# **GORDONDALE TEAM**

Birchcliff's Gordondale area is located northwest of Grande Prairie, Alberta and consists solely of Birchcliff's properties in Gordondale. At December 31, 2018, Birchcliff held an aggregate of 139.0 (88.4 net) sections of land in the Gordondale area. Annual average production in 2018 for the Gordondale area was 28,028 boe/d.

During 2018, Birchcliff was focused on the drilling of Montney horizontal oil wells and the delineation of the Montney D1 and D2 intervals in the Gordondale area. Birchcliff drilled 17 (17.0 net) horizontal wells and brought 13 (13.0 net) wells on production in Gordondale in 2018.

Since Birchcliff acquired its assets in Gordondale in 2016, it has drilled 40 (40.0 net) wells in the area, consisting of 22 (22.0 net) Montney D2 horizontal oil wells, 13 (13.0 net) Montney D1 horizontal oil wells, 4 (4.0 net) Montney D1 liquids-rich horizontal natural gas wells and 1 (1.0 net) water disposal well. When Birchcliff first acquired its assets in Gordondale, the average production for such assets was approximately 22,000 boe/d at the date of the acquisition. The horizontal wells that Birchcliff has subsequently drilled and brought on production have replaced the natural production declines and significantly increased the production on its Gordondale assets. The Montney D2 horizontal wells that Birchcliff has drilled, completed and brought on production to-date have significantly delineated, de-risked and proven the commerciality of the Montney D2 play.

# **2019 OUTLOOK**

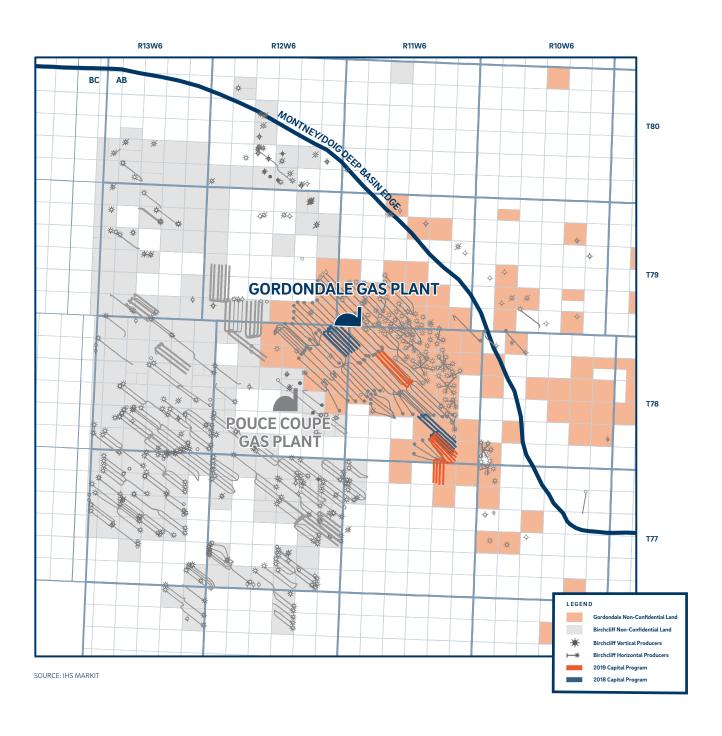
Birchcliff plans to invest approximately \$84 million in Gordondale during 2019. Key focus areas for Gordondale in 2019 will be the drilling of Montney horizontal oil wells and the further exploitation and delineation of oil in the Montney D1 and D2 intervals, specifically in the southeastern part of the Gordondale field.

#### **DRILLING AND DEVELOPMENT**

In 2019, Birchcliff plans to drill 8 (8.0 net) horizontal oil wells, consisting of 5 (5.0 net) Montney D2 wells and 3 (3.0 net) Montney D1 wells, all of which will be drilled on multi-well pads.



#### Gordondale Team Highlight Map



#### CONTINUED RESERVES GROWTH

### 2018 YEAR-END RESERVES

Birchcliff retained two independent qualified reserves evaluators, Deloitte LLP ("Deloitte") and McDaniel & Associates Consultants Ltd. ("McDaniel"), to evaluate and prepare reports on 100% of Birchcliff's light crude oil and medium crude oil (combined), conventional natural gas, shale gas and NGLs reserves. Deloitte evaluated all of Birchcliff's properties other than the Corporation's assets in Gordondale, representing approximately 78% of the assigned total proved plus probable reserves, and McDaniel evaluated the reserves attributable to the Corporation's assets in Gordondale, representing approximately 22% of the assigned total proved plus probable reserves.

The reserves data set forth below at December 31, 2018 is based upon the evaluation by Deloitte with an effective date of December 31, 2018 as contained in the report of Deloitte dated February 13, 2019 (the "2018 Deloitte Reserves Report") and the evaluation by McDaniel with an effective date of December 31, 2018 as contained in the report of McDaniel dated February 13, 2019 (the "2018 McDaniel Reserves Report"), which are contained in the consolidated report of Deloitte dated February 13, 2019 with an effective date of December 31, 2018 (the "2018 Consolidated Reserves Report"). Deloitte prepared the 2018 Consolidated Reserves Report by consolidating the properties evaluated by Deloitte in the 2018 Deloitte Reserves Report with the properties evaluated by McDaniel in the 2018 McDaniel Reserves Report, in each case using Deloitte's forecast price and cost assumptions effective December 31, 2018 (the "2018 Deloitte Price Forecast").

Deloitte also prepared an evaluation with an effective date of December 31, 2017 as contained in the report of Deloitte dated February 9, 2018 (the "2017 Deloitte Reserves Report") and McDaniel prepared an evaluation with an effective date of December 31, 2017 as contained in the report of McDaniel dated February 14, 2018 (the "2017 McDaniel Reserves Report"), which are contained in the consolidated report of Deloitte with an effective date of December 31, 2017 (the "2017 Consolidated") Reserves Report"). Deloitte prepared the 2017 Consolidated Reserves Report by consolidating the properties evaluated by Deloitte in the 2017 Deloitte Reserves Report with the properties evaluated by McDaniel in the 2017 McDaniel Reserves Report, in each case using Deloitte's forecast price and cost assumptions effective December 31, 2017 (the "2017 Deloitte Price Forecast").

All of the above-noted reserves reports were prepared in accordance with the standards contained in the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") and National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities ("NI 51-101") in effect at the relevant time.

For additional information regarding the presentation of Birchcliff's reserves disclosure contained herein, please see "Presentation of Oil and Gas Reserves" and "Advisories" in this Annual Report. The reserves data provided in this Annual Report presents only a portion of the disclosure required under NI 51-101. The disclosure required under NI 51-101 is contained in Birchcliff's Annual Information Form for the year ended December 31, 2018. In certain of the tables below, numbers may not add due to rounding.

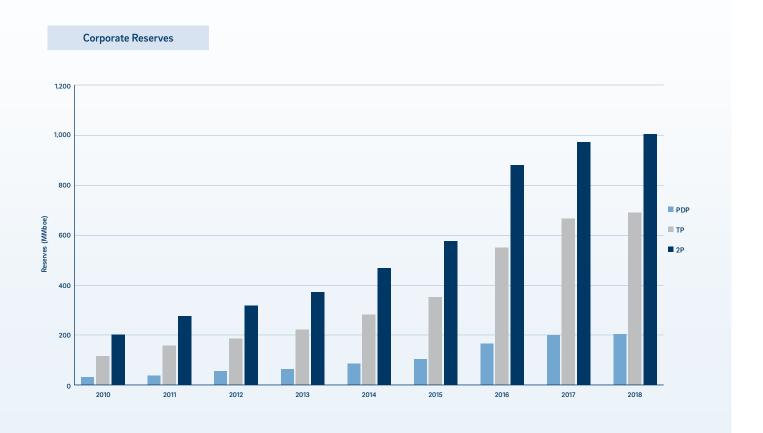
#### **RESERVES SUMMARY**

The following table summarizes the estimates of Birchcliff's gross reserves at December 31, 2018 and December 31, 2017, estimated using the forecast price and cost assumptions in effect as at the effective dates of the applicable reserves evaluations:

#### Summary of Gross Reserves

(Forecast Prices and Costs)

Reserves Category	<b>Dec 31, 2018</b> ( <i>Mboe</i> )	Dec 31, 2017 (Mboe)	Change from Dec 31, 2017
Proved Developed Producing	203,631.0	197,955.1	3%
Total Proved	689,674.1	664,480.5	4%
Probable	312,396.0	308,034.8	1%
Total Proved Plus Probable	1,002,070.1	972,515.3	3%



The following table sets forth Birchcliff's light crude oil and medium crude oil, conventional natural gas, shale gas and NGLs reserves at December 31, 2018, estimated using the 2018 Deloitte Price Forecast:

#### Summary of Reserves at December 31, 2018

(Forecast Prices and Costs)

0				Shale	e Gas	N	GLs	Total	Boe
Gross (Mbbls)	<b>Net</b> (Mbbls)	Gross (MMcf)	Net (MMcf)	Gross (MMcf)	Net (MMcf)	Gross (Mbbls)	Net (Mbbls)	Gross (Mboe)	Net (Mboe)
9,292.8	7,406.5	5,620.7	5,176.5	989,197.3	918,413.6	28,535.1	22,404.8	203,631.0	183,743.1
0.0	0.5	666.1	645.3	31,301.6	29,130.5	317.5	239.6	5,645.4	5,202.7
11,221.1	9,451.5	3,192.9	2,930.1	2,568,438.0	2,339,902.8	40,571.5	32,695.9	480,397.7	432,619.5
20,513.9	16,858.5	9,479.7	8,752.0	3,588,937.0	3,287,446.9	69,424.1	55,340.3	689,674.1	621,565.3
14,318.3	11,287.8	8,546.2	7,973.1	1,519,533.0	1,347,374.6	43,397.8	33,596.7	312,396.0	270,775.8
34,832.2	28,146.3	18,025.9	16,725.1	5,108,470.0	4,634,821.5	112,821.9	88,937.0	1,002,070.1	892,341.1
	Medium (Gross (Mbbls) 9,292.8 0.0 11,221.1 20,513.9 14,318.3	(Mbbls) (Mbbls)  9,292.8 7,406.5  0.0 0.5  11,221.1 9,451.5  20,513.9 16,858.5  14,318.3 11,287.8	Medium Crude Oil         Natura           Gross (Mbbls)         Net (Mbbls)         Gross (MMcf)           9,292.8         7,406.5         5,620.7           0.0         0.5         666.1           11,221.1         9,451.5         3,192.9           20,513.9         16,858.5         9,479.7           14,318.3         11,287.8         8,546.2	Medium Crude Oil         Natural Gas           Gross (Mbbls)         Net (Mbbls)         Gross (MMcf)         Net (MMcf)           9,292.8         7,406.5         5,620.7         5,176.5           0.0         0.5         666.1         645.3           11,221.1         9,451.5         3,192.9         2,930.1           20,513.9         16,858.5         9,479.7         8,752.0           14,318.3         11,287.8         8,546.2         7,973.1	Medium Crude Oil         Natural Gas         Shale           Gross (Mbbls)         Net (Mbbls)         Gross (MMcf)         Net (MMcf)         Gross (MMcf)           9,292.8         7,406.5         5,620.7         5,176.5         989,197.3           0.0         0.5         666.1         645.3         31,301.6           11,221.1         9,451.5         3,192.9         2,930.1         2,568,438.0           20,513.9         16,858.5         9,479.7         8,752.0         3,588,937.0           14,318.3         11,287.8         8,546.2         7,973.1         1,519,533.0	Medium Crude Oil         Natural Gas         Shale Gas           Gross (Mbbls)         Net (Mbbls)         Gross (MMcf)         Net (MMcf)           9,292.8         7,406.5         5,620.7         5,176.5         989,197.3         918,413.6           0.0         0.5         666.1         645.3         31,301.6         29,130.5           11,221.1         9,451.5         3,192.9         2,930.1         2,568,438.0         2,339,902.8           20,513.9         16,858.5         9,479.7         8,752.0         3,588,937.0         3,287,446.9           14,318.3         11,287.8         8,546.2         7,973.1         1,519,533.0         1,347,374.6	Medium Crude Oil         Natural Gas         Shale Gas         Net         Gross (Mbbls)         Net Gross (Mbbls)	Medium Tude Oil         Natural Gas         Shale Gross (Mbbls)         Net Gross (Mbbls)         Net (Mbbls)         Net (Mbbls)           9,292.8         7,406.5         5,620.7         5,176.5         989,197.3         918,413.6         28,535.1         22,404.8           0.0         0.5         666.1         645.3         31,301.6         29,130.5         317.5         239.6           11,221.1         9,451.5         3,192.9         2,930.1         2,568,438.0         2,339,902.8         40,571.5         32,695.9           20,513.9         16,858.5         9,479.7         8,752.0         3,588,937.0         3,287,446.9         69,424.1         55,340.3           14,318.3         11,287.8         8,546.2         7,973.1         1,519,533.0         1,347,374.6         43,397.8         33,596.7	Medium Tude Oil         Natural Gas         Shale Gas         Net Gross (Mbbls)         Net (Mbbls)         Span="2">Span="2

#### **NET PRESENT VALUES OF FUTURE NET REVENUE**

The following table sets forth the net present values of future net revenue attributable to Birchcliff's reserves at December 31, 2018, estimated using the 2018 Deloitte Price Forecast, before deducting future income tax expenses and calculated at various discount rates:

#### Summary of Net Present Values of Future Net Revenue at December 31, 2018(1)

(Forecast Prices and Costs)

	Before Income Taxes Discounted At (%/year)					
Reserves Category	<b>O</b> (MM\$)	<b>5</b> (MM\$)	<b>10</b> (MM\$)	<b>15</b> (MM\$)	<b>20</b> (MM\$)	Unit Value Discounted at 10%/yr (\$/boe) <sup>(1)</sup>
Proved						
Developed Producing	4,259.1	3,027.3	2,320.1	1,874.6	1,572.9	12.63
Developed Non-Producing	98.6	64.4	46.1	35.2	28.2	8.87
Undeveloped	8,155.5	4,217.5	2,342.1	1,341.1	761.3	5.41
Total Proved	12,513.2	7,309.1	4,708.3	3,250.9	2,362.4	7.57
Probable	6,869.4	2,898.5	1,433.1	789.6	469.2	5.29
Total Proved Plus Probable	19,382.6	10,207.6	6,141.4	4,040.5	2,831.6	6.88

<sup>(1)</sup> Unit values are based on net reserves.

#### **PRICING ASSUMPTIONS**

The following table sets forth the 2018 Deloitte Price Forecast used in the 2018 Consolidated Reserves Report:

#### 2018 Deloitte Price Forecast

	Crude Oil		Natur	Natural Gas		NGLs					
Year	WT I at Cushing Oklahoma (US\$/bbl)	Edmonton City Gate (CDN\$/bbl)	Alberta AECO Average Price (CDN\$/Mcf) <sup>(1)</sup>	Ontario Dawn Reference Point (CDN\$/Mcf) <sup>(1)</sup>	NYMEX Henry Hub (US\$/Mcf) <sup>(1)</sup>	Edmonton Ethane (CDN\$/bbl)	Edmonton Propane (CDN\$/bbl)	Edmonton Butane (CDN\$/bbl)	Edmonton Pentanes + Condensate (CDN\$/bbl)	Currency Exchange Rate (CDN\$/US\$)	Price and Cost Inflation Rates (%)
2019	58.00	65.80	1.75	3.90	3.00	5.70	32.90	29.60	75.65	0.760	0.0
2020	61.20	72.45	2.20	4.15	3.15	6.10	36.25	39.90	79.70	0.760	2.0
2021	64.50	78.35	2.50	4.40	3.45	6.95	39.15	50.95	86.20	0.770	2.0
2022	69.00	81.95	2.80	4.50	3.60	7.85	40.95	53.25	90.10	0.790	2.0
2023	75.75	89.30	3.20	4.75	3.85	8.95	44.65	58.05	98.25	0.800	2.0
2024	77.30	91.10	3.55	5.15	4.15	9.90	45.55	59.25	100.20	0.800	2.0
2025	78.85	92.90	3.85	5.45	4.40	10.70	46.45	60.40	102.20	0.800	2.0
2026	80.40	94.75	3.95	5.65	4.55	11.10	47.40	61.65	104.25	0.800	2.0
2027	82.00	96.65	4.10	5.80	4.70	11.50	48.35	62.85	106.35	0.800	2.0
2028	83.65	98.60	4.20	5.90	4.80	11.70	49.30	64.10	108.45	0.800	2.0
2029	85.35	100.55	4.25	6.05	4.90	11.95	50.30	65.40	110.60	0.800	2.0
2030	87.05	102.60	4.35	6.15	4.95	12.20	51.30	66.70	112.85	0.800	2.0
2031	88.80	104.65	4.45	6.30	5.05	12.45	52.30	68.05	115.10	0.800	2.0
2032	90.55	106.70	4.55	6.40	5.15	12.70	53.35	69.40	117.40	0.800	2.0
2033	92.35	108.85	4.60	6.55	5.30	12.95	54.45	70.80	119.75	0.800	2.0
2034	94.20	111.05	4.70	6.65	5.40	13.20	55.50	72.20	122.15	0.800	2.0
2035	96.10	113.25	4.80	6.80	5.50	13.45	56.65	73.65	124.60	0.800	2.0
2036	98.00	115.50	4.90	6.95	5.60	13.70	57.75	75.10	127.05	0.800	2.0
2037	100.00	117.85	5.00	7.05	5.70	14.00	58.90	76.65	129.60	0.800	2.0
2038	102.00	120.20	5.10	7.20	5.85	14.30	60.10	78.15	132.20	0.800	2.0
2038+	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.800	2.0

<sup>(1) 1</sup> Mcf = 1 MMBtu.

#### **RECONCILIATION OF CHANGES IN RESERVES**

The following table sets forth a reconciliation of Birchcliff's gross reserves at December 31, 2018 as set forth in the 2018 Consolidated Reserves Report, estimated using the 2018 Deloitte Price Forecast, to Birchcliff's gross reserves at December 31, 2017 as set forth in the 2017 Consolidated Reserves Report, estimated using the 2017 Deloitte Price Forecast:

#### Reconciliation of Gross Reserves from December 31, 2017 to December 31, 2018

(Forecast Prices and Costs)

Factors	Light Crude Oil and Medium Crude Oil (Mbbls)	Conventional Natural Gas (MMcf)	Shale Gas (MMcf)	NGLs (Mbbls)	Oil Equivalent (Mboe)
GROSS TOTAL PROVED					
Opening balance December 31, 2017	16,615.8	21,752.4	3,470,382.2	65,842.3	664,480.5
Discoveries <sup>(1)</sup>	0.0	0.0	0.0	0.0	0.0
Extensions & Improved Recovery <sup>(2)</sup>	2,304.6	0.0	167,870.6	2,950.3	33,233.3
Technical Revisions <sup>(3)</sup>	3,436.2	(4,081.1)	82,830.1	4,322.0	20,883.0
Acquisitions <sup>(4)</sup>	0.0	15.9	2,722.3	37.7	494.1
Dispositions <sup>(5)</sup>	(235.3)	(4,941.9)	0.0	(11.9)	(1,070.8)
Economic Factors <sup>(6)</sup>	171.2	(2,416.2)	124.3	4.8	(206.0)
Production <sup>(7)</sup>	(1,778.6)	(849.4)	(134,992.5)	(3,721.1)	(28,140.0)
Closing balance December 31, 2018	20,513.9	9,479.7	3,588,937.0	69,424.1	689,674.1
GROSS TOTAL PROBABLE					
Opening balance December 31, 2017	14,394.0	14,103.2	1,449,379.3	49,727.2	308,034.8
Discoveries <sup>(1)</sup>	0.0	0.0	0.0	0.0	0.0
Extensions & Improved Recovery <sup>(2)</sup>	1,280.5	0.0	28,582.0	885.6	6,929.8
Technical Revisions <sup>(3)</sup>	(1,094.9)	(4,924.4)	16,047.0	(8,214.5)	(7,455.7)
Acquisitions <sup>(4)</sup>	0.0	0.0	24,954.9	969.3	5,128.4
Dispositions <sup>(5)</sup>	(264.3)	(2,210.4)	0.0	(6.6)	(639.2)
Economic Factors <sup>(6)</sup>	3.0	1,577.8	569.9	36.8	397.8
Production <sup>(7)</sup>	0.0	0.0	0.0	0.0	0.0
Closing balance December 31, 2018	14,318.3	8,546.2	1,519,533.0	43,397.8	312,396.0
GROSS TOTAL PROVED PLUS PROBABLE					
Opening balance December 31, 2017	31,009.7	35,855.6	4,919,761.5	115,569.4	972,515.3
Discoveries <sup>(1)</sup>	0.0	0.0	0.0	0.0	0.0
Extensions & Improved Recovery <sup>(2)</sup>	3,585.1	0.0	196,452.5	3,835.9	40,163.1
Technical Revisions <sup>(3)</sup>	2,341.3	(9,005.5)	98,877.1	(3,892.5)	13,427.5
Acquisitions <sup>(4)</sup>	0.0	15.9	27,677.2	1,007.0	5,622.5
Dispositions <sup>(5)</sup>	(499.5)	(7,152.4)	0.0	(18.5)	(1,710.0)
Economic Factors <sup>(6)</sup>	174.2	(838.4)	694.2	41.6	191.8
Production <sup>(7)</sup>	(1,778.6)	(849.4)	(134,992.5)	(3,721.1)	(28,140.0)
Closing balance December 31, 2018	34,832.2	18,025.9	5,108,470.0	112,821.9	1,002,070.1

<sup>(1)</sup> Additions to volumes in reservoirs where no reserves were previously booked.

<sup>(2)</sup> Additions to volumes resulting from capital expenditures for: (i) step-out drilling in previously discovered reservoirs; (ii) infill drilling in previously discovered reservoirs that were not drilled as part of an enhanced recovery scheme; and (iii) the installation of improved recovery schemes.

(3) Positive or negative volume revisions to an estimate resulting from new technical data or revised interpretations on previously assigned volumes, performance and operating costs.

<sup>(4)</sup> Positive additions to volume estimates because of purchasing interests in oil and gas properties.

<sup>(5)</sup> Reductions in volume estimates because of selling all or a portion of an interest in oil and gas properties.
(6) Changes to volumes resulting from different price forecasts, inflation rates and regulatory changes.
(7) Reductions in the volume estimates due to production.

Key highlights include the following:

- **Extensions and Improved Recovery** Reserves added were due to the Corporation's successful 2018 capital program for the wells drilled and brought on production, including the additional offsetting future drilling locations that were assigned.
- Technical Revisions The positive technical revisions in the total proved and the total proved plus probable reserves categories were primarily the result of the following: (i) for shale gas, increased well performance in existing and future drilling locations in Pouce Coupe; (ii) for light and medium crude oil, the reclassification of drilling locations from shale gas to light and medium crude oil in Gordondale; and (iii) for NGLs, the successful C3+ extraction project at Phases V and VI of the Pouce Coupe Gas Plant. These positive technical revisions were offset by the loss of NGLs reserves due to the cancellation of the proposed Phase VII deep-cut expansion at the Pouce Coupe Gas Plant in connection with Birchcliff entering into a new long-term processing arrangement at Alta Gas' deep-cut sour gas process facility in Gordondale, as well as the removal of the conventional natural gas reserves for the planned abandonment of a non-core facility.

The negative technical revisions in the total probable reserves category were primarily the result of the loss of NGLs reserves due to the cancellation of Phase VII, the removal of the conventional natural gas reserves for the planned abandonment of the non-core facility and the adjustment in light and medium crude oil reserves for future infill drilling locations in Gordondale.

- **Acquisitions** Changes were the result of various minor acquisitions Birchcliff completed in the Gordondale and Pouce Coupe areas in 2018.
- Dispositions Changes were the result of various non-core dispositions Birchcliff completed in 2018.
- **Economic Factors** The lower natural gas price forecast resulted in the reduction of conventional natural gas reserves in the proved reserves category as one future drilling location was not economic to develop and was reclassified into the probable reserves category. In addition, the economic limit caused the reduction of proved plus probable conventional natural gas reserves. This was offset by the slightly higher price forecasts for oil and NGLs which resulted in increases to the light and medium crude oil, shale gas and NGLs reserves in all reserves categories.

#### **FUTURE DEVELOPMENT COSTS**

FDC reflects the independent reserves evaluators' best estimate of what it will cost to bring the proved and proved plus probable reserves on production. Changes in forecast FDC occur annually as a result of development activities, acquisition and disposition activities and capital cost estimates. The following table sets forth development costs deducted in the estimation of Birchcliff's future net revenue attributable to the reserves categories noted below:

#### **Future Development Costs**

(Forecast Prices and Costs)

	Proved (MM\$)	Proved Plus Probable (MM\$)
2019	244.9	271.0
2020	492.5	514.5
2021	399.6	506.4
2022	720.5	791.8
2023	477.0	535.0
Thereafter	627.3	1,673.1
Total undiscounted	2,961.8	4,291.8

FDC for total proved reserves decreased to \$2.96 billion at December 31, 2018 from \$3.23 billion at December 31, 2017. FDC for total proved plus probable reserves decreased to \$4.29 billion at December 31, 2018 from \$4.50 billion at December 31, 2017. The decreases in FDC for both proved and proved plus probable reserves were largely due to: (i) the cancellation of Phase VII; and (ii) the completion of Phase VI of the Pouce Coupe Gas Plant which occurred in Q3 2018. These decreases were partially offset by the FDC associated with a net increase in Montney/Doig potential net future drilling locations added in each category of reserves as a result of Birchcliff's successful 2018 drilling program.

The FDC for both proved and proved plus probable reserves are primarily the capital costs required to drill, complete, equip and tie-in the net undeveloped locations. The estimates of FDC on a proved and proved plus probable basis also include approximately \$331 million for the continued expansion of the Pouce Coupe Gas Plant from the existing 340 MMcf/d to 660 MMcf/d of total throughput. The FDC for the expansions of the Pouce Coupe Gas Plant also include the costs of the related gathering pipelines and maintenance capital.

The following table sets forth the average cost to drill, complete, equip and tie-in a multi-stage fractured horizontal well as estimated by Deloitte and McDaniel:

Average Well Cost, as Estimated by Deloitte or McDaniel	December 31, 2018 (MM\$)	December 31, 2017 (MM\$)
Pouce Coupe <sup>(1)</sup>	4.7	4.6
Gordondale <sup>(2)</sup>	5.4	5.2

<sup>(1)</sup> Estimated by Deloitte. Up slightly compared to 2017 based on actual costs incurred in 2018 from higher completions costs as a result of increased fracture intensities per well. (2) Estimated by McDaniel. Up slightly compared to 2017 based on actual costs incurred in 2018 from higher completions costs as a result of increased fracture intensities per well.

## **RESERVES REPLACEMENT**

The following table sets forth Birchcliff's 2018 reserves replacement ratios:

Reserves Category	2018 Reserves Replacement, Excluding the Effects of Acquisitions and Dispositions <sup>(1)</sup>	2018 Reserves Replacement, Including the Effects of Acquisitions and Dispositions <sup>(1)</sup>		
Proved Developed Producing	122%	120%		
Proved	192%	190%		
Proved Plus Probable	191%	205%		

<sup>(1)</sup> Please see "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate reserves replacement.

## **RESERVES LIFE INDEX**

The following table sets forth Birchcliff's 2018 reserves life index:

Reserves Category	2018 Reserves Life Index <sup>(1)</sup>
Proved Developed Producing	7.2 years
Total Proved	24.5 years
Total Proved Plus Probable	35.6 years

<sup>(1)</sup> Based on a forecast production rate of 77,000 boe/d for 2019, which represents the mid-point of Birchcliff's annual average production guidance range for 2019. Please see "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate reserves life index.

### RESERVES ON THE MONTNEY/DOIG RESOURCE PLAY

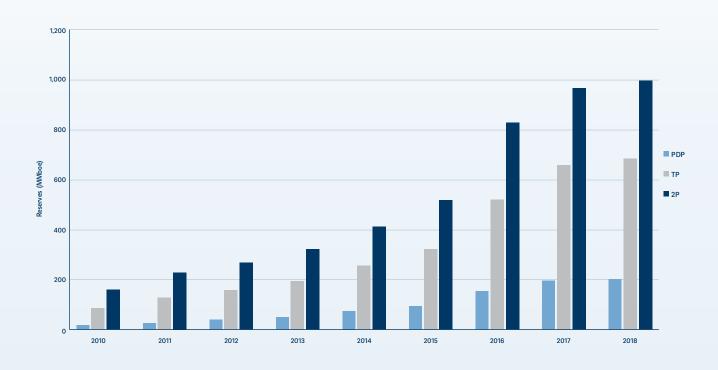
The following table summarizes the estimates of reserves attributable to Birchcliff's horizontal wells on the Montney/Doig Resource Play as contained in the 2018 Consolidated Reserves Report and the number of horizontal wells to which reserves were attributed:

Montney/Doig Resource Play Reserves Data(1)(2)

	Shale Gas (Bcf)		Light Crude Oil and Medium Crude Oil Combined (Mbbls)			NGLs Total Horizontal Well Local (Mbbls) (Mboe) (Gross) (New York Control of the				and Potential F Horizontal Well Lo		ure ations
Reserves Category	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Proved Developed Producing	973.4	976.5	9,239.1	8,323.4	27,923.0	23,066.0	199,396.1	194,145.1	368	339	364.3	333.8
Total Proved	3,572.8	3,464.1	20,460.2	16,318.7	68,779.3	65,348.2	684,710.4	659,029.0	903	862	888.8	846.0
Total Proved Plus Probable	5,088.6	4,911.2	34,758.7	30,428.7	111,985.9	114,869.1	994,848.1	963,836.1	1,154	1,103	1,121.8	1,072.0

<sup>(1)</sup> Estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation. (2) At December 31, 2018, the estimated FDC for Birchcliff's reserves on its Montney/Doig Resource Play is \$0.0 million on a proved developed producing basis (as compared to \$0.0 million at December 31, 2017), \$2,958.7 million on a proved basis (as compared to \$3,223.3 million at December 31, 2017) and \$4,282.9 million on a proved plus probable basis (as compared to \$4,480.8 million at December 31, 2017).

## Montney/Doig Reserves



### 2018 FINDING AND DEVELOPMENT COSTS

During 2018, our F&D costs were \$299.7 million and our FD&A costs were \$296.0 million.

The following table sets forth our estimates of our F&D costs per boe and FD&A costs per boe for 2018, 2017 and 2016, excluding and including FDC:

Excluding FDC (\$/boe) <sup>(1)</sup>	2018	2017	2016	3-Year Average
F&D – Proved Developed Producing	\$8.75	\$6.29	\$6.42	\$6.99
F&D – Proved	\$5.56	\$2.53	\$1.57	\$2.72
F&D – Proved Plus Probable	\$5.57	\$2.54	\$1.25	\$2.52
FD&A – Proved Developed Producing	\$8.75	\$4.79	\$9.32	\$7.71
FD&A – Proved	\$5.55	\$1.95	\$3.53	\$3.25
FD&A – Proved Plus Probable	\$5.13	\$2.35	\$2.33	\$2.66
Including FDC (\$/boe) <sup>(1)</sup>	<b>2018</b> <sup>(2)</sup>	<b>2017</b> <sup>(3)</sup>	<b>2016</b> <sup>(4)</sup>	3-Year Average
F&D – Proved	\$0.64	\$8.14	\$4.89	\$5.83
F&D – Proved Plus Probable	\$1.27	\$7.27	\$4.43	\$5.27
FD&A – Proved	\$0.45	\$7.16	\$6.73	\$6.06
FD&A – Proved Plus Probable	\$1.47	\$5.37	\$5.58	\$5.06

### **2018 RECYCLE RATIOS**

The following table sets forth our recycle ratios for operating and adjusted funds flow netbacks for 2018 and 2017, excluding and including FDC:

		Operating Netback Recycle Ratio <sup>(1)(2)</sup>		s Flow Netback Ratio <sup>(1)(3)</sup>
	2018	2017	2018	2017
Excluding FDC				
F&D – Proved Developed Producing	1.5	2.2	1.3	2.0
FD&A – Proved Developed Producing	1.5	2.9	1.3	2.7
F&D – Proved	2.4	5.5	2.0	5.1
FD&A – Proved	2.4	7.2	2.0	6.6
F&D – Proved Plus Probable	2.4	5.5	2.0	5.0
FD&A – Proved Plus Probable	2.6	6.0	2.2	5.5
Including FDC <sup>(4)</sup>				
F&D – Proved	21.2	1.7	17.4	1.6
FD&A – Proved	30.3	2.0	24.9	1.8
F&D – Proved Plus Probable	10.7	1.9	8.8	1.8
FD&A – Proved Plus Probable	9.2	2.6	7.6	2.4

<sup>(1)</sup> Please see "Advisories - Oil and Gas Metrics" for a description of the methodology used to calculate recycle ratios.

During 2018, the average benchmark price for WTI crude oil was US\$64.77/bbl and the average benchmark price for natural gas sold at AECO was CDN\$1.42/GJ. The operating netback was \$13.52/boe in 2018, as compared to \$13.97/boe in 2017. Adjusted funds flow netback was \$11.12/boe in 2018, as compared to \$12.81/boe in 2017.

<sup>(1)</sup> Please see "Advisories – Oil and Gas Metrics" for a description of the methodology used to calculate F&D and FD&A costs.
(2) Reflects the 2018 decrease in FDC from 2017 of \$272.2 million on a proved basis and \$211.2 million on a proved plus probable basis.

<sup>(3)</sup> Includes the 2017 increase in FDC from 2016 of \$732.9 million on a proved basis and \$352.9 million on a proved plus probable basis

<sup>(4)</sup> Includes the 2016 increase in FDC from 2015 of \$690.0 million on a proved basis and \$1,059.0 million on a proved plus probable basis.

<sup>(2)</sup> Birchcliff's operating netback was \$13.52/boe in 2018, as compared to \$13.97/boe in 2017.
(3) Birchcliff's adjusted funds flow netback was \$11.12/boe in 2018, as compared to \$12.81/boe in 2017.

<sup>(4)</sup> FDC decreased from 2017 primarily due to the cancellation of the proposed Phase VII deep-cut expansion at the Pouce Coupe Gas Plant.

### LOOKING OUT FOR OUR TEAM AND THE COMMUNITY

# RESPONSIBILITY

### **HEALTH, SAFETY AND ENVIRONMENT**

Birchcliff is committed to constantly evolving and improving its health, safety and environmental management program and conducting its activities in a manner that safeguards its employees, contractors, representatives, the environment and the public at large. We have an active program to monitor and comply with health, safety and environmental laws, rules and regulations applicable to our operations.

Birchcliff's corporate policies require operational activities to be conducted in a manner which meets or exceeds regulatory requirements and industry standards to safeguard the environment and protect employees, contractors and the public at large. Employees receive pertinent health, safety and environmental training for their role. Birchcliff conducts operational audits and assessments to identify risks and takes steps to reduce or prevent incidents. In addition, we have developed emergency response plans in conjunction with local authorities, emergency services and the communities in which we operate in order to be prepared to effectively respond to an incident should one arise. We rigorously conduct annual emergency response exercises and training for our staff that exceed regulatory requirements.

Birchcliff participates in Alberta's Certificate of Recognition (COR) Safety Program and has received and maintained a COR certification since 2011. A COR certification demonstrates that the employer's health and safety management system has been evaluated by a certified auditor and meets provincial standards, as established by Occupational Health and Safety (Alberta). Maintaining a COR certification requires a commitment to continuous improvement in the health, safety and environment management practices, including sound planning and implementation.

Birchcliff's Health and Safety program is audited externally every three years by an independent auditor and internally annually by a certified professional. Birchcliff works hard to maintain the safety and integrity of its facility and pipeline infrastructure. Our Asset Integrity staff manages our Pressure Equipment Integrity Program in compliance with the Alberta Boilers Safety Association (ABSA) requirements and our Pipeline Integrity Program in compliance with Alberta Energy Regulator requirements. These programs are audited internally on an annual basis and externally on a periodic basis to evaluate their effectiveness and are updated based on the findings from such audits. Birchcliff has received high audit scores from ABSA on two recent audits of its program. Our Chief Inspector and our Asset Integrity Group make use of databases and associated work tracking systems to ensure that all integrity tasks (inspections, pigging, etc.) are scheduled and completed according to the requirements set forth in our programs.

As part of our fundamental values, we recognize the importance of, and our responsibility for, environmental stewardship. Birchcliff endeavors to maintain excellence in environmental reporting and response and to take proactive steps to eliminate or reduce our environmental impact. As an organization which strives for continuous improvement, Birchcliff continues to look for, and develop, new technology, systems and processes that will help improve efficiency, reduce our environmental footprint and create a safer work environment. For example, Birchcliff utilizes multi-well pads in many of our drilling operations and we recycle as much water from our completion operations as we can. We are also proud that we have received our allocation benchmark from the Alberta Climate Change Office as part of the Carbon Competitiveness Incentive Regulation (CCIR). To the extent the Pouce Coupe Plant's total regulated emissions is less than its output-based allocation, it will earn emission performance credits (EPCs). We anticipate that the Pouce Coupe Gas Plant will generate EPCs in respect of the 2018 financial year.

Environmental assessments are undertaken for new projects or when acquiring new properties or facilities in order to identify, assess and minimize environmental risks and operational exposures. Birchcliff conducts audits of operations to confirm compliance with internal standards and to stimulate improvement in practices where needed. Documentation is maintained to support internal accountability and measure operational performance against recognized industry indicators to assist in achieving the objectives of the described policies and programs.

### **COMMUNITY SUPPORT**

Fostering a strong relationship with the community and its stakeholders is as integral to the success of Birchcliff's projects as obtaining the required regulatory approvals. We believe cooperative, sincere and responsive consultation efforts with stakeholders in the areas in which we operate creates a solid foundation for our business. Birchcliff has an experienced team working with local stakeholders to learn their values and priorities and to resolve any issues or concerns that arise in the course of our field operations.

Birchcliff recognizes the role that communities play in our success and looks for opportunities to "give back". We are a staunch supporter of the community and the business and educational initiatives of the Indigenous Communities who live in areas in which we operate. Every year, we participate in a number of community support endeavours in the areas surrounding our field operations and in Calgary. In 2018, Birchcliff contributed to a number of local community initiatives that elevate and enhance quality of life at the local level, including minor hockey and other amateur sports, local schools, agricultural societies and fire departments. To date, Birchcliff has helped raise over \$1,000,000 for both the STARS Air Ambulance in the Grande Prairie area and the United Way of Calgary. Each year, Birchcliff also raises funds for the YWCA. We make an annual contribution to Home Front Calgary, a community-justice response team dedicated to helping families experiencing domestic violence. Through our support of Momentum, Calgarians living in poverty learn how to achieve a sustainable livelihood. We donate to the OneSight program and support the Canadian Cancer Society daffodil campaign. Birchcliff volunteers with Feed the Hungry, providing healthy meals in an atmosphere of dignity and respect. During the holiday season, Birchcliff employees "adopt" a number of families in need and donate gifts, food and decorations to help make the holidays special. We also fill backpacks with living essentials and gifts for the Mustard Seed and prepare sandwiches for the homeless for the Calgary Drop-In Centre.

Through these activities and numerous others, Birchcliff creates and maintains long-term, positive partnerships and relationships, while promoting employee engagement in the communities in which we operate.

#### INDIGENOUS RELATIONS

Birchcliff's activity is focused in the Peace River Area of Alberta which is within the traditional area occupied by the Treaty 8 First Nations members and by the Metis people. Birchcliff recognizes and respects these indigenous groups, their rights and their culture. Much of our activity takes place upon the unoccupied crown lands which are administered by the Province of Alberta. We are committed to open, honest and straight forward communication with the indigenous groups who have been formally recognized as having rights within the areas in which we operate. Currently those groups include Horse Lake First Nation, Duncan's First Nation, Gift Lake Metis Settlement and East Prairie Metis Settlement.

We provide support to these communities and their ventures to enhance their human, economic and cultural development. Our support is aligned with several key philosophies and based upon the principle that all individuals should be treated fairly and with respect.

The success of our children and future generations is the key. For this reason we are strong supporters of all education initiatives from early childhood programs, programs that support adolescents, post-secondary courses, upgrading and equivalency programs and trade and technical training programs. We believe that everyone should be aware of, and proud of, their culture and heritage. We support many cultural events including round dances, formal events such as Treaty 8 Days and cultural camps which bring youth and elders together for traditional learning and sharing opportunities. Communities are most successful when their members drive the programs. We look to community members to set goals and take the initiative to plan, prepare budgets, submit the request for support and organize their events.

We have long standing agreements with the key communities in our operations areas. We are proud of the relationships that we have with these communities and the reputation we have worked hard to build and maintain. We believe that our actions must always speak louder than our words.

**FINANCIALS** 

# MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **GENERAL**

This Management's Discussion and Analysis ("MD&A") for Birchcliff Energy Ltd. ("Birchcliff" or the "Corporation") is dated March 13, 2019. This MD&A with respect to the three and twelve months ended December 31, 2018 (the "Reporting Periods") as compared to the three and twelve months ended December 31, 2017 (the "Comparable Prior Periods") has been prepared by management and approved by the Corporation's Audit Committee and Board of Directors. This MD&A should be read in conjunction with the audited financial statements of the Corporation and the related notes for the year ended December 31, 2018. Birchcliff's audited financial statements and the related notes for the year ended December 31, 2018 have been prepared in accordance with GAAP. All dollar amounts are expressed in Canadian currency, unless otherwise stated.

This MD&A uses "adjusted funds flow", "adjusted funds flow per common share", "operating netback", "free funds flow", "total cash costs", "adjusted working capital deficit" and "total debt", which do not have standardized meanings prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. For further information, see "Non-GAAP Measures" in this MD&A.

This MD&A contains forward-looking statements and information (collectively, "forward-looking statements") within the meaning of applicable Canadian securities laws. Such forward-looking statements are based upon certain expectations and assumptions and actual results may differ materially from those expressed or implied by such forward-looking statements. For further information regarding the forward-looking statements contained herein, see "Advisories – Forward-Looking Statements" in this MD&A.

All boe amounts have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil and all Mcfe amounts have been calculated by using the conversion ratio of 1 bbl of oil to 6 Mcf of natural gas. For further information, see "Advisories – Boe and Mcfe Conversions" in this MD&A.

#### **ABOUT BIRCHCLIFF**

Birchcliff is a Calgary, Alberta based intermediate oil and natural gas company with operations concentrated within its one core area, the Peace River Arch of Alberta. Birchcliff's common shares and cumulative redeemable preferred shares, Series A and Series C, are listed for trading on the Toronto Stock Exchange (the "**TSX**") under the symbols "BIR", "BIR.PR.A" and "BIR.PR.C", respectively. Additional information relating to the Corporation, including its Annual Information Form for the financial year ended December 31, 2018, is available on the SEDAR website at www.sedar.com and on the Corporation's website at www.birchcliffenergy.com.

### **2018 FINANCIAL AND OPERATIONAL HIGHLIGHTS**

#### 2018 Year-End Highlights

- Production averaged 77,096 boe/d (20% oil and NGLs), a 13% increase from the twelve month Comparable Prior Period.
- Cash flow from operating activities of \$324.4 million, a 13% increase from the twelve month Comparable Prior Period.
- Adjusted funds flow of \$312.9 million, or \$1.18 per basic common share, a 1% decrease and a 2% decrease, respectively, from the twelve month Comparable Prior Period.
- Net income to common shareholders of \$98.0 million, or \$0.37 per basic common share, as compared to the net loss to common shareholders of \$51.0 million and \$0.19 per basic common share in the twelve month Comparable Prior Period.
- Operating expense of \$3.52/boe, a 21% decrease from the twelve month Comparable Prior Period.
- Total cash costs of \$10.42/boe, a 3% decrease from the twelve month Comparable Prior Period.
- Operating netback of \$13.52/boe, a 3% decrease from the twelve month Comparable Prior Period.
- Total capital expenditures of \$298.0 million. During 2018, Birchcliff drilled 36 (36.0 net) wells and brought 28 (28.0 net) wells on production.
- As at December 31, 2018, Birchcliff's long-term bank debt was \$605.3 million and its total debt was \$626.5 million, a 3% increase and a 5% increase, respectively, from its long-term and total debt as at December 31, 2017.

### Fourth Quarter 2018 Highlights

- Production averaged 76,408 boe/d (21% oil and NGLs), a 5% decrease from the three month Comparable Prior Period.
- Cash flow from operating activities of \$92.2 million, a 4% increase from the three month Comparable Prior Period.
- Adjusted funds flow of \$81.5 million, or \$0.31 per basic common share, a 16% decrease and a 14% decrease, respectively, from the three month Comparable Prior Period.
- Net income to common shareholders of \$70.9 million, or \$0.27 per basic common share, a 186% increase and a 200% increase, respectively, from the three month Comparable Prior Period.
- Operating expense of \$3.51/boe, a 9% decrease from the three month Comparable Prior Period.
- Total cash costs of \$10.68/boe, a 2% decrease from the three month Comparable Prior Period.
- · Operating netback of \$13.47/boe, a 3% decrease from the three month Comparable Prior Period.
- Total capital expenditures of \$52.9 million. During the quarter, Birchcliff drilled 9 (9.0 net) wells.

