ATHABASCA – PREMIER RESOURCE EXPOSURE

~40,000 boe/d  
87% liquids

$800MM EV  
$400MM Liquidity

90 year 2P RLI  
450 MMboe Proved  
1,280 MMboe 2P

Footnotes and additional information included in the back as endnotes
HIGHLIGHTS

- Demand trends remain strong
  - Surpassed 100 mmbbl/d in 2019
  - China and India comprise ~55% of growth
- Supply has kept pace but risks are emerging
  - Global events (Venezuelan & Iranian sanctions)
  - Underinvestment in mega projects
- Inventory levels expected to continue to rebalance
  - OPEC goal to achieve inventories at 5 year average

Improving fundamentals for global oil
CANADIAN OIL OUTLOOK

CANADIAN LANDSCAPE
- Failed regulatory system – broken market in Q4/18
- Government mandated curtailments worked
- Crude by rail remains a necessary bridge to pipelines

HEAVY BARREL ADVANTAGE
- Heavy supply increasingly scarce globally
  - Venezuela & Mexico declines
  - OPEC+ cuts
  - Increasing petrochemical demand
- US refineries built for a heavy crude slate (PADD II/III)
- Global demand increasing for heavy feedstock

ATHABASCA WELL POSITIONED FOR THE FUTURE
- LT egress secured (Keystone XL 25mbbl/d & TMX 20mbbl/d)

ATH WCS differential expectation:

WESTERN CANADIAN SELECT PRICING

Source: Bloomberg
ATHABASCA – THE TRANSFORMATION

Resource appraisal
Funding not secured

2015 - 2019

- $486MM Light Oil JV with Murphy Oil
- ~$560MM Leismer acquisition from Equinor
- Balance sheet refinancing with 5 year term
- ~$265MM infrastructure sale
- Corporate production ~40,000 boe/d

2015
- $400MM Contingent Bitumen Royalty

2016
- Light Oil surpasses 10,000 boe/d

2017
- ~$560MM Leismer acquisition from Equinor

2018
- Balance sheet refinancing with 5 year term

2019
- Low risk development
- Positive FCF outlook
- Strong balance sheet

PRODUCTION

- 85% DAPPS CAGR

$/boe

- Thermal Non-Energy Opex
- Light Oil Opex
- Corporate G&A

Footnotes and additional information included in the back as endnotes
ATHABASCA – A RESILIENT BUSINESS

COMPLEMENTARY ASSETS
- Diversified operating income (30% LO & 70% TO)
- Industry leading Light Oil netbacks (~$29/boe)
- Competitive Leismer operating breakeven* ($43/bbl WTI)
- Minimal gas exposure (~10 mmcf/d net short)

STRONG BALANCE SHEET
- $400MM in liquidity
- $263MM net debt
- High yield debt termed out until 2022

HEDGING TO PROTECT BASE CAPITAL
- 14,000 bbl/d WCS hedged at ~C$53.50 for balance of 2019
  - ~35% of dilbit production
  - Apportionment protection ensures market access

* Breakevens reflect a US$17.50 WCS diff, US$5 C5 diff, CS1.50 AECO, 0.75 FX

Footnotes and additional information included in the back as endnotes
ATHABASCA – DRIVE TO FREE CASH FLOW

SUSTAINABLE PRODUCTION
- Thermal Oil underpins low corporate decline (~10%)
- Flexible operated liquids rich Montney
- Funded development through Duvernay JV

COMPELLING FREE CASH FLOW OPPORTUNITY
- Low sustaining capital (2019: $95 – $110MM)
- Competitive cost structure
- Free cash flow optionality
  - Debt reduction
  - Share buybacks
  - Sustaining capital

Annual unhedged funds flow sensitivity
~C$80MM for US$5 WTI

PRODUCTION
- ~6% CAGR

CAPITAL
- Sustaining
- Potential Growth

FUNDs FLOW (US$17.50 WCS DIFF)
- Capital offset by: $265MM infrastructure sale
- $160MM FCF @$65
- $100MM FCF @$65

2019: budget details on slide 8; funds flow sensitivity includes Q1 actuals and flat pricing Q2 - Q4
2020: funds flow sensitivity reflects growth scenario with balanced investment across Light & Thermal Oil
Q1 2019 HIGHLIGHTS
STRONG OPERATIONAL AND FINANCIAL RESULTS

- 39,206 boe/d
  - 86% liquids
- $32MM Capex (net)
  - 45% Thermal / 55% Light Oil
- $400MM liquidity
  - 2019e 1.2x D/CF
- Strong Netbacks
  - $29.67/boe Light Oil
  - $18.50/bbl Thermal
- $42MM Funds Flow
  - $10MM Free Cash Flow

