Petroleum News
Bakken

page 6 Baytex primary work in Three Forks; despite sale set record

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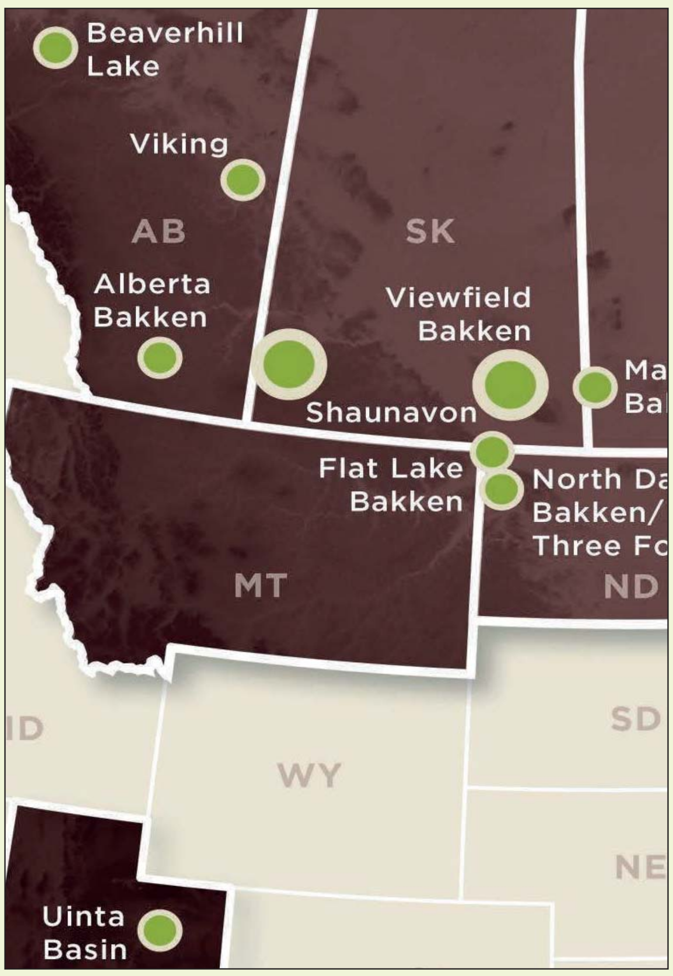
C.P. awaits SK's first unit in 20 yrs



Crescent Point Energy is eagerly awaiting a decision by the Saskatchewan government to allow the province's first "unitization" in 20 years, opening the door for multiple owners in pools to create single operating units, requiring each to contribute to capital and operating costs, while sharing in the profits based on their stakes. Based on its initial success, the mid-range producer plans to drill six more two-mile horizontal wells this year, on top of the four already completed, and is confident they can be drilled for about half the cost of similar wells drilled across the border in North Dakota.

Crescent extends horizons

For Crescent Point Energy, recognized as one of the most innovative players in Bakken-type plays, one of the keys to unlocking the value of its Canadian resource assets lies in a combination of waterflooding and unitization.

The mid-range producer is now eagerly awaiting a decision by the Saskatchewan government to allow that province's first "unitization" in 20 years, opening the door for multiple owners in pools to create single operating units, requiring each to contribute to capital and operating costs, while sharing in the profits based on their stakes.

Neil Smith, chief operating officer, said Crescent Point is optimistic that government approval will occur within the next six months for the first unit and will be followed by

see **CRESCENT** page 13

Is Apache pulling out of Bakken fringe?

In a Feb. 14 press conference to discuss its fourth quarter earnings and production results, Apache Corp. Chairman and Chief Executive Officer G. Steven Farris said Apache is in the process of identifying approximately $2 billion in "asset rationalizations to be completed in 2013," but he would not elaborate on where those assets are; just that Apache is looking to sell them this year.

Speculation has begun about the 300,000-plus net acres

see **INSIDER** page 12

PRODUCTION

ND rig count up

Hit 188 rigs March 15; oil output should exceed 850,000 bopd in 2015

BY MIKE ELLERD
For Petroleum News Bakken

While harsh winter weather smacked North Dakota in January, causing a 4.2 percent drop in its daily oil production, the state's drilling rig count has been inching upwards. As of March 15, 188 rigs were operating in the state. North Dakota's top oil official, Lynn Helms, says if the rig count stays around that level, production should exceed the 850,000 barrels of oil per day projected by the state for the biennium.

North Dakota's rig count in February was 183, down two from the 185 rigs that were operating in January and down one from the 184 operating in December. However, the rig count has been increasing in March.

LYNN HELMS

The record high rig count is 218 which was the number of rigs operating in North Dakota on May 29, 2012.

In February, the North Dakota Oil and Gas Division issued 185 drilling permits, down from the 218 that were issued in January but up from the 154 that were issued in December.

The record high number of drilling permits issued by the division was the 370 issued in

see **COUNT** page 16

MOVING HYDROCARBON

Rail ruffles pipeliner

TC exec: rail has 'very important role' in moving oil, but dirtier, more dangerous

BY GARY PARK
For Petroleum News Bakken

The increasing talk that rail can provide a larger, more durable alternative to pipelines for shipping crude shows signs of ruffling some feathers.

Alex Pourbaix, president of energy and oil pipelines with TransCanada, told a New York conference in February he did not want to be seen as "slagging" rail, then proceeded to embark on a short, sharp critique of the service.

ALEX POURBAIX

He told the event sponsored by FirstEnergy Capital/Societe Generale that although rail can fill a "very important role," there are some "pretty simple facts" to consider.

"For every mile you move a barrel of oil by rail, you emit three times the greenhouse gases than you do by using a pipeline and you have an order of magnitude higher risk of having some sort of incident, leak or spill.

"From that perspective, I make the point that if you're actually concerned about the environment, for long-haul movement of oil, you very much want to see that oil move by pipeline."

Pourbaix noted that the U.S. Department of

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GOVERNMENT

Gas flaring stuck at 29%

Kringstad dissects causes; solutions are compression, loops, pigging, incentives

BY MIKE ELLERD
For Petroleum News Bakken

Flaring of natural gas in North Dakota in January held steady at 29 percent, right where it has been for the last three months. The good news is that flaring isn't going up; the bad news is neither is it going down.

In the March Director's Cut press conference, North Dakota Pipeline Authority Director Justin Kringstad looked at root causes for the flaring of 29 percent of natural gas produced in the state. The press conference is held by the North Dakota Industrial Commission, Department of Mineral Resources, Oil and Gas Division and the pipeline authority.

see **FLARING** page 14

Bakken Hunter pads align with Oneok pipe

In a move that would eliminate flaring in its Divide County operations, Bakken Hunter LLC is reconfiguring well pads in order to perfectly align them with Oneok's new gas gathering pipelines so the wells can be connected to gas sales before they go into production.

In February, Bakken Hunter, a subsidiary of Magnum Hunter, submitted applications to the North Dakota Industrial Commission requesting 13 new 640-acre spacing units and 10 new 1,280-spacing units in the

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GEOLOGY

Helms on Three Forks potential

In his March 15 Director's Cut press conference Lynn Helms, director of the North Dakota Industrial Commission's Department of Mineral Resources and Oil and Gas Division, says he is "very excited" about the prospects for the Three Forks formation in the state.

"This is a thing that has really captured industry's attention," Helms says, and adds that the industry is "anxious, really anxious" to start quantifying the potential of the formation, which is part of the Bakken petroleum system in the Williston Basin.

And with more attention being given to the Three Forks Helms says the commission recently conducted a Three Forks core workshop at the North Dakota Geological Survey's core library in Grand Forks for the Colorado School of Mines' Bakken Research Consortium.

Another Three Forks core workshop was scheduled for March 15 for the Williston Basin Section of the Society of Petroleum Engineers.

Helms noted that while Continental Resources is the leading in Three Forks exploration, other companies are working hard to quantify how many benches of Three Forks potential they have.

He says companies want to know "how much of North Dakota has one or two or three or four benches of Three Forks potential." He adds that while no company has yet tested the fourth Three Forks bench, it will probably be tested this summer (Continental Resources).

With both the prolific Middle Bakken and up to four benches of the Three Forks, Helms says he is pretty confident that there will be at least some areas in the basin that will have up to five potential layers of production. Although in other areas the number of potential layers will be less, such as Fortuna in far northwest Divide County, where, he says, there may only be one or two producing layers.

The area around northern McKenzie County, which according to Helms is the deepest part of the basin with the thickest rocks in every layer, has "great potential" for both Bakken formation and Three Forks formation production. "It's the thickest and the hottest," he says.

Helms also says that new, very uniform proppants are being developed, which he believes will play an important part in maximizing Three Forks production.

Using the extremely uniform proppant may not be as important in the Middle Bakken member, "but it looks like the Three Forks really responds well to spending more money on proppant."

—MIKE ELLERD

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● COMPANY UPDATE

'We apologize'

Magnum Hunter busts 10-K filing deadline, attributes inaction to accounting issues related to rapid growth

BY RAY TYSON
Petroleum News Bakken

Shareholders generally have little sympathy for publicly traded companies that miss their mandated deadlines for filing quarterly and year-end financial reports because of accounting problems.

In Bakken player Magnum Hunter's case, however, they appeared to be in a more forgiving mood. Company shares slipped just a few percentage points then rebounded in days after the Houston, Texas-based producer announced it could not meet its March 18 10-K filing deadline with the U.S. Securities and Exchange Commission.

Gary Evans, chairman and chief executive officer of Magnum Hunter, held a conference call to apologize to shareholders and explain why the company was remiss in complying with SEC requirements.

"Let me start out by saying that of the 20 years that I've been running public companies, I have never not met a mandated public filing deadline until today," Evans said.

"And so is this a black eye? Absolutely. Is this being fixed? Most definitely. I have lots of excuses but the excuses are totally unacceptable, and for that, we apologize to our shareholders and our lenders and our investors."

Growing pains

Magnum Hunter, which operates as Bakken Hunter in the Bakken play, did submit a 10-K notice, which attributes the delay to accounting troubles associated with a rapidly growing E&P independent.

"So as we grew so rapidly, we did not have enough — sufficient accounting personnel to manage the process; and we were delinquent in bringing qualified personnel that had the sufficient talent to handle the growth that we were undertaking," Evans told analysts on the call. "So with that, we are responsible."

Evans suggested that his eagerness as head of the company to advance Magnum Hunter contributed to the accounting problem, noting troubles with assimilating two acquisitions — NGAS Resources and NuLock Resources — into the company last year.

"So most of you know, in my career, I've been an acquisitive type of person trying to grow the enterprise," he said.

But the company was "deficient" in managing its "internal controls," he added, and a "lot of this" relates to complying with reporting requirements in the Sarbanes-Oxley Act of 2002, also known as the "Public Company Accounting Reform and Investor Protection Act."

He said changing accounting firms last July was a "huge undertaking" and a "big strain" on the company.

"However, there is nothing more important than fixing the problem," Evans said. "We feel like we're close to fixing it, and we had hoped to have it fixed by today, but that was not the case."

Evans did not say when Magnum Hunter would be filing its 10-K financial statement.

Beefing up accounting

In beefing up the accounting department, management hired Fred Smith in October as senior vice president and chief accounting officer.

"Fred is responsible for helping us fix the problems of the past, and he's also responsible for bringing in a whole plethora of new people," Evans said.

Moreover, he added, the company hired a new Appalachia division controller in November, a new tax manager in December, a new manager of financial reporting in early January, and a new controller of operations in mid-January. The company also promoted the internal controller to corporate accounting.

As the company has been going through the audit process with its third-party accounting firm, it also has retained another "Big Four" firm to assist, Evans said.

"So we have done everything that we possibly know to do to try to get through this process," he said. "Again, no excuses because there is no excuse for this, but these are the reasons."

Credit group grants waiver

Because of Magnum Hunter's "very strong bank credit group," senior lenders approved the company's request for a waiver until its financial statement is filed with the SEC, he noted.

Though exceedingly sorry for missing its 10-K filing, the company refused to take questions from analysts regarding accounting issues.

see MAGNUM page 10

● MOVING HYDROCARBONS

XL fight broadens, intensifies

BY GARY PARK

For Petroleum News Bakken

The XL in Keystone XL stands for Extra Large, an accurate reflection of the battle being waged for hearts and minds as the pipeline project awaits a final verdict in the United States.

And the battleground has centered lately in the New York Times, where the Alberta government took out a $30,000 half-page ad on March 17, partly to counter the newspaper's editorial stand a week earlier telling President Barack Obama to opt for his climate change strategy over a pipeline carrying bitumen from the "tar sands" of Alberta.

> *"What I can say to the millions of Americans who are committed to the fight against climate change is that there are millions of Canadians who stand with you." —Thomas Mulcair, leader of the main opposition party in the Canadian Parliament*

The Times contended that a "yes" for Keystone XL would only make it economical to expand the oil sands, resulting in even more greenhouse gas emissions — which Alberta claims currently makes up just over one-tenth of 1 percent of the world's emissions.

The Alberta ad argued that the $7 billion pipeline is about more than environmental concerns.

"America's desire to effectively balance strong environmental policy, clean technology development, energy security and plentiful job opportunities for the middle class and returning war veterans mirrors that of the people of Alberta," it said.