See "Cash Flow from Operating Activities and Adjusted Funds Flow", "Net Income (Loss) to Common Shareholders", "Discussion of Operations", "Capital Expenditures" and "Capital Resources and Liquidity" in this MD&A for further information regarding the financial and operational results for the Reporting Periods.

### **2019 OUTLOOK**

Birchcliff's disciplined 2019 capital program of \$204 million (the "2019 Capital Program") is focused on its high-value oil assets in Gordondale and its condensate-rich assets in Pouce Coupe. Approximately \$122 million has been allocated for drilling and development in Pouce Coupe and Gordondale, \$33.9 million for facilities and infrastructure and \$47.9 million for maintenance and optimization and other capital projects on the Montney/Doig Resource Play. The 2019 Capital Program contemplates the drilling of a total of 17 (17.0 net) wells and the bringing on production of a total of 26 (26.0 net) wells during 2019.

The 2019 Capital Program targets an annual average production rate of 76,000 to 78,000 boe/d which is expected to generate approximately \$330 million of adjusted funds flow, based on the assumptions set forth herein. Total F&D capital expenditures are estimated to be \$204 million, which are significantly less than Birchcliff's estimated 2019 adjusted funds flow.

Based on the assumptions set forth in the table below, Birchcliff currently expects that it will be well positioned to generate significant free funds flow in 2019 as supported by its natural gas diversification and financial risk management contracts and mix of long-life and low decline assets which provide it with a stable base of production. Any free funds flow will be allocated based on what Birchcliff believes will provide the most value to its shareholders, with alternatives that may include debt reduction, production growth and purchasing common shares under its normal course issuer bid. Any free funds flow will also be allocated by Birchcliff to pay dividends on its common and preferred shares (including an increased dividend on the common shares) and to pay for the recent acquisition in Pouce Coupe for total cash consideration of \$39 million, which closed on January 3, 2019 (the "Acquisition"). See "Subsequent Event" in this MD&A.

During 2019, the Corporation expects that approximately 65% of its natural gas will be effectively sold at prices that are not based on AECO. In addition, effectively 87% of Birchcliff's total revenue in 2019 is expected to be based on non-AECO benchmark prices after taking into account Birchcliff's commodity risk management contracts and expected sales from oil and NGLs and based on the commodity price assumptions set forth in the table on the following page. This natural gas market diversification together with Birchcliff's financial risk management contracts will help to further strengthen Birchcliff's balance sheet and protect its cash flow and project economics.

The following table sets forth Birchcliff's guidance and commodity price assumptions for 2019, as well as its 2018 actual results for comparative purposes:

	2019 Guidance and Assumptions <sup>(1)</sup>	2018 Actual Results
Production		
Annual average production (boe/d)	76,000 - 78,000	77,096
% Natural gas	79%	80%
% Light oil	7%	6%
% Condensate	6%	6%
% Other NGLs	8%	8%
Average Expenses (\$/boe)		
Royalty	1.30 - 1.50	1.36
Operating	3.15 - 3.35	3.52
Transportation and other	4.65 - 4.85(2)	3.68 <sup>(3)</sup>
Adjusted Funds Flow (MM\$)	330 <sup>(4)</sup>	312.9
F&D Capital Expenditures (MM\$)	204(5)	299.7
Free Funds Flow (MM\$) <sup>(G)</sup>	126	13.2
Acquisition Purchase Price (MM\$)	39(7)	N/A
Total Capital Expenditures (MM\$)	245 <sup>(5)</sup>	298.0
Natural Gas Market Exposure <sup>(8)</sup>		
AECO exposure as a % of total natural gas production	35%	61%
Dawn exposure as a % of total natural gas production	39%	31%
NYMEX HH exposure as a % of total natural gas production	25%	N/A
Alliance pipeline exposure as a % of total natural gas production	1%	8%
Commodity Prices		
Average WTI price (US\$/bbl)	56.00	64.77
Average WTI-MSW differential (CDN\$/bbl)	10.00	14.85
Average AECO price (CDN\$/GJ)	1.65	1.42
Average Dawn price (CDN\$/GJ)	3.40	3.84
Average NYMEX HH price (US\$/MMBtu) <sup>(9)</sup>	3.00	3.07
Exchange rate (CDN\$ to US\$1)	1.32	1.2961

<sup>(1)</sup> See "Advisories – Forward-Looking Statements". Birchcliff's guidance for its commodity mix, average expenses, funds flow, capital expenditures and natural gas market exposure in 2019 is based on an annual average production rate of 77,000 boe/d during 2019, which is the mid-point of Birchcliff's annual average production guidance for 2019.

Birchcliff's 2018 financial and operational results were generally in line with, or better than, guidance. Birchcliff's 2018 production results were within guidance of 76,000 boe/d to 78,000 boe/d. Royalty expense on a per boe basis in 2018 was 15% lower than the low end of Birchcliff's guidance of \$1.60/boe to \$1.80/boe. The variance was primarily a result of decreased averaged realized oil sales prices in the three month Reporting Period. Operating expense on a per boe basis was in line with Birchcliff's guidance of \$3.40/boe to \$3.60/boe. Birchcliff's transportation and other expense on a per boe basis was 3% lower than the low end of Birchcliff's guidance of \$3.80/boe to \$4.10/boe due to unbudgeted mitigation of excess transportation capacity.

<sup>(2)</sup> Includes transportation tolls for 150,000 GJ/d of natural gas sold at the Dawn price from January 1, 2019 to October 31, 2019 and 175,000 GJ/d from November 1, 2019 to December 31, 2019. Also includes any new unused firm transportation costs associated with Birchcliff's commitments on the NGTL system, which is available for future production growth.

 <sup>(3)</sup> Includes transportation tolls for 120,000 GJ/d of natural gas sold at the Dawn price from January 1, 2018 to October 31, 2018 and 150,000 GJ/d from November 1, 2018 to December 31, 2018.
 (4) Birchcliff's estimate of adjusted funds flow takes into account the settlement of financial and physical commodity risk management contracts outstanding as at March 13, 2019. See "Commodity Price Risk Management".

<sup>(5)</sup> Birchcliff's estimate of F&D capital expenditures corresponds to Birchcliff's 2019 capital budget of \$204 million. This estimate excludes the purchase price for the Acquisition and any other net potential acquisitions and dispositions. Birchcliff's estimate of total capital expenditures includes the purchase price for the Acquisition; however, this estimate does not take into account any other potential acquisitions or dispositions as these amounts are unbudgeted. The estimate of total capital expenditures also includes minor administrative assets. See "Advisories – Capital Expenditures".

<sup>(6)</sup> Free funds flow is calculated as adjusted funds flow less F&D capital expenditures and is prior to administrative assets, acquisitions, dispositions, dividend payments and abandonment and reclamation obligations. See "Non-GAAP Measures". Free funds flow may be used by Birchcliff to reduce debt, pursue additional growth, pay dividends and/or to fund share buybacks under its normal course issuer bid. Any prolonged or significant decrease in commodity prices may leave insufficient free funds flow for debt reduction or the other foregoing purposes.

<sup>(7)</sup> Represents the purchase price for the Acquisition of \$39 million.

<sup>(8)</sup> Birchcliff's guidance regarding its natural gas market exposure in 2019 assumes: (i) 150,000 GJ/d being sold at the Dawn index price from January 1, 2019 to October 31, 2019 and 175,000 GJ/d from November 1, 2019 to December 31, 2019; (ii) 5 MMcf/d being sold at Alliance's Trading Pool daily index price; and (iii) 100,000 MMBtu/d being hedged at a fixed basis differential between the AECO price and the NYMEX HH price.

<sup>(9) \$1.00</sup> per MMBtu equals \$1.00 per Mcf based on a standard heat value of 37.4 MJ/m3 or a heat uplift of 1.055 when converting from \$/GJ.

#### SELECTED ANNUAL INFORMATION

	2018	2017	2016
Average daily production (boe)	77,096	67,963	49,236
Petroleum and natural gas revenue (\$000s) <sup>(1)</sup>	621,421	556,942	337,586
Average sales price (CDN\$) <sup>(1)</sup>			
Light oil (per bbl)	68.66	61.42	51.40
Natural gas (per Mcf)	2.45	2.72	2.41
NGLs (per bbl)	44.66	33.39	31.23
Total (per boe)	22.08	22.44	18.73
Cash flow from operating activities (\$000s)	324,434	287,660	140,514
Adjusted funds flow (\$000s)	312,922	317,680	147,443
Per common share – basic (\$)	1.18	1.20	0.74
Per common share – diluted (\$)	1.17	1.19	0.73
Net income (loss) (\$000s)	102,212	(46,980)	(24,335)
Net income (loss) to common shareholders (\$000s)	98,025	(51,027)	(28,335)
Per common share – basic (\$)	0.37	(0.19)	(0.14)
Per common share – diluted (\$)	0.37	(0.19)	(0.14)
Total capital expenditures (\$000s) <sup>(2)</sup>	298,018	276,125	762,030
Operating expense (\$ per boe)	3.52	4.45	4.18
Total assets (\$000s)	2,762,920	2,627,108	2,710,457
Capital securities (\$000s)	49,535	49,225	48,916
Revolving term credit facilities (\$000s)	605,267	587,126	572,517
Adjusted working capital deficit (\$000s)	21,187	11,067	27,495
Total debt (\$000s)	626,454	598,193	600,012
Common shares outstanding (000s):			
End of period – basic	265,911	265,797	264,042
End of period – diluted	284,699	282,895	279,881
Weighted average common shares for period – basic	265,852	265,182	199,581
Weighted average common shares for period – diluted	267,323	265,182	199,581
Common shares – dividend distribution (\$000s)	26,586	26,522	-
Per common share (\$)	0.10	0.10	-
Series A preferred shares outstanding – end of period (000s)	2,000	2,000	2,000
Series A – dividend distribution (\$000s)	4,187	4,047	4,000
Per Series A preferred share (\$)	2.0935	2.0234	2.0000
Series C preferred shares outstanding – end of period (000s)	2,000	2,000	2,000
Series C – dividend distribution (\$000s)	3,500	3,500	3,500
Per Series C preferred share (\$)	1.7500	1.7500	1.7500

Annual average production in 2018 was 77,096 boe/d, up 13% from 2017 and up 57% from 2016. The increase in annual average production from 2016 was primarily due to incremental production additions from new horizontal oil and natural gas wells brought on production in Pouce Coupe and Gordondale in connection with Birchcliff's successful 2017 and 2018 capital programs and production volumes acquired pursuant to an asset acquisition in Gordondale in July 2016 (the "Gordondale Acquisition"), partially offset by the disposition of the Corporation's assets in the Worsley area (the "Worsley Assets") in August 2017 (the "Worsley Disposition").

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.
(2) Birchcliff previously referred to total capital expenditures as "net capital expenditure" or "capital expenditures, net". See "Advisories – Capital Expenditures".

Birchcliff generated lower adjusted funds flow in 2018 as compared to 2017 and higher adjusted funds flow as compared to 2016. The decrease in adjusted funds flow from 2017 was primarily due to a lower corporate average realized sales price, partially offset by an increase in annual average production volumes in 2018. Adjusted funds flow in 2018 was also negatively impacted by lower oil production as a result of the Worsley Disposition and a realized loss on financial instruments in 2018, as compared to a realized gain on financial instruments in 2017. The increase in adjusted funds flow from 2016 was largely due to a higher average realized sales price and an increase in annual average production volumes as a result of the Gordondale Acquisition.

Birchcliff recorded net income to common shareholders of \$98.0 million (\$0.37 per basic common share) in 2018, as compared to the net loss to common shareholders of \$51.0 million (\$0.19 per basic common share) in 2017 and \$28.3 million (\$0.14 per basic common share) in 2016. The change from a net loss to a net income position from the prior two years was primarily due to changes in adjusted funds flow (as explained above), a \$64.2 million unrealized mark-to-market gain on financial instruments recorded in 2018 and a \$132.3 million after-tax loss in connection with the Worsley Disposition, partially offset by higher depletion and income tax expenses.

Total capital expenditures in 2018 were significantly lower as compared to 2016, and comparable to total capital expenditures in 2017. Total capital expenditures in 2016 included the \$613.5 million Gordondale Acquisition. Excluding the Gordondale Acquisition, capital expenditures in the last three years were largely directed towards the Montney/Doig Resource Play which included: (i) the drilling and completion of new horizontal oil and natural gas wells brought on production in Pouce Coupe and Gordondale; and (ii) the Phase V and Phase VI expansion of the 100% owned and operated Pouce Coupe natural gas processing plant located in Pouce Coupe ("Pouce Coupe Gas Plant") (including related wells and infrastructure), which increased the licensed natural gas processing capacity from 180 MMcf/d to a licensed processing capacity of 340 MMcf/d.

Operating expense on a per boe basis in 2018 was lower as compared to the prior two years primarily due to an incremental increase in natural gas production processed at the Pouce Coupe Gas Plant and the reduced processing fees at AltaGas' deep-cut sour gas processing facility located in Gordondale (the "Gordondale Gas Plant"), as well as the disposition of the higher-cost Worsley Assets in August 2017. During 2018, Birchcliff entered into a new long-term natural gas processing arrangement effective January 1, 2018 (the "Gordondale Processing Arrangement") which significantly reduced its processing fees at the Gordondale Gas Plant.

### CASH FLOW FROM OPERATING ACTIVITIES AND ADJUSTED FUNDS FLOW

The following table sets forth the Corporation's cash flow from operating activities and adjusted funds flow for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31,		
(\$000s)	2018	2017	2018	2017
Cash flow from operating activities	92,200	88,995	324,434	287,660
Adjusted funds flow	81,517	97,008	312,922	317,680
Per common share – basic (\$)	0.31	0.36	1.18	1.20
Per common share – diluted (\$)	0.30	0.36	1.17	1.19

Adjusted funds flow in the three and twelve month Reporting Periods decreased by 16% and 1%, respectively, from the Comparable Prior Periods. For the three month Reporting period, the decrease was primarily due to lower corporate production, lower average realized oil and NGLs sales prices, higher interest and transportation and other expenses and lower realized gains on financial instruments, partially offset by a higher average realized natural gas sales price. For the twelve month Reporting Period, the decrease was primarily due to a realized loss on financial instruments as compared to a realized gain on financial instruments in the twelve month Comparable Prior Period, as well as an increase in transportation and other expense as a result of the Corporation increasing its Dawn and AECO firm service. The decrease was partially offset by significantly higher revenues received by the Corporation due to higher natural gas and NGLs production in the twelve month Reporting Period, notwithstanding the decrease in oil production as a result of Worsley Disposition.

Cash flow from operating activities for the three and twelve month Reporting Periods increased by 4% and 13%, respectively, from the Comparable Prior Periods. The reason for the changes in cash flow from operating activities from the Comparable Prior Periods is consistent with the explanation for adjusted funds flows as noted above, and additionally by an increase in non-cash operating working capital, partially offset by higher decommissioning expenditures in the Reporting Periods as compared to the Comparable Prior Periods.

The following table sets forth a breakdown of the Corporation's total cash costs on a per unit basis and the percentage change period-over-period for the Reporting Periods and the Comparable Prior Periods:

			nths ended ecember 31,			nths ended cember 31,
(\$/boe)	2018	2017	Change	2018	2017	Change
Royalty expense	0.96	1.26	24%	1.36	1.16	17%
Operating expense	3.51	3.86	(9)%	3.52	4.45	(21)%
Transportation and other expense	4.07	3.52	16%	3.68	2.87	28%
G&A expense, net	1.08	1.28	(16)%	0.87	1.07	(19)%
Interest expense	1.06	0.97	9%	0.99	1.14	(13)%
Total cash costs	10.68	10.89	(2)%	10.42	10.69	(3)%

See "Discussion of Operations" in this MD&A for further details regarding the period-over-period movement in total cash cost inputs.

### **NET INCOME (LOSS) TO COMMON SHAREHOLDERS**

The following table sets forth the Corporation's net income (loss) and net income (loss) to common shareholders for the Reporting Periods and the Comparable Prior Periods:

(\$000s)	Three	months ended December 31,	Twelve months ended December 31,		
	2018	2017	2018	2017	
Net income (loss)	71,947	25,820	102,212	(46,980)	
Net income (loss) to common shareholders <sup>(1)</sup>	70,900	24,773	98,025	(51,027)	
Per common share – basic (\$)	0.27	0.09	0.37	(0.19)	
Per common share – diluted (\$)	0.27	0.09	0.37	(0.19)	

<sup>(1)</sup> Net income (loss) to common shareholders is calculated by adjusting net income (loss) for the dividends paid on the Series A Preferred Shares during the period. Per common share amounts are calculated by dividing net income (loss) to common shareholders by the weighted average number of basic or diluted common shares outstanding for the period.

During the three and twelve month Reporting Periods, Birchcliff reported net income to common shareholders of \$70.9 million and \$98.0 million, respectively, compared to net income to common shareholders of \$24.8 million in the three month Comparable Prior Period and a net loss to common shareholder of \$51.0 million in the twelve month Comparable Prior Period. The increase in net income to common shareholders from the three month Comparable Prior Period was primarily due to a \$77.5 million (\$56.6 million, net of tax) unrealized mark-to-market gain on financial instruments, partially offset by lower adjusted funds flow and higher income tax expenses. The change from a net loss to a net income position from the twelve month Comparable Prior Period was primarily due to a \$64.2 million (\$46.9 million, net of tax) unrealized mark-to-market gain on financial instruments recorded in the twelve month Reporting Period and a \$181.3 million (\$132.3 million, net of tax) loss from the sale of the Worsley Assets in the twelve month Comparable Prior Period, partially offset by higher depletion and income tax expenses.

### **POUCE COUPE GAS PLANT NETBACKS**

During the twelve month Reporting Period, Birchcliff processed approximately 67% of its total corporate natural gas production and 57% of its total corporate production through the Pouce Coupe Gas Plant as compared to 60% and 49%, respectively, during the twelve month Comparable Prior Period. These increases were primarily due to the incremental production from horizontal natural gas wells brought on production in Pouce Coupe. The average plant and field operating expense for production processed through the Pouce Coupe Gas Plant was \$0.34/Mcfe (\$2.02/boe) and the operating netback at the Pouce Coupe Gas Plant was \$2.04/Mcfe (\$12.24/boe), resulting in an operating margin of 68% in the twelve month Reporting Period.

During the Reporting Periods, Birchcliff specifically targeted condensate-rich natural gas wells in Pouce Coupe. This materially increased the amount of condensate being produced at the Pouce Coupe Gas Plant to 2,431 bbls/d in the twelve month Reporting Period from 1,292 bbls/d in the twelve month Comparable Prior Period, an 88% increase. This resulted in a 53% increase in the liquids-to-gas ratio from the twelve month Comparable Prior Period from 6.8 bbls/MMcf to 10.4 bbls/MMcf.

The following table sets forth Birchcliff's average daily production and operating netback for wells producing to the Pouce Coupe Gas Plant for the twelve month Reporting Period and the twelve month Comparable Prior Period:

		onths ended ber 31, 2018		onths ended ber 31, 2017	
Average production:					
Natural gas (Mcf/d)		250,011		193,417	
NGLs (bbls/d) <sup>(1)</sup>		2,609		1,316	
Total (boe/d)		44,278		33,552	
Liquids <sup>(1)</sup> -to-gas ratio (bbls/MMcf)		10.4		6.8	
Netback and cost:	\$/Mcfe	\$/boe	\$/Mcfe	\$/boe	
Petroleum and natural gas revenue <sup>(2)</sup>	3.02	18.11	3.04	18.24	
Royalty expense	(0.05)	(0.29)	(0.07)	(0.44)	
Operating expense <sup>(3)</sup>	(0.34)	(2.02)	(0.34)	(2.07)	
Transportation and other expense <sup>(4)</sup>	(0.59)	(3.56)	(0.44)	(2.61)	
Operating netback	\$2.04	\$12.24	\$2.19	\$13.12	
Operating margin <sup>(5)</sup>	68%	68%	72%	72%	

<sup>(1)</sup> Primarily condensate.

### **DISCUSSION OF OPERATIONS**

#### **Petroleum and Natural Gas Revenues**

The following table sets forth Birchcliff's P&NG revenues by product category for the Corporation's Pouce Coupe operating assets in the Montney/Doig Resource Play (the "Pouce Coupe assets"), the Corporation's Gordondale operating assets in the Montney/Doig Resource Play (the "Gordondale assets") and on a corporate basis for the Reporting Periods and the Comparable Prior Periods:

			months ended mber 31, 2018			months ended ember 31, 2017
(\$000s)	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(3)</sup>
Light oil <sup>(1)</sup>	20	18,208	18,233	27	33,186	33,332
Natural gas <sup>(1)</sup>	75,020	26,226	101,249	68,800	24,450	93,647
NGLs <sup>(1)</sup>	17,282	17,902	35,210	13,741	25,350	39,114
Total P&NG sales	92,322	62,336	154,692	82,568	82,986	166,093
Royalty revenue	4	23	28	5	45	56
Total P&NG revenues	92,326	62,359	154,720	82,573	83,031	166,149
% of corporate revenues	60%	40%		50%	50%	

<sup>(2)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts. See "Commodity Price Risk Management".

<sup>(3)</sup> Represents plant and field operating expense.

<sup>(4)</sup> The increase in transportation and other expense was primarily due to transportation tolls for natural gas sold at the Dawn price during the twelve month Reporting Period. Birchcliff began selling natural gas at the Dawn price on November 1, 2017.

<sup>(5)</sup> Operating margin is calculated by dividing the operating netback for the period by the petroleum and natural gas revenue for the period.

			months ended mber 31, 2018	Twelve months ended December 31, 2017			
(\$000s)	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(3)</sup>	
Light oil <sup>(1)</sup>	225	121,622	122,118	163	108,593	134,597	
Natural gas <sup>(1)</sup>	247,793	84,629	332,979	224,402	88,373	318,790	
NGLs <sup>(1)</sup>	77,419	88,798	166,194	38,170	64,189	103,244	
Total P&NG sales	325,437	295,049	621,291	262,735	261,155	556,631	
Royalty revenue	18	107	130	14	260	311	
Total P&NG revenues	325,455	295,156	621,421	262,749	261,415	556,942	
% of corporate revenues	52%	47%		47%	47%		

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.

Corporate P&NG revenues decreased 7% from the three month Comparable Prior Period largely due to lower production from the Pouce Coupe and Gordondale assets and a lower corporate average realized sales price.

Corporate P&NG revenues increased 12% from the twelve month Comparable Prior Period largely due to higher production from the Pouce Coupe and Gordondale assets, partially offset by a lower corporate average realized sales price and the Worsley Disposition.

### Production

The following table sets forth Birchcliff's production by product category for the Pouce Coupe assets, the Gordondale assets and on a corporate basis for the Reporting Periods and the Comparable Prior Periods:

			months ended mber 31, 2018	Three months ende December 31, 201			
	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(1)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	
Light oil (bbls/d)	7	4,777	4,788	5	5,257	5,283	
Natural gas (Mcf/d)	266,774	96,818	363,596	282,084	101,385	385,280	
NGLs (bbls/d)	3,484	7,533	11,021	2,119	8,484	10,607	
Total production (boe/d)	47,953	28,446	76,408	49,138	30,639	80,103	
Liquids <sup>(3)</sup> -to-gas ratio (bbls/MMcf)	13.1	127.1	43.5	7.5	135.5	41.2	
% of corporate production	63%	37%		61%	38%		
			months ended mber 31, 2018			months ended ember 31, 2017	
	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(1)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	
Light oil (bbls/d)	9	4,852	4,873	8	4,747	6,004	
Natural gas (Mcf/d)	276,004	95,508	372,170	224,561	90,599	320,927	
NGLs (bbls/d)	2,933	7,258	10,195	1,657	6,761	8,471	
Total production (boe/d)	48,943	28,028	77,096	39,092	26,608	67,963	
Liquids <sup>(3)</sup> -to-gas ratio (bbls/MMcf)	10.7	126.8	40.5	7.4	127.0	45.1	
% of corporate production	63%	36%		58%	39%		

<sup>(1)</sup> Includes production from Birchcliff's other minor oil and natural gas properties which were not individually significant during the Reporting Periods

<sup>(2)</sup> Includes revenue from Birchcliff's other minor oil and natural gas properties which were not individually significant during the Reporting Periods.

(3) Includes revenues from other minor oil and natural gas properties which were not individually significant during the Comparable Prior Periods, and for the twelve month Comparable Prior Period, also includes revenues from the Corporation's oil-weighted Worsley Assets which were sold in August 2017.

<sup>(2)</sup> Includes production from other minor oil and natural gas properties which were not individually significant during the Comparable Prior Periods and, for the twelve month Comparable Prior Period, also includes production from the Corporation's oil-weighted Worsley Assets which were sold in August 2017.

<sup>(3)</sup> Liquids is comprised of oil and NGLs (ethane, propane, butane and pentanes plus).

Corporate production averaged 76,408 boe/d in the three month Reporting Period and 77,096 boe/d in the twelve month Reporting Period, a 5% decrease and 13% increase from the Comparable Prior Periods.

The decrease in corporate production from the three month Comparable Prior Period was primarily attributable to production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines, partially offset by incremental production from new horizontal natural gas wells brought on production in Pouce Coupe and new horizontal oil wells brought on production in Gordondale.

The increase in corporate production from the twelve month Comparable Prior Period was primarily attributable to the success of Birchcliff's capital programs which resulted in incremental production from new horizontal natural gas wells brought on production in Pouce Coupe and new horizontal oil wells brought on production in Gordondale. This increase was partially offset by the Worsley Disposition in the twelve month Comparable Prior Period, production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines.

During the three month Reporting Period, Birchcliff produced a total of 15,809 bbls/d of oil and NGLs (collectively, "liquids") on a corporate basis, which represented 21% of the Corporation's total production and an average liquids-to-gas ratio of 43.5 bbls/MMcf. Birchcliff's liquids-to-gas ratio for the three month Reporting Period was 13.1 bbls/MMcf for the Pouce Coupe assets (of which 83% were higher-value oil and pentanes plus ("condensate")) and 127.1 bbls/MMcf for the Gordondale assets (of which 50% were higher-value oil and condensate). Birchcliff's corporate NGLs production mix consisted of approximately 23% ethane, 23% propane, 15% butane and 39% condensate in the three month Reporting Period as compared to 28% ethane, 24% propane, 14% butane and 34% condensate in the three month Comparable Prior Period.

During the twelve month Reporting Period, Birchcliff produced a total of 15,068 bbls/d of liquids on a corporate basis, which represented 20% of the Corporation's total production and an average liquids-to-gas ratio of 40.5 bbls/MMcf. During the twelve month Reporting Period, Birchcliff's liquids-to-gas ratio was 10.7 bbls/MMcf for the Pouce Coupe assets (of which 93% were higher-value oil and condensate) and 126.8 bbls/MMcf for the Gordondale assets (of which 51% were higher-value oil and condensate). Birchcliff's corporate NGLs production mix consisted of approximately 24% ethane, 22% propane, 14% butane and 40% condensate in the twelve month Reporting Period as compared to 25% ethane, 26% propane, 16% butane and 33% condensate in the twelve month Comparable Prior Period.

The following table sets forth Birchcliff's production weighting by product category for its Pouce Coupe and Gordondale assets and on a corporate basis for the Reporting Periods and the Comparable Prior Periods:

			months ended mber 31, 2018	Three months end December 31, 20			
	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(1)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	
% Light oil production	-	17%	6%	-	17%	7%	
% Natural gas production	93%	57%	79%	96%	55%	80%	
% NGLs production	7%	26%	15%	4%	28%	13%	
			months ended mber 31, 2018			months ended mber 31, 2017	
	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(1)</sup>	Pouce Coupe assets	Gordondale assets	Total corporate <sup>(2)</sup>	
% Light oil production	-	17%	6%	-	18%	9%	
% Natural gas production	94%	57%	80%	96%	57%	79%	
% NGLs production	6%	26%	14%	4%	25%	12%	

<sup>(1)</sup> Includes production weighting from Birchcliff's other minor oil and natural gas properties which were not individually significant during the Reporting Periods.

Corporate oil production as a percentage of total production decreased from the twelve Comparable Prior Period largely due to the Worsley Disposition.

Corporate NGLs production as a percentage of total production increased from the Comparable Prior Periods primarily due to the addition of condensate-rich natural gas wells drilled in Pouce Coupe.

<sup>(2)</sup> Includes production weighting from other minor oil and natural gas properties which were not individually significant during the Comparable Prior Periods and, for the twelve month Comparable Prior Period, also includes production weighting from the Corporation's oil-weighted Worsley Assets which were sold in August 2017.

#### **Commodity Prices**

The following table sets forth the average benchmark index prices and exchange rate for the Reporting Periods and the Comparable Prior Periods:

		months ended December 31,	Twelve months ended December 31,		
	2018	2017	2018	2017	
Light oil – WTI Cushing (US\$/bbl)	58.81	55.40	64.77	50.95	
Light oil – WTI Cushing (CDN\$/bbl)	77.56	70.47	83.89	66.11	
Light oil – MSW (Mixed Sweet) (CDN\$/bbl) <sup>(1)</sup>	42.42	68.62	69.04	62.52	
Natural gas – NYMEX HH (US\$/MMBtu) <sup>(2)</sup>	3.76	2.92	3.07	3.02	
Natural gas – AECO 5A (CDN\$/GJ)	1.48	1.60	1.42	2.04	
Natural gas – AECO 5A (US\$/MMBtu) <sup>(2)</sup>	1.18	1.33	1.16	1.66	
Natural gas – Dawn Day Ahead (CDN\$/GJ)	4.75	3.53	3.84	3.74	
Natural gas – Dawn Day Ahead (US\$/MMBtu) <sup>(2)</sup>	3.79	2.93	3.12	3.04	
Natural gas – ATP 5A Day Ahead (CDN\$/GJ)	2.57	1.16	2.07	2.02	
Natural gas – Chicago City Gate (US\$/MMBtu) <sup>(2)</sup>	3.69	2.88	3.02	2.90	
Exchange rate (CDN\$ to US\$1)	1.3215	1.2717	1.2961	1.2979	

<sup>(1)</sup> Previously referred to as the "Edmonton Par price".

Birchcliff sold substantially all of its light crude oil based on the MSW price during the Reporting Periods and Comparable Prior Periods. Birchcliff sold substantially all of its natural gas production for prices based on the AECO and Dawn benchmark prices during the Reporting Periods and sold substantially all of its natural gas production at the AECO benchmark price during the first 10 months of 2017. Effective November 1, 2017, Birchcliff began selling a portion of its natural gas at the Dawn benchmark price (see "Natural Gas Sales, Production and Average Realized Sales Price" for further details). Birchcliff has also financially diversified a portion of its AECO production to NYMEX-based pricing (see "Commodity Price Risk Management"). The average realized sales prices the Corporation receives for its light crude oil and natural gas production depends on a number of factors, including the average benchmark prices for crude oil and natural gas, the US to Canadian dollar exchange rate, transportation and product quality differentials and the heat premium on its natural gas production.

The benchmark prices for crude oil are impacted by global and regional events that dictate the level of supply and demand for crude oil. The principal benchmark trading exchanges that Birchcliff compares its oil price to are the WTI oil price and the MSW price. The differential between the WTI oil price and the MSW price can widen due to a number of factors, including, but not limited to, downtime in North American refineries, rising domestic production, high inventory levels in North America and a lack of pipeline infrastructure connecting to key consuming oil markets. The improved WTI benchmark crude oil prices in the Reporting Periods was partially offset by the widening differential between WTI and MSW prices, which averaged CDN\$35.14/bbl and CDN\$14.85/bbl in the three and twelve month Reporting Periods, respectively, compared to CDN\$1.85/bbl and CDN\$3.59/bbl in the Comparable Prior Periods.

<sup>(2) \$1.00/</sup>MMBtu = \$1.00/Mcf based on a standard heat value Mcf. See "Advisories – MMBtu Pricing Conversions".

Canadian natural gas prices are mainly influenced by North American supply and demand fundamentals which can be impacted by a number of factors, including, but not limited to, weather-related conditions in key consuming natural gas markets, changing demographics, economic growth, underground storage levels, net import and export markets, pipeline takeaway capacity, maintenance on key natural gas infrastructure, cost of competing renewable and non-renewable energy alternatives, drilling and completion rates and efficiencies in extracting natural gas from North American natural gas basins. AECO natural gas spot prices during the three month Reporting Period continued to receive a significant discount to the Dawn and NYMEX HH prices primarily due to the high natural gas supplies in Western Canada relative to the limited economic transportation and egress solutions out of Western Canadian natural gas basins. During the three month Reporting Period, AECO natural gas spot prices were additionally challenged due to temporary restrictions in pipeline egress and compressor station capacity on the Alberta NGTL system.

The following table sets forth Birchcliff's average realized oil, natural gas and NGLs sales prices for the Reporting Periods and the Comparable Prior Periods:

		Three mo	Twelve months ended December 31,			
(\$/boe)	2018	2017	Change	2018	2017	Change
Light oil (\$/bbl)	41.39	68.58	(40)%	68.66	61.42	12%
Natural gas (\$/Mcf)	3.03	2.64	15%	2.45	2.72	(10)%
NGLs (\$/bbl)	34.73	40.08	(13)%	44.66	33.39	34%
Average realized sales price (\$/boe) <sup>(1)</sup>	22.01	22.54	(2)%	22.08	22.44	(2)%

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.

The changes in the average realized sales prices from the Comparable Prior Periods were primarily the result of the movement in the average benchmark index price for each respective commodity.

The average realized sales price for the Pouce Coupe assets was \$20.93/boe in the three month Reporting Period and \$18.22/boe in the twelve month Reporting Period, a 15% increase and a 1% decrease, respectively, from the Comparable Prior Periods. The average realized sales price for the Gordondale assets was \$23.82/boe in the three month Reporting Period and \$28.84/boe in the twelve month Reporting Period, a 19% decrease and a 7% increase, respectively, from the Comparable Prior Periods. The Gordondale assets received a higher average realized sales price compared to the Pouce Coupe assets, largely as a result of higher volume weighting of liquids produced in the Gordondale area which received a higher value on a per unit basis than Birchcliff's natural gas sales. The higher weighting of liquids in the total corporate production mix generally improves Birchcliff's overall average realized sales price.

For further production and average realized pricing details for Birchcliff's Pouce Coupe assets and Gordondale assets, see "Discussion of Operations – Operating Netbacks" in this MD&A.

#### Natural Gas Sales, Production and Average Realized Sales Price

The following table sets forth Birchcliff's natural gas sales, production and average realized sales price by natural gas market for the Reporting Periods and the Comparable Prior Periods:

					nths ended er 31, 2018				Three months ended December 31, 2017			
	Natural gas sales (\$000s) <sup>(1)</sup>	(%)	Natural gas production (Mcf/d)	(%)	Average realized natural gas price (\$/Mcf) <sup>(1)(2)</sup>	Natural gas sales (\$000s) <sup>(1)</sup>	(%)	Natural gas production (Mcf/d)	(%)	Average realized natural gas price (\$/Mcf) <sup>(1)(2)</sup>		
AECO	33,788	33	223,261	61	1.67	57,778	62	266,437	69	2.34		
Dawn <sup>(3)</sup>	64,969	64	127,211	35	5.55	26,531	28	73,222	19	3.94		
Alliance <sup>(4)</sup>	2,492	3	13,124	4	2.06	9,338	10	45,621	12	2.22		
Total	101,249	100	363,596	100	3.03	93,647	100	385,280	100	2.64		
		Twelve months ended December 31, 2018 Twelve months ended December 31, 2017										
	Natural gas sales (\$000s) <sup>(1)</sup>	(%)	Natural gas production (Mcf/d)	(%)	Average realized natural gas price (\$/Mcf) <sup>(1)(2)</sup>	Natural gas sales (\$000s) <sup>(1)</sup>	(%)	Natural gas production (Mcf/d)	(%)	Average realized natural gas price (\$/Mcf) <sup>(1)(2)</sup>		
AECO	132,342	40	229,225	61	1.59	280,274	88	285,977	89	2.67		
Dawn <sup>(3)</sup>	182,385	55	114,110	31	4.38	26,531	8	18,456	6	3.94		
Alliance <sup>(4)</sup>	18,252	5	28,835	8	1.73	11,985	4	16,494	5	1.99		
Total	332,979	100	372,170	100	2.45	318,790	100	320,927	100	2.72		

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.

### Commodity Price Risk Management

Birchcliff maintains an ongoing commodity price risk management program in part to reduce volatility in its financial results. As a part of this program, Birchcliff utilizes various financial derivative and physical delivery sales contracts. Subject to compliance with the Corporation's credit facilities, the Board has authorized the Corporation to execute a risk management strategy whereby Birchcliff is authorized to enter into agreements and financial or physical transactions with one or more counterparties from time to time that are intended to protect the Corporation from volatility in future commodity prices, foreign exchange rates and/or interest rates.

### Financial Derivative Contracts

Birchcliff has not designated its financial derivative contracts as effective accounting hedges, even though the Corporation considers all commodity price contracts to be effective economic hedges. As a result, all such financial derivative contracts are recorded on the statement of financial position on a mark-to-market fair value basis at December 31, 2018, with the changes in fair value being recognized as a non-cash unrealized gain or loss in profit or loss. These contracts are not entered into for trading or speculative purposes.

<sup>(2)</sup> Reflects the average realized natural gas wellhead price after adjusting for fuel to transport natural gas from the field receipt point to the delivery sales trading hub.

<sup>(2)</sup> Reflects the average realized natural gas weithread price after adjusting for flate to transport natural gas from the flet receipt point to the delivery sales trading flour.

(3) The Corporation has in place firm service transportation for an aggregate of 175,000 G.J/d of natural gas on TCPL's Canadian Mainline for a 10-year term, whereby natural gas is transported to the Dawn trading hub. The first 120,000 G.J/d tranche of service became available to Birchcliff on November 1, 2017 and the second tranche of 30,000 G.J/d became available on November 1, 2018, with an additional 25,000 GJ/d becoming available on November 1, 2019. During the three month Reporting Period, Birchcliff entered into physical delivery sales contracts at Dawn for 50,000 MMBtu/d at an average contract price of US\$5.05/MMBtu for the period from December 1, 2018 to March 31, 2019.

<sup>(4)</sup> Birchcliff has in place various natural gas delivery arrangements with third party marketers to deliver and sell natural gas on the Alliance pipeline system. Alliance sales are recorded net of transportation tolls.

As at December 31, 2018, Birchcliff had the following financial derivative contracts in place in order to manage commodity price risk:

Product	Type of contract	Notional quantity	Term <sup>(1)</sup>	Contract price
Natural gas	AECO 7A basis swap <sup>(2)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.298/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.32/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.33/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	15,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.185/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.20/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.20/MMBtu
Natural gas	AECO 7A basis swap <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.10/MMBtu
Natural gas	AECO 7A basis swap <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.15/MMBtu
Natural gas	AECO 7A basis swap <sup>(3)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.16/MMBtu

<sup>(1)</sup> Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price.

The following table provides a summary of the realized and unrealized gains (losses) on financial derivative contracts for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31, December 31,					ths ended ember 31,	
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Realized gain (loss) on derivatives	1,658	0.24	10,787	1.46	(15,771)	(0.56)	25,785	1.03
Unrealized gain (loss) on derivatives	77,443	11.02	(13,712)	(1.86)	64,222	2.28	5,387	0.22

Birchcliff realized a cash loss on financial commodity price risk management contracts of \$15.8 million in the twelve month Reporting Period as compared to a realized cash gain of \$25.8 million in the Comparable Prior Period. The realized loss was due to the settlement of WTI fixed price financial contracts with an average contract price that was below the average benchmark commodity index price in that period. This loss was partially offset by a realized gain of \$4.0 million recorded in the three month Reporting Period due to the monetization of Birchcliff's outstanding 2019 WTI fixed price financial contracts.

Birchcliff recorded a \$64.2 million unrealized mark-to-market gain on financial commodity price risk management contracts in the twelve month Reporting Period as compared to a \$5.4 million unrealized gain in the Comparable Prior Period. The unrealized gain was due to an increase in the fair value of Birchcliff's financial contracts to an asset position of \$60.2 million at December 31, 2018, as compared to a liability position of \$4.0 million at December 31, 2017. The increase in the fair value of Birchcliff's financial contracts was primarily attributable to the addition of the multi-year AECO/NYMEX basis swap contracts entered into during the twelve month Reporting Period and the settlement of the WTI fixed price financial contracts during the Reporting Periods. Any changes in the forward commodity price assumptions period-over-period will also be reflected in the unrealized gain or loss for unsettled financial risk management contracts. The fair value of the asset or liability is the estimated value to settle the outstanding contracts at a point in time. As such, unrealized financial gains or losses do not impact adjusted funds flow and the actual gains or losses realized on eventual cash settlement can vary materially due to subsequent fluctuations in commodity prices as compared to the valuation assumptions.

<sup>(2)</sup> Birchcliff sold AECO basis swap.

<sup>(3)</sup> Birchcliff bought AECO basis swap

The following financial derivative contracts were entered into subsequent to December 31, 2018:

Product	Type of contract	Notional quantity	Term <sup>(1)</sup>	Contract price
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2025 – Dec. 31, 2025	NYMEX HH less US\$1.020/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	20,000 MMBtu/d	Jan. 1, 2024 – Dec. 31, 2025	NYMEX HH less US\$1.119/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	25,000 MMBtu/d	Jan. 1, 2024 – Dec. 31, 2025	NYMEX HH less US\$1.135/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.178/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.175/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.190/MMBtu

<sup>(1)</sup> Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price.

#### **Physical Delivery Sales Contracts**

Birchcliff also enters into physical delivery sales contracts to manage commodity price risk. These contracts are considered normal executory sales contracts and are not recorded at fair value through profit or loss. At December 31, 2018, the Corporation had the following physical delivery sales contract in place:

Product	Type of contract	Notional quantity	Term <sup>(1)</sup>	Contract price
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.205/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.100/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.000/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.005/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.020/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	15,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.103/MMBtu

<sup>(1)</sup> Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price.

There were no long-term physical delivery sales contracts entered into subsequent to December 31, 2018.

#### **Royalties**

The following table sets forth Birchcliff's royalty expense for the Reporting Periods and the Comparable Prior Periods:

	Three	months ended December 31,			
	2018	2017	2018	2017	
Royalty expense (\$000s) <sup>(1)</sup>	6,763	9,271	38,306	28,727	
Royalty expense (\$/boe)	0.96	1.26	1.36	1.16	
Effective royalty rate (%) <sup>(2)</sup>	4%	6%	6%	5%	

<sup>(1)</sup> Royalties are paid primarily to the Government of Alberta.

During the three month Reporting Period, Birchcliff's aggregate and per unit royalties decreased from the Comparable Prior Period primarily due to a decrease in the average realized oil and NGLs sales prices and the effect these lower prices have on the sliding scale royalty calculation, partially offset by an increase in the average realized natural gas sales price.

During the twelve month Reporting Period, Birchcliff's aggregate and per unit royalties increased from the Comparable Prior Period primarily due to an increase in the average realized oil and NGLs sales prices and the effect these higher prices have on the sliding scale royalty calculation, partially offset by a decrease in the average realized natural gas sales price.

See "Discussion of Operations – Operating Netbacks" in this MD&A for details on royalties for the Corporation's Pouce Coupe and Gordondale assets.

<sup>(2)</sup> Birchcliff sold AECO basis swap.

<sup>(2)</sup> Birchcliff sold AECO basis swap.

<sup>(3)</sup> Birchcliff entered into a 4-month fixed price physical natural gas Dawn sales arrangement commencing December 1, 2018.

<sup>(2)</sup> The effective royalty rate is calculated by dividing the aggregate royalties into petroleum and natural gas sales for the period.

### **Operating Expense**

The following table sets forth a breakdown of Birchcliff's operating expense for the Reporting Periods and the Comparable Prior Periods:

			Three montl Dece	ns ended mber 31,		Twelve months ended December 31,		
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Field operating expense	25,705	3.66	28,901	3.92	102,099	3.63	112,287	4.53
Recoveries	(1,028)	(0.15)	(523)	(0.07)	(2,995)	(0.11)	(1,917)	(0.08)
Field operating expense, net	24,677	3.51	28,378	3.85	99,104	3.52	110,370	4.45
Expensed workovers and other	-	-	82	0.01	-	-	116	-
Operating expense	24,677	3.51	28,460	3.86	99,104	3.52	110,486	4.45

On an aggregate and per unit basis, operating expense decreased in the Reporting Periods as compared to the Comparable Prior Periods primarily due to: (i) an incremental increase in natural gas production processed at the Pouce Coupe Gas Plant; (ii) a reduction in third-party natural gas processing fees at the Gordondale Gas Plant as a result of the Gordondale Processing Arrangement; and (iii) the sale of the higher-cost Worsley Assets in August 2017.

See "Discussion of Operations – Operating Netbacks" in this MD&A for details on operating expense for the Pouce Coupe assets and Gordondale assets.

### **Transportation and Other Expense**

The following table sets forth Birchcliff's transportation and other expense for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31,				Tv	velve month Dece	ns ended mber 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Transportation	28,014	3.99	25,852	3.52	99,889	3.55	71,098	2.87
Fractionation	521	0.08	-	-	3,533	0.13	-	-
Other	32	-	31	-	125	-	126	-
Transportation and other expense <sup>(1)</sup>	28,567	4.07	25,883	3.52	103,547	3.68	71,224	2.87

<sup>(1)</sup> Previously referred to as "transportation and marketing expense" in the Comparable Prior Periods.

