

# Director's Cut

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Jun Oil 24,647,947 barrels = 821,598 barrels/day  
Jul Oil 27,108,258 barrels = 874,460 barrels/day (preliminary)(NEW all-time high)

Jun Gas 28,003,677 MCF = 933,456 MCF/day  
Jul Gas 30,079,449 MCF = 970,305 MCF/day (preliminary)(NEW all-time high)

Jun Producing Wells = 9,096  
Jul Producing Wells = 9,322 (preliminary)(NEW all-time high)

Jun Permitting: 165 drilling and 0 seismic  
Jul Permitting: 179 drilling and 0 seismic  
Aug Permitting: 276 drilling and 0 seismic (all time high was 370 in Oct 2012)

Jun Sweet Crude Price = \$85.79/barrel  
Jul Sweet Crude Price = \$95.78/barrel  
Aug Sweet Crude Price = \$93.97/barrel  
Today Sweet Crude Price = \$95.00/barrel (all-time high was \$136.29 July 3, 2008)

Jun rig count 187  
Jul rig count 186  
Aug rig count 183  
Today's rig count is 180 (all-time high was 218 on Jul 29, 2012)

## Comments:

The drilling rig count decreased slightly from Jun to Jul, but the number of well completions jumped 102 to 251, resulting in a 6.4% increase in oil production. That number of completions is almost 3 times the threshold needed to maintain production. Completion crews outpaced drilling rigs for the first time this year. The average number of days to drill a well from spud to total depth remained steady at about 22, but the average number of days from total depth to initial production fell from 94 to 79. The uncertainty surrounding federal policies on taxation and hydraulic fracturing regulation continues to make investors nervous.

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

We estimate that at the end of July there were about 460 wells waiting on completion services, a decrease of 30.

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

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

Drilling permit activity was up sharply in August and will increase even more as we help operators plan for winter. The goal is to have a sufficient permit inventory to accommodate multi-well pads through the end of load restrictions in 2014 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 remains at 0.

Activity on the Fort Berthold Reservation is as follows

22 drilling rigs (6 on fee lands and 16 on trust lands)

291,726 barrels of oil per day (12,956 from trust lands & 170,770 from fee lands)

1,004 active wells (129 on trust lands & 875 on fee lands)

141 wells waiting on completion

271 approved drilling permits (251 on trust lands & 20 on fee lands)

2,365 additional potential future wells (1,473 on trust lands & 892 on fee lands)

Seismic activity is steady with 4 surveys active/recording, 0 remediating, 1 suspended, and 0 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 1.4% above the five-year average indicating continued low prices for the foreseeable future. Natural gas production increased 4% versus the 6.4% increase in oil production. This appears to not be consistent with the Bentek study that shows gas oil ratios increasing as wells age, but there was a surge in the number of new wells with lower gas oil ratios. North Dakota shallow gas exploration is not economic at near term gas prices.

Natural gas delivered to Northern Border at Watford City is up \$0.30 to \$3.09/MCF.

This results in a current oil to gas price ratio of 31:1, but the high liquids content makes gathering and processing of Bakken gas economic. The percentage of gas flared is back up 2% to 30% almost all of which can be attributed to processing plant outages for mechanical repairs and electrical failures. The historical high was 36% in September 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 May 24, 2013 and the comment period ended August 23, 2013. This time BLM received 1.2 million comments. Thank you to all those who provided comments in support of a “states first” policy.

Draft EPA Guidance for permitting hydraulic fracturing using diesel fuel was also published last year. EPA received over 97,000 comments and is reported to have a target of Q3 2013 for final guidance document publication.