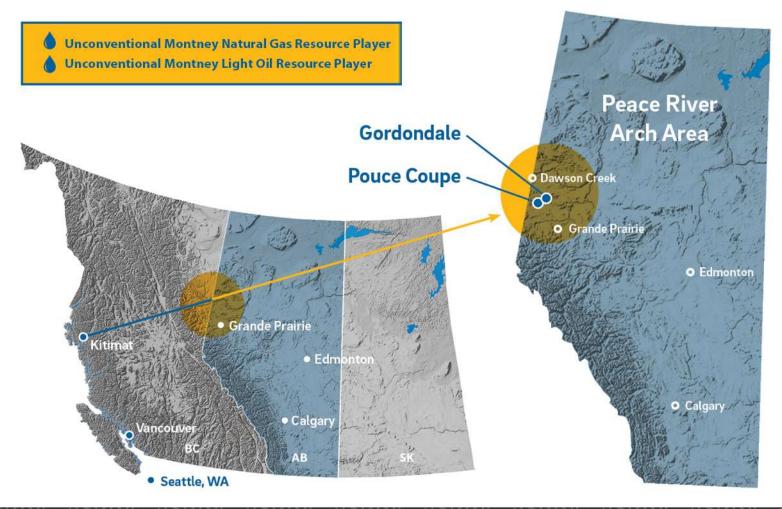
# BIRCHCLIFF ENERGY

# **CORPORATE PRESENTATION**

# **PEOPLE, FOCUS & EXECUTION**



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### **Corporate Snapshot & Select 2022 Guidance**<sup>(1)(2)</sup>

Q3 2021 average production	84,924 boe/d			
Light oil (% of production)	2,878 bbls/d (3%)			
Condensate (% of production)	5,990 bbls/d (8%)			
NGLs (% of production)	6,889 bbls/d (8%)			
Natural gas (% of production)	415 MMcf/d (81%)			
Q3 2021 adjusted funds flow	\$168.1 million <sup>(3)</sup> / \$0.63 per basic common share <sup>(4)</sup>			
Q3 2021 cash flow from operating activities	\$155.6 million			
Q3 2021 free funds flow <sup>(3)</sup>	\$150.1 million			
Q3 2021 net income to common shareholders	\$138.4 million / \$0.52 per basic common share			
Estimated 2022 annual average production	78,000 - 80,000 boe/d			
Estimated 2022 adjusted funds flow <sup>(3)(5)</sup>	\$590 million			
Estimated 2022 F&D capital expenditures <sup>(6)</sup>	\$240 – \$260 million			
Estimated 2022 free funds flow	\$330 – \$350 million <sup>(3)</sup> /			
Estimated 2022 free funds flow	\$1.25 – \$1.32 per basic common share <sup>(4)</sup>			
Estimated total debt at December 31, 2022 <sup>(7)</sup>	\$175 – \$195 million			

1) Birchcliff's 2022 guidance (as of January 19, 2022) assumes the following commodity prices and exchange rate: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of US\$3.50/GJ; an average Dawn price of US\$3.90/MMBtu; an average AECO price of US\$3.50/GJ; an average wTI price of US\$3.50/bbl; an average wTI-MSW differential of CDN\$5.00/bbl; an average AECO price of US\$3.50/GJ; an average bar price of US\$3.50/bbl; an average wTI-MSW differential of CDN\$5.00/bbl; an average AECO price of US\$3.50/GJ; an average bar price of US\$3.50/bbl; an average wTI-MSW differential of CDN\$5.00/bbl; an average AECO price of US\$3.50/GJ; an average bar price of US\$3.50/bbl; an average wTI-MSW differential of CDN\$5.00/bbl; an average AECO price of US\$3.50/GJ; an average bar price of US\$3.50/bbl; an average wTI-brice of US\$3.50/bbl; an average wTI-b

2) Birchcliff's quidance for its production commodity mix and adjusted funds flow in 2022 is based on an annual average production rate of 79,000 boe/d during 2022, which is the mid-point of Birchcliff's annual average production quidance range for 2022.

3) Non-GAAP financial measures. See "Advisories" – Non-GAAP and Other Financial Measures". Non-GAAP financial measures are not standardized measures under GAAP and might not be comparable to similar financial measures disclosed by other issuers where similar terminology is used.

4) Non-GAAP ratio. See "Advisories – Non-GAAP and Other Financial Measures". Non-GAAP ratios are not standardized financial measures under GAAP and might not be comparable to similar financial measures disclosed by other issuers where similar terminology is used. Adjusted Fund Flow per basic common share and Free Funds Flow per basic common share assume approximately 265 million common shares outstanding See "Advisories – Non-GAAP and Other Financial Measures".

5) Birchcliff's estimate of adjusted funds flow takes into account the effects of its physical and financial basis swap contracts outstanding as at January 19, 2022 and excludes annual cash incentive payments that have not been approved by Birchcliff's board of directors. Birchcliff's 2022 guidance for adjusted funds flow has been revised from its preliminary guidance of \$650 million (previously disclosed on November 10, 2021) as a result of a lower commodity price forecast.

6) Birchcliff's estimate of F&D capital expenditures corresponds to Birchcliff's 2022 F&D capital budget and excludes any net potential acquisitions and dispositions and the capitalized portion of annual cash incentive payments that have not been approved by Birchcliff's board of directors. See "Advisories – Capital Expenditures".

7) Capital management measure. See "Advisories – Non-GAAP and Other Financial Measures". The total debt amount set forth in the table above assumes the following: (i) that any free funds flow remaining after the payment of dividends, ARO and other amounts for administrative assets, financing fees and capital lease obligations is allocated towards debt reduction; (ii) that the timing of common share and preferred share dividends paid by the Corporation remains consistent with previous years, with the dividend rates and applicable taxes remaining unchanged; (iii) that there are approximately 265 million common, 2,000,000 series A preferred shares ("Series A Preferred Shares") and 1,530,709 series C preferred shares or buybacks of common share socurring during 2022; (iv) that no significant acquisitions are completed by the Corporation and there is no repayment of debt using the proceeds from asset dispositions or equity issuances; (v) that there are no proceeds received from the exercise of stock options or performance warrants during 2022; (iv) that the 2022 capital program will be carried out as currently contemplated and the level of capital spending set forth herein will be achieved; and (vii) the targets for production, production commodity mix, capital expenditures, adjusted flows, free funds flow and natural gas market exposure and the commodity price and exchange rate assumptions set forth herein are met. The amount set forth in the table above does not include annual cash incentive payments that have not been approved by Birchelffs board of directors.

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Long-term (drawn) debt as at September 30, 2021	\$648.3 million
Total debt as at September 30, 2021 <sup>(1)</sup>	\$637.9 million
Credit facilities borrowing base limit as at September 30, 2021	\$850.0 million
Common shares (basic) as at September 30, 2021	~266 million
Market capitalization as at January 18, 2022 – \$6.70/sh <sup>(2)</sup>	\$1,779 million
Enterprise value as at January 18, 2022 – \$6.70/sh <sup>(3)</sup>	\$2,506 million
Montney/Doig land position as at December 31, 2020	415.7 (394.6 net) sections
Montney/Doig potential net future horizontal drilling locations as at December $31, 2020^{(4)}$	7,134 locations
Gross PDP reserves as at December 31, 2020 <sup>(5)</sup>	206,606 Mboe
Gross 2P reserves as at December 31, 2020 <sup>(5)</sup>	1,040,477 Mboe
TSX	BIR, BIR.PR.A, BIR.PR.C
Quarterly dividend to common shareholders	\$0.01/sh

Capital management measure. See "Advisories - Non-GAAP and Other Financial Measures". 1)

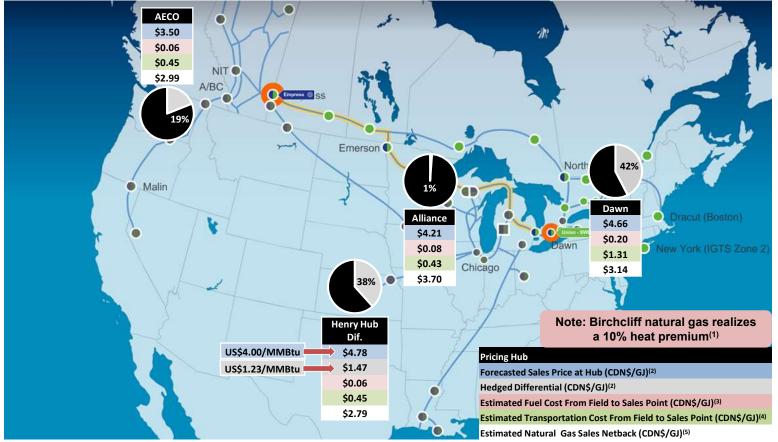
2)

Market capitalization is calculated as the closing price of the common shares on the TSX multiplied by the basic common shares outstanding. Enterprise value is calculated by multiplying the closing price of the common shares on the TSX by the total number of common shares outstanding, adding total debt as at September 30, 2021 and including the face value of the Series A and Series C Preferred 3) Shares.

See "Advisories - Drilling Locations". 4)

5) Based upon the evaluation by Deloitte, independent qualified reserves evaluator, with an effective date of December 31, 2020 as contained in the report by Deloitte dated February 10, 2021 (the "2020 Deloitte Reserves Report"). See "Advisories -Presentation of Oil and Gas Reserves".

## **2022E NATURAL GAS MARKETING**



Birchcliff receives premium pricing for its natural gas production due to its high heat content. Birchcliff's conversion from \$/GJ to \$/Mcf is approximately 1.16 compared to the standard 1.055. 1)

Birchcliff's guidance for volumes and natural gas market exposure is based on mid-point 2022 guidance including fuel volumes; pricing based on Birchcliff's 2022 guidance and internal volume-weighted natural gas sales forecasts. Birchcliff's 2022 2) guidance (as of January 19, 2022) assumes the following commodity prices and exchange rate: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of CDN\$3.50/GJ; an average Dawn price of US\$3.90/MMBfu; an average NYMEX HH price of US\$4.00/MMBfu; and an exchange rate (CDN\$ to US\$1) of 1.26. Changes in assumed commodity prices and variances in production estimates can have a significant impact on Birchcliff's estimates of adjusted funds flow and free funds flow and Birchcliff's other guidance, which impact may be material. For further information, see "Advisories - Forward-Looking Statements". Recorded net of extraction income

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- Recorded as transportation expense for: AECO & Dawn service. Transportation expense recorded net of realized wellhead price for Alliance service
- 4) 5 Natural gas sales netback denotes the average realized natural gas sales proceress network gas sales proceed on the point 2022 production guidance \*Pie charts indicate % of volumes forecast to be sold at the respective hub/contract based on mid-point 2022 production guidance

# **KEYS TO SUCCESS**

*** ***	Management	<ul> <li>Executives with a proven track record, continuity since inception and significant ownership.</li> <li>Highly experienced Management Team with excellent technical knowledge and a long history with the company.</li> </ul>
<b>\\$</b>	Operational Execution	<ul> <li>453 (449.9 net) Montney/Doig horizontal wells drilled to December 31, 2020 all utilizing multi-stage fracture stimulated technology.</li> <li>Construction of the 340 MMcf/d Pouce Coupe Gas Plant in six separate phases on time and on budget.</li> <li>Own, control or have access to infrastructure and operate 99% of production.</li> </ul>
÷Ö:	Technical Expertise	<ul> <li>Significant in-house technical expertise and experience on the Montney/Doig Resource Play.</li> <li>Supports continual improvements in high grading portfolio for the decision making process.</li> <li>Continued improvements in estimated reserve recovery per well, drilling &amp; completion practices and operating costs.</li> </ul>
	Scale & Repeatability	<ul> <li>Consistent, repeatable, low-cost, predictable production and results.</li> <li>7,134 potential net future Montney/Doig horizontal drilling locations as at December 31, 2020<sup>(1)</sup>.</li> <li>415.7 (394.6 net) sections of land on the Montney/Doig Resource Play as at December 31, 2020<sup>(1)</sup>.</li> </ul>
\$	Financial Execution	<ul> <li>Full-cycle profitability with top tier F&amp;D costs and netbacks through 2020 and prior years.</li> <li>Accurate and reliable real time forecasts supported by a detailed capital management and production forecasting process which is fully integrated into Birchcliff's financial reporting systems.</li> </ul>

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1) See "Advisories – Drilling Locations".

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# **2022 CAPITAL PROGRAM**

2022 Capital Program - F&D Capital Expenditures by Classification					
Classification	Capital (millions)				
DCCET					
Pouce Coupe <sup>(1)</sup>	\$103 - \$112				
Gordondale <sup>(1)</sup>	\$35 - \$38				
Additional Well Completions Capital <sup>(2)</sup>	\$16 - \$18				
Total DCCET	\$154 - \$168				
Facilities and Infrastructure <sup>(3)</sup>	\$34 - \$37				
Maintenance and Optimization <sup>(4)</sup>	\$30 - \$32				
Land & Seismic <sup>(5)</sup>	\$6				
Other <sup>(6)</sup>	\$16 - \$17				
Total F&D Capital Expenditures <sup>(7)</sup>	\$240 - \$260				



Annual Average Production 78,000 – 80,000 boe/d



Capital Program utilizing 4 multi-well pads to reduce costs and environmental impact



64% of capital to be spent on DCCET activities

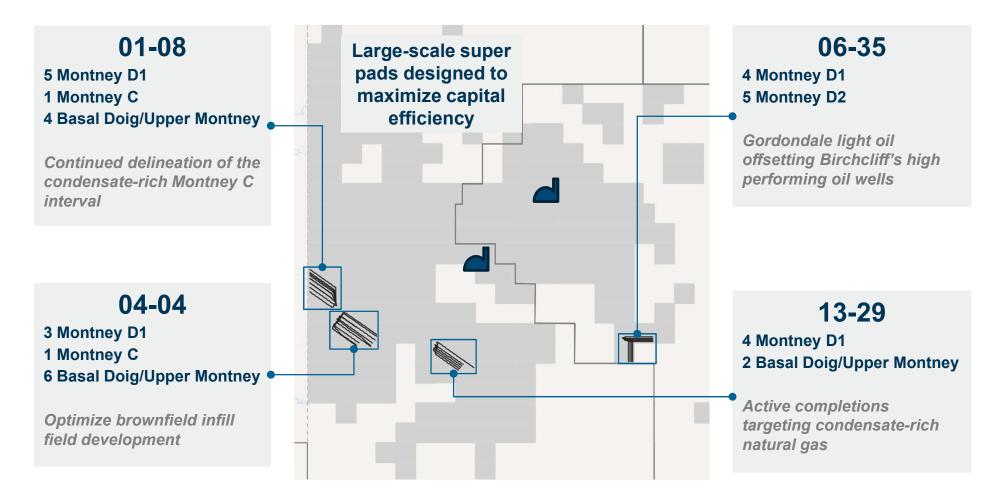
14% of capital directed to | Facilities & Infrastructure to accommodate production and minimize adverse backout

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On a DCCET basis, the average well cost in 2022 is estimated to be approximately \$5.2 million for each of Pouce Coupe and Gordondale. These costs can vary depending on factors such as the size of the associated multi-well pads, 1) horizontal well length, the costs of construction, the existence of pipelines and other infrastructure and the distance to existing or planned pipelines and other infrastructure.