The increase in the aggregate and per unit transportation and other expense from the Comparable Prior Periods was largely due to firm service pipeline transportation tolls for natural gas transported to Dawn which commenced November 1, 2017 and new unused firm transportation costs associated with Birchcliff's commitments on the NGTL system, which is available for future production growth. Additionally, fractionation fees associated with NGLs production processed at third-party facilities were reclassified from NGLs revenue for the Reporting Periods as a result of Birchcliff's transition to IFRS 15: Revenue from Contracts with Customers ("IFRS 15") effective January 1, 2018. See "Changes in Accounting Policies" in this MD&A for further details.

See "Discussion of Operations – Operating Netbacks" in this MD&A for details on transportation and other expense for the Pouce Coupe assets and Gordondale assets.

### **Operating Netback**

The following table sets forth Birchcliff's net production and operating netback for the Corporation's assets in Pouce Coupe and Gordondale on the Montney/Doig Resource Play and on a corporate basis for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31,		onths ended ecember 31,
	2018	2017	2018	2017
Pouce Coupe Montney/Doig Resource Play:				
Average production:				
Light oil (bbls/d)	7	4	9	7
Natural gas (Mcf/d)	266,774	282,084	276,004	224,561
NGLs (bbls/d)	3,484	2,120	2,933	1,658
Total (boe/d)	47,953	49,138	48,943	39,092
% of corporate production	63%	61%	63%	58%
Liquids <sup>(1)</sup> -to-gas ratio (bbls/MMcf)	13.1	7.5	10.7	7.4
Netback and cost (\$/boe):				
Petroleum and natural gas revenue <sup>(2)</sup>	20.93	18.27	18.22	18.41
Royalty expense	(0.33)	(0.50)	(0.29)	(0.40)
Operating expense	(2.29)	(2.37)	(2.28)	(2.66)
Transportation and other expense	(4.16)	(3.69)	(3.59)	(2.68)
Operating netback	14.15	11.71	12.06	12.67
Gordondale Montney/Doig Resource Play:				
Average production:				
Light oil (bbls/d)	4,777	5,257	4,852	4,747
Natural gas (Mcf/d)	96,818	101,385	95,508	90,599
NGLs (bbls/d)	7,533	8,484	7,258	6,761
Total (boe/d)	28,446	30,639	28,028	26,608
% of corporate production	37%	38%	36%	39%
Liquids <sup>(3)</sup> -to-gas ratio (bbls/MMcf)	127.1	135.5	126.8	127.0
Netback and cost (\$/boe):				
Petroleum and natural gas revenue <sup>(2)</sup>	23.83	29.46	28.85	26.92
Royalty expense	(2.04)	(2.50)	(3.23)	(2.07)
Operating expense	(5.55)	(6.15)	(5.63)	(6.32)
Transportation and other expense	(3.91)	(3.27)	(3.84)	(2.93)
Operating netback	12.33	17.54	16.15	15.60
Total Corporate:				
Average production:				
Light oil (bbls/d)	4,788	5,283	4,873	6,004
Natural gas (Mcf/d)	363,596	385,280	372,170	320,927
NGLs (bbls/d)	11,021	10,607	10,195	8,471
Total (boe/d) <sup>(4)</sup>	76,408	80,103	77,096	67,963
Liquids <sup>(3)</sup> -to-gas ratio (bbls/MMcf)	43.5	41.2	40.5	45.1
Netback and cost (\$/boe):				
Petroleum and natural gas revenue <sup>(2)</sup>	22.01	22.55	22.08	22.45
Royalty expense	(0.96)	(1.26)	(1.36)	(1.16)
Operating expense	(3.51)	(3.86)	(3.52)	(4.45)
Transportation and other expense	(4.07)	(3.52)	(3.68)	(2.87)
Operating netback	13.47	13.91	13.52	13.97

Primarily condensate.
 Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.
 Liquids is comprised of oil and NGLs (ethane, propane, butane and condensate).
 Includes production from Birchcliff's other minor oil and natural gas properties which were not individually significant and, for the twelve month Comparable Prior Period, also includes production from the Corporation's oil-weighted Worsley Assets which were sold in August 2017.

#### Pouce Coupe Montney/Doig Resource Play

Birchcliff's average production from its Pouce Coupe assets was 47,953 boe/d in the three month Reporting Period and 48,943 boe/d in the twelve month Reporting Period, a 2% decrease and 25% increase, respectively, from the Comparable Prior Periods. The decrease in the three month Reporting Period was primarily attributable to production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines, partially offset by incremental production from new horizontal natural gas wells being brought on production. The increase in the twelve month Reporting Period was primarily attributable to the success of Birchcliff's capital programs which resulted in incremental production from new horizontal natural gas wells being brought on production with the start-up of Phase V and Phase VI of the Pouce Coupe Gas Plant, partially offset by production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines in the Reporting Period.

Birchcliff's liquids-to-gas ratio for the Pouce Coupe assets was 13.1 bbls/MMcf in the three month Reporting Period and 10.7 bbls/MMcf in the twelve month Reporting Period as compared to 7.5 bbls/MMcf and 7.4 bbls/MMcf, respectively, in the Comparable Prior Periods. During the Reporting Periods, Birchcliff specifically targeted condensate-rich natural gas wells in Pouce Coupe which resulted in the increase in liquids-to-gas ratio from the Comparable Prior Periods. During the three month Reporting Period, approximately 83% of the liquids produced in the Pouce Coupe area were comprised of higher-value condensate which received an average price of \$58.03/bbl. During the twelve month Reporting Period, approximately 93% of the liquids produced in the Pouce Coupe area were comprised of higher-value condensate which received an average price of \$75.16/bbl.

Operating expense for the Pouce Coupe assets was \$2.29/boe in the three month Reporting Period and \$2.28/boe in the twelve month Reporting Period, a 3% and 14% decrease, respectively, from the Comparable Prior Periods. Operating expense per boe decreased largely due to an incremental increase in natural gas production processed through the Pouce Coupe Gas Plant during the Reporting Periods.

Transportation and other expense for the Pouce Coupe assets was \$4.16/boe in the three month Reporting Period and \$3.59/boe in the twelve month Reporting Period, a 13% and 34% increase, respectively, from the Comparable Prior Periods. Transportation and other expense per boe increased mainly due to firm service pipeline transportation tolls for natural gas transported to Dawn which commenced November 1, 2017 and new unused firm transportation costs associated with Birchcliff's commitments on the NGTL system, which is available for future production growth.

Birchcliff's operating netback for the Pouce Coupe assets was \$14.15/boe in the three month Reporting Period and \$12.06/boe in the twelve month Reporting Period, a 21% increase and 5% decrease, respectively, from the Comparable Prior Periods. The increase in the three month Reporting Period was largely due to a higher average realized sales price received for Birchcliff's Pouce Coupe production and lower per boe royalty and operating expenses, partially offset by higher per boe transportation and other expense. The decrease in the twelve month Reporting Period was largely due to a lower average realized sales price received for Birchcliff's Pouce Coupe production and higher per boe transportation and other expense, partially offset by lower per boe royalty and operating expenses during the Reporting Period.

#### Gordondale Montney/Doig Resource Play

Birchcliff's average production from the Gordondale assets was 28,446 boe/d in the three month Reporting Period and 28,028 boe/d in the twelve month Reporting Period, a 7% decrease and 5% increase, respectively, from the Comparable Prior Periods. The decrease in the three month Reporting Period was primarily attributable to production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines, partially offset by incremental production from new horizontal oil wells being brought on production. The increase in production in the twelve month Reporting Period was primarily attributable to the success of Birchcliff's capital programs which resulted in incremental production from new horizontal oil wells being brought on production, partially offset by production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines in the Reporting Period.

Birchcliff's liquids-to-gas ratio for the Gordondale assets was 127.1 bbls/MMcf in the three month Reporting Period and 126.8 bbls/MMcf in the twelve month Reporting Period as compared to 135.5 bbls/MMcf and 127.0 bbls/MMcf, respectively, in the Comparable Prior Periods. During the three month Reporting Period, approximately 50% of the liquids produced in Gordondale were comprised of higher-value oil and condensate which received an average price of \$43.58/bbl. Birchcliff's Gordondale NGLs production mix consisted of approximately 34% ethane, 31% propane, 18% butane and 17% condensate in the three month Reporting Period. During the twelve month Reporting Period, approximately 51% of the liquids produced in Gordondale were comprised of higher-value oil and condensate which received an average price of \$71.57/bbl. Birchcliff's Gordondale NGLs production mix consisted of approximately 33% ethane, 30% propane, 18% butane and 19% condensate in the twelve month Reporting Period.

Operating expense for the Gordondale assets was \$5.55/boe in the three month Reporting Period and \$5.63/boe in the twelve month Reporting Period, a 10% and 11% decrease, respectively, from the Comparable Prior Periods. The decrease in operating expense for the Reporting Periods was primarily attributable to the reduction in third-party natural gas processing fees at the Gordondale Gas Plant as a result of the Gordondale Processing Arrangement.

Transportation and other expense for the Gordondale assets was \$3.91/boe in the three month Reporting Period and \$3.84/boe in the twelve month Reporting Period, a 20% and 31% increase respectively, from the Comparable Prior Periods. Transportation and other expense per boe increased mainly due to firm service pipeline transportation tolls for natural gas transported to Dawn which commenced November 1, 2017 and new unused firm transportation costs associated with Birchcliff's commitments on the NGTL system, which is available for future production growth.

Birchcliff's operating netback for the Gordondale assets was \$12.33/boe in the three month Reporting Period and \$16.15/boe in the twelve month Reporting Period, a 30% decrease and 4% increase, respectively, from the Comparable Prior Periods. The decrease in the three month Reporting Period was largely due a lower average realized sales price received for Birchcliff's Gordondale liquids production and higher per boe transportation and other expense, partially offset by lower per boe royalty and operating expenses. The increase in the twelve month Reporting Period was largely due to a higher average realized sales price received for Birchcliff's Gordondale production and lower per boe operating expense, partially offset by higher per boe royalty expense and transportation and other expense.

### **Administrative Expense**

The following table sets forth the components of Birchcliff's net administrative expense for the Reporting Periods and the Comparable Prior Periods:

	Three months ended December 31,					-	Twelve month Decer	s ended nber 31,
		2018		2017		2018		2017
	(\$000s)	(%)	(\$000s)	(%)	(\$000s)	(%)	(\$000s)	(%)
Cash:								
Salaries and benefits <sup>(1)</sup>	11,131	75	13,451	83	28,618	68	31,437	70
Other <sup>(2)</sup>	3,683	25	2,832	17	13,329	32	13,498	30
	14,814	100	16,283	100	41,947	100	44,935	100
Operating overhead recoveries	(33)	(1)	(52)	(1)	(150)	(1)	(202)	(1)
Capitalized overhead <sup>(3)</sup>	(7,163)	(48)	(6,781)	(41)	(17,195)	(40)	(18,229)	(40)
G&A expense, net	7,618	51	9,450	58	24,602	59	26,504	59
G&A expense, net per boe	\$1.08		\$1.28		\$0.87		\$1.07	
Non-cash:								
Other compensation <sup>(4)</sup>	9,668	100	2,370	100	14,758	100	9,945	100
Capitalized compensation <sup>(3)</sup>	(4,175)	(43)	(1,376)	(58)	(7,061)	(48)	(5,886)	(59)
Other compensation, net	5,493	57	994	42	7,697	52	4,059	41
Other compensation, net per boe	\$0.78		\$0.13		\$0.27		\$0.16	
Administrative expense, net	13,111		10,444		32,299		30,563	
Administrative expense, net per boe	\$1.86		\$1.41		\$1.14		\$1.23	

- [] Includes salaries, benefits and bonuses paid to officers and employees of the Corporation and retainer fees, meeting fees and benefits paid to directors of the Corporation.
- (2) Includes costs such as rent, legal, tax, insurance, minor computer hardware and software and other business expenses incurred by the Corporation.
- (3) Includes a portion of gross general and administrative expenses and other compensation directly attributable to the exploration and development activities of the Corporation, which have been capitalized.
- (4) Birchcliff recorded a post-employment benefit expense of \$7.8 million in the Reporting Periods (2017 \$nil).

On an aggregate basis, administrative expense for the three and twelve month Reporting Periods increased 26% and 6%, respectively, from the Comparable Prior Periods. The increases were primarily due to the establishment of a post-employment benefit plan for eligible employees, which provides for post-employment benefits based upon the age at retirement and their period of service with Birchcliff. During the Reporting Periods, Birchcliff recorded a post-employment benefit expense of \$7.8 million (2017 - \$nil). The increases were partially offset by lower net stock-based compensation expense in the Reporting Periods, which reflects stock options with a lower fair value being expensed in the Reporting Periods as compared to the Comparable Prior Periods. Birchcliff uses the fair-value method for the determination of non-cash related share-based payments expense.

The following table sets forth the Corporation's outstanding stock options for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31, 2018		nonths ended nber 31, 2017
	Number	Exercise price(\$) <sup>(2)</sup>	Number	Exercise price(\$) <sup>(2)</sup>
Outstanding, beginning of period	16,000,070	5.78	14,378,009	6.90
Granted <sup>(1)</sup>	140,500	4.59	137,000	4.96
Exercised	(26,000)	(3.35)	(8,000)	(3.35)
Forfeited	(10,000)	(5.03)	(148,734)	(6.73)
Expired	(257,000)	(7.46)	(200,168)	(7.75)
Outstanding, end of period	15,847,570	5.74	14,158,107	6.88

<sup>(1)</sup> Each stock option granted entitles the holder to purchase one common share at the exercise price.

<sup>(2)</sup> Exercise price is calculated on a weighted average basis.

		nonths ended nber 31, 2018	Twelve months end December 31, 20			
	Number	Exercise price(\$) <sup>(2)</sup>	Number	Exercise price(\$) <sup>(2)</sup>		
Outstanding, beginning of period	14,158,107	6.88	12,899,775	6.45		
Granted <sup>(1)</sup>	4,734,900	3.23	4,867,400	7.67		
Exercised	(114,664)	(3.35)	(1,754,796)	(5.33)		
Forfeited	(483,405)	(5.59)	(1,606,437)	(7.49)		
Expired	(2,447,368)	(7.57)	(247,835)	(7.55)		
Outstanding, end of period	15,847,570	5.74	14,158,107	6.88		

<sup>(1)</sup> Each stock option granted entitles the holder to purchase one common share at the exercise price.

At December 31, 2018, there were also 2,939,732 performance warrants outstanding with an exercise price of \$3.00 which expire on January 31, 2020.

### **Depletion and Depreciation Expense**

Depletion and depreciation ("D&D") expense is a function of the estimated proved plus probable reserve additions, the finding and development costs attributable to those reserves, the associated future development costs required to recover those reserves and the actual production in the relevant period. The Corporation determines its D&D expense on a field area basis.

The following table sets forth Birchcliff's D&D expense for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31,						s ended nber 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Depletion and depreciation expense	51,274	7.29	57,920	7.86	208,868	7.42	185,666	7.48

D&D expense on an aggregate basis for the three month Reporting Period was lower as compared to the Comparable Prior Period mainly due to a decrease in production. D&D expense on an aggregate basis for the twelve month Reporting Period was higher as compared to the Comparable Prior Period mainly due to an increase in production.

Included in the depletion calculation at December 31, 2018 were 1,002,070 Mboe of proved plus probable reserves and \$4.3 billion of future development costs required to recover those reserves as estimated by the Corporation's independent qualified reserves evaluators.

<sup>(2)</sup> Exercise price is calculated on a weighted average basis

#### Asset Impairment Assessment

The Corporation reviews its petroleum and natural gas assets for impairment in accordance with International Accounting Standards ("IAS") 36 under IFRS. Birchcliff's assets are grouped into cash generating units ("CGU") for the purpose of determining impairment. A CGU represents the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets. In determining the Corporation's CGUs, the Corporation takes into consideration all available information, including, but not limited to: geographical proximity; geological similarities (i.e. reservoir characteristics and production profiles); degree of shared infrastructure; independent versus interdependent cash flows; operating structure; the regulatory environment; management decision-making; and overall business strategy.

The Corporation's CGUs are reviewed at each reporting date for both internal and external indicators of potential impairment. Potential CGU impairment indicators include, but are not limited to: changes to Birchcliff's business plan; deterioration in commodity prices; negative changes in the technological, economic, legal, capital or operating environment; adverse changes to the physical condition of a CGU; current expectations that a material CGU (or a significant component thereof) is more likely than not to be sold or otherwise disposed of before the end of its previously estimated useful life; non-compliance with the agreements governing the Corporation's bank credit facilities; deterioration in the financial and operational performance of a CGU; net assets exceeding market capitalization; and significant downward revisions of estimated proved plus probable reserves of a CGU. If impairment indicators exist, an impairment test is performed by comparing a CGU's carrying value to its recoverable amount.

In light of industry conditions, Birchcliff determined there were impairment indicators present at December 31, 2018 and December 31, 2017. Birchcliff performed an impairment assessment on a CGU basis and determined that the carrying value of its P&NG properties and equipment was recoverable. Birchcliff's P&NG properties and equipment were not impaired at December 31, 2018 and December 31, 2017.

Management has determined that the calculation of the recoverable amount is most sensitive to key assumptions regarding discount rates, commodity prices and estimated quantities of proved plus probable reserves and the future production profile of those reserves. Each of these underlying key assumptions is reviewed by management and corroborated independently to assess for reasonableness. The P&NG future prices are based on period-end commodity price forecast assumptions determined by the Corporation's independent reserves evaluator.

#### **Finance Expense**

The following table sets forth the components of the Corporation's finance expense for the Reporting Periods and the Comparable Prior Periods:

		Three months ended December 31,				Tv	velve montl Dece	ns ended mber 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Cash:								
Interest expense on credit facilities <sup>(1)</sup>	7,437	1.06	7,131	0.97	27,969	0.99	28,374	1.14
Non-cash:								
Accretion <sup>(2)</sup>	811	0.12	595	0.08	3,208	0.11	3,055	0.12
Amortization of deferred financing fees	374	0.05	400	0.05	1,534	0.05	1,510	0.06
Finance expense	8,622	1.23	8,126	1.10	32,711	1.15	32,939	1.32

<sup>(1)</sup> At December 31, 2018, the Corporation's credit facilities consisted of extendible revolving credit facilities in the aggregate principal amount of \$950 million with maturity dates of May 11, 2021 (the "Credit Facilities"). At December 31, 2018, the Credit Facilities were comprised of: (i) an extendible revolving syndicated term credit facility (the "Syndicated Credit Facility") of \$850 million; and (ii) an extendible revolving working capital facility (the "Working Capital Facility") of \$100 million.

Birchcliff's interest expense is primarily impacted by the average effective interest rate and the average outstanding drawn balance under its Syndicated Credit Facility in the period. Birchcliff draws on its Syndicated Credit Facility using Canadian dollar denominated bankers' acceptances and US dollar denominated LIBOR loans. The average effective interest rate under the Syndicated Credit Facility is determined based on: (i) the market interest rate of its drawn bankers' acceptances and LIBOR loans; and (ii) Birchcliff's stamping fee.

<sup>(2)</sup> Includes accretion on decommissioning obligations and post-employment benefits

Birchcliff's stamping fees are calculated using a pricing margin grid and will change as a result of the ratio of outstanding indebtedness to the trailing four quarter EBITDA as calculated in accordance with the Corporation's agreement governing the Credit Facilities. EBITDA is defined as earnings before interest and non-cash items, including (if any) income taxes, stock-based compensation, gains and losses on sale of assets, unrealized gains and losses on financial instruments and depletion, depreciation and amortization.

The following table sets forth the Corporation's effective interest rates under its Credit Facilities for the Reporting Periods and the Comparable Prior Periods:

		nonths ended December 31,		Twelve months ended December 31,	
	2018	2017	2018	2017	
Revolving working capital facility	5.2%	5.0%	5.2%	5.0%	
Revolving syndicated credit facility	4.7%	4.9%	4.7%	4.8%	

Birchcliff's average outstanding total credit facilities balance was approximately \$620 million and \$605 million in the three and twelve month Reporting Periods, respectively, as compared to \$586 million and \$588 million in the Comparable Prior Periods, calculated as the simple average of the month-end amounts.

The Corporation reviews its market interest rate risk exposure and may enter into interest rate swaps when market conditions are favourable in order to reduce volatility in its financial results. Subsequent to December 31, 2018, Birchcliff entered into a financial one-month bankers' acceptance CDOR (Canadian Dollar Offered Rate) fixed interest rate swap on \$350 million at 2.215% for the period from March 1, 2019 to March 1, 2024. The interest rate swap effectively fixes only the market interest rate component of Birchcliff's Syndicated Credit Facility.

### Gain (Loss) on Sale of Assets

The following table details Birchcliff's gain (loss) on sale of assets in the Reporting Periods and Comparable Prior Periods:

				nths ended cember 31,			Twelve mon Dec	ths ended ember 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Gain (loss) on sale of assets	(1,831)	(0.26)	13,705	1.86	(10,192)	(0.36)	(186,143)	(7.50)

During the twelve month Reporting Period, Birchcliff completed the dispositions of certain non-core miscellaneous P&NG properties and related assets and interests. The total cash consideration was \$5.3 million, before customary closing adjustments. As a result of the dispositions, Birchcliff recorded a loss on sale of assets of approximately \$10.2 million (\$7.4 million, net of tax) in the twelve month Reporting Period. These dispositions are considered non-core as they represented less than 1% of both Birchcliff's production during the Reporting Periods and proved plus probable reserves at December 31, 2018 and therefore were not significant to the Corporation's financial results or operational performance.

In October 2017, Birchcliff completed the sale of the Progress Charlie Lake assets for cash consideration of \$31.7 million, before closing adjustments. As a result of the disposition, Birchcliff recorded a gain on the sale of assets of approximately \$13.7 million (\$10.0 million, net of tax) in the Comparable Prior Periods.

In August 2017, Birchcliff completed the Worsley Disposition for total consideration of \$100 million, before closing adjustments. As a result of the disposition, Birchcliff recorded a loss on the sale of assets of approximately \$181.3 million (\$132.3 million, net of tax) in the Comparable Prior Periods.

#### **Income Taxes**

The components of the Corporation's income taxes for the Reporting Periods and the Comparable Prior Periods are set forth in the table below:

(\$000s)	Three mo	Twelve months ended December 31,		
	2018	2017	2018	2017
Deferred income tax expense (recovery)	25,585	9,631	36,858	(16,906)
Dividend income tax expense on preferred shares	769	767	3,075	3,020
Income tax expense (recovery)	26,354	10,398	39,933	(13,886)
Income tax expense (recovery) per boe	\$3.77	\$1.42	\$1.44	(\$0.54)

Birchcliff had an income tax expense in the Reporting Periods resulting from net income before tax recorded in the respective periods. Birchcliff had an income tax expense in the three month Comparable Prior Period resulting from net income before tax recorded in that period and an income tax recovery in the twelve month Comparable Prior Period largely resulting from the accounting loss on the Worsley Disposition.

The Corporation's estimated income tax pools were \$2.1 billion at December 31, 2018. Management expects that future taxable income will be available to utilize the accumulated tax pools. The components of the Corporation's estimated income tax pools are set forth in the table below:

(\$000s)	Tax pools as at December 31, 2018
Canadian oil and gas property expense	415,609
Canadian development expense	358,212
Canadian exploration expense	284,401
Undepreciated capital costs	341,590
Non-capital losses and investment tax credits	643,116
SR&ED <sup>(1)</sup> & Investment tax credits	23,940
Financing costs and other	13,331
Estimated income tax pools <sup>(2)</sup>	2,080,199

<sup>(1)</sup> Scientific research and experimental development ("SR&ED") tax pools.

### Veracel Tax Pools

Birchcliff's 2006 income tax filings were reassessed by the CRA in 2011 (the "Reassessment"). The Reassessment was based on the CRA's position that the tax pools available to Veracel Inc. ("Veracel"), prior to its amalgamation with Birchcliff, ceased to be available to Veracel after Birchcliff and Veracel amalgamated on May 31, 2005. The Veracel tax pools in dispute totalled \$39.3 million. Birchcliff appealed the Reassessment to the Tax Court of Canada (the "Trial Court") and the trial of that appeal occurred in November 2013. On October 1, 2015, the Trial Court issued its decision (the "Trial Decision") and dismissed Birchcliff's appeal on the basis of the general anti-avoidance rule contained in the *Income Tax Act* (Canada). The Trial Decision was rendered by a judge based on the written record and not by the judge who conducted the trial. As a result of the Trial Decision, Birchcliff recorded a non-cash deferred income tax expense in the amount of \$10.2 million in the fourth quarter of 2015.

Birchcliff appealed the Trial Decision to the Federal Court of Appeal (the "FCA"), which appeal was heard in January 2017. In April 2017, the FCA issued its decision and allowed the appeal and set aside the Trial Decision, based on the lack of jurisdiction by the judge who rendered the Trial Decision. In setting aside the Trial Decision, the FCA referred the matter back to the judge of the Trial Court who initially conducted the trial in 2013 to render a judgment. The judge of the Trial Court rendered a decision in November 2017 and dismissed the Corporation's appeal. The Corporation appealed that decision to the FCA, which appeal was heard on December 10, 2018 with judgment reserved.

<sup>(2)</sup> Excludes Veracel tax pools of \$39.3 million which were reassessed by the Canada Revenue Agency (the "CRA").

#### **CAPITAL EXPENDITURES**

The following table sets forth a summary of the Corporation's capital expenditures for the Reporting Periods and the Comparable Prior Periods:

	Three	months ended December 31,	Twelve months ended December 31,			
(\$000s)	2018	2017	2018	2017		
Land	390	286	2,226	1,700		
Seismic	332	515	1,310	1,435		
Workovers	1,804	3,328	6,281	10,279		
Drilling and completions	37,888	35,457	200,782	269,142		
Well equipment and facilities	11,907	9,734	89,055	132,429		
Finding and development capital	52,321	49,320	299,654	414,985		
Acquisitions	-	58	1,524	999		
Dispositions	(9)	(31,159)	(5,184)	(141,690)		
Finding, development and acquisition capital	52,312	18,219	295,994	274,294		
Administrative assets	574	450	2,024	1,831		
Total capital expenditures <sup>(1)</sup>	52,886	18,669	298,018	276,125		

<sup>(1)</sup> Birchcliff previously referred to total capital expenditures as "net capital expenditure" or "capital expenditures, net". See "Advisories – Capital Expenditures".

During the three month Reporting Period, Birchcliff had total capital expenditures of \$52.9 million which included approximately \$18.5 million (35%) on the drilling and completion of Montney/Doig horizontal wells in Pouce Coupe, \$19.3 million (37%) on the drilling and completion of Montney horizontal wells in Gordondale and \$2.2 million (4%) on the Phase VI expansion of the Pouce Coupe Gas Plant which was brought on-stream in August 2018.

During the twelve month Reporting Period, Birchcliff had total capital expenditures of \$298.0 million which included approximately \$108.6 million (36%) on the drilling and completion of Montney/Doig horizontal wells in Pouce Coupe, \$92.1 million (31%) on the drilling and completion of Montney horizontal wells in Gordondale and \$22.1 million (7%) on the Phase VI expansion of the Pouce Coupe Gas Plant.

The remaining capital during the Reporting Periods was primarily attributed to land, seismic and infrastructure expansion projects in the Montney/Doig Resource Play and on other oil and gas exploration and development projects in the Peace River Arch.

During the twelve month Reporting Period, Birchcliff brought on production a total of 28 (28.0 net) wells, consisting of 13 (13.0 net) Montney horizontal oil wells in Gordondale and 15 (15.0 net) Montney/Doig horizontal natural gas wells in Pouce Coupe. During the three month Reporting Period, Birchcliff drilled an additional 9 (9.0 net) horizontal wells which were originally targeted for 2019 in order to help to ensure the efficient execution of the 2019 Capital Program. During 2019, the Corporation has targeted its F&D capital expenditures to be less than its estimate of adjusted funds flow.

### **CAPITAL RESOURCES AND LIQUIDITY**

### **Liquidity and Capital Resources**

The Corporation generally relies on its adjusted funds flow and available credit under its existing credit facilities to fund its capital requirements, including its dividend payments. In addition, the Corporation may from time to time seek additional capital in the form of debt and/or equity or dispose of non-core properties to fund its ongoing capital expenditure programs and protect its statements of financial position.

The following table sets forth a summary of the Corporation's capital resources for the Reporting Periods and the Comparable Prior Periods:

(\$000s)		Three months ended December 31,				
	2018	2017	2018	2017		
Adjusted funds flow	81,517	97,008	312,922	317,680		
Changes in non-cash working capital from operations	10,838	(7,920)	12,591	(29,226)		
Decommissioning expenditures	(155)	(93)	(1,079)	(794)		
Exercise of stock options	87	27	384	9,350		
Financing fees paid on credit facilities	-	-	(950)	(2,375)		
Dividends paid on common shares	(6,648)	(6,644)	(26,586)	(26,522)		
Dividends paid on preferred shares	(1,922)	(1,922)	(7,687)	(7,547)		
Net change in revolving term credit facilities	(30,149)	1,479	17,868	15,783		
Deposit on acquisition	(3,900)	-	(3,900)	-		
Changes in non-cash working capital from investing	3,218	(63,225)	(5,540)	9,780		
Capital resources	52,886	18,710	298,023	286,129		

Birchcliff's adjusted funds flow depends on a number of factors, including, but not limited to, commodity prices, production and sales volumes, royalties, operating and transportation expenses and foreign exchange rates. The Corporation closely monitors commodity prices and its capital spending and has taken proactive measures to ensure liquidity and financial flexibility in the current environment.

Birchcliff's market diversification initiatives have helped to reduce its exposure to volatility in commodity prices, including AECO prices. The benchmark spot prices at Dawn outperformed AECO spot prices during the Reporting Periods. Birchcliff has agreements for the firm service transportation of an aggregate of 175,000 GJ/d of natural gas on TCPL's Canadian Mainline for a 10-year term, whereby natural gas is transported to the Dawn trading hub in Southern Ontario. The first tranche of this service (120,000 GJ/d) became available on November 1, 2017 and the second tranche (30,000 GJ/d) became available on November 1, 2018. The last tranche of service (25,000 GJ/d) will become available on November 1, 2019. See "Discussion of Operations – Petroleum and Natural Gas Revenues" in this MD&A. Birchcliff also has various financial and physical derivative contracts outstanding to help protect its adjusted funds flow and capital expenditure programs. See "Discussion of Operations – Commodity Price Risk Management" in this MD&A.

In addition to its adjusted funds flow, the Corporation's other main source of liquidity is its Credit Facilities in the aggregate principal amount of \$950 million, of which \$324.0 million remains available at December 31, 2018. The Corporation may each year, at its option, request an extension to the maturity date of the Syndicated Credit Facility and the Working Capital Facility, or either of them, for an additional period of up to three years from May 11 of the year in which the extension request is made. In the second quarter of 2018, Birchcliff's syndicate of lenders completed its semi-annual review of Birchcliff's borrowing base limit under its Credit Facilities. In connection with such review, Birchcliff and its syndicate of lenders agreed to: (i) an extension of the maturity dates of each of the Syndicated Credit Facility and the Working Capital Facility from May 11, 2020 to May 11, 2021; (ii) the borrowing base remaining unchanged at \$950 million; and (iii) increasing the Working Capital Facility to \$100 million (from \$50 million) with a corresponding reduction in the Syndicated Credit Facility to \$850 million (from \$900 million). See also "Discussion of Operations – Finance Expense" and "Capital Resources and Liquidity – Bank Debt" in this MD&A for further details.

Management believes that its adjusted funds flow will be sufficient to fund the Corporation's ongoing 2019 Capital Program. Should commodity prices deteriorate materially below Birchcliff's assumptions, Birchcliff may adjust its ongoing capital program, draw down on its Credit Facilities, seek additional equity financing and/or consider the potential sale of additional non-core assets to fund planned growth. The 2019 Capital Program is designed with financial and operational flexibility with the potential to accelerate or decelerate capital expenditures throughout the year, depending on commodity prices and industry conditions. See "Advisories – Forward-Looking Statements".

### **Working Capital**

The Corporation's adjusted working capital deficit increased to \$21.2 million at December 31, 2018 from an \$11.1 million deficit at December 31, 2017. The deficit at December 31, 2018 was largely comprised of costs incurred from the drilling and completion of new wells in Pouce Coupe and Gordondale.

At December 31, 2018, the major component of Birchcliff's current assets was revenue to be received from its marketers in respect of December 2018 production (54%), which was subsequently received in January 2019. In contrast, current liabilities largely consisted of trade payables (60%) and accrued capital and operating expense (27%). Birchcliff monitors the financial strength of its marketers. At this time, Birchcliff expects that such counterparties will be able to meet their financial obligations.

Adjusted working capital includes items expected for normal operations, including trade receivables and payables, accruals, deposits and prepaid expenses, and excludes the fair value of financial instruments. The Corporation's adjusted working capital varies from quarter to quarter primarily due to the timing of such items, as well as due to the size and timing of the Corporation's capital expenditures, volatility in commodity prices and changes in revenue, among other things. Birchcliff manages any adjusted working capital deficit using adjusted funds flow and advances under its Credit Facilities. Any adjusted working capital deficit position will not reduce the amount available under the Credit Facilities.

#### **Bank Debt**

Management of debt levels continues to be a priority for Birchcliff given its long-term growth plans and the current volatility in the commodity price environment.

Total debt, including the adjusted working capital deficit, was \$626.5 million at December 31, 2018 as compared to \$598.2 million at December 31, 2017. Total debt increased from December 31, 2017 primarily due to capital expenditures incurred on the drilling and completion of new horizontal wells in Pouce Coupe and Gordondale, the Phase VI expansion of the Pouce Coupe Gas Plant and the payment of common share and preferred share dividends, partially offset by an increase to adjusted funds flow in the twelve month Reporting Period.

The following table sets forth the Corporation's unused Credit Facilities as at December 31, 2018 and December 31, 2017:

<b>As at,</b> (\$000s)	December 31, 2018	December 31, 2017			
Maximum borrowing base limit <sup>(1)</sup> :					
Revolving term credit facilities	950,000	950,000			
Principal amount utilized:					
Drawn revolving term credit facilities	(608,821)	(594,823)			
Outstanding letters of credit <sup>(2)</sup>	(17,205)	(12,184)			
	(626,026)	(607,007)			
Unused credit	323,974	342,993			
% unused credit	34%	36%			

<sup>(1)</sup> The Credit Facilities are subject to a semi-annual review of the borrowing base limit, which is directly impacted by the value of Birchcliff's P&NG reserves.

### **Contractual Obligations & Commitments**

The Corporation enters into various contractual obligations and commitments in the normal course of operations. The following table lists Birchcliff's estimated material contractual obligations and commitments at December 31, 2018:

(\$000s)	2019	2020	2021-2023	Thereafter
Accounts payable and accrued liabilities	76,567	-	-	-
Drawn revolving term credit facilities	-	-	608,821	-
Operating leases <sup>(1)</sup>	4,408	4,408	13,707	19,667
Firm transportation and fractionation <sup>(2)</sup>	107,678	116,574	364,742	348,079
Natural gas processing <sup>(3)</sup>	17,155	17,702	51,465	154,536
Estimated contractual obligations <sup>(4)</sup>	205,808	138,684	1,038,735	522,282

<sup>(1)</sup> On December 2, 2015, the Corporation entered into an operating lease commitment relating to a new office premises beginning February 1, 2018 and expiring on January 31, 2028. The commitment amount under the new 10 year office lease is estimated to be \$42.2 million, which includes costs allocated to base rent, parking and building operating expenses. The office lease commitment amounts disclosed in the above table have not been reduced for any rents receivable by the Corporation.

Birchcliff's Series C Preferred Shares, which are redeemable by their holders after December 31, 2020, have not been included in this table as they are not contractual obligations of the Corporation at the end of the reporting period. Upon receipt of a notice of redemption, the Corporation has an obligation to redeem the Series C Preferred Shares, at its option, for cash or common shares.

<sup>(2)</sup> Letters of credit are issued to various service providers. The letters of credit reduce the amount available under the Working Capital Facility

<sup>(2)</sup> Includes firm transportation service arrangements with various terms on TCPL's Alberta NGTL System and on TCPL's Canadian Mainline to the AECO and Dawn trading hubs and fractionation commitments associated with NGLs production processed at third-party facilities.

<sup>(3)</sup> Includes natural gas processing commitments at third-party facilities.

<sup>(4)</sup> Contractual obligations and commitments that are not material to Birchcliff are excluded from the above table. The Corporation's decommissioning obligations are excluded from the table as these obligations arose from a regulatory requirement rather than from a contractual arrangement. Birchcliff estimates the total undiscounted cash flow to settle its decommissioning obligations on its wells and facilities at December 31, 2018 to be approximately \$272 million and are estimated to be incurred as follows: 2019 - \$2.7 million, 2020 - \$0.6 million and \$268.7 million thereafter. The estimate for determining the undiscounted decommissioning obligations requires significant assumptions on both the abandonment cost and timing of the decommissioning and therefore the actual obligation may differ materially.

#### **OFF-BALANCE SHEET TRANSACTIONS**

The Corporation has certain lease arrangements, all of which are reflected in the contractual obligations and commitments table above, which were entered into in the normal course of operations. All leases have been treated as operating leases whereby the lease payments are included in operating expense or general and administrative expense depending on the nature of the lease. Other than the foregoing, Birchcliff was not involved in any off-balance sheet transactions during the Reporting Periods and the Comparable Prior Periods.

#### **OUTSTANDING SHARE INFORMATION**

At March 13, 2019, Birchcliff had common shares, Series A Preferred Shares and Series C Preferred Shares that were outstanding. Birchcliff's common shares are listed on the TSX under the symbol "BIR" and are included in the S&P/TSX Composite Index. Birchcliff's Series A Preferred Shares and Series C Preferred Shares are individually listed on the TSX under the symbols "BIR.PR.A" and "BIR.PR.C", respectively.

The following table sets forth the common shares issued by the Corporation:

	Common shares
Balance at December 31, 2017	265,796,698
Exercise of options	114,664
Balance at December 31, 2018	265,911,362
Exercise of options	10,000
Balance at March 12, 2019	265,921,362

At March 12, 2019, the Corporation had the following securities outstanding: 265,921,362 common shares; 2,000,000 Series A Preferred Shares; 2,000,000 Series C Preferred Shares; 18,728,436 stock options to purchase an equivalent number of common shares; and 2,939,732 performance warrants to purchase an equivalent number of common shares.

#### **Dividends**

The following table sets forth the dividend distributions by the Corporation for each class of shares for the Reporting Periods and the Comparable Prior Periods:

(\$000s)		Three months ended December 31,		
	2018	2017	2018	2017
Common shares:				
Dividend distribution (\$000s)	6,648	6,644	26,586	26,522
Per common share (\$)	0.0250	0.0250	0.1000	0.1000
Preferred shares - Series A:				
Series A dividend distribution (\$000s)	1,047	1,047	4,187	4,047
Per Series A preferred share (\$)	0.5234	0.5234	2.0935	2.0234
Preferred shares - Series C:				
Series C dividend distribution (\$000s)	875	875	3,500	3,500
Per Series C preferred share (\$)	0.4375	0.4375	1.7500	1.7500

All dividends have been designated as "eligible dividends" for the purposes of the Income Tax Act (Canada).

#### **Normal Course Issuer Bid**

On November 20, 2018, Birchcliff announced that the TSX had accepted the Corporation's notice of intention to make a normal course issuer bid (the "NCIB"). Pursuant to the NCIB, Birchcliff may purchase up to 18,767,520 of its outstanding common shares. The total number of common shares that Birchcliff is permitted to purchase is subject to a daily purchase limit of 320,520 common shares; provided, however, that the Corporation may make one block purchase per calendar week which exceeds the daily purchase restriction. The NCIB commenced on November 23, 2018 and will terminate on November 22, 2019, or such earlier time as the NCIB is completed or is terminated at the option of Birchcliff. Purchases under the NCIB will be effected

through the facilities of the TSX and/or Canadian alternative trading systems at the prevailing market price at the time of such transaction. All common shares purchased under the NCIB will be cancelled. As at the date of this MD&A, Birchcliff has not purchased any common shares pursuant to the NCIB.

A security holder of the Corporation may obtain, for no charge, a copy of the notice in respect of the NCIB filed with the TSX by contacting the Corporation at 403-261-6401.

### **SUMMARY OF QUARTERLY RESULTS**

The following table sets forth a summary of the Corporation's quarterly results for the eight most recently completed quarters:

-								
Quarter ending,	Dec. 31, 2018	Sep. 30, 2018	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017	Sep. 30, 2017	Jun. 30, 2017	Mar. 31, 2017
Average production (boe/d)	76,408	79,331	76,296	76,323	80,103	65,276	64,636	61,662
Realized natural gas sales price (\$/Mcf) <sup>(1)</sup>	3.03	2.06	2.01	2.72	2.64	2.11	3.13	3.06
Realized oil sales price (\$/bbl) <sup>(1)</sup>	41.39	80.16	79.55	71.92	68.58	55.62	60.38	62.59
Realized NGLs sales price (\$/bbl) <sup>(1)</sup>	34.73	49.17	47.81	48.09	40.08	27.67	31.10	32.09
Average realized sales price (\$/boe)	22.01	21.45	21.68	23.22	22.54	18.55	24.90	23.90
Total revenues (\$000s) <sup>(1)</sup>	154,720	156,609	150,561	159,531	166,149	111,488	146,597	132,708
Operating expense (\$/boe)	3.51	3.45	3.36	3.78	3.86	4.27	4.67	5.22
Total capital expenditures (\$000s)	52,886	45,524	66,464	133,144	18,669	12,136	120,782	124,538
Cash flow from operating activities (\$000s)	92,200	68,556	71,825	91,853	88,995	70,584	57,467	70,614
Adjusted funds flow (\$000s)	81,517	75,378	72,369	83,658	97,008	64,430	88,612	67,630
Per common share – basic (\$)	0.31	0.28	0.27	0.31	0.36	0.24	0.33	0.26
Per common share – diluted (\$)	0.30	0.28	0.27	0.31	0.36	0.24	0.33	0.25
Net income (loss) (\$000s)	71,947	7,703	7,437	15,125	25,820	(120,743)	18,015	29,928
Net income (loss) to common shareholders (\$000s) <sup>(2)</sup>	70,900	6,657	6,390	14,078	24,773	(121,743)	17,015	28,928
Per common share – basic (\$)	0.27	0.03	0.02	0.05	0.09	(0.46)	0.06	0.11
Per common share – diluted (\$)	0.27	0.02	0.02	0.05	0.09	(0.46)	0.06	0.11
Total assets (\$ million)	2,763	2,707	2,715	2,697	2,627	2,615	2,871	2,797
Long-term bank debt (\$000s)	605,267	635,120	617,291	573,935	587,126	585,323	628,401	578,954
Total debt (\$000s)	626,454	641,484	661,409	657,732	598,193	666,808	700,484	664,352
Dividends on common shares (\$000s)	6,648	6,647	6,646	6,645	6,644	6,635	6,635	6,604
Dividends on pref. shares – Series A (\$000s)	1,047	1,046	1,047	1,047	1,047	1,000	1,000	1,000
Dividends on pref. shares – Series C (\$000s)	875	875	875	875	875	875	875	875
Pref. shares outstanding – Series A (000s)	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Pref. shares outstanding – Series C (000s)	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Common shares outstanding (000s)								
Basic	265,911	265,885	265,845	265,805	265,797	265,789	265,417	264,442
Diluted	284,699	285,825	285,253	285,692	282,895	283,106	284,461	284,160
Wtd. avg. common shares outstanding (000s)								
Basic	265,910	265,877	265,820	265,797	265,792	265,490	265,326	264,099
Diluted	267,288	268,605	267,773	266,179	267,619	267,988	268,203	268,077

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of physical delivery contracts.

<sup>(2)</sup> Reduced for the Series A Preferred Share dividends paid in the period.

Average daily production volumes from the third quarter of 2017 to the fourth quarter of 2017 increased largely due to production volumes from new horizontal natural gas wells being brought on production in Pouce Coupe in connection with the start-up of Phase V of the Pouce Coupe Gas Plant and new horizontal oil wells being brought on production in Gordondale, partially offset by the Worsley Disposition in August 2017 and natural production declines. Average daily production volumes for the four quarters of 2018 decreased compared to the fourth quarter of 2017 primarily attributable to production curtailments due to temporary restrictions in pipeline and compressor station capacity on the Alberta NGTL system and natural production declines, partially offset by new horizontal wells brought on production in Pouce Coupe and Gordondale during the Reporting Periods.

Quarterly variances in revenues, adjusted funds flow and net income (loss) are primarily due to fluctuations in commodity prices and production volumes. Oil and gas revenues and adjusted funds flow in the last eight quarters were largely impacted by incremental production additions in Pouce Coupe and Gordondale and the average realized sales price received for Birchcliff's production. Birchcliff recorded a net loss in the third quarter of 2017 primarily as a result of the after-tax book loss of \$132.3 million in connection with the Worsley Disposition. Birchcliff's net income in the fourth quarter of 2018 included a \$77.5 million unrealized mark-to-market gain on financial instruments. Net income or loss in the last eight quarters was also impacted by certain non-cash adjustments, including depletion expense, unrealized gains and losses on financial instruments and gains and losses on the sale of non-core assets recognized in those periods.

