Permian Basin

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PERMIAN BASIN

Premier North American Basin

- Developing the cube
  - Critical to creating value at industrial scale
  - Reservoir & above-ground benefits
  - Natural extension of our experience & capabilities

- Type curves increased
  - IP30s & IP180s up by ~20%
  - Innovation and technology driving performance

- Managing risk
  - Execution efficiency offsetting inflation
  - Just-in-time water infrastructure ensures availability & avoids over-capitalization
  - Sophisticated supply-chain & logistics
  - Market access secure

- Stacked pay & completions upside
  - New benches & advanced completions
  - Coring up acreage boosts long lateral inventory

*Estimated inventory based on 450-660 ft spacing
ENCANA’S PERMIAN ACREAGE
Core Position in Midland Basin

• In the Permian, execution efficiency at industrial scale is going to be critical
• Industry leader in driving efficiency at scale
ENCANA IS THE 2\textsuperscript{nd} LARGEST PRODUCER

Core Midland Basin Producers at a Glance

Encana Gross Production vs Peers

Source: IHS., production from Glasscock, Howard, Midland and Martin
CUBE DEVELOPMENT ABOVE-GROUND BENEFITS

Development at Industrial Scale

- Highly efficient, agile development
- Multi-well pads
  - Higher utilization of services & infrastructure
- Multiple drilling rigs and frac spreads on a pad
  - Rapid cycle times
  - Accelerated learnings
- Integrated supply chain
  - Leveraging economies of scale
  - Centralized planning and logistics
CUBE DEVELOPMENT ABOVE-GROUND BENEFITS

Practical Infrastructure Solutions

• Re-occupied infrastructure
  – Multiple wells sharing infrastructure yields scale efficiency
  – Continued high utilization of wellsite facilities through re-occupation

• Reliable market access
  – Pipe based gathering through Medallion
  – Provides access diversity of markets
CUBE DEVELOPMENT ABOVE-GROUND BENEFITS

Effective Water Management

- Improves capital efficiency and de-risks supply
  - 3 frac spreads per hub
  - Simple and effective catch basin design
  - Water hubs pay out in less than 12 months
  - Mitigates risk of water supply restrictions

- County-by-County solution
  - Recent Howard County water infrastructure transaction minimizes infrastructure investment
  - Water provider can service broader market for a lower fee

- Reducing all-in water costs by ~$1/bbl
  - On track to average 25% recycled water use in 2017
  - Expect to average 40% in 2018

- D&C cost savings up to $300k/well
- LOE savings up to ~$0.80/BOE
INNOVATION SUCCESS

Identifying Optimal Completion Design and Geometry

• Applying advanced completions to high-density, stacked development

• Key principles:
  – Tight cluster spacing and optimal hydraulics maximize fracture surface area
  – Clean, non-guar based fluids lead to better fracture conductivity
  – Fine grained proppant maximizes fracture complexity

• Improved recovery from stacked pay reservoir
  – Effective draw-down within cube

• Continued evolution and data-driven refinement
CUBE DEVELOPMENT RESULTS

Boosting Permian Productivity

• Accelerated learning
  – Each pad producing stronger wells
  – Abbie Laine outperforming RAB Davidson Phase 1 by 22% after 180 days
  – RAB Davidson 2 outperforming RAB Davidson Phase 1 by 28% after 170 days

• 45 ECA cube wells on production
  – Abbie Laine and RAB Davidson Phase 2 continue to lead industry
  – RAB Davidson Phase 1 among the best results
  – 20 additional cube wells scheduled to be on production early Q4

• Industry dataset is all wells at >10 total wells per section
  – ~930 wells, 17 operators, 7 counties

*Well results normalized to 7500’ lateral
Encana Wells Outpacing Peer Results

Data sourced from IHS, includes Midland Basin data from 2014 onward. Peers include APA, AREX, CPE, CVX, CXO, EGN, END, EPE, FANG, LPI, OXY, PXD, QEP, RSPP, SM and XOM
PERMIAN CAPITAL EFFICIENCY
Leading Operator

• D&C well costs held flat countering inflation
  – 20% increase in service cost offset with efficiencies
  – Performing amongst the top operators on days and cost
  – Managing shallow flow zones with 3 string design

• 52% reduction in drilling days
  – Limiter approach to maximize footage per day
  – High performance water based mud
  – Advanced survey tools and mud motors

*Normalized to 7,500'. **Data sourced from latest peer IR presentations. Peers include APA, CPE, FANG, LPI, OXY, PE, PXD, QEP, and SM
**WOLFCAMP**

Midland/Upton County

**Midland/Upton WCA/WCB Type Curve**
- IP180 = 800 BOE/d
- EUR = 1,100 MBOE
- D&C = $5.6 MM (incl. advanced completions scope)
- Lateral Length = 7,500'

All metrics based on $50/bbl WTI, $3.00/MMBtu NYMEX

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<tr>
<th>Type Well Metrics – ECA Net</th>
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LOWER SPRABERRY
Martin, Midland/Upton, Glasscock

Martin Lower Spraberry Type Curve
IP180 = 650 BOE/d
EUR = 1,020 MBOE
D&C = $5.4 MM (incl. advanced completions scope)
Lateral Length = 7,500 ft

2017 Average Well
2017 UPDATED Type Curve

Type Well Metrics – ECA Net
Atax IRR (%) 39-54%
Operating Margin ($/BOE) $30

All metrics based on $50/bbl WTI, $3.00/MMBtu NYMEX
EXPANDING MARGINS
Reducing Operating Costs

• Improving efficiencies
  – Company-wide effort
  – Accountability at the operator level

• Working smarter
  – >80% of produced water on pipe
  – >70% of production on remote monitoring and control

• Negotiating the best price

~30% Improvement in operating costs

Permian Direct Operating Cost Reductions

$/BOE

2015  2016  2017F
Permian

- Majority of oil production gathered via pipeline with access to multiple physical markets
- Firm gas gathering and NGL processing with access to Waha and Mt. Bellvieu markets
- Secured firm, low-cost pipeline capacity to Gulf Coast refining/export markets (Enterprise Echo Pipeline 2018)
- No take or pay commitments
PERMIAN
5 Year Growth Profile

• >50% of Encana’s capital directed to the Permian in 2018
• Permian production expected to grow 3x
  – 5 year CAGR 25%
• Quality inventory with scale
• No infrastructure or midstream limitations
• Minimal vertical program