Director's Cut

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July Oil 37,416,889 barrels = 1,206,996 barrels/day Aug Oil 36,779,754 barrels = 1,186,444 barrels/day (preliminary) (all-time high was Dec 2014 1,227,483 barrels/day) 1,130,272 barrels per day or 95% from Bakken and Three Forks 56,172 barrels per day or 5% from legacy conventional pools

July Gas 51,465,695 MCF = 1,660,184 MCF/day Aug Gas 50,965,043 MCF = 1,644,034 MCF/day (preliminary) (all-time high was July 2015 1,660,184 MCFD)

July Producing Wells = 12,965 Aug Producing Wells = 13,016 (preliminary) (NEW all-time high) 10,367 wells or 80% are now unconventional Bakken – Three forks wells 2,649 wells or 20% produce from legacy conventional pools

July Permitting: 233 drilling and 0 seismicAug Permitting: 153 drilling and 1 seismicSep Permitting: 154 drilling and 1 seismic (all time high was 370 in 10/2012)

July Sweet Crude Price¹ = \$39.41/barrel Aug Sweet Crude Price = \$29.52/barrel Sep Sweet Crude Price = \$31.17/barrel Today's Sweet Crude Price = \$35.00/barrel (low-point since Bakken play began was \$22.00 in Dec 2008)(all-time high was \$136.29 7/3/2008)

July rig count 73 Aug rig count 74 Sep rig count 71 Today's rig count is 67 (in November 2009 it was 63)(all-time high was 218 on 5/29/2012) The statewide rig count is down 69% from the high and in the five most active counties rig count is down as follows: Divide -85% (high was 3/2013) Dunn -68% (high was 6/2012) McKenzie -63% (high was 1/2014) Mountrail -79% (high was 6/2011) Williams -79% (high was 10/2014)

¹ Pricing Source: <u>Flint Hills Resources</u>

Comments:

The drilling rig count increased 1 from July to August, decreased 3 from August to September, and dropped 4 more this month. Operators are now committed to running fewer rigs than their planned 2015 minimum as drill times and efficiencies continue to improve and oil prices continue to fall. This has resulted in a current active drilling rig count of 10 to 15 rigs below what operators indicated would be their 2015 average if oil price remained below \$65/barrel. The number of well completions fell from 119(final) in July to 115(preliminary) in August. Oil price weakness now anticipated to last well into next year is the main reason for the continued slow-down. There was one significant precipitation event in the Minot area, 6 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.

At the end of August there were an estimated 993 wells² waiting on completion services, 79 more than at the end of July.

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

The drop in oil price associated with anticipation of lifting sanctions on Iran and a weaker economy in China is leading to further cuts in the drilling rig count. Utilization rate for rigs capable of 20,000+ feet is about 40% and for shallow well rigs (7,000 feet or less) about 20%.

Drilling permit activity decreased sharply from July to August but stabilized from August to September as operators continued to position themselves for low 2016 price scenarios. Operators already have a significant permit inventory should a return to the drilling price point occur in the next 12 months.

The number of rigs actively drilling on federal surface in the Dakota Prairie Grasslands is unchanged at 0.

² Disclaimer: 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.

Activity on the Fort Berthold Reservation is as follows³: 9 drilling rigs (2 on fee lands and 7 on trust lands) 204,917 barrels of oil per day (124,840 from trust lands & 80,078 from fee lands) 1,394 active wells (946 on trust lands & 448 on fee lands) 126 wells waiting on completion 522 approved drilling permits (340 on trust lands & 182 on fee lands) 1,811 additional potential future wells (1,047 on trust lands & 764 on fee lands)

Seismic activity is limited to 5 micro-seismic arrays for monitoring and optimizing hydraulic fracturing. There are 5 surveys active/recording, 0 remediating, 0 suspended, and 3 permitted.

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

US natural gas storage is now 4.5% above the five-year average indicating stable to slightly higher 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 down \$0.40 to \$1.90/MCF. This results in a current oil to gas price ratio of 18 to 1. The percentage of gas flared was unchanged at 20%. The Tioga gas plant was up slightly to 92% 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 August Bakken capture percentage was 80% with the daily volume of gas flared from July to August up 9.5 MMCFD. The historical high flared percent was 36% in 09/2011.