The Corporation's capital expenditures program fluctuates based on the outlook in commodity prices and market conditions, as well as the timing of acquisitions and dispositions. Quarterly variances in long-term debt and total debt are primarily due to fluctuations in adjusted funds flow and the amount and timing of capital expenditures (including acquisitions and dispositions).

### **SUBSEQUENT EVENT**

On November 14, 2018, Birchcliff announced that it had entered into a definitive purchase and sale agreement for the Acquisition. Pursuant to the Acquisition, the Corporation acquired 18 gross (15.1 net) contiguous sections of Montney land located between the Corporation's existing Pouce Coupe and Gordondale properties, as well as various other non-Montney lands and other assets, for total cash consideration of \$39 million. Closing of the Acquisition occurred on January 3, 2019 and further consolidated Birchcliff's land position in the area.

#### **POTENTIAL TRANSACTIONS**

Within its focus area, the Corporation is continually reviewing potential asset acquisitions and dispositions and corporate mergers and acquisitions for the purpose of determining whether any such potential transaction is of interest to the Corporation, as well as the terms on which such a potential transaction would be available. As a result, the Corporation may from time to time be involved in discussions or negotiations with other parties or their agents in respect of potential asset acquisitions and dispositions and corporate merger and acquisition opportunities.

### INTERNAL CONTROL OVER FINANCIAL REPORTING

#### **Disclosure Controls and Procedures**

The Corporation's Chief Executive Officer and Chief Financial Officer (the "Certifying Officers") have designed, or caused to be designed under their supervision, disclosure controls and procedures ("DC&P"), as defined in National Instrument 52-109 – Certification of Disclosure in Issuer's Annual and Interim Filings ("NI 52-109"), to provide reasonable assurance that: (i) material information relating to the Corporation is made known to the Certifying Officers by others, particularly during the period in which the annual filings are being prepared; and (ii) information required to be disclosed by the Corporation in its annual filings, interim filings or other reports filed or submitted by the Corporation under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation. The Certifying Officers have evaluated, or caused to be evaluated under their supervision, the effectiveness of the Corporation's DC&P at December 31, 2018 and have concluded that the Corporation's DC&P were effective at December 31, 2018.

While the Certifying Officers believe that the Corporation's DC&P provide a reasonable level of assurance and are effective, they do not expect that the DC&P will prevent all errors and fraud. A control system, no matter how well conceived, maintained and operated, can provide only reasonable, but not absolute, assurance that the objectives of the control system will be met.

#### **Internal Control over Financial Reporting**

The Certifying Officers have designed, or caused to be designed under their supervision, internal control over financial reporting ("ICFR"), as defined in NI 52-109, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the generally accepted accounting

principles applicable to the Corporation. The control framework the Certifying Officers used to design the Corporation's ICFR is "Internal Control – Integrated Framework (May 2013)" published by The Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Certifying Officers have evaluated, or caused to be evaluated under their supervision, the effectiveness of the Corporation's ICFR at December 31, 2018 and have concluded that the Corporation's ICFR was effective at December 31, 2018. There were no changes in the Corporation's ICFR that occurred during the period beginning on October 1, 2018 and ended on December 31, 2018 that have materially affected, or are reasonably likely to materially affect, the Corporation's ICFR.

While the Certifying Officers believe that the Corporation's ICFR provides a reasonable level of assurance and is effective, they do not expect that the ICFR will prevent all errors and fraud. A control system, no matter how well conceived, maintained and operated, can provide only reasonable, but not absolute, assurance that the objectives of the control system will be met.

### **CRITICAL ACCOUNTING ESTIMATES**

The preparation of the financial statements requires management to make judgments, estimates and assumptions that affect the application of IFRS accounting policies, reported amounts of assets and liabilities and income and expenses. Accordingly, actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

### **Critical Judgments in Applying Accounting Policies:**

The following are the critical judgments that management has made in the process of applying the Corporation's accounting policies and that have the most significant effect on the amounts recognized in these financial statements:

### Identification of Cash-Generating Units

Birchcliff's assets are required to be aggregated into CGUs for the purpose of calculating impairment based on their ability to generate largely independent cash inflows. CGUs have been determined based on similar geological structure, shared infrastructure, geographical proximity, operating structure, commodity type and similar exposures to market risks. By their nature, these assumptions are subject to management's judgment and may impact the carrying value of the Corporation's assets in future periods.

### Identification of Impairment Indicators

IFRS requires Birchcliff to assess, at each reporting date, whether there are any indicators that its petroleum and natural gas assets may be impaired. Birchcliff is required to consider information from both external sources (such as negative downturn in commodity prices, significant adverse changes in the technological, market, economic or legal environment in which the entity operates) and internal sources (such as downward revisions in reserves, significant adverse effects on the financial and operational performance of a CGU, evidence of obsolescence or physical damage to the asset). By their nature, these assumptions are subject to management's judgment.

#### Tax Uncertainties

IFRS requires Birchcliff, at each reporting date, to make certain judgments on uncertain tax positions by relevant tax authorities. Judgments include determining whether the Corporation will "more likely than not" be successful in defending its tax positions by considering information from relevant tax interpretations and tax laws in Canada. As such, this recognition threshold is subject to management's judgment and may impact the carrying value of the Corporation's deferred tax assets and liabilities at the end of the reporting period.

## **Key Sources of Estimation Uncertainty:**

The following are the key assumptions concerning the sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing adjustments to the carrying amounts of assets and liabilities within the next financial year:

### Reserves

Reported recoverable quantities of proved and probable reserves requires estimation regarding production profile, commodity prices, exchange rates, remediation costs, timing and amount of future development costs, and production, transportation and marketing costs for future cash flows. It also requires interpretation of geological and geophysical models in order to make an assessment of the size, shape, depth and quality of reservoirs, and their anticipated recoveries. The economical, geological and technical factors used to estimate reserves may change from period to period. Changes in reported reserves can impact the carrying values of the Corporation's petroleum and natural gas properties and equipment, the calculation of depletion and depreciation, the provision for decommissioning obligations, and the recognition of deferred tax assets due to changes in expected future cash flows. The recoverable quantities of reserves and estimated cash flows from Birchcliff's petroleum and natural gas interests are independently evaluated by reserve engineers at least annually.

The Corporation's petroleum and natural gas reserves represent the estimated quantities of petroleum, natural gas and NGLs which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be economically recoverable in future years from known reservoirs and which are considered commercially producible. Such reserves may be considered commercially producible if management has the intention of developing and producing them and such intention is based upon (i) a reasonable assessment of the future economics of such production; (ii) a reasonable expectation that there is a market for all or substantially all the expected petroleum and natural gas production; and (iii) evidence that the necessary production, transmission and transportation facilities are available or can be made available. Reserves may only be considered proved and probable if producibility is supported by either production or conclusive formation tests. Birchcliff's oil and gas reserves are determined in accordance with the standards contained in National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("NI 51-101") and the Canadian Oil and Gas Evaluation Handbook ("COGE").

#### Share-based payments

All equity-settled, share-based awards issued by the Corporation are fair valued using the Black-Scholes option-pricing model. In assessing the fair value of equity-based compensation, estimates have to be made regarding the expected volatility in share price, option life, dividend yield, risk-free rate and estimated forfeitures at the initial grant date.

### Decommissioning obligations

The Corporation estimates future remediation costs of production facilities, wells and pipelines at different stages of development and construction of assets or facilities. In most instances, removal of assets occurs many years into the future. This requires an estimate regarding abandonment date, future environmental and regulatory legislation, the extent of reclamation activities, the engineering methodology for estimating cost, future removal technologies in determining the removal cost and liability-specific discount rates to determine the present value of these cash flows.

### Post-employment benefit obligation

The Corporation estimates the post-employment benefit obligation at the end of each reporting period. In most instances, the obligation occurs many years into the future. The Corporation uses estimates related to the initial measurement of the obligation for eligible employees including expected age of employee retirement, employee turnover, probability of early retirement, discount rate and inflation rate on salary and benefits. From time to time, these estimates may change causing the obligation recorded by the Corporation to change.

### Impairment of non-financial assets

For the purposes of determining the extent of any impairment or its reversal, estimates must be made regarding future cash flows taking into account key assumptions including future petroleum and natural gas prices, expected forecasted production volumes and anticipated recoverable quantities of proved and probable reserves. These assumptions are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates. Changes in the aforementioned assumptions could affect the carrying amount of the Corporation's assets, and impairment charges and reversal will affect profit or loss.

#### Income taxes

Birchcliff files corporate income tax, goods and service tax and other tax returns with various provincial and federal taxation authorities in Canada. There can be differing interpretations of applicable tax laws and regulations. The resolution of these tax positions through negotiations or litigation with tax authorities can take several years to complete. The Corporation does not anticipate that there will be any material impact upon the results of its operations, financial position or liquidity.

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods.

Deferred tax assets (if any) are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse and a judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. Estimates of future taxable income are based on forecasted cash flows from operations. To the extent that any interpretation of tax law is challenged by the tax authorities or future cash flows and taxable income differ significantly from estimates, the ability of Birchcliff to realize the deferred tax assets recorded at the statement of financial position date could be impacted.

#### **CHANGES IN ACCOUNTING POLICIES**

#### **Accounting Pronouncements Adopted**

On January 1, 2018, Birchcliff adopted IFRS 15 using the cumulative effect method. Under this method, the comparative periods have not been restated and the cumulative effect on net earnings and the change in opening retained earnings as a result of the application of IFRS 15 to revenue contracts in progress at January 1, 2018 is nil. The Corporation reviewed its revenue streams and major contracts with customers using the IFRS 15 five step model and there were no changes to net earnings or timing of petroleum and natural gas sales recognized. It should be noted, however, that certain profit and loss line item reclassifications were made.

On January 1, 2018, Birchcliff adopted IFRS 9: Financial Instruments ("IFRS 9") to replace IAS 39: Financial Instruments: Recognition and Measurement ("IAS 39"). IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income and fair value through profit or loss. The previous IAS 39 categories of held to maturity, loans and receivables and available for sale are eliminated. IFRS 9 bases the classification of financial assets on the contractual cash flow characteristics and the Corporation's business model for managing the financial asset. Additionally, embedded derivatives are not separated if the host contract is a financial asset within the scope of IFRS 9. Instead, the entire hybrid contract is assessed for classification and measurement. IFRS 9 largely retains the existing requirements in IAS 39 for the classification of financial liabilities. The adoption of IFRS 9 has resulted in changes to the Corporation's investment in securities which, upon adoption of IFRS 9, are measured at fair value through profit or loss. Under the previous IAS 39 standard, Birchcliff's investment in securities were categorized as available for sale which required the securities to be fair valued with any gains or losses recognized in other comprehensive income. There were no changes to the treatment of distributions declared on the investment in securities which are recorded to profit or loss. The adoption of IFRS 9 had no impact on the amounts recorded in the financial statements as at January 1, 2018 or on the comparative periods.

#### **Future Accounting Pronouncements**

In January 2016, the IASB issued IFRS 16: Leases ("**IFRS 16**") which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, i.e. the customer ("**lessee**") and the supplier ("**lessor**") and replaces the previous lease standards, IAS 17: Leases and IFRIC 4: Determining whether an Arrangement contains a Lease. IFRS 16 requires the recognition of a right-of-use asset and lease liability on the statement of financial position for most leases, where Birchcliff is acting as a lessee. For lessees applying IFRS 16, the dual classification model of leases as either operating leases or finance leases no longer exists, effectively treating all leases as finance leases. IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. The standard is required to be adopted either retrospectively or using a modified retrospective approach. The Corporation will adopt IFRS 16 using the modified retrospective approach, which does not require restatement of prior period financial information and applies the standard prospectively.

IFRS 16 is expected to increase Birchcliff's total assets and liabilities at January 1, 2019. Future net income will be impacted as the finance charges and depreciation charges associated with lease contracts are not expected to correspond in any one period to the amount of related cash flows. Cash flows associated with lease repayments will be allocated between operating and financing activities based on their interest repayment and principal repayment portions. The actual impact of applying IFRS 16 on the financial statements in the period of initial application will depend on multiple factors and conditions, including but not limited to, the Corporation's borrowing rate at January 1, 2019, the composition of the Corporation's lease portfolio at that date, the Corporation's latest assessment of whether it will exercise any lease renewal options, and the extent to which the Corporation chooses to use practical expedients and recognition exemptions. On initial adoption, Birchcliff will have the following optional practical expedients available under IFRS 16:

- Certain short-term leases and leases of low value assets that have been identified for recognition at January 1, 2019 can be excluded from recognition on the statements of financial position. Payments for these leases will be disclosed in the notes to the financial statements.
- Certain classes of lease arrangements that transfer a separate good or service under the same contract that have been identified for recognition at January 1, 2019 can be recognized as a single lease component rather than separating between their lease and non-lease components.
- · For leases having similar characteristics, a portfolio approach can be used by applying a single discount rate.

The Corporation continues to review all existing contracts in detail. The full extent of the impact has not yet been determined. At minimum, Birchcliff expects to record a right-of-use asset and corresponding lease liability on the statement of financial position for the Corporation's head office lease. The Corporation will disclose the financial impact of IFRS 16 in its unaudited financial statements for the first quarter 2019 and continue to develop and implement changes to its internal controls, information systems and business and accounting processes throughout 2019.

#### RISK FACTORS AND RISK MANAGEMENT

Investors should carefully consider the risk factors set out below and consider all other information contained herein and in the Corporation's other public filings before making an investment decision. The risks set out below are not an exhaustive list and should not be taken as a complete summary or description of all the risks associated with the Corporation's business and the oil and natural gas business generally. If any of the risks set out below materialize, the Corporation's business, financial condition, results of operations, prospects, cash flows and reputation may be adversely affected, which may, in turn, reduce or restrict the Corporation's ability to pay dividends and may materially affect the market price of the Corporation's securities.

#### Financial Risks and Risks Relating to Economic Conditions

#### Prices, Markets and Marketing

Numerous factors beyond the Corporation's control do, and will continue to, affect the marketability and price of oil and natural gas acquired, produced or discovered by the Corporation. The Corporation's revenues, operating results and financial condition depend substantially on prevailing prices for oil and natural gas and the Corporation's ability to successfully market its oil and natural gas production from its properties.

The Corporation's ability to market its oil and natural gas may depend upon its ability to acquire capacity on pipelines that deliver natural gas, crude oil and NGLs to commercial markets or contract for the delivery of crude oil by rail (see "Risk Factors and Risk Management – Financial Risks and Risks Relating to Economic Conditions – Weakness in the Oil and Gas Industry" and "Risk Factors and Risk Management – Business and Operational Risks – Gathering and Processing Facilities, Pipeline Systems and Rail"). Deliverability uncertainties include the distance the Corporation's reserves are from pipelines, railway lines, processing and storage facilities and operational problems affecting pipelines, railway lines and facilities.

Prices for oil and natural gas are subject to large fluctuations in response to relatively minor changes in the supply of and demand for oil and natural gas, market uncertainty and a variety of additional factors that are beyond the Corporation's control. These factors include, but are not limited to, the following:

- · global energy supply and demand;
- · the actions taken by OPEC and other oil and gas exporting nations;
- political conditions, instability and hostilities;
- · domestic and foreign supplies of crude oil, NGLs and natural gas;
- the level of consumer demand, including demand for different qualities and types of crude oil and NGLs;
- the production and storage levels of North American natural gas and crude oil and the supply and price of imported oil;
- the ability to export oil, LNG and NGLs from North America;
- the availability, proximity and capacity of gathering, transportation, processing and/or refining facilities in regional or localized areas that may affect the realized prices for oil and natural gas;
- weather conditions;
- government regulations, including existing and proposed changes to such regulations;
- · the effect of world-wide environmental regulations and energy conservation and GHG reduction measures;
- · the price and availability of alternative energy supplies; and
- global and domestic economic conditions, including currency fluctuations.

Oil and natural gas prices are expected to remain volatile for the near future because of market uncertainties over the supply and demand of these commodities due to the current state of the world economy, increased growth of shale oil production in the United States and other concerns of over-supply, OPEC actions, sanctions imposed on certain oil producing nations by other countries, political uncertainties and ongoing credit and liquidity concerns. Volatile oil and natural gas prices make it difficult to estimate the value of producing properties for acquisitions and often cause disruption in the market for oil and natural gas producing properties, as buyers and sellers have difficulty agreeing on such value. Price volatility also makes it difficult to budget for and project the return on acquisitions and development and exploitation projects.

A material decline in oil and natural gas prices could result in a reduction of the Corporation's net production revenue. The economics of producing from some wells may change because of lower prices, which could result in reduced production of oil or natural gas. The Corporation might also elect not to produce from certain wells at lower prices. In addition, any prolonged period of low crude oil or natural gas prices could result in a decision by the Corporation to suspend or slow exploration and

development activities or the construction or expansion of new or existing facilities or reduce its production levels. Any substantial and prolonged decline in the price of oil and natural gas would have an adverse effect on the carrying value of the Corporation's assets, borrowing capacity, revenues, profitability and cash flows from operations and may have a material adverse effect on the Corporation's business, financial condition, results of operations, prospects, its ability to pay dividends and ultimately on the market prices of the Corporation's securities.

Lower commodity prices may also affect the volume and value of the Corporation's reserves, rendering certain reserves uneconomic for development. The Corporation's reserves at December 31, 2018 are estimated using forecast prices and costs. If oil and natural gas prices stay at current levels or decrease, the Corporation's reserves may be substantially reduced as economic limits of developed reserves are reached earlier and undeveloped reserves become uneconomic at such prices. Even if some reserves remain economic at lower price levels, sustained low prices may compel the Corporation to re-evaluate its development plans and reduce or eliminate various projects with marginal economics. Any decrease in the value of the Corporation's reserves may reduce the borrowing base under the Credit Facilities, which, depending on the level of the Corporation's indebtedness, could result in the Corporation having to repay a portion of its indebtedness. See "Risk Factors and Risk Management – Financial Risks and Risks Relating to Economic Conditions – Credit Facilities".

In addition, lower commodity prices restrict the Corporation's cash flow resulting in less funds from operations being available to fund the Corporation's capital expenditure programs. The Corporation's capital expenditure plans are impacted by the Corporation's cash flow. Consequently, the Corporation may not be able to replace its production with additional reserves and both the Corporation's production and reserves could be reduced on a year-over-year basis.

In addition to possibly resulting in a decrease in the value of the Corporation's economically recoverable reserves, lower commodity prices may also result in a decrease in the value of the Corporation's infrastructure and facilities, all of which could also have the effect of requiring a write down of the carrying value of its oil and natural gas assets on its balance sheet and the recognition of an impairment charge on its income statement.

#### Weakness in the Oil and Natural Gas Industry

Recent market events and conditions, including global excess oil and natural gas supply, actions taken by OPEC, slowing growth in China and emerging economies, market volatility and disruptions in Asia, weakening global relationships, isolationist trade policies, increased shale production in the United States, sovereign debt levels and political upheavals in various countries have caused significant weakness and volatility in commodity prices. These events and conditions have caused a significant decrease in the valuation of oil and natural gas companies and a decrease in the confidence in the oil and natural gas industry. These difficulties have been exacerbated in Canada by political and other actions resulting in uncertainty surrounding regulatory, tax, royalty changes and environmental regulation. In addition, the inability to get the necessary approvals to build pipelines, LNG plants and other facilities to provide better access to markets for the oil and natural gas industry in Western Canada has led to additional downward price pressure on oil and natural gas produced in Western Canada and uncertainty and reduced confidence in the oil and natural gas industry in Western Canada.

#### Substantial Capital and Additional Funding Requirements

The Corporation anticipates that it will make substantial capital expenditures for the acquisition, exploration, development and production of oil and natural gas reserves and resources in the future. As future capital expenditures are expected to be financed out of cash generated from operations, borrowings and possible future equity sales, the Corporation's ability to do so is dependent on, among other factors:

- · the overall state of the capital markets;
- the Corporation's credit rating (if applicable);
- · commodity prices;
- interest rates;
- royalty rates;
- tax burden due to current and future tax laws; and
- · investor appetite for investments in the energy industry and the Corporation's securities in particular.

The Corporation's cash flow from its properties may not be sufficient to fund its ongoing activities at all times and from time to time the Corporation may require additional financing. The inability of the Corporation to access sufficient capital for its operations and activities could have a material adverse effect on the Corporation's financial condition, results of operations and prospects.

Due to the conditions in the oil and natural gas industry and/or global economic and political volatility, the Corporation may from time to time have restricted access to capital and increased borrowing costs. The conditions in or affecting the oil and natural gas industry have negatively impacted the ability of oil and natural gas companies to access additional financing. Failure to obtain financing on a timely basis could cause the Corporation to forfeit its interest in certain properties, miss certain acquisition opportunities and reduce or terminate its operations.

There can be no assurance that debt or equity financing or cash generated by operations will be available or sufficient to meet the Corporation's requirements or, if debt or equity financing is available, that it will be on terms acceptable to the Corporation. To the extent that external sources of capital become limited, unavailable or available on onerous terms, the Corporation's ability to make capital investments and maintain existing assets may be impaired, and its assets, liabilities, business, financial condition and results of operations may be affected materially and adversely as a result. In addition, the future development of the Corporation's petroleum properties may require additional financing and there are no assurances that such financing will be available or, if available, will be available upon acceptable terms. The Corporation may be required to seek additional equity financing on terms that are highly dilutive to existing shareholders. Moreover, future activities may require the Corporation to alter its capitalization significantly.

#### **Credit Facilities**

The amount authorized under the Credit Facilities is dependent on the borrowing base determined by the Corporation's lenders. The Credit Facilities are subject to a semi annual review of the borrowing base limit by Birchcliff's syndicate of lenders, which limit is directly impacted by the value of Birchcliff's oil and natural gas reserves. The Corporation's lenders use the Corporation's reserves, commodity prices and other factors to determine the Corporation's borrowing base. Commodity prices continue to be depressed and have fallen dramatically since 2014. Continued depressed commodity prices or further declines in commodity prices could result in a reduction in the Corporation's borrowing base, thereby reducing the funds available to the Corporation under the Credit Facilities. As the borrowing base is determined based on the lender's interpretation of the Corporation's reserves and future commodity prices, there can be no assurance as to the amount of the borrowing base determined at each review. In addition, a majority of lenders have the right once per year to redetermine the borrowing base in between scheduled redeterminations and the borrowing base may also be reduced in connection with asset dispositions. If, at the time of a borrowing base redetermination, the outstanding borrowings under the Credit Facilities were to exceed the borrowing base as a result of any such redetermination, the Corporation would be required to make principal repayments or otherwise eliminate the borrowing base shortfall. If the Corporation is forced to repay a portion of its indebtedness under the Credit Facilities, it may not have sufficient funds to make such repayments. If it does not have sufficient funds and is otherwise unable to negotiate renewals of its borrowings or arrange new financing, it may have to sell significant assets. Any such sale could have a material adverse effect on the Corporation's business and financial results.

The maturity date of the Credit Facilities is currently May 11, 2021. The Corporation may each year, at its option, request an extension to the maturity date of the Syndicated Credit Facility and the Working Capital Facility, or either of them, for an additional period of up to three years from May 11 of the year in which the extension request is made. In the event that either of the Credit Facilities is not extended before the maturity date, all outstanding indebtedness under such Credit Facility will be repayable at the maturity date. There is also a risk that the Credit Facilities will not be renewed for the same principal amount or on the same terms. Any of these events could adversely affect the Corporation's ability to fund its ongoing operations and to pay dividends.

The Corporation is required to comply with covenants under the Credit Facilities. In the event that the Corporation does not comply with these covenants, the Corporation's access to capital could be restricted or repayment could be required. Events beyond the Corporation's control may contribute to the failure of the Corporation to comply with such covenants. A failure to comply with covenants could result in an event of default under the Credit Facilities, which could result in the Corporation being required to repay amounts owing thereunder and may prevent the payment of dividends to shareholders. The acceleration of the Corporation's indebtedness under one agreement may permit acceleration of indebtedness under other agreements that contain cross-default or cross-acceleration provisions. In addition, the Credit Facilities impose certain restrictions on the Corporation, including, but not limited to, restrictions on the payment of dividends, incurring of additional indebtedness, dispositions of properties and the entering into of amalgamations, mergers, plans of arrangements, reorganizations or consolidations with any person. The Credit Facilities do not currently contain any financial maintenance covenants; however, there is no assurance that the Corporation's lenders will not impose any such covenants on the Corporation in the future. Any such covenants may either affect the availability or price of additional funding.

The impact of the Supreme Court of Canada's decision in *Redwater Energy Corporation (Re)* ("**Redwater**") on lending practices in the oil and natural gas sector and actions taken by secured creditors and receivers/trustees of insolvent borrowers has not yet been determined but could affect lending practices.

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

#### **Dividends**

The declaration and payment of dividends (and the amount thereof) is subject to the discretion of the Board and may vary depending on a variety of factors and conditions existing from time to time, including fluctuations in commodity prices, the financial condition of Birchcliff, production levels, results of operations, capital expenditure requirements, working capital requirements, debt service requirements, operating costs, royalty burdens, foreign exchange rates, interest rates, contractual restrictions, Birchcliff's hedging activities or programs, available investment opportunities, Birchcliff's business plan, strategies and objectives, the satisfaction of the solvency and liquidity tests imposed by the *Business Corporations Act* (Alberta) (the "ABCA") for the declaration and payment of dividends and other factors that the Board may deem relevant. Depending on these and various other factors, many of which are beyond the control of Birchcliff, the dividend policy of the Corporation may vary from time to time and, as a result, future cash dividends could be reduced or suspended entirely.

Pursuant to the ABCA, the Corporation may not declare or pay a dividend if there are reasonable grounds for believing that: (i) the Corporation is, or would after the payment be, unable to pay its liabilities as they become due; or (ii) the realizable value of its assets would thereby be less than the aggregate of its liabilities and stated capital of its outstanding shares. Additionally, pursuant to the agreement governing the Credit Facilities, the Corporation is not permitted to make any distribution (which includes dividends) at any time when an event of default exists or would reasonably be expected to exist upon making such distribution, unless such event of default arose subsequent to the ordinary course declaration of the applicable distribution.

Dividends may be reduced or suspended during periods of lower cash flows from operations. The timing and amount of Birchcliff's capital expenditures, and the ability of the Corporation to repay or refinance existing debt as it becomes due, directly affects the amount of cash dividends that may be declared by the Board. Future acquisitions, expansions of Birchcliff's assets, and other capital expenditures and the repayment or refinancing of existing debt as it becomes due may be financed from sources such as cash flows from operations, the issuance of additional shares or other securities of Birchcliff, and borrowings. Dividends may be reduced, or even eliminated, at times when significant capital or other expenditures are made. There can be no assurance that sufficient capital will be available on terms acceptable to Birchcliff, or at all, to make additional investments, fund future expansions or make other required capital expenditures. To the extent that external sources of capital, including the issuance of additional shares or other securities or the availability of additional credit facilities, become limited or unavailable on favourable terms or at all due to credit market conditions or otherwise, the ability of the Corporation to make the necessary capital investments to maintain or expand its operations, to repay outstanding debt and to invest in assets, as the case may be, may be impaired. To the extent Birchcliff is required to use cash flows from operations to finance capital expenditures or acquisitions or to repay existing debt as it becomes due, the cash available for dividends may be reduced and the level of dividends declared may be reduced.

The market value of the Corporation's securities may deteriorate if dividends are reduced or suspended. Furthermore, the future treatment of dividends for tax purposes will be subject to the nature and composition of dividends paid by Birchcliff and potential legislative and regulatory changes.

#### Hedging

The Corporation may enter into agreements to receive fixed prices on its oil and natural gas production to offset the risk of revenue losses if commodity prices decline. Similarly, the Corporation may enter into agreements to fix the differential or discount pricing gap which exists and may fluctuate between different grades of oil, NGLs and natural gas and the various market prices received for such products. However, to the extent that the Corporation engages in price risk management activities to protect itself from commodity price declines, it may also be prevented from realizing the full benefits of price increases above the levels of the derivative instruments used to manage price risk. In addition, if the Corporation enters into hedging arrangements it may be exposed to the risk of financial loss in certain circumstances, including instances in which:

- production falls short of the hedged volumes or prices fall significantly lower than projected;
- there is a widening of price-basis differentials between delivery points for production and the delivery point assumed in the hedge arrangement;
- the counterparties to the hedging arrangements or other price risk management contracts fail to perform under those arrangements; and/or
- a sudden unexpected material event impacts crude oil and natural gas prices.

Similarly, the Corporation may enter into agreements to fix the exchange rate of Canadian dollars to United States dollars or other currencies in order to offset the risk of revenue losses if the Canadian dollar increases in value compared to the other currencies. However, if the Canadian dollar declines in value compared to such fixed currencies, the Corporation will not benefit from the fluctuating exchange rate.

Further, the Corporation may enter into hedging arrangements to fix interest rates applicable to the Corporation's debt. However, if interest rates decrease as compared to the interest rate fixed by the Corporation, the Corporation will not benefit from the lower interest rate.

#### Issuance of Debt

From time to time, the Corporation may finance its activities (including asset acquisitions) in whole or in part with debt, which may increase the Corporation's debt levels above industry standards for peers of similar size. Depending on future exploration and development plans, the Corporation may require additional debt financing that may not be available or, if available, may not be available on favourable terms. Neither the Corporation's articles nor its by-laws limit the amount of indebtedness that the Corporation may incur. The level of the Corporation's indebtedness from time to time could impair the Corporation's ability to obtain additional financing on a timely basis to take advantage of business opportunities that may arise.

#### Credit Risk

The Corporation may be exposed to third-party credit risk through its contractual arrangements with joint venture partners, marketers of its petroleum and natural gas production and other parties. In addition, the Corporation may be exposed to third-party credit risk from operators of properties in which the Corporation has a working or royalty interest. In the event such entities fail to meet their contractual obligations to the Corporation, such failures may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. In addition, poor credit conditions in the industry generally and of joint venture partners may affect a joint venture partner's willingness to participate in the Corporation's ongoing capital program, potentially delaying the program and the results of such program until the Corporation finds a suitable alternative partner. To the extent that any of such third parties go bankrupt, become insolvent or make a proposal or institute any proceedings relating to bankruptcy or insolvency, it could result in the Corporation being unable to collect all or a portion of any money owing from such parties. Any of these factors could materially adversely affect the Corporation's financial and operational results.

Conversely, the Corporation's counterparties may deem the Corporation to be at risk of defaulting on its contractual obligations. These counterparties may require that the Corporation provide additional credit assurance by prepaying anticipated expenses or posting letters of credit, which would decrease the Corporation's available liquidity.

#### Variations in Foreign Exchange Rates and Interest Rates

World oil and natural gas prices are quoted in United States dollars. The Canadian/United States dollar exchange rate, which fluctuates over time, consequently affects the price received by Canadian producers of oil and natural gas. Material increases in the value of the Canadian dollar relative to the United States dollar may negatively affect the Corporation's production revenues. Accordingly, Canadian/United States exchange rates could impact the future value of the Corporation's reserves as determined by independent evaluators. Although a low value of the Canadian dollar relative to the United States dollar may positively affect the price the Corporation receives for its oil and natural gas production, it could also result in an increase in the price for certain goods used for the Corporation's operations, which may have a negative impact on the Corporation's financial results.

To the extent that the Corporation engages in risk management activities related to foreign exchange rates, there is credit risk associated with the counterparties with whom the Corporation may contract. See "Risk Factors and Risk Management – Financial Risks and Risks Relating to Economic Conditions – Hedging".

An increase in interest rates could result in a significant increase in the amount the Corporation pays to service debt, resulting in a reduced amount available to fund its exploration and development activities and the cash available for dividends and could negatively impact the market prices of the Corporation's securities.

#### **Business and Operational Risks**

#### Exploration, Development and Production Risks

Oil and natural gas operations involve many risks that even a combination of experience, knowledge and careful evaluation may not be able to overcome. The long-term commercial success of the Corporation depends on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. Without the continual addition of new reserves, any existing reserves the Corporation may have at a particular point in time and the production therefrom, will decline over time as such existing

reserves are produced. A future increase in the Corporation's reserves will depend on both the ability of the Corporation to explore and develop its existing properties and its ability to select and acquire suitable producing properties or prospects. There is no assurance that the Corporation will be able to continue to find satisfactory properties to acquire or participate in. Moreover, management of the Corporation may determine that current markets, terms of acquisition, participation or pricing conditions make potential acquisitions or participation uneconomic. There is also no assurance that the Corporation will discover or acquire further commercial quantities of oil and natural gas. The success of the Corporation's business is highly dependent on its ability to acquire or discover new reserves in a cost efficient manner as substantially all of the Corporation's cash flow is derived from the sale of the petroleum and natural gas reserves that it accumulates and develops. In order to remain financially viable, the Corporation must be able to replace reserves over time at a lesser cost on a per unit basis than its cash flow on a per unit basis.

Future oil and natural gas exploration may involve unprofitable efforts from dry wells or wells that are productive but do not produce sufficient petroleum substances to return a profit after drilling, completing (including hydraulic fracturing), operating and other costs. Completion of a well does not ensure a profit on the investment or recovery of drilling, completion and operating costs.

Drilling hazards, environmental damage and various field operating conditions could greatly increase the cost of operations and adversely affect the production from successful wells. Field operating conditions include, but are not limited to, delays in obtaining governmental approvals or consents, the shutting-in of wells resulting from extreme weather conditions, insufficient storage or transportation capacity or geological and mechanical conditions. While diligent well supervision, effective maintenance operations and the development and utilization of enhanced recovery technologies can contribute to maximizing production rates over time, it is not possible to eliminate production delays and declines from normal field operating conditions, which can negatively affect revenue and cash flow levels to varying degrees.

Oil and natural gas exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including, but not limited to, fire, explosion, blowouts, cratering, sour gas releases, spills and other environmental hazards. These typical risks and hazards could result in substantial damage to oil and natural gas wells, production facilities, other property or the environment and cause personal injury or threaten wildlife. Particularly, the Corporation may explore for and produce sour natural gas in certain areas. An unintentional leak of sour natural gas could result in personal injury, loss of life or damage to property and may necessitate an evacuation of populated areas, all of which could result in liability to the Corporation.

Oil and natural gas production operations are also subject to geologic and seismic risks, including encountering unexpected formations or pressures, premature decline of reservoirs and the invasion of water into producing formations. Losses resulting from the occurrence of any of these risks may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

As is standard industry practice, the Corporation is not fully insured against all risks, nor are all risks insurable. Although the Corporation maintains liability and business interruption insurance in amounts that it considers consistent with industry practice, liabilities associated with certain risks could exceed policy limits or not be covered. In either event, the Corporation could incur significant costs. See "Risk Factors and Risk Management – Other Risks – Insurance".

#### Gathering and Processing Facilities, Pipeline Systems and Rail

The Corporation delivers its products through gathering and processing facilities, pipeline systems and, in certain circumstances, by rail. The amount of oil and natural gas that the Corporation can produce and sell is subject to the accessibility, availability, proximity and capacity of these gathering and processing facilities, pipeline systems and railway lines. Notwithstanding recent actions taken by the Government of Alberta, the ongoing lack of availability of capacity in any of the gathering and processing facilities, pipeline systems and railway lines could result in the Corporation's inability to realize the full economic potential of its production or in a reduction of the price offered for the Corporation's production. The lack of firm pipeline capacity continues to affect the oil and natural gas industry and limits the ability to transport produced oil and natural gas to market. In addition, the pro-rationing of capacity on inter-provincial pipeline systems continues to affect the ability to export oil and natural gas. Unexpected shut-downs or curtailment of capacity of pipelines for maintenance or integrity work or because of actions taken by regulators could also affect the Corporation's production, operations and financial results. As a result, producers are increasingly turning to rail as an alternative means of transportation. In recent years, the volume of crude oil shipped by rail in North America has increased dramatically. Any significant change in market factors or other conditions affecting these infrastructure systems and facilities, as well as any delays or uncertainties in constructing new infrastructure systems and facilities, could harm the Corporation's business and, in turn, the Corporation's financial condition, results of operations and cash flows. Announcements and actions taken by the Federal Government of Canada and the provincial governments of British Columbia, Alberta and Quebec relating to the approval of infrastructure projects may continue to intensify, leading to

increased challenges to interprovincial and international infrastructure projects moving forward. In addition, while the Federal Government has introduced Bill C-69 to overhaul the existing environmental assessment process and replace the National Energy Board with a new regulatory agency, the impact of the new proposed regulatory scheme on proponents and the timing of receipt of approvals of major projects remains unclear.

Following major accidents in Lac-Megantic, Quebec and North Dakota, the Transportation Safety Board of Canada and the U.S. National Transportation Board recommended additional regulations for railway tank cars carrying crude oil. In June 2015, as a result of these recommendations, the Government of Canada passed the *Safe and Accountable Rail Act* which increased insurance obligations on the shipment of crude oil by rail and imposed a per tonne levy of \$1.65 on crude oil shipped by rail to compensate victims and for environmental cleanup in the event of a railway accident. In addition to this legislation, new regulations have implemented the TC-117 standard for all rail tank cars carrying flammable liquids which formalized the commitment to retrofit, and phase out DOT-111 tank cars carrying crude oil. The increased regulation of rail transportation may reduce the ability of railway transportation to alleviate pipeline constraints and adds additional costs to the transportation of crude oil by rail. On July 13, 2016, the Minister of Transport (Canada) issued Protective Direction No. 38, which directed that the shipping of crude oil on DOT-111 tank cars end by November 1, 2016. Tank cars entering Canada from the United States will be monitored to ensure they are compliant with Protective Direction No. 38.

The Corporation's production passes through Birchcliff owned or third-party infrastructure prior to it being ready for sale. There is a risk that should this infrastructure fail and cause a significant portion of the Corporation's production to be shut-in and unable to be sold, this could have a material adverse effect on the Corporation's available cash flow. With respect to facilities owned by third parties and over which the Corporation has no control, these facilities may discontinue or decrease operations either as a result of normal servicing requirements or as a result of unexpected events. A discontinuation or decrease of operations could have a material adverse effect on the Corporation's ability to process its production and deliver the same to market. Midstream and pipeline companies may take actions to maximize their return on investment which may in turn adversely affect producers and shippers, especially when combined with a regulatory framework that may not always align with the interests of particular shippers.

Further, the Corporation has certain long-term take-or-pay commitments to deliver products through third-party owned infrastructure which creates a financial liability and there can be no assurance that future volume commitments will be met which may adversely affect the Corporation's financial condition and cash flows from operations.

#### Project Risks

The Corporation manages a variety of small and large projects in the conduct of its business. Project delays and interruptions may delay expected revenues from operations. Significant project cost overruns could make a project uneconomic. The Corporation's ability to execute projects and successfully market its oil and natural gas depends upon numerous factors beyond the Corporation's control, including:

- · the availability and proximity of processing and pipeline capacity;
- · the availability of storage capacity;
- the availability of, and the ability to acquire, water supplies needed for drilling and hydraulic fracturing and the Corporation's ability to dispose of water used or removed from strata at a reasonable cost and in accordance with applicable environmental regulations;
- · the effects of inclement weather;
- the availability of drilling and related equipment;
- · unexpected cost increases;
- · accidental events;
- · currency fluctuations;
- · regulatory changes;
- the availability and productivity of skilled labour; and
- the regulation of the oil and natural gas industry by various levels of government and governmental agencies.

Because of these factors, the Corporation could be unable to execute projects on time, on budget, or at all, and may be unable to effectively market the oil and natural gas that it produces.

#### **Uncertainty of Reserves Estimates**

There are numerous uncertainties inherent in estimating oil, natural gas and NGLs reserves and the future net revenue attributed to such reserves. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserves recovery, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For these reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the classification of such reserves based on risk of recovery and estimates of future net revenue associated with reserves prepared by different engineers, or by the same engineer at different times, may vary. The Corporation's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material.

The estimation of proved reserves that may be developed and produced in the future is often based upon volumetric calculations and upon analogy to similar types of reserves rather than actual production history. Recovery factors and drainage areas are often estimated by experience and analogy to similar producing pools. Estimates based on these methods are generally less reliable than those based on actual production history. Subsequent evaluation of the same reserves based upon production history and production practices will result in variations in the estimated reserves and such variations could be material.

In accordance with applicable securities laws in Canada, the Corporation's independent qualified reserves evaluators have used forecast prices and costs in estimating the reserves and future net revenue. Actual future net revenue will be affected by other factors such as actual production levels, supply and demand for oil and natural gas, curtailments or increases in consumption by oil and natural gas purchasers, changes in governmental regulations or taxation and the impact of inflation on costs.

Actual production and cash flows derived from the Corporation's reserves will vary from the estimates contained in the Corporation's independent reserves evaluations and such variations could be material. The independent reserves evaluations are based in part on the assumed success of activities the Corporation intends to take in future years. The reserves and estimated future net revenue to be derived therefrom and contained in the Corporation's independent reserves evaluations will be reduced to the extent that such activities do not achieve the level of success assumed in the evaluations.

#### Availability and Cost of Equipment and Services

Oil and natural gas exploration, development and operating activities are dependent on the availability and cost of specialized equipment and other materials (typically leased from third parties) and skilled personnel trained to use such equipment in the areas where such activities will be conducted. The availability of such equipment, materials and personnel is limited. An increase in demand or cost, or a decrease in the availability of, such equipment, materials or personnel may impede the Corporation's exploration, development and operating activities, which, in turn, could materially adversely affect the Corporation's business and financial condition.

#### Potential Future Drilling Locations

The Corporation's identified potential future drilling locations represent a significant part of the Corporation's future growth. The Corporation's ability to drill and develop these locations and the drilling locations on which it actually drills wells 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, costs, inclement weather, seasonal restrictions, drilling results, additional geological, geophysical and reservoir information that is obtained, production rate recovery, gathering system and transportation constraints, the net price received for commodities produced, regulatory approvals and regulatory changes. As a result of these uncertainties, there can be no assurance that the potential future drilling locations that Birchcliff has identified will ever be drilled and, if drilled, that such locations will result in additional oil, NGLs or natural gas production and, in the case of unbooked locations, additional reserves. As such, the Corporation's actual drilling activities may differ materially from those presently identified, which could adversely affect the Corporation's business.

#### Seasonality and Extreme Weather Conditions

The level of activity in the Canadian oil and natural gas industry is influenced by seasonal weather patterns. Wet weather and spring thaw may make the ground unstable. Consequently, municipalities and provincial transportation departments may enforce road bans that restrict the movement of rigs and other heavy equipment, thereby reducing activity levels. Road bans and other restrictions generally result in a reduction of drilling and exploratory activities and may also result in the shut-in of some of the Corporation's production if not otherwise tied-in. In addition, certain oil and natural gas producing properties 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. Further, extreme cold weather, heavy snowfall and heavy rainfall may restrict the Corporation's ability to access its properties and cause operational difficulties including damage to machinery or contribute

to personnel injury because of dangerous working conditions. Seasonal factors and unexpected weather patterns may lead to declines in exploration and production activity and also to volatility in commodity prices as the demand for natural gas typically fluctuates during cold winter months and hot summer months.

#### Competition

The oil and natural gas industry is highly competitive in all of its phases. The Corporation competes with numerous other entities in the exploration, development, production and marketing of oil and natural gas, including land, acquisitions of reserves, access to drilling and service rigs and other equipment, access to transportation and skilled technical and operating personnel. The Corporation's competitors include oil and natural gas companies that have substantially greater financial resources, staff and facilities than those of the Corporation. Some of these companies not only explore for, develop and produce oil and natural gas, but also carry on refining operations and market oil and natural gas on an international basis. As a result of these complementary activities, some of these competitors may have greater and more diverse competitive resources to draw on than the Corporation. The Corporation's ability to increase its reserves in the future will depend not only on its ability to explore and develop its present properties, but also on its ability to select and acquire other suitable producing properties or prospects for exploratory drilling.

#### **Hydraulic Fracturing**

Hydraulic fracturing involves the injection of water, sand and small amounts of additives under pressure into rock formations to stimulate the production of oil and natural gas. Specifically, hydraulic fracturing enables the production of commercial quantities of oil and natural gas from reservoirs that were previously unproductive. While hydraulic fracturing has been in use for many years, there has been increased focus on the environmental aspects of hydraulic fracturing practices in recent years. Increased regulation and attention given to the hydraulic fracturing process could lead to greater opposition (including litigation) to oil and natural gas production activities using hydraulic fracturing techniques. Any new laws, regulations or permitting requirements regarding hydraulic fracturing could lead to operational delays, increased operating costs, third-party or governmental claims and could increase the Corporation's costs of compliance and doing business, as well as delay the development of oil and natural gas resources from certain formations which are not commercial without the use of hydraulic fracturing. Restrictions on hydraulic fracturing could also reduce the amount of oil and natural gas that the Corporation is ultimately able to produce from its reserves and, therefore, could adversely affect the Corporation's business, financial condition, results of operations and prospects.

#### All Assets in One Area

All of the Corporation's producing properties are geographically concentrated in the Peace River Arch area of Alberta. As a result of this concentration, the Corporation may be disproportionately exposed to the impact of delays or interruptions of production from that area caused by transportation capacity constraints, curtailment of production, natural disasters, availability of equipment, facilities or services, adverse weather conditions or other events which impact that area. Due to the concentrated nature of the Corporation's portfolio of properties, a number of the Corporation's properties could experience any of the same conditions at the same time, resulting in a relatively greater impact on the Corporation's results of operations than they might have on other companies that have a more diversified portfolio of properties. Such delays or interruptions could have a material adverse effect on the Corporation's financial condition and results of operations.