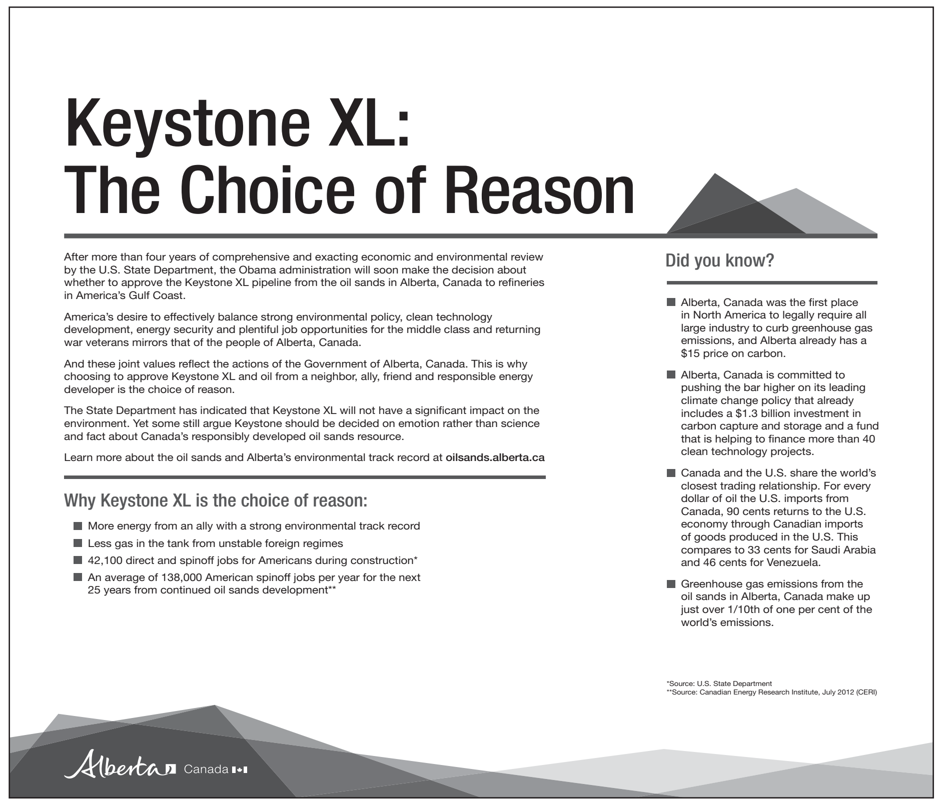
The ad summarize why Keystone XL should be the "choice of reason," by claiming it would provide "more energy from an ally with a strong environmental track record," lessen the gas in U.S. tanks "from unstable foreign regimes," create 42,100 direct and indirect jobs for Americans during construction and yield an average 138,000 American spinoff jobs per year for the first 25 years.

Tensions within Canada

Tensions within Canada over XL rose over a trip to Washington, D.C., by Thomas Mulcair, leader of the main opposition party in the Canadian Parliament, who said he disagrees with the Canadian government's assertion that Keystone XL is in Canada's national interest, provoking a retaliation from Foreign Affairs Minister John Baird who accused Mulcair of "running down" his country.

Saskatchewan Premier Brad Wall was even harsher, insisting Mulcair has "betrayed Canada's interests."

The leader of the socialist New Democratic Party further aroused anger in some quarters by presenting his view of Keystone XL to Nancy Pelosi, the Democrat leader in the House of Representatives.



Pelosi wasted no time going public, signaling she is skeptical about claims that XL would "create tens of thousands of jobs and reduce our dependence on foreign oil. The oil is for export and the jobs are nowhere near that."

She also insisted that Canadians "don't want the pipeline in their own country," but declined to identify the source of that claim.

Mulcair, while declining to say whether he is for or against XL, lambasted the government of Prime Minister Stephen Harper for failing to set a clear policy direction for the oil sands while gutting Canadian environmental laws and international climate-change treaties.

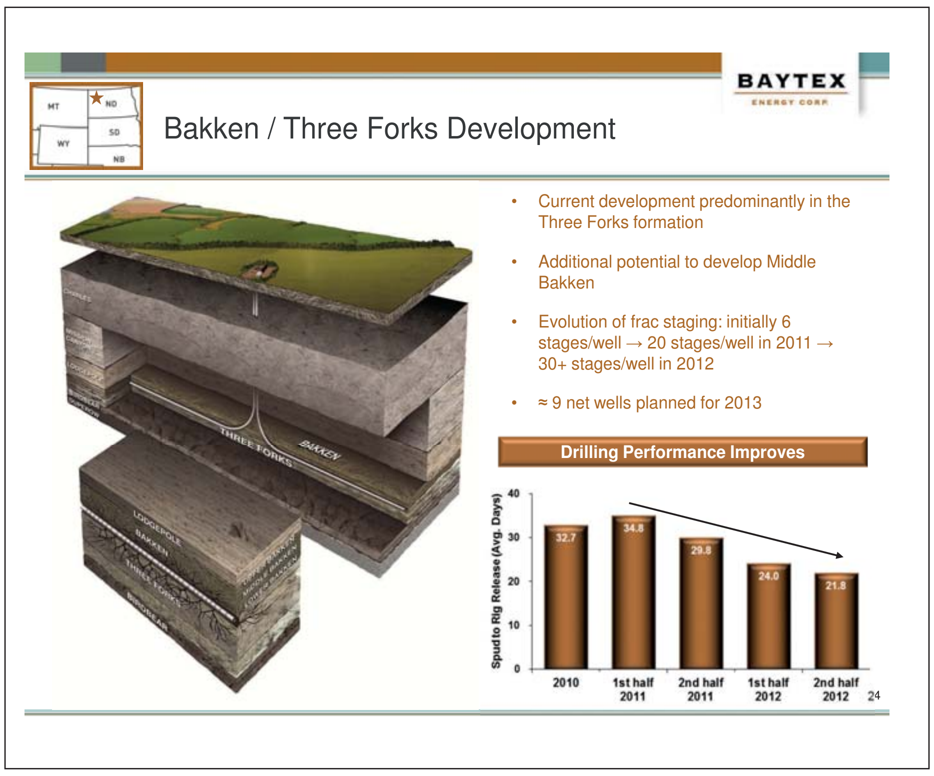
"What I can say to the millions of Americans who are committed to the fight against climate change is that there are millions of Canadians who stand with you," he said, declaring that high environmental standards will eventually become an international norm and not dismissed as a threat to economic advantage. ●

Contact Gary Park through publisher@petroleumnews.com

● COMPANY UPDATE

Baytex announces record production

After selling its non-operated North Dakota assets to Bakken Hunter, Baytex still managed to set a 2012 oil production record



BY MIKE ELLERD
For Petroleum News Bakken

In a year when it sold all of its non-operated North Dakota assets, Calgary-based Baytex Energy Corp. still finished the year with a record high Bakken/Three Forks production along with an increase in its North Dakota reserves. Baytex holds approximately 80,000 acres in the Bakken petroleum system, most of which is in Divide County in northwest North Dakota.

Baytex's Bakken/Three Forks production in the fourth quarter 2012 was reported at 2,600 barrels of oil equivalent per day, which according to James Bowzer, the company's president, director and chief executive officer, "is the highest quarterly rate of production we have experienced in North Dakota." The company's proved and probable reserves, 2P, in North Dakota totaled 34 million boe. In December 2011, the company was producing 1,800 boe per day and had 2P reserves of 32.4 million boe.

In the fourth quarter of 2012, Baytex participated in the drilling of seven (1.7 net) wells in its Bakken/Three Forks play, operated six (1.8 net) of them, and fracked six others (1.8 net). The company also reports an average 30-day initial production rate on 11 other operated wells at approximately 475 boe per day. For the year, Baytex drilled 41 Bakken/Three Forks wells (10.5 net). All of Baytex's Bakken/Three Forks wells are completed with two-mile laterals.

For 2012, Baytex reports completed well costs of $7 million per well. From the first half of 2011 to the second half of 2012, the company's average time from spud to rig release declined from 34.8 days to 21.8 days. Baytex increased the number of frack stages per well from six to 20 in 2011, and in 2012 increased the number of frack stages to over 30.

Baytex's North Dakota wells have an average 30-day initial production rate of 420 boe per day. Estimated ultimate recoveries for its North Dakota wells average 420,000 boe.

Plans for 2013

Baytex has set a total capital expenditure budget for 2013 at $520 million, of which $75 million is slated to go to North Dakota where it plans to drill 20 wells (nine net) over the year. The company plans to focus its 2013 North Dakota development on the Three Forks formation, but says it will also continue to develop the Middle Bakken. Longer-term, the company has identified 90 net drilling locations in its 2013-17 development plans.

Sale of non-operated assets

In May 2012, Baytex sold its non-operated North Dakota interests to Bakken Hunter, LLC for cash proceeds totaling $312 million. In that deal, Bakken Hunter picked up 149,700 gross acres, 50,400 of which are net, and yield approximately 950 boe per day in production. Bakken Hunter is a wholly owned subsidiary of Magnum Hunter Resources Corp. (See related story on page 1.)

Even with the sale of these assets, Baytex managed to set a fourth quarter 2012 production record, which Bowzer said "is an impressive milestone, considering the disposal of approximately 1,000 barrels per day in May. So our results here are very strong."

Overall production

Baytex has heavy crude oil operations in Alberta and Saskatchewan, and light crude oil and natural gas operations British Columbia, Alberta, Saskatchewan and North Dakota. Overall production in 2012 averaged 53,986 boe per day, an 8 percent increase over the company's 2011 production.

Fourth quarter 2012 Baytex production averaged 55,046 boe per day, and that production was an increase of 1 percent over third quarter production and 4 percent over fourth quarter 2011 production.

Baytex is predicting a slight decline in first quarter 2013 production down to 52,000 boe per day. However, for all of 2013, the company is forecasting average daily production at between 56,000 and 58,000 boe per day. ●

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com

BAKKEN Stats

Montana oil activity report, March 8-14

Abbreviations & parameters

With a few exceptions, such as the Heath shale play in the central part of the state, the Montana weekly oil activity report includes horizontal well activity in the Bakken petroleum system in the eastern/northeastern part of the state within the Williston Basin. It also includes what is referred to as the South Alberta Bakken fairway in northwestern/west-central Montana, which is at least 175 miles long (north-south) and 50 miles wide (east-west), extending from southern Alberta, where the formation is generally referred to as the Exshaw, southwards through Montana's Glacier, Toole, Pondera, Teton and Lewis & Clark counties. The Southern Alberta Bakken, under evaluation by several oil companies, is not part of the Williston Basin.

Following are the abbreviations used in the report and what they mean.

BHL: bottomhole location
BOPD: barrels of oil per day
BWPD: barrels of water per day
IP: initial production
MCFPD: thousand cubic feet per day
PBHL: probable bottomhole location
SHL: surface hole location
TD: total depth

COMPILED BY DARRYL L. FLOWERS
For Petroleum News Bakken

New locations — horizontal wells

Three new horizontal wells were approved, all targeting the Bakken, and all are in Richland County.

Two of the wells will fly the Continental Resources Inc. banner. The Mona 1-29H has a SHL at NE SE 29-26N-54E (1980 FSL/270 FEL) and a PBHL of 19,489 feet at NW SW 30-26N-54E (1980 FSL/200 FWL); the Collins 1-28H has an SHL at NE NW 28-23N-52E (295 FNL/1980 FWL) and a PBHL of 13,770 feet at SE SW 28-23N-52E (200 FSL/1980 FWL).

Whiting Oil and Gas Corp. was approved for the Sundheim 21-3-1H, with an SHL at N2 3-24N-59E (200 FNL/1980 FWL) and has a PBHL of 17,128 feet at SW SW 10-24N-59E (240 FSL/660 FWL).

Re-issued locations

In Roosevelt County, Brigham Oil & Gas LP was green lighted for the Nelson 27-22 1H, with an SHL at SW SW 27-28N-57E (325 FSL/995 FWL) and a PBHL of 19,817 feet at NE NW 22-28N-57E (250 FNL/1740 FWL). The Bakken is the target formation.

Completions

There were five completions reported in Roosevelt County.

G3 Operating LLC reported the completion of four of the wells, all targeting the Bakken. The Sorensen 1-34-27H has an SHL at SW SE 34-30N-56E (210 FSL/1980 FEL) and three laterals, with BHLs of 12,296 feet at SE NE 34-30N-56E (2259 FNL/1972 FEL); 11,766 feet at NW SE 34-30N-56E (2498 FSL/1968 FEL); and 19,160 feet at NW NE 27-30N-56E (684 FNL/1974 FEL). The Sorensen reported an IP of 484 BOPD, 734 MCFPD and 2,503 BWPD. The Jacobsen Farms Inc. 1-14-23H, with an SHL at NE NW 14-30N-57E (266 FNL/1869 FWL) and a BHL of 19,827 feet at SE SW 23-30N-57E (229 FSL/1966 FWL) reported an IP of 135 BOPD, 45 MCFPD and 406 BWPD. The Wheeler Ranch 1-16-21H has an SHL at NW NE 16-30N-57E (317 FNL/2019 FEL) and a BHL of 19,580 feet at SW SE 21-30N-57E (229 FSL/1973 FEL). The Wheeler Ranch reported an IP of 255 BOPD, 185 MCFPD and 890 BWPD. The McCabe 1-4-9H has an SHL at NW NE 4-29N-56E (225 FNL/1980 FEL) and two laterals with BHLs of 18,102 feet at NW SE 9-29N-56E (1714 FSL/1976 FEL) and of 19,582 feet at SW SE 9-29N-56E (236 FSL/1972 FEL); the well reported an IP of 321 BOPD, 389 MCFPD and 863 BWPD.

