



First things first



VERN WHITTEN PHOTOGRAPHY

In preparation for drilling, construction crews lay the groundwork for a Bakken-system multi-well pad approximately five miles northwest of New Town in Mountrail County, North Dakota in mid-February.

ND's May lease acres increase but cluster outside Bakken core

A total of 23,194 acres have been nominated for the North Dakota Trust Lands' May oil and gas lease auction — up 30 percent from the 17,878 acres leased in the February auction and up 28 percent from the 18,133 acres leased in the May 2015 auction. The May acreage is also the highest nominated acreage in any Trust Lands quarterly auction since August 2013 when 54,483 acres were leased.

The acreage nominated for the May auction is spread among 267 tracts across nine western North Dakota counties all within the Williston Basin province. However, with the exception of a few tracts along Lake Sakakawea in McKenzie and Mountrail counties and one tract at Williston

see **NDTL MAY SALE** page 20

Once one, DeeThree splits in two

Calgary-based DeeThree Exploration is about to embark on the next chapter of an eight-year existence by dividing itself into two standalone operations built around its core holdings.

The company plans to consign its quirky name to the archives, and take on some heft, labeling its new oil-weighted entities Granite Oil and Boulder Energy.

Granite is being shaped as a dividend-and-growth company based on its Alberta Bakken play near the Montana border, while Boulder will focus on development of properties in the Pembina-Brazeau area of west-central Alberta.

"The reorganization will create two independent, pure-play oil companies which will pursue different business strategies which better reflect the unique nature of the two different asset

see **DEETHREE SPLIT** page 22

ND gas capture hits 81 percent at expense of some production

Curtailing production to meet gas capture targets may cause oil production volumes to take a hit, but the positive impact it has on flaring is what matters most to North Dakota citizens, the state's top oil regulator says.

Meeting gas capture targets in February required some voluntary as well as ordered production curtailment, but by doing so, North Dakota operators were able to capture 81 percent of the natural gas, well above the current 77 percent target that went into effect in January. The state has not seen gas capture at that level since July 2010.

"North Dakota citizens were very firm in what they wanted from this industry, and they wanted less flaring," North

see **GAS CAPTURE** page 24

PRODUCTION & RECOVERY

'An unusual event'

For first time in four years, ND output falls for two straight months

By **MIKE ELLERD**

Petroleum News Bakken

Oil production fell in North Dakota again in February, marking the first time in more than four years that the state's output declined for two consecutive months. Preliminary data released by the Department of Mineral Resources April 14 indicate the state produced an average of 1,177,094 bpd in February — a decrease of 14,104 bpd or 1.2 percent from the 1,191,198 bpd production in January.

"An unusual event," is how DMR Director Lynn Helms described the second month of production decline during a monthly press confer-



LYNN HELMS

ence on April 14. "Not an enormous decline — about 1 percent decline — but it's the first time since December of '10-January of '11 we've had back-to-back production declines," Helms said.

"At that time it was because of incredible winter weather," Helms added. "I don't know if you remember the winter of '10-'11, but it was the worst winter in the oil patch that we had had in probably several decades." However, weather was not a significant contributor to the production decline in February, which Helms described as "pretty much normal" with "seven windy days and nine very cold days and little or

see **ND OUTPUT** page 23

DRILING & COMPLETION

XTO ramps up activity

ExxonMobil subsidiary look's to drill 600 of 800 wells in April ND applications

By **MIKE ELLERD**

Petroleum News Bakken

Among applications for drilling additional wells on existing drill spacing units that the North Dakota Industrial Commission will consider during hearings on April 22, 23 and 24 are nine applications from ExxonMobil subsidiary XTO Energy requesting authorization to drill up to a total of 610 wells on 73 DSUs most of which are in Williams County (see table).

Of those 73 XTO spacing units, 46 are 1,280-acre units, another 26 are 2,560s and one is a 320-acre DSU. The 1,280s and 2,560s are in the Capa,

see **XTO ACTIVITY** page 21

Oasis continues MT Bakken development

As the second largest Bakken producer in Montana, Oasis Petroleum continues developing the resource in that state, and the Montana Board of Oil and Gas Conservation will consider a number of the company's drilling and spacing unit applications when it meets in Billings on April 30.

Among the applications that Oasis has submitted are four seeking permanent status

see **OASIS IN MT** page 21

PRODUCTION & RECOVERY

ND's new official record IP

Recently released DMR data show a Whiting upper TF well tested at 7,824 boepd

By **MIKE ELLERD**

Petroleum News Bakken

Data recently released by the North Dakota Department of Mineral Resources make official a new record high initial production rate of 7,824 barrels of oil equivalent per day that a Whiting Petroleum offsetting upper Three Forks well in the Twin Valley field in northern McKenzie County put out during the first 24 hours of production when tested in October 2014. Whiting announced the IP in its third quarter 2013 press release, but with the well on confidential status for six months, the data only recently became part of North Dakota's official public record.