- 2) Represents the estimated completion, equipping and tie-in costs associated with 5 wells that were drilled and rig released in Q4 2021.
- 3) Facilities and infrastructure includes approximately \$1.5 million for various emissions reduction initiatives.
- 4) Maintenance and optimization includes capital for the planned turnarounds at the Pouce Coupe Gas Plant and AltaGas' deep-cut sour gas processing facility in Gordondale (the "AltaGas Facility").
- Land and seismic includes capital for crown sales and rental payments but does not include other property acquisitions and dispositions. 5)
- 6) Other primarily includes capitalized G&A.
- 7Ś Net property acquisitions and dispositions have not been included in the table above as these amounts are generally unbudgeted. See "Advisories - Capital Expenditures" and "Advisories - Forward-Looking Statements".

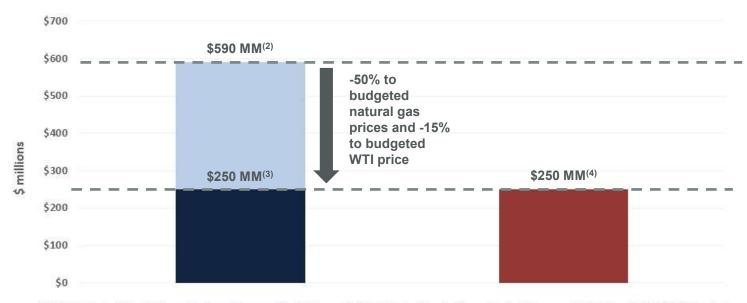
# **2022 CAPITAL PROGRAM**





## STRESS TESTING ADJUSTED FUNDS FLOW<sup>(1)</sup>

Birchcliff's 2022 capital program would remain fully funded from adjusted funds flow with a 50% decrease from Birchcliff's budgeted blended corporate realized natural gas price and a 15% decrease from Birchcliff's budgeted WTI pricing, demonstrating the profitability of Birchcliff's business through its low-cost structure, low-decline asset base and efficient 2022 capital program.



■ 2022 Adjusted Funds Flow - Reduced Commodity Pricing ■ 2022 Adjusted Funds Flow - Budget Commodity Pricing ■ 2022 F&D Capital

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1) Non-GAAP financial measure. See "Advisories – Non-GAAP and Other Financial Measures."

2) Budget commodity pricing includes: average AECO price of CDN\$3.50/GJ, average Dawn price of US\$3.90/MMBtu, average NYMEX price of US\$4.00/MMBtu, and an average WTI price of US\$76.00/bbl.

3) Reduced commodity pricing includes: average AECO price of CDN\$1.28/GJ, average Dawn price of US\$2.44/MMBtu, average NYMEX price of US\$2.44/MMBtu, and an average WTI price of US\$65.00/bbl

4) 2022 F&D Capital based on mid-point of 2022 guidance range.

# FIVE YEAR PLAN THEMES

**INCREASING SHAREHOLDER VALUE** 



Maximizing Free Funds Flow and Reducing Indebtedness



**Increasing Shareholder Returns** 

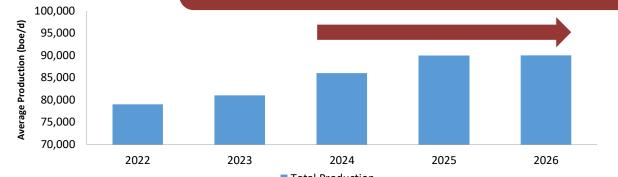


Fully Utilizing the Available Processing Capacity of Birchcliff's Existing Infrastructure



### **FIVE YEAR PLAN – PRODUCTION** REDUCING PER UNIT COSTS AND MAXIMIZING EFFICIENCIES

Filling existing infrastructure drives down per-unit costs and maximizes efficiencies. Per-unit combined royalty, operating, and transportation and other expenses decrease by ~\$1.00/boe (~9%) from 2022 to 2026.



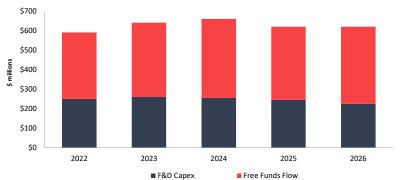
Total	Proc	luction	

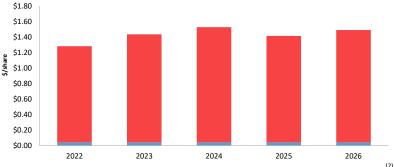
	2022	2023	2024	2025	2026
Average Production (boe/d) <sup>(1)</sup>	78,000 - 80,000	81,000	86,000	90,000	90,000
Liquids (%) <sup>(1)</sup>	20	20	20	19	18
Annual Average Production Growth (%) <sup>(1)(2)</sup>		3	6	5	-

1) See "Advisories – Forward-Looking Statements".

Growth based on mid-point of guidance range.

### FIVE YEAR PLAN – FINANCIAL<sup>(1)</sup> SIGNIFICANTLY REDUCING DEBT & INCREASING SHAREHOLDER RETURNS





Current Annual Common Share Dividend Free Funds Flow Above Annual Common Share Dividend (2)

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	2022	2023	2024	2025	2026
Adjusted Funds Flow (MM) <sup>(3)(4)</sup>	\$590	\$640	\$660	\$620	\$620
F&D Capital Expenditures (MM) <sup>(5)</sup>	\$240 - \$260	\$260	\$255	\$245	\$225
Free Funds Flow (MM) <sup>(3)</sup>	\$330 - \$350	\$380	\$405	\$375	\$395
Cumulative Free Funds Flow (MM) <sup>(3)(6)</sup>	\$330 - \$350	\$720	\$1,125	\$1,500	\$1,895
(Total Debt) Cash at Year End (MM) <sup>(6)(7)</sup>	(\$175 - \$195)	\$160	\$540	\$885	\$1,250

1) See "Advisories – Forward-Looking Statements".

2) Non-GAAP ratio. See "Advisories - Non-GAAP and Other Financial Measures."

3) Non-GAAP financial measure. See "Advisories - Non-GAAP and Other Financial Measures".

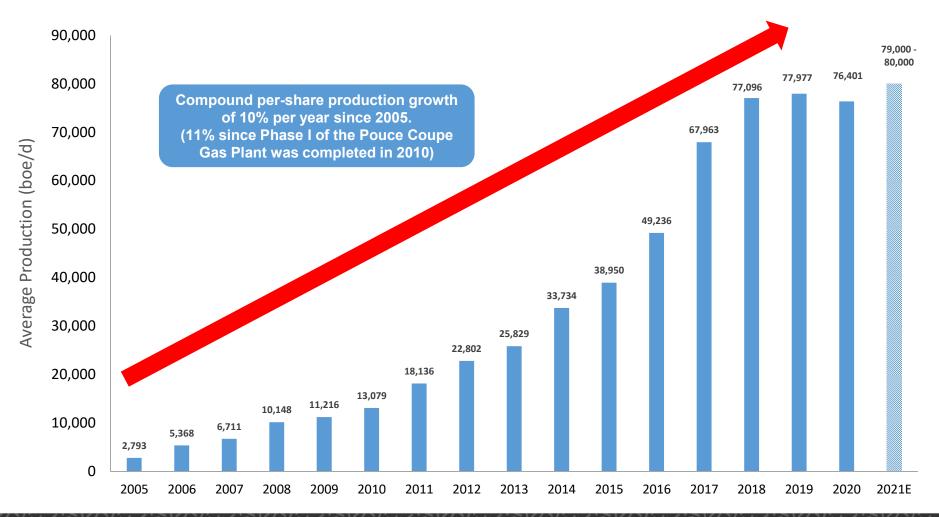
4) Assumes the following commodity prices and exchange rate over 2022 to 2025: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of CDN\$3.50/GJ; an average Dawn price of US\$3.90/MMBtu; an average NYMEX HH price of US\$4.00/MMBtu; and an exchange rate over 2022 to 2025. Concerning the set interval of a set interval of the se

5) The Five Year Plan contemplates that approximately 170 to 180 wells will be brought on production by the Corporation over 2022 to 2026.

6) The Corporation has used the mid-point of its 2022 guidance for free funds flow and total debt at year end in determining the cumulative free funds flow and (total debt) cash at year end for 2023 to 2026.

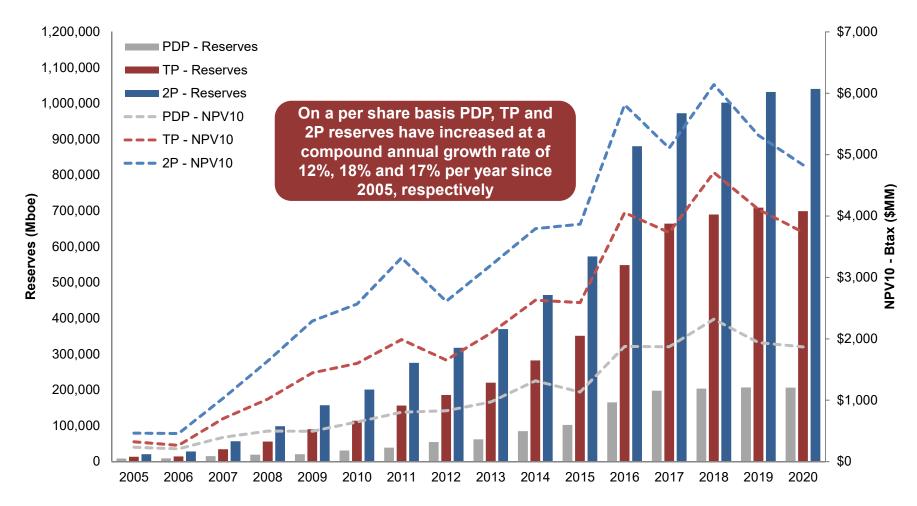
7) Total debt is a capital management measure. See "Non-GAAP and Other Financial Measures". The total debt amounts set forth in the table above assume the following: (i) that any free funds flow remaining after the payment of dividends, ARO and other amounts for administrative assets, financing fees and capital lease obligations is allocated towards debt reduction; (ii) that the timing of common share and preferred share dividends paid by the Corporation remains consistent with previous years, with the dividend rates and applicable taxes remaining unchanged; (iii) that there are approximately 265 million common, 2,000,000 Series A and 1,530,709 Series C Preferred Shares outstanding, with no edemptions of the Series C Preferred Shares or buybacks of cases on shares occurring during 2022 to 2026; (iv) that no significant acquisitions are completed by the Corporation and there is no repayment of debt using the proceeds from asset dispositions or equity issuances; (v) that the capital programs for each year will be carried out as currently contemplated and the level of capital spending set forth herein will be achieved; and (vii) the targets for production, production, commodity mix, capital expenditures, adjusted flow and free funds flow and the commodity price and exchange rate assumptions set forth herein are met. The amounts set forth in the table above does not include annual cash incentive payments that have not been approved by Birchelff's board of directors.

# **PRODUCTION HISTORY**



\$44443557\$44443557\$44443557\$44443557\$44444557\$444443557\$444443557\$444443557\$444443557\$44444555

# **CORPORATE RESERVES**<sup>(1)</sup>



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See "Advisories – Presentation of Oil and Gas Reserves".

# PROVEN TRACK RECORD AS A LOW-COST PRODUCER

Profitability Breakdown:	2016	2017	2018	2019	2020	5 Year Average
Average AECO (CDN\$/GJ)	\$2.05	\$2.04	\$1.42	\$1.67	\$2.11	\$1.86
Average WTI (US\$/bbl)	\$43.32	\$50.95	\$64.77	\$57.03	\$38.91	\$51.00
P&NG Revenue (\$/Mcfe) <sup>(1)(2)</sup>	\$3.12	\$3.74	\$3.68	\$3.59	\$3.15	\$3.46
PDP F&D (\$/Mcfe) <sup>(2)(3)</sup>	(\$1.07)	(\$1.05)	(\$1.46)	(\$1.44)	(\$1.69)	(\$1.34)
Total Cash Costs (\$/Mcfe) <sup>(4)</sup>	(\$1.77)	(\$1.78)	(\$1.74)	(\$1.72)	(\$1.72)	(\$1.75)
Profit (\$/Mcfe) <sup>(4)</sup>	<u>\$0.29</u>	<u>\$0.91</u>	<u>\$0.48</u>	<u>\$0.43</u>	<u>(\$0.26)</u>	<u>\$0.37</u>
Profit Margin (%) <sup>(4)</sup>	<u>9%</u>	<u>24%</u>	<u>13%</u>	<u>12%</u>	<u>(8%)</u>	<u>10%</u>

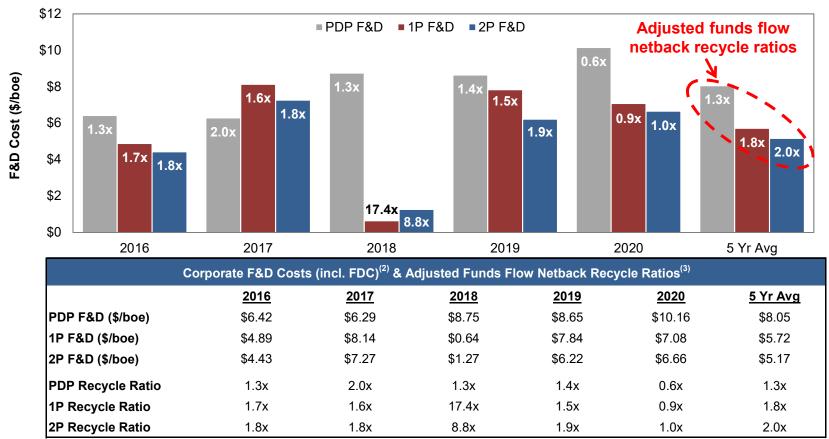
1) Excludes the effects of financial instruments but includes the effects of fixed price physical delivery contracts.

