

Director's Cut

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Oil Production

March 34,454,047 barrels = 1,111,421 barrels/day
April 31,230,218 barrels = 1,041,007 barrels/day (preliminary)(all-time high was Dec 2014 at 1,227,483 barrels/day)
987,581 barrels per day or 95% from Bakken and Three Forks
53,426 barrels per day or 5% from legacy conventional pools

Gas Production

March 53,035,524 MCF = 1,710,823 MCF/day
April 48,508,496 MCF = 1,616,950 MCF/day (preliminary)(all-time high was March 2016 at 1,710,823 MCFD)

Producing Wells

March 13,052
April 13,050 (preliminary)(all-time high was Oct 2015 13,190)
11,036 wells or 85% are now unconventional Bakken – Three forks wells
2,014 wells or 15% produce from legacy conventional pools

Permitting

March 56 drilling and 4 seismic
April 66 drilling and 0 seismic
May 42 drilling and 0 seismic (all time high was 370 in 10/2012)

ND Sweet Crude Price¹

March \$26.62/barrel
April \$30.75/barrel
May \$33.74/barrel
Today \$38.25/barrel (all-time high was \$136.29 7/3/2008)

Rig Count

March 32
April 29
May 27
Today's rig count is 28 (lowest since July 2005 when it was 27)(all-time high was 218 on 5/29/2012)

¹ Pricing Source: [Flint Hills Resources](#)

The statewide rig count is down 87% from the high and in the five most active counties rig count is down as follows:

Divide -92% (high was 3/2013)

Dunn -74% (high was 6/2012)

McKenzie -84% (high was 1/2014)

Mountrail -88% (high was 6/2011)

Williams -100% (high was 10/2014)

Comments:

The drilling rig count fell 3 from March to April, 2 from April to May, and increased 1 from May to today. Operators remain committed to running the minimum number of rigs while oil prices remain below \$60/barrel WTI. The number of well completions fell from 66(final) in March to 41(preliminary) in April. Oil price weakness is the primary reason for the slow-down and is now anticipated to last into at least the third quarter of this year and perhaps into the second quarter of 2017. There was 1 significant precipitation event, 15 days with wind speeds in excess of 35 mph (too high for completion work), and no days with temperatures below -10F.

Over 98% of drilling now targets the Bakken and Three Forks formations.

Estimated wells waiting on completion services² is 892, down 28 from the end of March to the end of April.

Estimated inactive well count³ is 1,590, up 67 from the end of March to the end of April.

Crude oil take away capacity remains dependent on rail deliveries to coastal refineries to remain adequate.

Low oil price associated with lifting of sanctions on Iran and a weaker economy in China are expected to lead to continued low drilling rig count. Utilization rate for rigs capable of 20,000+ feet is 25-30% and for shallow well rigs (7,000 feet or less) 15-20%.

Drilling permit activity increased from March to April then fell back in May as operators continue to position themselves for low 2016 price scenarios. Operators have a significant permit inventory should a return to the drilling price point occur in the next 12 months.

² The number of wells waiting on completions is an estimate on the part of the director based on idle well count and a typical five year average. Neither the State of North Dakota, nor any agency officer, or employee of the State of North Dakota warrants the accuracy or reliability of this product and shall not be held responsible for any losses caused by this product. Portions of the information may be incorrect or out of date. Any person or entity that relies on any information obtained from this product does so at his or her own risk.

³ Includes all well types on IA and AB statuses.

IA= Inactive shut in >3 months and <12 months

AB= Abandoned (Shut in >12 months)

Rigs actively drilling on federal surface in the Dakota Prairie Grasslands remains at 0.

Activity on the Fort Berthold Reservation is as follows:

7 drilling rigs (0 on fee lands and 7 on trust lands)

167,055 barrels of oil per day (112,719 from trust lands & 54,336 from fee lands)

1,448 active wells (990 on trust lands & 458 on fee lands)

150 wells waiting on completion

527 approved drilling permits (333 on trust lands & 194 on fee lands)

1,792 additional potential future wells (1,278 on trust lands & 514 on fee lands)

Seismic activity is unchanged. There are 4 surveys active, 0 recording and 0 NDIC reclamation projects, 0 remediating, 3 suspended, and 1 permitted.

North Dakota leasing activity is limited to renewals and top leases in the Bakken - Three Forks area.