The Flatland Federal 11-4TFH produced 6,002 barrels of oil and 10,932 thousand cubic feet of natural gas in the first 24 hours on production, which equates to the record 7,824 boe using a conversion of 6,000 cubic feet of gas per barrel of oil equivalent.

A second Whiting well on the same pad, the Flatland Federal 11-4HR completed in the middle Bakken and also tested in October, also trumped the previous high IP by producing 5,002 barrels of oil and 12,706 mcf of gas for a combined IP 7,120 boe. Both of those top IP Whiting wells were completed with coiled tubing and cemented lin-

see **RECORD IP** page 6

contents

Petroleum News Bakken

ON THE COVER

'An unusual event'

For first time in four years, ND output falls for two straight months



XTO ramps up activity

ExxonMobil subsidiary look's to drill 600 of 800 wells in April ND applications

SIDEBAR, Page 1: Oasis continues MT Bakken development

ND's new official record IP

Recently released DMR data show a Whiting upper TF well tested at 7,824 boepd



ND's May lease acres increase but cluster outside Bakken core

Once one, DeeThree splits in two

ND gas capture hits 81 percent at expense of some production

BAKKEN STATS

- 11** Whiting tops all of the week's stats charts
- 12** North Dakota Pipeline Authority Monthly update, April
- 13** IPs for ND Bakken wells, April 7-13
- 14** North Dakota oil permit activity, April 7-13
- 15** Top 50 North Dakota Bakken oil producers, February
- 15** ND weekly county permit totals, April 7-13

- 15** Top 10 Bakken wells by IP rate, April 7-13

COMPANY UPDATE

- 7** Triangle's businesses rely on each other
- 8** ConocoPhillips' optimistic look ahead
- 16** American Eagle struggles with debt load
- 18** Penn West sells royalty stake to tackle debt

ENVIRONMENT & SAFETY

- 18** Flare appears to be cause of grassland fire

GOVERNMENT

- 3** Onstad frustrated with funding formula
 - 5** ND's shifting approach on rail safety
 - 10** Aiming to restore landowner trust
- SIDEBAR**, Page 10: Transforming rubbish to roads



LEGAL COLUMN

- 4** Court rules on force majeure in NY case

MOVING HYDROCARBONS

- 4** Summers voices Keystone XL support
 - 6** Pipelines pick up 3 WB export share points
 - 9** Washington tribe sues BNSF to stop oil trains
- SIDEBAR**, Page 9: BNSF counters alleged spill reporting violations
- 17** TransCanada scraps Quebec terminal

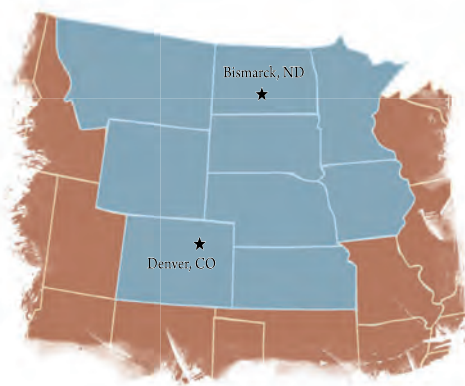


WHERE PROGRESS MEETS PRESERVATION

Professional cultural resource inventories for the oil & gas industry with two offices serving the Upper Midwest.

Our services include:

- NEPA & NHPA compliance assistance
- Archaeological inventories
- Native American consultation
- Architectural history
- Preservation compliance
- Interpretive planning
- Interdisciplinary GIS mapping and geoprocessing analysis



701-663-5521 | info@bcarch.org
www.bcarch.org



Beaver Creek
ARCHAEOLOGY

BLUETICK®



RMC

Remote Monitoring and Control

RMC helps operators optimize oil and gas production, enhance compliance and safety, and improve workforce efficiency.



LMS

Land Management System

LMS allows operators and brokers to streamline the land management process, reduce project time and costs, and enhance business initiatives.

Visit us online or call today to discuss how your company can benefit.
www.bluetickinc.com | 1-877-283-3442

GOVERNMENT

Onstad frustrated with funding formula

Proposed share of oil production tax revenue is not enough for Parshall Democrat, a strong advocate for infrastructure funds

By MAXINE HERR

For Petroleum News Bakken

House Minority Leader Kenton Onstad from Parshall represents District 4 in the North Dakota Legislature which includes six oil producing counties. He's served in the House since 2001 and since 2009 has pushed for changes to tax revenue distributions in order to send more dollars back to western communities. As the 64th Legislative Assembly heads into the homestretch, Petroleum News Bakken sat down with Onstad to discuss the progress made for his constituents.

Petroleum News Bakken: What were your top priorities coming into this session of the Legislature?

Onstad: Number one was funding for infrastructure — not only for counties, but cities and schools. It's probably been a priority for several sessions of mine, so it's really the funding formula. We have water projects, we have Department of Transportation, and we have other schools and unmet needs for townships all across the state. I think we look to support that and we kind of are but not at the level I think we could be.

