

# Director's Cut

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Feb Oil 32,986,298 barrels = 1,178,082 barrels/day

Mar Oil 36,908,068 barrels = 1,190,583 barrels/day (preliminary)(all-time high was Dec 2014 1,227,483 barrels/day)

1,129,174 barrels per day or 95% from Bakken and Three Forks

61,409 barrels per day or 5% from legacy conventional pools

Feb Gas 41,311,066 MCF = 1,475,395 MCF/day

Mar Gas 47,165,803 MCF = 1,521,478 MCF/day (preliminary)(all-time high was Dec 2014 1,570,858 MCF/day)

Feb Producing Wells = 12,199

Mar Producing Wells = 12,439 (preliminary)(NEW all-time high)

9,397 wells or 76% are now unconventional Bakken – Three forks wells

3,037 wells or 24% produce from legacy conventional pools

Feb Permitting: 197 drilling and 0 seismic

Mar Permitting: 190 drilling and 0 seismic

Apr Permitting: 168 drilling and 1 seismic (all time high was 370 in 10/2012)

<sup>1</sup>Feb Sweet Crude Price = \$34.11/barrel

Mar Sweet Crude Price = \$31.47/barrel

Apr Sweet Crude Price = \$38.33/barrel

Today Sweet Crude Price = \$46.00/barrel (all-time high was \$136.29 7/3/2008)

Feb rig count 133

Mar rig count 108

Apr rig count 91

Today's rig count is 83 (lowest since January 2010)(all-time high was 218 on 5/29/2012)

The statewide rig count is down 62% from the high and in the five most active counties rig count is down as follows:

Divide -77% (high was 3/2013)

Dunn -74% (high was 6/2012)

McKenzie -52% (high was 1/2014)

Mountrail -63% (high was 6/2011)

Williams -63% (high was 10/2014)

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<sup>1</sup> Source: Flint Hills Resources

<http://www.fhr.com/refining/bulletins.aspx?AspxAutoDetectCookieSupport=1>

Comments:

The drilling rig count dropped 25 from February to March, 17 more from March to April, and has since fallen 8 more from April to today. The number of well completions<sup>2</sup> rose sharply from 42(final) in February to 189(preliminary) in March. Oil price is by far the biggest driver of the slow-down followed by oil extraction tax triggers, NDIC gas capture goals, and NDIC oil conditioning rules. There were no major precipitation events, 8 days with wind speeds in excess of 35 mph (too high for completion work), and 1 day with temperatures below -10F.

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

At the end of March there were an estimated 880 wells waiting on completion services, a decrease of 20. To maintain production near 1.2 million barrels per day, 110-120 completions must be made per month.

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 45%, and for shallow well rigs (7,000 feet or less) about 25%.

Drilling permit activity decreased slightly from February to March and significantly more from March to April 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:

8 drilling rigs (2 on fee lands and 6 on trust lands)

382,159 barrels of oil per day (164,012 from trust lands & 218,147 from fee lands)

1,458 active wells (1,103 on trust lands & 355 on fee lands)

80 wells waiting on completion

455 approved drilling permits (321 on trust lands & 134 on fee lands)

1,910 additional potential future wells (1,165 on trust lands & 745 on fee lands)

Seismic activity is in the mid-winter slow down with 5 surveys active/recording, 0 remediating, 0 suspended, and 0 permitted. There are now 5 buried micro-seismic arrays in North Dakota for monitoring and optimizing hydraulic fracturing.

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<sup>2</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 limited to renewals and top leases in the Bakken - Three Forks area.

US natural gas storage is now 3.6% below the five-year average indicating slightly 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 up \$0.09 to \$2.28/MCF. This results in a current oil to gas price ratio of 20 to 1. The percentage of gas flared was unchanged at 19%. The Tioga gas plant was steady at 83% of full capacity, but expansion of gas gathering from south of Lake Sakakawea remains delayed. The March capture percentage was 81% with the daily volume of gas flared from February to March increased 7.7 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows:

Statewide 80%

Statewide Bakken 81%

Non-FBIR Bakken 80%

FBIR Bakken 85%

Trust FBIR Bakken 86%

Fee FBIR 80%

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 and Colorado have intervened in the Wyoming legal challenge of the rules and plan to seek an injunction or temporary restraining order to prevent the rules going into effect until the case is settled.

The North Dakota Legislature passed HB1432 which sets up a council to address Clean Water Act, Safe Drinking Water Act, Clean Air Act, and Endangered Species Act issues: 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 have proposed 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.