Footnotes and additional information included in the back as endnotes
2019 OUTLOOK

CORPORATE
- Minimal capital: $95 – $110MM
- Maintain production: 37,500 – 40,000 boe/d (88% liquids)

LIGHT OIL
- Capital: $15 – $30MM net
- Production: 10,000 – 11,000 boe/d (55% liquids)
- Montney: activity deferred until H2/19+
- Duvernay: self funded through joint venture capital carry
  - ATH pays 7.5% to earn a 30%WI (~$280MM gross)

THERMAL OIL
- Capital: $80MM
- Production: 27,500 – 29,000 bbl/d
- Major projects: Leismer sustaining pad ($40MM)

2019 FUNDS FLOW OUTLOOK

<table>
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<tr>
<th>WTI (US$)</th>
<th>$55</th>
<th>$60</th>
<th>$65</th>
<th>$70</th>
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<td>-$15.00</td>
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<td>$165</td>
<td>$200</td>
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2019 NET DEBT / FUNDS FLOW

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<th>WTI (US$)</th>
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<th>$60</th>
<th>$65</th>
<th>$70</th>
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<td>-$15.00</td>
<td>1.9x</td>
<td>1.4x</td>
<td>1.0x</td>
<td>0.7x</td>
<td>0.6x</td>
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<tr>
<td>-$17.50</td>
<td>2.4x</td>
<td>1.7x</td>
<td>1.2x</td>
<td>0.9x</td>
<td>0.7x</td>
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<tr>
<td>-$20.00</td>
<td>3.0x</td>
<td>2.0x</td>
<td>1.4x</td>
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<tr>
<td>-$22.50</td>
<td>3.8x</td>
<td>2.5x</td>
<td>1.7x</td>
<td>1.2x</td>
<td>0.9x</td>
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</table>

FCF = Free Cash Flow (Funds Flow – Capital Expenditures)
LIGHT OIL
MONTNEY & DUVERNAY
PLACID MONTNEY

HIGHLIGHTS – OPERATED 70%WI

- 80,000 gross prospective acres
  - 200 well development inventory
- ~$22.50/boe 2019 operating netback (US$65 WTI)
  - 200 – 300 bbl/mmcf initial free liquids

ACTIVITY OVERVIEW

- 2016 – 2018: 32 wells (7 pads)
- 2018/19 Winter: tie-in 6 wells & rig release 7 wells
- H2/19: readiness to resume activity

PLACID ACTIVITY

PLACID PRODUCTION (NET)
JOINT VENTURE HIGHLIGHTS (30% WI)

- Cash/carry structure minimizes financial exposure
  - $1B gross investment; $75MM net to retain 30% WI
- Significant resource exposure
  - 200,000 acres and 1,000+ well inventory

2019 activity

- $280MM gross (~$20MM net)
- 18 spuds
- Continued volatile oil delineation

DUVERNAY ACTIVITY OVERVIEW

Volatile Oil
156,000 acres
~800 locations

Condensate Rich Gas
41,000 acres
~200 locations
THERMAL OIL
LEISMER & HANGINGSTONE
THERMAL OIL – ASSET OVERVIEW

LEISMER – TOP TIER OIL SANDS PROJECT

- ~20,000 bbl/d; ~3.5x SOR
- 40,000 bbl/d AER approval
- 675 mmbbl 2P reserves; 90 year 2P RLI
- US$43 WTI operating breakeven

HANGINGSTONE – LOW SUSTAINING CAPITAL

- 9,000 – 10,000 bbl/d; ~4.5x SOR
- 177 mmbbl 2P reserves; 55 year 2P RLI
- US$53 WTI operating breakeven

CORNER – LONG TERM DEVELOPMENT

- Top tier lease with high quality reservoir
- 40,000 bbl/d AER approval in place

Footnotes and additional information included in the back as endnotes.
THERMAL OIL – LEISMER ACTIVITY

PAD 7 SUSTAINING PAD

- Rig released 5 well-pairs in February
  - 1,250m laterals (50% longer) and flow control equipped
- Production anticipated Q4/19
  - Steaming to commence this summer
  - 4,000 – 4,500 bbl/d peak pad production

LEISMER DEVELOPMENT

PAD 7 OVERVIEW

103/07-22 CORE
CORPORATE RESPONSIBILITY – HIGHLIGHTS

SAFETY
Exemplary performance is key to business results and stakeholder needs
- Total Recordable Injury Frequency (TRIF):
  - 2018 0.36 vs. 0.8 industry average
- Industry leading Emergency Response Plans
- Behavior Based Safety Embedded in Culture