Petroleum News Bakken: How do you feel about the failed contingency amendment presented by Democrats to the formula bill (House Bill 1176) which would have raised the percentage of gross production tax revenue sent to oil producing counties to 40 percent if oil production grows to 1.2 million barrels per day by February 2016? (HB 1176 was amended from a 60/40 percentage split weighted to the counties to a 30/70 split.)

Onstad: I'm not supportive of the bill the way it is — the way it came out of the House being at 30 percent. Yes, we sent out the surge fund, but don't put the surge fund and this funding formula together and say look at all the money we're giving to western North Dakota. That surge funding should have been there four years ago. We shouldn't have been playing these games. Because we adopt a two-year budget, the second half of the budget according to Moody's Analytics is a lot more positive than the first half so we have production levels going to be at 1.2 million barrels per day. We can afford to increase that distribution to 40 percent. Did the contingency fall on deaf ears? I don't think so, but they want to put their hopes into 1377.

(House Bill 1377 would take the unobligated balance of the strategic investment and improvement fund — the final "bucket" filled from the gross production tax revenue — and apply 30 percent of it to the political subdivisions instead of sending 25 percent to the Legacy Fund, a savings fund constitutionally untouched until 2017).

Is it any real difference than just going to 40 percent? The change (in HB 1377) is running funds back to the formula and it comes back to the western counties and that's good. But when production comes up, everything else is tied to that — income tax collections are up, corporate tax, sales tax, motor vehicle excise tax are all up — because we're producing more and they're distributing more so it really has nothing to do with whether the trigger's on or off. The fact

that production is there and we're able to fill this bucket list means we could afford the 40 percent. It's a choice.

Petroleum News Bakken: How do you feel about the tax triggers?

Onstad: As we have been in oil exploration since 1951 all of our incentives were based on something that happened and it was either to continue or encourage drilling. To say that now we should change it, it would be a little disingenuous to say to the oil industry that's really going to hurt us now. I think we have to live with that decision, let it run its course and then probably look at that whole formula again. I'm hesitant at this point to change that; it should be a bigger, broader picture. We had all these incentives and they're all there for a reason. We had at one time 17 or 18 incentives at one level or another. Let's clean all that up.

Restricting regulatory bodies

Petroleum News Bakken: The House Appropriations Committee cut the rail safety program funding from the Public Service Commission's budget. What are your thoughts on that?

Onstad: I have no idea why they want to do that. It kind of started with a press release from the governor's office that said the railroad's going to put their own inspectors on it and the committee members thought, well if they're going to put more of their inspectors on it then we'll cut them. That's what happened. Well, then when you visit with industry that doesn't necessarily mean all the railroads because that was only BNSF. You've got CP; you've got some of these short lines. What are they going to do? They're hauling oil as well on the tracks and the safety is needed. Speeds have changed, dynamics have changed. Were the railroads built for those kinds of specs? That's what the safety program will look



KENTON ONSTAD

at. Is it the railroad to tell you that? I don't think so. I think we need an independent regulatory body to look at that and that's why the PSC should be front and center and we're trying to restore that back. We put amendments to restore that back, they failed, and we're going to have a minority report when it comes to the floor to discuss that.

Petroleum News Bakken: Lawmakers introduced some bills which would affect the authority of the North Dakota Industrial Commission which regulates the oil and gas industry. For instance, House Bill 1187 which would have required orders of "general applicability" to be subject to the administrative rules process did not pass, but Senate Bill 2343 which requires the NDIC to report the fiscal effect of any orders in excess of \$20 million to the Legislative Assembly was passed and became law on April 8. What are your thoughts on how NDIC operates and do you feel there is a need to rein in its authority?

Onstad: I think they have a lot of entities. Really, the way the state has gone, the question is: can three people really handle that? They have their own real jobs they're doing and then they need to be part of the Industrial Commission. Part of that is we probably should expand that to four to five members. Maybe that should not be done (in the Legislature); maybe that should be a vote of the people. The one with the orders, they wanted to rescind the two orders — the oil conditioning and flaring. All they want to do is rescind those orders, so what do you want to

replace it with? The oil/gas stabilization is part of the railroad safety. We need to look at it and stabilize the oil. Is it perfect? No, I disagree with parts of it but it was in the right direction. The argument to rescind it is that the industry didn't want it in the first place. So who are we regulating here? The public wanted this. Other states wanted it, and yet follow the money.

see ONSTAD Q&A page 19



Making Your Sites Safer Together

Audit. Document. Operate.

From electrical area classification studies to safety control system implementation to testing and maintenance, aeSolutions stands ready to help you achieve a safer operation and meet safety conformance and compliance.

Specializing in automation, process safety consulting, industrial cybersecurity, alarm management, and O&M solutions, aeSolutions can be your full Process Safety Lifecycle partner.