Vaalco Energy (USA) Inc. reported the completion of the EPU 133H in Roosevelt County. The Bakken well has an SHL at NW NE 10-28N-51E (360 FNL/2275 FEL) and a BHL of 11,553 feet at SE SE 10-28N-51E (661 FSL/752 FEL).

In Sheridan County, Sinclair Oil & Gas Co. completed the Chisholm 1-3H. The well has an SHL at NW 3-32N-56E (250 FNL/1080 FWL) and a BHL of 18,698 feet at SE SW 10-32N-56E (246 FSL/1378 FWL), tapping the Bakken.

In Toole County, Bill Barrett Corp. reported the completion of the Simmes Ranch 41-2-36-3W-H. The well has an SHL at NE NE 2-36N-3W (400 FNL/850 FEL) and a BHL of 7,400 feet at SE SE 2-36N-3W (425 FSL/950 FEL). The well targets the Exshaw shale. ●

Petroleum News Bakken

North Dakota well operator transfers

March 11 – 15, 2013

LEGEND
Date of well operator transfer
Well(s) transferred from
Well(s) transferred to
NDIC well file number — well name — well type — pool — field — IP (initial production) test date — IP oil rate in barrels — location — county

March 13, 2013

From: Samson Resources (KKR & Co.)
To: Continental Resources
08922 - O. M. Seel Federal 1, vertical, Red River, Sixmile, 3/17/1987, 660 bbl, NESE 32-153N-103W, Williams Co.
09144 - Amerada Federal 32-22, vertical, Red River, Beaver Creek, 3/14/1982, 110 bbl, SWNE 22-143N-103W, Golden Valley Co.
13219 -Connell Trust 1-2, horizontal, Bakken, Elkhorn Ranch, 10/6/1991, 225 bbl, NWNE 2-143N-102W, Billings Co.
15668 - Miller 44-7H, horizontal, Bakken, Baukol Noonan, 1/6/2005, 140 bbl, SESE 7-162N-95W, Divide Co.
15808 -Rindel 3-9 HD, horizontal, Bakken, Juno, 9/1/2005, 250 bbl, NENW 9-162N-96W, Divide Co.
15984 -Buck 3-8 H, horizontal, Bakken, Juno, 1/10/2006, 54 bbl, SWSW 8-162N-96W, Divide Co.
16254 - Miller 24-25-162-96H, horizontal, Bakken, Baukol Noonan, 4/13/2007, 112 bbl, SESE 24-162N-96W, Divide Co.
16404 - Pegasus 1-17H, horizontal, Bakken, South Meadow, 5/13/2007, 115 bbl, SWSW 17-158N-96W, Williams Co.
16405 - Pegasus 2-17H, horizontal, Bakken, South Meadow, 5/22/2007, 50 bbl, SWSW 17-158N-96W, Williams Co.
16443 - Wenstad 15-162-97H, horizontal, Bakken, Bluffton, 4/22/2007, 60 bbl, SESE 15-162N-97W, Divide Co.
17442 -Rindel 17-162-95H, horizontal, Bakken, Baukol Noonan, 5/25/2009, 27 bbl, NWNE 17-162N-95W, Divide Co.
18941 - Antonson 01-12-163-95H, horizontal, Bakken, Forthun, 9/12/2010, 119 bbl, N2NE 1-163N-95W, Divide Co.
19265 - Navigator 13-24-162-97H, horizontal, Bakken, Bluffton, 6/8/2012, 137 bbl, NENW 13-162N-97W, Divide Co.
19367 - Eagle 22-15-163-95H, horizontal, Bakken, Forthun, 5/5/2011, 543 bbl, SESW 22-163N-95W, Divide Co.
19432 - Woodpecker 27-34-163-95H, horizontal, Bakken, Forthun, 4/27/2011, 127 bbl, SESW 22-163N-95W, Divide Co.
19686 - Love 11-2 1H, horizontal, Bakken, Ellisville, 9/28/2011, 343 bbl, SESW 11-158N-99W, Williams Co.
20251 - Blue jay 32-29-163-95H, horizontal, Bakken, Kimberly, 12/4/2011, 313 bbl, LOT3 5-162N-95W, Divide Co.
20756 - Stork 20-17-162-96H, horizontal, Bakken, Juno, 12/19/2011, 419 bbl, SESW 20-162N-96W, Divide Co.
20757 - Lark 29-32-162-96H, horizontal, Bakken, Juno, 12/20/2011, 287 bbl, SESW 20-162N-96W, Divide Co
20792 - Pelican 26-35-162-96H, horizontal, Bakken, Baukol Noonan, 1/4/2012, 265 bbl, SWSE 23-162N-96W, Divide co.
21446 - Pigeon 30-31-162-96H, horizontal, Bakken, Juno, 5/20/2012, 120 bbl, NENW 30-162N-96W, Divide Co.
21447 - Dove 19-18-162-96H, horizontal, Bakken, Juno, 5/19/2012, 228 bbl, NENW 30-162N-96W, Divide Co.
21651 - Armada 12-1-162-97H, horizontal, Bakken, Bluffton, 5/31/2012, 506 bbl, NENW 13-162N-97W, Divide Co.
22166 - Outback 25-36-162-97H, horizontal, Bakken, Bluffton, 9/21/2012, 48 bbl, NWNE 25-162N-97W, Divide Co.
22255 - Longhorn 9-4-158-99H, horizontal, Bakken, Ellisville, 6/26/2012, 225 bbl, SWSE 9-158N-99W, Williams Co.

Note: The information in this chart was compiled by Petroleum News Bakken from the online daily activity reports of the North Dakota Industrial Commission, or NDIC. The operator names in this report are as they appear in State of North Dakota records, even though some of the companies, or their Bakken assets, might have been purchased by other companies. Samson Resources, for example, is now part of KKR & Co.

Petroleum News Bakken

IPs for ND Bakken wells

March 12 — March 15, 2013

This chart contains initial production rates, or IPs, for active wells that were filed as completed with the state of North Dakota from March 12 to March 15, 2013 in the Bakken petroleum system, which includes formations such as the Bakken, Three Forks and Birdbear. The completed wells that are missing either haven't been tested or were awarded tight-hole status, so the IP rate is not yet available. This chart also contains a section with active wells that were released from tight-hole status during the same period, March 12 to March 15. The information was assembled by Petroleum News Bakken from daily activity reports from the North Dakota Industrial Commission's Department of Minerals, Oil and Gas Division, website and other sources. The name of the well operator is as it appears in state records, with the loss of an occasional Inc., LLC or Corporation. Some of the companies, or their Bakken assets, have been acquired by others. In those cases, the current owner is in parenthesis, such as ExxonMobil in parenthesis behind XTO Energy.

LEGEND

The well operator's name is on the upper line, followed by individual wells with data in this order: NDIC file number; well name; field; location; spacing; county; wellbore type; total depth; IP test date; IP oil flow rate. (IP stands for initial production; in this chart it's the first 24 hours of oil production.)

IPs for completed North Dakota wells

Brigham Oil and Gas (Statoil)
22757; Iron Horse 21-2MBH; Union Center; LOT4 2-152N-96W; 2SEC; McKenzie; horizontal; 21,129; 2/6/2013; 561 bbl

Continental Resources
23292; Topeka 2-12H; Brooklyn; SWSW 12-155N-98W; 2SEC; Williams; horizontal; 21,100; 2/4/2013; 575 bbl
23291; Topeka 3-12H; Brooklyn; SWSW 12-155N-98W; 2SEC; Williams; horizontal; 21,320; 2/6/2013; 629 bbl

Crescent Point Energy
23400; Cpeusc Suitor 13-24-158N-101W; Little Muddly; SESW 12-158N-101W; 2SEC; Williams; horizontal; 20,250; 2/7/2013; 407 bbl

Hess Corp.
22683; EN-Jeffrey-155-94- 2215H-3; Alkali Creek; SWSE 22-155N-94W; 2SEC; Mountrail; horizontal; 20,880; 2/20/2013; 615 bbl

Kodiak Oil and Gas
21392; Smokey 15-7-19-15H3; Pembroke; SWSE 7-149N-98W; 2SEC; McKenzie; horizontal; 20,954; 12/2/2012; 1,466 bbl

XTO Energy (ExxonMobil)
23402; Fbir Smith 11X-10F; Heart Butte; NWNW 10-149N-92W; 2SEC; Dunn; horizontal; 20,141; 1/27/2013; 1,045 bbl

IPs for ND wells released from tight-hole status

Continental Resources
23664; Charlotte 3-22H; Banks; SESE 22-152N-99W; 2SEC; McKenzie; horizontal; 21,325; 11/18/2012; 657 bbl
23519; Jack 4-9H; Murphy Creek; SESE 9-145N-95W; 2SEC; Dunn; horizontal; 20,660; 2/7/2013; 581 bbl

Fidelity Exploration and Production (MDU Resources)
23179; Pavlish 19-20H; Dutch Henry Butte; LOT3 19-140N-97W; 2SEC; Stark; horizontal; 19,777; 9/21/2012; 754 bbl

Hess Corp.
23324; SC-Ellingsberg 154-98-3229H-2; Truax; SESE 32-154N-98W; 2SEC; Williams; horizontal; 20,748; 1/13/2013; 653 bbl

Kodiak Oil and Gas
21393; Smokey 15-7-19-15H; Pembroke; SWSE 7-149N-98W; 2SEC; McKenzie; horizontal; 20,988; 12/1/2012; 1,950 bbl

Liberty Resources
23132; Cavalli State 156-100-9-4-1H; East Fork; SWSE 9-156N-100W; 2SEC; Williams; horizontal; 20,611; 9/25/2012; 948 bbl

Newfield Production Company
21592; Sand Creek Federal 153-96-23-14-3H; Keene; NWNW 26-153N-96W; 2SEC; McKenzie; horizontal; 21,204; 2/15/2013; 2,771 bbl

Oasis Petroleum North America
22088; Dubuque 5300 14-22B; Willow Creek; NENE 22-153N-100W; 2SEC; Williams; horizontal; 20,750; 9/14/2012; 2,530 bbl
22937; State 5792 11-15H; Cottonwood; NWNW 15-157N-92W; 2SEC; Mountrail; horizontal; 19,407; 8/30/2012; 770 bbl

OXY USA (Occidental Petroleum Corp.)
22444; Easton 1-35-26H-142-95; Murphy Creek; SWSE 35-142N-95W; 2SEC; Dunn; horizontal; 20,169; 9/15/2012; 432 bbl

SM Energy
23521; Gulbranson 1-1H; West Ambrose; LOT1 1-163N-100W; 2SEC; Divide; horizontal; 18,060; 11/14/2012; 508 bbl

Whiting Oil and Gas
22949; Lydia 11-14PH; Bell; SWSW 11-140N-99W; 2SEC; Stark; horizontal; 20,877; 9/14/2012; 993 bbl
22950; Solberg 14-11PH; Bell; SWSW 11-140N-99W; 2SEC; Stark; horizontal; 21,500; 9/17/2012; 1,494 bbl

WPX Energy
23215; Corn Stalk 20HD; Squaw Creek; NWSW 20-149N-94W; S2; McKenzie; horizontal; 15,818; 1/11/2013; 637 bbl
22897; Kate Soldier 23-14HZ; Spotted Horn; NWNW 25-150N-94W; 2SEC; McKenzie; horizontal; 21,487; 12/16/2012; 1,510 bbl

XTO Energy (ExxonMobil)
22552; Albert 24X-1F; Capa; SESW 1-154N-96W; 2SEC; Williams; horizontal; 19,480; 1/21/2013; 765 bbl

Note: This chart is usually assembled from Tuesday to Monday. Due to the NDIC website not having the daily activity report available for Monday, March 18, 2013, this chart contains information from Tuesday, March 12, through Friday, March 15. Monday, March 18, will be picked up in the March 31, 2013 issue of Petroleum News Bakken.

—Compiled by Ashley Lindly

Contact Ashley Lindly at alindly@petroleumnewsbakken.com

Top 10 Bakken wells by IP rate

Newfield Production Company
21592; Sand Creek Federal 153-96-23-14-3H; McKenzie; 2,771 bbl

Oasis Petroleum North America
22088; Dubuque 5300 14-22B; Williams; 2,530 bbl

Kodiak Oil and Gas
21393; Smokey 15-7-19-15H; McKenzie; 1,950 bbl

WPX Energy
22897; Kate Soldier 23-14HZ; McKenzie; 1,510 bbl

Whiting Oil and Gas
22950; Solberg 14-11PH; Stark; 1,494 bbl

Kodiak Oil and Gas
21392; Smokey 15-7-19-15H3; McKenzie; 1,466 bbl

XTO Energy (ExxonMobil)
23402; Fbir Smith 11X-10F; Dunn; 1,045 bbl

Whiting Oil and Gas
22949; Lydia 11-14PH; Stark; 993 bbl

Liberty Resources
23132; Cavalli State 156-100-9-4-1H; Williams; 948 bbl

Oasis Petroleum North America
22937; State 5792 11-15H; Mountrail; 770 bbl

Note: This chart contains initial production rates, or IPs, from the adjacent IP chart for active wells that were filed as completed with the state of North Dakota from March 12 to March 15, 2013 in the Bakken petroleum system, as well as active wells that were released from tight-hole status during the same period. The well operator's name is on the upper line, followed by individual wells the NDIC file number; well name; county and IP oil flow rate in barrels of oil.