ENVIRONMENT
Committed to innovation and sustainable development
- Environmental monitoring and compliance
- Approved Government funding for Innovation
- Implemented Natural Gas Co-injection to reduce annual emissions

SOCIAL
Supporting the communities where we operate
- Regional business engagement
- Employee initiatives: STARS & United Way
- Employee and Community engagement

GOVERNANCE
Corporate Discipline
- Transparent compensation programs
- Shareholder Rights Plan
- Board Diversity Policy
THE WORLD NEEDS MORE CANADIAN ENERGY

- Energy education gaining momentum across the country

- The World Needs Canada’s Energy
  - World Demand estimated to grow by 27% by 2040 (source: EIA)
  - ALL forms of energy needed including Oil & Gas

- Canada is a Global leader in innovation and environmental stewardship
  - $4B investment in environmental initiatives
  - Oil Sands 0.15% of world emissions

- The Canadian economy needs the energy sector
  - Largest private investor – 7% of GDP
  - Employment far reaching (528,000 jobs), largest employer of Indigenous people

The World Needs More Canadian Energy

Source: CAPP unless otherwise noted
ENDNOTES & RISK MANAGEMENT

Slide   Endnotes

Multi-year outlook price assumptions:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>Q1 2019</th>
<th>Q2-Q4 2019</th>
<th>2019e</th>
<th>2020e</th>
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<tr>
<td>WTI</td>
<td>US$/bbl</td>
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<td>WCS</td>
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<td>MSW Diff</td>
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<td>Condensate</td>
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<td>AECO</td>
<td>C$/mcf</td>
<td>$1.48</td>
<td>$1.95</td>
<td>$1.50</td>
<td>$1.61</td>
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</tbody>
</table>

1  (1) Liquidity = cash & equivalents + available credit facilities
   (2) Consolidated reserves as at December 31, 2018 evaluated by McDaniel & Associates Consultants Ltd.
   (3) Reserve life index calculated on corporate 2P reserves of 1,280mmboe and ~40,000 boe/d production
   (4) For additional information regarding Athabasca’s reserves and resources estimates, please see “Independent Reserve and Resource Evaluations” in the Company’s 2018 Annual Information Form which is available on Company’s website or on SEDAR www.sedar.com

4/7  (1) Historical financial and operating results found on Company’s website or on SEDAR www.sedar.com
     (2) Liquidity = cash & equivalents + available credit facilities
     (3) Netbacks = operating netbacks prior to realized hedging gains (losses) and other income

8   (1) FCF = funds flow – capital expenditures
     (2) Net debt = FV term debt + Current Liabilities (adj. for risk management) - Current Assets (adj. for risk management)

10/11 (1) Gross Montney inventory based on management estimate of 4 wells per section
        Gross Duvernay acres and inventories. Well inventory based on management estimate of 4-6 wells per section
        See reader advisory “Drilling Locations” for more detail
     (2) Operating netback is prior to realized hedging gains (losses) and other income

13  (1) Thermal Oil reserve life index calculated on 852mbbl 2P reserves (Leismer & Hangingstone) and 29,000 bbl/d production
     (2) Thermal Oil McDaniel & Associates Consultants Ltd. reserve evaluation as at December 31, 2018 (675mmboe Leismer, 177mmboe Hangingstone, 353mmboe Corner)
Forward Looking Statements

This Presentation contains forward-looking information that involves various risks, uncertainties and other factors. All information other than statements of historical fact is forward-looking information. The use of any of the words “anticipate”, “plan”, “continue”, “estimate”, “expect”, “may”, “will”, “project”, “believe”, “contemplate”, “target”, “potential” and similar expressions are intended to identify forward-looking information. The forward-looking information is not historical fact, but rather is based on the Company’s current plans, objectives, goals, strategies, estimates, assumptions and projections about the Company’s industry, business and future operating and financial results. This information involves 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 information. No assurance can be given that these expectations will prove to be correct and such forward-looking information included in this Presentation should not be unduly relied upon. This information speaks only as of the date of this Presentation. In particular, this Presentation contains forward-looking information pertaining to, but not limited to, the following: the Company’s 2019 guidance and multi-year outlook; type well economic metrics; estimated recovery factors and reserve life index; and other matters.