Solutions™
aesolns.com | 864-676-0600

NORTHERN OILFIELD SERVICES

We Believe in Teamwork & Hard Work

Heavy Haul Transportation ~ Hot Shot Trucking
Roustabout Crews ~ Lease Operators ~ Well Site Supervision
Well Site & Tank Battery Construction ~ Pumping Unit Maintenance
Environmental Remediation & Location Reclamation
Vegetation Suppression, Mowing & Snow Removal

Call Us Today...406.765.1183
www.NorthernOilServices.com

Northern Oilfield Services, Inc. | 112 North Main Street | PO Box 396 | Plentywood, Montana

MOVING HYDROCARBONS

Summers voices Keystone XL support

A former treasury secretary (under Bill Clinton) and key economic advisor (under Barack Obama) has chided both the United States and Canadian governments over their failure to work together and independently clear the way for Keystone XL.

Lawrence Summers told a business audience in Toronto that, speaking for himself, he wished the pipeline had already been approved to meet U.S. energy needs and to acknowledge the importance of its relationship with Canada.

Instead, delays in moving the project through the U.S. regulatory and political system have turned the clock back far into last century by forcing the oil industry to move more of its production by rail, which he rated as a “dangerous” activity because of its potential for accidents and environmental damage.

Summers, who has also served as chief economist at the World Bank, said Canada could also have “made it easier for the U.S. to approve Keystone” by showing “more concern” about the issues raised by environmentalists, including the climate change arguments related to the movement of heavy crude from Canada into the U.S.

But, regardless of the aggressive line taken by Prime Minister Stephen Harper, who said U.S. approval of XL would be a “no brainer” and that he would “not take no” for an answer from the Obama administration, Summers said the U.S. “should have approved Keystone.”

He said allowing construction of the system from Alberta, through the Bakken region to the U.S. Gulf Coast remains “the right answer.”



LAWRENCE SUMMERS

—GARY PARK

LEGAL COLUMN

Court rules on force majeure in New York case

Fracking ban in Empire State found insufficient to hold leases past primary term; such litigation will spread as low prices linger

By JANNELLE STEGER COMBS
For Petroleum News Bakken

On March 31, the New York Court of Appeals decided a case that could be used for defining force majeure arguments in other parts of the country. The case was pending in the United States Court of Appeals for the 2nd Circuit when that court certified questions of state law relating to oil and gas leases to the New York appellate court.



JANNELLE STEGER COMBS

History of case

Walter Beardslee, along with several other New York mineral owners in Tioga County entered in oil and gas leases with Victory Energy Corp. between 2001 and 2009. The leases all contained typical habendum clauses: “It is agreed that this lease shall remain in force for a primary term of FIVE (5) years from the date hereof and as long thereafter as the said land is operated by Lessee in the production of oil or gas.”

The leases also contained a normal force majeure clause, that stated in part “[i]f and when drilling ... [is] delayed or interrupted ... as a result of some order, rule, regulation, requisition or necessity of the government, or as the result of any other cause whatsoever beyond the control of Lessee, the time of such delay or interruption shall not be counted against Lessee, anything in this lease to the contrary notwithstanding. ...”

NY moratorium

On July 23, 2008, the governor of New York ordered a formal public environmental review of the combination of horizontal drilling and hydraulic fracturing. After a preliminary report, the gov-

ernor, on Dec. 31, 2010, issued an executive order that a final report be issued and that until the report was completed, no permits would be issued for horizontal drilled and hydraulic fractured units. At the end of 2014, the ban on hydraulic fracturing was made permanent by New York.

In February 2012, after the primary term of the lease had expired, Beardslee and the landowners commenced a declaratory action against Victory and two additional partial assignees of the lease, Inflection Energy LLC and Megaenergy Inc., in federal court in New York requesting that the leases be declared expired. The lessees argued that the force majeure clause extended the primary term due to the drilling ban.

In 2012, the federal court granted summary judgment in favor of the mineral owners. That court did not reach the force majeure issue because it held that that conventional drilling could still occur, so the oil companies could have drilled and extended the lease into a secondary term.

The New York appellate court found that the force majeure clause does not modify the primary term of the habendum clauses and will not extend the leases. The court said the force majeure clause only modified the lease in the secondary term, after a well has been drilled.

Lessons learned

As prices continue to be depressed, creative arguments will be used throughout oil-producing states to preserve leases. The force majeure clause can be used for many unplanned events like flooding, storms; creative arguments like this can often be made. Sometimes they succeed, but often, like in this case, they do not. Still, nothing ventured is nothing gained. ●

Contact Jannelle Steger Combs
at jc@combs-law.com

EMPIRE OIL COMPANY
YOUR BAKKEN BROKER SERVING THE WILLISTON BASIN FOR OVER 30 YEARS

BILL LACROSSE, PRESIDENT
E-MAIL: BILL@EMPIREOIL.NET PHONE: 701-774-2845 FAX: 701-774-3537
P.O. Box 1835
WILLISTON, ND 58802

