

# Director's Cut

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Dec Oil 38,051,988 barrels = 1,227,483 barrels/day  
Jan Oil 36,905,179 barrels = 1,190,490 barrels/day (preliminary)(all-time high was Dec 2014 1,227,483 barrels/day)  
1,128,707 barrels per day or 95% from Bakken and Three Forks  
61,783 barrels per day or 5% from legacy conventional pools

Dec Gas 46,836,598 MCF = 1,570,858 MCF/day  
Jan Gas 45,660,015 MCF = 1,472,904 MCF/day (preliminary)(all-time high was Dec 2014 1,570,858 MCF/day)

Dec Producing Wells = 12,134  
Jan Producing Wells = 12,181 (preliminary)(NEW all-time high)  
9,027 wells or 74% are now unconventional Bakken – Three forks wells  
3,154 wells or 26% produce from legacy conventional pools

Dec Permitting: 251 drilling and 0 seismic  
Jan Permitting: 246 drilling and 0 seismic  
Feb Permitting: 197 drilling and 2 seismic (all time high was 370 in 10/2012)

Dec Sweet Crude Price = \$40.74/barrel  
Jan Sweet Crude Price = \$31.41/barrel  
Feb Sweet Crude Price = \$34.11/barrel  
Today Sweet Crude Price = \$32.00/barrel (lowest since Feb 2009 and Jan 2015) (all-time high was \$136.29 7/3/2008)

Dec rig count 181  
Jan rig count 160  
Feb rig count 133  
Today's rig count is 111 (lowest since April 2010)(all-time high was 218 on 5/29/2012)  
The statewide rig count is down 49% from the high and in the five most active counties rig count is down as follows:  
Divide -69% (high was 3/2013)  
Dunn -58% (high was 6/2012)  
McKenzie -32% (high was 1/2014)  
Mountrail -49% (high was 6/2011)  
Williams -63% (high was 10/2014)

Comments:

The drilling rig count dropped 21 from December to January, 27 more from January to February, and has since fallen 22 more from February to today. The number of well completions dropped from 183(final) in December to 47(preliminary) in January. 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, only 5 days with wind speeds in excess of 35 mph (too high for completion work), and 8 days with temperatures below -10F.

Over 98% of drilling now targets the Bakken and Three Forks formations.

At the end of January there were an estimated 825 wells<sup>1</sup> waiting on completion services, an increase of 75. Comparing December completions and production increase to January completions and production decrease results in a requirement of 115 completions per month to maintain 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 60%, and for shallow well rigs (7,000 feet or less) less than 40%.

Drilling permit activity decreased in January as operators began positioning 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

18 drilling rigs (6 on fee lands and 12 on trust lands)

375,158 barrels of oil per day (152,208 from trust lands & 222,951 from fee lands)

1,420 active wells (1,095 on trust lands & 325 on fee lands)

120 wells waiting on completion

390 approved drilling permits (227 on trust lands & 132 on fee lands)

1,948 additional potential future wells (1,173 on trust lands & 775 on fee lands)

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.

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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.

North Dakota leasing activity is very low, consisting mostly of renewals and top leases in the Bakken - Three Forks area.

US natural gas storage is now 7.7% below the five-year average indicating stronger prices in the future. North Dakota shallow gas exploration could be economic at future gas prices. 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 \$0.07 to \$2.31/MCF. This results in a current oil to gas price ratio of 14 to 1. The percentage of gas flared decreased to 22%. The Tioga gas plant increased to 80% of full capacity, but expansion of gas gathering from south of Lake Sakakawea remains delayed. The January capture percentage was 78% with the daily volume of gas flared from December to January decreasing 37.5 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows:

Statewide 78%

Statewide Bakken 78%

Non-FBIR Bakken 78%

FBIR Bakken 79%

Trust FBIR Bakken 80%

Fee FBIR 76%

October 2014 capture target =74%

January 2015 capture target =77%

BLM revised final regulations for hydraulic fracturing on federal and Indian lands were sent to the White House Office of Management and Budget for interagency review on Jan 26, 2013 and Department of Interior continues to be committed to their goal of issuing a final rule soon. After initial publication in 2012, BLM received over 177,000 comments and withdrew the rule. A new proposed rule was published in the federal register on 5/24/2013 and the comment period ended 8/23/2013. This time BLM received over 1.2 million comments. Thanks to all who provided comments in support of a “states first” policy.

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. The North Dakota Legislature is working on this issue through HB 1432 and HR3009.

The Obama administration officials 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.