## **Director's Cut**

## Lynn Helms NDIC Department of Mineral Resources

Nov Oil 29,293,592 barrels = 976,453 barrels/day

Dec Oil 28,620,049 barrels = 923,227 barrels/day (preliminary)(all-time high was

976,453 in 11/13)

862,978 barrels per day or 93% from Bakken and Three Forks

60,249 barrels per day or 7% from legacy conventional pools

Nov Gas 32,557,686 MCF = 1,085,256 MCF/day

Dec Gas 30,731,240 MCF = 991,330 MCF/day (preliminary)(all-time high was

1,085,256 in 11/13)

Nov Producing Wells = 10,042

Dec Producing Wells = 10,015 (preliminary)(all-time high was 10,042 in 11/13)

6,803 Wells or 68% are now unconventional Bakken – Three forks wells

3,212 wells or 32% produce from legacy conventional pools

Nov Permitting: 232 drilling and 1 seismic Dec Permitting: 227 drilling and 1 seismic

Jan Permitting: 253 drilling and 0 seismic (all time high was 370 in 10/2012)

Nov Sweet Crude Price = \$71.42/barrel

Dec Sweet Crude Price = \$73.47/barrel

Jan Sweet Crude Price = \$74.20/barrel

Today Sweet Crude Price = \$81.35/barrel (all-time high was \$136.29 7/3/2008)

Nov rig count 184

Dec rig count 190

Jan rig count 188

Today's rig count is 185 (all-time high was 218 on 5/29/2012)

The statewide rig count is down 15% from the high and in the five most active counties

rig count is down as follows:

McKenzie -4% high was July 2013

Williams -33% high was March 2012

Mountrail -15% high was June 2011

Dunn -29% high was June 2012

Divide -25% high was March 2013

## Comments:

The drilling rig count was up from Nov to Dec, but the number of well completions dropped from 138 to 119. Days from spud to initial production increased 18 days to 132.

Investor confidence appears to be growing, but there is still some concerns about the uncertainty surrounding federal policies on taxation and hydraulic fracturing regulation, but the big story is the December weather. Low temperatures of 21 to 31 degrees below zero, 4 major snow events, and 5 major wind events. Dickinson had the 4th coldest December on record and from Williston to Bismarck it was the 9th snowiest December since 1890.

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

We estimate that at the end of Dec there were about 635 wells waiting on completion services, an increase of 125.

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

Rig count in the Williston basin is increasing slowly. Utilization rate for rigs capable of +20,000 feet remains above 90%, and for shallow well rigs (drill to 7,000 feet or less) about 60%.

Drilling permit activity was up in December and continues to be strong as operators start late winter operations and plan for multi-well pad drilling during spring melt. The NDIC goal is to maintain a sufficient permit inventory to accommodate multi-well pads through the end of load restrictions as well as the time required to deal with federal hydraulic fracturing rules if required.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is 3, up 1 from 2 in January.

Activity on the Fort Berthold Reservation is as follows

23 drilling rigs (7 on fee lands and 16 on trust lands)

294,269 barrels of oil per day (107,204 from trust lands & 187,065 from fee lands)

1,129 active wells (728 on trust lands & 401 on fee lands)

130 wells waiting on completion

327 approved drilling permits (299 on trust lands & 28 on fee lands)

2,240 additional potential future wells (1,540 on trust lands & 700 on fee lands)

Seismic activity is steady with 4 surveys active/recording, 1 remediating, 1 suspended, and 1 permitted. There are now 4 buried 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 27% below the five-year average indicating increasing prices in the foreseeable future. North Dakota shallow gas exploration may be economic at future gas prices.

The price of natural gas delivered to Northern Border at Watford City is up \$0.64 to \$4.50/MCF. This results in a current oil to gas price ratio of 18:1. The percentage of gas flared is up 6% to 36% largely due to the temporary shut-down of the Tioga gas plant on November 25th for expansion. The new plant is now planned to begin operating at the end of February. This matches the historical high of 36% in 09/2011.

Draft BLM regulations for hydraulic fracturing on federal lands were published last year. 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 1.2 million comments. Thanks to all who provided comments in support of a "states first" policy.

Final EPA Guidance for permitting hydraulic fracturing using diesel fuel was published 2/13/14. The nearly 2 years of comment and analysis resulted in some very real improvements, but more significantly allowed industry time to develop new recipes that do not use diesel fuel. We are disappointed that EPA did not provide for the ability to use a de minimis amount of diesel such as less than 1%. However they reduced the impact a great deal by removing petroleum distillate, synonyms, and "substantially similar compounds". The revised guidance should not result in any type of moratorium on hydraulic fracturing in North Dakota. We have reviewed the FracFocus data for all North Dakota wells since 4/1/12 and found 15 instances of kerosene, one of the five chemicals defined as diesel fuel, being used at concentrations of less than 4 ten-thousands of one percent. The operator has been contacted, the reason identified, and the operator has already eliminated that product from its treatments. We were given less than 24 hours advanced notice of publication in the Federal Register and are working really hard to let everyone know what chemicals will result in a underground injection control permit being required and what the permitting requirements are.