To advertise in Petroleum News Bakken

Call 907.522.9469 or visit petroleumnewsbakken.com



www.PetroleumNewsBakken.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mike Ellerd	EDITOR-IN-CHIEF
Gary Park	CONTRIBUTING WRITER (CANADA)
Maxine Herr	CONTRIBUTING WRITER
Steve Sutherlin	CONTRIBUTING WRITER
Rose Ragsdale	CONTRIBUTING WRITER
Jannelle Steger Combs	LEGAL COLUMNIST
Eric Lidji	CONTRIBUTING WRITER
Bighorn Engineering	MAPPING/GIS
Mary Mack	CEO & GENERAL MANAGER
Raylene Combs	BAKKEN ADVERTISING EXECUTIVE
Ashley Lindly	RESEARCH ASSOCIATE
Mark Cashman	RESEARCH ASSOCIATE
Susan Crane	ADVERTISING DIRECTOR
Bonnie Yonker	AK / NATL ADVERTISING SPECIALIST
Steven Merritt	PRODUCTION DIRECTOR
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Tom Kearney	ADVERTISING DESIGN MANAGER
Heather Yates	BOOKKEEPER
Renee Garbutt	CIRCULATION MANAGER
Shane Lasley	IT CHIEF
Dee Cashman	RESEARCH ASSOCIATE

ADDRESS
P.O. Box 231647
Anchorage, AK 99523-1647

NEWS
MIKE ELLERD
406.551.0815
mellerd.pnb@gmail.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
907.522.9469
mreeve@petroleumnews.com

FAX NUMBER
907.522.9583

Several of the individuals listed above are independent contractors

OWNER: Petroleum Newspapers of Alaska LLC (PNA)
Petroleum News Bakken • Vol. 4, No. 1 • Week of April 19, 2015



Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to: P.O. Box 231647 Anchorage, AK 99523-1647)
Subscription prices in U.S. — \$117.95 1 year, \$215.95 2 years • Canada — \$205.95 1 year, \$374.95 2 years
Overseas (sent air mail) — \$239.95 1 year, \$435.95 2 years
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

**SAFETY ISN'T JUST A GOAL
IT'S A WAY OF LIFE**

Proudly serving the Oil and Gas industry for over 65 years, we specialize in complex projects where various Land Surveying, Right of Way, Remote Sensing, and Geographic Information Systems (GIS) services are required.

experience you can use
ESTABLISHED 1948

LOUNSBURY & ASSOCIATES
Surveyors • Engineers • Planners
lounsburyinc.com

● GOVERNMENT

ND's shifting approach on rail safety

Committee cuts \$972,000 for rail inspectors leaving safety concerns to the feds; other state leaders believe state-run is better

By **MAXINE HERR**

For Petroleum News Bakken

Some North Dakota lawmakers feel that ensuring rail safety needs to be left to the federal government and private industry, so they chose not to fund a state-run program of further safety checks.

On April 7, the North Dakota House Appropriations committee voted 16-5 to strip funding for two rail safety inspectors and one rail safety manager from the Public Service Commission's budget, claiming that the federal government has increased its own inspectors and BNSF Railway is implementing additional safety measures, therefore state inspectors are not necessary.

"It just grows government and duplicates efforts of the federal government," Rep. Jeff Delzer of Underwood who chairs the committee said. "It doesn't give any additional guarantee of safety."

The Senate had passed the bill (Senate Bill 2008) unanimously in February, and Senate Majority Leader Rich Wardner said he was disappointed that the House committee cut the safety program funding.

"We always talk about the state's rights and sometimes we need to take charge and make sure we're doing the job so the feds don't want to come in and regulate us," Wardner told Petroleum News Bakken. "That's an overall principle in all areas."

That was also the sentiment of PSC Chair Julie Fedorchak who told Petroleum News Bakken that the state does not traditionally "push things back to the feds," especially something that has a significant impact to the citizens.

"These trains go through 175 North Dakota commu-

nities — right through the middle of town — and so it's proven risks," Fedorchak said. "Now is the time to make this investment. We've never said we can eliminate every future accident or solve every problem, but we should be vested in the project. We should be working along with the feds to increase the safety and increase the efficiency and safety of the rail system."

Fedorchak said the Federal Railroad Administration had testified before the committee to explain the need for the program saying it welcomes a state-run program to assist its efforts.

"I've had a lot of conversations with the FRA and PHMSA (Pipeline and Hazardous Materials Safety Administration) and they are very supportive with the state getting involved," she said. "They have said they're doing the best they can with what they have, but there's a lot going on around the country and they don't have enough resources to do the job completely and protect every area like they'd like to."

Currently 30 states have state-run rail inspection programs to complement federal oversight and Fedorchak said about 10 of those are increasing the number of inspectors due to the increase in crude moving by rail.