Petroleum News Bakken

Bakken producers' stock prices

Closing prices as of March 20, along with those from previous Wednesday

Company	Exchange	Symbol	Closing price	Previous Wed.
Abraxas Petroleum Corp.	NASDAQ	AXAS	$2.34	$2.16
Arsenal Energy USA, Inc.	TSE	AEI	$0.48	$0.50
Baytex Energy Corp.	NYSE	BTE	$42.65	$42.74
Brigham Exploration Co. (Statoil)	NYSE	STO	$24.21	$24.61
Burlington Resources Co. (ConocoPhillips)	NYSE	COP	$60.44	$58.78
Continental Resources, Inc.	NYSE	CLR	$89.15	$90.25
Crescent Point Energy Corp.	TSE	CPG	$39.65	$38.94
Enerplus Resources USA Corp.	NYSE	ERF	$14.75	$14.29
EOG Resources, Inc.	NYSE	EOG	$124.24	$129.88
Fidelity Exploration and Production (MDU)	NYSE	MDU	$24.84	$24.54
G3 Operating LLC (Halcon Resources Corp.)	NYSE	HK	$6.88	$7.13
GMX Resources, Inc.	NYSE	GMXR	$2.93	$3.11
Hess Corp.	NYSE	HES	$69.90	$71.69
Kodiak Oil and Gas (USA), Inc.	NYSE	KOG	$9.15	$9.39
Legacy Reserves Operating LP	NASDAQ	LGCY	$26.43	$26.19
Marathon Oil Co.	NYSE	MRO	$34.60	$34.37
Newfield Production Co.	NYSE	NFX	$23.38	$23.84
Oasis Petroleum Inc.	NYSE	OAS	$37.30	$38.23
OXY USA (Occidental Petroleum Corp.)	NYSE	OXY	$78.63	$83.28
QEP Energy Co.	NYSE	QEP	$31.86	$31.77
Resolute (Resolute Energy Corp.)	NYSE	REN	$11.14	$10.90
Samson Resources Co. (KKR & Co.)	NYSE	KKR	$19.29	$19.63
SM Energy Co.	NYSE	SM	$57.37	$56.61
Triangle USA Petroleum Corp.	NYSE	TPLM	$6.84	$7.01
Whiting Oil and Gas Corp.	NYSE	WLL	$50.63	$50.92
WPX Energy Inc.	NYSE	WPX	$16.46	$16.00
XTO Energy Inc. (ExxonMobil)	NYSE	XOM	$88.63	$89.26

Petroleum News Bakken

Looking for a rig report?

Montana
Drilling Ahead at **http://www.drillingahead.com/USARigReport** offers a U.S. Drilling Rig Report that includes Montana.

North Dakota
The best list for North Dakota is updated daily by the North Dakota Oil and Gas Division at **https://www.dmr.nd.gov/oilgas/riglist.asp**

Saskatchewan
Weekly drilling activity report from the government of Saskatchewan:
http://www.economy.gov.sk.ca/Daily-Well-Bulletin-Weekly-Drilling-Reports

Manitoba
Weekly drilling activity report from the government of Manitoba:
http://www.manitoba.ca/iem/petroleum/wwar/index.html

PHOTO COURTESY CONTINENTAL RESOURCES

Petroleum News Bakken

North Dakota Bakken oil production by company

January 2013

Derived from the preliminary January 2013 Oil & Gas Production Report published by the North Dakota State Industrial Commission, Department of Minerals, Oil and Gas Division. Note this is the oil produced by wells operated by these companies; it does not identify the percentage of Bakken petroleum system oil (including Three Forks and other formations within the system) that is owned by each company or its partners, so it may differ from what each company reports. Also, the daily average was derived from dividing the total production by the number of days in December, versus the number of days the well was actually producing. There are a few wells that did not produce for the entire month.

LEGEND
Field - pool - county - daily average barrels of oil
Daily average barrels for all fields combined

Also note: The operator names used in this chart are exactly as they appear in State of North Dakota Oil & Gas Division records, but some of the companies and/or their Bakken assets might have been acquired by others. The ones we caught were Burlington Resources Oil & Gas Company, LP, which is owned by Conoco Phillips; Brigham Oil & Gas, L.P., owned by Statoil; XTO Energy, Inc., owned by ExxonMobil, and Samson Resources Company, owned by KKR & Co. Please let us know if you see any others by emailing Kay Cashman at publisher@petroleumnews.com.

Abraxas Petroleum Corp.

Demores - Bakken - Billings	388
North Fork - Bakken – McKenzie	11,406
Roosevelt - Bakken – Billings	524

Daily average: 397.4

American Eagle Energy Corp.

Colgan - Bakken – Divide	38,250

Daily average: 1,233.9

Arsenal Energy USA, Inc.

Stanley - Bakken – Mountrail 22,122

Daily average: 713.6

Baytex Energy USA Ltd.

Ambrose - Bakken - Divide	33,136
Blooming Prairie - Bakken - Divide	5,481
Burg - Bakken - DIV/WIL	1,556
Garnet - Bakken - Divide	4,039
Lone Tree - Bakken - Williams	1,683
Lone Tree Lake - Bakken - Williams	2,691
Moraine - Bakken - Divide	2,091
Musta - Bakken - Divide	2,809
Plumer - Bakken - Divide	7,721
Skabo - Bakken - Divide	1,150
Smoky Butte - Bakken - Divide	4,497
West Ambrose - Bakken - Divide	17,384
Whiteaker - Bakken - Divide	14,618
Wildcat - Bakken - Williams	2,197

Daily average: 3,259.8

Brigham Oil & Gas, LP (Statoil)

Alexander - Bakken - McKenzie	20,645
Alger - Bakken - Mountrail	486,880
Avoca - Bakken - Williams	10,647
Banks - Bakken - McKenzie	121,439
Briar Creek - Bakken - McKenzie	12,390
Buford - Bakken - Williams	2,262
Bull Butte - Bakken - Williams	25,173
Camp - Bakken - McKenzie	56,479
Catwalk - Bakken - Williams	10,894
Cow Creek - Bakken - Williams	27,707
East Fork - Bakken - Williams	63,422
Elk - Bakken - McKenzie	21,252
Foreman Butte - Bakken - McKenzie	4,376
Glass Bluff - Bakken - McKenzie	2,340
Hardscrabble - Bakken - Williams	1,464
Kittleson Slough - Bakken - Mountrail	9,808
Lake Trenton - Bakken - Williams	2,632
Last Chance - Bakken - Williams	19,053
Nameless - Bakken - McKenzie	7,414
Painted Woods - Bakken - Williams	61,973
Parshall - Bakken - Mountrail	799
Patent Gate - Bakken - McKenzie	7,092
Poe - Bakken - McKenzie	20,019
Ragged Butte - Bakken - McKenzie	26,851
Rosebud - Bakken - Williams	7,146
Ross - Bakken - Mountrail	259
Sakakawea - Bakken - McKenzie	7,271
Sandrocks - Bakken - McKenzie	15,337
Spring Creek - Bakken - McKenzie	6,648
Squires - Bakken - Williams	33,250
Stony Creek - Bakken - Williams	61,341
Sugar Beet - Bakken - Williams	7,219
Todd - Bakken - Williams	189,942
Wildcat - Bakken - MCK/WIL	4,101
Williston - Bakken - Williams	29,285

Daily average: 44,671.3

BTA Oil Producers, LLC

Bicentennial - Bakken - Golden Valley	221
Elkhorn Ranch - Bakken - Billings	37
Pierre Creek - Bakken - McKenzie	188
Stoneview - Bakken - Divide	

Daily average: 14.4

Burlington Resources Oil & Gas Company, LP (ConocoPhillips)

Bailey - Bakken - Dunn	23,399
Banks - Bakken - McKenzie	8,122
Bennett Creek - Bakken - McKenzie	2,469
Blue Buttes - Bakken - McKenzie	48,572
Bully - Bakken - McKenzie	2,976
Cabernet - Bakken - Dunn	10,950
Camel Butte - Bakken - McKenzie	15,946
Charlson - Bakken - McKenzie	21,611
Clear Creek - Bakken - McKenzie	19,182
Corral Creek - Bakken - Dunn	43,062
Croff - Bakken - McKenzie	4,705
Crooked Creek - Bakken - Dunn	6,416
Dimmick Lake - Bakken - McKenzie	4,001
Elidah - Bakken - McKenzie	36,708
Fayette - Bakken - Dunn	4,354
Hawkeye - Bakken - McKenzie	8,430
Haystack Butte - Bakken - McKenzie	58,478
Jim Creek - Bakken - Dunn	4,332
Johnson Corner - Bakken - McKenzie	7,743
Keene - Bakken/Three Forks - McKenzie	51,779
Killdeer - Bakken - Dunn	7,433
Little Knife - Bakken - Dunn	40,354
Lone Butte - Bakken - Dunn	5,175
Mondak - Bakken - McKenzie	0
Morgan Draw - Bakken - Golden Valley	1,323
Murphy Creek - Bakken - Dunn	54,989
North Fork - Bakken - McKenzie	15,205
Pershing - Bakken - McKenzie	19,127
Pierre Creek - Bakken - McKenzie	131
Sand Creek - Bakken - McKenzie	18,989
Twin Valley - Bakken - McKenzie	2,398
Union Center - Bakken - McKenzie	62,320
Westberg - Bakken - McKenzie	17,940
Wildcat - Bakken - McKenzie	0
Willmen - Bakken - Dunn	3,007

Daily average: 20,375

Carl H. Nordstrand

Pierre Creek - Bakken - McKenzie	95

Daily average: 3.1

Charger Resources, LLC

Buckhorn - Bakken - McKenzie	12
Johnson Corner - Bakken - McKenzie	198
Morgan Draw - Bakken - Golden Valley	198
Pierre Creek - Bakken - McKenzie	0

Daily average: 13.2

Chesapeake Operating, Inc.

Wildcat - Bakken/Three Forks - STK/GV	0

Daily average: 0

Citation Oil & Gas Corp.

Sadler - Bakken - Divide	111

Daily average: 3.6

Condor Petroleum, Inc.

Big Bend - Bakken – Mountrail 0	
Hayland - Bakken - Divide	70
Stoneview - Bakken - Divide	111

Daily average: 5.8

Continental Resources, Inc.

Alkali Creek - Bakken - Mountrail	17,446
Avoca - Bakken - Williams	23,524
Banks - Bakken - McKenzie	132,531
Barta - Bakken - Billings	3,124
Battleview - Bakken - Williams	6,784
Baukol Noonan - Bakken - Divide	1,167

To view this report in its entirety, please visit: http://bit.ly/ZMemT4

Top 50 North Dakota Bakken oil producers

January 2013

Company	BDP*
1 Continental Resources, Inc.	67,341.1
2 Hess Corporation	66,782.3
3 Whiting Oil and Gas Corporation	64,385.8
4 Brigham Oil & Gas, LP (Statoil)	44,671.3
5 EOG Resources, Inc.	43,947.6
6 XTO Energy Inc. (ExxonMobil)	32,445.5
7 Marathon Oil Company	30,680.7
8 Petro-Hunt, LLC	23,897.4
9 Kodiak Oil & Gas (USA), Inc.	23,067.0
10 Slawson Exploration Company, Inc.	20,759.3
11 Burlington Resources (ConocoPhillips)	20,375.0
12 Oasis Petroleum North America LLC	19,565.7
13 QEP Energy Company	17,615.3
14 Oxy USA, Inc.	15,416.1
15 WPX Energy Williston, LLC	14,713.1
16 SM Energy Company	13,292.7
17 Newfield Production Company	10,503.6
18 Enerplus Resources USA Corporation	9,864.7
19 Hunt Oil Company	9,235.7
20 Zenergy, Inc.	8,799.1
21 Zavanna, LLC	8,367.6
22 Murex Petroleum Corporation	8,064.2
23 Fidelity Exploration & Production (MDU)	7,523.0
24 Samson Resources Company (KKR & Co.)	6,486.6
25 Crescent Point Energy US Corp.	3,611.2
26 Baytex Energy USA Ltd	3,259.8
27 Triangle USA Petroleum Corporation	3,203.9
28 Liberty Resources, LLC	2,915.3
29 G3 Operating, LLC (Halcon Resources Corp.)	2,891.5
30 Sinclair Oil and Gas Company	1,938.0
31 Cornerstone Natural Resources, LLC	1,486.9
32 American Eagle Energy Corporation	1,233.9
33 Arsenal Energy USA, Inc.	713.6
34 GMX Resources, Inc.	594.8
35 Sequel Energy, LLC	580.0
36 True Oil, LLC	503.9
37 Abraxas Petroleum Corp	397.4
38 Windsor Energy Group, LLC	231.1
39 Gadeco, LLC	192.0
40 Resource Drilling, LLC	161.3
41 Resolute Natural Resources Company, LLC	148.8
42 Legacy Reserves Operating LP	110.8
43 Prima Exploration, Inc.	109.5
44 SHD Oil & Gas, LLC	92.4
45 Texakota, Inc.	38.7
46 Petro Havester Operating Company, LLC	36.9
47 Peregrine Petroleum Partners, LTD	17.3
48 Pride Energy, An Oklahoma General Partnership	16.2
49 Sundance Energy, Inc.	15.4
50 Jettison, Inc.	15.3

*Barrels of oil per day

Numbers derived from the preliminary January 2013 Oil & Gas Production Report published by the North Dakota State Industrial Commission, Department of Minerals, Oil and Gas Division. Note this is the oil produced by wells operated by these companies; it does not identify the percentage of Bakken petroleum system oil (including Three Forks) that is owned by the company or its partners, so it may differ from what the company reports.