#### Operational Dependence

Other companies operate some of the assets in which the Corporation has an interest. The Corporation has limited ability to exercise influence over the operation of those assets or their associated costs, which could adversely affect the Corporation's business, financial condition, results of operations and prospects. The Corporation's return on assets operated by others depends upon a number of factors that may be outside of the Corporation's control, including, but not limited to, the timing and amount of capital expenditures, the operator's expertise and financial resources, the approval of other participants, the selection of technology and risk management practices.

In addition, due to the current low and volatile commodity price environment, many companies, including companies that may operate some of the assets in which the Corporation has an interest, may be in financial difficulty, which could impact their ability to fund and pursue capital expenditures, carry out their operations in a safe and effective manner and satisfy regulatory requirements with respect to abandonment and reclamation obligations. If companies that operate some of the assets in which the Corporation has an interest fail to satisfy regulatory requirements with respect to abandonment and reclamation obligations, the Corporation may be required to satisfy such obligations and to seek recourse from such companies. To the extent that any of such companies go bankrupt, become insolvent or make a proposal or institute any proceedings relating to bankruptcy or insolvency, it could result in such assets being shut-in, the Corporation potentially becoming subject to additional liabilities relating to such assets and the Corporation having difficulty collecting revenue due to it from such operators or recovering amounts owing to the Corporation from such operators for their share of abandonment and reclamation obligations. Any of these factors could have a material adverse effect on the Corporation's financial and operational results.

#### Expiration of Licences and Leases

The Corporation's properties are held in the form of licences and leases and working interests in licences and leases held by others. If the Corporation or the holder of the licence or lease fails to meet the specific requirements of a licence or lease, the licence or lease may terminate or expire. There can be no assurance that any of the obligations required to maintain each licence or lease will be met. The termination or expiration of the Corporation's licences or leases or the working interests relating to a licence or lease may have a material adverse effect on the business, financial condition, results of operations and prospects of the Corporation.

#### Cost of New Technologies

The oil and natural gas industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other oil and natural gas companies may have greater financial, technical and personnel resources that allow them to implement and benefit from new technologies before the Corporation. There can be no assurance that the Corporation will be able to respond to such competitive pressures and implement such technologies on a timely basis or at an acceptable cost. If the Corporation implements such technologies, there is no assurance that the Corporation will do so successfully. One or more of the technologies currently utilized by the Corporation or implemented in the future may become obsolete. In such case, the Corporation's business, financial condition, results of operations and prospects could be affected adversely and materially. If the Corporation is unable to utilize the most advanced commercially available technology or is unsuccessful in implementing certain technologies, its business, financial condition, results of operations and prospects could also be adversely affected in a material way.

#### Alternatives to and Changing Demand for Petroleum Products

Fuel conservation measures, alternative fuel requirements, increasing consumer demand for alternatives to oil and natural gas and technological advances in fuel economy and renewable energy generation devices could reduce the demand for oil, natural gas and liquid hydrocarbons. Recently, certain jurisdictions have implemented policies or incentives to decrease the use of fossil fuels and encourage the use of renewable fuel alternatives, which may lessen the demand for petroleum products and put downward pressure on commodity prices. In addition, advancements in energy efficient products have a similar effect on the demand for oil and natural gas products. The Corporation cannot predict the impact of the changing demand for oil and natural gas products and any major changes may have a material adverse effect on the Corporation's business, financial condition, results of operations and cash flows by decreasing the Corporation's profitability, increasing its costs, limiting its access to capital or decreasing the value of its assets.

#### **Expansion into New Activities**

The operations and expertise of the Corporation's management are currently focused primarily on oil and natural gas production, exploration and development in the Peace River Arch area of Alberta. In the future, the Corporation may acquire or move into new industry-related activities or new geographical areas or may acquire different energy-related assets, and as a result, the Corporation may face unexpected risks or alternatively, the Corporation's exposure to one or more existing risk factors may be significantly increased, which may in turn result in the Corporation's future operational and financial condition being adversely affected.

#### Regulatory, Political and Environmental Risks

#### Regulatory

Various levels of governments impose extensive controls and regulations on oil and natural gas operations (including exploration, development, production, pricing, marketing, transportation and infrastructure). Governments may regulate or intervene with respect to exploration and production activities, prices, taxes, royalties, the exportation of oil and natural gas and infrastructure projects. Amendments to these controls and regulations may occur from time to time in response to economic or political conditions. The implementation of new regulations or the modification to existing regulations affecting the oil and natural gas industry could reduce the demand for crude oil and natural gas and increase the Corporation's costs or make certain projects uneconomic, which may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

Although the current Federal Government has introduced Bill C-69 to overhaul the existing environmental assessment process and replace the National Energy Board with a new regulatory agency, the impact of the new proposed regulatory scheme on proponents and the timing of receipt of approvals of major projects remains unclear.

Even when projects are approved at a federal level, such projects often face further delays due to interference by provincial and municipal governments, as well as court challenges related to issues such as indigenous title, the government's duty to consult and accommodate indigenous peoples and the sufficiency of the relevant environmental review processes. In addition, export pipelines from Canada to the United States face additional uncertainty as such pipelines require approvals of several

levels of government in the United States. The ongoing third-party challenges to regulatory decisions or orders has reduced the efficiency of the regulatory regime, as the implementation of the decisions and orders has been delayed resulting in uncertainty and interruption to business of the oil and natural gas industry.

Recently, the Federal Government and certain provincial governments have taken steps to initiate protocols and regulations to limit the release of methane from oil and natural gas operations. Such draft regulations and protocols may require additional expenditures or otherwise negatively impact the Corporation's operations and may affect the Corporation's revenues and financial condition.

Further, in response to widening pricing differentials, the Government of Alberta implemented production curtailment. The Corporation is not currently subject to a curtailment order; however, no assurance can be given that the Government of Alberta will not in the future enact rules which would require the Corporation to curtail its production.

In order to conduct oil and natural gas operations, the Corporation requires regulatory permits, licences, registrations, approvals and authorizations from various governmental authorities. There can be no assurance that the Corporation will be able to obtain all of the permits, licences, registrations, approvals and authorizations that may be required to conduct operations that it may wish to undertake. In addition, the Corporation may have to comply with the requirements of certain federal legislation such as the *Competition Act* (Canada) and the *Investment Canada Act* (Canada), which may adversely affect its business and financial condition and the market value of its securities or assets, particularly when undertaking, or attempting to undertake, an acquisition or disposition.

#### **Political Uncertainty**

In the last several years, the United States and certain European countries have experienced significant political events that have cast uncertainty on global financial and economic markets.

Since the 2016 U.S. presidential election, the current United States administration has begun taking steps to implement certain of its promises made during the campaign. The administration has withdrawn the United States from the Trans-Pacific Partnership and Congress has passed sweeping tax reform, which, among other things, significantly reduces U.S. corporate tax rates. This may affect competitiveness of other jurisdictions, including Canada. In addition, the North American Free Trade Agreement ("NAFTA") was renegotiated and on November 30, 2018, Canada, the U.S. and Mexico signed the United States-Mexico-Canada Agreement which will replace NAFTA once ratified by the three signatory countries. The administration has also taken action with respect to reducing regulation which may also affect the relative competitiveness of other jurisdictions. It is unclear exactly what other actions the United States administration will implement, and if implemented, how these actions may impact Canada and in particular the oil and natural gas industry. Any actions taken by the current United States administration may have a negative impact on the Canadian economy and on the businesses, financial condition, results of operations, prospects and the valuation of Canadian oil and natural gas companies, including the Corporation.

In addition to the political disruption in the United States, the citizens of the United Kingdom voted to withdraw from the European Union and the Government of the United Kingdom has taken steps to implement such withdrawal. The terms of the United Kingdom's exit from the European Union and whether it will occur at all remain to be determined. Some European countries have also experienced the rise of anti-establishment political parties and public protests held against open-door immigration policies, trade and globalization. To the extent that certain political actions taken in North America, Europe and elsewhere in the world result in a marked decrease in free trade, access to personnel and freedom of movement, it could have an adverse effect on the Corporation's ability to market its products internationally, increase costs for goods and services required for the Corporation's operations, reduce access to skilled labour and negatively impact the Corporation's business, operations, financial condition and the market value of its securities.

A change in federal, provincial or municipal governments in Canada may have an impact on the directions taken by such governments on matters that may impact the oil and natural gas industry, including the balance between economic development and environmental policy such as the potential impact of the recent change of government in British Columbia and announcements and actions by the Government of British Columbia that may impact the completion of the Trans-Mountain Pipeline project, LNG facilities and other infrastructure projects.

#### Geopolitical Risks

Political changes in North America and political instability in the Middle East and elsewhere may cause disruptions in the supply of oil that affects the marketability and price of crude oil and natural gas. Conflicts, or conversely peaceful developments, arising outside of Canada, including changes in political regimes or parties in power, may have a significant impact on the price of oil and natural gas. Any particular event could result in a material decline in prices and result in a reduction of the Corporation's revenue.

#### **Environmental**

All phases of the oil and natural gas business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of federal, provincial and local laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on the spill, release or emission of various substances produced in association with oil and natural gas industry operations. In addition, such legislation sets out the requirements with respect to oilfield waste handling and storage, habitat protection and the satisfactory operation, maintenance, abandonment and reclamation of well and facility sites.

Compliance with environmental legislation can require significant expenditures and a breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require the Corporation to incur costs to remedy such discharge. Although the Corporation believes that it is in material compliance with current applicable environmental legislation, no assurance can be given that environmental compliance requirements will not result in a curtailment of production or a material increase in the costs of production, development or exploration activities or otherwise have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

In addition, political and economic events may significantly affect the scope and timing of climate change measures that are put in place. The implementation of new environmental regulations or the modification of existing environmental regulations affecting the oil and natural gas industry generally could reduce demand for oil and natural gas and increase costs. See "Risk Factors and Risk Management – Regulatory, Political and Environmental Risks – Climate Change".

#### Climate Change

The Corporation's exploration and production facilities and other operations and activities emit GHGs which requires the Corporation to comply with applicable GHG emissions legislation. Climate change policy is evolving at regional, national and international levels and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place. As a signatory to the United Nations Framework Convention on Climate Change and the Paris Agreement, the Government of Canada pledged to cut its GHG emissions by 30% from 2005 levels by 2030. One of the pertinent policies announced to date by the Government of Canada to reduce GHG emissions is the planned implementation of a nation-wide price on carbon emissions. The federal carbon levy goes into effect April 1, 2019 and will affect those provinces that have not implemented their own carbon taxes, cap-and-trade systems or other plans for carbon pricing, namely Ontario, Manitoba, Saskatchewan and New Brunswick. The federal carbon levy will be at an initial rate of \$20 per tonne. Provincially, the Government of Alberta has already implemented a carbon levy on almost all sources of GHG emissions, now at a rate of \$30 per tonne. The implementation of the federal carbon levy is currently subject to constitutional challenges by the Provinces of Saskatchewan and Ontario, which are supported by the Province of New Brunswick.

Concerns about climate change have resulted in a number of environmental activists and members of the public opposing the continued exploitation and development of fossil fuels. Historically, political and legal opposition to the fossil fuel industry focused on public opinion and the regulatory process. More recently, however, there has been a movement to more directly hold governments and oil and natural gas companies responsible for climate change through climate litigation. In November 2018, ENvironment JEUnesse, a Quebec advocacy group, applied to the Quebec Superior Court to certify a class action against the Government of Canada for climate related matters. In January 2019, the City of Victoria became the first municipality in Canada to endorse exploring the initiation of a class action lawsuit against oil and natural gas producers for climate-related harms. See "Risk Factors and Risk Management – Non-Governmental Organizations and Eco-Terrorism Risks" and "Risk Factors – Public Opinion and Reputational Risk".

In addition, there has been public discussion that climate change may be associated with extreme weather conditions and increased volatility in seasonal temperatures. Extreme weather could interfere with the Corporation's production and increase the Corporation's costs. At this time, the Corporation is unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting its operations.

The direct or indirect costs of compliance with GHG-related legislation may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. Adverse impacts to the Corporation's business as a result of GHG legislation may include, but are not limited to, increased compliance costs, permitting delays, increased operating costs and capital expenditures and reduced demand for the oil, natural gas and NGLs that the Corporation produces. In addition, the Pouce Coupe Gas Plant is subject to the Carbon Competitiveness Incentive Regulation (Alberta) and some of the Corporation's other significant facilities may ultimately become subject to future regional, provincial and/or federal climate change regulations

to manage GHG emissions. Given the evolving nature of the debate related to climate change and the control of GHG and resulting requirements, it is expected that current and future climate change regulations will have the effect of increasing the Corporation's operating expenses and in the long-term reducing the demand for oil and natural gas production resulting in a decrease in the Corporation's profitability and a reduction in the value of its assets or asset write-offs.

#### Carbon Pricing Risk

The majority of countries across the globe have agreed to reduce their carbon emissions in accordance with the Paris Agreement. In Canada, the Federal Government and certain provincial governments have implemented legislation aimed at incentivizing the use of alternative fuels and in turn reducing carbon emissions. The taxes placed on carbon emissions may have the effect of decreasing the demand for oil and natural gas products and at the same time, increasing the Corporation's operating expenses, each of which may have a material adverse effect on the Corporation's profitability and financial condition. Further, the imposition of carbon taxes puts the Corporation at a disadvantage with its counterparts who operate in jurisdictions where there are less costly carbon regulations.

#### **Liability Management Programs**

Alberta has developed a licensee Liability Management Rating Program (the "AB LMR Program") which is designed to prevent taxpayers from incurring costs associated with the suspension, abandonment, remediation and reclamation of wells, facilities and pipelines in the event that a licensee or permit holder is unable to satisfy its regulatory obligations. This program involves an assessment of the ratio of a licensee's deemed assets to deemed liabilities. If a licensee's deemed liabilities exceed its deemed assets, a security deposit is generally required. Changes to the required ratio of the Corporation's deemed assets to deemed liabilities or other changes to the requirements of the AB LMR Program may result in the requirement for security to be posted in the future and may result in significant increases to the Corporation's compliance obligations. In addition, the AB LMR Program may prevent or interfere with the Corporation's ability to acquire or dispose of assets as both the vendor and the purchaser of oil and natural gas assets must be in compliance with the AB LMR Program (both before and after the transfer of the assets) for the applicable regulatory agency to allow for the transfer of such assets.

The impact and consequences of the Supreme Court of Canada's decision in the Redwater case on the AER's rules and policies, lending practices in the crude oil and natural gas sector and on the nature and determination of secured lenders to take enforcement proceedings will no doubt evolve as the consequences of the decision are evaluated and considered by regulators, lenders and receivers/trustees.

#### Royalty Regimes

There can be no assurance that the Government of Alberta will not adopt a new royalty regime or modify the existing royalty regime, which may have an impact on the economics of the Corporation's projects. An increase in royalties would reduce the Corporation's earnings and could make future capital investments, or the Corporation's operations, less economic or uneconomic. On January 29, 2016, the Government of Alberta adopted a new royalty regime which took effect on January 1, 2017.

#### Disposal of Fluids Used in Operations

The safe disposal of the hydraulic fracturing fluids (including the additives) and water recovered from oil and natural gas wells is subject to ongoing regulatory review by the federal and provincial governments, including its effect on fresh water supplies and the ability of such water to be recycled, amongst other things. While it is difficult to predict the impact of any regulations that may be enacted in response to such review, the implementation of stricter regulations may increase the Corporation's costs of compliance which may impact the economics of certain projects and, in turn, impact activity levels and new capital spending on the Corporation's oil and natural gas properties.

#### **Other Risks**

#### Market Prices of the Corporation's Securities

The market price of the Corporation's securities may be volatile, which may affect the ability of holders to sell such securities at an advantageous price. The trading price of securities of oil and natural gas issuers is subject to substantial volatility often based on factors related and unrelated to the financial performance or prospects of the issuers involved. Factors unrelated to the Corporation's performance could include macroeconomic developments nationally, within North America or globally, domestic and global commodity prices or current perceptions of the oil and natural gas market. In recent years, the volatility of commodities has increased due to, in part, the implementation of computerized trading and the decrease of discretionary commodity trading. In addition, in certain jurisdictions, institutions, including government-sponsored entities, have determined to decrease their ownership in oil and natural gas entities which may impact the liquidity of certain securities and may put

downward pressure on the trading price of those securities. Similarly, the market prices of the Corporation's securities could be subject to significant fluctuations in response to variations in the Corporation's operating results, financial condition, liquidity and other internal factors. In addition, market price fluctuations in the Corporation's securities may also be due to the Corporation's results failing to meet the expectations of securities analysts or investors in any quarter, downward revision in securities analysts' estimates and material public announcements by the Corporation, along with a variety of additional factors, including, without limitation, those set forth under "Advisories – Forward-Looking Statements". Accordingly, the prices at which the Corporation's securities will trade cannot be accurately predicted.

#### Reliance on Key Personnel

The Corporation's success depends, in large measure, on certain key personnel. The loss of the services of such key personnel could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. The Corporation does not have any key personnel insurance in effect. The contributions of the existing management team to the immediate and near-term operations of the Corporation are likely to be of central importance. In addition, the competition for qualified personnel in the oil and natural gas industry is intense and there can be no assurance that the Corporation will be able to continue to attract and retain all of the personnel necessary for the development and operation of its business. Investors must rely upon the ability, expertise, judgment, discretion, integrity and good faith of the Corporation's management.

#### Skilled Workforce

An inability to recruit and retain a skilled workforce may negatively impact the Corporation. The operations and management of the Corporation require the recruitment and retention of a skilled workforce, including engineers, technical personnel and other professionals. The loss of key members of such workforce, or a substantial portion of the workforce as a whole, could result in the failure to implement the Corporation's business plans. The Corporation competes with other companies in the oil and natural gas industry as well as other industries for this skilled workforce. A decline in market conditions has led to increasing numbers of skilled personnel to seek employment in other industries. In addition, certain of the Corporation's current employees are senior and have significant institutional knowledge that must be transferred to other employees prior to their departure from the workforce. If the Corporation is unable to retain current employees, successfully complete effective knowledge transfers and/or recruit new employees with comparable knowledge and experience, the Corporation could be negatively impacted. In addition, the Corporation could experience increased costs to retain and recruit these professionals.

#### Public Opinion and Reputational Risk

The Corporation's business, financial condition, operations or prospects may be negatively impacted as a result of any negative public opinion towards the Corporation or as a result of any negative sentiment towards, or in respect of, the Corporation's reputation with stakeholders, special interest groups, political leadership, the media or other entities. Public opinion may be influenced by certain media and special interest groups' negative portrayal of the industry in which the Corporation operates, as well as their opposition to certain oil and natural gas projects. Potential impacts of negative public opinion or reputational issues may include delays or interruptions in operations, legal or regulatory actions or challenges, blockades, increased regulatory oversight, reduced support for, delays in, challenges to, or the revocation of regulatory approvals, permits and/or licences and increased costs and/or cost overruns.

Any environmental damage, loss of life, injury or damage to property caused by the Corporation's operations could damage its reputation. Negative sentiment towards the Corporation could result in a lack of willingness of municipal authorities to grant the necessary licenses or permits for the Corporation to operate its business. In addition, negative sentiment towards the Corporation could result in the residents of the areas where the Corporation is doing business opposing further operations in the area by the Corporation. If the Corporation develops a reputation of having an unsafe work site, this may impact its ability to attract and retain the necessary skilled employees and consultants to operate its business. Further, the Corporation's reputation could be affected by actions and activities of other corporations operating in the oil and natural gas industry, particularly other producers, over which the Corporation has no control. Further, opposition from special interest groups opposed to oil and natural gas development and the possibility of climate related litigation against governments and fossil fuel companies may impact the Corporation's reputation. See "Risk Factors and Risk Management – Regulatory, Political and Environmental Risks – Climate Change".

Reputational risk cannot be managed in isolation from other forms of risk. Credit, market, operational, insurance, regulatory and legal risks, among others, must all be managed effectively to safeguard the Corporation's reputation. Damage to the Corporation's reputation could result in negative investor sentiment towards the Corporation, which may result in limiting the Corporation's access to capital, increasing the cost of capital and decreasing the price and liquidity of the Corporation's securities.

#### Changing Investor Sentiment

A number of factors, including the concerns of the effects of the use of fossil fuels on climate change, concerns of the impact of oil and natural gas operations on the environment, concerns of environmental damage relating to spills of petroleum products during transportation and concerns of indigenous rights, have affected certain investors' sentiments towards investing in the oil and natural gas industry. As a result of these concerns, some institutional, retail and public investors have announced that they no longer are willing to fund or invest in oil and natural gas properties or companies or are reducing the amount thereof over time. In addition, certain institutional investors are requesting that issuers develop and implement more robust social, environmental and governance policies and practices. Developing and implementing such policies and practices can involve significant costs and require a significant time commitment from the Corporation's Board, management and employees. Failing to implement the policies and practices as requested by institutional investors may result in such investors reducing their investment in the Corporation or not investing in the Corporation at all. Any reduction in the investor base interested or willing to invest in the oil and natural gas industry and more specifically, in the Corporation, may result in limiting Birchcliff's access to capital, increasing the cost of capital and decreasing the price and liquidity of the Corporation's securities, even if the Corporation's operating results, underlying asset value or prospects have not changed. Additionally, these factors, as well as other related factors, may cause a decrease in the value of the Corporation's assets which may result in an impairment charge.

#### Non-Governmental Organizations and Eco-Terrorism Risks

The crude oil and natural gas industry may, at times, be subject to public opposition. Such public opposition could expose the Corporation to the risk of higher costs, delays or even project cancellations due to increased pressure on governments and regulators by special interest groups including Aboriginal groups, landowners, environmental interest groups (including those opposed to oil and gas production operations) and other non-governmental organizations. Potential impacts of such pressure and opposition include blockades, legal or regulatory actions or challenges, increased regulatory oversight, reduced support of the federal, provincial or municipal governments, and delays in, challenges to, or the revocation of regulatory approvals, permits and/or licences. There is no guarantee that the Corporation will be able to satisfy the concerns of the special interest groups and non-governmental organizations and attempting to address such concerns may require significant and unanticipated capital and operating expenditures which may negatively impact the Corporation's business, financial condition, results of operations and prospects.

In addition, the Corporation's oil and natural gas properties, wells and facilities or the third-party facilities and pipelines utilized by the Corporation could be the subject of a terrorist attack. If any of such properties, wells or facilities are the subject of terrorist attack, it may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### Management of Growth and Integration

The Corporation may be subject to both integration and growth-related risks, including capacity constraints and pressure on its internal systems and controls. The ability of the Corporation to effectively manage growth and the integration of additional assets will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Corporation to effectively deal with this integration and growth could have a material adverse impact on its business, financial condition, results of operations and prospects.

#### Risks Associated with Acquisitions and Dispositions

The Corporation considers acquisitions and dispositions of assets in the ordinary course of business. Typically, once an acquisition opportunity is identified, a review of available information relating to the assets is conducted. There is a risk that even a detailed review of records and assets may not necessarily reveal every existing or potential problem, nor will it permit the Corporation to become sufficiently familiar with the assets to fully assess their deficiencies and potential. There is no guarantee that defects in the chain of title will not arise to defeat the Corporation's title to certain assets or that environmental defects, liabilities or deficiencies do not exist or are greater than anticipated. Inspections may not always be performed on every well, and environmental problems, such as ground water contamination, are not necessarily observable even when an inspection is undertaken. Even when problems are identified, the Corporation may assume certain environmental and other risk liabilities in connection with acquired assets.

In addition, acquisitions of oil and natural gas properties or companies are based in large part on engineering, environmental and economic assessments. These assessments include a series of assumptions regarding such factors as recoverability and marketability of oil and natural gas, environmental restrictions and prohibitions regarding releases and emissions of various substances, future prices of oil and natural gas, future operating costs, future capital expenditures and royalties and other government

levies which will be imposed over the producing life of the reserves. Many of these factors are subject to change and are beyond the control of the Corporation. All such assessments involve a measure of geologic, engineering, environmental and regulatory uncertainty that could result in lower production and reserves or higher operating or capital expenditures than anticipated.

Achieving the benefits of acquisitions depends on successfully consolidating functions and integrating operations and procedures in a timely and efficient manner and the Corporation's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with those of the Corporation. The integration of acquired businesses and assets may require substantial management effort, time and resources, diverting management's focus away from other strategic opportunities and operational matters.

Management continually assesses the value and contribution of the various assets within its portfolio. In this regard, certain assets may be periodically disposed of so the Corporation can focus its efforts and resources more efficiently. Depending on the state of the market for such assets, there is a risk that certain assets of the Corporation could realize less on disposition than what the market may expect for such disposition or realize less than their carrying value on the Corporation's financial statements.

#### Information Technology Systems and Cyber-Security

The Corporation has become increasingly dependent upon the availability, capacity, reliability and security of its information technology infrastructure and its ability to expand and continually update this infrastructure to conduct daily operations. The Corporation depends on various information technology systems to estimate reserves, process and record financial data, manage its financial resources and land base, analyze seismic information, administer its contracts with its operators and lessees and communicate with employees and third-party partners.

In the event the Corporation is unable to regularly deploy software and hardware, effectively upgrade systems and network infrastructure and take other steps to maintain or improve the efficiency and efficacy of its information technology systems, the operation of such systems could be interrupted or result in the loss, corruption or release of data. Further, the Corporation is subject to a variety of information technology and system risks as a part of its normal course operations, including potential breakdown, invasion, virus, cyber-attack, cyber-fraud, security breach, and destruction or interruption of the Corporation's information technology systems by third parties or insiders. Unauthorized access to these systems by employees or third parties could lead to corruption or exposure of confidential, fiduciary or proprietary information, interruption to communications or operations or disruption to its business activities or its competitive position. In addition, cyber-phishing attempts, in which a malicious party attempts to obtain sensitive information such as usernames, passwords, and credit card details (and money) by disguising as a trustworthy entity in an electronic communication, have become more widespread and sophisticated in recent years. If the Corporation becomes a victim to a cyber-phishing attack it could result in a loss or theft of the Corporation's financial resources or critical data and information or could result in a loss of control of the Corporation's technological infrastructure or financial resources. The Corporation's employees are often the targets of such cyber-phishing attacks, as they are and will continue to be targeted by parties using fraudulent "spoof" emails to misappropriate information or to introduce viruses or other malware through "trojan horse" programs to the Corporation's computers. These emails appear to be legitimate emails, but direct recipients to fake websites operated by the sender of the email or request recipients to send a password or other confidential information through email or to download malware.

In addition to the oversight provided by the Corporation's Information Technology Committee, there is further reporting on the Corporation's information technology and cyber-security risks to the Board. Further, the Corporation maintains policies and procedures that address and implement employee protocols with respect to electronic communications and electronic devices and the Corporation periodically conducts cyber-security risk assessments. The Corporation also employs encryption protection for some of its confidential information. Despite the Corporation's efforts to mitigate such phishing attacks through education and training, phishing activities remain a serious problem that may damage its information technology infrastructure. The Corporation applies technical and process controls in line with industry-accepted standards to protect its information assets and systems, including a written incident response plan for responding to a cyber-security incident. However, these controls may not adequately prevent cyber-security breaches. Disruption of critical information technology services, or breaches of information security, could have a negative effect on the Corporation's performance and earnings, as well as on its reputation, and any damages sustained may not be adequately covered by the Corporation's current insurance coverage, or at all. The significance of any such event is difficult to quantify, but may in certain circumstances be material and could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

To date, the Corporation has not been subject to a cyber-security attack or other breach that has had a material impact on its business or operations or resulted in material losses to the Corporation; however, there is no assurance that the measures the Corporation takes to protect its business systems and operational control systems will be effective in protecting against a breach in the future and that the Corporation will not incur such losses in the future.

#### Insurance

Although the Corporation maintains insurance in accordance with industry standards to address certain risks, such insurance has limitations on liability and may not be sufficient to cover the full extent of liabilities. In addition, certain risks are not, in all circumstances, insurable or, in certain circumstances, the Corporation may elect not to obtain insurance to deal with specific risks due to the high premiums associated with such insurance or other reasons. The payment of any uninsured liabilities would reduce the funds available to the Corporation. The occurrence of a significant event that the Corporation is not fully insured against, or the insolvency of the insurer of such event, could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### Litigation

In the normal course of the Corporation's operations, it may become involved in, be named as a party to or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions. Such proceedings may develop in relation to personal injury (including claims resulting from exposure to hazardous substances), property damage, property taxes, land and access rights, royalty rights, the environment (including claims relating to contamination) and lease and contractual disputes. The outcome of outstanding, pending or future proceedings cannot be predicted with certainty and may be determined adversely to the Corporation and, as a result, could have a material adverse effect on the Corporation's assets, liabilities, business, financial condition and results of operations. Even if the Corporation prevails in any such legal proceedings, the proceedings could be costly and time-consuming and may divert the attention of management and key personnel from the Corporation's business operations, which may adversely affect the Corporation.

Due to the rapid development of oil and natural gas technology, the Corporation may become involved in, be named as a party to or be the subject of, various legal proceedings in which it is alleged that the Corporation has infringed the intellectual property rights of others or conversely, the Corporation may commence lawsuits against others who the Corporation believes are infringing upon its intellectual property rights. The Corporation's involvement in intellectual property litigation could result in significant expense, adversely affecting the development of its assets or intellectual property or diverting the efforts of its technical and management personnel, whether or not such litigation is resolved in the Corporation's favour. In the event of an adverse outcome as a defendant in any such litigation, the Corporation may, among other things, be required to: (i) pay substantial damages; (ii) cease the use of infringing intellectual property; (iii) expend significant resources to develop or acquire non-infringing intellectual property; (iv) discontinue processes incorporating infringing technology; or (v) obtain licences to the infringing intellectual property. However, the Corporation may not be successful in such development or acquisition or such licences may not be available on reasonable terms. Any such development, acquisition or licence could require the expenditure of substantial time and other resources and could have a material adverse effect on the Corporation's business and financial results.

#### **Aboriginal Claims**

Aboriginal peoples have claimed aboriginal title and rights in portions of Western Canada. The Corporation is not aware that any claims have been made in respect of its properties or assets; however, the legal basis of an aboriginal land claim and aboriginal rights is a matter of considerable legal complexity and the impact of the assertion of such a claim, or the possible effect of a settlement of such claim, upon the Corporation cannot be predicted with any degree of certainty at this time. In addition, no assurance can be given that any recognition of aboriginal rights or claims whether by way of a negotiated settlement or by judicial pronouncement (or through the grant of an injunction prohibiting exploration or development activities pending resolution of any such claim) would not delay or even prevent the Corporation's exploration and development activities. If a claim arose and was successful, such claim may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects. In addition, the process of addressing such claims, regardless of the outcome, is expensive and time consuming and could result in delays which could have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### **Internal Controls**

Effective internal controls are necessary for the Corporation to provide reliable financial reports and to help prevent fraud. Although the Corporation undertakes a number of procedures in order to help ensure the reliability of its financial reports, including those imposed on it under Canadian securities laws, the Corporation cannot be certain that such measures will ensure that the Corporation will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Corporation's results of operations or cause it to fail to meet its reporting obligations. If the Corporation or its independent auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in the Corporation's financial statements and harm the trading prices of the Corporation's securities.

#### Title to Assets

The Corporation's actual title to and interest in its properties, and its right to produce and sell the oil and natural gas therefrom, may vary from the Corporation's records. In addition, there may be valid legal challenges or legislative changes that affect the Corporation's title to and right to produce from its oil and natural gas properties, which could impair the Corporation's activities on them and result in a reduction of the revenue received by the Corporation.

If a defect exists in the chain of title or in the Corporation's right to produce, or a legal challenge or legislative change arises, it is possible that the Corporation may lose all or a portion of the properties to which the title defect relates and/or its right to produce from such properties. This may have a material adverse effect on the Corporation's business, financial condition, results of operations and prospects.

#### **Breaches of Confidentiality**

While discussing potential business relationships or other transactions with third parties, the Corporation may disclose confidential information relating to the business, operations or affairs of the Corporation. Although confidentiality agreements are generally signed by third parties prior to the disclosure of any confidential information, a breach could put the Corporation at competitive risk and may cause significant damage to its business. The harm to the Corporation's business from a breach of confidentiality cannot presently be quantified, but may be material and may not be compensable in damages. There is no assurance that, in the event of a breach of confidentiality, the Corporation will be able to obtain equitable remedies, such as injunctive relief, from a court of competent jurisdiction in a timely manner, if at all, in order to prevent or mitigate any damage to its business that such a breach of confidentiality may cause.

#### **Income Taxes**

The Corporation files all required income tax returns and believes that it is in full compliance with the provisions of the *Income Tax Act* (Canada) and all other applicable provincial tax legislation. However, such returns are subject to reassessment by the applicable taxation authority. In the event of a successful reassessment of the Corporation, such reassessment may have an impact on current and future taxes payable.

Income tax laws relating to the oil and natural gas industry, such as the treatment of resource taxation or dividends, may in the future be changed or interpreted in a manner that adversely affects the Corporation. Furthermore, tax authorities having jurisdiction over the Corporation may disagree with how the Corporation calculates its income for tax purposes or could change administrative practices to the Corporation's detriment.

#### Negative Impact of Additional Sales or Issuances of Securities

The Corporation may issue an unlimited number of Common Shares without any vote or action by the shareholders, subject to the rules of any stock exchange on which the Corporation's securities may be listed. The Corporation may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Corporation which may be dilutive. If the Corporation issues additional securities, the percentage ownership of existing shareholders will be reduced and diluted and the price of the Corporation's securities could decrease.

#### Additional Taxation Applicable to Non-Residents

Tax legislation in Canada may impose withholding or other taxes on the cash dividends, stock dividends or other property transferred by the Corporation to non-resident shareholders. These taxes may be reduced pursuant to tax treaties between Canada and the non-resident shareholder's jurisdiction of residence. Evidence of eligibility for a reduced withholding rate must be filed by the non-resident shareholder in prescribed form with their broker (or in the case of registered shareholders, with the transfer agent). In addition, the country in which the non-resident shareholder is resident may impose additional taxes on such dividends. Any of these taxes may change from time to time.

#### Foreign Exchange Risk for Non-Resident Shareholders

The Corporation's cash dividends are declared in Canadian dollars and may be converted in certain instances to foreign denominated currencies at the spot exchange rate at the time of payment. As a consequence, non-resident shareholders and shareholders who calculate their return in currencies other than the Canadian dollar are subject to foreign exchange risk. To the extent that the Canadian dollar strengthens with respect to their currency, the amount of any dividend will be reduced when converted to their home currency.

#### Conflicts of Interest

Certain directors or officers of the Corporation may also be directors or officers of other oil and natural gas companies and as such may, in certain circumstances, have a conflict of interest. Conflicts of interest, if any, will be subject to and governed by procedures prescribed by the ABCA which require a director or officer of a Corporation who is a party to, or is a director or an officer of, or has a material interest in any person who is a party to, a material contract or proposed material contract with the Corporation to disclose his or her interest and, in the case of directors, to refrain from voting on any matter in respect of such contract unless otherwise permitted under the ABCA.

#### Forward-Looking Information May Prove Inaccurate

Shareholders and prospective investors are cautioned not to place undue reliance on the Corporation's forward-looking statements. By their nature, forward-looking statements involve numerous assumptions and known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking statements or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate. Additional information on the risks, assumptions and uncertainties relating to forward-looking statements is found under the heading "Advisories – Forward-Looking Statements".

#### **ABBREVIATIONS**

The abbreviations set forth below have the following meanings:

AECO	benchmark price for natural gas determined at the AECO 'C' hub in southeast Alberta
bbl	barrel
bbls	barrels
bbls/d	barrels per day
boe	barrel of oil equivalent
boe/d	barrel of oil equivalent per day
F&D	finding and development
G&A	general and administrative
GAAP	generally accepted accounting principles for Canadian public companies which are currently IFRS
GHG	greenhouse gas
GJ	gigajoule
GJ/d	gigajoules per day
НН	Henry Hub
IFRS	International Financial Reporting Standards as issued by the International Accounting Standards Board
LNG	liquefied natural gas
m3	cubic metres
Mboe	thousand barrels of oil equivalent
Mcf	thousand cubic feet
Mcf/d	thousand cubic feet per day
Mcfe	thousand cubic feet of gas equivalent
MJ	megajoule
MM\$	millions of dollars
MMBtu	million British thermal units
MMBtu/d	million British thermal units per day
MMcf	million cubic feet
MMcf/d	million cubic feet per day
MSW	price for mixed sweet crude oil at Edmonton, Alberta
NGLs	natural gas liquids
NGTL	NOVA Gas Transmission Ltd.
NYMEX	New York Mercantile Exchange
P&NG	petroleum and natural gas
ГСРЬ	TransCanada PipeLines Limited
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma, for crude oil of standard grade
000s	thousands
\$000s	thousands of dollars

#### **NON-GAAP MEASURES**

This MD&A uses "adjusted funds flow", "adjusted funds flow per common share", "free funds flow", "operating netback", "total cash costs", "adjusted working capital deficit" and "total debt". These measures do not have standardized meanings prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. Management believes that these non-GAAP measures assist management and investors in assessing Birchcliff's profitability, efficiency, liquidity and overall performance. Each of these measures is discussed in further detail below.

"Adjusted funds flow" denotes cash flow from operating activities before the effects of decommissioning expenditures and changes in non-cash working capital and "adjusted funds flow per common share" denotes adjusted funds flow divided by the basic or diluted weighted average number of common shares outstanding for the period. Birchcliff eliminates changes in non-cash working capital and settlements of decommissioning expenditures from cash flow from operating activities as the amounts can be discretionary and may vary from period-to-period depending on its capital programs and the maturity of its operating areas. The settlement of decommissioning expenditures are managed with Birchcliff's capital budgeting process which considers available adjusted funds flow. Management believes that adjusted funds flow and adjusted funds flow per common share assist management and investors in assessing Birchcliff's profitability, as well as its ability to generate the cash necessary to fund future growth through capital investments, decommission its assets, pay dividends and repay debt. Investors are cautioned that adjusted funds flow should not be construed as an alternative to or more meaningful than cash flow from operating activities or net income or loss as determined in accordance with GAAP as an indicator of Birchcliff's performance. Birchcliff previously referred to adjusted funds flow as "funds flow from operations".

The following table provides a reconciliation of cash flow from operating activities, as determined in accordance with GAAP, to adjusted funds flow for the Reporting Periods and Comparable Prior Periods:

		onths ended ecember 31,		
(\$000s)	2018	2017	2018	2017
Cash flow from operating activities	92,200	88,995	324,434	287,660
Adjustments:				
Change in non-cash working capital	(10,838)	7,920	(12,591)	29,226
Funds flow	81,362	96,915	311,843	316,886
Adjustments:				
Decommissioning expenditures	155	93	1,079	794
Adjusted funds flow	81,517	97,008	312,922	317,680

"Free funds flow" denotes adjusted funds flow less F&D capital expenditures. Management believes that free funds flow assists management and investors in assessing Birchcliff's ability to generate the cash necessary to repay debt, pay dividends, fund a portion of its future growth investments and/or fund share buybacks.

"Operating netback" denotes petroleum and natural gas revenue less royalties, less operating expense and less transportation and other expense. All netbacks are calculated on a per unit basis, unless otherwise indicated. Management believes that operating netback assists management and investors in assessing Birchcliff's profitability and its operating results on a per unit basis to better analyze its performance against prior periods on a comparable basis. The following table provides a breakdown of Birchcliff's operating netback for the Reporting Periods and Comparable Prior Periods:

			Three montl	ns ended mber 31,		1	Twelve montl Dece	hs ended mber 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Petroleum and natural gas revenue	154,720	22.01	166,149	22.55	621,421	22.08	556,942	22.45
Royalty expense	(6,763)	(0.96)	(9,271)	(1.26)	(38,306)	(1.36)	(28,727)	(1.16)
Operating expense	(24,677)	(3.51)	(28,460)	(3.86)	(99,104)	(3.52)	(110,486)	(4.45)
Transportation and other expense	(28,567)	(4.07)	(25,883)	(3.52)	(103,547)	(3.68)	(71,224)	(2.87)
Operating netback <sup>(1)</sup>	94,713	13.47	102,535	13.91	380,464	13.52	346,505	13.97

<sup>(1)</sup> All per boe amounts are calculated by dividing each aggregate financial amount by the production (boe) in the respective period.

"Total cash costs" are comprised of royalty, operating, transportation and other, general and administrative and interest expenses. Total cash costs are calculated on a per unit basis. Management believes that total cash costs assists management and investors in assessing Birchcliff's efficiency and overall cash cost structure.

"Adjusted working capital deficit" is calculated as current assets minus current liabilities excluding the effects of any financial instruments. Management believes that adjusted working capital deficit assists management and investors in assessing Birchcliff's liquidity. The following table reconciles working capital deficit (current assets minus current liabilities), as determined in accordance with GAAP, to adjusted working capital deficit:

<b>As at,</b> (\$000s)	December 31, 2018	December 31, 2017
Working capital deficit (surplus)	(15,611)	15,113
Financial instrument – asset	36,798	-
Financial instrument – liability	-	(4,046)
Adjusted working capital deficit	21,187	11,067

"Total debt" is calculated as the revolving term credit facilities plus adjusted working capital deficit. Management believes that total debt assists management and investors in assessing Birchcliff's liquidity. The following table provides a reconciliation of the revolving term credit facilities, as determined in accordance with GAAP, to total debt:

<b>As at,</b> (\$000s)	December 31, 2018	December 31, 2017
Revolving term credit facilities	605,267	587,126
Adjusted working capital deficit	21,187	11,067
Total debt	626,454	598,193

#### **ADVISORIES**

#### **Boe and Mcfe Conversions**

Boe amounts have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil and Mcfe amounts have been calculated by using the conversion ratio of 1 bbl of oil to 6 Mcf of natural gas. Boe and Mcfe amounts may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf: 1 bbl and an Mcfe conversion ratio of 1 bbl: 6 Mcf is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

#### **MMBtu Pricing Conversions**

\$1.00 per MMBtu equals \$1.00 per Mcf based on a standard heat value Mcf.

#### Oil and Gas Metrics

This MD&A contains metrics commonly used in the oil and natural gas industry, including operating netback. These oil and gas metrics do not have any standardized meanings or standard methods of calculation and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. As such, they should not be used to make comparisons. Management uses these oil and gas metrics for its own performance measurements and to provide shareholders with measures to compare Birchcliff's performance over time; however, such measures are not reliable indicators of Birchcliff's future performance, which performance may not compare to Birchcliff's performance in previous periods, and therefore should not be unduly relied upon. For further information regarding netbacks, see "Non-GAAP Measures".

#### **Capital Expenditures**

Unless otherwise stated, any references in this MD&A to: (i) "F&D capital" denotes capital for land, seismic, workovers, drilling and completions and well equipment and facilities; and (ii) "total capital expenditures" denotes F&D capital plus acquisitions, less any dispositions, plus administrative assets. Birchcliff previously referred to total capital expenditures as "net capital expenditures" or "capital expenditures, net".

#### Reserves

Birchcliff retained two independent qualified reserves evaluators, Deloitte LLP and McDaniel & Associates Consultants Ltd., to evaluate and prepare reports on 100% of Birchcliff's light crude oil and medium crude oil (combined), conventional natural gas, shale gas and NGLs reserves effective December 31, 2018. Such evaluations were prepared in accordance with the standards contained in the COGE Handbook and NI 51-101. Further information regarding the Corporation's reserves can be found in the Corporation's Annual Information Form for the financial year ended December 31, 2018.

Certain terms used herein are defined in NI 51-101 or the COGE Handbook and, unless the context otherwise requires, shall have the same meanings in this MD&A as in NI 51-101 or the COGE Handbook, as the case may be.

#### **Forward-Looking Statements**

Certain statements contained in this MD&A constitute forward-looking statements within the meaning of applicable Canadian securities laws. The forward-looking statements contained in this MD&A relate to future events or Birchcliff's future plans, operations or performance and are based on Birchcliff's current expectations, estimates, projections, beliefs and assumptions. Such forward-looking statements have been made by Birchcliff in light of the information available to it at the time the statements were made and reflect its experience and perception of historical trends. All statements and information other than historical fact may be forward-looking statements. Such forward-looking statements are often, but not always, identified by the use of words such as "seek", "plan", "expect", "project", "intend", "believe", "anticipate", "estimate", "forecast", "potential", "proposed", "predict", "budget", "continue", "targeting", "may", "will", "could", "might", "should" and other similar words and expressions.

By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Accordingly, readers are cautioned not to place undue reliance on such forward-looking statements. Although Birchcliff 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 and Birchcliff makes no representation that actual results achieved will be the same in whole or in part as those set out in the forward-looking statements.