US natural gas storage is now 32.1% above the five-year average indicating low prices in the future. North Dakota shallow gas exploration could be economic at future gas prices, but is not at the current price. The operator of the exploration well (file 27235) in Emmons County has received Temporary Abandoned status on 8/31/15 and cancelled all other permits in the area. The well 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 up \$0.31 to \$1.88/MCF. This results in a current oil to gas price ratio of 20 to 1. The percentage of gas flared decreased slightly to 9.2%. The Tioga gas plant operated at 79% of capacity. Even though the expansion of gas gathering from south of Lake Sakakawea was approved, the approval came too late for the 2015 construction season, resulting in a 1 year delay. The April Bakken capture percentage was 92% with the daily volume of gas flared from March to April down 25.6 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows:

Statewide 91%

Statewide Bakken 92%

Non-FBIR Bakken 93%

FBIR Bakken 88%

Trust FBIR Bakken 88%

Fee FBIR 91%

77% January 1, 2015 through March 31, 2016

80% April 1, 2016 through October 31, 2016

85% November 1, 2016 through October 31, 2018

88% November 1, 2018 through October 31, 2020

91% beginning November 1, 2020

The North Dakota Legislature passed HB1432 which sets up a council to address Clean Water Act, Safe Drinking Water Act, Clean Air Act, and Endangered Species Act issues: **BIA** has published a new final rule to update the process for obtaining rights of way on Indian land. The rule was published 11/19/15 and became effective 12/21/15. The final rule can be found at <https://www.federalregister.gov/articles/2015/11/19/2015-28548/rights-of-way-on-indian-land>. On April 11, 2016, the Western Energy Alliance filed a complaint and motion for a temporary restraining order and/or a preliminary injunction. On April 19, 2016, the US District court for the District of North Dakota issued an order denying the motion for a preliminary injunction.

BLM has published a new final rule to revise Onshore Order 4. The proposed rule would replace Onshore Oil and Gas Order Number 4 (Order 4), which sets minimum standards for the measurement of oil. Order 4 has not been updated since 1989, and does not reflect modern industry practices or standards. The proposed rule may be viewed online at www.regulations.gov. Comments on the proposed rule were due April 14, 2015. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/BLM-Comments-OnshoreOrder4.pdf>

BLM released a proposed rule on 10/2/15 to update and replace its regulations (Onshore order 5) governing the measurement of natural gas produced from onshore Federal and Indian leases. The requirements contained in the proposed rule reflect advances in measurement technology and critical updates in industry standards and practices. It also responds directly to concerns from the Government Accountability Office (GAO), the Department of the Interior's Office of Inspector General, and Secretary's Subcommittee on Royalty Management, that the BLM's existing rules do not provide adequate assurance that gas production on public and Indian lands is being accounted for in a way that ensures that all royalties are accurately tracked and paid. The proposed rule that would replace Onshore Order 5 may be viewed online at www.blm.gov. Comments on the proposed rule were due April 14, 2015. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/BLM-Comments-1004-AE17.pdf>

BLM released a proposed rule on 1/22/16 to update and replace its regulations on venting and flaring of natural gas. The information from public and tribal sessions in Denver, Albuquerque, Dickinson, and Washington, DC can be viewed at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/public_events_on_oil.html. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/BLM-comments-140509.pdf>. Comments on the proposed rule were due April 22, 2016. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/dmr-blm-43CFR.pdf>

BLM revised final regulations for hydraulic fracturing on federal and Indian lands were published in the CFR on 3/26/15 and they were scheduled to go into effect 6/24/15. North Dakota, Colorado, Utah, Wyoming, Western Energy Alliance, and IPAA filed for a preliminary injunction to prevent the rules going into effect until the case is settled. Following a lengthy hearing in Casper, Wyoming on Aug 23, the court issued a stay on

the rules. On 9/30/15 the court granted the preliminary injunction, preventing the rules from being enforced until litigation on the rule is final. The 10th Circuit Court of Appeals issued an order 3/10/16 denying the industry alternative motion for a stay. Briefs have been filed in U.S District Court of Wyoming on the merits of the final rule. The US Court of Appeals for the Tenth Circuit preliminary injunction appeal briefing will be completed in June 2016. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/BLM-comments-120625.pdf>

BLM has published a new final rule to revise Onshore Order 3. The proposed rule would change the way federal production is measured and allocated for calculation of royalties, require a federal Application for Permit to Drill (APD) even for state and private wells in a federal unit or communitized area (CA), and revise the situations in which downhole commingling of production from different leaseholds would be allowed. Comments on the proposed rule were due April 14, 2015. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/BLM-Comments-OnshoreOrder3.pdf>

BLM has published the North Dakota Greater Sage-Grouse Proposed Resource Management Plan Amendment and Final EIS. Information on the plan and EIS can be found at the following web addresses: <https://www.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=48797>

EPA On March 26, 2015 a coalition of environmental organizations filed a 60 day legal notice with the U.S. Environmental Protection Agency demanding more regulation of drilling and fracking waste. The groups are the Environmental Integrity Project, Natural Resources Defense Council, Earthworks, Responsible Drilling Alliance, San Juan Citizens Alliance, West Virginia Surface Owners Rights Organization, and the Center for Health, Environment and Justice. On May 4, 2016 the same environmental groups filed suit against the EPA in the federal district court for the District of Columbia. The Plaintiffs Allege that EPA "has failed to meet its nondiscretionary duty" under the federal Resource Conservation and Recovery Act (RCRA) to review and revise the RCRA Subtitle D solid waste regulations for O&G wastes every three years and that EPA last completed such a review in 1988 and that EPA has failed to review or revise the guidelines for state solid waste plans since 1981.