Gas capture statistics are as follows: Statewide 80% Statewide Bakken 80% Non-FBIR Bakken 81% FBIR Bakken 77% Trust FBIR Bakken 77% Fee FBIR 80% January – December 2015 capture target=77% April 2016 – October 2016 capture target=80% November 2016 - October 2018 capture target=85% November 2018 - October 2020 capture target=88% After October 2020 capture target=91%

³ Numbers have been amended to reflect a correction to our dataset. Please see all amendments at the end of the document. We apologize for any inconvenience.

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:

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 <u>www.regulations.gov</u>

Comments on the proposed rule must be submitted by November 30, 2015 through one of the following methods:

Federal eRulemaking Portal: <u>http://www.regulations.gov</u> Follow the instructions at this Web site.

Mail: U.S. Department of the Interior, Director (630), Bureau of Land Management, Mail Stop 2134 LM, 1849 C Street NW, Washington, DC 20240 Attention: Regulatory Affairs.

Personal/messenger delivery: Bureau of Land Management, 20 M. Street SE, Room 2134 LM, Attention: Regulatory Affairs, Washington, DC 20003.

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 <u>www.blm.gov</u> Comments on the proposed rule must be submitted within 60 days following publication in the Federal Register through one of the following methods: Federal eRulemaking Portal: <u>http://www.regulations.gov</u> Follow the instructions at this Web site.

Mail: U.S. Department of the Interior, Director (630), Bureau of Land Management, Mail Stop 2134 LM, 1849 C Street NW, Washington, DC 20240 Attention: Regulatory Affairs.

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BLM has started the process of new venting and flaring regulations with input sessions in Denver, Albuquerque, Dickinson, and Washington, DC. <u>NDIC comments</u>

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. Injunction applicants have until 10/16/15 to file motions regarding the BLM administrative record. NDIC comments

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. <u>NDIC comments</u>

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 <u>here</u>.

EPA on August 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. The groups are calling on EPA to comply with its long-overdue obligations to update waste disposal rules such as instituting stricter controls for underground injection wells, banning the practice of spreading fracking wastewater onto roads or fields, and requiring landfills and ponds that receive drilling and fracking waste to be built with adequate liners and structural integrity to prevent spills and leaks into groundwater and streams. **ND may need to intervene to prevent a sue and settle situation that would adversely impact state regulatory jurisdiction.**

EPA on August 18, 2015, proposed a suite of requirements to help combat climate change, reduce air pollution that harms public health, and provide greater certainty about Clean Air Act permitting requirements for the oil and natural gas industry.

The proposed actions are:

- Proposed updates to the agency's New Source Performance Standards that would set methane and VOC requirements for additional new and modified sources in the oil and gas industry;
- Draft guidelines for reducing VOC emissions from existing oil and gas sources in certain ozone nonattainment areas as well as in the mid-Atlantic and northeastern states in the Ozone Transport Region;

- Proposed updates to the agency's air permitting rules as they apply to the oil and natural gas industry; and
- A proposed Federal Implementation Plan to implement minor New Source Review permitting in Indian country.

EPA will take written comments until November 17, 2015. Instructions for submitting comments are below. Please note that each of the proposals has a different docket number. It is important to label your comments with the correct docket number to ensure EPA receives them.

Include the docket number in the subject line if you are emailing or faxing your comments, or on the envelope if you are submitting them by mail.

Here are the docket numbers for the proposed rules and draft guidelines. Please label your comments with the appropriate docket number:

- Proposed New Source Performance Standards Docket ID number EPA-HQ-OAR-2010-0505
- Draft Control Techniques Guidelines Docket ID number: EPA-HQ-OAR-2015-0216
- Proposed Source Determination Rule Docket ID number: EPA-HQ-OAR-2013-0685
- Proposed Federal Implementation Plan for Implementing Minor New Source Review Permitting in Indian Country – Docket ID number: EPA-HQ-OAR-2014-0606

SUBMIT COMMENTS BY ANY OF THE FOLLOWING METHODS

Go to <u>www.regulations.gov</u> enter the docket number in the search box and click the "Search" button. Then click a "Comment Now!" on the search results page and follow the online instructions for submitting comments.