In particular, this MD&A contains forward-looking statements relating to the following: Birchcliff's plans and other aspects of its anticipated future financial performance, operations, focus, objectives, strategies, opportunities, priorities and goals; the information set forth under the heading "2019 Outlook" as it relates to Birchcliff's 2019 guidance (including: Birchcliff's estimates of annual average production, commodity mix, average expenses, adjusted and free funds flow, capital expenditures and natural gas market exposure in 2019; Birchcliff's expectation that during 2019 65% of its natural gas production will be sold at prices that are not based on AECO; Birchcliff's expectation that 87% of its total revenue in 2019 is expected to be based on non-AECO benchmark prices; Birchcliff's expectation that it will be well positioned to generate significant free funds flow in 2019; that any free funds flow will be allocated based on what Birchcliff believes will provide the most value to its shareholders, with alternatives that may include debt reduction, production growth and purchasing common shares under its normal course issuer bid; that any free funds flow will also be allocated by Birchcliff to pay dividends and to pay for the Acquisition; and Birchcliff's expectation that its natural gas market diversification and financial risk management contracts will help to further strengthen its statements of financial position and protect its cash flow and project economics); Birchcliff's quidance regarding its 2019 Capital Program and its proposed exploration and development activities and the timing thereof (including: that the program targets an annual average production rate of 76,000 to 78,000 boe/d which is expected to generate approximately \$330 million of adjusted funds flow; that total F&D capital expenditures are estimated to be \$204 million, which are significantly less than Birchcliff's estimated 2019 adjusted funds flow; the number and types of wells to be drilled, completed and brought on production and the timing thereof; estimates of capital expenditures and capital allocation; the focus of, the objectives of and the anticipated results from the program; that Birchcliff has the ability to expand its drilling program and increase its natural gas production given the available capacity at the Pouce Coupe Gas Plant; the financial and operational flexibility of the 2019 Capital Program and that Birchcliff has the ability to expand its drilling program should commodity prices and/or economic conditions improve during 2019); Birchcliff's marketing and transportation arrangements (including that an additional tranche of service will become available later in 2019 and the aggregate level of firm service on the Canadian Mainline that will become available on November 1, 2019); Birchcliff's market diversification and hedging activities, risk management strategy and use of risk management techniques (including statements that Birchcliff maintains an ongoing commodity price risk management program; and that Birchcliff's current strategy is to hedge up to 50% of its estimated forecast annual average production using a combination of financial derivatives and physical sales contracts); the Corporation's estimated income tax pools and management's expectation that future taxable income will be available to utilize the accumulated tax pools; the Corporation's liquidity (including: the Corporation's financial flexibility; the sources of funding for the Corporation's activities and capital requirements; that the Corporation generally relies on its adjusted funds flow and available credit under its existing credit facilities to fund its capital requirements; statements that the Corporation may from time to time seek additional capital in the form of debt and/or equity or dispose of non-core properties to fund its ongoing capital expenditure programs and protect its statements of financial position; management's belief that its adjusted funds flow will be sufficient to fund the 2019 Capital Program; statements that Birchcliff may adjust its ongoing capital program, draw down on its Credit Facilities, seek additional equity financing and/or consider the potential sale of additional non-core assets to fund planned growth should commodity prices deteriorate materially; and the Corporation's expectation that counterparties will be able to meet their financial obligations); statements that management of debt levels continues to be a priority for Birchcliff; estimates of Birchcliff's material contractual obligations and commitments and decommissioning obligations; statements relating to the Corporation's normal course issuer bid (including potential purchases under the bid and the cancellation of common shares under the bid); and statements regarding future accounting pronouncements (including the timing for adoption by the Corporation and the impact on the Corporation's financial statements). Statements relating to reserves are forward-looking as they involve the implied assessment, based on certain estimates and assumptions, that the reserves exist in the quantities predicted or estimated and that the reserves can be profitably produced in the future.

With respect to the forward-looking statements contained in this MD&A, assumptions have been made regarding, among other things: prevailing and future commodity prices and differentials, currency exchange rates, interest rates, inflation rates, royalty rates and tax rates; the state of the economy, financial markets and the exploration, development and production business; the political environment in which Birchcliff operates; the regulatory framework regarding royalties, taxes and environmental laws; the Corporation's ability to comply with existing and future environmental, climate change and other laws; future cash flow, debt and dividend levels; future operating, transportation, marketing, G&A and other expenses; Birchcliff's ability to access capital and obtain financing on acceptable terms; the timing and amount of capital expenditures and the sources of funding for capital expenditures and other activities; the sufficiency of budgeted capital expenditures to carry out planned operations; the successful and timely implementation of capital projects; results of future operations; Birchcliff's ability to continue to develop its assets and obtain the anticipated benefits therefrom; the performance of existing and future wells, well production rates and well decline rates; success rates for future drilling; reserves and resource volumes and Birchcliff's ability to replace and expand reserves through acquisition, development or exploration; the impact

of competition on Birchcliff; the availability of, demand for and cost of labour, services and materials; the ability to obtain any necessary regulatory or other approvals in a timely manner; the satisfaction by third parties of their obligations to Birchcliff; the ability of Birchcliff to secure adequate processing and transportation for its products; Birchcliff's ability to market oil and gas; the availability of hedges on terms acceptable to Birchcliff; and natural gas market exposure. In addition to the foregoing assumptions, Birchcliff has made the following assumptions with respect to certain forward-looking statements contained in this MD&A:

- Birchcliff's 2019 guidance assumes the following commodity prices during 2019: an average WTI price of US\$56.00/bbl; an average WTI-MSW differential of \$10.00/bbl; an average AECO price of \$1.65/GJ; an average Dawn price of \$3.40/GJ; an average NYMEX HH price of US\$3.00/MMBtu; and an exchange rate (CDN\$ to US\$1) of 1.32.
- With respect to estimates of 2019 capital expenditures, statements that total F&D capital expenditures are expected to be significantly less than adjusted funds flow and Birchcliff's spending plans for 2019, such estimates, statements and plans are based on the following:
  - o Estimates of capital expenditures and any allocation thereof assume that the 2019 Capital Program will be carried out as currently contemplated.
  - o Statements that Birchcliff's total F&D capital expenditures are expected to be significantly less than adjusted funds flow assume that: the 2019 Capital Program will be carried out as currently contemplated; and the production targets, commodity mix, natural gas market exposure and commodity price assumptions set forth herein are met.
  - o Birchcliff makes acquisitions and dispositions in the ordinary course of business. Any acquisitions and dispositions completed could have an impact on Birchcliff's capital expenditures, production, adjusted funds flow, free funds flow, costs and total debt, which impact could be material.
  - o The amount and allocation of capital expenditures for exploration and development activities by area and the number and types of wells to be drilled is dependent upon results achieved and is subject to review and modification by management on an ongoing basis throughout the year. Actual spending may vary due to a variety of factors, including commodity prices, economic conditions, results of operations and costs of labour, services and materials. Birchcliff will monitor economic conditions and commodity prices and, where deemed prudent, will adjust its capital programs to respond to changes in commodity prices and other material changes in the assumptions underlying such programs.
- With respect to Birchcliff's production guidance for 2019, such guidance assumes that: the 2019 Capital Program will be carried out as currently contemplated; no unexpected outages occur in the infrastructure that Birchcliff relies on to produce its wells and that any transportation service curtailments or unplanned outages that occur will be short in duration or otherwise insignificant; the construction of new infrastructure meets timing and operational expectations; existing wells continue to meet production expectations; and future wells scheduled to come on production meet timing, production and capital expenditure expectations. Birchcliff's production guidance may be affected by acquisition and disposition activity and acquisitions and dispositions could occur that may impact expected production.
- With respect to Birchcliff's estimates of adjusted and free funds flow for 2019 and statements that Birchcliff expects to generate significant free funds flow during 2019, such estimates and statements assume that: the 2019 Capital Program will be carried out as currently contemplated and the level of capital spending for 2019 set forth herein will be achieved; and the production targets, commodity mix, natural gas market exposure and commodity price assumptions set forth herein are met. In addition, Birchcliff's estimate of adjusted funds flow takes into account the settlement of financial and commodity risk management contracts outstanding as at March 13, 2019.
- With respect to statements of future wells to be drilled and brought on production, the key assumptions are: the continuing validity of the geological and other technical interpretations performed by Birchcliff's technical staff, which indicate that commercially economic volumes can be recovered from Birchcliff's lands as a result of drilling future wells; and that commodity prices and general economic conditions will warrant proceeding with the drilling of such wells.
- With respect to estimates of reserves, the key assumption is the validity of the data used by Deloitte and McDaniel in their independent reserves evaluations.

Birchcliff's actual results, performance or achievements could differ materially from those anticipated in the forward-looking statements as a result of both known and unknown risks and uncertainties including, but not limited to: general economic, market and business conditions which will, among other things, impact the demand for and market prices of Birchcliff's products and Birchcliff's access to capital; volatility of crude oil and natural gas prices; fluctuations in currency and interest rates; stock market volatility; loss of market demand; an inability to access sufficient capital from internal and external sources; fluctuations in the costs of borrowing; operational risks and liabilities inherent in oil and natural gas operations; the occurrence

of unexpected events such as fires, equipment failures and other similar events affecting Birchcliff or other parties whose operations or assets directly or indirectly affect Birchcliff; uncertainty that development activities in connection with its assets will be economical; uncertainties associated with estimating oil and natural gas reserves and resources; the accuracy of oil and natural gas reserves estimates and estimated production levels; geological, technical, drilling, construction and processing problems; uncertainty of geological and technical data; horizontal drilling and completions techniques and the failure of drilling results to meet expectations for reserves or production; uncertainties related to Birchcliff's future potential drilling locations; potential delays or changes in plans with respect to exploration or development projects or capital expenditures, including delays in the completion of gas plants and other facilities; the accuracy of cost estimates and variances in Birchcliff's actual costs and economic returns from those anticipated; incorrect assessments of the value of acquisitions (including the Acquisition) and exploration and development programs; changes in tax laws, Crown royalty rates, environmental laws, carbon tax regimes, incentive programs and other regulations that affect the oil and natural gas industry and other actions by government authorities; an inability of the Corporation to comply with existing and future environmental, climate change and other laws; the cost of compliance with current and future environmental laws; political uncertainty and uncertainty associated with government policy changes; uncertainties and risks associated with pipeline restrictions and outages to third-party infrastructure that could cause disruptions to production; the lack of available pipeline capacity and an inability to secure adequate processing and transportation for Birchcliff's products; the inability to satisfy obligations under Birchcliff's firm marketing and transportation arrangements or other agreements; shortages in equipment and skilled personnel; the absence or loss of key employees; competition for, among other things, capital, acquisitions of reserves, undeveloped lands, equipment and skilled personnel; management of Birchcliff's growth; environmental risks, claims and liabilities; uncertainties associated with the outcome of litigation or other proceedings involving Birchcliff; unforeseen title defects; uncertainties associated with credit facilities and counterparty credit risk; non-performance or default by counterparties; risks associated with Birchcliff's risk management program and the risk that hedges on terms acceptable to Birchcliff may not be available; risks associated with the declaration and payment of dividends, including the discretion of Birchcliff's board of directors to declare dividends and change the Corporation's dividend policy; the failure to obtain any required approvals in a timely manner or at all; the failure to realize the anticipated benefits of acquisitions (including the Acquisition) and dispositions and the risk of unforeseen difficulties in integrating acquired assets into Birchcliff's operations; negative public perception of the oil and natural gas industry, including transportation, hydraulic fracturing and fossil fuels; the Corporation's reliance on hydraulic fracturing; the availability of insurance and the risk that certain losses may not be insured; and breaches or failure of information systems and security (including risks associated with cyber-attacks).

Readers are cautioned that the foregoing lists of factors are not exhaustive. Additional information on these and other risk factors that could affect results of operations, financial performance or financial results are included in Birchcliff's most recent Annual Information Form and in other reports filed with Canadian securities regulatory authorities.

This MD&A contains information that may constitute future-orientated financial information or financial outlook information (collectively, "FOFI") about Birchcliff's prospective results of operations including, without limitation, adjusted funds flow and free funds flow, all of which is subject to the same assumptions, risk factors, limitations and qualifications as set forth above. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise or inaccurate and, as such, undue reliance should not be placed on FOFI. Birchcliff's actual results, performance and achievements could differ materially from those expressed in, or implied by, the FOFI. Birchcliff has included the FOFI in order to provide readers with a more complete perspective on Birchcliff's future operations and Birchcliff's current expectations relating to its future performance. Such information may not be appropriate for other purposes and readers are cautioned that any FOFI contained herein should not be used for purposes other than those for which it has been disclosed herein. FOFI contained herein was made as of the date of this MD&A. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any FOFI statements, whether as a result of new information, future events or otherwise.

Management has included the above summary of assumptions and risks related to forward-looking statements provided in this MD&A in order to provide readers with a more complete perspective on Birchcliff's future operations. Readers are cautioned that this information may not be appropriate for other purposes.

The forward-looking statements contained in this MD&A are expressly qualified by the foregoing cautionary statements. The forward-looking statements contained herein are made as of the date of this MD&A. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

#### MANAGEMENT'S REPORT

To the Shareholders of Birchcliff Energy Ltd.

The annual financial statements of Birchcliff Energy Ltd. for the year ended December 31, 2018 were prepared by management within the acceptable limits of materiality and are in accordance with International Financial Reporting Standards.

Management is responsible for ensuring that the financial and operating information presented in the annual report is consistent with that shown in the financial statements.

The financial statements have been prepared by management in accordance with the accounting policies as described in the notes to the financial statements. Timely release of financial information sometimes necessitates the use of estimates when transactions affecting the current accounting period cannot be finalized until future periods. When necessary, such estimates are based on informed judgments made by management.

Management has designed and maintains an appropriate system of internal controls to provide reasonable assurance that all assets are safeguarded and financial records properly maintained to facilitate the preparation of financial statements for reporting purposes.

KPMG LLP, an independent firm of Chartered Professional Accountants appointed by shareholders, have conducted an examination of the corporate and accounting records in order to express their opinion on the financial statements.

The Audit Committee, consisting of non-management directors, has met with representatives of KPMG LLP and management in order to determine if management has fulfilled its responsibilities in the preparation of the financial statements. The Board of Directors has approved the financial statements on the recommendation of the Audit Committee.

Respectfully,

(signed) "Bruno P. Geremia"

#### Bruno P. Geremia

Vice-President and Chief Financial Officer

(signed) "A. Jeffery Tonken"

#### A. Jeffery Tonken

President and Chief Executive Officer

Calgary, Canada March 13, 2019

#### INDEPENDENT AUDITORS' REPORT

To the Shareholders of Birchcliff Energy Ltd.

#### **Opinion**

We have audited the financial statements of Birchcliff Energy Ltd. (the "Company"), which comprise:

- the statements of financial position as at December 31, 2018 and December 31, 2017
- · the statements of income (loss) and comprehensive income (loss) for the years then ended
- · the statements of changes in shareholders' equity for the years then ended
- · the statements of cash flows for the years then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2018 and December 31, 2017, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

#### **Basis for Opinion**

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Financial Statements" section of our auditors' report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.
- the information, other than the financial statements and the auditors' report thereon, included in a document entitled "2018 Annual Report".

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions and the information, other than the financial statements and the auditors' report thereon, included in a document entitled "2018 Annual Report" as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

The information, other than the financial statements and the auditors' report thereon, included in a document to be entitled "Annual Report" is expected to be made available to us after the date of this auditors' report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

#### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

#### Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

#### We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
  - The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of
  the audit and significant audit findings, including any significant deficiencies in internal control that we identify during
  our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements
  regarding independence, and communicate with them all relationships and other matters that may reasonably be thought
  to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this auditors' report is Timothy Arthur Richards.

(signed) "KPMG LLP"

Chartered Professional Accountants

Calgary, Canada March 13, 2019

## BIRCHCLIFF ENERGY LTD. STATEMENTS OF FINANCIAL POSITION

(Expressed in thousands of Canadian dollars)

As at December 31,	2018	2017
ASSETS		
Current assets:		
Cash	53	48
Accounts receivable (Note 18)	51,941	69,302
Prepaid expenses and deposits	3,386	2,622
Financial instruments (Note 18)	36,798	-
	92,178	71,972
Non-current assets:		
Deposit on acquisition (Note 22)	3,900	-
Petroleum and natural gas properties and equipment (Note 5)	2,633,460	2,545,131
Investment in securities (Note 6)	10,005	10,005
Financial instruments (Note 18)	23,377	-
	2,670,742	2,555,136
Total assets	2,762,920	2,627,108
LIABILITIES		
Current liabilities:		
Accounts payable and accrued liabilities	76,567	83,039
Financial instruments (Note 18)	-	4,046
	76,567	87,085
Non-current liabilities:		
Revolving term credit facilities (Note 7)	605,267	587,126
Decommissioning obligations (Note 8)	129,264	124,825
Deferred income taxes (Note 9)	119,553	82,694
Capital securities (Note 10)	49,535	49,225
Other liabilities (Note 14)	7,844	-
	911,463	843,870
Total liabilities	988,030	930,955
SHAREHOLDERS' EQUITY		
Share capital (Note 10)		
Common shares	1,478,260	1,477,750
Preferred shares (perpetual)	41,434	41,434
Contributed surplus	76,747	69,959
Retained earnings	178,449	107,010
	1,774,890	1,696,153
Total shareholders' equity and liabilities	2,762,920	2,627,108

Subsequent event (Note 22)

Commitments (Note 19)

The accompanying notes are an integral part of these financial statements.

Approved by the Board

(signed) "Dennis A. Dawson"

(signed) "A. Jeffery Tonken"

Dennis A. Dawson

A. Jeffery Tonken

Lead Independent Director

Director

### **BIRCHCLIFF ENERGY LTD.** STATEMENTS OF NET INCOME (LOSS) AND **COMPREHENSIVE INCOME (LOSS)**

(Expressed in thousands of Canadian dollars, except per share information)

Years Ended December 31,	2018	2017
REVENUE		
Petroleum and natural gas sales (Note 11)	621,421	556,942
Royalties	(38,306)	(28,727)
Net revenue from oil and natural gas sales	583,115	528,215
Other income (Note 6)	800	268
Realized gain (loss) on financial instruments (Note 18)	(15,771)	25,785
Unrealized gain (loss) on financial instruments (Note 18)	64,222	5,387
	632,366	559,655
EXPENSES		
Operating (Note 12)	99,104	110,486
Transportation and other	103,547	71,224
Administrative, net (Note 13)	32,299	30,563
Depletion and depreciation (Note 5)	208,868	185,666
Finance (Note 15)	32,711	32,939
Dividends on capital securities (Note 10)	3,500	3,500
Loss on sale of assets (Note 5)	10,192	186,143
	490,221	620,521
Net income (loss) before taxes	142,145	(60,866)
Income tax expense (recovery) (Note 9)	39,933	(13,886)
NET INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)	102,212	(46,980)
Net income (loss) per common share (Note 10)		
Basic	\$0.37	(\$0.19)
Diluted	\$0.37	(\$0.19)

The accompanying notes are an integral part of these financial statements.

# BIRCHCLIFF ENERGY LTD. STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Expressed in thousands of Canadian dollars)

Share Ca	Share Capital			
Common Shares	Preferred Shares	Contributed Surplus	Retained Earnings 1	Total
1,464,567	41,434	63,847	184,559	1,754,407
-	-	-	(26,522)	(26,522)
-	-	-	(4,047)	(4,047)
13,183	-	(3,833)	-	9,350
-	-	9,945	-	9,945
-	-	-	(46,980)	(46,980)
1,477,750	41,434	69,959	107,010	1,696,153
-	-	-	(26,586)	(26,586)
-	-	-	(4,187)	(4,187)
510	-	(126)	-	384
-	-	6,914	-	6,914
-	-		102,212	102,212
1,478,260	41,434	76,747	178,449	1,774,890
	Common Shares  1,464,567	Common Shares         Preferred Shares           1,464,567         41,434           -         -           13,183         -           -         -           1,477,750         41,434           -         -           510         -           -         -	Common Shares         Preferred Shares         Contributed Surplus           1,464,567         41,434         63,847           -         -         -           13,183         -         (3,833)           -         -         9,945           -         -         -           1,477,750         41,434         69,959           -         -         -           510         -         (126)           -         -         6,914           -         -         -           -         -         -	Common Shares         Preferred Shares         Contributed Surplus         Retained Earnings           1,464,567         41,434         63,847         184,559           -         -         (26,522)           -         -         (4,047)           13,183         -         (3,833)         -           -         -         (46,980)           1,477,750         41,434         69,959         107,010           -         -         (26,586)           -         -         (4,187)           510         -         (126)         -           -         6,914         -           -         -         102,212

The accompanying notes are an integral part of these financial statements.

### **BIRCHCLIFF ENERGY LTD. STATEMENTS OF CASH FLOWS**

(Expressed in thousands of Canadian dollars)

, ,		
Years ended December 31,	2018	2017
Cash provided by (used in):		
OPERATING		
Net income (loss) and comprehensive income (loss)	102,212	(46,980)
Adjustments for items not affecting operating cash:		
Unrealized (gain) on financial instruments	(64,222)	(5,387)
Depletion and depreciation	208,868	185,666
Other compensation (Note 13)	7,697	4,059
Finance	32,711	32,939
Loss on sale of assets	10,192	186,143
Income tax expense (recovery)	39,933	(13,886)
Interest paid	(27,969)	(28,374)
Dividends on capital securities	3,500	3,500
Decommissioning expenditures	(1,079)	(794)
Changes in non-cash working capital (Note 20)	12,591	(29,226)
	324,434	287,660
FINANCING		
Exercise of stock options	384	9,350
Financing fees paid on credit facilities	(950)	(2,375)
Dividends on common shares	(26,586)	(26,522)
Dividends on perpetual preferred shares	(4,187)	(4,047)
Dividends on capital securities	(3,500)	(3,500)
Net change in revolving term credit facilities	17,868	15,783
	(16,971)	(11,311)
INVESTING		
Petroleum and natural gas properties	(301,763)	(416,786)
Acquisition of petroleum and natural gas properties and equipment	(1,524)	(999)
Sale of petroleum and natural gas properties and equipment (Note 5)	5,269	131,657
Deposit on acquisition	(3,900)	-
Changes in non-cash working capital (Note 20)	(5,540)	9,780
	(307,458)	(276,348)
Net change in cash	5	1
Cash, beginning of year	48	47
CASH, END OF YEAR	53	48

The accompanying notes are an integral part of these financial statements.

# BIRCHCLIFF ENERGY LTD. NOTES TO THE FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

(Expressed In thousands Of Canadian Dollars, Unless Otherwise Stated)

#### 1. NATURE OF OPERATIONS

Birchcliff Energy Ltd. ("Birchcliff" or the "Corporation") is domiciled and incorporated in Alberta, Canada. Birchcliff is engaged in the exploration for and the development, production and acquisition of petroleum and natural gas reserves in Western Canada. The Corporation's financial year end is December 31. The address of the Corporation's registered office is Suite 1000, 600 – 3<sup>rd</sup> Avenue S.W., Calgary, Alberta, Canada T2P OG5. Birchcliff's common shares, Series A Preferred Shares and Series C Preferred Shares are listed for trading on the Toronto Stock Exchange under the symbols "BIR", "BIR.PR.A" and "BIR.PR.C", respectively.

These financial statements were approved and authorized for issuance by the Board of Directors on March 13, 2019.

#### 2. BASIS OF PREPARATION

These financial statements present Birchcliff's financial results of operations and financial position under International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") as at and for the years ended December 31, 2018 and December 31, 2017. The financial statements have been prepared in accordance with IFRS accounting policies and methods of computation as set forth in Note 3.

Operating, transportation and marketing expenses in profit or loss are presented as a combination of function and nature in conformity with industry practices. Depletion and depreciation, finance expenses, dividends on capital securities and gain or loss on sale of assets are presented in a separate line by their nature, while net administrative expenses are presented on a functional basis. Significant expenses such as salaries and benefits and other compensation are presented by their nature in the notes to the financial statements.

Birchcliff's financial statements are prepared on a historical cost basis, except for certain financial and non-financial assets and liabilities which have been measured at fair value. The Corporation's financial statements include the accounts of Birchcliff only and are expressed in Canadian dollars, unless otherwise stated. Birchcliff does not have any subsidiaries.

#### 3. SIGNIFICANT ACCOUNTING POLICIES

#### (a) Revenue Recognition

Revenue from the sale of crude oil, natural gas and natural gas liquids ("**NGLs**") is measured based on the consideration specified in contracts with marketers and other third parties. Birchcliff recognizes revenue when it transfers control of the product to the contract counterparty. In making this evaluation, management considers if Birchcliff has the ability to direct the use of, and obtain substantially all of the remaining benefits from the delivery of the product.

Birchcliff evaluates its arrangements with marketers and other third parties to determine if the Corporation acts as the principal or as an agent. In making this evaluation, the Corporation considers if it obtains control of the product delivered or services provided, which is indicated by the Corporation having the primary responsibility for the delivery of the product or rendering of the service, having the ability to establish prices or having inventory risk. If the Corporation acts in the capacity of an agent rather than as a principal in a transaction, then the revenue is recognized on a net-basis, only reflecting the fee, if any, realized by the Corporation from the transaction.

#### (b) Cash and Cash Equivalents

Cash may consist of cash on hand, deposits and term investments held with a financial institution, with an original maturity of three months or less. Restricted cash is not considered part of cash and cash equivalents.

#### (c) Jointly Owned Assets

Certain activities of the Corporation are conducted jointly with others where the participants have a direct ownership interest in the related assets. Accordingly, the accounts of Birchcliff reflect only its working interest share of revenues, expenses and capital expenditures related to these jointly owned assets. The relationship with jointly owned asset partners have been referred to as joint venture in the remainder of the financial statements as this is common terminology in the Canadian oil and natural gas industry.

#### (d) Exploration and Evaluation Assets

Costs incurred prior to obtaining the right to explore a mineral resource are recognized as an expense in the period incurred.

Intangible exploration and evaluation expenditures are initially capitalized and may include mineral license acquisitions, geological and geophysical evaluations, technical studies, exploration drilling and testing and other directly attributable administrative costs. Tangible assets acquired which are consumed in developing an intangible exploration asset are recorded as part of the cost of the exploration asset. These costs are accumulated in cost centres by exploration area pending the determination of technical feasibility and commercial viability.

The technical feasibility and commercial viability of extracting a mineral resource in an exploration area is considered to be determinable when economic quantities of proved reserves are determined to exist. A review of each exploration project by area is carried out at each reporting date to ascertain whether such reserves have been discovered. Upon determination of commercial proved reserves, associated exploration costs are transferred from exploration and evaluation to developing and producing petroleum and natural gas properties and equipment as reported on the statements of financial position. Exploration and evaluation assets are reviewed for impairment prior to any such transfer. Assets classified as exploration and evaluation are not subject to depletion and depreciation until they are reclassified to petroleum and natural gas properties and equipment.

#### (e) Petroleum and Natural Gas Properties and Equipment

#### (i) Recognition and measurement

Petroleum and natural gas properties and equipment are measured at cost less accumulated depletion and depreciation and accumulated impairment losses, if any.

Petroleum and natural gas properties and equipment consists of the purchase price and costs directly attributable to bringing the asset to the location and condition necessary for its intended use. Petroleum and natural gas assets include developing and producing interests such as mineral lease acquisitions, geological and geophysical costs, facility and production equipment and associated turnarounds, other directly attributable administrative costs and the initial estimate of the costs of dismantling and removing an asset and restoring the site on which it was located.

#### (ii) Subsequent costs

Costs incurred subsequent to the determination of technical feasibility and commercial viability are recognized as developing and producing petroleum and natural gas interests when they increase the future economic benefits embodied in the specific asset to which they relate. Such capitalized petroleum and natural gas interests generally represent costs incurred in developing proved and/or probable reserves and bringing in or enhancing production from such reserves, and are accumulated on an area basis. The cost of day-to-day servicing of an item of petroleum and natural gas properties and equipment is expensed in profit or loss as incurred.

Petroleum and natural gas properties and equipment are de-recognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising from the disposal of an asset, determined as the difference between the net disposal proceeds and the carrying amount of the asset, is recognized in profit or loss.

#### (iii) Asset exchanges

For exchanges or parts of exchanges that involve only exploration and evaluation assets, the exchange is accounted for at carrying value. Exchanges of development and production assets are measured at fair value, unless the exchange transaction lacks commercial substance or the fair value of the assets given up or the assets received cannot be reliably estimated. The cost of the acquired asset is measured at the fair value of the asset given up, unless the fair value of the asset received is more reliable. Where fair value is not used, the cost of the acquired asset is measured at the carrying amount of the asset given up. Any gain or loss on the de-recognition of the asset given up is recognized in profit and loss.

### (iv) Depletion and depreciation

The net carrying value of developing and producing petroleum and natural gas assets, net of estimated residual value, is depleted on an area basis using the unit of production method. This depletion calculation includes actual production in the period and total estimated proved plus probable reserves attributable to the assets being depreciated, taking into account total capitalized costs plus estimated future development costs necessary to bring those reserves into production. Relative volumes of reserves and production (before royalties) are converted at the energy equivalent conversion ratio of six thousand cubic feet of natural gas to one barrel of oil. These estimates are reviewed by the Corporation's independent reserves evaluator at least annually.

Capitalized plant turnaround costs are depreciated on a straight-line basis over the estimated time until the next turnaround is completed. Corporate assets, which include office furniture and equipment, software, computer equipment and leasehold improvements, are depreciated on a straight-line basis over the estimated useful lives of the assets, which are estimated to be four years.

When significant parts of property and equipment, including petroleum and natural gas interests, have different useful lives, they are accounted for as separate items (major components). Depreciation methods, useful lives and residual values for petroleum and natural gas properties and equipment are reviewed at each reporting date.

### (f) Provisions

Provisions are recognized when the Corporation has a present obligation (legal or constructive), as a result of a past event, if it is probable that the Corporation will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is significant).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Provisions are not recognized for future operating losses.

# (g) Decommissioning Obligations

The Corporation's activities give rise to dismantling, restoration and site disturbance remediation activities. Costs related to abandonment activities are estimated by management in consultation with the Corporation's independent reserves evaluators based on risk-adjusted current costs which take into consideration current technology in accordance with existing legislation and industry practices.

Decommissioning obligations are measured at the present value of the best estimate of expenditures required to settle the present obligations at the reporting date. When the best estimate of the liability is initially measured, the estimated cost, discounted using a pre-tax risk-free discount rate, is capitalized by increasing the carrying amount of the related petroleum and natural gas properties and equipment. The increase in the provision due to the passage of time, which is referred to as accretion, is recognized as a finance expense. Actual costs incurred upon settlement of the liability are charged against the obligation to the extent that the obligation was previously established. The carrying amount capitalized in petroleum and natural gas properties and equipment is depleted in accordance with the Corporation's depletion and depreciation policy. The Corporation reviews the obligation at each reporting date and revisions to the estimated timing of cash flows, discount rates and estimated costs result in an increase or decrease to the obligations and the related petroleum and natural gas properties and equipment. Any difference between the actual costs incurred upon settlement of the obligation and the recorded liability is recognized as a gain or loss in profit or loss.

### (h) Share-Based Payments

Equity-settled share-based awards granted by the Corporation include stock options and performance warrants granted to officers, directors and employees. The fair value determined at the grant date of an award is expensed on a graded basis over the vesting period of each respective tranche of an award with a corresponding increase to contributed surplus. In calculating the expense of share-based awards, the Corporation revises its estimate of the number of equity instruments expected to vest by applying an estimated forfeiture rate for each vesting tranche and subsequently revising this estimate throughout the vesting period, as necessary, with a final adjustment to reflect the actual number of awards that vest. Upon the exercise of

share-based awards, consideration paid together with the amount previously recognized in contributed surplus is recorded as an increase to share capital. In the event that vested share-based awards expire without being exercised, previously recognized compensation costs associated with such awards are not reversed. The expense related to share-based awards is included within administrative expenses in profit or loss.

The fair value of equity-settled share-based awards is measured using the Black-Scholes option-pricing model taking into account the terms and conditions upon which the awards were granted. Measurement inputs as at the grant date include: share price, exercise price, expected volatility (based on weighted average historical traded daily volatility), weighted average expected life of the instruments (based on historical experience and general option holder behaviour), expected dividends and the risk-free interest rate (based on government bonds) applicable to the term of the award.

A portion of share-based compensation expense directly attributable to the exploration and development of the Corporation's assets are capitalized.

## (i) Finance Income and Expenses

Finance expenses include interest expense on borrowings, accretion of the discount on decommissioning and post-employment benefit obligation, amortization of deferred charges and impairment losses (if any) recognized on financial assets. Interest and dividend income is recognized as it is earned and is presented as "other income" in profit and loss.

### (i) Borrowing Costs

Borrowing costs incurred for the acquisition, construction or production of qualifying assets are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Assets are considered to be qualifying assets when this period of time is substantial. The capitalization rate, used to determine the amount of borrowing costs to be capitalized, is the weighted average interest rate applicable to the Corporation's outstanding borrowings during the period. All other borrowing costs are charged to profit or loss using the effective interest method.

### (k) Financial Instruments

# (i) Non-derivative financial instruments

Non-derivative financial instruments are comprised of cash, accounts receivable, deposits, investment in securities, accounts payable and accrued liabilities, outstanding credit facilities and capital securities. Non-derivative financial instruments are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, non-derivative financial instruments are measured based on their classification. The Corporation has made the following classifications:

- · Cash, accounts receivable and deposits are classified as loans and receivables and are measured at amortized cost using the effective interest method. Typically, the fair value of these balances approximates their carrying value due to their short term to maturity.
- Investment in securities have been categorized as fair value through profit and loss which requires the securities to be fair valued at the end of each reporting period with any gains or losses recognized in other comprehensive income. In the event of disposal or impairment the cumulative fair value changes recognized in other comprehensive income are reclassified to profit or loss. Distributions declared are recorded to profit or loss and presented as an operating activity on the statement of cash flow.
- · Accounts payable and accrued liabilities and outstanding credit facilities are classified as other financial liabilities and are measured at amortized cost using the effective interest method. Due to the short-term nature of accounts payable and accrued liabilities, their carrying values approximate their fair values. The Corporation's outstanding credit facilities bear interest at a floating rate and accordingly the fair market value approximates the carrying value before the carrying value is reduced for any remaining unamortized costs. The interest costs and financing fees associated with the Corporation's credit facilities have been deferred and netted against the amounts drawn, and are being amortized to profit or loss using the effective interest method over the applicable term.
- · The proceeds from the issuance of Series C Preferred Shares, which are presented as "capital securities" on the statement of financial position, are classified as "other financial liabilities" under IFRS. The incremental costs directly attributable to the issuance of Series C Preferred Shares are initially recognized as a reduction to capital securities and subsequently amortized to profit and loss, using the effective interest rate method, as a finance expense. Dividend distributions on capital securities are recorded as an expense directly to profit and loss and presented as a financing activity on the statements of cash flows.

### (ii) Derivative financial instruments

Derivatives may be used by the Corporation to manage economic exposure to market risk relating to commodity prices, interest rates and foreign exchange. Birchcliff's policy is not to utilize derivative financial instruments for speculative purposes. The Corporation does not designate its financial derivative contracts as hedges, and as such does not apply hedge accounting. As a result, financial derivatives are classified at fair value through profit or loss and are recorded on the statements of financial position at fair value.

The fair value of commodity price risk management contracts is determined by discounting the difference between the contracted prices/rates and published forward price/rate curves as at the statement of financial position date. The fair value of options and costless collars is based on option models that use published information with respect to volatility, prices and interest rates.

The Corporation accounts for any forward physical delivery sales contracts, which were entered into and continue to be held for the purpose of receipt or delivery of non-financial items, in accordance with its expected purchase, sale or usage requirements as executory contracts. As such, these contracts are not considered to be derivative financial instruments and have not been recorded at fair value on the statements of financial position. Settlements on physical sales contracts are recognized in petroleum and natural gas sales in profit and loss.

### (iii) Share capital

Common shares and perpetual preferred shares are classified as equity. Incremental costs directly attributable to the issuance of shares are recognized as a reduction in share capital, net of any tax effects.

# (l) Impairment

# (i) Impairment of financial assets

Impairment of financial assets is determined by measuring the assets' expected credit loss ("ECL"). Birchcliff's financial assets are not considered to have a significant financing component and a lifetime ECL is measured at the date of initial recognition of the financial asset. ECL allowances have not been recognized for cash and cash equivalents due to the virtual certainty associated with their collection. The ECL pertaining to accounts receivable, financial instruments and investment in securities is assessed at initial recognition and this provision is re-assessed at each reporting date. ECLs are a probability-weighted estimate of all possible default events related to the financial asset (over the lifetime or within 12 months after the reporting period, as applicable) and are measured as the difference between the present value of the cash flows due to Birchcliff and the cash flows the Corporation expects to receive, including cash flows expected from collateral and other credit enhancements that are a part of contractual terms. In making an assessment as to whether financial assets are credit-impaired, the Corporation considers historically realized bad debts, evidence of a debtor's present financial condition and whether a debtor has breached certain contracts, the probability that a debtor will enter bankruptcy or other financial reorganization, changes in economic conditions that correlate to increased levels of default, the number of days a debtor is past due in making a contractual payment, and the term to maturity of the specified receivable. The carrying amounts of financial assets are reduced by the amount of the ECL through an allowance account and losses are recognized within general and administrative expense in profit and loss.

Based on contractual terms and conditions, the Corporation considers its financial assets to be in default when the counterparty fails to make contractual payments as required. Once the Corporation has pursued collection activities and it has been determined that the incremental cost of pursuing collection outweighs the benefits, Birchcliff derecognizes the gross carrying amount of the financial asset and the associated allowance from the statement of financial position.

### (ii) Impairment of non-financial assets

The Corporation's petroleum and natural gas properties and equipment are grouped into Cash Generating Units ("**CGUs**") for the purpose of assessing impairment. A CGU represents the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets.

CGUs are reviewed at each reporting date for indicators of potential impairment. Such indicators may include, but are not limited to, changes in the Corporation's business plan, deterioration in commodity prices or a significant downward revision of estimated recoverable reserves. If indicators of asset impairment exist, an impairment test is performed by comparing a CGU's carrying value to its recoverable amount. A CGU's recoverable amount is the greater of its fair value less cost to sell and its current value in use. The calculation of the recoverable amount is sensitive to the assumptions regarding production volumes, discount rates and commodity prices. Any excess of carrying value over recoverable amount is recognized as impairment loss in profit or loss.

In assessing the value in use, the estimated future cash flows from proved and probable reserves are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money. Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties. The petroleum and natural gas future prices used in the impairment test are based on period-end commodity price forecasts estimated by the Corporation's independent reserves evaluator and are adjusted for petroleum and natural gas differentials and transportation and marketing costs specific to the Corporation.

Where circumstances change such that an impairment no longer exists or is less than the amount previously recognized, the carrying amount of the CGU is increased to the revised estimate of its recoverable amount as long as the revised estimate does not exceed the carrying amount that would have been determined, net of depletion and depreciation, had no impairment loss been recognized for the CGU in prior periods. A reversal of an impairment loss is recognized immediately through profit or loss.

Exploration and evaluation assets are assessed for impairment if: (i) sufficient data exists to determine technical feasibility and commercial viability of an exploration area, or (ii) facts and circumstances suggest that the carrying amount exceeds the recoverable amount. For purposes of impairment testing, exploration and evaluation assets are allocated to CGUs.

### (m) Income Taxes

Birchcliff is a corporation as defined under the *Income Tax Act* (Canada) and is subject to Canadian Federal and provincial taxes. Birchcliff is subject to provincial taxes in Alberta as the Corporation operates in this jurisdiction. The Corporation's income tax expenses include current and/or deferred tax. Income tax expense is recognized through profit or loss except to the extent that it relates to items recognized directly in equity, in which case the related income taxes are also recognized in equity.

Current tax is the expected tax payable on taxable income and Part VI.I dividend tax payable on taxable preferred shares for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable income will be available against which those deductible temporary differences can be utilized. The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is expected to be settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which Birchcliff expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

### (n) Flow-Through Shares

The Corporation may issue flow-through shares to finance a portion of its capital expenditure program. Pursuant to the terms of the flow-through share agreements, the tax deductions associated with the expenditures are renounced to the subscribers. The difference between the value ascribed to flow-through shares issued and the value that would have been received for common shares at the date of announcements of the flow-through shares is initially recognized as a liability on the statements of financial position. When the expenditures are incurred, the liability is drawn down, a deferred tax liability is recorded equal to the estimated amount of deferred income tax payable by the Corporation as a result of the renunciation and the difference is recognized as a deferred tax expense.

# (o) Per Common Share

The Corporation calculates per common share amounts using net income available to Birchcliff's shareholders, reduced for perpetual preferred share dividends and divided by the weighted average number of common shares outstanding. Basic per share information is computed using the weighted average number of basic common shares outstanding during the period. Diluted per share information is calculated using the treasury stock method, which assumes that any proceeds from the exercise of "in-the-money" stock options, performance warrants or warrants (the "Securities"), plus the unamortized stock-based compensation expense amounts, would be used to purchase common shares at the average market price during

the period. No adjustment to diluted earnings per share is made if the result of these calculations is anti-dilutive. The average market value of the Corporation's shares for the purpose of calculating the dilutive effect is based on average quoted market prices for the time that the Securities were outstanding during the period.

## (p) Business Combinations

The purchase method of accounting is used to account for acquisitions of businesses and assets that meet the definition of a business under IFRS. The cost of an acquisition is measured as the fair value of the assets given and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. If the consideration given up is less than the fair value of the net assets received, the difference is recognized immediately in the income statement. If the consideration is greater than the fair value of the net assets received, the difference is recognized as goodwill on the statement of financial position. Acquisition costs incurred are expensed.

# (q) Post-Employment Benefit Obligation

Birchcliff's post-employment benefits are defined benefit obligations under IFRS. The cost of the post-employment benefit obligation is determined using the projected unit credit method. The obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that have terms to maturity approximating the terms of the related liability. Post-employment benefit obligation is presented on the statements of financial position as other liabilities. Past service cost is the change in the present value of the obligation and can arise from the introduction, amendment or curtailment of a plan. Current service cost is the increase in the present value of the obligation resulting from the service provided by an employee in the current period. Current and past service costs are recognized as post-employment benefit expenses of the Corporation when incurred and presented in profit and loss as an administrative expense. The unwinding of the present value of the post-employment benefit obligation is recorded as accretion (interest) expense and is presented in profit and loss as a finance expense.

Remeasurements of the post-employment benefit obligation will result in gains and losses and will be included in other comprehensive income. Remeasurements result from increases or decreases in the present value of the obligation as a result of changes in assumptions including unexpectedly high or low rates of employee turnover, early retirement, change in expected future salaries and benefits and revision to the discount rate. Settlements will be recorded as a reduction to the obligation in the period incurred. Any difference between the actual costs incurred upon settlement of the obligation and the recorded liability is recognized as a gain or loss in profit or loss.

# (r) Critical Accounting Judgments and Key Sources of Estimation Uncertainty

The timely preparation of the financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities and income and expenses. Accordingly, actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

# Critical judgments in applying accounting policies:

The following are the critical judgments that management has made in the process of applying the Corporation's accounting policies and that have the most significant effect on the amounts recognized in these financial statements:

# (i) Identification of cash-generating units

Birchcliff's assets are required to be aggregated into CGUs for the purpose of calculating impairment based on their ability to generate largely independent cash inflows. CGUs have been determined based on similar geological structure, shared infrastructure, geographical proximity, operating structure, commodity type and similar exposures to market risks. By their nature, these assumptions are subject to management's judgment and may impact the carrying value of the Corporation's assets in future periods.

### (ii) Identification of impairment indicators

IFRS requires Birchcliff to assess, at each reporting date, whether there are any indicators that its petroleum and natural gas assets may be impaired. Birchcliff is required to consider information from both external sources (such as negative downturn in commodity prices, significant adverse changes in the technological, market, economic or legal environment in which the entity operates) and internal sources (such as downward revisions in reserves, significant adverse effect on the financial and operational performance of a CGU, evidence of obsolescence or physical damage to the asset). By their nature, these assumptions are subject to management's judgment.

### (iii) Tax uncertainties

IFRS requires Birchcliff, at each reporting date, to make certain judgments on uncertain tax positions by relevant tax authorities. Judgments include determining whether the Corporation will "more likely than not" be successful in defending its tax positions by considering information from relevant tax interpretations and tax laws in Canada. As such, this recognition threshold is subject to management's judgment and may impact the carrying value of the Corporation's deferred tax assets and liabilities at the end of the reporting period.

# Key sources of estimation uncertainty:

The following are the key assumptions concerning the sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing adjustments to the carrying amounts of assets and liabilities within the next financial year:

## (i) Reserves

Reported recoverable quantities of proved and probable reserves requires estimation regarding production profile, commodity prices, exchange rates, remediation costs, timing and amount of future development costs, and production, transportation and marketing costs for future cash flows. It also requires interpretation of geological and geophysical models in order to make an assessment of the size, shape, depth and quality of reservoirs, and their anticipated recoveries. The economical, geological and technical factors used to estimate reserves may change from period to period. Changes in reported reserves can impact the carrying values of the Corporation's petroleum and natural gas properties and equipment, the calculation of depletion and depreciation, the provision for decommissioning obligations, and the recognition of deferred tax assets due to changes in expected future cash flows. The recoverable quantities of reserves and estimated cash flows from Birchcliff's petroleum and natural gas interests are independently evaluated by reserve engineers at least annually.