2) Supplementary financial measure. See "Advisories – Non-GAAP and Other Financial Measures."

3) Cost to find and develop PDP reserves based on F&D costs. See "Advisories – Oil and Gas Metrics".

4) Non-GAAP ratio. See "Advisories – Non-GAAP and Other Financial Measures".

## PROVEN TRACK RECORD AS A LOW-COST FINDER<sup>(1)</sup>



1) See "Advisories - Oil and Gas Metrics" for a description of the methodology used to calculate F&D costs and recycle ratios.

2) Supplementary Financial Measure. See "Advisories - Non-GAAP and Other Financial Measures"

3) Non-GAAP ratio. See "Advisories – Non-GAAP and Other Financial Measures."

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### **ENVIRONMENTAL, SOCIAL AND GOVERNANCE**

## PEER EMISSIONS METRICS<sup>(1)(2)(3)(4)</sup>



2. All peer data as of 2019 YE with the exception of BNP and VII (2016YE)

4. Scope 2 Emissions: Emissions from the purchase of indirect energy

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### ENVIRONMENTAL, SOCIAL AND GOVERNANCE

## COMMITMENT TO ENVIRONMENTAL STEWARDSHIP

Waste heat recovery units at the Pouce Coupe Gas Plant take the equivalent of >5,000 cars off the road annually.

Peer-leading water storage and infrastructure has taken the equivalent of over 50,000 large water handling trucks off the road since 2017.

Birchcliff has numerous VRUs at various facilities, which allow for the capture of vented gas or gas that might normally be flared, and recycle it back into Birchcliff's process streams. This eliminates or significantly reduces vented and flared emissions at these sites.





Birchcliff wellsites are designed to have zero vented emissions.

Birchcliff exceeds industry safety standards by conducting an Emergency Response Preparedness exercise every year (vs requirement of every 3 years).



Birchcliff's LMR rating of 17.87 (as at January 1, 2022) compares to the industry average of 4.95.





### **ENVIRONMENTAL, SOCIAL AND GOVERNANCE**

## INVESTING IN OUR PEOPLE AND THE COMMUNITY

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\$4.25 million donated to more than 100 local community groups and organizations in the last 5 years.



Continued partnerships with local communities through educational, cultural, and economic development initiatives.



Major supporter of STARS Air Ambulance and the United Way of Calgary, raising \$1.5 million for each organization todate.





Strong record of success built on the belief that outstanding people combined with a great culture creates a winning environment.



Employee education funds and scholarships promote continued knowledge enhancement.



Strong internal mentoring program encourages senior employees to develop junior staff.



#### View Birchcliff's ESG Report at birchcliffenergy.com

# MONTNEY/DOIG - A WORLD CLASS RESOURCE PLAY

440 gross (437.7 net) Montney/Doig horizontal wells producing as of Dec 31, 2020

**Resource density.** Stacked resource up to 300 metres thick. **Large areal extent.** Extends over 50,000 square miles.

**Exceptional "fracability".** Low clay content, low Poisson's Ratio and high Young's Modulus.

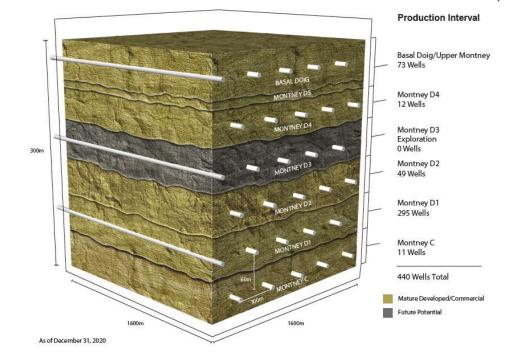
**Exceptional fracture stability.** 

Fractures stay open due to very low proppant embedment. **High permeability.** Formation is dominated by siltstones allowing

natural fluid flow. **Over pressured.** Indicative of high

gas in place.

**Repeatability.** Widespread "blanket" style deposit provides for more repeatable results. BIRCHCLIFF MONTNEY/DOIG NATURAL GAS RESOURCE PLAY FULL DEVELOPMENT PLAN: HEXASTACK

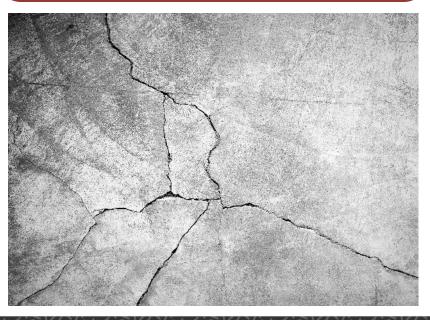


# MONTNEY/DOIG MINERALOGY LEADS TO EXCELLENT "FRACABILITY"

The Montney/Doig Resource Play rock type is composed of a high percentage of hard minerals, and a low percentage of clays and soft minerals. When fractured this results in a complex fracture system similar to shattering glass. This complex fracture system enhances stimulated rock volume and allows hydrocarbons to flow at greater quantities into the horizontal wellbore leading to enhanced production rates and EURs.

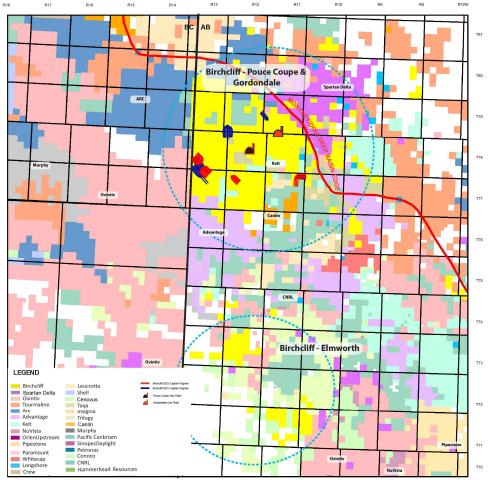


Some other resource plays have a high percentage of clays and soft minerals. When fractured this results in the rock breaking similar to concrete, in a simple bi-wing fracture system. This simple bi-wing fracture system can lead to less stimulated rock volume, which in tight shale reservoirs can lead to less effective long term hydrocarbon production rates and EURs.



# BIRCHCLIFF'S MONTNEY/DOIG RESOURCE PLAY

- Large contiguous land base with 415.7 (394.6 net) sections prospective for the Montney/Doig as at December 31, 2020.
- Birchcliff has a contiguous land block at Pouce Coupe and Gordondale of approximately 228 net sections.
- Stacked resource in some of the thickest Montney (~300m of consistent thickness) with 7,134<sup>(1)</sup> potential net future horizontal drilling locations identified.
- Low-cost structure as a result of Birchcliff's ownership of the Pouce Coupe Gas Plant and surrounding field infrastructure.
- Low decline production base estimated at 19% in 2021.

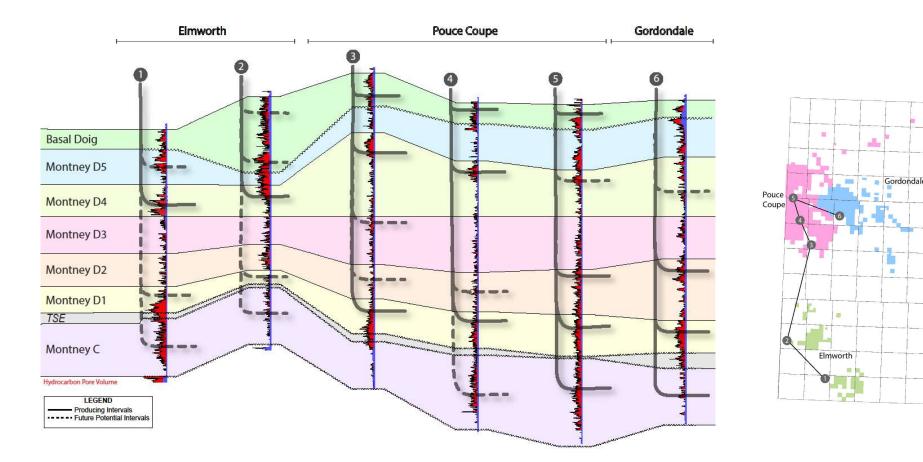


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See "Advisories - Drilling Locations".

## **MONTNEY/DOIG MULTI-LAYER OPPORTUNITY**



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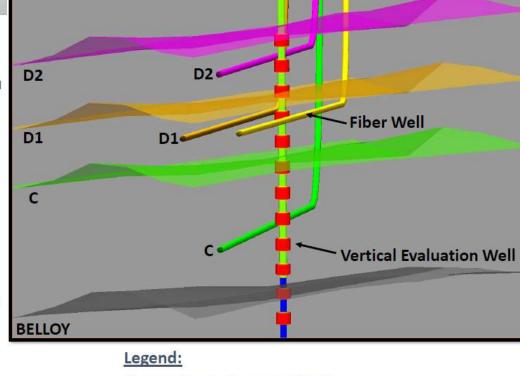
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ENERGY

## **SCIENCE & TECHNOLOGY PAD**

#### **Goals and Objectives**

- Improve calibration of reservoir characteristics and petrophysical properties with drilling, completion and production performance
- Optimize vertical and horizontal well spacing, frack stage spacing and landing depths for continuous reservoir multilayer development
- Calibrate and optimize fracture stimulation methods by imaging fracture initiation, fracture propagation and flow back
- Develop a calibrated reservoir flow model to characterized reservoir performance and develop field optimization strategies
- Perform quantitative production analysis by stimulation stage along the fiber well to better understand productions depletion and recovery factors
- Develop a better understanding of cross well fracture stimulation interference in Montney natural fractured reservoirs



- Conventional advanced wireline logs
- DAS and DTS Fiber Well
- Micro Seismic Geophones
- Cored Interval ~300m Basal Doig and Montney

#### Tools

### Full diameter core to identify and calibrate

- Reservoir facies, fabric and reservoir characteristics
- Increased stratigraphic resolution
- Petrophysical and seismic properties
- Geomechanical properties
- Reservoir fluid distribution

#### Suit of conventional and advanced wireline logs

- Image rock fabric and fractures
- Sonic characteristics
- Lithology
- Reservoir fluids distributions

#### Microseismic

- Fracture initiation and propagation
- Fracture characterization

#### Fiber Optic Distributed Thermal Sensing (DTS) and Fiber Optic Distributed Acoustic Sensing (DAS

- Hydraulic fracture profiling
- Fluid and proppant placement
- Inter-stage communication
- Cross well communication detection
   and monitoring
- Production performance by stage

## **BIRCHCLIFF MONTNEY/DOIG INVENTORY 2020YE**

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				BIR MONT	NEY/DOIG		
	-	PDP/	PDNP	1P Loc	ations	2P Locations	
		Gross	Net	Gross	Net	Gross	Net
$\sim$	BD/MNTN D5	73.0	71.9	182.0	179.0	259.0	254.0
	MNTN D4	12.0	12.0	9.0	9.0	31.0	31.0
	MNTN D3	0.0	0.0	0.0	0.0	0.0	0.0
	MNTN D2	49.0	49.0	37.0	37.0	84.0	84.0
$( \ $	MNTN D1	295.0	293.7	284.0	284.0	381.0	376.0
	MNTN C	11.0	11.0	6.0	6.0	24.0	24.0
	TOTAL	440.0	437.7	518.0	515.0	779.0	769.0

		POUCE							
	-	PDP/	PDNP	1P Loc	1P Locations		ations		
		Gross	Net	Gross	Net	Gross	Net		
$\sim$	BD/MNTN D5	73.0	71.9	176.0	173.2	249.0	244.3		
	MNTN D4	10.0	10.0	9.0	9.0	31.0	31.0		
	MNTN D3	0.0	0.0	0.0	0.0	0.0	0.0		
	MNTN D2	15.0	15.0	4.0	4.0	19.0	19.0		
$( \ $	MNTN D1	183.0	181.7	247.0	247.0	299.0	296.8		
$\sim$	MNTN C	11.0	11.0	6.0	6.0	24.0	24.0		
	TOTAL	292.0		442.0		622.0	615.1		

		GORDONDALE							
		PDP/	PDNP	1P Loc	1P Locations		ations		
		Gross	Net	Gross	Net	Gross	Net		
$\sim$	BD/MNTN D5 <sup>(1)</sup>	0.0	0.0	6.0	5.8	10.0	9.7		
	MNTN D4	1.0	1.0	0.0	0.0	0.0	0.0		
	MNTN D3	0.0	0.0	0.0	0.0	0.0	0.0		
$\sim$	MNTN D2	34.0	34.0	33.0	33.0	65.0	65.0		
	MNTN D1	112.0	112.0	37.0	37.0	82.0	79.2		
	MNTN C	0.0	0.0	0.0	0.0	0.0	0.0		
	TOTAL	147.0	147.0	76.0	75.8	157.0	153.9		

8		ELMWORTH & SINCLAIR							
4		PDP/	PDNP	1P Loc	ations	2P Locations			
		Gross	Net	Gross	Net	Gross	Net		
	BD/MNTN D5	0.0	0.0	0.0	0.0	0.0	0.0		
$\sim$	MNTN D4	1.0	1.0	0.0	0.0	0.0	0.0		
	MNTN D3	0.0	0.0	0.0	0.0	0.0	0.0		
	MNTN D2	0.0	0.0	0.0	0.0	0.0	0.0		
	MNTN D1	0.0	0.0	0.0	0.0	0.0	0.0		
~	ΜΝΤΝ C	0.0	0.0	0.0	0.0	0.0	0.0		
	TOTAL	1.0		0.0	0.0	0.0	0.0		

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Note: Location inventory includes three (3) 100% W.I. existing wells that have proved non-producing reserves. (2 in Pouce Coupe and 1 in Elmworth).