MOVING HYDROCARBONS

Oneok, Barcas settle

Barcas LLC, the Houston-based oilfield services firm that filed a $10 million lawsuit against Oneok Partners L.P. in September, alleging Oneok failed to honor an agreement with Barcas on securing shippers for the now defunct Bakken Express crude oil pipeline project, said March 15 that it has entered into an agreement with Oneok to settle that lawsuit.

The March 15 press release said that "Barcas has retracted all allegations of wrongdoing by Oneok Partners, including, but not limited to, all charges that Oneok Partners personnel misrepresented any facts."

While the details of the settlement are confidential, Barcas did say that both parties have dismissed their respective claims. Barcas also said that according to the settlement it will be reimbursed for expenses it incurred during the development stages of the Bakken Express project.

Comments

Oneok did not offer any comments to Petroleum News Bakken on the settlement. However, shortly after the lawsuit was filed in September, Oneok provided a statement to Petroleum News Bakken saying the company had "reviewed the petition, denies all allegations of breach of contract or wrongdoing, and will vigorously defend the lawsuit."

As first reported by Tulsa World, Barcas claimed in the lawsuit that Oneok failed to compensate Barcas for assisting Oneok in securing commitments from potential shippers for the Bakken Express pipeline. Tulsa World said the complaint alleged Oneok partnered with Barcas through a letter of agreement, and that after Barcas contacted a number of potential shippers, Oneok did not provide those potential shippers with transportation service agreements.

—MIKE ELLERD

continued from page 4

MAGNUM

"We're in the middle of an audit (and) the audit is not complete," Evans asserted. "Our accounting firm does not want us to talk about that and our lawyers don't want us to talk about that. So don't put us in an uncomfortable position of trying to answer something we can't answer."

Some results released

Meanwhile, Magnum Hunter released some financial and production results for full-year 2012. The numbers are estimates and unaudited, meaning they may change in the official version. But they are impressive.

Magnum Hunter revenues for 2012 were estimated at $274 million compared to $113.7 million for 2011, a 141 percent increase.

Earnings before interest, taxes, depreciation, depletion, amortization and exploration expenses, EBITDAX — which Evans said is "one of the most important numbers that we can record" — is expected to rocket 217 percent, or up to $160 million in 2012 from to $50.4 million reported in 2011.

The company projected oil and gas production of 4.8 million barrels of oil equivalent in 2012 versus 2 million boe in 2011, a 139 percent increase.

And average daily production was 13,200 boe in 2012 compared to 5,511 boe in 2011, a 140 percent increase. The company estimated at the end of last year's third quarter that daily production would average 14,900 boe in the fourth quarter. And production exited 2012 at 18,500 boe per day, the company said.

Problems affect production

However, since the first part of January, the company has shut-in about 2,500 boe per day in Appalachia because of pipeline, compressor and weather issues. That has backed off total production to about 15,500 boe per day, for an anticipated 2013 first-quarter average of 15,000-16,000 boe per day.

"We're anticipating that 2,500 boe per day drop that we've experienced to start back up April 1," Evans noted.

Magnum Hunter production is now about 60-65 percent liquids and 35-40 percent natural gas, the company said.

"As many of you know, we made a significant shift in 2012 moving from a gas company to predominantly an oil (liquids) company," Evans said.

The company also projected total year-end 2012 proved reserves of 73.1 million boe: 45.9 million barrels of liquids and 162.7 billion cubic feet of natural gas.

On other subjects, Magnum Hunter mentioned it would be taking non-cash charges for impairments, or write-downs on the value of reserves located predominately in the Williston Basin, amounting to $49 million for unproved reserves and $16 million for proved reserves.

Focus on 'higher-return' wells

Consequently, management has decided to "really" focus on "higher-return" production wells in the Williston Basin in 2013 and beyond.

"We're going to let leases expire that we don't deem to be economic, or as economic as what we already have in our inventory," Evans told analysts.

He said North Dakota Williston Basin acreage the company is "least excited about" is located "further east," and the acreage it's "most excited about" is further west.

"We definitely like Divide County more than we like Burke County with respect to what we're trying to achieve," Evans added.

"There're others that are more interested in Burke County, so that's fine. So we decided with our acreage position, we really need to home in on the best areas."

The company keeps a close watch on water cuts, making sure they are in the 20-35 percent range versus the 50-60 percent range, he said, explaining that it makes a "huge difference" when it comes to a well's ultimate recovery rate.

Looking to sell assets

The company hopes to raise $400-$500 million in asset sales this year, including non-core Williston Basin legacy properties in Burke County.

"We would like to be disposed of those assets this year," Evans said.

The company has received offers on some of these Bakken properties and will continue negotiating, he said, noting that Magnum Hunter will "actively market that property" once it completes a well to enhance production.

The company also is looking to sell assets in Texas and Kentucky, he said. ●

Contact Ray Tyson at rtyson@petroleumnews.com

MOVING HYDROCARBONS

Artist's rendition of the Pioneer Project

Dakota Plains expanding New Town in deal with Petroleum Transport Sol.

Minnesota-based Dakota Plains Holdings Inc. is partnering with Petroleum Transport Solutions LLC to nearly triple the throughput capacity of its New Town rail transloading facility in Mountrail County, N.D., from 30,000 barrels of oil per day to 80,000 barrels per day using Canadian Pacific unit trains.

When completed in late 2013, the $50 million Pioneer Project (as it is known) will have 8,300 feet of double loop track capable of accommodating 120-car trains, a 10 tank car load out building, 10 truck stations, five pipeline connections, and two 90,000 barrel storage tanks with an expansion design to install a third. The facility encompasses more than 192 acres with more than 90 acres in the interior of the rail loop that will be available for industrial use. In addition, with the expansion the facility's four existing 2,500 foot tracks can be used for inbound delivery of oil field supplies.

In a March 15 press release, Dakota Plains Chairman and Chief Executive Officer Craig McKenzie said that the Pioneer Project "is safe, efficient and economically attractive. It also opens the door to new logistics businesses where Dakota Plains can be an even greater service provider to upstream operators in the basin."

CP partnering in project

The Canadian Pacific presently serves five rail facilities in the Williston Basin and provides rail transport to premium crude oil markets in the Northeast and West Coast in both the U.S. and Canada.

"Canadian Pacific is pleased to be the rail partner for Dakota Plains and World Fuels as they expand the New Town facility," said Jane O'Hagan, Canadian Pacific executive vice president and chief marketing officer. "Through CP's North American network and rail connections, we offer direct service from the Bakken to key refining markets across North America. We look forward to leveraging this expansion and our network to increase the volume of crude moving efficiently into the marketplace and to provide a cost effective way for inbound commodities to reach Bakken production areas."

Petroleum Transport Solutions is a wholly owned subsidiary of World Fuel Services, a global downstream marketing and financing company dealing with ground transportation, aviation and marine fuel products and related services. Of the Pioneer Project, World Fuel Services Senior Vice President Carlos Cuervo said that the project will further expand World Fuel Services' Bakken crude oil marketing capabilities. "We are excited to be playing a major role in expediting this project."

Dakota Plains' New Town facility went into service in 2009 offering trucking, transloading and marketing services. In addition to the New Town facility, Dakota Plains' direct and indirect assets include a fleet of trucks and 1,100 railroad tank cars.

—MIKE ELLERD

GOVERNMENT

BLM officials in other states aid with ND Bakken drilling applications

The number of drilling applications submitted to federal land managers in western North Dakota has grown so large that U.S. Bureau of Land Management officials in other states have been asked to shoulder some of the load.

BLM employees in Great Falls are reviewing permits, verifying royalty amounts and working on mineral estate agreements to help their North Dakota colleagues dealing with the Bakken oil boom.

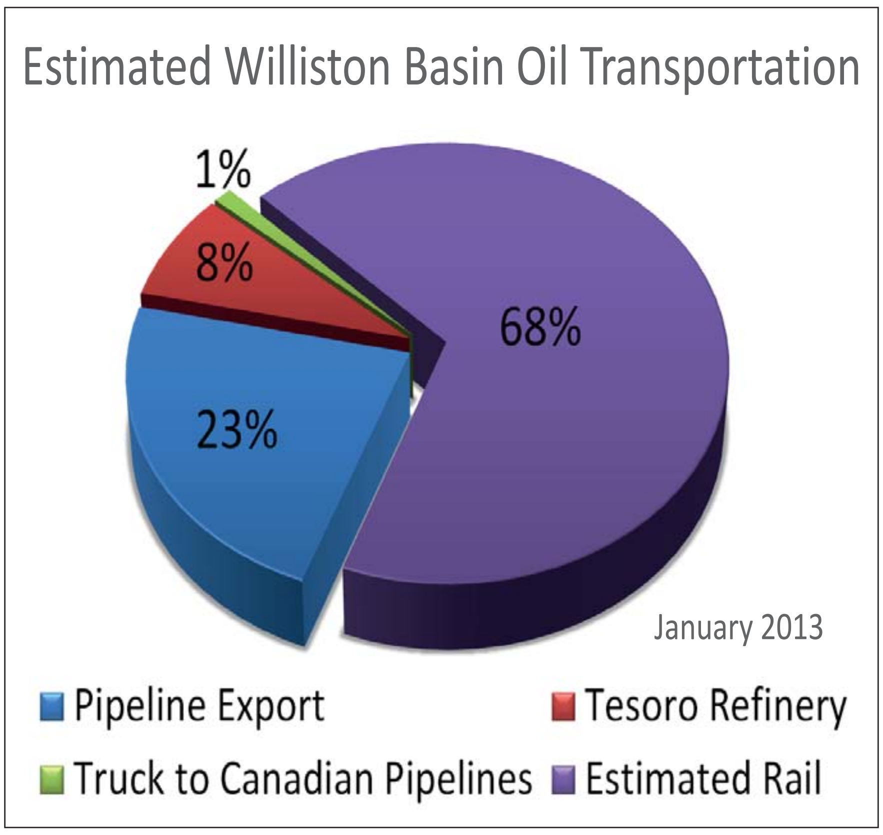
The Dickinson BLM office is expected to review more than 800 applications this year.

BLM Montana head Don Judice says the North Dakota office is unable to get the staff they need quickly due to budget concerns and recruitment efforts.

Twenty-six BLM staffers from Montana, two from South Dakota and one from Utah are assisting the 27 Dickinson staffers.

—THE ASSOCIATED PRESS

MOVING HYDROCARBONS



Access to premium markets boosts rail exports from North Dakota

Exports of crude oil from North Dakota via rail continued to increase in January, jumping another 4 percent to 68 percent over December 2012. That 4 percent came directly from pipelines, their crude oil transport share falling from 27 percent in December to 23 percent in January (see adjacent chart).

Approximately 574,000 barrels of crude oil were shipped via rail per day in January.

Truck exports to Canadian pipelines accounted for 1 percent of January's crude output, and the remaining 8 percent went to the Tesoro refinery in Mandan. Those numbers are unchanged from December.

North Dakota Pipeline Authority Director Justin Kringstad says the reason rail exports continue to pull market share away from pipelines is that railroads can get Bakken crude to premium coastal markets, some of which pipelines either don't reach or if they do, there is not space available.

As of March 14, the date that Kringstad prepared his remarks for the March Director's Cut press conference, Bakken crude was bringing $92.98 per barrel at Clearbrook, Minn., which was a positive price differential of 25 cents per barrel over West Texas Intermediate.

That same day, Brent crude was bringing $109.47 per barrel at East Coast, West Coast and Gulf Coast markets, which was a positive price differential of $16.74 per barrel over West Texas Intermediate.

Kringstad says Bakken crude was fetching prices close to Brent at those coastal markets. Those are the premium markets that rail can offer access to.

While the future is hard to predict, Kringstad believes that premium pricing will continue for at least several years at the coastal markets, maintaining the rail advantage.

However, he says Enbridge is looking at expanding pipeline capacity toward the East Coast and TransCanada is looking at modifying a gas pipeline for crude transport to the East Coast, so crude transport out of North Dakota could get more competitive in the future.