'A broken promise'

Rep. Ron Guggisberg, a Democrat and fire department captain from Fargo, said scrapping the rail safety program represents a broken promise that leaves North Dakota at risk of further rail-related incidents. He carried a "minority report" on the bill when it was considered by the full House but it was not approved. It would have funded the rail safety program at a price tag of \$972,000 with money coming primarily from special fuel taxes of which the state receives about \$5 million a biennium. Instead, it has been moved to a conference committee.

"In the wake of the near-disaster outside Casselton, state officials were scrambling all over each other with proposals to address rail safety," Guggisberg said in a

statement. "Now, when it actually matters, members of the majority are actively opposing the creation of a rail safety program while GOP statewide officeholders sit back and do nothing about it. That's unacceptable to us, and we're going to push hard to bring the rail safety program online in the remaining days of the session."

During last November's elections, a state-run rail safety program met bipartisan approval as both Fedorchak and her opponent in the race Sen. Tyler Axness advocated for greater rail inspections. In addition, Gov. Jack Dalrymple issued a press release on March 31 touting the proposed rail safety program funding.

Democratic optimism

As the bill is hashed out in a conference committee, two Democratic senators are hopeful it will result in a funded program despite the House Appropriations' decision.

Sen. Tim Mathern said he's concerned about the risk of a railcar derailment and explosion in urban areas like his hometown of Fargo if the state doesn't get behind the program. He criticized the appropriations committee for making "blunt cuts" in a variety of budgets brought before them.

"It's a pattern ... there's just sort of like blatant cuts that are done just because there's too much money being spent," Mathern said.

Sen. Connie Triplett who served on the interim Energy Development and Transmission Committee where discussion of the rail safety program met strong bipartisan approval from both chambers is also disappointed to see the funding cut by House Republicans.

"There's a general resistance on the part of the more conservative Republicans on the House side — resistance to growing government of any type irrespective of oil prices being down now," she said. "It's just a philos-

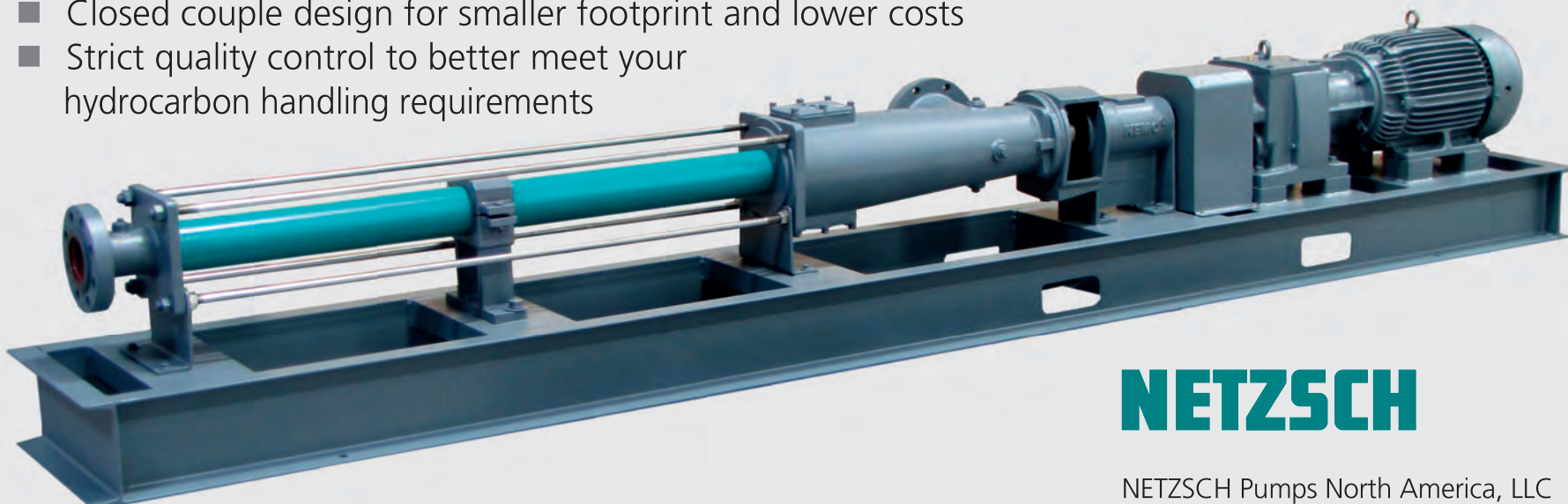
see **RAIL SAFETY** page 9



JULIE FEDORCHAK

NETZSCH Pipeline Pumps Ensure efficient and reliable LACT unit operation

- Proven dependability in the harshest conditions
- Pressures up to 1080 psi, special designs to 3000 psi
- Reduced wall stators produce up to 50% more pressure per stage to reduce overall length
- Flow rates up to 2200 gpm
- Low speed operation with lower shear and reduced NPSHr
- Low pulsation and steady flow in direct proportion to speed
- Materials available for widest range of API gravities
- Patented gear joint for superior lifetime
- Closed couple design for smaller footprint and lower costs
- Strict quality control to better meet your hydrocarbon handling requirements