### 2020 LIQUIDS SUMMARY MULTI-INTERVAL CUBE-STYLE

## DEVELOPMENT

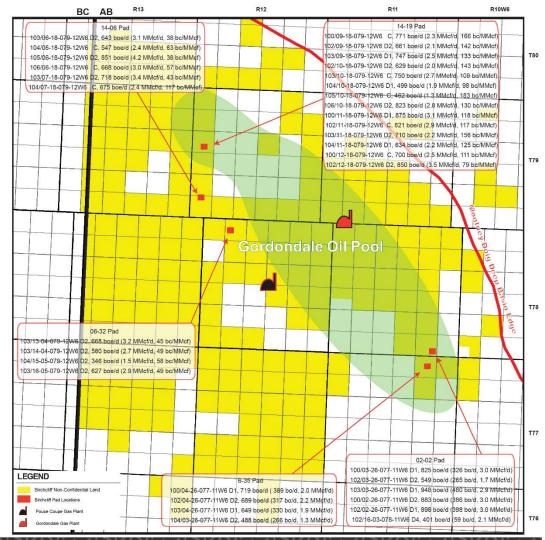
## Discovery of Extension to the Gordondale Light Oil Pool

- In Q3 2020, Birchcliff brought the production on from its 14-well pad (14-19-079-12W6) located in the northeastern area of Pouce Coupe.
- The 14 wells were drilled in 3 different intervals, with 5 wells drilled in the Montney D2, 4 wells drilled in the Montney D1 and 5 in the Montney C.
- The wells have produced significantly more condensate/light oil than initially forecast.

#### Utilization of the Inlet Liquids-Handling Facility at the Pouce Coupe Gas Plant

• The Inlet Liquids-Handling Facility, which was completed in the Q3 2020, allows Birchcliff to process and sell the condensate/light oil from these wells in Pouce Coupe to achieve a premium price.

#### 2020 Well Rates (IP60)



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# 2021 CAPITAL PROGRAM

## DEVELOPMENT

### 2021 Capital Program Major Themes

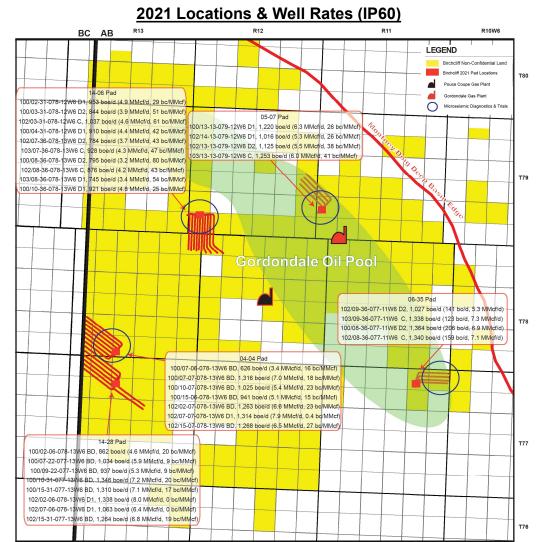
- 2021 Capital Program focused on low-risk drilling opportunities to generate free funds flow.
- Majority of capital to be spent on DCCET activities.
- Facilities & Infrastructure spending reduced significantly compared to 2020.

#### **Pouce Coupe**

- Reducing per well costs via 10-well pad.
- Focused on condensate-rich natural gas opportunities.
- Further delineation and exploration of Basal Doig/Upper Montney condensate-rich trends.

#### Gordondale

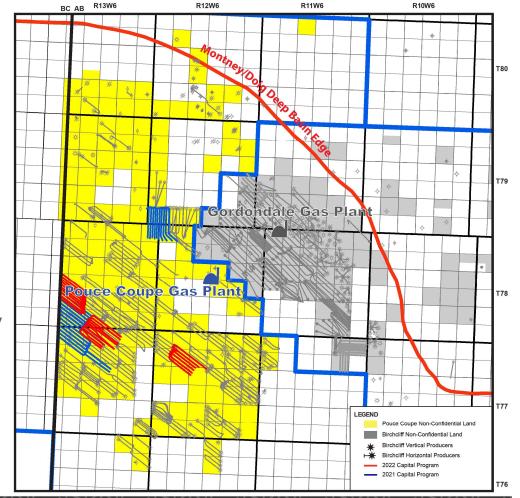
- Keeping the AltaGas Facility full.
- Focused on condensate-rich natural gas opportunities.
- Further delineation and exploration of Montney D2 and C intervals.



### POUCE COUPE

# **POUCE COUPE OVERVIEW**

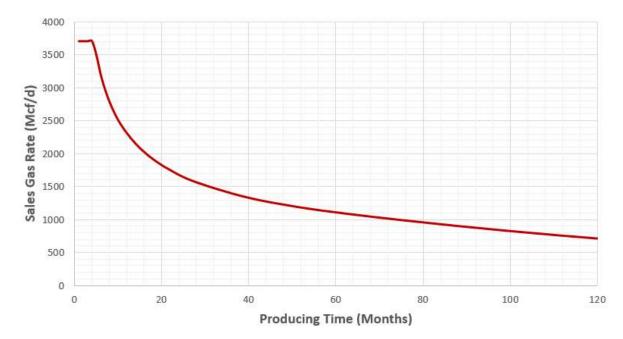
- Proven asset in development phase.
- Wells show high initial deliverability, low terminal decline and stable long term production.
- Predictable results with improving gas rates and liquids yields.
- No land expiry issues.
- The 2021 drilling program included 19 (19.0 net) Montney/Doig horizontal condensate-rich natural gas wells: 7 Montney D1 natural gas wells, 3 Montney D2 natural gas wells, 3 Montney C natural gas wells and 6 Basal Doig/Upper Montney natural gas wells. Birchcliff also brought on production 6 Basal Doig/Upper Montney natural gas wells drilled in Q4/20 for a total of 25 wells brought on production in 2021.



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### POUCE COUPE

## **POUCE COUPE 2021 TYPE CURVE**



Tier 0 Production Summary								
	Cond.	Sales Gas	C3+ <sup>(1)</sup>	Total Sales				
	bbl/d	mcf/d	bbl/d	boe/d				
IP30	256	3,706	26	899				
IP90	224	3,706	26	867				
IP180	180	3,587	25	803				
IP360	132	3,098	21	669				

<sup>(1)</sup> Associated liquid recovery at Pouce Coupe 03-22 Plant

**Tier 0 Type Curve Inputs Raw Gas EUR** Bcf 8.2 1,595 Sales EUR Mboe Capped Rate (Sales) MMcf/d 3.7 CGR<sup>(2)</sup> bbl/MMcf 33.3 \$MM 5.30 **DCCET** Capital

<sup>(2)</sup> CGR reflects life-time equivalent. CGR Curve for Tier 0 input declines from 70 bbl/MMcf to 30 bbl/MMcf over a 6-month

period, remaining at 30 bbl/MMcf for the life of the well

Assumptions:	Fx	1.25	(CDN\$	to	US\$1).	
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\*All economics are before tax; reference date is January 1, 2021.

	Rate of Return (%)								
		WTI (US\$/bbl)							
		\$60.00	\$70.00	\$80.00	\$90.00				
_	\$3.00	138	162	187	213				
0 (ē	\$3.50	161	186	213	240				
AE (c\$	\$4.00	185	212	240	269				
	\$4.50	210	238	268	298				

	NPV 10% (\$MM)								
			WTI (US	s\$/bbl)					
		\$60.00	\$70.00	\$80.00	\$90.00				
_	\$3.00	15.0	16.3	17.6	18.7				
0 (ē	\$3.50	16.8	18.2	19.4	20.5				
AE CS	\$4.00	18.6	20.0	21.2	22.3				
	\$4.50	20.3	21.7	22.9	24.0				

Payout (Years)								
			WTI (US	\$\$/bbl)				
		\$60.00	\$70.00	\$80.00	\$90.00			
-	\$3.00	0.8	0.7	0.6	0.5			
8 2	\$3.50	0.7	0.6	0.5	0.5			
AE CS	\$4.00	0.6	0.6	0.5	0.5			
	\$4.50	0.6	0.5	0.5	0.4			

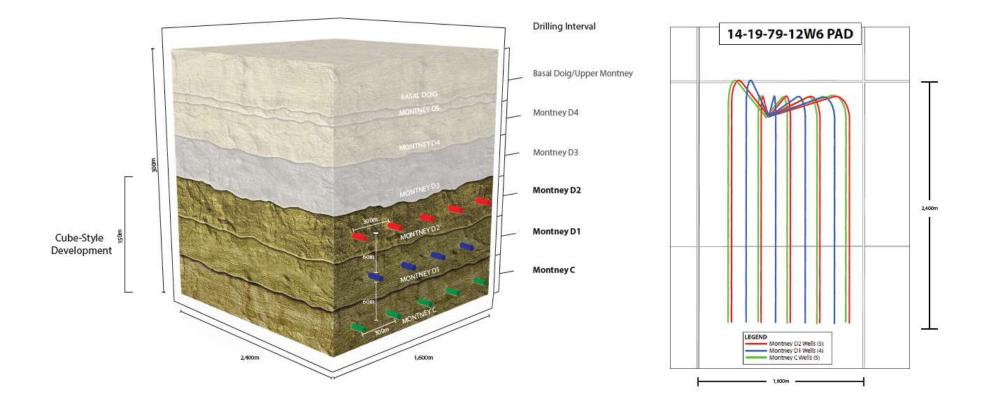
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### POUCE COUPE

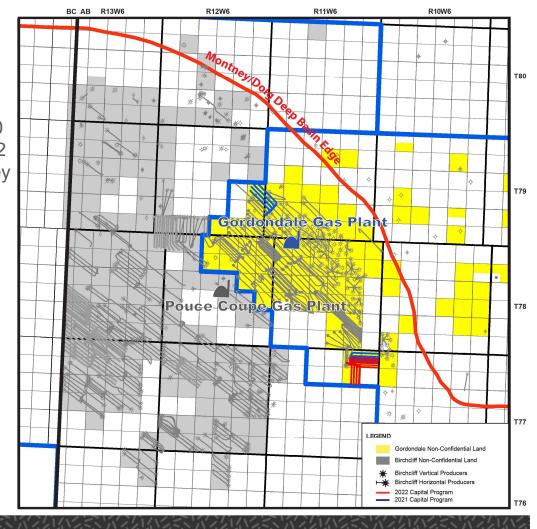
# MULTI-INTERVAL CUBE-STYLE DEVELOPMENT



### GORDONDALE

## **GORDONDALE OVERVIEW**

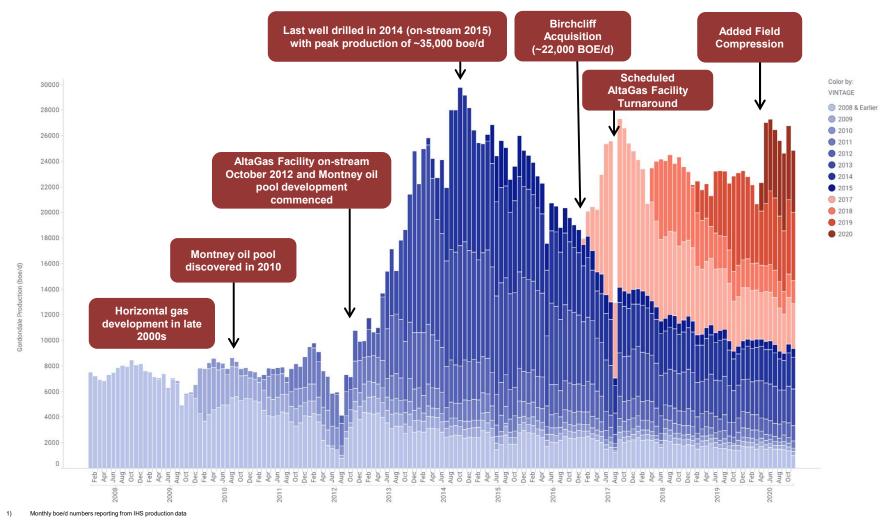
- High oil & NGLs weighting.
- Strategic infrastructure.
- Low base production decline.
- The 2021 drilling program included 8 (8.0 net) horizontal oil and natural gas wells: 2 Montney D1 natural gas wells, 1 Montney D2 natural gas well, 1 Montney C natural gas well, 2 Montney D1 oil wells and 2 Montney D2 oil wells.
- Exploration success in the Montney C in 2021 adds another commercial development interval to the Montney D1 and D2 at Gordondale.