—MIKE ELLERD

Enbridge targets Bakken takeaway

Enbridge has embarked on the regulatory phase for one major link in its Light Oil Market Initiative, LOMI, to increase takeaway capacity from the Bakken.

The Calgary-based company is seeking U.S. State Department approval to move more crude from North Dakota in conjunction with its proposal to hike the shipment of oil sands crude from Alberta through Minnesota to Wisconsin above levels previously targeted.

The State Department said Enbridge is now planning to raise overall volumes to 570,000 barrels per day from between 450,000-500,000 bpd and is hoping to raise that level 880,000 bpd with its second phase.

The goal can be achieved by adding pumping stations in Minnesota and Wisconsin without installing new pipelines.

If the State Department approves the project, the first phase is scheduled for completion in 2014 and the second phase in 2015.

By including Bakken crude in the plan, Enbridge is moving ahead with its LOMI program to unlock the best markets in the Gulf Coast, East Coast, Eastern PADD II (U.S. East Coast) and Eastern Canada, primarily for Bakken crude, although there is the potential for the inclusion of Canadian light barrels from the Saskatchewan Bakken and light synthetic crudes from Alberta.

Enbridge said its Sandpiper line should be the next high volume pipeline out of the Bakken, challenging the growth of rail transport.

The company, which can currently handle 475,000 bpd out of the Bakken, is counting on increasing takeaway capacity from the region by 225,000 bpd by relieving congestion between the Beaver Lodge rail terminal and Clearbrook by late 2015.

—GARY PARK

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PIPELINER

State's recent draft environmental impact study of TransCanada's long-delayed 830,000 barrels per day Keystone XL pipeline (which includes provision for moving about 100,000 bpd from the Bakken) concluded that the increasing use of rail to move oil while pipelines are delayed or deferred "is not necessarily in anybody's interest."

Growing irritation

His comments, made in response to a single question, hinted at growing irritation within TransCanada over the fate of Keystone XL and possibly growing concern over the prospect that rail could carve out more that simply a transitional place in crude shipments, even if planned pipelines go ahead.

Crescent Point Energy, a key producer in the Saskatchewan Bakken and Shaunavon (both Upper and Lower), said it has capacity to move more than half its production of about 100,000 barrels of oil equivalent per day by rail.

"For every mile you move a barrel of oil by rail, you emit three times the greenhouse gases than you do by using a pipeline and you have an order of magnitude higher risk of having some sort of incident, leak or spill." —Alex Pourbaix, president of energy and oil pipelines, TransCanada

In addition, company Chief Executive Officer Scott Saxberg told analysts that Crescent Point hopes to add a "rail option" later this year to transport its newly acquired output from northeast Utah since acquiring Ute Energy Upstream Holding.

The Ute assets in the Uinta Basin include 7,800 boe per day of output and 172,800 net acres in a light oil resource play.

The draft environmental impact statement offered a breakdown of rail participation by producers:

Barrels per day	2012	2013 (estimated)
Crescent Point Energy	16,000	50,000
MEG Energy	0	32,000-40,000
Suncor Energy	5,000	20,000-25,000
Baytex Energy	10,000	15,000
Southern Pacific Resource	0	12,000
Connacher Oil & Gas	10,000	10,000
Cenovus Energy	5,000	10,000
Devon Energy	NA	5,000-10,000
Grizzly Oil Sands	0	5,000

"In 2012 we improved operational flexibility by adding 50,000 bpd of rail capacity," Saxberg said. "That gives us the flexibility" to achieve more stable crude price differentials.

He said Crescent Point hopes to pin down rail options in Utah by mid-year to help offset a $15 per barrel differential in area oil prices.

The company has recently been shipping 19,000 bpd through Stoughton and 2,000 bpd through Dollard, two rail terminals in Saskatchewan.

Continuing rail shipment

Brian Ferguson, chief executive officer of Cenovus Energy, told the New York conference his company expects rail will be a flexible part of the transportation options for a "number of years."

He said Cenovus is currently using rail for about 6,000 bpd and expects to reach 10,000 bpd by year's end.

The Keystone XL report painted a much broader picture of the outlook for rail, forecasting that by late 2014 there will be enough insulated rail cars to carry 800,000 bpd of bitumen with little or no diluents, equivalent to just over 1 million bpd of dilbit (diluted bitumen), surpassing the initial XL capacity.

Because of weight limits, tank cars can carry only about 550 barrels of undiluted bitumen compared with 650-700 barrels of light crude.

The report said the rail industry is quickly addressing the need for more tank cars, with loading and unloading infrastructure, estimating the U.S. is producing about 5,000 rail units per quarter (equivalent to 18,000 cars per year).

It said orders for new cars are about 8,800 units per quarter, with a 2012 backlog of 46,700 cars expected to be cleared in 2014, adding about 1.75 million bpd of rail freighting capacity for U.S. and Canadian crude over the next 18 to 24 months.

The report said 60 percent of the tank cars in production are insulated and contain steam coils able to reheat the sticky bitumen.

Unit trains of 100 cars

Because of weight limits, tank cars can carry only about 550 barrels of undiluted bitumen compared with 650-700 barrels of light crude.

The report was made on an assumption that crude movements would occur in unit trains of 100 rail cars, operating from a single starting point to a single end point, with no intermediate stops or storage. However, BNSF recently said it was considering unit trains of 118 cars.

The Canadian Association of Petroleum Producers estimated that if no new pipeline capacity is added out of Western Canada, rail must be able to handle an expected annual production growth of 175,000 bpd through 2035 to keep pace with supply and prevent shut-ins.

The report said Canadian National Rail had 14 crude oil loading facilities completed or under construction, while at least nine Western Canadian crude producers are either using rail or planning to do so by the end of 2023.

CN and Canadian Pacific Rail are currently moving 200,000 bpd, including 120,000 bpd from the Western Canada Sedimentary Basin. ●

Contact Gary Park through publisher@petroleumnews.com

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INSIDER

that Apache holds in Daniels County, Mont., on the northwest fringe of the Bakken petroleum system.

John Bedingfield, Apache vice-president for exploration and new ventures, said in late summer that the Bakken petroleum system is at a shallower depth in the area, making the vertical well leg shorter, 7,000-7,400 feet, thus reducing the costs — around $7.5 million compared to about $10 million in the center of the basin in North Dakota.

Bedingfield said Apache has more than 1,900 potential locations in its Montana Bakken acreage, with a potential resource of 1 billion barrels of oil.

Apache's entry into Daniels County was its first venture into the Williston basin.

It's the only big player in the county, giving what Bedingfield called at the time a "first-mover" advantage.

An announcement about the company's drilling results was expected sometime after the first of the year.

In November an Apache spokesperson said the company would "more to say next year after the data (from the first wells) are analyzed, and we're in a better position to comment on their impact."

During the recent press conference, Farris said that Apache has drilled some wells in the Bakken in Montana, but said the company is concentrating its efforts on its Permian and Anadarko basin plays.

On March 15, the Billings Gazette quoted a local landman as saying Apache is selling its holdings near Scobey, Mont., the county seat for Daniels.

Petroleum News Bakken was unable to contact that landman who was traveling out of the country.

Hints around repositioning

More recently, in a March 18 article, Bloomberg reported Farris as saying in an interview that Apache is considering all of its options in regard to the sale of $2 billion of assets.

Farris told Bloomberg that Apache is repositioning its portfolio and is looking at what the long-term benefit would be for its shareholders.

Bloomberg identified one of the potential sale assets as Apache's deepwater Gulf of Mexico, or GOM, assets.

According to Bloomberg, Farris said Apache's portfolio "changed" after it acquired those GOM assets in 2010 through a $2.7 billion acquisition of Mariner Energy Inc.

Whether it sells its deepwater GOM assets will depend on the market for those holdings, he said.

In 2012, Apache secured a 300,000 set acre share of Fort Worth-based Shale Exploration's Jayhawk prospect in Daniels County. Shale exploration told Petroleum News Bakken that it is not aware of Apache selling any of its Daniels County assets. "To our knowledge they are not selling," Shale Exploration chief executive officer Sid Greehey told Petroleum News Bakken.

Petroleum News Bakken contacted Apache on March 20 to ask whether someone could comment on the speculation that Apache's Daniels County acreage is among the $2 billion in assets Apache is looking to divest.

An Apache spokesman said the company does not comment on speculation regarding acquisition or divestiture activity.

—MIKE ELLERD

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CRESCENT

three more over the next two years.

Crescent Point is also expanding its waterflood programs in the Bakken, Shaunavon and Viking plays of Western Canada.

Waterflooding, one of the enhanced oil recovery techniques, is deemed to function best over an entire pool rather than on an individual well basis, although the owners must reach a unitization agreement before a project can proceed.

After a lapse of many years, the sudden surge of light oil drilling has revived the prospect of unitizations, driven by a Petroleum Technology Alliance Canada study estimating that improved water management could boost Western Canada's oil reserves by 1 billion barrels.

Already yielding results

Crescent Point said its waterflood trials are already yielding positive results.

In southeastern Saskatchewan and Manitoba the company converted five producing Viewfield Bakken wells to water injection, raising the total to 46 wells and reported that production results are surpassing its expectations.

Company President Scott Saxberg forecast that 40,000 barrels per day of Crescent Point's anticipated 100,000 bpd in 2013 will be affected by waterflooding.

"There is easily 25,000 bpd of long-term waterfloods that we have within our company already from legacy assets," he told a conference call. "On the Bakken side it is probably going to push close to 10,000 bpd and on the Shaunavon side probably 5,000 bpd."

Based on the initial success, Crescent Point plans to drill six more two-mile horizontal wells this year, on top of the four already completed, and is confident they can be drilled for about half the cost of similar wells drilled across the border in North Dakota.

The company reported that water is now being injected into 30 converted wells in both the Lower and Upper Shaunavon unconventional zones and Crescent Point has applied to the Saskatchewan government to establish a unit in the Lower Shaunavon for implementing a unit-wide water injection scheme.

Larger-scale unitization

Smith said the company has its eye on larger-scale unitization based on technical decisions last year to use two four injectors that have produced "good early results in the waterflood in the Viking ... and really strong results in the Shaunavon as we've added more injectors."

Smith said the application has worked with multi-stage fracturing in the Bakken and the Shaunavon following a corporate decision to "push it across all of our plays."

In the Saskatchewan Bakken, Crescent Point has re-entered wells that were originally completed with eight-stage and 16-stage cemented liners and increased them to 25-stage and 30-stage completions.

The results have allowed the company to identify 90 wells in the play as candidates for the process.

Based on the initial success, Crescent Point plans to drill six more two-mile horizontal wells this year, on top of the four already completed, and is confident they can be drilled for about half the cost of similar wells drilled across the border in North Dakota.

—GARY PARK

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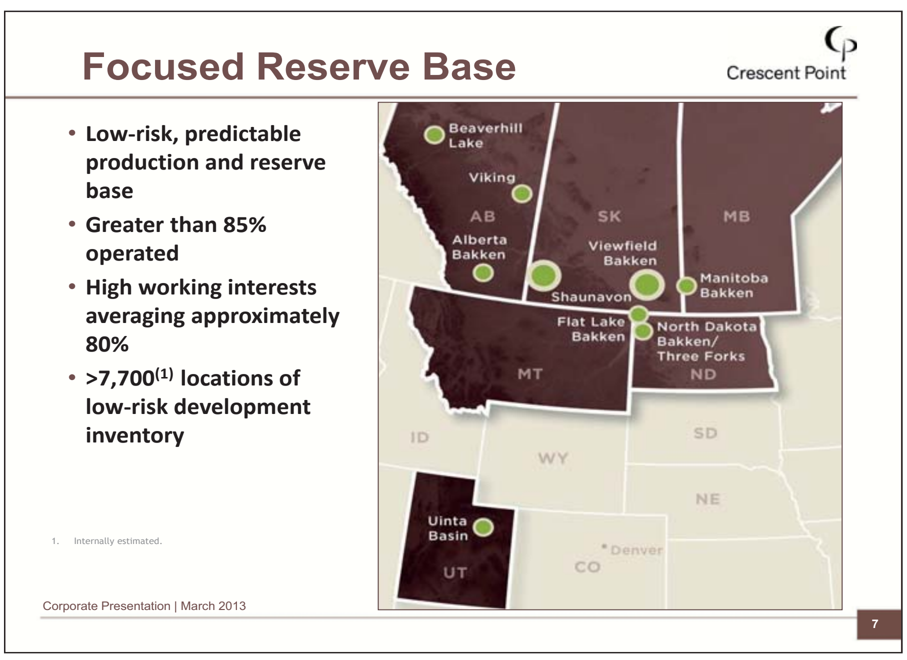