Information relating to “reserves” is also deemed to be forward-looking information, as it involves the implied assessment, based on certain estimates and assumptions, that the reserves described exist in the quantities predicted or estimated and that the reserves can be profitably produced in the future. With respect to forward-looking information contained in this Presentation, assumptions have been made regarding, among other things: commodity outlook; the regulatory framework in the jurisdictions in which the Company conducts business; the Company’s financial and operational flexibility; the Company’s capital expenditure outlook, financial sustainability and ability to access sources of funding; geological and engineering estimates in respect of Athabasca’s reserves and resources; and other matters.

Actual results could differ materially from those anticipated in this forward-looking information as a result of the risk factors set forth in the Company’s Annual Information Form (“AIF”) dated March 6, 2019 that is available on SEDAR at www.sedar.com, including, but not limited to: fluctuations in commodity prices, foreign exchange and interest rates; political and general economic, market and business conditions in Alberta, Canada, the United States and globally; changes to royalty and tax regimes, environmental risks and hazards; the potential for management estimates, assumptions and regulatory interpretations to be inaccurate; the dependence on Murphy as the operator of the Company’s Duvernay assets; the capital requirements of Athabasca’s projects and the ability to obtain financing; operational and business interruption risks; failure by counterparties to make payments or perform their operational or other obligations to Athabasca in compliance with the terms of contractual arrangements; aboriginal claims; failure to obtain regulatory approvals or maintain compliance with regulatory requirements; uncertainties inherent in estimating quantities of reserves and resources; litigation risk; environmental risks and hazards; reliance on third party infrastructure; hedging risks; insurance risks; claims made in respect of Athabasca’s operations, properties or assets; risks related to Athabasca’s amended credit facilities and senior secured notes; and risks related to Athabasca’s common shares.

For important additional information regarding Athabasca’s reserves and resources estimates and the evaluations that were conducted by McDaniel & Associates, please see “Independent Reserve and Resource Evaluations” in the Company’s most recent AIF. The forward-looking statements included in this presentation are expressly qualified by this cautionary statement. The forward looking statements contained herein are made as of the date hereof and Athabasca does not undertake any obligation to publicly update or revise any forward-looking statements except as required by applicable securities laws.

Drilling Locations: The 1,000 Duvernay drilling locations referenced include: 50 proved undeveloped or non-producing locations and 35 probable undeveloped locations for a total of 85 booked locations with the balance being unbooked locations. The 200 Montney drilling locations include: 77 proved undeveloped locations and 12 probable undeveloped locations for a total of 89 booked locations with the balance being unbooked locations. Proved undeveloped locations and probable undeveloped locations are booked and derived from the Company’s most recent independent reserves evaluation as prepared by McDaniel as of December 31, 2018 and account for drilling locations that have associated proved and/or probable reserves, as applicable. Unbooked locations are internal management estimates. Unbooked locations do not have attributed reserves or resources (including contingent or prospective). Unbooked locations have been identified by management as an estimation of Athabasca’s multi-year drilling activities expected to occur over the next two decades based on evaluation of applicable geologic, seismic, engineering, production and reserves information. There is no certainty that the Company will drill all unbooked drilling locations and if drilled there is no certainty that such locations will result in additional oil and gas reserves, resources or production. The drilling locations on which the Company will actually drill wells, including the number and timing thereof is ultimately dependent upon the availability of funding, oil and natural gas prices, provincial fiscal and royalty policies, costs, actual drilling results, additional reservoir information that is obtained and other factors.

Additional Oil and Gas Information:

“BOEs” may be misleading, particularly if used in isolation. A BOE conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

Test Results and Initial Production Rates: The well test results and initial production rates provided in this presentation should be considered to be preliminary, except as otherwise indicated. Test results and initial production rates disclosed herein may not necessarily be indicative of long term performance or of ultimate recovery.

Non-GAAP Financial Measures:

The “Adjusted Funds Flow”, “Light Oil Operating Income”, “Light Oil Operating Netback”, “Light Oil Capital Expenditures Net of Capital-Carry”, “Thermal Oil Operating Income”, “Thermal Oil Operating Netback”, “Consolidated Operating Income”, “Consolidated Operating Netback”, “Consolidated Capital Expenditures Net of Capital-Carry” and “Net Debt” financial measures contained in this Presentation do not have standardized meanings which are prescribed by IFRS and they are considered to be non-GAAP measures. These measures may not be comparable to similar measures presented by other issuers and should not be considered in isolation with measures that are prepared in accordance with IFRS. Complete definitions are outlined in the Company’s Q2 2019 MD&A and financials available on SEDAR (www.sedar.com) or the Company’s website (www.atha.com).