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### GORDONDALE

## **GORDONDALE BASE PRODUCTION HISTORY**<sup>(1)</sup>



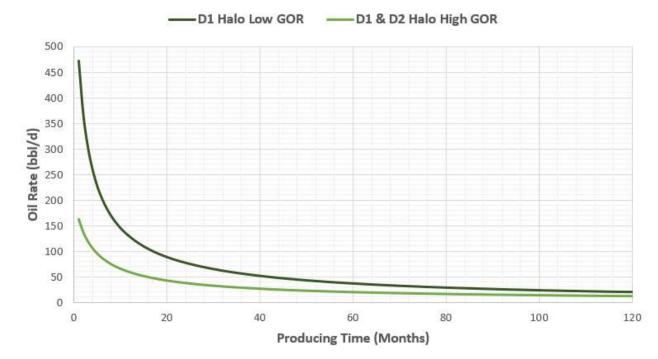
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### GORDONDALE

## **GORDONDALE 2021 HALO OIL TYPE CURVE**



D1 & D2 Halo High GOR - Rate of Return (%)							
		WTI (US\$/bbl)					
		\$60.00	\$70.00	\$80.00	\$90.00		
(	\$3.00	116	143	170	200		
8 🧕	\$3.50	135	162	192	222		
CS, AE	\$4.00	154	183	214	246		
	\$4.50	173	204	236	269		

D1 & D2 Halo High GOR - NPV 10% (\$MM)							
		WTI (US\$/bbl)					
		\$60.00	\$70.00	\$80.00	\$90.00		
-	\$3.00	11.0	12.7	14.3	15.8		
3 2	\$3.50	12.5	14.2	15.8	17.3		
AE CCS	\$4.00	13.9	15.6	17.2	18.6		
	\$4.50	15.2	16.9	18.5	20.0		

D1 & D2 Halo High GOR - Payout (Years)							
		WTI (US\$/bbl)					
		\$60.00	\$70.00	\$80.00	\$90.00		
_	\$3.00	0.9	0.7	0.7	0.6		
0.0	\$3.50	0.8	0.7	0.6	0.6		
AE [CS	\$4.00	0.7	0.6	0.6	0.5		
	\$4.50	0.7	0.6	0.5	0.5		

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D1 Halo GOR Type Curve Inputs								
		Low GOR	High GOR					
Raw Gas EUR Bo	f	3.3	6.5					
Oil EUR M	bbl	302	144					
Sales EUR M	boe	968	1,490					
CGR (C2+) bb	ol/MMcf	86	86					
DCCET Capital \$/	MM	5.30	5.30					

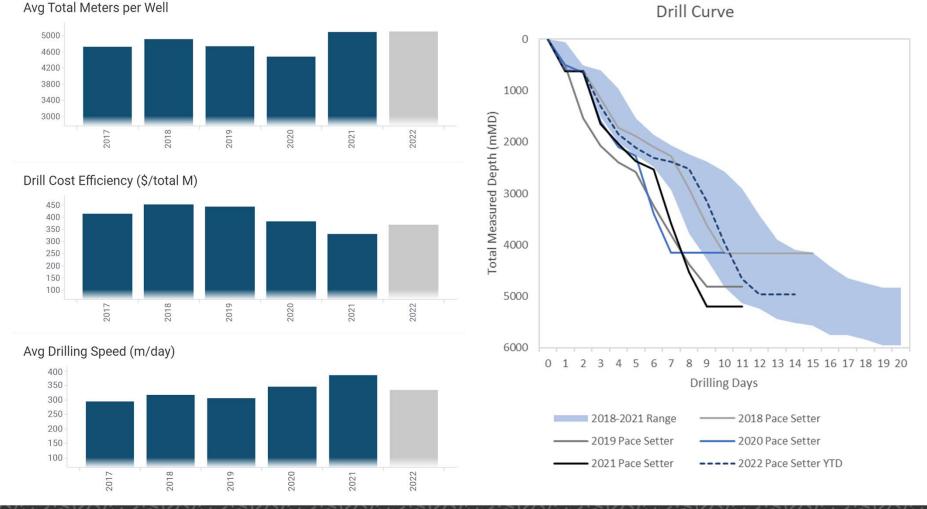
D1 Halo High GOR - Production Summary									
	Oil	Sales Gas	C2+	<b>Total Sales</b>					
	bbl/d	mcf/d	bbl/d	boe/d					
IP30	163	3,608	303	1,068					
IP90	140	3,453	290	1,005					
IP180	118	3,243	272	931					
IP360	93	2,895	243	819					

\*Assumptions: Fx 1.25 (CDN\$ to US\$1).

\*All economics are before tax; reference date is January 1, 2021.

### **D&C CONTINUOUS PERFORMANCE IMPROVEMENT**

## **POUCE COUPE DRILLING PERFORMANCE**



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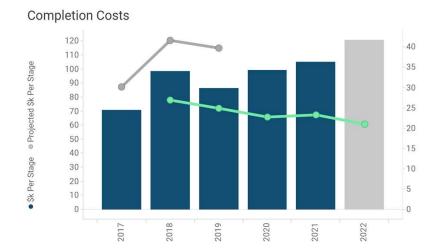
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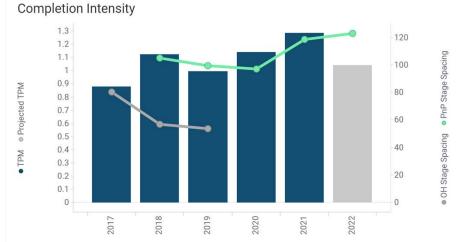
### **D&C CONTINUOUS PERFORMANCE IMPROVEMENT**

## **POUCE COUPE COMPLETION EVOLUTION**

PnP Stages

OH Stages



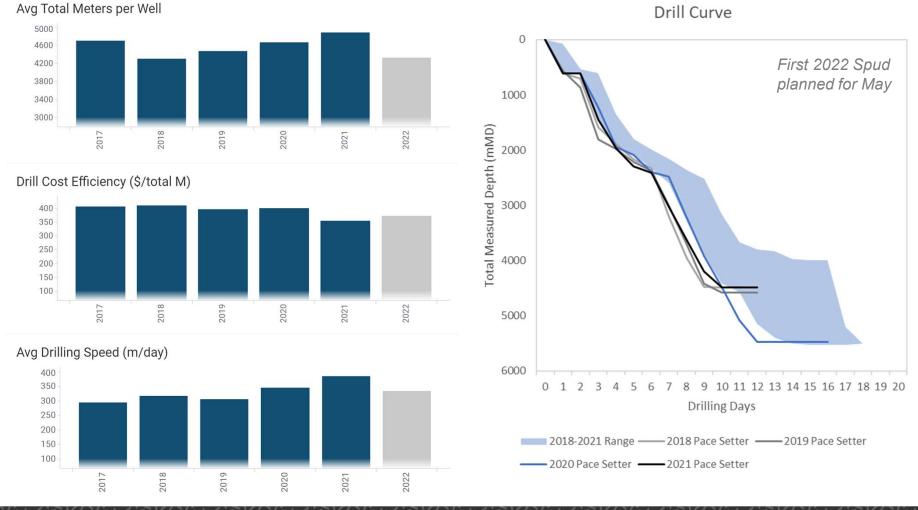


Completion Parameter	2017	2018	2019	2020	2021	2022 Design
# of Wells	37	15	17	24	25	26
Completion System	Open Hole Ball Drop	Plug & Perf				
Completion Fluid	Slickwater	Slickwater	Slickwater	Slickwater	Slickwater	Slickwater
Lateral Length (m)	2,202	2,478	2,298	2,201	2,718	2,488
Number of Stages (#)	30	39	32	23	24	21
Interfrac Spacing (m)	79	67	78	97	118	123
Cluster Spacing (m)	-	25	24	23	23	23
Tonnage per Stage (t)	66	75	78	104	149	128
Proppant Intensity (t/m)	0.88	1.12	1.00	1.14	1.28	1.04

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### **D&C CONTINUOUS PERFORMANCE IMPROVEMENT**

## **GORDONDALE DRILLING PERFORMANCE**

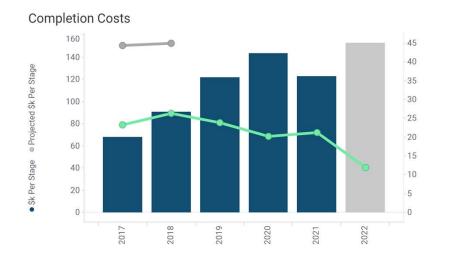


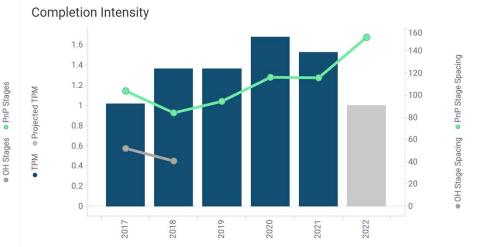
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## **D&C CONTINUOUS PERFORMANCE IMPROVEMENT**

## **GORDONDALE COMPLETION EVOLUTION**





Completion Parameter	2017	2018	2019	2020	2021	2022 Design
# of Wells	22	13	16	8	8	8
Completion System	OH Ball Drop/Cemented Single Point Entry/Plug & Perf	Open Hole Ball Drop Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Completion Fluid	Slickwater	Slickwater	Slickwater	Slickwater	Slickwater	Slickwater
Lateral Length (m)	2,352	1,959	2,058	2,273	2,421	1,771
Number of Stages (#)	41	36	24	20	21	12
Interfrac Spacing (m)	64	62	95	108	116	152
Cluster Spacing (m)	31	22	22	25	22	32
Tonnage per Stage (t)	63	85	131	191	177	152
Proppant Intensity (t/m)	1.00	1.37	1.42	1.78	1.53	1.00

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## **D&C CONTINUOUS PERFORMANCE IMPROVEMENT**

## ENGINEERED COMPLETIONS FOR MONTNEY/DOIG DEVELOPMENT

Completion Parameter	Industry Range	Birchcliff Best Practices Oil	Birchcliff Best Practices Gas		
Completion System	Open Hole Ball Drop, Plug & Perf	Plug & Perf	Plug & Perf		
Fluid	CO <sub>2</sub> , N <sub>2</sub> , Hybrid, Slickwater	Slickwater	Slickwater		
Inter-well spacing	200 – 500 m 600 – 1,500 ft	200 – 250 m 600 – 750 ft	300 – 400 m 900 – 1200 ft		
Inter-frac spacing	20 – 150 m 60 – 450 ft	85 – 150 m 255 – 450 ft	100 – 150 m 255 – 450 ft		
Inter-cluster spacing	5 – 50 m 16 – 165 ft	17 – 35 m 50 – 100 ft	20 – 35 m 50 – 100 ft		
Stages	20 – 120	15 – 50	20 – 35		
Proppant Intensity	1.0 – 6.0 tonne/m 335 – 4,023 lb/ft	1.5 tonne/m 1,005 lb/ft	1.0 – 1.5 tonne/m 670 – 1,005 lb/ft		
Pump Rate	2 – 12 m³/min 12 – 75 bbl/m	8 – 12 m <sup>3</sup> /min 50 – 75 bbl/m	8 – 12 m <sup>3</sup> /min 50 – 75 bbl/m		
Avg. Lateral Length	1,500 – 4,000 m 4,500 – 12,000 ft	2,000 – 3,000 m 6,000 – 9,000 ft	2,000 – 3,000 m 6,000 – 9,000 ft		
	4,000 - 12,000 ft	*Optimized based on F	Plug & Perf         Slickwater $300 - 400 \text{ m}$ $900 - 1200 \text{ ft}$ $100 - 150 \text{ m}$ $255 - 450 \text{ ft}$ $20 - 35 \text{ m}$ $50 - 100 \text{ ft}$ $20 - 35$ $1.0 - 1.5 \text{ tonne/m}$ $670 - 1,005 \text{ lb/ft}$ $8 - 12 \text{ m}^3/\text{min}$ $50 - 75 \text{ bbl/m}$ $2,000 - 3,000 \text{ m}$ $6,000 - 9,000 \text{ ft}$		
Estimated DCCET	\$4.0 - \$13.0 million	\$5.5 million <sup>(1)</sup>	\$5.25 million <sup>(1)</sup>		
Royalty C*	-	~ \$8.0 million	~ \$7.8 million		

1) Estimated by Deloitte. Based on actual costs incurred and go forward DCCET costs.

## POUCE COUPE GAS PLANT

Production Processed through the Pouce Coupe Gas Plant	20	18	20	19	20	20	9mc	o/21
Average production:								
Natural gas (Mcf/d)		250,011		263,108		239,419		255,870
Condensate & NGLs (bbl/d)		2,609		4,735		5,440		5,808
Total (boe/d)		44,278		48,587		45,343		48,453
% of corporate natural gas production		67%		72%		<u>68%</u>		<b>69%</b>
Liquids-to-gas ratio <sup>(1)</sup> (bbls/MMcf)		10.4		18.0		22.7		22.7
Average AECO price for period (\$/Mcf)	\$1.50		\$1.76		\$2.23			\$3.19
Average Dawn price for period (\$/Mcf)	\$4.05		\$3.18		\$2.52			\$4.10
Netback and cost:	\$/Mcfe	\$/boe	\$/Mcfe	\$/boe	\$/Mcfe	\$/boe	\$/Mcfe	\$/boe
Petroleum and natural gas revenue <sup>(2)(3)</sup>	3.02	18.11	3.20	19.17	3.05	18.29	4.76	28.59
Royalty expense <sup>(3)</sup>	(0.05)	(0.29)	(0.07)	(0.42)	(0.06)	(0.37)	(0.29)	(1.76)
Operating expense <sup>(3)(4)</sup>	(0.34)	(2.02)	(0.34)	(2.05)	(0.36)	(2.14)	(0.37)	(2.22)
Transportation and other expense <sup>(5)</sup>	(0.59)	(3.56)	(0.76)	(4.54)	(0.88)	(5.27)	(0.91)	(5.47)
Operating netback <sup>(5)</sup>	\$2.04	\$12.24	\$2.03	\$12.16	\$1.75	\$10.51	\$3.19	\$19.14
Operating margin <sup>(5)</sup>	68%	68%	63%	63%	57%	57%	67%	67%

31%

 9mo/21 Natural Gas Volumes Processed at Pouce Coupe Gas Plant
 9mo/21 Natural Gas Volumes Processed through other plants



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1) Liquids consists of condensate and other NGLs.

2) Excludes the effects of financial instruments but includes the effects of physical delivery contracts.

3) Supplementary financial measure. See "Advisories – Non-GAAP and Other Financial Measures."

4) Represents plant and field operating expense.

5) Non-GAAP ratio. See "Advisories – Non-GAAP and Other Financial Measures."