Plaintiffs want to force EPA to do two things-

1. Issue more stringent regulations for managing and disposing of O&G wastes, including on issues such as open-air pits and impoundments used for storing O&G wastewater, underground injection wells, and the transportation of O&G wastes by truck or pipeline.

2. Make the state solid waste plan guidelines more stringent and comprehensive. The document filed in the suit can be found at <http://environmentalintegrity.org/wp-content/uploads/2016-05-04-RCRA-OG-Wastes-Deadline-Suit-Complaint-FILED.pdf>

The state of North Dakota has determined that it should intervene in order to prevent a sue and settle situation that would adversely impact state regulatory jurisdiction.

EPA Prime Minister Justin Trudeau and President Barack Obama announced Thursday 3/10/16 their two countries will work together to reduce methane emissions from the oil and gas sector by 40 to 45 per cent below 2012 levels by 2025. On June 3, 2016 the proposed “Information Collection Effort for Oil and Gas Facilities” was published in the Federal Register on June 3, 2016. The notice and supporting statement along with the operator survey and facility survey can be found at <https://www3.epa.gov/airquality/oilandgas/actions.html>. Comments on the proposed information collection are due August 2, 2016. Submit your comments, referencing Docket ID No. EPA-HQ-OAR-2016-0204, online using <http://www.regulations.gov>, or by mail to: EPA Docket Center (EPA/DC), Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

EPA On June 3, 2016 the final rule proposing a suite of changes to Clean Air Act permitting requirements for new and modified emissions sources in the oil and natural gas industry was published in the Federal Register. The NDIC is considering filing a Petition for Review before August 2, 2016 to defend the state’s sovereign jurisdiction over oil and gas regulation.

The proposed actions and NDIC comments are as follows:

- o Proposed New Source Performance Standards – Docket ID number EPA-HQ-OAR-2010-0505. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2010-0505.pdf>
- o Draft Control Techniques Guidelines – Docket ID number: EPA-HQ-OAR-2015-0216. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2015-0216.pdf>
- o Proposed Source Determination Rule – Docket ID number: EPA-HQ-OAR-2013-0685. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2013-0685.pdf>
- o Proposed Federal Implementation Plan for Implementing Minor New Source Review Permitting in Indian Country – Docket ID number: EPA-HQ-OAR-2014-0606. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2014-0606.pdf>

EPA published an advanced notice of proposed rule-making to seek comments 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. NDIC comments can be viewed at <http://www.nd.gov/ndic/ic-press/DMR-frac714.pdf>

EPA Administrator, Gina McCarthy, and the Assistant Secretary of the Army (Civil Works), Jo Ellen Darcy, signed the “Waters of the United States” final rule on 05/27/2015. The final rule was published in the Federal Register Aug 29, 2015 and

became effective in 37 states on March 28, 2015. North Dakota, Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, New Mexico, Nevada, South Dakota, and Wyoming filed a lawsuit in U.S. District Court, claiming the final rule would harm states as regulators of the waters and lands. On March 27th Federal District Judge Erickson granted a preliminary injunction preventing enforcement of the rule in the 13 states. The North Dakota case will now be subject to appeal, but no schedule has been set at this time. NDIC comments can be viewed at <http://www.nd.gov/ndic/ic-press/WOTUS-comments.pdf>

Texas, Mississippi and Louisiana filed a joint complaint in the U.S. District Court for the Southern District of Texas, charging that the rule is unconstitutional. Ohio and Michigan filed a complaint in the U.S. District Court for the Southern District of Ohio, alleging that the expansion of jurisdiction includes dry land. Georgia and eight other states (Alabama, Florida, Kansas, Kentucky, South Carolina, Utah, West Virginia and Wisconsin) filed suit in the U.S. District Court for the Southern District of Georgia, asking the court to vacate the rule and block its enforcement by injunction. On 10/9/15 the United States Court Of Appeals for the Sixth Circuit granted a nationwide stay of the WOTUS rule pending jurisdiction determinations.

USFWS has made a decision to list the Dakota Skipper and Powershiek 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 Sicklefing Chub.

USFWS has published a new final rule to revise Management of Non-Federal Oil and Gas Rights. Key components of the proposed rule include: A permitting process for new operations; A permitting process for well plugging and reclamation for all operations; Information requirements for particular types of operations; Operating standards so that both the Service and the operator can readily identify what standards apply to particular operations; Fees for new access beyond that held as part of the operator's oil and gas right; Financial assurance (bonding); Penalty provisions; Clarification that the process for authorizing access to non-Federal oil and gas properties in Alaska will continue to be controlled by 43 CFR part 36, which implements provisions of the Alaska National Interest Lands Conservation Act; and Codification of some existing agency policies and practices. The proposed rule may be viewed online at <http://www.fws.gov/policy/library/2015/2015-30977.html> comments on the proposed rule were due April 9, 2016. NDIC comments can be found at <http://www.nd.gov/ndic/ic-press/DMR-FWS-0086.pdf>