- Send comments by e-mail to a-and-r-Docket@epa.gov Attention Docket ID No. (fill in the appropriate docket ID number)
- Fax your comments to: (202) 566-9744, Attention Docket ID. No. (fill in the appropriate docket ID number)
- Mail your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail code 28221T, 1200 Pennsylvania Ave, NW, Washington, DC 20460, Attention Docket ID No. (fill in the appropriate docket ID number)
- Deliver comments in person to: Hand Delivery: EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.
- For tips on submitting comments, see

http://www2.epa.gov/dockets/commenting-epadockets

NDIC has requested a 180 day extension of the comment period.

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. <u>NDIC comments</u>

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 August 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 August 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. <u>NDIC</u> comments

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 Sicklefin Chub.

The following numbers have been amended to reflect a correction to our dataset. We apologize for any inconvenience.

		BOPD Trust Reported					FeeWells	Fee Wells Reported
Jul-15	124,673	141,845	935	1,103	75,830	216,938	441	436
Jun-15	117,926	140,256	923	1,103	75,317	206,858	433	409
May-15	109,047	139,292	900	1,103	68,013	200,343	433	378
Apr-15	116,094	144,431	889	1,103	68,889	196,047	432	368
Mar-15	126,864	164,012	888	1,103	71,556	218,147	418	355
Feb-15	125,644	147,678	886	1,103	71,417	196,133	409	344
Jan-15	121,063	152,208	866	1,095	80,746	222,951	402	325
Dec-14	117,964	148,886	845	1,059	83,770	222,554	399	341
Nov-14	121,101	144,127	827	1,059	89,140	226,038	395	317
Oct-14	120,522	149,547	814	1,044	91,865	237,131	384	327
Sep-14	122,624	146,280	808	1,023	91,763	230,918	378	319
Aug-14	122,595	134,433	797	1,008	84,090	198,687	368	302
Jul-14	114,032	134,433	779	930	66,834	198,687	343	347
Jun-14	116,698	100,748	764	748	66,425	197,239	329	493
May-14	112,824	103,834	752	748	66,036	197,040	325	472
Apr-14	108,354	113,456	730	748	62,369	187,315	321	426
Mar-14	102,766	92,500	710	748	63,914	187,315	321	426
Feb-14	105,399	98,786	698	722	63,535	172,335	317	441
Jan-14	100,732	105,954	680	728	61,577	183,087	315	411
Dec-13	103,621	107,204	675	728	64,737	187,065	310	401
Nov-13	109,483	111,814	661	728	66, 362	183,773	309	371
Oct-13	110,351	121,986	644	781	64,434	187,721	306	295
Sep-13	107,446	121,667	634	805	65,342	167,663	302	250
Aug-13	107,429	126,501	608	805	61,257	173,205	299	230
Jul-13	99,837	120,956	589	129	59,408	170,770	294	875
Jun-13	91,141	88,330	565	111	50,498	148,895	289	868
May-13	91,051	5,387	549	96	49,778	148,594	269	839
Apr-13	88,010	5,240	526	96	48,925	141,609	268	820
Mar-13	88,986	5,699	514	96	49,138	143,800	265	779
Feb-13	80,303	5,140	497	96	46,708	120,675	265	761
Jan-13	70,611	5,889	473	96	44,966	123,571	263	734
Dec-12	78,160	6,652	442	96	46,456	134,217	264	709
Nov-12	76,739	6,730	435	96	48,868	128,650	263	697
Oct-12	73,988	6,807	424	96	50, 150	130,096	262	676
Sep-12	63,835	6,859	404	122	47,867	115,510	256	619
Aug-12	59,225	7,309	369	101	46,907	112,925	252	605
Jul-12	57,106		356	101	43,880	106,480	251	590
Jun-12	53,436		340	95	44,053	101,800	248	585