

# Director's Cut

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Jan Oil 36,927,131 barrels = 1,191,198 barrels/day  
Feb Oil 32,958,640 barrels = 1,177,094 barrels/day (preliminary)(all-time high was Dec 2014 1,227,483 barrels/day)

1,116,325 barrels per day or 95% from Bakken and Three Forks  
60,769 barrels per day or 5% from legacy conventional pools

Jan Gas 45,678,995 MCF = 1,473,516 MCF/day  
Feb Gas 41,267,123 MCF = 1,473,826 MCF/day (preliminary)(all-time high was Dec 2014 1,570,858 MCF/day)

Jan Producing Wells = 12,197  
Feb Producing Wells = 12,198 (preliminary)(NEW all-time high)  
9,208 wells or 75% are now unconventional Bakken – Three forks wells  
2,990 wells or 24% produce from legacy conventional pools

Jan Permitting: 246 drilling and 0 seismic  
Feb Permitting: 197 drilling and 0 seismic  
Mar Permitting: 190 drilling and 0 seismic (all time high was 370 in 10/2012)

Jan Sweet Crude Price = \$31.41/barrel  
Feb Sweet Crude Price = \$34.11/barrel  
Mar Sweet Crude Price = \$31.47/barrel  
Today Sweet Crude Price = \$36.25/barrel (lowest since Feb 2009) (all-time high was \$136.29 7/3/2008)

Jan rig count 160  
Feb rig count 133  
Mar rig count 108  
Today's rig count is 91 (lowest since January 2010)(all-time high was 218 on 5/29/2012)  
The statewide rig count is down 58% from the high and in the five most active counties rig count is down as follows:  
Divide -69% (high was 3/2013)  
Dunn -68% (high was 6/2012)  
McKenzie -44% (high was 1/2014)  
Mountrail -61% (high was 6/2011)  
Williams -65% (high was 10/2014)

Comments:

The drilling rig count dropped 27 from January to February, 25 more from February to March, and has since fallen 17 more from March to today. The number of well completions dropped from 63(final) in January to 42(preliminary) in February. Oil price is by far the biggest driver behind the slow-down, with operators reporting postponed completion work to avoid high initial oil production at very low prices and to achieve NDIC gas capture goals. There were no major precipitation events, 7 days with wind speeds in excess of 35 mph (too high for completion work), and 9 days with temperatures below -10F.

Over 99% of drilling now targets the Bakken and Three Forks formations.

At the end of February there were an estimated 900 wells waiting on completion services<sup>1</sup>, an increase of 75. Comparing December, January, and February completions and production increases results in a requirement of 110-120 completions per month to maintain production near 1.2 million barrels per day.

Crude oil take away capacity depends on rail deliveries to coastal refineries to remain adequate.

Rig count in the Williston Basin has fallen rapidly. Utilization rate for rigs capable of 20,000+ feet is about 50%, and for shallow well rigs (7,000 feet or less) about 30%.

Drilling permit activity decreased significantly from January to February and slightly from February to March as operators positioned themselves for low price 2015 budget scenarios.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is unchanged at 0.

Activity on the Fort Berthold Reservation is as follows

9 drilling rigs (2 on fee lands and 7 on trust lands)

343,811 barrels of oil per day (147,678 from trust lands & 196,133 from fee lands)

1,447 active wells (1,103 on trust lands & 344 on fee lands)

110 wells waiting on completion

414 approved drilling permits (281 on trust lands & 133 on fee lands)

1,921 additional potential future wells (1,165 on trust lands & 756 on fee lands)

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<sup>1</sup> Disclaimer: The number of completions is an estimate on the part of the director based on idle well count and a typical five year average. Neither the State of North Dakota, nor any agency officer, or employee of the State of North Dakota warrants the accuracy or reliability of this product and shall not be held responsible for any losses caused by this product. Portions of the information may be incorrect or out of date. Any person or entity that relies on any information obtained from this product does so at his or her own risk.

Seismic activity is in the mid-winter slow down with 4 surveys active/recording, 2 remediating, 0 suspended, and 0 permitted. There are now 4 buried micro-seismic arrays in North Dakota for monitoring and optimizing hydraulic fracturing.

North Dakota leasing activity is limited to renewals and top leases in the Bakken - Three Forks area.

US natural gas storage is now 10.5% below the five-year average indicating higher prices in the future. North Dakota shallow gas exploration could be economic at future gas prices, but is not at the current price. As you are aware the exploration well in Emmons County is no longer on confidential status as of 12/23/14. The well has not been completed yet, but appears to contain 2 pay sections totaling about 80 feet thick with very good gas shows.

The price of natural gas delivered to Northern Border at Watford City is down \$0.12 to \$2.19/MCF. This results in a current oil to gas price ratio of 17 to 1. The percentage of gas flared decreased to 19%. The Tioga gas plant increased to 84% of full capacity, but expansion of gas gathering from south of Lake Sakakawea remains delayed. The February capture percentage was 81% with the daily volume of gas flared from January to February decreasing 43.7 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows:

Statewide 81%

Statewide Bakken 81%

Non-FBIR Bakken 81%

FBIR Bakken 83%

Trust FBIR Bakken 83%

Fee FBIR 82%

October 2014 capture target =74%

January 2015 capture target =77%

BLM revised final regulations for hydraulic fracturing on federal and Indian lands were published in the CFR on 3/26/15 so they will go into effect 6/26/15. North Dakota has intervened in the Wyoming legal challenge of the rules which seeks an injunction or temporary restraining order to prevent the rules going into effect until the case is settled.

The North Dakota Legislature is working to set up a council to address the following Clean Water Act, Safe Drinking Water Act, Clean Air Act, and Endangered Species Act issue through HB1432 and HR3009:

BLM has started the process of new venting and flaring regulations with input sessions in Denver, Albuquerque, Dickinson, and Washington, DC.

EPA published an advanced notice of proposed rule-making to seek comment on the information that should be reported or disclosed for hydraulic fracturing

chemical substances and mixtures and the mechanism for obtaining this information. The proposed rule-making is in response to a petition from Earthjustice and 114 other groups who are opposed to the use of the GWPC-IOGCC FracFocus website process of chemical disclosure and any type of trade secret protection for hydraulic fracturing fluid mixtures. These groups are requesting EPA regulation of chemical disclosure under the federal Toxic Substances Control Act. Thanks to all who provided comments in support of a “states first” policy.

The comment period for the EPA and USACOE proposed rule redefining “Waters of the United States” ended 11/14/14. No prospective date for the final rule has been published.

Obama administration officials recently announced a plan under which the oil and gas industry would have to cut methane emissions by 40 to 45 percent below 2012 levels by 2025. U.S. EPA will issue new regulations this summer under the Clean Air Act, and a final rule could be in place in 2016. EPA's rulemaking will be done under Section 111(b) of the Clean Air Act, which allows regulation of new sources along the oil and gas supply chain. So the new regulations would apply to new and modified pieces of equipment only and would leave older pieces of equipment unregulated. In North Dakota the Clean Air Act is enforced by the Department of Health. Please monitor future Director's cuts for information on the status and how to comment on the proposed rule.

The USFWS has made a decision to list the Dakota Skipper and Poweshiek Skipperling to receive protection under the Endangered Species Act. Additional potential listing of concern are the Rufa Red Knot, Sprague's Pipit, Greater Sage Grouse, Monarch Butterfly, Sturgeon Chub, and Sicklefin Chub.