

# Director's Cut

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Aug Oil 21,743,671 barrels = 701,409 barrels/day  
Sep Oil 21,854,812 barrels = 728,494 barrels/day (preliminary)(NEW all-time high)

Aug Gas 23,633,182 MCF = 762,361 MCF/day  
Sep Gas 23,806,444 MCF = 793,548 MCF/day (preliminary)(NEW all-time high)

Aug Producing Wells = 7,701  
Sep Producing Wells = 7,798 (preliminary)(NEW all-time high)

Aug Permitting: 261 drilling and 1 seismic  
Sep Permitting: 273 drilling and 0 seismic  
Oct Permitting: 370 drilling and 0 seismic (NEW all-time high)

Aug Sweet Crude Price = \$80.65/barrel  
Sep Sweet Crude Price = \$84.98/barrel  
Oct Sweet Crude Price = \$87.00/barrel  
Today Sweet Crude Price = \$80.75/barrel ND (all-time high was \$136.29 July 3, 2008)

Aug rig count 198  
Sep rig count 190  
Oct rig count 188  
Today's rig count is 187 (all-time high was 218 on May 29, 2012)

## Comments:

September weather was great for drilling and hydraulic fracturing resulting in a 4% oil production rate increase from August to September. Rig count has stabilized at around 190 as operators transition to higher efficiency rigs and implement cost cutting measures. The idle well count remained constant indicating an estimated 300 wells waiting on fracturing services. Rapidly escalating well costs that consumed capital spending budgets faster than many companies anticipated and uncertainty surrounding future federal policies on hydraulic fracturing are impacting capital investment decisions. Over 95% of drilling still targets the Bakken and Three Forks formations.

Additions to gathering and processing capacity are helping but the percentage of gas flared rose slightly to 30%. The historical high was 36% in September 2011. Yesterday, the NDIC approved Oil and Gas Research Council Funding for flared gas to anhydrous ammonia fertilizer. Previously investments were made for research into electrical generation, and compression of natural gas for use as fuel or transport to a processing

facility. Future projects may include use of flared gas to produce petrochemicals, conversion of flared gas to liquid fuels, and removal of natural gas liquids from flared gas. It is hoped the legislature will consider tax exemptions and royalty certainty to provide incentives for beneficial uses like the above.

Crude oil take away via pipeline is now 39% of daily production, but transportation by rail at 51% and truck at 2% plus Tesoro refining 8% are adequate to keep up with near term production projections.

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

Drilling permit activity was increased dramatically to accommodate more multi-well pads and the need to build locations before winter weather comes.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is down to 5.

The number of rigs drilling on the Fort Berthold Reservation has dropped to 26 with 2 on fee lands and 24 on trust lands.

There are now 741 wells (122 on trust lands & 619 on fee lands)

Producing 122,369 barrels of oil per day (6,859 from trust lands & 115,510 from fee lands)

104 wells are waiting on completion

259 approved drilling permits (304 on trust lands & 11 on fee lands)

1,531 additional potential future wells (1,426 on trust lands & 105 on fee lands)

Seismic activity is down with 5 surveys active/recording, 1 remediating, 0 suspended, and 6 permitted.

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

Daily natural gas production continues to increase slightly faster than oil production. This indicates that gas oil ratios are increasing and confirms the need for more gathering and processing capacity. Construction of processing plants and gathering systems will now be affected by weather. US natural gas storage has dropped to 6% above the five-year average but this still indicates low prices for the foreseeable future. North Dakota shallow gas exploration is not economic at near term gas prices.

Natural gas delivered to Northern Border at Watford City is up to \$3.06/MCF. This results in a current oil to gas price ratio of 26 to 1, but the high liquids content makes gathering and processing of Bakken gas economic.

Draft BLM regulations for hydraulic fracturing on federal lands were published in the Federal Register. The comment period closed at 5pm EDT on September 10, 2012. BLM has given no indication of when a final rule will be published.

Draft EPA Guidance for permitting hydraulic fracturing using diesel fuel has been published. The comment period closed at 5pm EDT on August 23, 2012. There is no indication from EPA of when a final guidance document will be published.