

# Director's Cut

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Feb Oil 21,813,391 barrels = 779,050 barrels/day  
Mar Oil 24,267,186 barrels = 782,812 barrels/day (preliminary)(NEW all-time high)

Feb Gas 23,369,839 MCF = 834,637 MCF/day  
Mar Gas 26,254,101 MCF = 846,906 MCF/day (preliminary)(NEW all-time high)

Feb Producing Wells = 8,492  
Mar Producing Wells = 8,634 (preliminary)(NEW all-time high)

Feb Permitting: 185 drilling and 2 seismic  
Mar Permitting: 218 drilling and 1 seismic  
Apr Permitting: 202 drilling and 0 seismic (all time high was 370 in Oct 2012)

Feb Sweet Crude Price = \$86.88/barrel  
Mar Sweet Crude Price = \$87.25/barrel  
Apr Sweet Crude Price = \$87.85/barrel  
Today Sweet Crude Price = \$87.25/barrel (all-time high was \$136.29 July 3, 2008)

Feb rig count 183  
Mar rig count 186  
Apr rig count 186  
Today's rig count is 191 (all-time high was 218 on May 29, 2012)

## Comments:

March weather was much worse than February with three major storms. The drilling rig count increased slightly but the number of well completions dropped by 30 to 140. That number of completions is above the threshold needed to maintain production so oil production rate rose slightly, up 0.5% from February. Operators are gradually picking up the pace as summer weather begins while continuing to push higher efficiency and cost cutting measures. Uncertainty surrounding federal policies on taxation and hydraulic fracturing regulation continue to make capital acquisition more difficult, but the new USGS recoverable reserve estimate has bolstered confidence in the long term. Over 95% of drilling still targets the Bakken and Three Forks formations.

We estimate that at the end of March there were about 440 wells waiting on completion services.

Crude oil take away capacity continues to be adequate as long as rail deliveries to the coasts keep growing.

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

Drilling permit activity was down slightly in April. There is a sufficient permit inventory to accommodate multi-well pads, the inability to construct locations during load restrictions, and 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 unchanged at 4.

The number of rigs drilling on the Fort Berthold Reservation is down 1 to 26 with 5 on fee lands and 21 on trust lands.

There are now 875 active wells (96 on trust lands & 779 on fee lands)

Producing 150,959 barrels of oil per day (5,699 from trust lands & 143,800 from fee lands)

170 wells are waiting on completion

287 approved drilling permits (216 on trust lands & 71 on fee lands)

2,477 additional potential future wells (2,182 on trust lands & 295 on fee lands)

Seismic activity is up slightly with 4 surveys active/recording, 1 remediating, 1 suspended, and 6 permitted. There are now 4 buried arrays in North Dakota for monitoring and optimizing hydraulic fracturing.

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

Construction of processing plants and gathering systems was virtually at a standstill until very recently. US natural gas storage is now 5% below the five-year average indicating the price has bottomed, but low prices are still expected for the foreseeable future.

Natural gas production increased 1.5% versus the 0.5% increase in oil production. This is consistent with the Bentek study that shows gas oil ratios increasing as wells age.

North Dakota shallow gas exploration is not economic at near term gas prices.

Natural gas delivered to Northern Border at Watford City is down to \$3.47/MCF. This results in a current oil to gas price ratio of 25 to 1, but the high liquids content makes gathering and processing of Bakken gas economic. Additions to gathering and processing capacity are not keeping up so the percentage of gas flared fell to 29%. The historical high was 36% in September 2011.

Draft BLM regulations for hydraulic fracturing on federal lands were published last year. BLM received over 170,000 comments and has withdrawn the rule. A new proposed rule has been sent to OMB and is expected to be opened for comment this month.

Draft EPA Guidance for permitting hydraulic fracturing using diesel fuel was also published last year. EPA received over 97,000 comments and has set a target of this quarter for final guidance document publication.

Pressure on the federal budget has led to a budget proposal that eliminates expenses of intangible drilling costs and the depletion allowance.