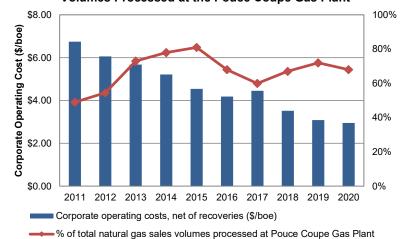
## POUCE COUPE GAS PLANT

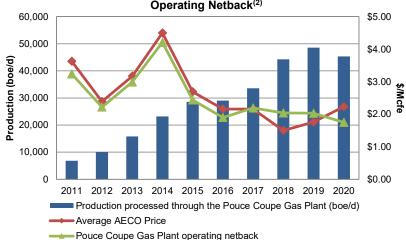
2)

# KEY STRATEGIC ADVANTAGES

- 100% owned and operated.
- Generates operating cost savings of approximately \$1.00/Mcf vs. third-party processing of an equivalent gas plant.
- Provides flexibility to adjust development pace at minimal cost and maximize profitability.
- Control of the gas plant, infrastructure and two acid gas disposal wells provide predictable run times and the ability to consistently meet production and budget targets.

Corporate Operating Costs<sup>(1)</sup> vs. % of Natural Gas Sales Volumes Processed at the Pouce Coupe Gas Plant





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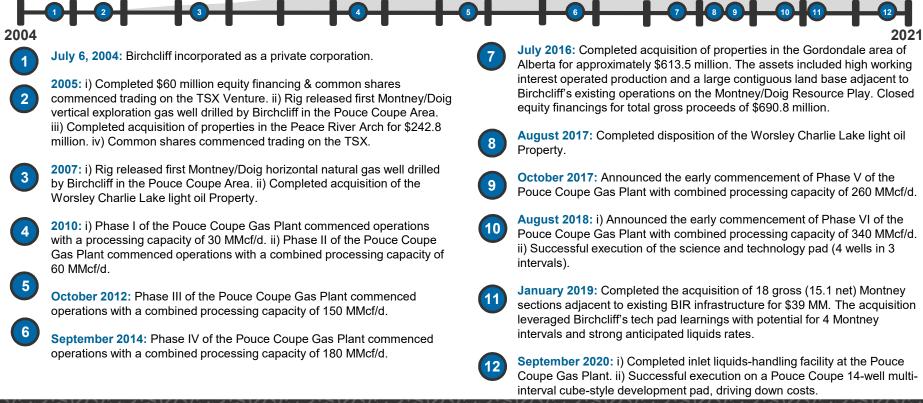
Average AECO Price vs. Pouce Coupe Gas Plant Operating Netback<sup>(2)</sup>

Supplementary financial measure. See "Advisories – Non-GAAP and Other Financial Measures." Non-GAAP ratio. See "Advisories – Non-GAAP and Other Financial Measures."

## **BUILDING ON OUR PAST**

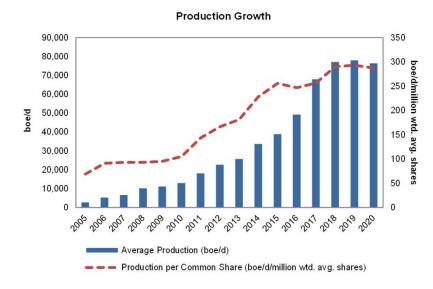
Birchcliff's average daily production was 76,401 boe/d in 2020 compared to 2,793 boe/d in 2005, a compounded annual growth rate of 25% per year over that span.

#### Forecasted annual average production of 79,000-80,000 boe/d in 2021

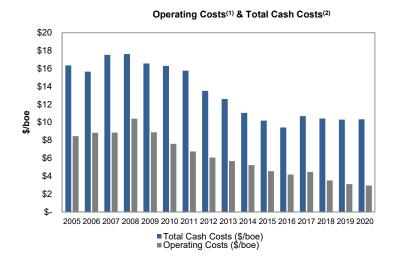




### **BUILDING ON OUR PAST**



Birchcliff has increased production at a compound annual growth rate of 25% since 2005.



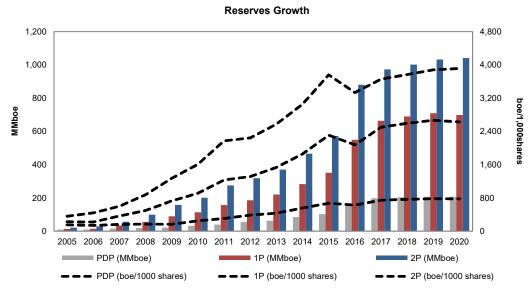
Operating and Total Cash Costs have decreased by 72% and 41% since 2008 largely due to horizontal drilling success and benefits achieved from processing gas at the Pouce Coupe Gas Plant which began operations in early 2010.

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Supplemental financial measure. See "Advisories – Non-GAAP and Other Financial Measures".
 Non-GAAP financial measure. See "Advisories – Non-GAAP and Other Financial Measures".

## **BUILDING ON OUR PAST**



Birchcliff has added significant low cost reserves since commencing operations in 2005. On a per common share basis, PDP, TP and 2P reserves grew 12% per year, 18% per year and 17% per year, respectively.

### Over 16 years of operations, Birchcliff has...

- Invested \$4.7 billion in capital
- ✓ Generated \$5.2 billion in revenue
- Delivered \$2.6 billion in adjusted funds flow<sup>(1)</sup>
- Realized \$172 million in net income to common shareholders
- ✓ Grown 2P NPV10 to \$4.8 billion
- Drilled 453 Montney/Doig horizontal wells

BIRCHC

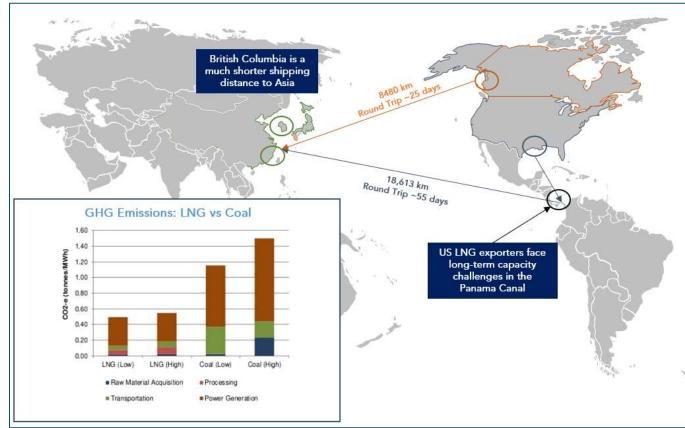
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1) Non-GAAP financial measure. See "Advisories – Non-GAAP and Other Financial Measures

# **CANADA'S LNG ADVANTAGE**

#### Cleaning Our World's Environment, a 2.0 Bcf/d LNG Facility Could:

- Displace 50 million tonnes of carbon emissions from coal-fired power generation.
- Replace approximately **10** large-scale coal fired power plants in China.
- Reduce Alberta's 2016 annual GHGs on an equivalent basis by 20%.
- Reduce Canada's 2016 GHGs on an equivalent basis by 8%.



#### **Benefits**

- Massive untapped natural gas resources, Montney/Doig Resource Play world class.
- Low supply-cost from Montney/Doig Resource Play.
- Proximity to key LNG markets, less than half of the shipping distance to Asia.
- Low ambient temperature reduces energy required from LNG facility.
- Regulatory stability and predictability.
- Growing Indiaenous support for LNG development.
- Extensive history of trade as a large and reliable gas exporter to the USA.
- Established oil and gas sector with world-leading expertise and technology.
- Lower carbon emissions intensity than other fossil fuels, displacing the use of coal in Asian markets.

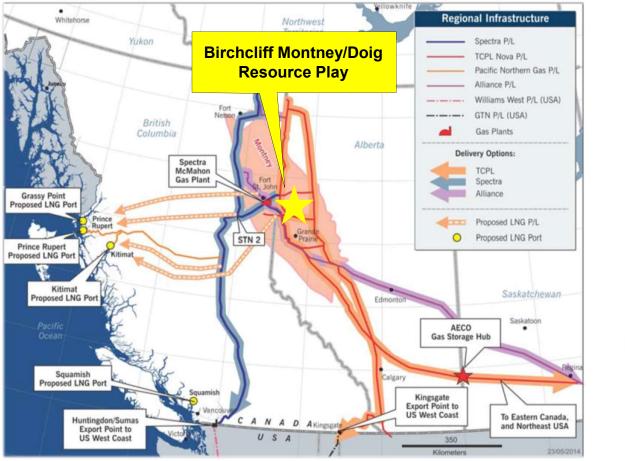
44

Sources: Pace Global, Portworld Shipping

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January 19, 2022

# PROXIMAL TO INFRASTRUCTURE WITH LONG TERM EXPOSURE TO LNG EXPORT





**Montney/Doig** 

Production

Pouce Coupe Gas Plant

Nova Pipeline System

North American Market

LNG Export

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Source: RBC Energy Insights: The Montney – Tracking an Elephant August 12, 2014

# **MONTNEY/DOIG WELL LOCATIONS**

Existing and Potential Future Drilling Locations by Interval at December 31, 2020

	Gross Nun Horizontal W			nber of 2P Vell Locations	Reserves plu Prod	us Cumulative uction cfe)
		Potential		Potential		Potential
Interval	Existing	Future	Existing	Future	Existing	Future
Basal Doig / Upper Montney	73	259	71.9	254.0	4.7	5.0
Montney D4	12	31	12	31	5.1	5.2
Montney D2 Gas	15	22	15	22	7.1	7.0
Montney D2 Oil	34	62	34	62	4.8	4.0
Montney D1 Gas	216	325	214.7	320.0	7.1	7.5
Montney D1 Oil	79	56	79	56	6.3	5.5
Montney C	11	24	11	24	6.2	7.2
_Total <sup>(1)</sup>	440	779	437.7	769.0		

1) At December 31, 2020, Birchcliff had 445 (442.7 net) existing horizontal wells, five of them had no reserves assigned at YE2020.

Average Proved Plus Probable

## **SERIES A PERPETUAL PREFERRED SHARES**

Preferred Share Details	Series A
Number of Shares	2,000,000
Issue Date	August 8, 2012
TSX Trading Symbol	BIR.PR.A
Issue / Par Price	\$25.00 per share
Quarterly Dividend	\$0.523375 per share
Yield on Par Price	8.374%
Redeemable by Holder	No

- September 30, 2022: Series A are redeemable by Birchcliff (and not by holder) on this date and every five years thereafter.
- **September 30, 2022:** Series A fixed rate will be reset on this date and every five years thereafter to the five year Government of Canada bond yield plus 6.83%.
- September 30, 2022: Subject to Birchcliff's right to redeem the shares and the terms and conditions of the shares, Series A (fixed rate) holders are entitled to convert their Series A shares into Series B shares on this date and every five years thereafter so long as the shares remain outstanding.

# **SERIES C PREFERRED SHARES**

Preferred Share Details	Series C
Number of Shares	1,530,709
Issue Date	June 14, 2013
TSX Trading Symbol	BIR.PR.C
Issue / Par Price	\$25.00 per share
Quarterly Dividend	\$0.4375 per share
Yield at Issue	7.0%
Redeemable by Birchcliff or the Holder <sup>(1)</sup>	June 30, 2020 and each quarter thereafter

1) Upon receipt of a notice for redemption, Birchcliff may elect to convert into common shares. The number of common shares is determined by dividing the applicable redemption price, together with accrued and unpaid dividends, by the greater of \$2.00 and 95% of the 20-day weighted average trading price of the common shares on the TSX ending on the fourth day prior to the date specified for conversion amount of \$25.00. Refer to <a href="http://birchcliffenergy.com/investors/series-c-preferred-shares/">http://birchcliffenergy.com/investors/series-c-preferred-shares/</a> for more information.

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January 19, 2022

## **CORPORATE INFORMATION**

#### EXECUTIVE

**A. Jeffery Tonken** CEO and Chairman of the Board

Christopher A. Carlsen President and Chief Operating Officer

Bruno P. Geremia Executive Vice President and Chief Financial Officer

Myles R. Bosman Executive Vice President, Exploration

**David M. Humphreys** Executive Vice President, Operations

**Theo van der Werken** Vice President, Engineering

**Robyn Bourgeois** Vice President, Legal, General Counsel and Corporate Secretary

Hue Tran Vice President, Business Development and Marketing

#### DIRECTORS

**A. Jeffery Tonken** CEO and Chairman of the Board

James W. Surbey Director

Dennis A. Dawson Independent Lead Director

Debra A. Gerlach Independent Director

Stacey E. McDonald Independent Director

#### **AUDITORS**

KPMG LLP, Chartered Professional Accountants Calgary, Alberta

#### **RESERVES EVALUATOR**

Deloitte LLP Calgary, Alberta

#### **HEAD OFFICE**

Suite 1000, 600 – 3rd Avenue S.W. Calgary, Alberta T2P 0G5 Phone: 403-261-6401 Fax: 403-261-6424

#### **SPIRIT RIVER OFFICE**

5604 – 49th Avenue Spirit River, Alberta T0H 3G0 Phone: 780-864-4624 Fax: 780-864-4628 Email: info@birchcliffenergy.com

#### **TRANSFER AGENT**

Computershare Trust Company of Canada Calgary, Alberta and Toronto, Ontario

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#### TSX: BIR, BIR.PR.A, BIR.PR.C

January 19, 2022

## **ADVISORIES**

#### DEFINITIONS

 AltaGas Facility
 AltaGas' deep-cut sour gas processing facility in Gordondale

 Deloitte
 Deloitte LLP, independent qualified reserves evaluator

 Pouce Coupe Gas Plant
 Birchcliff's 100% owned and operated natural gas plant located in the Pouce Coupe area of Alberta

#### ABBREVIATIONS

2P	proved plus probable
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/d	ban especialy
	binion cable lee to ay barrel of all equivalent
boe	
boe/d	barrel of oil equivalent per day
CGR	condensate to gas ratio
CO <sub>2</sub>	carbon dioxide
condensate	pentanes plus (C5+)
DCCET	drilling, casing, completions, equipping and tie-in
EUR	estimated ultimate recovery
F&D	finding and development
FDC	future development costs
ft	feet
G&A	general and administrative
GAAP	generally accepted accounting principles for Canadian public companies which are currently International Financial Reporting Standards as issued by the International Accounting Standards Board
GHG	greenhouse gas
GJ	gigajoule
GJ/d	gigajoules per day
HH	Henry Hub
lb	pounds
LMR	liability management rating
LNG	liquefied natural gas
m	metres
m <sup>3</sup>	cubic metres
Mboe	thousands of 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
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
N <sub>2</sub>	nitrogen
NGLs	natural gas liquids consisting of ethane (C2), propane (C3) and butane (C4) and specifically excluding condensate
NPV10	net present value discounted at 10%
NYMEX	New York Mercantile Exchange
OPEC	Organization of the Petroleum Exporting Countries
PDP	proved developed producing
t	tones
t/m	tones per metre
tCO2e	tomes of carbon dioxide equivalent
TP	total proved
WTI	West Texas Intermediate, the reference price paid in U.S. dollars at Cushing, Oklahoma, for crude oil of standard grade
\$000s	West reads memorially, the reference price part in 0.5 doilars at cosming, ownowing, for crude on of standard grade
20003	(housands of donars

#### CONVENTIONS

Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars and all references to "US\$" are to United States dollars. Except where otherwise indicated, all financial information contained in this presentation has been presented in accordance with GAAP. All financial and operational information contained in this presentation for the three and nine months ended September 30, 2021 and 2020 is unaudited.