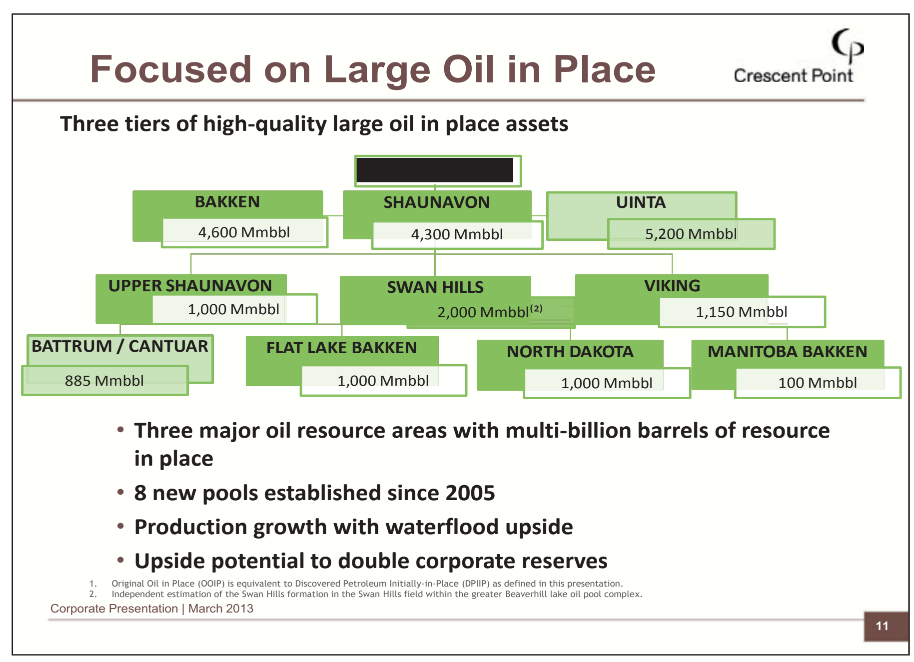

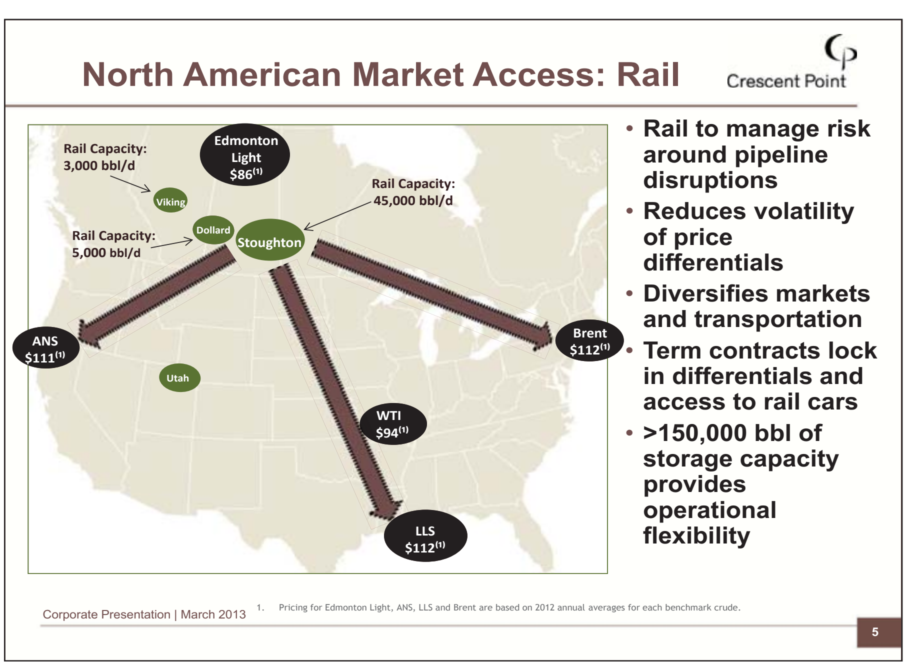

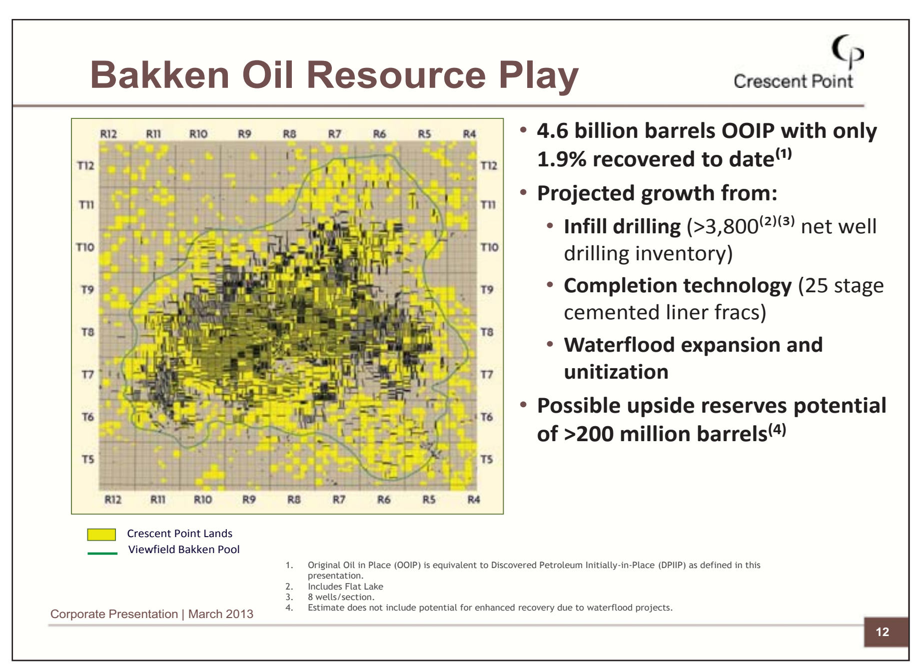

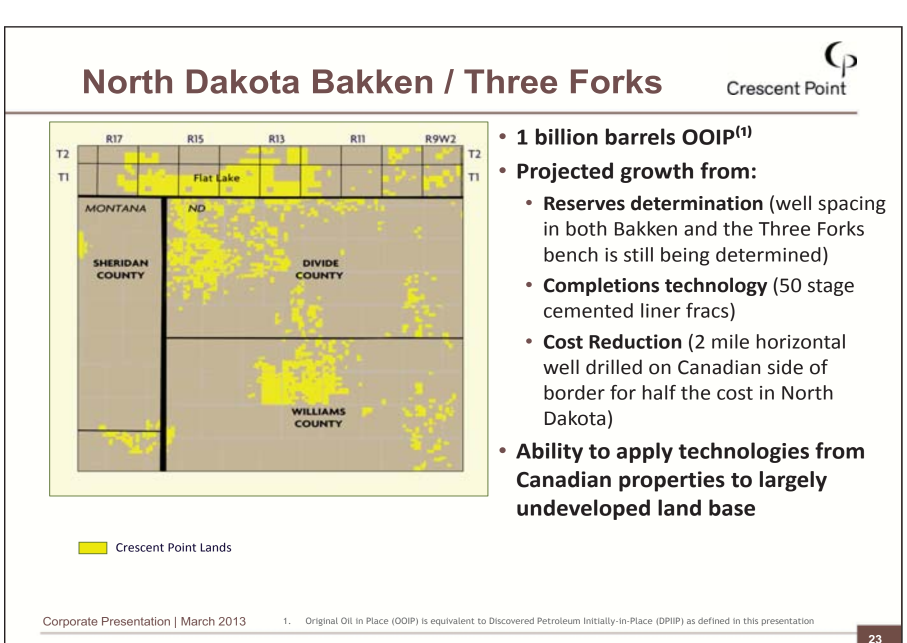

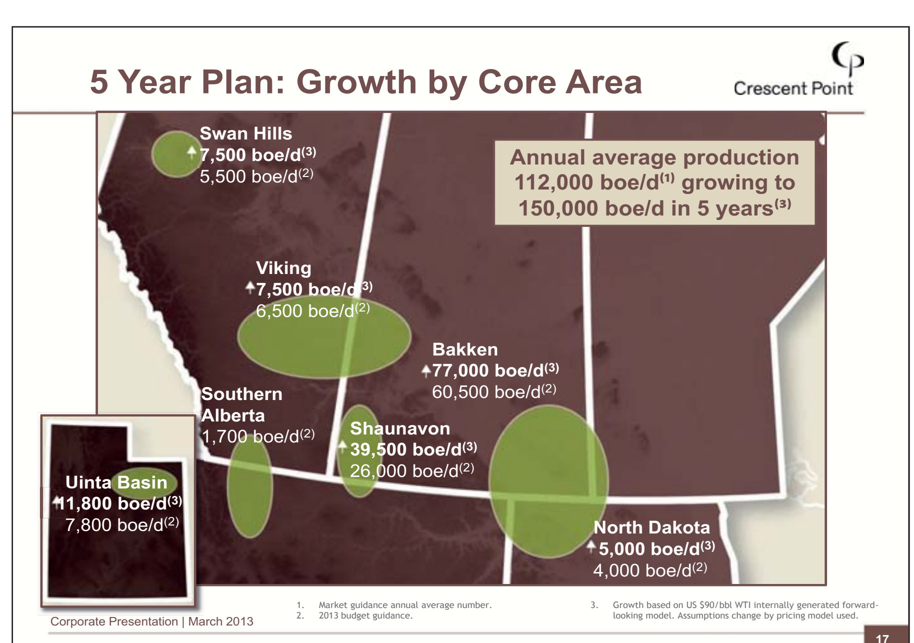

Petroleum News Bakken

Oil Patch Bits

Larson Electronics offers strobe hazard strobe light

Larson Electronics said March 14 that it has announced the addition of an LED strobe light designed for use in hazardous locations where corrosive conditions are commonly encountered. The HALSB-CRNM-LED Hazardous Area Strobing LED Light Beacon is constructed with a non metallic design that features a excellent resistance to corrosion and incorporates a high power LED lamp for brilliant signal output and high reliability in hazardous locations where easy signal visibility is critical

The HALSB-CRNM-LED hazardous area LED beacon light from Larson Electronics is a powerful signal beacon that provides high reliability and durability with corrosion resistant construction and high output LED lamp assembly. This powerful strobing beacon is constructed with a housing formed from GE Lexan polycarbonate, giving it excellent resistance to the effects of corrosion from exposure to marine environments, high humidity, salt water and damaging chemicals. A Pyrex lamp globe provides protection for the LED assembly and is also resistant to the effects of damaging environments and heat. This beacon light is NEMA 4X rated against water intrusion, making it suitable for wet locations and hose down areas, and is USCG approved for marine locations as well. For more information visit www.larsonelectronics.com.

Bakken Players

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FLARING

According to Kringstad, 16 percent of the natural gas that is produced in North Dakota is flared because there is no gas gathering infrastructure in place at the point of production. Another 13 percent is flared in areas where the gathering infrastructure is in place, but there are "challenges," Kringstad says, in the capability of the existing gathering systems to handle all of the oncoming gas.

Challenges with existing infrastructure

Kringstad says that good progress was made in 2012 on gas connections, and that by the end of the year "we were getting to a point where we were very close to catching up with our well connections." He says there was a significant dip in new gas connections in January as a result of winter weather, but he is not surprised by that nor is he concerned.

Moving forward Kringstad expects gas connections to again increase, and in the next six to 12 months, reach a point where gas connections are keeping up with new wells. Then the focus, he says, can be on the backlog of wells not connected.

Addressing existing infrastructure

One of the challenges with existing infrastructure, according to Kringstad, is compression. He says when a new high-pressure well comes online it can often kick older, low-pressure wells off of the gathering grid because there is not sufficient compression to handle new gas and the old gas.

In those situations, Kringstad says gas from the older low-pressure wells is again flared. One solution, he says, is more compression, which is accomplished by adding more compressor stations in order to boost line pressure.

A second solution, says Kringstad, is to "loop" existing gathering pipelines, where an additional, parallel line is installed to accommodate higher gas volumes in the system.

The third solution is more frequent "pigging" of the pipelines to push out the natural gas liquids that fall out and settle in the low spots in the pipelines, especially in the winter months. When those NGLs fall out and pool in the pipe, they reduce the volume of pipeline available for gas. In the pigging process, plastic or foam plugs known as "pigs," are shot through the pipeline and push the pooled liquids out.

"The goal then is to maximize every inch," Kringstad says. "We need every inch of that pipeline to move gas."

Kringstad says that because the pigging operations are becoming quite intricate, dedicated crews are being flown in to work two-week shifts just to keep up with the gas because it is so rich.

Gas processing is expected to keep pace with production, so the real challenges are in the gathering systems.

Kringstad says an estimated $4 billion to $5 billion will be spent on current or planned projects over the next several years in North Dakota, both on gas pipelines and processing infrastructure. That number, he says, could double or triple over the next five to 10 years as production increases.

Addressing lack of infrastructure

For the 16 percent of North Dakota's natural that is flared as a result of no gathering capability, there are two apparent solutions. One is to install gathering systems, which is ongoing in some areas, such as Oneok's Divide County gathering system and where Bakken Hunter is aligning its well pads with Oneok's pipelines (see sidebar to this story).

The other solution is to develop and implement alternatives to gathering in areas where gathering infrastructure is not yet in place or is simply not feasible to install.

Oil and Gas Division Director Lynn Helms says the North Dakota Industrial Commission is supporting two flaring bills that are moving through the North Dakota legislative assembly. House Bill 1134 and Senate Bill 2370 would provide incentives to companies to stop gas flaring.