The Corporation's petroleum and natural gas reserves represent the estimated quantities of petroleum, natural gas and NGLs which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be economically recoverable in future years from known reservoirs and which are considered commercially producible. Such reserves may be considered commercially producible if management has the intention of developing and producing them and such intention is based upon (i) a reasonable assessment of the future economics of such production; (ii) a reasonable expectation that there is a market for all or substantially all the expected petroleum and natural gas production; and (iii) evidence that the necessary production, transmission and transportation facilities are available or can be made available. Reserves may only be considered proved and probable if producibility is supported by either production or conclusive formation tests. Birchcliff's oil and gas reserves are determined in accordance with the standards contained in National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities and the Canadian Oil and Gas Evaluation Handbook.

# (ii) Share-based payments

All equity-settled, share-based awards issued by the Corporation are fair valued using the Black-Scholes option-pricing model. In assessing the fair value of equity-based compensation, estimates have to be made regarding the expected volatility in share price, option life, dividend yield, risk-free rate and estimated forfeitures at the initial grant date.

# (iii) Decommissioning obligations

The Corporation estimates future remediation costs of production facilities, wells and pipelines at different stages of development and construction of assets or facilities. In most instances, removal of assets occurs many years into the future. This requires an estimate regarding abandonment date, future environmental and regulatory legislation, the extent of reclamation activities, the engineering methodology for estimating cost, future removal technologies in determining the removal cost and liability-specific discount rates to determine the present value of these cash flows.

# (iv) Post-employment benefit obligation

The Corporation estimates the post-employment benefit obligation at the end of each reporting period. In most instances, the obligation occurs many years into the future. The Corporation uses estimates related to the initial measurement of the obligation for eligible employees including expected age of employee retirement, employee turnover, probability of early retirement, discount rate and inflation rate on salary and benefits. From time to time, these estimates may change causing the obligation recorded by the Corporation to change.

# (v) Impairment of non-financial assets

For the purposes of determining the extent of any impairment or its reversal, estimates must be made regarding future cash flows taking into account key assumptions including future petroleum and natural gas prices, expected forecasted production volumes and anticipated recoverable quantities of proved and probable reserves. These assumptions are

subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates. Changes in the aforementioned assumptions could affect the carrying amount of the Corporation's assets, and impairment charges and reversal will affect profit or loss.

### (vi) Income taxes

Birchcliff files corporate income tax, goods and service tax and other tax returns with various provincial and federal taxation authorities in Canada. There can be differing interpretations of applicable tax laws and regulations. The resolution of these tax positions through negotiations or litigation with tax authorities can take several years to complete. The Corporation does not anticipate that there will be any material impact upon the results of its operations, financial position or liquidity.

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods.

Deferred tax assets (if any) are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse and a judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. Estimates of future taxable income are based on forecasted cash flows from operations. To the extent that any interpretation of tax law is challenged by the tax authorities or future cash flows and taxable income differ significantly from estimates, the ability of Birchcliff to realize the deferred tax assets recorded at the statement of financial position date could be impacted.

# 4. CHANGES IN ACCOUNTING POLICIES

# **Accounting Pronouncements Adopted**

On January 1, 2018, Birchcliff adopted IFRS 15: Revenue from Contracts with Customers ("**IFRS 15**") using the cumulative effect method. Under this method, the comparative periods have not been restated and the cumulative effect on net earnings and the change in opening retained earnings as a result of the application of IFRS 15 to revenue contracts in progress at January 1, 2018 is nil. The Corporation reviewed its revenue streams and major contracts with customers using the IFRS 15 five step model and there were no changes to net earnings or timing of petroleum and natural gas sales recognized. It should be noted, however, that certain profit and loss line item reclassifications were made.

On January 1, 2018, Birchcliff adopted IFRS 9: Financial Instruments ("IFRS 9") to replace IAS 39: Financial Instruments: Recognition and Measurement ("IAS 39"). IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, fair value through other comprehensive income and fair value through profit or loss. The previous IAS 39 categories of held to maturity, loans and receivables and available for sale are eliminated. IFRS 9 bases the classification of financial assets on the contractual cash flow characteristics and the Corporation's business model for managing the financial asset. Additionally, embedded derivatives are not separated if the host contract is a financial asset within the scope of IFRS 9. Instead, the entire hybrid contract is assessed for classification and measurement. IFRS 9 largely retains the existing requirements in IAS 39 for the classification of financial liabilities. The adoption of IFRS 9 has resulted in changes to the Corporation's investment in securities which, upon adoption of IFRS 9, are measured at fair value through profit or loss. Under the previous IAS 39 standard, Birchcliff's investment in securities were categorized as available for sale which required the securities to be fair valued with any gains or losses recognized in other comprehensive income. There were no changes to the treatment of distributions declared on the investment in securities which are recorded to profit or loss. The adoption of IFRS 9 had no impact on the amounts recorded in the financial statements as at January 1, 2018 or on the comparative periods.

### **Future Accounting Pronouncements**

In January 2016, the IASB issued IFRS 16: Leases ("IFRS 16") which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, i.e. the customer ("lessee") and the supplier ("lessor") and replaces the previous lease standards, IAS 17: Leases and IFRIC 4: Determining whether an Arrangement contains a Lease. IFRS 16 requires the recognition of a right-of-use asset and lease liability on the statement of financial position for most leases, where Birchcliff is acting as a lessee. For lessees applying IFRS 16, the dual classification model of leases as either operating leases or finance leases no longer exists, effectively treating all leases as finance leases. IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. The standard is required to be adopted either retrospectively or using a modified retrospective approach. The Corporation will adopt IFRS 16 using the modified retrospective approach, which does not require restatement of prior period financial information and applies the standard prospectively.

IFRS 16 is expected to increase Birchcliff's total assets and liabilities at January 1, 2019. Future net income will be impacted as the finance charges and depreciation charges associated with lease contracts are not expected to correspond in any one period to the amount of related cash flows. Cash flows associated with lease repayments will be allocated between operating and financing activities based on their interest repayment and principal repayment portions. The actual impact of applying IFRS 16 on the financial statements in the period of initial application will depend on multiple factors and conditions, including but not limited to, the Corporation's borrowing rate at January 1, 2019, the composition of the Corporation's lease portfolio at that date, the Corporation's latest assessment of whether it will exercise any lease renewal options, and the extent to which the Corporation chooses to use practical expedients and recognition exemptions. On initial adoption, Birchcliff will have the following optional practical expedients available under IFRS 16:

- Certain short-term leases and leases of low value assets that have been identified for recognition at January 1, 2019
  can be excluded from recognition on the statements of financial position. Payments for these leases will be
  disclosed in the notes to the financial statements.
- Certain classes of lease arrangements that transfer a separate good or service under the same contract that have been identified for recognition at January 1, 2019 can be recognized as a single lease component rather than separating between their lease and non-lease components.
- · For leases having similar characteristics, a portfolio approach can be used by applying a single discount rate.

The Corporation continues to review all existing contracts in detail. The full extent of the impact has not yet been determined. At minimum, Birchcliff expects to record a right-of-use asset and corresponding lease liability on the statement of financial position for the Corporation's head office lease. The Corporation will disclose the financial impact of IFRS 16 in its unaudited financial statements for the first quarter 2019 and continue to develop and implement changes to its internal controls, information systems and business and accounting processes throughout 2019.

### 5. PETROLEUM AND NATURAL GAS PROPERTIES AND EQUIPMENT

The continuity for petroleum and natural gas ("P&NG") properties and equipment are as follows:

(\$000s)	Exploration & Evaluation Assets <sup>(5)</sup>	Developed & Producing Assets	Corporate Assets	Total
Cost:				
As at December 31, 2016	53	3,376,236	13,950	3,390,239
Additions	28	455,894	1,774	457,696
Acquisitions	-	999	-	999
Dispositions <sup>(1)</sup>	-	(542,027)	-	(542,027)
As at December 31, 2017	81	3,291,102	15,724	3,306,907
Additions	31	311,887	2,013	313,931
Acquisitions	-	2,173	-	2,173
Dispositions <sup>(2)</sup>	-	(55,636)	-	(55,636)
As at December 31, 2018 <sup>(3)</sup>	112	3,549,526	17,737	3,567,375
Accumulated depletion and depreciation:				
As at December 31, 2016	-	(735,221)	(9,181)	(744,402)
Depletion and depreciation expense	-	(183,831)	(1,835)	(185,666)
Dispositions <sup>(1)</sup>	-	168,292	-	168,292
As at December 31, 2017	-	(750,760)	(11,016)	(761,776)
Depletion and depreciation expense	-	(206,892)	(1,976)	(208,868)
Dispositions <sup>(2)</sup>	-	36,729	-	36,729
As at December 31, 2018	-	(920,923)	(12,992)	(933,915)
Net book value:				
As at December 31, 2017 <sup>(4)</sup>	81	2,540,342	4,708	2,545,131
As at December 31, 2018 <sup>(4)</sup>	112	2,628,603	4,745	2,633,460

<sup>(1)</sup> Consists largely of two asset dispositions, the Worsley Charlie Lake Light Oil Pool Disposition (the "Worsley Disposition") and the Progress Area Disposition (the "Progress Disposition"). The Worsley Disposition had a net book value of \$321.1 million for total consideration of \$100 million, before closing adjustments and other costs, consisting of: (i) cash consideration of \$90 million; and (ii) securities of affiliates of the purchaser with a total value of \$100 million (Note 6). The Worsley Disposition closed on August 31, 2017. The Progress Disposition had a net book value of \$18.7 million for cash consideration of \$31.7 million, before closing adjustments and other costs. The Progress Disposition closed on October 2, 2017.

# **6. INVESTMENT IN SECURITIES**

The Corporation received on August 31, 2017 (the "Issuance Date") securities consisting of 4,500,000 common A units (the "Common A LP Units") in a limited partnership (the "Limited Partnership") affiliated with the purchaser and 10,000,000 preferred units (the "Preferred Trust Units") in a trust (the "Trust") affiliated with the purchaser (collectively, the "Securities") at a combined value of \$10 million. The Securities acquired are not publicly listed and do not constitute significant investments of the entities.

The Securities have limited voting rights and, in the case of the Common A LP Units, no redemption rights and limited participation rights in the event of the liquidation, dissolution or wind-up of the Limited Partnership. Holders of the Securities are entitled to, if and when declared, non-cumulative, quarterly dividend distributions for each three month period ending March 31, June 30, September 30 and December 31. The Preferred Trust Units are redeemable on demand by Birchcliff. For each Preferred Trust Unit redeemed by Birchcliff within the first five years of the Issuance Date, the redemption price

<sup>(2)</sup> Consists mainly of two asset dispositions with a combined net book value of \$18.9 million for total consideration of \$5.3 million.

<sup>(3)</sup> The Corporation's P&NG properties and equipment were pledged as security for its credit facilities. Although the Corporation believes that it has title to its P&NG properties, it cannot control or completely protect itself against the risk of title disputes and challenges. There were no borrowing costs capitalized to P&NG properties and equipment.

<sup>(4)</sup> Birchcliff performed an impairment assessment of its P&NG assets on a CGU basis and determined there were impairment indicators present at the end of each reporting period. The Corporation performed an asset impairment test to ensure that the carrying value of its P&NG properties and equipment was recoverable. Birchcliff's P&NG properties and equipment were not impaired at December 31, 2018 and December 31, 2017.

<sup>(5)</sup> E&E assets consist of the Corporation's exploration activities which are pending the determination of economic quantities of commercially producible proved reserves. Additions represent the Corporation's net share of costs incurred on E&E activities during the period. A review of each exploration project by area is carried out at each reporting date to ascertain whether economical quantities of proved reserves have been discovered and whether such costs should be transferred to depletable petroleum and natural gas components. There were no exploration costs reclassified from the E&E category to petroleum and natural gas properties and equipment category during 2018 and 2017.

will be equal to the lesser of (i) 90% of the fair market value of each redeemed Preferred Trust Unit at the date the redemption and (ii) \$0.90 per redeemed Preferred Trust Unit. For each Preferred Trust Unit redeemed on a date that is later than five years from the Issuance Date, being after August 31, 2022 (the "Fifth Anniversary Date"), the redemption price will be equal to the lesser of (i) the fair market value of each redeemed Preferred Trust Unit at the date the redemption and (ii) \$1.00 per redeemed Preferred Trust Unit.

Payment of the redemption price by the Trust is limited to a maximum cash amount of \$10,000 per month (or a greater amount, if the trustees of the Trust so decide) and any portion of the redemption price in excess of such cash amount (the "Balance") will be repaid through the Trust's issuance of a redemption note or an *in specie* distribution of the Trust's property. If the Preferred Trust Units are redeemed by Birchcliff before the Fifth Anniversary Date, the Balance is paid by the Trust through the issuance of redemption notes due and payable prior to the sixth anniversary of the Issuance Date, being August 31, 2023. If the Preferred Trust Units are redeemed by Birchcliff after the Fifth Anniversary Date, the Balance is paid by the Trust through the issuance of redemption notes due and payable within less than a year of the date the redemption notes are issued.

The Securities had a fair value of \$10 million at December 31, 2018 and December 31, 2017. During 2018, Birchcliff recorded \$0.8 million (2017 - \$0.3 million) in dividend distributions in respect of the Securities that are included in other income.

### 7. REVOLVING TERM CREDIT FACILITIES

The components of the Corporation's revolving credit facilities include:

As at December 31, (\$000s)	2018	2017
Syndicated credit facility	586,000	578,000
Working capital facility	22,821	16,823
Drawn revolving term credit facilities	608,821	594,823
Unamortized prepaid interest on bankers' acceptances	(1,021)	(4,891)
Unamortized deferred financing fees	(2,533)	(2,806)
Revolving term credit facilities	605,267	587,126

At December 31, 2018, the Corporation's credit facilities consisted of extendible revolving credit facilities in the aggregate principal amount of \$950 million with maturity dates of May 11, 2021 (the "Credit Facilities"). At December 31, 2018, the Credit Facilities were comprised of: (i) an extendible revolving syndicated term credit facility (the "Syndicated Credit Facility") of \$850 million; and (ii) an extendible revolving working capital facility (the "Working Capital Facility") of \$100 million.

Birchcliff has outstanding \$17.2 million in letters of credit at December 31, 2018 (see Note 17). The letters of credit reduces the amount available under the Working Capital Facility from \$100 million to approximately \$82.8 million.

The Credit Facilities allow for prime rate loans, LIBOR loans, U.S. base rate loans, bankers' acceptances and, in the case of the Working Capital Facility only, letters of credit. The interest rates applicable to the drawn loans are based on a pricing margin grid and will change as a result of the ratio of outstanding indebtedness to EBITDA as calculated in accordance with the agreement governing the Credit Facilities. EBITDA is defined as earnings before interest and non-cash items including (if any) income taxes, other compensation, gains and losses on sale of assets, unrealized gains and losses on financial instruments and depletion, depreciation and amortization.

The Credit Facilities are subject to a semi-annual review of the borrowing base limit by Birchcliff's syndicate of lenders, which limit is directly impacted by the value of Birchcliff's oil and natural gas reserves. In addition, pursuant to the terms of the credit agreement governing the Credit Facilities, the borrowing base of the Credit Facilities may be adjusted in certain other circumstances. Upon any change in or redetermination of the borrowing base limit which results in a borrowing base shortfall, Birchcliff must eliminate the borrowing base shortfall amount. Birchcliff may each year, at its option, request an extension to the maturity date of the Syndicated Credit Facility and the Working Capital Facility, or either of them, for an additional period of up to three years from May 11 of the year in which the extension request is made. In connection with the most recently completed semi-annual review of the Corporation's borrowing base limit under its credit facilities, the Corporation and the lenders agreed to the borrowing base remaining unchanged at \$950 million.

The Credit Facilities are secured by a fixed and floating charge debenture and pledge charging substantially all of the Corporation's assets. No fixed charges have been granted pursuant to such debenture. The Credit Facilities do not contain any financial maintenance covenants.

### 8. DECOMMISSIONING OBLIGATIONS

The Corporation's decommissioning obligations result from its net ownership interests in petroleum and natural gas assets, including well sites, gathering systems and processing facilities. The Corporation estimates the total undiscounted (inflated) amount of cash flow required to settle its decommissioning obligations is approximately \$272.1 million at December 31, 2018 (December 31, 2017 – \$269.7 million) and is expected to be incurred up until 2069.

A reconciliation of the decommissioning obligations is set forth below:

<b>As at December 31,</b> (\$000s)	2018	2017
Balance, beginning	124,825	133,470
Obligations incurred	3,930	8,468
Obligations acquired	649	626
Obligations divested	(3,446)	(45,902)
Changes in estimated future cash flows <sup>(2)</sup>	1,177	25,902
Accretion expense	3,208	3,055
Actual expenditures	(1,079)	(794)
Balance, ending <sup>(1)</sup>	129,264	124,825

<sup>(1)</sup> Birchcliff applied a risk-free rate of 2.36% and an inflation rate of 2.0% to calculate the discounted fair value of its decommissioning liabilities as at December 31, 2018 and December 31, 2017.

# 9. INCOME TAXES

Included in income tax expense is a deferred income tax expense of \$36.9 million in 2018 and deferred income tax recovery of \$16.9 million in 2017. Part VI.I dividend tax totalling \$3.1 million in 2018 (2017 - \$3.0 million) resulting from preferred share dividends paid during the period. For the purposes of determining the current and deferred income tax, the Corporation applied a combined Canadian federal and provincial income tax rate of 27% in 2018 (2017 - 27%).

The components of income tax expense (recovery) are set forth below:

Years ended December 31, (\$000s)	2018	2017
Net income (loss) before taxes	142,145	(60,866)
Computed expected income tax expense (recovery)	38,379	(16,434)
Decrease (increase) in taxes resulting from:		
Non-deductible stock-based compensation	2,315	1,275
Non-deductible dividends on capital securities	945	945
Non-deductible expenses	155	161
Non-capital losses and investment tax credits	(1,861)	167
Balance, ending	39,933	(13,886)

<sup>(2)</sup> Changes in estimated future cash flows largely due to the revision in abandonment and reclamation cost and date estimates for Birchcliff's oil and natural gas wells and facilities

# The components of net deferred income tax liabilities are set forth below:

As at December 31, (\$000s)	2018	2017
Deferred income tax liabilities:		
P&NG properties and equipment and E&E assets	322,526	286,604
Deferred financing fees	684	758
Capital securities	125	209
Risk management contracts	16,247	-
Deferred income tax assets:		
Decommissioning obligations	(34,901)	(33,703)
Risk management contracts	-	(1,092)
Share issue costs	(3,599)	(5,133)
Non-capital losses and investment tax credits	(181,529)	(164,949)
Deferred income tax liabilities	119,553	82,694

# A continuity of the net deferred income tax liabilities is set forth below:

(\$000s)	Balance Jan. 1, 2018	Recognized in Profit or Loss	Balance Dec. 31, 2018
P&NG and E&E assets	286,604	35,922	322,526
Deferred financing fees	758	(74)	684
Capital securities	209	(84)	125
Decommissioning obligations	(33,703)	(1,198)	(34,901)
Risk management contracts	(1,092)	17,339	16,247
Share issue costs	(5,133)	1,534	(3,599)
Non-capital losses and investment tax credits	(164,949)	(16,580)	(181,529)
	82,694	36,859	119,553

(\$000s)	Balance Jan. 1, 2017	Recogniz d in Profit or Loss	Balance Dec. 31, 2017
P&NG and E&E assets	309,741	(23,137)	286,604
Deferred financing fees	441	317	758
Capital securities	293	(84)	209
Decommissioning obligations	(36,037)	2,334	(33,703)
Risk management contracts	(2,547)	1,455	(1,092)
Share issue costs	(6,041)	908	(5,133)
Non-capital losses and investment tax credits	(166,251)	1,302	(164,949)
	99,599	(16,905)	82,694

As at December 31, 2018, the Corporation had approximately \$2.1 billion (2017 – \$2.1 billion) in tax pools available for deduction against future taxable income. Included in this tax basis are estimated non-capital loss carry forwards of approximately \$641 million that expire between 2028 and 2038. Discretionary tax deductions, including Canadian Development Expenses, Canadian Oil and Gas Property Expense and Capital Cost Allowance, were maximized in the respective tax years in order to reduce Birchcliff's accounting profits into a loss position for tax purposes.

### 10. CAPITAL STOCK

# **Share Capital**

# (a) Authorized:

Unlimited number of voting common shares, with no par value.

Unlimited number of preferred shares, with no par value.

The preferred shares may be issued in one or more series and the directors are authorized to fix the number of shares in each series and to determine the designation, rights, privileges, restrictions and conditions attached to the shares of each series.

### (b) Number of common shares and perpetual preferred shares issued:

The following table sets forth the number of common shares and perpetual preferred shares issued:

<b>As at December 31,</b> (000's)	2018	2017
Common Shares:		
Outstanding at beginning of period	265,797	264,042
Exercise of stock options	144	1,755
Outstanding at end of period <sup>(1)</sup>	265,911	265,797
Series A Preferred Shares (perpetual) <sup>(2)</sup> :		
Outstanding at beginning of period	2,000	2,000
Outstanding at end of period	2,000	2,000

<sup>(1)</sup> On November 20, 2018, Birchcliff announced that the TSX had accepted the Corporation's notice of intention to make a normal course issuer bid (the "NCIB"). Pursuant to the NCIB, Birchcliff may purchase up to 18,767,520 of its outstanding common shares. The total number of common shares that Birchcliff is permitted to purchase is subject to a daily purchase limit of 320,520 common shares; provided, however, that the Corporation may make one block purchase per calendar week which exceeds the daily purchase restriction. The NCIB commenced on November 23, 2018 and will terminate on November 22, 2019, or such earlier time as the NCIB is completed or is terminated at the option of Birchcliff. Purchases under the NCIB will be effected through the facilities of the TSX and/or Canadian alternative trading systems at the prevailing market price at the time of such transaction. All common shares purchased under the NCIB will be cancelled. During 2018 and 2017, Birchcliff has not purchased any common shares pursuant to the NCIB.

# **Capital Securities**

On June 14, 2013, Birchcliff completed a \$50 million preferred share issue. The Corporation issued 2,000,000 cumulative redeemable Series C Preferred Shares, at a price of \$25.00 per share. The Series C Preferred Shares bear a 7% dividend and their holders are entitled to receive, as and when declared by the Board of Directors of Birchcliff, fixed cumulative preferential cash dividends at an annual rate of \$1.75 per share, payable quarterly.

The Series C Preferred Shares are not redeemable by the Corporation prior to June 30, 2018. On and after June 30, 2018, the Corporation may, at its option, redeem for cash, all or any number of the outstanding Series C Preferred Shares at \$25.75 per share if redeemed before June 30, 2019, at \$25.50 per share if redeemed on or after June 30, 2019 but before June 30, 2020 and at \$25.00 per share if redeemed on or after June 30, 2020, in each case together with all accrued and unpaid dividends to but excluding the date fixed for redemption.

The Series C Preferred Shares are not redeemable by the holders of the preferred shares prior to June 30, 2020. On and after June 30, 2020, a holder of Series C Preferred Shares may, at its option, redeem for cash, all or any number of Series C Preferred Shares held by such holder on the last day of March, June, September and December of each year at \$25.00 per share, together with all accrued and unpaid dividends to but excluding the date fixed for redemption. Upon receipt of the Notice of Redemption, the Corporation may, at its option elect to convert such Series C Preferred Shares into common shares of the Corporation.

<sup>(2)</sup> In August 2012, Birchcliff completed a bought deal equity financing for gross proceeds of \$50 million. The Corporation issued 2,000,000 preferred units at a price of \$25.00 per preferred unit for gross proceeds of \$50 million. Each preferred unit was comprised of one cumulative redeemable five year rate reset Series A Preferred Share of Birchcliff, to yield initially 8% per annur The Series A Preferred Shares paid cumulative dividends of \$2.00 per Series A Preferred Share per annum for the initial five year period ending September 30, 2017. On September 30, 2017. the Series A Preferred Shares dividend was reset to \$2.09 per Series A Preferred Share per annum, payable quarterly if, as and when declared by Birchcliff's Board of Directors. Thereafter, the dividend rate will be reset every five years at a rate equal to the then current five year Government of Canada bond yield plus 6.83%. The Series A Preferred Shares were redeemable at \$25.00 per preferred share at the option of the Corporation on September 30, 2017. The Corporation did not exercise the option to redeem any Series A Preferred Shares on September 30, 2017. The next opportunity for the Corporation to redeem the Series A Preferred Shares at \$25.00 per preferred share is September 30, 2022 and on September 30 in every fifth year thereafter. Holders of the Series A Preferred Shares had the right, at their option, to convert their Series A Preferred Shares into cumulative redeemable floating rate Series B Preferred Shares, subject to certain conditions, on September 30, 2017. None of Birchcliff's outstanding Series A Preferred Shares were converted into Series B Preferred Shares on September 30, 2017 as only 165,960 Series A Preferred Shares were tendered for conversion, which was less than the 250,000 shares required to give effect to conversions into Series B Preferred Shares. The next opportunity for holders of the Series A Preferred Shares to convert their Series A Preferred Shares into Series B Preferred Shares, subject to certain conditions, is September 30, 2022 and on September 30 in every fifth year thereafter. The holders of the Series B Preferred Shares will be entitled to receive quarterly floating rate cumulative preferential cash dividends, if declared by Birchcliff's Board of Directors, at a rate equal to the sum of the then current 90 day Government of Canada Treasury Bill rate plus 6.83%. In the event of liquidation, dissolution or winding-up of Birchcliff, the holders of the Series A Preferred Shares and Series B Preferred Shares will be entitled to receive \$25.00 per share as well as all accrued unpaid dividends before any amounts will be paid or any assets will be distributed to the holders of any other shares ranking junior to the Series A Preferred Shares and the Series B Preferred Shares. The holders of the Series A Preferred Shares and the Series B Preferred Shares will not be entitled to share in any further distribution of the assets of the Corporation.

On or after June 30, 2018, the Corporation may, at its option, convert all or any number of the outstanding Series C Preferred Shares into common shares. The Corporation has outstanding 2,000,000 Series C Preferred Shares at December 31, 2018 (December 31, 2017 - 2,000,000).

As at December 31, 2018, Birchcliff has not redeemed for cash any of its outstanding Series C Preferred Shares or converted any number of the outstanding Series C Preferred Shares into common shares.

### **Dividends**

The following table sets forth the dividend distributions by the Corporation for each class of shares:

Years ended December 31,	2018	2017
Common Shares:		
Outstanding at beginning of period (\$000's)	26,586	26,522
Per common share (\$)	0.1000	0.1000
Preferred Shares - Series A:		
Series A dividend distribution (\$000's)	4,187	4,047
Per Series A preferred share (\$)	2.0935	2.0234
Preferred Shares - Series C:		
Series C dividend distribution (\$000's)	3,500	3,500
Per Series C preferred share (\$)	1.7500	1.7500

### **Per Common Share**

The following table sets forth the computation of net income (loss) per common share:

Years ended December 31, (\$000's, except for per share information)	2018	2017
Net income (loss)	102,212	(46,980)
Dividends on Series A preferred shares	(4,187)	(4,047)
Net income (loss) to common shareholders	98,025	(51,027)
Weighted average common shares:		
Weighted average basic common shares outstanding	265,852	265,182
Effects of dilutive securites	1,471	-
Weighted average diluted common shares outstanding <sup>(1)</sup>	267,323	265,182
Net income (loss) per common share		
Basic	\$0.37	(\$0.19)
Diluted	\$0.37	(\$0.19)

<sup>(1)</sup> The weighted average diluted common shares outstanding as of December 31, 2018 excludes 9,512,201 common shares issuable pursuant to outstanding stock options that were anti-dilutive. As the Corporation reported a loss in 2017, the basic and diluted weighted average shares outstanding are the same for the periods and all stock options and warrants were anti-dilutive.

# 11. PETROLEUM AND NATURAL GAS SALES

The following table sets forth Birchcliff's petroleum and natural gas sales:

Years ended December 31, (\$000's)	2018	2017
Light oil sales	122,118	134,597
Natural gas sales	332,979	318,790
NGLs sales	166,194	103,245
Total P&NG sales <sup>(1)(2)</sup>	621,291	556,632
Royalty income	130	310
Total P&NG sales	621,421	556,942

<sup>(1)</sup> Excludes the effects of financial derivatives but includes the effects of any physical delivery sales contracts outstanding during the period.

<sup>(2)</sup> Included in accounts receivable at December 31, 2018 was \$49.1 million in P&NG sales to be received from its marketers in respect of December 2018 production, which was subsequently received in January 2019.

### 12. OPERATING EXPENSES

The Corporation's operating expenses include all costs with respect to day-to-day well and facility operations. The components of operating expenses are set forth below:

Years ended December 31, (\$000s)	2018	2017
Field operating costs	102,099	112,287
Recoveries	(2,995)	(1,917)
Field operating costs, net	99,104	110,370
Expensed workovers and other	-	116
Operating expenses	99,104	110,486

### 13. ADMINISTRATIVE EXPENSES

The components of administrative expenses are set forth below:

Years ended December 31, (\$000s)	2018	2017
Cash:		
Salaries and benefits <sup>(1)</sup>	28,618	31,437
Other <sup>(2)</sup>	13,329	13,498
General and administrative, gross	41,947	44,935
Operating overhead recoveries	(150)	(202)
Capitalized overhead <sup>(3)</sup>	(17,195)	(18,229)
General and administrative, net	24,602	26,504
Non-cash:		
Other compensation <sup>(4)</sup>	14,758	9,945
Capitalized compensation <sup>(3)</sup>	(7,061)	(5,886)
Other compensation, net	7,697	4,059
Administrative expenses, net	32,299	30,563

- (1) Includes salaries, benefits and bonuses paid to officers and employees of the Corporation and retainer fees, meeting fees and benefits paid to directors of the Corporation.
- (2) Includes costs such as rent, legal, tax, insurance, minor computer hardware and software and other business expenses incurred by the Corporation
- (3) Includes a portion of gross general and administrative expenses and other compensation directly attributable to the exploration and development activities of the Corporation, which have been capitalized.
- (4) Includes stock-based compensation expense of \$6.9 million and post-employment benefit expense of \$7.8 million in 2018 (2017 \$9.9 million and \$nil, respectively) (Notes 14 & 16).

Gross compensation for the Corporation's executive officers and directors are comprised of the following:

Years ended December 31, (\$000s)	2018	2017
Salaries and benefits <sup>(1)</sup>	6,312	8,623
Stock-based compensation <sup>(2)</sup>	1,770	2,256
Post-employement benefit expense <sup>(3)</sup>	7,844	-
Executive Officers and Directors compensation	15,926	10,879

- (1) Includes salaries, benefits and bonuses paid to officers of the Corporation and directors' fees and benefits paid to the directors of the Corporation
- (2) Represents the amortization of stock-based compensation expense in the year associated with options granted to the executive officers participating in the Option Plan (as defined herein).
- (3) Represents past service costs associated with post-employment benefits granted in the year to the Corporation's executive officers (Note 14).

## 14. OTHER LIABILITIES

The Corporation has established a post-employment benefit plan for eligible employees, which provides for post-employment benefits based upon the age at retirement and their period of service with Birchcliff (the "Plan"). The Plan is not funded and as such no plan assets exist. The post-employment benefit obligation arising from the Plan is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that have terms to maturity approximating the terms of the related liability. The expenses associated with the Plan are comprised of current and past service costs and the interest (accretion) on the unwinding of the present value of the post-employment benefit obligation.

The Corporation estimates the total undiscounted (inflated) amount of cash flow required to settle its post-employment obligations is approximately \$14.8 million at December 31, 2018 (December 31, 2017 - \$nil). A reconciliation of the discounted post-employment benefit obligation is set forth below:

As at, December 31 (\$000s)	2018	2017
Balance, beginning	-	-
Post-employement benefit expense <sup>(1)</sup>	7,844	-
Balance, ending <sup>(2)</sup>	7,844	-

Birchcliff recorded a post-employment benefit obligation of \$7.8 million at December 31, 2018 (December 31, 2017 – \$nil). A 1% increase in the discount rate would result in a \$0.3 million decrease in the post-employment benefit obligation at December 31, 2018 (December 31, 2017 - \$nil)

### 15. FINANCE EXPENSES

The components of finance expenses are set forth below:

Years ended December 31, (\$000s)	2018	2017
Cash:		
Interest on credit facilities	27,969	28,374
Non-cash:		
Accretion <sup>(1)</sup>	3,208	3,055
Amortization of deferred financing fees	1,534	1,510
Finance expenses	32,711	32,939

<sup>(1)</sup> Includes accretion on decommissioning obligations and post-employment benefits.

# **16. SHARE-BASED PAYMENTS**

# **Stock Options**

At December 31, 2018, the Corporation's stock option plan (the "Option Plan") permitted the grant of options in respect of a maximum of 26,591,136 (December 31, 2017 - 26,579,670) common shares. At December 31, 2018, there remained available for issuance options in respect of 10,743,566 (December 31, 2017 - 12,421,563) common shares. For stock options exercised during 2018, the weighted average common share trading price on the Toronto Stock Exchange was \$4.03 (2017 - \$6.22) per common share.

A summary of the outstanding stock options is set forth below:

	Number	<b>Price</b> (\$) <sup>(1)</sup>
Outstanding, December 31, 2016	12,899,775	6.45
Granted <sup>(2)</sup>	4,867,400	7.67
Exercised	(1,754,796)	(5.33)
Forfeited	(1,606,437)	(7.49)
Expired	(247,835)	(7.55)
Outstanding, December 31, 2017	14,158,107	6.88
Granted <sup>(2)</sup>	4,734,900	3.23
Exercised	(114,664)	(3.35)
Forfeited	(483,405)	(5.59)
Expired	(2,447,368)	(7.57)
Outstanding, December 31, 2018	15,847,570	5.74

<sup>(1)</sup> Calculated on a weighted average basis.

<sup>(1)</sup> Represents the past service costs associated with post-employment benefits.
(2) Birchcliff applied a discount rate of 2.8% and an inflation rate of 3.0% to calculate the present value of the post-employment benefit obligation at December 31 2018.

<sup>(2)</sup> Each stock option granted entitles the holder to purchase one common share at the exercise price.

The weighted average fair value per option granted during 2018 was \$1.03 (2017 – \$2.96). In determining the stock-based compensation expense for options issued during 2018, the Corporation applied a weighted average estimated forfeiture rate of 11% (2017 – 11%).

The weighted average assumptions used in calculating the Black-Scholes fair values are set forth below:

Years ended December 31,	2018	2017
Risk-free interest rate	2.0%	1.0%
Expected life (years)	4.0	4.0
Expected volatility	49.7%	49.3%
Dividend yield	3.2%	0.1%

A summary of the stock options outstanding and exercisable under the Option Plan at December 31, 2018 is set forth below:

Exercise	Exercise Price (\$)		Awards Outstanding			Awards Exercisable	
Low	High	Quantity	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price (\$)	Quantity	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price (\$)
3.00	6.00	7,056,369	3.5	3.34	1,595,513	2.1	3.49
6.01	9.00	8,668,201	1.9	7.64	5,932,938	1.3	7.57
9.01	12.00	123,000	1.0	10.07	103,666	0.7	10.25
		15,847,570	2.6	5.74	7,632,117	1.4	6.75

### **Performance Warrants**

On January 14, 2005, Birchcliff issued 4,049,665 performance warrants as part of the Corporation's initial restructuring to become a public entity. There are 2,939,732 performance warrants outstanding and exercisable at December 31, 2018 (December 31, 2017 – 2,939,732). Each performance warrant is exercisable at a price of \$3.00 to purchase one common share of Birchcliff and expires on January 31, 2020.

### 17. CAPITAL MANAGEMENT

The Corporation's general policy is to maintain a sufficient capital base in order to manage its business in the most effective manner with the goal of increasing the value of its assets and thus its underlying share value. The Corporation's objectives when managing capital are to maintain financial flexibility in order to preserve its ability to meet financial obligations (including potential obligations arising from additional acquisitions), to maintain a capital structure that allows Birchcliff to finance its business strategy using primarily internally-generated cash flow and its available debt capacity and to optimize the use of its capital to provide an appropriate investment return to its shareholders. There were no changes in the Corporation's approach to capital management during 2018 and 2017.

The following table sets forth the Corporation's total available credit:

As at December 31, (\$000s)	2018	2017
Maximum borrowing base limit <sup>(1)</sup> :		
Revolving term credit facilities	950,000	950,000
Principal amount utilized:		
Drawn revolving term credit facilities	(608,821)	(594,823)
Outstanding letters of credit <sup>(2)</sup>	(17,205)	(12,184)
	(626,026)	(607,007)
Unused credit	323,974	342,993

<sup>(1)</sup> The Credit Facilities are subject to a semi-annual review of the borrowing base limit, which is directly impacted by the value of Birchcliff's petroleum and natural gas reserves.

<sup>(2)</sup> Letters of credit are issued to various service providers. The letters of credit reduced the amount available under the Working Capital Facility.

The capital structure of the Corporation is as follows:

As at December 31, (\$000s)	2018	2017	% Change
Shareholders' equity <sup>(1)</sup>	1,774,890	1,696,153	
Capital securities	49,535	49,225	
Shareholders' equity & capital securities	1,824,425	1,745,378	5%
Shareholders' equity & capital securities as a % of total capital <sup>(2)</sup>	74%	74%	
Working capital deficit <sup>(3)</sup>	21,187	11,067	
Drawn revolving term credit facilities	605,267	594,823	
Drawn debt	626,454	605,890	3%
Drawn debt as a % of total capital	26%	26%	
Total capital	2,450,879	2,351,268	4%

<sup>(1)</sup> Shareholders' equity is defined as share capital plus contributed surplus plus retained earnings, less any deficit.

### 18. FINANCIAL RISK MANAGEMENT

Birchcliff is exposed to credit risk, liquidity risk and market risk as part of its normal course of business. The Board of Directors has overall responsibility for the establishment and oversight of the Corporation's financial risk management framework and periodically reviews the results of all risk management activities and all outstanding positions.

#### **Credit Risk**

Credit risk is the risk of financial loss to the Corporation if a customer or counterparty to a financial asset fails to meet its contractual obligation, and arises principally from Birchcliff's receivables from its oil and natural gas marketers and its financial instruments. Cash is comprised of bank balances. Historically, the Corporation has not carried short-term investments. Should this change in the future, counterparties will be selected based on credit ratings, management will monitor all investments to ensure a stable return and complex investment vehicles with higher risk will be avoided. The Corporation's exposure to cash credit risk at the statement of financial position date is low.

The carrying amount of accounts receivable reflects management's assessment of the credit risk associated with these customers. The following table illustrates the Corporation's maximum exposure for accounts receivable:

As at December 31, (\$000s)	2018	2017
Marketers <sup>(1)</sup>	49,070	59,821
Joint venture	2,342	3,544
Other	529	5,937
Accounts receivable	51,941	69,302

<sup>(1)</sup> At December 31, 2018, approximately 33% was due from one marketer (2017 – 23%, one marketer). During 2018, the Corporation received 23%, 11% and 10% of its revenue, respectively, from three marketers (2017 – 20%, 16% and 10% of its revenue, respectively, from three marketers).

Typically, Birchcliff's maximum credit exposure from its marketers is revenue from its commodity sales. Receivables from marketers are normally collected on the 25th day of the month following production. Birchcliff mitigates the credit risk associated with these receivables by establishing marketing relationships with credit worthy purchasers, obtaining guarantees from their ultimate parent companies and obtaining letters of credit, if and as appropriate. The Corporation historically has not experienced any material collection issues with its marketers.

Birchcliff's accounts receivables are aged as follows:

As at December 31, (\$000s)	2018	2017
Current (less than 30 days)	48,052	66,901
30 to 60 days	2,006	1,637
61 to 90 days	1,099	666
91 to 120 days	160	26
Over 120 days	624	72
Accounts receivable	51,941	69,302

<sup>(2)</sup> Of the 74%, approximately 95% relates to common capital stock and 5% relates to preferred capital stock.

<sup>(3)</sup> Working capital is defined as current assets less current liabilities (excluding fair value of financial instruments).

At December 31, 2018, approximately \$0.6 million or 1.2% (2017 – \$0.07 million or 0.1%) of Birchcliff's total accounts receivable are aged over 120 days and considered past due. The majority of these accounts are due from various joint venture partners. Birchcliff attempts to mitigate the credit risk from joint venture receivables by obtaining pre-approval of significant capital expenditures. However, the receivables are from participants in the oil and natural gas sector, and collection of the outstanding balances is dependent on industry factors such as commodity price fluctuations, escalating costs and the risk of unsuccessful drilling. In addition, further risk exists with joint venture partners as disagreements occasionally arise that increases the potential for non-collection. The Corporation does not typically obtain collateral from petroleum and natural gas marketers or joint venture partners; however, the Corporation does have the ability to withhold production from joint venture partners in the event of non-payment.

The carrying amount of Birchcliff's accounts receivable, financial instruments and investment in securities represents its maximum credit exposure. Birchcliff determined that the ultimate collection of these financial assets were not in doubt and therefore no allowance or charge to profit or loss was recorded in 2018 and 2017.

# **Liquidity Risk**

Liquidity risk is the risk that the Corporation will not be able to meet its obligations associated with financial liabilities that are settled by cash as they become due. Birchcliff's approach to managing liquidity is to ensure, as much as possible, that it will have sufficient liquidity to meet its short-term and long-term financial obligations when due, under both normal and unusual conditions without incurring unacceptable losses or risking harm to the Corporation's reputation. Birchcliff actively manages its liquidity using cash and debt management programs. Strategies include monitoring forecast and actual cash flows from operating, financing, and investing activities and managing available credit and working capital under its Credit Facilities.

All of the Corporation's contractual financial liabilities can be settled in cash. Typically, the Corporation ensures that it has sufficient cash on demand to meet expected operational expenses, including the servicing of financial obligations. To achieve this objective, the Corporation prepares annual capital expenditure budgets, which are approved by the Board of Directors and are regularly reviewed and updated as considered necessary. Petroleum and natural gas production is monitored daily and is used to provide monthly cash flow estimates. Further, the Corporation utilizes authorizations for expenditures on both operated and non-operated projects to manage capital expenditure. The Corporation also attempts to match its payment cycle with collection of petroleum and natural gas revenue on the 25th of each month. Should commodity prices deteriorate materially, Birchcliff may adjust its capital spending accordingly to ensure that it is able to service its short-term financial obligations.

To facilitate the capital expenditure program, the Corporation has an aggregate \$950 million reserve-based bank credit facilities at the end of 2018 (2017 – \$950 million) which are reviewed semi-annually by its lenders. The principal amount drawn under the Corporation's total credit facilities at December 31, 2018 was \$626.0 million (2017 – \$607.0 million) and \$324 million in unused credit was available at the end of 2018 (2017 – \$343.0 million) to fund future obligations.

The following table lists the Corporation's financial liabilities at December 31, 2018 in the period they are due:

(\$000s)	2019	2021
Accounts payable and accrued liabilities	76,567	-
Drawn revolving credit facilities	-	608,821
Financial liabilities	76,567	608,821

# **Market Risk**

Market risk is the risk that changes in market conditions, such as commodity prices, exchange rates and interest rates, will affect the Corporation's net income or the value of its financial instruments, if any. The objective of market risk management is to manage and control exposures within acceptable limits, while maximizing returns. These risks are consistent with prior years. All risk management transactions are conducted within risk management tolerances that are reviewed by the Board of Directors.

# **Commodity Price Risk**

Commodity price risk is the risk that the fair value of future cash flows will fluctuate as a result of changes in commodity prices. Significant changes in commodity prices can materially impact cash flows and the Corporation's borrowing base limit. Lower commodity prices can also reduce the Corporation's ability to raise capital. Commodity prices for petroleum and natural gas are not only influenced by Canadian ("CDN") and United States ("US") demand, but also by world events that dictate the levels of supply and demand.

### Financial Derivative Contracts

As of December 31, 2018, Birchcliff had certain financial derivative contracts outstanding in order to manage commodity price risk. These instruments are not used for trading or speculative purposes. Birchcliff has not designated its financial derivative contracts as effective accounting hedges, even though the Corporation considers all commodity contracts to be effective economic hedges. As a result, all such financial derivative contracts are recorded on the statement of financial position at fair value, with the changes in fair value being recognized as an unrealized gain or loss in profit or loss.

As at December 31, 2018, Birchcliff had the following financial derivative contracts in place in order to manage commodity price risk:

Product	Type of Contract	Notional Quantity	Term <sup>(1)</sup>	Contract Price	Fair Value (\$000s)
Natural gas	AECO 7A basis swap <sup>(2)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.298/MMBtu	16,474
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.32/MMBtu	5,079
Natural gas	AECO 7Abasis swap <sup>(2)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.33/MMBtu	13,273
Natural gas	AECO 7A basis swap <sup>(2)</sup>	15,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.185/MMBtu	11,288
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.20/MMBtu	3,826
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2024	NYMEX HH less US\$1.20/MMBtu	3,604
Natural gas	AECO 7A basis swap <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.10/MMBtu	1,246
Natural gas	AECO 7A basis swap <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.15/MMBtu	1,276
Natural gas	AECO 7A basis swap <sup>(3)</sup>	30,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	NYMEX HH less US\$3.16/MMBtu	4,109
Fair Value Ass	set				60,175

<sup>(1)</sup> Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price.

The fair value asset of the Corporation's financial derivative contracts at December 31, 2018 was \$60.2 million (2017 – liability of \$4.0 million).

