

# Director's Cut

Lynn Helms  
NDIC Department of Mineral Resources

Oct Oil 36,688,971 barrels = 1,183,515 barrels/day  
Nov Oil 35,616,174 barrels = 1,187,206 barrels/day (preliminary)(NEW all-time high)  
1,123,304 barrels per day or 95% from Bakken and Three Forks  
63,902 barrels per day or 5% from legacy conventional pools

Oct Gas 44,334,943 MCF = 1,430,159 MCF/day  
Nov Gas 42,759,688 MCF = 1,425,323 MCF/day (preliminary)

Oct Producing Wells = 11,903  
Nov Producing Wells = 11,942 (preliminary)(NEW all-time high)  
8,640 wells or 72% are now unconventional Bakken – Three forks wells  
3,302 wells or 28% produce from legacy conventional pools

Oct Permitting: 328 drilling and 1 seismic  
Nov Permitting: 235 drilling and 1 seismic  
Dec Permitting: 251 drilling and 0 seismic (all time high was 370 in 10/2012)

Oct Sweet Crude Price = \$68.94/barrel  
Nov Sweet Crude Price = \$60.61/barrel  
Dec Sweet Crude Price = \$40.74/barrel  
Today Sweet Crude Price = \$29.25/barrel (lowest since December 2008) (all-time high was \$136.29 7/3/2008)

Oct rig count 191  
Nov rig count 188  
Dec rig count 181  
Today's rig count is 156 (lowest since Oct 2010)(all-time high was 218 on 5/29/2012)  
The statewide rig count is down 28% from the high and in the five most active counties rig count is down as follows:  
Divide -62% (high was 3/2013)  
Dunn -39% (high was 6/2012)  
McKenzie -23% (high was 1/2014)  
Mountrail -32% (high was 6/2011)  
Williams -28% (high was 10/2014)

## Comments:

The drilling rig count dropped 3 from October to November, 7 more from November to December, and has since fallen 25 more from December to today. The number of well completions decreased from 145(final) in October to 39(preliminary) in November. Oil

price is by far the biggest driver behind the slow-down. Operators report postponing completion work to avoid high initial oil production at very low prices and achieve NDIC gas capture goals. There were no major precipitation events, but there were 11 days with wind speeds in excess of 35 mph (too high for completion work) and 7 days with temperatures below -10F.

Over 95% of drilling still targets the Bakken and Three Forks formations.

The drillers far outpaced completion crews in November. At the end of November there were about 775 wells waiting on completion services, an increase of 125.

Crude oil take away capacity is expected to remain adequate as long as rail deliveries to coastal refineries keep growing.

Rig count in the Williston Basin is falling rapidly. Utilization rate for rigs capable of 20,000+ feet is currently about 80%, and for shallow well rigs (7,000 feet or less) about 50%.

Drilling permit activity peaked in October as operators finished their summer programs and planned locations for this winter.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is down from 3 to 0.

Activity on the Fort Berthold Reservation is as follows

22 drilling rigs (11 on fee lands and 11 on trust lands)

370,165 barrels of oil per day (144,127 from trust lands & 226,038 from fee lands)

1,376 active wells (1,059 on trust lands & 317 on fee lands)

190 wells waiting on completion

338 approved drilling permits (290 on trust lands & 48 on fee lands)

1,992 additional potential future wells (1,209 on trust lands & 783 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 4 buried micro-seismic arrays in North Dakota for monitoring and optimizing hydraulic fracturing.

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 2% below the five-year average indicating weak 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 \$0.28 to \$2.70/MCF. This results in a current oil to gas price ratio of 11 to 1. The percentage of gas flared rose to 25%. The Tioga gas plant remained below 70% of full capacity due to delayed expansion of gas gathering from south of Lake Sakakawea. The October capture percentage was 75% with the daily volume of gas flared from October to November increasing 36.5 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows:

Statewide 75%

Statewide Bakken 75%

Non-FBIR Bakken 75%

FBIR Bakken 74%

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 Nov 26 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 Obama administration officials this morning 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 would 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.