NETZSCH

NETZSCH Pumps North America, LLC
Tel: 610-363-8010
email: LACT@netsch.com
www.LACT-unit.com

MOVING HYDROCARBONS

Pipelines pick up 3 WB export share points

By MIKE ELLERD

Petroleum News Bakken

After nine months of essentially flat crude oil export market share between pipelines and railroads, pipelines picked up three market share points in February bumping the percent of crude oil piped out of the Williston Basin from 35 in January to 38 according to data released by the North Dakota Pipeline Authority on April 14. All three of those market share points came from the rail side whose export share fell from 58 to 55 percent. Of the remaining 7 percent of Williston Basin crude produced in February, 6 percent went to Tesoro's Mandan refinery and 1

percent was trucked into Canada and into Canadian pipelines.

In May 2014 pipelines' market share increased 4 percentage points pulling in 34 percent of basin crude exports. That market share fluctuated between 33 and 35 percent through January before jumping another 4 points in February. The last time pipelines held a 38 percent market share was in October 2012, but that was only after a steady decline from 56 percent in March 2012. At that time rail accounted for just 28 percent of basin exports.

The highest market share pipelines have held over the four-plus years which the Pipeline Authority has been tracking was in April 2011 when pipelines account-

ed for 71 percent of exports and railroads accounted for 11 percent.

Brent/WTI price spread

The shift came amid a widening in the price differential between Brent and West Texas Intermediate, which averaged \$7.84 in February compared to \$2.35 in January. The January price spread was the lowest monthly differential going back to January 2011, and followed a year-long general decline that began in February 2014.

Typically a wider Brent/WTI spread favors more rail exports to the East and West Coasts where pricing more closely

follows the Brent benchmark, and in general Williston Basin exports have reflected that trend. While that was not the case in February, historically there has been a one- to two-month lag period before exports begin to respond to a shift in the Brent/WTI spread.

Looking forward, the Brent/WTI spread continued to widen in March averaging \$9.15 for the month. However, in the first half of April the spread again began narrowing, averaging \$5.62 through April 15. On April 15, Brent settled at \$60.32 on the New York Mercantile Exchange and WTI settled at \$56.39 for a corresponding differential of \$3.93.

Double H pipeline

Another factor that could affect export market share in coming months, according to Pipeline Authority Director Justin Kringstad, is startup of the Double H pipeline which Kinder Morgan recently purchased from Hiland Partners. That pipeline will provide 84,000 barrels per day of crude oil transport from western North Dakota to a regional hub in Guernsey, Wyoming, where a connection is available to Cushing, Oklahoma, through Tallgrass Energy's Pony Express pipeline. "So we will see a change in dynamics as that system goes into service, and that will be reflected in coming months in the transportation estimates," Kringstad said in an April 14 press conference, adding that the pipeline has some strong shipper commitments. ●

continued from page 1

RECORD IP

ers.

According to Petroleum News Bakken's research, the previous record high combined IP was 7,027 boe from Statoil's Beaux 18-19 7H in the neighboring Banks field, which now stands as the third highest North Dakota IP. That well, originally drilled by Brigham Oil and Gas, produced 5,417 barrels of oil and 9,663 mcf of gas when tested in August 2013.

Whiting's Tarpon 21-4H well, also in the Twin Banks field, now moves down from the No. 2 IP in the state to No. 4. That well produced 4,815 barrels of oil and 13,163 mcf of gas when tested in

October 2011 for a combined IP of 7,009.

The fifth highest IP is now Statoil's Beaux 18-19 4H middle Bakken well, on the same pad as the other Statoil well, that yielded 5,387 barrels of oil and 9,484 mcf of gas for a combined IP of 6,968 boe when tested in June 2013. That well was also originally drilled by Brigham Oil and Gas.

While not breaking a record, a third Whiting well on the same pad as the other Flatland Federal wells, a second bench Three Forks well, produced 4,207 barrels of oil and 10,340 mcf of gas in the first 24 hours for a combined IP of 5,930 boepd. The three Whiting wells filled the top three spots on the week's top 10 IP list for North Dakota wells (see page 11).

Since going on production Oct. 11, Whiting's top IP well has been on production for a total of 178 days yielding 263,964 barrels of oil and 641,379 mcf of gas for an average daily output of 1,483 barrels of oil and 3,602 mcf of gas with a combined average of 2,084 boepd.

Whiting's second IP well has been on production for 177 days yielding 231,901 barrels of oil and 536,215 mcf of gas for daily averages of 1,310 barrels, 3,030 mcf and 1,815 boe.

Statoil's Beaux 18-19 7H well has produced 215,734 barrels of oil and 317,305 mcf of gas over 475 days resulting in daily averages of 454 barrels, 668 mcf and 566 boe. ●

Contact Mike Ellerd
at mellerd.pnb@gmail.com

Contact Mike Ellerd
at mellerd.pnb@gmail.com



Deister, Ward & Witcher, Inc. Land Title Information



"THE LEADER IN THE TITLE INDUSTRY FOR OVER 70 YEARS."