#### NON-GAAP AND OTHER FINANCIAL MEASURES

This presentation uses various "non-GAAP financial measures", "non-GAAP frains", "supplementary financial measures" and "capital management measures" (as such terms are defined in NI 52-112). These measures facilitate management's comparisons to the Corporation's historical operating results in assessing its results and strategic and operational decision-making and may be used by financial analysts and others in the oil and natural gas industry to evaluate the Corporation's performance.

#### Non-GAAP Financial Measures & Non-GAAP Financial Ratios

This presentation uses the terms "adjusted funds flow", "free funds flow", "transportation and other expense", "operating metback", "operating metback", "profit ", "profit margin" "adjusted funds flow recycle ratio", and "total cash costs". 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. Investors are cautioned that non-GAAP ratios should not be constructed as alternatives to or more meaningful than the most directly comparable GAAP measures as indicators of Bitchilf's profitallity, efficiency, liquidity and overall performance. Bana performance. Ban

BIRCHCLIFF

ENERGY



"Adjusted funds flow" denotes cash flow from operating activities before the effects of decommissioning expenditures and changes in non-cash operating working capital. Birchcliff eliminates settlements of decommissioning expenditures from cash flow from operating activities as the amounts can be discretioned appenditore from cash flow from operating activities as the amounts can be discretioned appenditores is managed with Birchcliff's capital budgeting process which considers available adjusted funds flow. Changes in non-cash operating activities as the amounts can be discretioned appenditores is managed with Birchcliff's capital budgeting process which considers available adjusted funds flow. Changes in non-cash operating activities as the adjusted funds flow as the timing of collection and payment are variable and by excluding them from the calculation, Birchcliff believes that it is able to provide a more maningful measure of its operation adjusted funds flow as the timing of collection and payment are variable and by excluding them from the calculation, Birchcliff believes that it is able to provide a more maningful measure of its operation adjusted funds flow so the timing of collection and payment and vary of a more maningful measure of its operation assist management believes that adjusted funds flow so the timing of according to the construction as well as its ability to generate cash necessary to fund sustaining and/or growth capital expenditures, repay debt, effect assist management and investors in assessing Birchcliff's operating periating activities or net income or loss as determined in accordinace with GAAP as an indicator of Birchcliff's performance.

"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 further generate shareholder returns through a number of initiatives, including but not limited to, potential debt repayment, common share repurchases, preferred share redemptions, dividend increases and acquisitions.

The following table provides a reconciliation of cash flow from operating activities, as determined in accordance with GAAP, to adjusted funds flow and free funds flow for the periods indicated:

		months ended September 30.		months ended September 30.	
(\$000s)	2021	2020	2021	2020	
Cash flow from operating activities	155,606	52,977	319,227	116,749	
Change in non-cash operating working capital	12,305	6,220	25,416	292	
Decommissioning expenditures	165	180	1,441	976	
Adjusted funds flow	168,076	59,377	346,084	118,017	
F&D capital expenditures	(18,026)	(30,842)	(194,753)	(246,676)	
Free funds flow	150.050	28,535	151.331	(128,659)	

"Transportation and other expense" denotes transportation expense plus marketing purchases minus marketing revenue on a per boe basis. Birchcliff may enter into certain marketing purchase and sales arrangements with the objective of reducing any available transportation and/or fractionation fees associated with its take-or-pay commitments. Management believes that transportation and other expense assists management and investors in assessing Birchcliff's total cost structure related to transportation activities. The most directly comparable financial measure that is disclosed in the primary financial statements of the Corporation is transportation and other expense. "Adjusted funds flow netback" denotes petroleum and natural gas revenue less royalty expense, less operating expense, less operating expense, less transportation and other expense. "Adjusted funds flow netback" denotes petroleum and natural gas revenue less royalty expense, less transportation and other expense, "Adjusted funds flow netback" denotes petroleum and natural gas revenue less royalty expense, less transportation and other expense, expense, less any realized gains) on financial instruments and plus any other cash income sources. Netbacks are calculated on a per unit basis, unless otherwise indicated. Management believes that operating netback and adjusted funds flow netbacks and adjusted funds flow netback for the periods indicated:

			Three mont	hs ended mber 30.			Nine mont	hs ended mber 30.
		2021	Septe	2020		2021	Jepte	2020
	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)	(\$000s)	(\$/boe)
Petroleum and natural gas revenue	263,348	33.71	142,779	19.80	642,600	30.00	370,222	17.86
Royalty expense	(19,500)	(2.50)	(3,935)	(0.55)	(47,819)	(2.23)	(11,682)	(0.56)
Operating expense	(23,164)	(2.96)	(19,668)	(2.73)	(66,200)	(3.09)	(60,415)	(2.91)
Transportation and other expense	(36,939)	(4.73)	(32,459)	(4.49)	(111,877)	(5.22)	(102,324)	(4.94)
Operating netback	183,745	23.52	86,717	12.03	416,704	19.46	195,801	9.45
G&A expense, net	(5,506)	(0.70)	(4,804)	(0.67)	(17,762)	(0.83)	(16,587)	(0.80)
Interest expense	(7,154)	(0.92)	(6,736)	(0.93)	(23,613)	(1.10)	(17,415)	(0.84)
Realized loss on financial instruments	(2,469)	(0.32)	(16,440)	(2.28)	(31,359)	(1.46)	(47,846)	(2.31)
Other cash income (expense)	(540)	(0.07)	640	0.08	2,114	0.09	4,064	0.19
Adjusted funds flow netback	168,076	21.51	59,377	8.23	346,084	16.16	118,017	5.69

The reconciliation for the operating netback of the Pouce Coupe Gas Plant is provided in this presentation under the heading "Pouce Coupe Gas Plant."

"Operating margin" is calculated by dividing the operating netback for the period by the petroleum and natural gas revenue for the period. Management believes this operating margin assists management and investors in assessing Birchcliff's operating efficiency.

"Profit" measures the amount, if any, during the relevant period by which revenues resulting from production exceed the sum of: (i) PDP F&D (i.e. the costs of replacing production excluding acquisitions and dispositions) and (ii) total cash costs. This measure is not intended to represent net income or net income to common

shareholders as presented in accordance with IFRS.

"Profit margin" is calculated by dividing profit before non-cash items for the period by petroleum and natural gas revenue for the period. Birchcliff believes that profit and profit margin are useful measures as they assist management and investors in assessing Birchcliff's ability during a period of declining commodity prices to bear all of its Total Cash Costs and the costs of replacing its production during the relevant period.

"Adjusted funds flow netback recycle ratio" denotes dividing the average adjusted funds flow netback per boe by PDP, 1P or 2P F&D costs, as the case may be. Recycle ratios may be used as a measure of a company's profitability.

"Total cash costs" denotes royalty, operating, transportation and other, G&A and interest expenses 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. The most directly comparable financial measure that is disclosed in the primary financial statements of the Corporation is total expenses.

#### Supplementary Financial Measures

The supplementary financial measures used in this presentation include "P&NG revenue per Mcfe", "P&NG revenue per boe", "PDP F&D per boe", "1P F&D per boe", "2P F&D per boe", "Royalty expense per Mcfe", "Royalty expense per boe", "Operating expense per boe" and "Operating expense per boe." Such measures are calculated by dividing the applicable aggregate revenue or expense by the production (Mcfe or boe) in the applicable period.

#### Capital Management Measures

"Total debt" is calculated as the amount outstanding under Birchcliff's liquidity. Birchcliff's credit facilities plus adjusted working capital deficit (surplus). Management believes that total debt assists management and investors in assessing Birchcliff's liquidity. Birchcliff previously classified total debt as a non-GAAP measure under CSA Staff Notice 52-306 – Non-GAAP Financial Measures. The following table provides a reconciliation of the revolving term credit facilities, as determined in accordance with GAAP, to total debt:

As at, (\$000s)	September 30, 2021	December 31, 2020	September 30, 2020
Revolving term credit facilities	648,327	731,372	771,706
Adjusted working capital deficit (surplus)	(10,422)	30,579	12,708
Total debt	637,905	761,951	784,414

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

As at, (\$000s)	September 30, 2021	December 31, 2020	September 30, 2020
Working capital deficit	16,058	93,988	92,843
Financial instrument – current asset	17,565		-
Financial instrument – current liability	(5,717)	(23,479)	(31,089)
Capital securities – current liability	(38,328)	(39,930)	(49,046)
Adjusted working capital deficit (surplus)	(10,422)	30,579	12,708





#### 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 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 of oil to 6 Mcf of natural gas. Boe and Mcfe amounts may be misleading as an indication of a metry equivalency conversion ratio of 5 Mcf. 1 bbl and an Mcfe conversion ratio of 1 bbl: 6 Mcf is based on an energy equivalency conversion as an indication of value.

#### MMBTU PRICING CONVERSIONS

\$1.00 per MMBtu equals \$1.00 per Mcf based on a standard heat value of 37.4 MJ/m<sup>3</sup> or a heat uplift of 1.055 when converting from \$/GJ.

#### PRESENTATION OF OIL AND GAS RESERVES

Certain terms used herein are defined in National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("CSA Staff Notice 51-324") and/or the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") and, unless the context otherwise requires, shall have the same meanines in this presentation as in NI 51-101. CSA Staff Notice 51-324 or the COGE Handbook. as the case may be.

Deloitte prepared the 2020 Deloitte Reserves Report. In addition, Deloitte and/or McDaniel & Associates Consultants Ltd. (or their predecessors) prepared reserves evaluations in respect of Birchcliff's oil and natural gas properties for the previous years disclosed herein. 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 for this presentation are estimates only. In general, estimates of economically recoverable oil, natural gas and NGLs reserves and the future net revenue information set for this presentation are estimates only. In general, estimates of elin, natural gas and NGLs reserves and the future net revenue information set for this presentation are estimates only. In general, estimates of elin, natural gas and NGLs reserves and the future net revenue information set for this properties, production rates, ultimate reserves received is 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 particulation of such reserves and encode of the economical precoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the disarce serves are encoded on the serves attributable to any particular group of properties, the disarce serves associated with reserves and another operating cost of such reserves and encode on the serves and another of the economical precoverable oil, natural gas and NGLs reserves attributable to any particular group of properties, the disarce serves associated with reserves and encode on the serves and another serves and another serves and another serves and the serves and the serves and another serves associated with reserves and another serves associated with reserves and another serves associated on reserves associated with reserves and another serves associated and another serves associated and exclusions could be mattered as and Another serves and development and operating expenditures with respect to its reserves will vary from estimates thereof and such variations cou

It should not be assumed that the undiscounted or discounted net present value of thure net revenue attributable to Birchcliff's reserves estimated by Birchcliff's independent qualified reserves evaluator 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 no reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation.

In this presentation, unless otherwise stated all references to "reserves" are to Birchcliff's gross company reserves (Birchcliff's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of Birchcliff).

The information set forth in this presentation relating to the reserves, future net revenue and FDC constitutes forward-looking statements and is subject to certain risks and uncertainties. See "Advisories – Forward-Looking Statements".

#### OIL AND GAS METRICS

This presentation contains metrics commonly used in the oil and natural gas industry, including netbacks, recycle ratio and F&D 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 and not reliable indicators of Birchcliff's future periodus periods, and therefore should not be used should not be used buddy relied upon.

Recycle ratios are calculated by dividing the average adjusted funds flow netback per boe by F&D costs. Recycle ratios may be used as a measure of a company's profitability.

- With respect to F&D costs:
  - F&D costs for proved developed producing reserves, proved reserves, proved reserves, as the case may be, are calculated by taking the sum of: (i) exploration and development costs (F&D capital expenditures) incurred in the period; and (ii) where appropriate, 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.
  - o In calculating the amounts of F&D 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.
  - 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.
  - F&D costs may be used as a measure of a company's efficiency with respect to finding and developing its reserves.
  - For information regarding netbacks, see "Advisories Non-GAAP Measures".

#### DRILLING LOCATIONS

This presentation discloses 7,134 potential net future horizontal drilling locations, of which 769 locations have been attributed proved plus probable reserves, as applicable, attributed to them. Unbooked locations are iternal estimates based on Birchcliff's prospective acreage and an assumption as to the number of wells that can be drilled per secrves, as applicable, attributed to them. Unbooked locations have been identified in the 2020 Deloitte Reserves Report that have proved and/or probable reserves, as applicable, attributed to them. Unbooked locations are iternal estimates based on Birchcliff's prospective acreage and an assumption as to the number of wells that can be drilled per secrves are proved or probable reserves. In Subject that proved proves proved prov

Birchcliffs ability to drill and develop these locations and the drilling locations on which Birchcliff study 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 assured 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, Birchcliff studied drilling activities may differ materially from those presentividentified, while control 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 coations are farther away from existing wells, where management has less information about the characteristics of the reservoirs, resources, resources, resources on probable reserves, resources, resour

#### PRODUCTION

With respect to the disclosure of Birchcliff's production contained in this presentation: (i) references to "light oil" mean "light crude oil and medium crude oil" as such term is defined in NI 51-101; (ii) unless otherwise indicated, references to "liquids" mean "light crude oil and medium crude oil" and "natural gas liquids" (including condensate) as such terms are defined in NI 51-101; (iii) unless otherwise indicated, references to "liquids" mean "light crude oil" and "natural gas liquids" (including condensate) as such terms are defined in NI 51-101. In addition, NI 51-101 includes condensate within the product type of natural gas liquids. Birchcliff has disclosed condensate separately from other natural gas liquids are do its operations and results therefrom.