The following table provides a summary of the realized and unrealized gains (losses) on financial derivative contracts:

Years ended December 31, (\$000s)	2018	2017
Realized gain (loss) on derivatives <sup>(1)</sup>	(15,771)	25,785
Unrealized gain on derivatives	64,222	5,387

<sup>(1)</sup> During the fourth quarter of 2018, Birchcliff monetized all of its outstanding USD WTI fixed price contracts and recorded a realized gain of \$4.0 million.

At December 31, 2018, if the future AECO/NYMEX basis was US\$0.10/MMBtu higher, with all other variables held constant, after tax net income in 2018 would have increased by \$15.5 million.

The following financial derivative contracts were entered into subsequent to December 31, 2018:

Product	Type of Contract	<b>Notional Quantity</b>	Term <sup>(1)</sup>	Contract Price
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2025 – Dec. 31, 2025	NYMEX HH less US\$1.020/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	20,000 MMBtu/d	Jan. 1, 2024 – Dec. 31, 2025	NYMEX HH less US\$1.119/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	25,000 MMBtu/d	Jan. 1, 2024 – Dec. 31, 2025	NYMEX HH less US\$1.135/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.178/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	10,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.175/MMBtu
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2021 – Dec. 31, 2025	NYMEX HH less US\$1.190/MMBtu

<sup>(1)</sup> Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price.

<sup>(2)</sup> Birchcliff sold AECO basis swap.

<sup>(3)</sup> Birchcliff bought AECO basis swap.

<sup>(2)</sup> Birchcliff sold AECO basis swap.

### **Physical Delivery Sales Contracts**

Birchcliff also enters into physical delivery sales contracts to manage commodity price risk. These contracts are considered normal executory sales contracts and are not recorded at fair value through profit or loss. At December 31, 2018, the Corporation had the following physical delivery sales contract in place:

Product	Type of Contract	<b>Notional Quantity</b>	Term <sup>(1)</sup>	Contract Price
Natural gas	AECO 7A basis swap <sup>(2)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Dec. 31, 2023	NYMEX HH less US\$1.205/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	5,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.100/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.000/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.005/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	10,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.020/MMBtu
Natural gas	Dawn fixed price <sup>(3)</sup>	15,000 MMBtu/d	Jan. 1, 2019 – Mar. 31, 2019	US\$5.103/MMBtu

- (1) Transactions with common terms and the same counterparty have been aggregated and presented at the weighted average price
- (2) Birchcliff sold AECO basis swap.
- (3) Birchcliff entered into a 4-month fixed price physical natural gas Dawn sales arrangement commencing December 1, 2018.

There were no long-term physical delivery sales contracts entered into subsequent to December 31, 2018.

### Foreign Currency Risk

Foreign currency risk is the risk that future cash flows will fluctuate as a result of changes in foreign currency exchange rates. The exchange rate effect cannot be quantified but generally an increase in the value of the CDN dollar as compared to the US dollar will reduce the CDN dollar prices received by Birchcliff for its petroleum and natural gas sales. The Corporation had no forward exchange rate contracts in place as at or during the years ended December 31, 2018 and 2017.

### **Interest Rate Risk**

Interest rate risk is the risk that future cash flows will fluctuate as a result of changes in market interest rates. The Corporation's credit facilities are exposed to interest rate cash flow risk on a floating interest rate due to fluctuations in market interest rates. The remainder of Birchcliff's financial assets and liabilities are not exposed directly to interest rate risk.

A 1% change in the CDN prime interest rate in 2018 would have changed after-tax net income by approximately \$4.4 million (2017 – \$4.3 million), assuming that all other variables remain constant. A sensitivity of 1% is considered reasonable given the current level of the bank prime rate and market expectations for future movements.

The Corporation reviews its market interest rate risk exposure and may enter into interest rate swaps when market conditions are favourable in order to reduce volatility in its financial results. Subsequent to December 31, 2018, Birchcliff entered into a financial one-month bankers' acceptance CDOR (Canadian Dollar Offered Rate) fixed interest rate swap on \$350 million at 2.215% for the period from March 1, 2019 to March 1, 2024.

### Fair Value of Financial Instruments

Birchcliff's financial instruments include cash, accounts receivable, deposits, investment in securities, accounts payable and accrued liabilities, financial derivative contracts, outstanding credit facilities and capital securities. All of Birchcliff's financial instruments are transacted in active markets. Financial instruments carried at fair value are assessed using the following hierarchy based on the amount of observable inputs used to value the instrument:

Level 1 – Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Pricing inputs are other than quoted prices in active markets included in Level 1. Prices in Level 2 are either directly or indirectly observable as of the reporting date. Level 2 valuations are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the marketplace.

Level 3 – Valuations in this level are those with inputs for the asset or liability that are not based on observable market data. Assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement within the fair value hierarchy level.

The carrying value and fair value of the Corporation's financial assets and liabilities at December 31, 2018 are set forth below:

(\$000s)	Carrying Value	Fair Value
Loans and receivables:		
Cash	53	53
Accounts receivable	51,941	51,941
Deposits	2,756	2,756
Investment in securities <sup>(1)</sup>	10,005	10,005
Fair value of financial derivatives <sup>(2)</sup>	60,175	60,175
Other liabilities:		
Accounts payable and accrued liabilities	76,567	76,567
Capital Securities	49,535	48,400
Drawn revolving term credit facilities	608,821	608,821

<sup>(1)</sup> Investment in securities are fair valued based on level 1.

# 19. COMMITMENTS

The Corporation enters into contracts and commitments in the normal course of operations. The following table lists Birchcliff's commitments at December 31, 2018:

(\$000s)	2019	2020	2021 - 2023	Thereafter
Operating leases <sup>(1)</sup>	4,408	4,408	13,707	19,667
Firm transportation, processing and fractionation $\!\!^{(2)}$	107,678	116,574	364,742	348,079
Natural gas processing <sup>(3)</sup>	17,155	17,702	51,465	154,536
Commitments	129,241	138,684	429,914	522,282

<sup>(1)</sup> On December 2, 2015, the Corporation entered into an operating lease commitment relating to a new office premises beginning February 1, 2018 and expiring on January 31, 2028. The commitment amount under the new 10 year office lease is estimated to be \$42.2 million, which includes costs allocated to base rent, parking and building operating expenses. The office lease commitment amounts disclosed in the above table have not been reduced for any rents receivable by the Corporation.

## 20. SUPPLEMENTARY CASH FLOW INFORMATION

Years ended December 31, (\$000s)	2018	2017
Provided by (used in):		
Accounts receivable	17,361	(6,730)
Prepaid expenses and deposits	(764)	(621)
Accounts payable and accrued liabilities	(6,472)	(9,076)
Dividend tax	(3,074)	(3,019)
	7,051	(19,446)
Provided by (used in):		
Operating	12,591	(29,226)
Investing	(5,540)	9,780
	7,051	(19,446)

<sup>(2)</sup> Financial derivative contracts are fair valued based on level 2.

<sup>(2)</sup> Includes firm transportation service arrangements with various terms on TCPL's Alberta NGTL System and on TCPL's Canadian Mainline to the AECO and Dawn trading hubs and fractionation commitments associated with NGLs production processed at third-party facilities.

<sup>(3)</sup> Includes natural gas processing commitments at third-party facilities.

### 21. CONTINGENT LIABILITY

Birchcliff's 2006 income tax filings were reassessed by the Canada Revenue Agency (the "CRA") in 2011 (the "Reassessment"). The Reassessment was based on the CRA's position that the tax pools available to Veracel Inc. ("Veracel"), prior to its amalgamation with Birchcliff, ceased to be available to Veracel after Birchcliff and Veracel amalgamated on May 31, 2005. The Veracel tax pools in dispute totalled \$39.3 million. Birchcliff appealed the Reassessment to the Tax Court of Canada (the "Trial Court") and the trial of that appeal occurred in November 2013. On October 1, 2015, the Trial Court issued its decision (the "Trial Decision") and dismissed Birchcliff's appeal on the basis of the general anti-avoidance rule contained in the *Income Tax Act* (Canada). The Trial Decision was rendered by a judge based on the written record and not by the judge who conducted the trial. As a result of the Trial Decision, Birchcliff recorded a non-cash deferred income tax expense in the amount of \$10.2 million in the fourth quarter of 2015.

Birchcliff appealed the Trial Decision to the Federal Court of Appeal (the "FCA"), which appeal was heard in January 2017. In April 2017, the FCA issued its decision and allowed the appeal and set aside the Trial Decision, based on the lack of jurisdiction by the judge who rendered the Trial Decision. In setting aside the Trial Decision, the FCA referred the matter back to the judge of the Trial Court who initially conducted the trial in 2013 to render a judgment. The judge of the Trial Court rendered a decision in November 2017 and dismissed the Corporation's appeal. The Corporation appealed that decision to the FCA, which appeal was heard on December 10, 2018 with judgment reserved.

# **22.SUBSEQUENT EVENT**

On November 14, 2018, Birchcliff announced that it had entered into a definitive purchase and sale agreement to acquire Montney lands located between the Corporation's existing properties, as well as various other non-Montney lands and other assets, for total cash consideration of \$39 million (the "Acquisition"). The Corporation paid a deposit of \$3.9 million in connection with the Acquisition, the full amount of which was drawn under the Credit Facilities at December 31, 2018. The remaining cash required to close the Acquisition was financed by the Corporation's Credit Facilities on closing which occurred on January 3, 2019.

# **GLOSSARY**

# **DEFINITIONS**

Capitalized terms not otherwise defined in this Annual Report shall have the following meanings:

"Birchcliff", "its", "our" "us" or "we"	means Birchcliff Energy Ltd.				
"CSA Staff Notice 51-324"	means CSA Staff Notice 51-324 – Revised Glossary to NI 51-101 Standards of Disclosure for Oil and Gas Activities.				
"GAAP"	means generally accepted accounting principles for publicly accountable enterprises in Canada which is currently in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.				
"Montney/Doig Resource Play"	means Birchcliff's Montney and Doig formations resource play located northwest of Grande Prairie, Alberta.				
"TSX"	means the Toronto Stock Exchange.				
"Western Canadian Sedimentary Basin"	means the vast sedimentary basin underlying Western Canada that is the source of most of Western Canada's current oil and gas production.				
"working interest"	means a percentage of ownership in an oil and gas property, obligating the owner to share in the costs of exploration, development and operations and granting the owner the right to share in production revenues after royalties are paid.				

# **ABBREVIATIONS**

AECO	benchmark price for natural gas determined at the AECO 'C' hub in southeast Alberta
bbl	barrel
bbls	barrels
bbls/d	barrels per day
Bcf	billion cubic feet
boe	barrel of oil equivalent
boe/d	barrel of oil equivalent per day
F&D	finding and development
FD&A	finding, development and acquisition
FDC	future development costs
G&A	general and administrative
GJ	gigajoule
GJ/d	gigajoules per day
НН	Henry Hub
km	kilometres
Mbbls	thousand barrels
Mboe	thousand barrels of oil equivalent
Mcf	thousand cubic feet
MM	millions
MM\$	millions of dollars
MMBoe	million barrels of oil equivalent
MMBtu	million British thermal units
MMcf	million cubic feet
MMcf/d	million cubic feet per day
MSW	price for mixed sweet crude oil at Edmonton, Alberta
NGLs	natural gas liquids
NYMEX	New York Mercantile Exchange
TCPL	TransCanada PipeLines Limited
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma, for crude oil of standard grade
000s	thousands
\$000s	thousands of dollars

# CONVENTIONS

Certain terms used herein are defined in NI 51-101, CSA Staff Notice 51-324 or the COGE Handbook and, unless the context otherwise requires, shall have the same meanings in this Annual Report as in NI 51-101, CSA Staff Notice 51-324 or the COGE Handbook, as the case may be. Unless otherwise indicated, all information contained herein is given at or for the year ended December 31, 2018. Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars and all references to "\$", "CDN\$" or "dollars" are to Canadian dollars and all references to "US\$" are to United States dollars. All financial information contained in this Annual Report has been presented in accordance with GAAP. Words importing the singular number only include the plural, and vice versa, and words importing any gender include all genders.

# **NON-GAAP MEASURES**

This Annual Report uses "adjusted funds flow", "adjusted funds flow per common share", "free funds flow", "operating netback", "adjusted working capital deficit" and "total debt". These measures do not have standardized meanings prescribed by GAAP and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. Management believes that these non-GAAP measures assist management and investors in assessing Birchcliff's profitability, efficiency, liquidity and overall performance. For further information regarding these non-GAAP measures, please see "Non-GAAP Measures" in the MD&A.

In addition, this Annual Report uses "adjusted funds flow netback" which denotes petroleum and natural gas revenue less royalty expense, less operating expense, less transportation and other expense, less net G&A expense, less interest expense and less any realized losses (plus realized gains) on financial instruments and plus any other cash income sources. Birchcliff previously referred to adjusted funds flow netback as "funds flow netback". Adjusted funds flow netback has been calculated on a per unit basis. Management believes that adjusted funds flow netback assists management and investors in assessing Birchcliff's profitability and its operating results on a per unit basis to better analyze its performance against prior periods on a comparable basis. The following table provides a breakdown of Birchcliff's adjusted funds flow netback for the periods indicated:

-			Three mon	ths ended ember 31,			Twelve mon	ths ended ember 31,
		2018		2017		2018		2017
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Petroleum and natural gas revenue	154,720	22.01	166,149	22.55	621,421	22.08	556,942	22.45
Royalty expense	(6,763)	(0.96)	(9,271)	(1.26)	(38,306)	(1.36)	(28,727)	(1.16)
Operating expense	(24,677)	(3.51)	(28,460)	(3.86)	(99,104)	(3.52)	(110,486)	(4.45)
Transportation and other expense	(28,567)	(4.07)	(25,883)	(3.52)	(103,547)	(3.68)	(71,224)	(2.87)
Operating netback <sup>(1)</sup>	94,713	13.47	102,535	13.91	380,464	13.52	346,505	13.97
General & administrative expense, net	(7,618)	(1.08)	(9,451)	(1.28)	(24,602)	(0.87)	(26,504)	(1.07)
Interest expense	(7,438)	(1.06)	(7,131)	(0.97)	(27,969)	(0.99)	(28,374)	(1.14)
Realized gain (loss) on financial instruments	1,658	0.24	10,787	1.46	(15,771)	(0.56)	25,785	1.03
Other income	202	0.03	268	0.04	800	0.02	268	0.02
Adjusted funds flow netback <sup>(1)</sup>	81,517	11.60	97,008	13.16	312,922	11.12	317,680	12.81

<sup>(1)</sup> All per boe amounts are calculated by dividing each aggregate financial amount by the production (boe) in the respective period.

# PRESENTATION OF OIL AND GAS RESERVES

Deloitte prepared the 2018 Consolidated Reserves Report, the 2017 Consolidated Reserves Report, the 2018 Deloitte Reserves Report and the 2017 Deloitte Reserves Report. McDaniel prepared the 2018 McDaniel Reserves Report and the 2017 McDaniel Reserves Report. In addition, Deloitte prepared reserves evaluations in respect of Birchcliff's oil and natural gas properties effective December 31, 2016 through to 2010. Such evaluations were prepared in accordance with the standards contained in NI 51-101 and the COGE Handbook that were in effect at the relevant time. Reserves estimates stated herein are extracted from the relevant evaluation.

There are numerous uncertainties inherent in estimating quantities of oil, natural gas and NGLs reserves and the future net revenue attributed to such reserves. The reserves and associated future net revenue information set forth in this Annual Report are estimates only. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue therefrom are based upon a number of variable factors and assumptions, such as historical production from the properties, production rates, ultimate reserves recovery, the timing and amount of capital expenditures, marketability of oil, natural gas and NGLs, royalty rates, the assumed effects of regulation by governmental agencies and future operating costs, all of which may vary materially from actual results. For these reasons, estimates of the economically recoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the classification of such reserves based on risk of recovery and estimates of future net revenue associated with reserves prepared by different engineers, or by the same

engineer at different times, may vary substantially. Birchcliff's actual production, revenues, taxes and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations could be material.

It should not be assumed that the undiscounted or discounted net present value of future net revenue attributable to the Corporation's reserves estimated by the Corporation's independent qualified reserves evaluators represent the fair market value of those reserves. There is no assurance that the forecast prices and costs assumptions will be attained and variances could be material. Actual oil, natural gas and NGLs reserves may be greater than or less than the estimates provided herein and variances could be material. With respect to the disclosure of reserves contained herein relating to portions of Birchcliff's properties, the estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation. In this Annual Report, all references to "reserves" are to Birchcliff's gross company reserves unless otherwise stated.

The information relating to the Corporation's reserves contains forward-looking statements and information, including information relating to future net revenue. See "Advisories – Forward-Looking Statements".

### **RESERVES CATEGORIES**

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable. Reserves are classified according to the degree of certainty associated with the estimates:

- "Proved reserves" are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
- "Probable reserves" are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

# INTEREST IN RESERVES, PRODUCTION, WELLS AND PROPERTIES

"Gross" means: (a) in relation to Birchcliff's interest in production or reserves, Birchcliff's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Birchcliff; (b) in relation to wells, the total number of wells in which Birchcliff has an interest; and (c) in relation to properties, the total area of properties in which Birchcliff has an interest.

"Net" means: (a) in relation to Birchcliff's interest in production or reserves, Birchcliff's working interest (operating or non-operating) share after deduction of royalty obligations, plus Birchcliff's royalty interests in production or reserves; (b) in relation to Birchcliff's interest in wells, the number of wells obtained by aggregating Birchcliff's working interest in each of its gross wells; and (c) in relation to Birchcliff's interest in a property, the total area in which Birchcliff has an interest multiplied by the working interest owned by Birchcliff.

### LEVELS OF CERTAINTY FOR REPORTED RESERVES

The qualitative certainty levels referred to in the definitions above are applicable to "individual reserves entities", which refers to the lowest level at which reserves calculations are performed, and to "reported reserves", which refers to the highest level sum of individual entity estimates for which reserves estimates are presented. Reported reserves should target the following levels of certainty under a specific set of economic conditions:

- at least a 90% probability that the quantities actually recovered will equal or exceed the estimated proved reserves;
- at least a 50% probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable reserves; and
- at least a 10% probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable plus possible reserves.

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

### FORECAST PRICES AND COSTS

"Forecast prices and costs" means future prices and costs that are: (a) generally accepted as being a reasonable outlook of the future; (b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which Birchcliff is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in paragraph (a).

# **ADVISORIES**

# **BOE CONVERSIONS**

Boe amounts have been calculated by using the conversion ratio of 6 Mcf of natural gas to 1 bbl of oil. Boe amounts may be misleading, particularly if used in isolation. A boe conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

### MMBTU PRICING CONVERSIONS

\$1.00 per MMBtu equals \$1.00 per Mcf based on a standard heat value Mcf.

### **OIL AND GAS METRICS**

This Annual Report contains metrics commonly used in the oil and natural gas industry, including netbacks, reserves life index, recycle ratio, reserves replacement, F&D costs and FD&A costs, which have been determined by Birchcliff as set out below. These oil and gas metrics do not have any standardized meanings or standard methods of calculation and therefore may not be comparable to similar measures presented by other companies where similar terminology is used. As such, they should not be used to make comparisons. Management uses these oil and gas metrics for its own performance measurements and to provide shareholders with measures to compare Birchcliff's performance over time; however, such measures are not reliable indicators of Birchcliff's future performance, which may not compare to Birchcliff's performance in previous periods, and therefore should not be unduly relied upon.

- Reserves life index is calculated by dividing reserves estimated by Birchcliff's independent qualified reserves evaluators at December 31, 2018 by 77,000 boe/d, which production rate represents the mid-point of Birchcliff's annual average production guidance range for 2019. Reserves life index may be used as a measure of a company's sustainability.
- Recycle ratios are calculated by dividing the average operating netback per boe or adjusted funds flow netback per boe, as the case may be, by F&D costs and FD&A costs, as the case may be. Recycle ratios may be used as a measure of a company's profitability.
- Reserves replacement is calculated by dividing proved developed producing reserves, proved reserves or proved plus
  probable reserves additions, as the case may be, before production by total production in the applicable period. Reserves
  replacement ratios have been presented both including and excluding the effects of acquisitions and dispositions. Reserves
  replacement may be used as a measure of a company's sustainability and its ability to replace its proved developed
  producing reserves, proved reserves or proved plus probable reserves, as the case may be.
- With respect to F&D and FD&A costs disclosed in this Annual Report:
  - o F&D costs both including and excluding FDC have been presented herein. F&D costs for each reserves category in a particular period are calculated by taking the sum of: (i) exploration and development costs incurred in the period; and (ii) where FDC has been included, the change during the period in FDC for the reserves category; divided by the additions to the reserves category before production during the period. F&D costs exclude the effects of acquisitions and dispositions. FD&A costs are calculated in the same manner as F&D costs but include the effects of acquisitions and dispositions.

- o In calculating the amounts of F&D and FD&A costs for a year, the changes during the year in estimated reserves and estimated FDC are based upon the evaluations of Birchcliff's reserves prepared by its independent qualified reserves evaluators, effective December 31 of such year.
- o The aggregate of the exploration and development costs incurred in the most recent financial year and any change during that year in estimated FDC generally will not reflect total F&D costs related to reserves additions for that year.
- o F&D and FD&A costs may be used as a measure of a company's efficiency with respect to finding and developing its reserves.
- For information regarding netbacks, please see "Non-GAAP Measures".

### **DRILLING LOCATIONS**

This Annual Report discloses net existing horizontal wells and potential net future horizontal drilling locations in four categories: (i) proved locations; (ii) proved plus probable locations; (iii) unbooked locations; and (iv) an aggregate total of (ii) and (iii). Of the 6,746.4 net existing horizontal wells and potential net future horizontal drilling locations identified herein, 888.8 are proved locations, 1,121.8 are proved plus probable locations and 5,624.6 are unbooked locations. Proved locations and probable locations are proposed drilling locations identified in the 2018 Consolidated Reserves Report that have proved and/or probable reserves, as applicable, attributed to them in the 2018 Consolidated Reserves Report. Unbooked locations are internal estimates based on Birchcliff's prospective acreage and an assumption as to the number of wells that can be drilled per section based on industry practice and internal technical analysis review. Unbooked locations have been identified by management as an estimate of Birchcliff's multi-year drilling activities based on evaluation of applicable geologic, seismic, engineering, production and reserves information. Unbooked locations do not have proved or probable reserves attributed to them in the 2018 Consolidated Reserves Report.

Birchcliff's ability to drill and develop these locations and the drilling locations on which Birchcliff actually drills wells 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, costs, inclement weather, seasonal restrictions, drilling results, additional geological, geophysical and reservoir information that is obtained, production rate recovery, gathering system and transportation constraints, the net price received for commodities produced, regulatory approvals and regulatory changes. As a result of these uncertainties, there can be no assurance that the potential future drilling locations that Birchcliff has identified will ever be drilled and, if drilled, that such locations will result in additional oil, NGLs and natural gas production and, in the case of unbooked locations, additional reserves. As such, Birchcliff's actual drilling activities may differ materially from those presently identified, which could adversely affect Birchcliff's business. While certain of the unbooked drilling locations have been de-risked by drilling existing wells in relatively close proximity to such unbooked drilling locations, some of the other unbooked drilling locations are farther away from existing wells, where management has less information about the characteristics of the reservoir and there is therefore more uncertainty whether wells will be drilled in such locations and, if drilled, there is more uncertainty that such wells will result in additional proved or probable reserves, resources or production.

### CAPITAL EXPENDITURES

Unless otherwise stated, references in this Annual Report to: (i) "F&D capital" denotes capital for land, seismic, workovers, drilling and completions and well equipment and facilities; and (ii) "total capital expenditures" denotes F&D capital plus acquisitions, less any dispositions, plus administrative assets. Birchcliff previously referred to total capital expenditures as "net capital expenditures" or "capital expenditures, net".

### PAYMENT OF DIVIDENDS

The declaration and payment of dividends and the amount of such dividends is subject to the discretion of Birchcliff's Board of Directors and may vary depending on a variety of factors and conditions existing from time to time, including fluctuations in commodity prices, the financial condition of Birchcliff, production levels, results of operations, capital expenditure and debt service requirements, contractual restrictions, hedging activities or programs, available investment opportunities, Birchcliff's business plan, strategies and objectives, the satisfaction of the solvency and liquidity tests imposed by the *Business Corporations Act* (Alberta) for the declaration and payment of dividends and other factors that Birchcliff's Board of Directors may deem relevant. The payment of cash dividends to common shareholders in the future is not assured or guaranteed and dividends may be reduced or suspended. Birchcliff's dividend policy will be periodically reviewed by its Board of Directors and no assurance or guarantee can be given that Birchcliff will maintain the dividend policy in its current form.

### FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Report constitute forward-looking statements and forward-looking information (collectively referred to as "forward-looking statements") within the meaning of applicable Canadian securities laws. The forward-looking statements contained in this Annual Report relate to future events or Birchcliff's future plans, operations or performance and are based on Birchcliff's current expectations, estimates, projections, beliefs and assumptions. Such forward-looking statements have been made by Birchcliff in light of the information available to it at the time the statements were made and reflect its experience and perception of historical trends. All statements and information other than historical fact may be forward-looking statements. Such forward-looking statements are often, but not always, identified by the use of words such as "seek", "plan", "expect", "project", "intend", "believe", "anticipate", "estimate", "forecast", "potential", "proposed", "predict", "budget", "continue", "targeting", "may", "will", "could", "might", "should" and other similar words and expressions.

By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Accordingly, readers are cautioned not to place undue reliance on such forward-looking statements. Although Birchcliff 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 and Birchcliff makes no representation that actual results achieved will be the same in whole or in part as those set out in the forward-looking statements.

In particular, this Annual Report contains forward-looking statements relating to the following: Birchcliff's plans and other aspects of its anticipated future financial performance, operations, focus, objectives, strategies, opportunities, priorities and goals (including that Birchcliff's strategy is to continue to develop and expand its Montney/Doig Resource Play in the Peace River Arch, while maintaining low capital costs and operating costs); the performance and other characteristics of Birchcliff's oil and natural gas properties and expected results from its assets (including: that the Montney/Doig Resource Play provides Birchcliff with an extensive inventory of repeatable, low-cost drilling opportunities targeting natural gas, oil and NGLs; and statements regarding the potential or prospectivity of Birchcliff's properties); statements that Birchcliff has the ability to grow when commodity prices warrant doing so while also having the ability to maintain production in low commodity price environments; statements regarding Birchcliff's ability to control and expand its production and further reduce its operating costs; statements that Birchcliff's operatorship, land position and infrastructure ownership gives it a competitive advantage and supports its low F&D costs and low operating cost structure, which helps Birchcliff to maximize its funds flow; Birchcliff's market diversification and hedging activities; Birchcliff's transportation arrangements (including that an additional tranche of service will become available on TCPL's Canadian Mainline later in 2019 and the anticipated aggregate level of firm service on TCPL's Canadian Mainline that will be available on November 1, 2019); Birchcliff's expectation that during 2019, 65% of its natural gas production will be effectively sold at prices that are not based on AECO; statements that based on its 2019 budget, Birchcliff expects to generate approximately \$126 MM of free funds flow in 2019; statements that during 2019 Birchcliff's focus will continue to be on protecting its balance sheet, improving its already-low cost structure and paying a sustainable quarterly dividend to its shareholders, while it maintains a prudent pace of development and continues to position Birchcliff for future growth; Birchcliff's guidance regarding its 2019 Capital Program and its proposed exploration and development activities and the timing thereof (including: the number and types of wells to be drilled, completed and brought on production; that the program targets an annual average production rate of 76,000 to 78,000 boe/d; estimates of capital expenditures and capital allocation; the focus of, the objectives of and the anticipated results from the program; the financial and operational flexibility of the 2019 Capital Program and that Birchcliff has the ability to accelerate or decelerate capital expenditures depending on commodity prices and economic conditions; and the information set forth under the headings "Pouce Coupe Team - 2019 Outlook" and "Gordondale Team - 2019 Outlook"); Birchcliff's expectation that its 2019 capital expenditures will be significantly less than its adjusted funds flow during 2019, which will help it to protect its balance sheet; the information set forth under the heading "2019 Key Objectives"; estimates of potential future drilling locations; statements that Birchcliff will continue to pilot technologies to achieve better well results; statements regarding the planned liquids-handling facility at the Pouce Coupe Gas Plant (including: the capacity of the facility; the anticipated timing for the completion of the facility; and that the facility will give Birchcliff the ability to grow its condensate production to 10,000 bbls/d in Pouce Coupe); statements regarding dividends (including the sustainability of dividends and the timing of payment of dividends); the information under the heading "2018 Year-End Reserves" and elsewhere as it relates to Birchcliff's reserves (including: estimates of reserves and the net present values of future net revenue associated with Birchcliff's reserves; price forecasts; FDC; reserves life index; forecast facility expansions; and Birchcliff's expectation that the Pouce Coupe Gas Plant will generate EPCs in respect to the 2018 financial year). In addition, forward-looking statements in this Annual Report include the forward-looking statements identified in the MD&A under the heading "Advisories - Forward-Looking Statements". Statements relating to reserves are forward-looking as they involves the implied assessment, based on certain estimates and assumptions, that the reserves exist in the quantities predicted or estimated and that the reserves can profitably be produced in the future. See "Presentation of Oil and Gas Reserves".

With respect to the forward-looking statements contained in this Annual Report, assumptions have been made regarding, among other things: prevailing and future commodity prices and differentials, currency exchange rates, interest rates, inflation rates, royalty rates and tax rates; the state of the economy, financial markets and the exploration, development and production business; the political environment in which Birchcliff operates; the regulatory framework regarding royalties, taxes and environmental laws; the Corporation's ability to comply with existing and future environmental, climate change and other laws; future cash flow, debt and dividend levels; future operating, transportation, marketing, G&A and other expenses; Birchcliff's ability to access capital and obtain financing on acceptable terms; the timing and amount of capital expenditures and the sources of funding for capital expenditures and other activities; the sufficiency of budgeted capital expenditures to carry out planned operations; the successful and timely implementation of capital projects; results of future operations; Birchcliff's ability to continue to develop its assets and obtain the anticipated benefits therefrom; the performance of existing and future wells, well production rates and well decline rates; success rates for future drilling; reserves and resource volumes and Birchcliff's ability to replace and expand reserves through acquisition, development or exploration; the impact of competition on Birchcliff; the availability of, demand for and cost of labour, services and materials; the ability to obtain any necessary regulatory or other approvals in a timely manner; the satisfaction by third parties of their obligations to Birchcliff; the ability of Birchcliff to secure adequate processing and transportation for its products; Birchcliff's ability to market oil and gas; the availability of hedges on terms acceptable to Birchcliff; and natural gas market exposure. In addition to the foregoing assumptions, Birchcliff has made the following assumptions with respect to certain forward-looking statements contained in this Annual Report:

- Birchcliff's 2019 guidance assumes the following commodity prices during 2019: an average WTI price of US\$56.00/bbl; an average WTI-MSW differential of \$10.00/bbl; an average AECO price of \$1.65/GJ; an average Dawn price of \$3.40/GJ; an average NYMEX HH price of US\$3.00/MMBtu; and an exchange rate (CDN\$ to US\$1) of 1.32.
- With respect to estimates of 2019 capital expenditures, statements that 2019 F&D capital expenditures are expected to be significantly less than adjusted funds flow and Birchcliff's spending plans for 2019, such estimates, statements and plans are based on the following:
  - o Estimates of capital expenditures and any allocation thereof assume that the 2019 Capital Program will be carried out as currently contemplated.
  - o Statements that Birchcliff's total F&D capital expenditures are expected to be significantly less than adjusted funds flow assume that: the 2019 Capital Program will be carried out as currently contemplated; and the production targets, commodity mix, natural gas market exposure and commodity price assumptions set forth under the heading "2019 Outlook" in the MD&A are met.
  - o Birchcliff makes acquisitions and dispositions in the ordinary course of business. Any acquisitions and dispositions completed could have an impact on Birchcliff's capital expenditures, production, adjusted funds flow, free funds flow, costs and total debt, which impact could be material.
  - o The amount and allocation of capital expenditures for exploration and development activities by area and the number and types of wells to be drilled is dependent upon results achieved and is subject to review and modification by management on an ongoing basis throughout the year. Actual spending may vary due to a variety of factors, including commodity prices, economic conditions, results of operations and costs of labour, services and materials. Birchcliff will monitor economic conditions and commodity prices and, where deemed prudent, will adjust its capital programs to respond to changes in commodity prices and other material changes in the assumptions underlying such programs.
- With respect to Birchcliff's production guidance for 2019, such guidance assumes that: the 2019 Capital Program will be carried out as currently contemplated; no unexpected outages occur in the infrastructure that Birchcliff relies on to produce its wells and that any transportation service curtailments or unplanned outages that occur will be short in duration or otherwise insignificant; the construction of new infrastructure meets timing and operational expectations; existing wells continue to meet production expectations; and future wells scheduled to come on production meet timing, production and capital expenditure expectations. Birchcliff's production guidance may be affected by acquisition and disposition activity and acquisitions and dispositions could occur that may impact expected production.
- With respect to Birchcliff's estimate of free funds flow for 2019, such estimate assumes that: the level of capital spending for 2019 will be achieved; and the production targets, commodity mix, natural gas market exposure and commodity price assumptions set forth under the heading "2019 Outlook" in the MD&A are met.

- With respect to statements of future wells to be drilled and brought on production and estimates of potential future
  drilling locations and opportunities, the key assumptions are: the continuing validity of the geological and other technical
  interpretations performed by Birchcliff's technical staff, which indicate that commercially economic volumes can be
  recovered from Birchcliff's lands as a result of drilling future wells; and that commodity prices and general economic
  conditions will warrant proceeding with the drilling of such wells.
- With respect to statements regarding the future potential and prospectivity of properties and assets, such statements assume: the continuing validity of the geological and other technical interpretations determined by Birchcliff's technical staff with respect to such properties; and that, over the long-term, commodity prices and general economic conditions will warrant proceeding with the exploration and development of such properties.
- With respect to estimates of reserves volumes and the net present values of future net revenue associated with Birchcliff's reserves, the key assumption is the validity of the data used by Deloitte and McDaniel in their independent reserves evaluations.

Birchcliff's actual results, performance or achievements could differ materially from those anticipated in the forward-looking statements as a result of both known and unknown risks and uncertainties including, but not limited to: general economic, market and business conditions which will, among other things, impact the demand for and market prices of Birchcliff's products and Birchcliff's access to capital; volatility of crude oil and natural gas prices; fluctuations in currency and interest rates; stock market volatility; loss of market demand; an inability to access sufficient capital from internal and external sources; fluctuations in the costs of borrowing; operational risks and liabilities inherent in oil and natural gas operations; the occurrence of unexpected events such as fires, equipment failures and other similar events affecting Birchcliff or other parties whose operations or assets directly or indirectly affect Birchcliff; uncertainty that development activities in connection with its assets will be economical; uncertainties associated with estimating oil and natural gas reserves and resources; the accuracy of oil and natural gas reserves estimates and estimated production levels; geological, technical, drilling, construction and processing problems; uncertainty of geological and technical data; horizontal drilling and completions techniques and the failure of drilling results to meet expectations for reserves or production; uncertainties related to Birchcliff's future potential drilling locations; potential delays or changes in plans with respect to exploration or development projects or capital expenditures, including delays in the completion of gas plants and other facilities; the accuracy of cost estimates and variances in Birchcliff's actual costs and economic returns from those anticipated; incorrect assessments of the value of acquisitions and exploration and development programs; changes in tax laws, Crown royalty rates, environmental laws, carbon tax regimes, incentive programs and other regulations that affect the oil and natural gas industry and other actions by government authorities; an inability of the Corporation to comply with existing and future environmental, climate change and other laws; the cost of compliance with current and future environmental laws; political uncertainty and uncertainty associated with government policy changes; uncertainties and risks associated with pipeline restrictions and outages to third-party infrastructure that could cause disruptions to production; the lack of available pipeline capacity and an inability to secure adequate processing and transportation for Birchcliff's products; the inability to satisfy obligations under Birchcliff's firm marketing and transportation arrangements or other agreements; shortages in equipment and skilled personnel; the absence or loss of key employees; competition for, among other things, capital, acquisitions of reserves, undeveloped lands, equipment and skilled personnel; management of Birchcliff's growth; environmental risks, claims and liabilities; uncertainties associated with the outcome of litigation or other proceedings involving Birchcliff; unforeseen title defects; uncertainties associated with credit facilities and counterparty credit risk; non-performance or default by counterparties; risks associated with Birchcliff's risk management program and the risk that hedges on terms acceptable to Birchcliff may not be available; risks associated with the declaration and payment of dividends, including the discretion of Birchcliff's Board of Directors to declare dividends and change the Corporation's dividend policy; the failure to obtain any required approvals in a timely manner or at all; the failure to realize the anticipated benefits of acquisitions and dispositions and the risk of unforeseen difficulties in integrating acquired assets into Birchcliff's operations; negative public perception of the oil and natural gas industry, including transportation, hydraulic fracturing and fossil fuels; the Corporation's reliance on hydraulic fracturing; the availability of insurance and the risk that certain losses may not be insured; and breaches or failure of information systems and security (including risks associated with cyber-attacks).

Readers are cautioned that the foregoing lists of factors are not exhaustive. Additional information on these and other risk factors that could affect results of operations, financial performance or financial results are included in Birchcliff's most recent Annual Information Form and in other reports filed with Canadian securities regulatory authorities.

This Annual Report contains information that may constitute future-orientated financial information or financial outlook information (collectively, "FOFI") about Birchcliff's prospective results of operations including, without limitation, adjusted funds flow and free funds flow, all of which is subject to the same assumptions, risk factors, limitations and qualifications as set forth above. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable

at the time of preparation, may prove to be imprecise or inaccurate and, as such, undue reliance should not be placed on FOFI. Birchcliff's actual results, performance and achievements could differ materially from those expressed in, or implied by, the FOFI. Birchcliff has included the FOFI in order to provide readers with a more complete perspective on Birchcliff's future operations and Birchcliff's current expectations relating to its future performance. Such information may not be appropriate for other purposes and readers are cautioned that any FOFI contained herein should not be used for purposes other than those for which it has been disclosed herein. FOFI contained herein was made as of the date of this Annual Report. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any FOFI statements, whether as a result of new information, future events or otherwise.

Management has included the above summary of assumptions and risks related to forward-looking statements provided in this Annual Report in order to provide readers with a more complete perspective on Birchcliff's future operations. Readers are cautioned that this information may not be appropriate for other purposes.

The forward-looking statements contained in this Annual Report are expressly qualified by the foregoing cautionary statements. The forward-looking statements contained herein are made as of the date of this Annual Report. Unless required by applicable laws, Birchcliff does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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# **CORPORATE INFORMATION**

# **OFFICERS**

### A. Jeffery Tonken

President & Chief Executive Officer

# Myles R. Bosman

Vice-President, Exploration & Chief Operating Officer

# Chris A. Carlsen

Vice-President, Engineering

#### Bruno P. Geremia

Vice-President & Chief Financial Officer

# David M. Humphreys

Vice-President, Operations

# **DIRECTORS**

# A. Jeffery Tonken (Chairman)

President & Chief Executive Officer Calgary, Alberta

# Dennis A. Dawson

Lead Independent Director Calgary, Alberta

# Debra A. Gerlach

Independent Director Calgary, Alberta

# Stacey E. McDonald

Independent Director Calgary, Alberta

# James W. Surbey

Non-Independent Director Calgary, Alberta

# **MANAGEMENT**

### **Gates Aurigemma**

Manager, General Accounting

# **Robyn Bourgeois**

General Counsel & Corporate Secretary

# Jesse Doenz

Controller & Investor Relations Manager

# **MANAGEMENT CONT'D**

### George Fukushima

Manager of Engineering

### **Andrew Fulford**

Surface Land Manager

### **Paul Messer**

Manager of IT

# Tyler Murray

Mineral Land Manager

### **Bruce Palmer**

Manager of Geology

### **Brian Ritchie**

Asset Manager - Gordondale

# Michelle Rodgerson

Manager, Human Resources & Corporate Services

# **Jeff Rogers**

Facilities Manager

# **Randy Rousson**

Drilling & Completions Manager

### Victor Sandhawalia

Manager of Finance

# Ryan Sloan

Health, Safety & Environment Manager

### **Duane Thompson**

Production Manager

## **Hue Tran**

Business Development Manager

# Theo van der Werken

Asset Manager – Pouce Coupe

### **AUDITORS**

KPMG LLP,

Chartered Professional Accountants Calgary, Alberta

# **RESERVES EVALUATORS**

Deloitte LLP

Calgary, Alberta

McDaniel & Associates Consultants Ltd. Calgary, Alberta

# **BANKERS**

The Bank of Nova Scotia

**HSBC Bank Canada** 

National Bank of Canada

Canadian Imperial Bank of Commerce

Bank of Montreal

The Toronto-Dominion Bank

ATB Financial

Business Development Bank of Canada

Wells Fargo Bank, N.A., Canadian Branch

United Overseas Bank Limited

ICICI Bank Canada

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# **TRANSFER AGENT**

Computershare Trust Company of Canada Calgary, Alberta and Toronto, Ontario

TSX: BIR, BIR.PR.A, BIR.PR.C



# THANK YOU TEAM BIRCHCLIFF

Jeffrey Akeroyd, Bradley Alexander, Karen Allen, Diana Almeida, Camille Ashton, Gates Aurigemma, Valerie Babkov, Angela Belbeck, Tyrus Bender, Daniel Blattler, Calvin Bohdan, Angela Boire, Darryl Bolch, Deborah Borthwick, Myles Bosman, Jeff Boswell, Robyn Bourgeois, David Boyle, Anthony Bozzi, Kenneth Bramhill, Wayne Brown, Madison Burns, Dave Campbell, Matthew Campbell, Chris Carlsen, Alexandra Carlson, Caitlin Carrigy, Ann Ceccanese, Scott Cedergren, Matthew Chorney, Benjamin Christenson, Wendy Clay, Dallas Cline, Jacob Cloutier, Kalen Conrad, Laura Conroy, Michael Cordingley, Loren Damer, Dennis Dawson, Lara Cristina De Paula, Mark Dilworth, Jesse Doenz, Joseph Doenz, Kelly Dolen, Richard Dunn, Terrance Dyck, Darryl Easter, Emily Ebbels, John Ennis, Timothy Etcheverry, Lindsay Fast, Laura Ferguson, Mikaela Fero, Grant Friesen, Marshall Fritz, Colin Fry, George Fukushima, Andrew Fulford, Carrie Fyfe, Alexandra Gatza, Bruno Geremia, Melina Geremia, Debra Gerlach, Chad Goddard, David Graham, Lee Grant, Hannah Grigore, Ryan Gugyelka, Rylan Gulka, Tania Haberlack-Dolan, Mike Hale, Samuel Hampton, Theresa-Marie Hannouche, Trevor Harley, Wanda Hiebert, Lorna Hildebrand, Warren Hingley, Paul Hirsekorn, Leah Janet Hogan, Jasen Holmstrom, Lory-Ann Hoppe, Daryl Hudak, Dave Humphreys, Derek Jamieson, Anna Johnson, David Johnson, Lorn Johnson, Dustin Kelm, Phyllis Kinzner, Diane Knoblauch, Jesiah Kurjata, Danny Kutrowski, Anji Lawrence, Katherine Lazaruk, Calvin Leithead,



Kristen Lewicki, Ehsan Liaqat, Ryan Linsley, Scott Lundquist, Thomas Lundquist, Joseph Lyste, John Macgillivray, Dallas Maclean, Darcy Macleod, Mary Macneill, Curtis Mah, Maggie Malapad, Arundeep Mann, Kevin Matiasz, John Matijevich, Drystan Mazur, Stacey Mcdonald, Angela Mcgonigal, Marc Mcintosh, Ryan Mcintosh, Jerilyn Mcpherson, Richard Melling, Paul Messer, Alfred Michetti, Derek Michetti, Emelyia Moghaddami, Thomas Moult, Steve Mueller, Mckenzie Murdoch, Tyler Murray, Kody Naka, Sarah Nance, Michael Ng, Tam Nguyen, Matteo Niccoli, Christopher Olson, Tammy Page, Philomena Paisley, Bruce Palmer, Dean Paterson, Chase Peirce, Jesse Peterson, Paul Picco, Allan Pickel, Landon Poffenroth, Austin Power, Glenn Power, Terrence Power, Shoni Proctor, Evan Pugh, Kathryn Ramage, Brian Ritchie, Michelle Rodgerson, Blaine Rogers, Jeff Rogers, Sherri Rosia, Jared Rousson, Randy Rousson, Todd Sajtovich, Lee Sallenbach, Victor Sandhawalia, Wade Schultz, Sadeq Shahamat, Daniel Sharp, Amy Short, Ryan Sloan, Kiran Somanchi, Tanner St. Julian, Hilary Steinbach, Darby Stolk, Lindsay Sturrock, Tracey Suchlandt, Jim Surbey, Tyson Suderman, Ryan Swanson, Conal Tackney, Duane Thompson, Jeff Tonken, Gillian Topping, Terry Tracey, Hue Tran, Joshua Uy, Theo Van Der Werken, Kara Vance, Kris Veach, Greg Vreim, Linda Wang, Michael Warrick, Shelby Watson, Matthew Weiss, David Wetta, Philip Wu, John Yeo, Kent Zahara, Michael Zimmerman

2018 ANNUAL REPORT

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