HB 1134 provides incentives for companies to implement other technologies to either utilize or process gas directly at the wellhead. Helms says there has been a lot of talk lately about the importance of providing incentives for removing natural gas liquids from the gas stream and getting those liquids to market.

SB 2370 offers temporary property tax exemptions for gas gathering systems which, per Helms, will incentivize more rapid build-out of gathering systems. That process, however, may not do much more than offset the rising cost of securing pipeline easements, which he says has become a "big business" in western North Dakota.

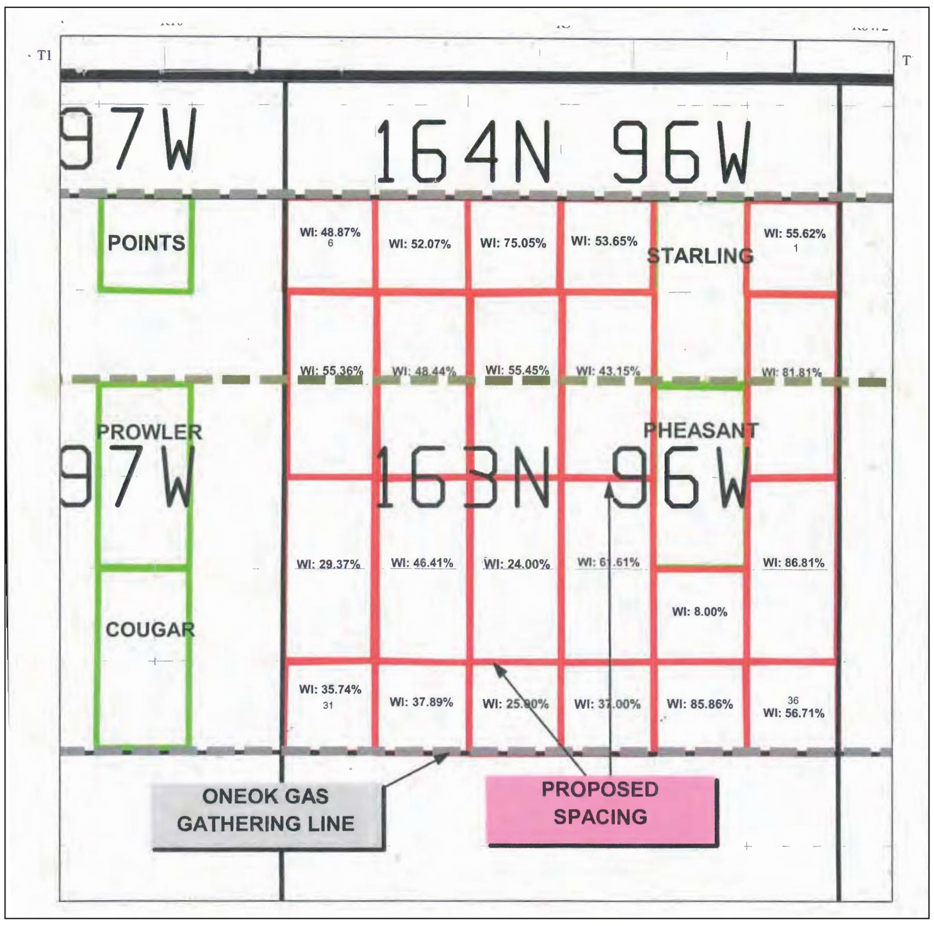
Sour gas concern

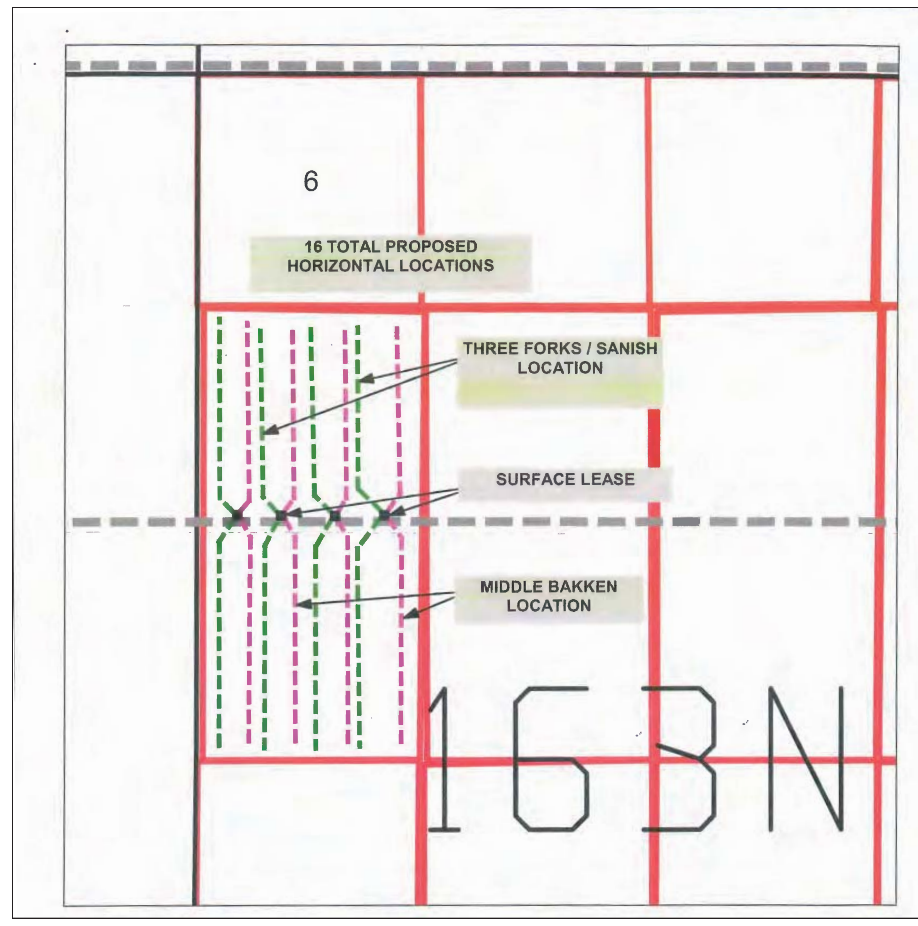
Another flaring concern Helms has is in the situation in which new, high-pressure wells come online and push older, low-pressure wells offline and back into flaring. Some of those older wells produce sour gas, i.e., higher sulfur content gas.

The main problem with the sour gas, according to Helms, is that Oneok's new Stateline and Garden Creek gas plants were designed for low-sulfur Bakken gas and are not equipped for sulfur removal.

He says those new plants can only accommodate a few parts per million of hydrogen sulfide, whereas traditional

see **FLARING** *page 15*





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HUNTER

Bounty School field where the company wants to drill up to eight wells on the 640-acre units and as many as 16 wells on the 1,280-acre units.

What is unique about the application is that Bakken Hunter has configured the multi-well pads to line up with Oneok's Divide County east-west trending natural gas gathering pipelines.

The pads in the 640-acre spacing units would be at the top or the bottom of the spacing unit, but in the 1,280-acre units, the pad would be in the middle of the unit so as to line up with Oneok's gathering lines.

In the monthly Director's Cut press conference, Lynn Helms, director of the commission's Department of Mineral Resources and the Oil and Gas Division, says initially the commission didn't think "highly" of the idea.

"It looked like a very odd reorganization of our typical 1,280 pattern spacing units." However, when Bakken Hunter explained the company's approach in the hearing, it was "really refreshing," and approaches like that could be a "step change."

Helms says it is "a good illustration" of the work that the pipeline authority and the commission have been doing, which "now has operators and midstream people working together to really try to solve the flaring problem and get the well pads and the gathering systems lined up" so that flaring will be eliminated, or nearly eliminated.

The Oneok gathering laterals are part of the company's Divide County gathering system that will transport gas to its Stateline gas processing plants. The laterals run on east-west corridors between rows of stacked 1,280 spacing units.

Helms says the laterals also line up with Continental Resources spacing units to the east of the Bounty School field, as well as some traditional 1,280 spacing units to the west.

Whiting's approach at Lewis and Clark

Another good illustration of companies addressing the flaring issue, Helms says, is Whiting Petroleum's approach in its Lewis and Clark Three Forks play in Billings and Golden Valley counties.

After drilling two or three wells in that play, Whiting soon realized it needed to install gas pipelines to capture the produced gas. Before proceeding with further drilling, Helms says, Whiting first installed a gas gathering system.

He says because of that foresight, Whiting is only flaring 1 percent of the gas in that play.

—MIKE ELLERD

continued from page 14

FLARING

North Dakota gas streams are from 1 up to 8 percent hydrogen sulfide.

Older gas plants, such as the Tioga and the Grasslands plants, according to Helms, are equipped to handle the higher sulfur concentrations.

He says Oneok is looking into implementing the capability to redirect gas coming in from the fields to plants that can handle the sulfur, which he calls a "ring" system.

In addition, he says some operators are actually considering installing field facilities to remove the sulfur before the gas enters the pipelines going to the Oneok plants.

Helms says the source of the high-sulfur gas is unknown. Whether the sulfur from the reservoir is somehow related to the way a well is fractured or if it's from bacteria needs to be investigated, he says.

In the past, sulfur has been seen predominantly in older wells and only in certain areas, but now, Helms says, the sulfur is starting to appear in some new Bakken wells.

If it is just a matter of hydrogen sulfide appearing in an individual well, he says, then that gas can be sweetened before entering the pipeline to the gas plant, but if the hydrogen sulfide is area-wide or field-wide, then he says it "completely changes the dynamic of gathering and treating." ●

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COUNT

October 2012.

Winter weather smacks January crude production

Two winter weather events hit North Dakota in January which dropped the state's average daily oil production for the month. Winter storm Gandolf in early January, followed by a sub-zero cold snap at the end of the month, resulted in a 4.2 percent drop in average daily oil production from the state's December 2012 record high production.

The January decline that followed December's record high came on the heels of the exact same situation that occurred when November's production fell following record high production in October. The November drop in production was the first decline in North Dakota production in 19 months.

That pattern may not be over.

In a March 15 Director's Cut press conference Lynn Helms, director of the North Dakota Industrial Commission, Department of Mineral Resources, Oil and Gas Division, said alternating good and bad weather conditions, coupled with upcoming road restrictions as spring breakup approaches, will result in a "sawtooth" patter of monthly oil production, up one month and down the next throughout the spring.

Helms says the sub-zero weather, like the cold snap that hit the state in late January, "really hampers the hydraulic fracturing business."

However, once into summer Helms believes production will get back on a trend of month-over-month increases, and believes average daily production is still on track to eventually reach the 850,000 bopd level that the state is using for its 2013-15 revenue projections.

January production numbers

Preliminary data released the week of March 11 by the Oil and Gas Division indicate that by the end of January, North Dakota's oil production was 738,022 barrels of oil per day, a decline of 32,089 bopd day from the record high of 770,111 bopd day in December.

Natural gas production fell in January to 793 million cubic feet per day, a 3.0 percent decrease from December's production of 818 million cfpd.

All totaled, North Dakota produced 22.9 million barrels of oil in January compared to the 23.9 million barrels produced in December. Likewise, the state produced a total of 24.6 billion cubic feet of natural gas, down from the 25.4 billion cubic feet produced in December.

New producing wells

The number of producing wells in the state increased to a record high of 8,322, up 85 from the 8,237 that were producing at the end of December.

Helms sees the "bad month/good month" or "sawtooth" pattern as he calls it, possibly extending all the way through May.

The number of wells that went online in December was an increase of 123 over November.

In the previous Director's Cut press conference in February, Helms said the division estimates that 90 new wells per month are necessary to maintain production in the 770,000 bopd range and that more than 100 new wells per month would be necessary to increase the production level to 850,000 bopd.

He says January was only the second month in the last year to year-and-a-half where the number of new producing wells was fewer than 90, and in both cases, Helms says, there was a corresponding decline in production.

Although 90 new wells per month is not a "magic number," he says the number of new wells needs to be close to 90 in order for steadily increasing production to continue.

Fracking setback

The number of wells waiting on hydraulic fracturing remained above 400 in January at 410, essentially unchanged from December. Helms says the sub-zero weather, like the cold snap that hit the state in late January, "really hampers the hydraulic fracturing business." He says operators are much less likely to spend an estimated $200,000 to $300,000 to keep frack water warm when wind chills are in the minus 10 to 20 range. In those situations, he says, operators simply put things on hold.

The "sawtooth" pattern

Helms says the state experienced some cold weather in early February, but through the remainder of the month the weather was generally moderate, and he believes February should be a good month in terms of production.

March has seen a couple of storms already, and more winter weather is in the forecast, which he says could slow production.

April can be unpredictable, and then comes the spring breakup and road restrictions, which he says could extend into May.

As a result, Helms sees the "bad month/good month/bad month" or "sawtooth" pattern as he calls it, possibly extending all the way through May. But then come the summer months, which "are always very good to us."

Road restrictions

This spring, road restrictions could be very stringent, according to Helms.

He has heard that Williams County could temporarily drop the weight limit as low as 10 tons, "which basically means we won't even move oil for a short period of time."

He says Divide County is also considering some very restrictive weight limits through spring breakup.

Counties, he says, would rather deal with a week or two of very severe road restrictions rather than weeks or months of road reconstruction. ●

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