ND Drilling Stats

Drilling Rigs & Spuds

Spuds

Drilling Rigs

Spuds per Rig per Month

Jan-07  May-07  Sep-07  Jan-08  May-08  Sep-08  Jan-09  May-09  Sep-09  Jan-10  May-10  Sep-10  Jan-11  May-11  Sep-11  Jan-12  May-12  Sep-12  Jan-13  May-13  Sep-13

Spuds Per Rig Per Month

0  0.2  0.4  0.6  0.8  1  1.2  1.4  1.6  1.8  2

Jan-07  May-07  Sep-07  Jan-08  May-08  Sep-08  Jan-09  May-09  Sep-09  Jan-10  May-10  Sep-10  Jan-11  May-11  Sep-11  Jan-12  May-12  Sep-12  Jan-13  May-13  Sep-13

JJK Rimgstad - North Dakota Pipeline Authority
# US Williston Basin Oil Production - 2013

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ND</th>
<th>Eastern MT*</th>
<th>SD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>739,072</td>
<td>70,598</td>
<td>4,617</td>
<td>814,287</td>
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<tr>
<td>February</td>
<td>781,327</td>
<td>71,861</td>
<td>4,891</td>
<td>858,079</td>
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<tr>
<td>March</td>
<td>786,360</td>
<td>73,406</td>
<td>5,111</td>
<td>864,877</td>
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<tr>
<td>April</td>
<td>793,753</td>
<td>76,027</td>
<td>5,131</td>
<td>874,911</td>
</tr>
<tr>
<td>May</td>
<td>811,798</td>
<td>75,058</td>
<td>4,800</td>
<td>891,656</td>
</tr>
<tr>
<td>June</td>
<td>823,721</td>
<td>73,547</td>
<td>4,781</td>
<td>902,049</td>
</tr>
<tr>
<td>July</td>
<td>874,202</td>
<td>75,881</td>
<td>4,678</td>
<td>954,761</td>
</tr>
<tr>
<td>August</td>
<td>912,528</td>
<td>75,817</td>
<td>4,877</td>
<td>993,222</td>
</tr>
<tr>
<td>September</td>
<td>933,191</td>
<td>72,982</td>
<td>5,017</td>
<td>1,011,190</td>
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<tr>
<td>October</td>
<td>945,182</td>
<td></td>
<td>4,643</td>
<td>--</td>
</tr>
<tr>
<td>November</td>
<td>973,045</td>
<td></td>
<td>5,026</td>
<td>--</td>
</tr>
<tr>
<td>December</td>
<td></td>
<td></td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>
Estimated Williston Basin Oil Transportation

- Estimated Rail
- Estimated Pipeline Export
- Tesoro Refinery
- Truck to Canadian Pipelines
- Brent - WTI Spread (EIA)
Crude Oil Prices – Feb. 9, 2014

Cushing $100.02

Brent $109.54
WTI + $9.52
Williston Basin Oil Production & Export Capacity, BOPD

Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

JJ Kringstad - North Dakota Pipeline Authority
Sandpiper Pipeline Open Season

North Dakota Pipeline Company LLC - formerly known as Enbridge Pipelines (North Dakota) LLC

- **225,000 BOPD ND Capacity to Clearbrook, MN (24”)**
- **375,000 BOPD Clearbrook, MN to Superior, WI (30”)**
- **In-service Date**: Q1 2016
- **Project cost**: $2.6 Billion

Map: Enbridge
Solving the Flaring Challenge

**Simple Terms**
- **Orange** – Challenges on existing infrastructure
- **Blue** – Lack of pipelines

**GREEN** – % of gas captured and sold
**Orange** – % flared from wells with at least one mcf sold.
**Blue** – % flared from zero sales wells

Statewide

- 71%
- 18%
- 11%

*Hess Tioga Gas Plant shut-in for 140 MMCFD expansion starting in November

November 2013 Data – Non-Confidential Wells
Capturing the 11%
Faster Well Connections

New Gas Sales Wells Per Month

- New Wells Selling Gas
- New Producing Wells

Number of Wells Per Month

0 50 100 150 200 250 300

ND Gas Gathering Statistics

- Wells With Gas Sales or Lease Use
- Wells Without Gas Sales
North Dakota Natural Gas Production Forecast

Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.
NDPC Flaring Targets 1-29-2014

* NDPA Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.
WBI Energy Dakota Pipeline

- Proposed Completion: 2017
- 400-500 Million Cubic Feet Per Day
- Estimated $650 Million Investment
- 24” Pipeline – 375 Miles
- In Open Season Jan 30 – May 30, 2014
Rich Natural Gas

Raw Natural Gas (1500+ BTU) — Processing Plant

- Consumer Quality Dry Natural Gas
- Methane
  - Ethane 41.64%
  - Propane 28.33%
  - Butane 16.53%
  - Natural Gasoline 13.51%

NGL’S (8-12 gpm)
- Y-Grade or Fractionated

*Using NGL breakdown from the July 2012 BENTEK Natural Gas Study*
ND Gas Plant NGL Production

Barrels Per Day

- Other (Ethane/Y-Grade)
- Natural Gasoline
- Butane
- Propane

Timeline:
- 11/1/2005
- 4/1/2006
- 9/1/2006
- 2/1/2007
- 7/1/2007
- 12/1/2007
- 5/1/2008
- 10/1/2008
- 3/1/2009
- 8/1/2009
- 1/1/2010
- 6/1/2010
- 11/1/2010
- 4/1/2011
- 9/1/2011
- 2/1/2012
- 7/1/2012
- 12/1/2012
- 5/1/2013

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North Dakota NGL Potential

Assumptions

- No Flaring
- 8 Gal/MCF
- All liquids extracted
Case 1: ND NGL Potential*

*Using NGL breakdown from the July 2012 BENTEK Natural Gas Study

Barrels Per Day

- Nat Gasoline
- Isobutane
- Butane
- Propane
- Ethane

13.51%
9.55%
6.98%
28.33%
41.64%

*Using NGL breakdown from the July 2012 BENTEK Natural Gas Study
Moving Future NGL Volumes

Transportation Options

- Trucking Regionally
- Rail Transportation
- Vantage Pipeline (Ethane)
- ONEOK Bakken Pipeline (Y-Grade)
- Alliance Pipeline (Rich Gas)
- New Pipeline Infrastructure??
NGL Pipeline Transportation

- Vantage (Ethane)
- Tioga Lateral
- Aux Sable
- Alliance (Dense Phase)
- North Dakota
- ONEOK (Y-Grade)

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