#### INITIAL PRODUCTION RATES

Any references in this presentation to initial production rates or other short-term production rates are useful in confirming the presence of hydrocarbons; however, such rates are not determinative of the rates at which such wells will continue to produce and decline thereafter and are not indicative of the long-term performance or the ultimate recovery of such wells. In addition, such rates may also include recovered "load oil" or "load water" fluids used in well completion stimulation. While encouraging, readers are cautioned not to place undue reliance on such rates in calculating the aggregate production for Birchcliff. Such rates are based on fliel destimates and may be based on limited data available at this time.

#### CAPITAL EXPENDITURES

References in this presentation to "F&D capital" denotes capital for land, seismic, workovers, drilling and completions and well equipment and facilities. Birchcliff's F&D capital expenditures excludes any net acquisitions, administrative asset expenditures and the capitalized portion of annual cash incentive payments that have not been approved by the board of directors.

BIRCHCLIFF

## ADVISORIES

#### FORWARD-LOOKING INFORMATION

Certain statements contained in this presentation constitute forward-looking statements and forward-looking statements or (collectively referred to as "forward-looking statements") within the meaning of applicable Canadian securities laws. The forward-looking statements contained in this presentation relate to future events or Birchtiff's future plans, operations, strategy, performance or financial position and are based on Birchtiff's future plans, operations, strategy, performance or financial position and are based on Birchtiff's future plans, operations, strategy, performance or financial position and are based on Birchtiff's future plans, operations, strategy, performance or financial position and are based on Birchtiff's future plans, beliefs and assumptions. Such forward-looking statements have been made by Birchtiff in light of the information available to it at the time the statements were made and referents were made and referents were made and referents were forward-looking statements. Such forward-looking statements are often, but not always, identified by the use of words such as "seek", "plan", "focus", "fourest", "govidance", "portential", "proposed", "protect," "protopsed", "prot

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. Accordingly, readers are cautioned not to place undue reliance on such forward-looking statements. Although Birchcilf 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 will prove to be correct and Birchcilf 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 attements.

- Birchcliff's plans and other aspects of its anticipated future financial performance, results, operations, focus, objectives, strategies, opportunities, priorities and goals, including: that Birchcliff'remains committed to increasing shareholder value, which it intends to accomplish by maximizing free funds flow generation and
  significantly reducing indebtedness; Birchcliff's belief that significantly reducing the Corporation's indebtedness will reduce the risks to its business and create optionality when considering sustainable increases to its common share dividend and common share buybacks over the next five years; and that continuing Birchcliff's
  industry-leading environmental performance and promoting its strong safety culture continue to be top priorities for the Corporation;
- the information set forth under the headings "Corporate Snapshot & Select Guidance" and "2022 Capital Program" and elsewhere in this presentation as it relates to Birchcliff's outlook and guidance, including: estimates of annual average production, production, production commodity mix, average expenses, adjusted funds flow, F&D capital expenditures, free funds flow; total debt and natural gas market exposure; the expected impact of changes in commodity prices and the CDN/US exchange rate on Birchcliff's total debt to full-year 2022 adjusted funds flow ratio;
- the information set forth under the heading "five Year Plan," and elsewhere in this presentation as it relates to the Five Year Plan, including: the expected benefits and focus of the Five Year Plan, that the Five Year Plan, its that the Corporation is strating informative; estimates and targets of average production, production comould ty mix, adjusted funds flow, F&D capital expenditures, if refe funds flow, with F&D capital expenditures, if refe funds flow, ith Plan is geared to avards maximizing Birchtiff's ability to generate free funds flow, with F&D capital expenditures, in the Soc and annual free funds flow with Pe Year Plan, its that in order to enhance Birchtiff's ability to generate free funds flow, with F&D capital expenditures is trageted to be significantly less than the Corporation strate for unds flow per provides that is noder to enhance Birchtiff's ability to generate free funds flow, with F&D capital expenditures is trageted to be significantly less than the Corporation's trageted adjusted funds flow each year, Birchtiff's belief that continuing to reduce its indebtedness will eave and uncease to the Corporation strate to adjusted funds flow each year, Birchtiff's belief that constrate to adjusted in the Corporation's total debt course of total adjusted interesses and increases that will be reduced to a adjusted funds flow each year, Birchtiff's belief that on eaver to enase of the Five Year Plan, with F&D capital adjusted funds flow and reduce the sist or to adjusted funds flow each year, Birchtiff's be

• the performance and other characteristics of Birchcliff's oil and natural gas properties and expected results from its assets (including statements regarding the potential or prospectivity of Birchcliff's properties) and estimates of potential future horizontal drilling locations

With respect to the forward-looking statements contained in this presentation, assumptions have been made regarding, among other things: the degree to which Birchcliff's results of operations and financial condition will be disrupted by circumstances attributable to the COVID-19 pandemic and the responses of governments and the public to the pandemic; prevailing and future commodity prices and differentials, exchange rates, interest rates, inflation rates; noy alty rates and tax rates; the state of the economy, financial markets and the exploration, development and production business; the political environment and private change and other laws; Birchcliff's ability to comply with existing and future eash flow, addet and will be disrupted by circumstances attributable to the COVID-19 pandemic and the responses of governments and the exploration, future cash flow, which sitting and a future exist flow, which sitting and future eash flow, debt and dividend levels; future cash f

- Birchcliff's 2022 guidance and Five Year Plan assume the following commodity prices and exchange rate: an average WTI price of US\$76.00/bbl; an average WTI-MSW differential of CDN\$5.00/bbl; an average AECO price of CDN\$3.50/GJ; an average Dawn price of US\$3.90/MMBtu; an average NYMEX HH price of US\$4.00/MMBtu; and an exchange rate (CDN\$ to US\$1) of 1.26.
- With respect to estimates of 2022 capital expenditures and Birchcliff's spending plans for 2022, such estimates and plans assume that the 2022 capital program will be carried out as currently contemplated. Any acquisitions completed could have an impact on Birchcliff's production, adjusted funds flow, free funds flow, expenses and total debt, which impact could be material. The amount and allocation of capital expenditures for exploration and development activities by area and the number and types of wells to be drilled and brought on production is dependent upon results achieved and is subject to review and modification by management on an ongoing basis throughton the year. Actual spending may any due to a variety of factors, including commodity prices, economic conditions, results of operations and aterials.
- With respect to Birchcliff's estimates of adjusted and free funds flow for 2022, such estimates assume that: the 2022 capital program will be carried out as currently contemplated and the level of capital spending for 2022 set forth herein will be achieved; and the targets for production, production commodity mix, expenses and
  natural gas market exposure and the commodity price and exchange rate assumptions set forth herein are met.
- With respect to Birchcliff's production guidance for 2022, such guidance assumes that: the 2022 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.
- With respect to statements of future wells to be drilled and brought on production, such statements assume: 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 the Five Year Plan, the plan is based on the commodity price, exchange rate and other assumptions set forth under the heading "Five Year Plan Targeted Key Metrics". In addition:
    - The forecast production estimates contained in the Five Year Plan are subject to similar assumptions set forth herein for Birchcliff's other production guidance.
    - With respect to Birchcliff's estimates of capital expenditures and spending plans, such estimates and plans assume that Birchcliff's capital programs are carried out as currently contemplated, with the Pouce Coupe Gas Plant and the AltaGas Facility being filled by the end of 2024. The Five Year Plan also forecasts
      that approximately 170 to 180 wells will be brought on production over the five year period, which forecast is subject to similar assumptions regarding wells drilled and brought on production as set forth herein.
    - With respect to Birchcliff's estimates of adjusted and free funds flow, such estimates assume that: Birchcliff's capital programs will be carried out as currently contemplated and the level of capital spending for each year will be achieved; and the targets for production and production commodity mix and the commodity orice and exchange rate assumptions set forth herein are met.
    - The internal projections, expectations and beliefs underlying the Five Year Plan are subject to change in light of ongoing results and prevailing economic and industry conditions. Birchcliff's F&D capital budget for 2023 to 2026 have not been finalized and are subject to approval by Birchcliff's board of directors. Accordingly, the levels of F&D capital budget for 2023 to 2026 have not been finalized and are subject to change, which would have an impact on the targeted production, production commodity mix, number of wells to be brought on production, adjusted funds flow, free funds flow and total debt set forth herein. The Five Year Plan disclosed herein supersedes the five year plan disclosed by Birchcliff's to are subject to change, which effect or commodity price forecast, the new Five Year Plan now targets higher adjusted and free funds flow orer a five year period, as well as accelerated debt reduction. The Corporation's targeted average annual production and F&D capital expenditures under the New Plan are generally comparable to the Previous Plan.

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#### FORWARD-LOOKING INFORMATION - Continued

Information relating to reserves is forward-looing as it 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 produced in the future.

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: the risks posed by pandemics (including COVID-19) and epidemics and their impacts on supply and demand and commodity prices; actions taken by OPEC and other major producers of crude oil and the impact such actions may have on supply and demand and commodity prices; 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 exchange and interest rates; stock market volatility; loss of market demand; an inability to access sufficient capital from internal and external sources on terms acceptable to Birchcliff; risks associated with Birchcliff's credit facilities, including a failure to comply with covenants under the agreement governing the credit facilities and the risk that the borrowing base limit may be redetermined; 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, severe weather, explosions, blow-outs, equipment failures, transportation incidents and other similar events; an inability to access sufficient water or other fluids needed for operations; uncertainty that development activities in connection with Birchcliff's assets will be economic; an inability to access or implement some or all of the technology necessary to effectively operate its assets and achieve expected future results; uncertainties associated with estimating oil and natural gas reserves; 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; 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 to the regulatory framework in the locations where Birchcliff operates, including changes to tax laws, Crown royalty rates, environmental laws, climate change 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 Birchcliff 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; dependence on facilities, gathering lines and pipelines, some of which Birchcliff does not control; 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 and cost-effective processing and transportation for Birchcliff's products; an inability to satisfy obligations under Birchcliff's firm marketing and transportation arrangements; 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 and climate change risks, claims and liabilities; potential litigation; default under or breach of agreements by counterparties and potential enforceability issues in contracts; claims by Indigenous peoples; the reassessment by taxing or regulatory authorities of Birchcliff's prior transactions and filings; unforeseen title defects; third-party claims regarding Birchcliff's right to use technology and equipment; uncertainties associated with the outcome of litigation or other proceedings involving Birchcliff's uncertainties associated with counternarty credit risk: risks associated with Bircholiff's risk management activities: risks associated with the declaration and navment of future dividends, including the discretion of Bircholiff's board of directors to declare dividends and change Bircholiff's risk management activities: risks associated with the declaration and navment of future dividends, including the discretion of Bircholiff's board of directors to declare dividends and change Bircholiff's risk management activities: risks associated with the declaration and navment of future dividends, including the discretion of Bircholiff's board of directors to declare dividends and change Bircholiff's risk management activities: risks associated with the declaration and navment of future dividends. approvals in a timely manner or at all; the failure to complete or realize the anticipated benefits of acquisitions and the risk of unforeseen difficulties in integrating acquired assets into Birchcliff's operations; negative public perception of the oil and natural gas industry and fossil fuels; Birchcliff's reliance on hydraulic fracturing: market competition: changing demand for petroleum products: the availability of insurance and the risk that certain losses may not be insured; breaches or failure of information systems and security (including risks associated with typer-attacks): risks associated with the ownership of Bircheliff's securities: the accuracy of Birchcliff's accounting estimates and judgments; and potential requirements under applicable accounting standards for the impairment or reversal of estimated recoverable amounts of Birchcliff's assets from time to time.

There is significant ongoing uncertainty surrounding COVID-19 and the extent and duration of the impacts that Birchcliff may experience. While the duration and full impact of the COVID-19 pandemic is not yet known, the effect of low commodity prices as a result of reduced demand associated with the impact of COVID-19 has had, and may continue to have, a negative impact on Birchcliff's business, results of operations, financial condition and the environment in which it operates. Birchcliff's current expectations, estimates, projections, beliefs and assumptions underlying Birchcliff's forward-looking statements are subject to change in light of the COVID-19 pandemic, isota estimates, projections, beliefs and assumptions underlying Birchcliff's forward-looking statements are subject to change in light of the COVID-19 pandemic, including potential future waves and actions taken by governments and business in response thereto.

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 under the heading "Risk Factors" and in other reports filed with Canadian securities regulatory authorities.

This presentation contains information that may constitute future-orientated financial information or financial performance, financial performance, financial position or cash flows, all of which is subject to the same assumptions, risk factors, limitations and qualetively, "FOFI" about Bircheliff's prospective financial performance, financial position or cash flows, all of which is subject to the same assumptions, risk factors, limitations and qualetively expectations from 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. Bircheliff's actual results, performance and achievements caurent expectations reliance bircheliff's future performance. Readers are cautioned that such information, although considered reasonable at the time of preparations and management's current expectations reliance bircheliff's future performance. Readers are cautioned that such information may not be appropriate for other purposes. FOFI contained herein was made as of the date of this presentation. Unless required by applicable laws, Bircheliff does not undertake any obligation to publicly update or revise any FOFI statements, where as a result of new information, relative expertations relating to fircheliff's future operations and risk related to forward-looking statements presentation in order to provide readers with a more complete perspective on Bircheliff's future operations and management's current bircheliff's future operations and risk related to forward-looking statements presentation in order to provide readers with a more complete perspective on Bircheliff's future operations and management's current expectations relating to fircheliff's future experimance. Readers are

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The forward-looking statements contained in this presentation are expressly qualified by the foregoing cautionary statements. The forward-looking statements contained herein are made as of the date of this presentation. 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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ENERGY