WWW.DWWTITLES.COM OR CALL AN OFFICE NEAR YOU!

Patrick Schmalz
Dickinson, North Dakota
1-800-829-8428

Larry Kennedy
Billings, Montana
1-800-443-7874

William (Bill) Weddle
Denver, Colorado
1-800-829-8426

Jack Lamb
Casper, Wyoming
1-800-829-8427

James French
Ft. Smith, Arkansas
1-800-829-8425

● COMPANY UPDATE

Triangle's businesses rely on each other

Knowing that when its E&P business is rocky, its subsidiary is keeping cash flow steady helps it weather the pricing storm

By MAXINE HERR

For Petroleum News Bakken

While Triangle Petroleum generated 77 percent more revenue in fiscal year 2015, ending Jan. 31, compared to fiscal year 2014, its fracture stimulation subsidiary RockPile Energy Services boasted a 116 percent increase year-over-year.

"2014 was a year of excessive inflation where high costs were offset by high revenue, and in that environment our service business was a star performer, generating record revenues," President and CEO Jonathan Samuels told analysts on April 14.

Triangle is relying on the integrated model to give the flexibility it may need in the volatile commodity markets of 2015 while still planning to separate RockPile from Triangle in late 2016 or early 2017, Samuels said. He expects RockPile to feel some pressure in coming months as service companies have become very competitive, but the cost savings within Triangle's exploration and production business should make up for that loss.

"We are at the same profitability levels we were before when oil was \$90 because of how much capital costs were," Samuels said.

Triangle improved its well costs by 14 percent year-over-year, decreasing drilling time to a 16-day average. Its downspacing program in the Bakken was increased from six Bakken wells to eight with four Three Forks wells per drilling spacing unit. The company said it is doing further evaluation and testing of Three Forks downspacing.

Dominic Spencer, executive vice president of operations, said efficiency gains coupled with lower service prices allowed Triangle to bring average well costs to less than \$8 million, and he expects further reductions if the poor market conditions persist.

Output and capex

Triangle increased its production by 116 percent compared to fiscal year 2014 by reaching 11,441 barrels of oil equivalent per day, which was also slightly above the high end of its guidance. Chief Financial Officer Justin Bliffen said it was the third year in a row the company exceeded estimated production. The company completed 49 gross (34.5 net) operated wells with four rigs in fiscal year 2015. During the fourth quarter, it produced 14,747 boepd, more than double what it produced in the fourth quarter of fiscal year 2014 ending Jan. 31, 2014.

Spencer said the fourth quarter production success was due in large part to the optimization of its artificial lift practices early on in the life of the wells. Electronic submersible pumps allowed Triangle to produce greater initial rates so he expects them to be a "vital piece" of the company's strategy going forward. During fiscal year 2016 which began on Feb. 1, Triangle anticipates producing 11,000 to 13,000 boepd while cutting capital expenses by 71 percent from fiscal year 2015 levels.

Capital expenditures in fiscal year 2015 amounted to nearly \$672 million. Triangle incurred \$435 million of drilling and completion costs during the year which includes about a 7 percent cost savings due to a consolidated elimination benefit from RockPile, Caliber Midstream Partners and other services resulting in a combined reduction of \$31.6 million in oil and natural gas expenses.

Triangle raised its estimated net proved reserves by 61 percent to nearly 59,000 mboe at the end of fiscal year 2015, marking a 46 percent increase year-over-year.

RockPile's 'excellent year'

During fiscal year 2015, RockPile doubled its hydraulic fracturing fleet and workover rig segment. RockPile made more than \$418 million of its own revenue compared to about \$194 million the previous year. In the fourth quarter alone, RockPile brought in just over \$111 million. The company increased completions from the prior year by 83 percent with Triangle completions making up about half of those wells.

The decline in completions has been steeper and more rapid than RockPile anticipated, but Executive Vice President James Evans said the company has experienced a significant gain of market share even as frack spreads have declined by

about 50 percent. He said he's "proud we're busy" and by staying active, the company has been fortunate to avoid layoffs. RockPile began lowering prices in November and December to stay competitive.

"Pricing has continued to deteriorate since that time due to competitiveness in the basins where we operate," Evans said. "In some cases, we're seeing competitors bid work below cost in an attempt to avoid set down costs."

Finding opportunity

Samuels sees the upcoming year as one of opportunity because economic realities will eventually set in and potential sellers will emerge.

"You're going to see a lot of service companies out there go out of business," Samuels said. "When you go from 72 frack leads in the Bakken last July to 25 today, that's a big decrease. ... The fleets today in

the Williston can barely keep up with the 90 rigs, even though that's a low number," he continued. "The moment you see operators wanting to turn the pedal back on for completing their backlog, you're going to see (service) pricing recover."

The company plans to protect cash flow by hedging at \$60 a barrel for the next two years. While the company's previous hedge strategy during high oil prices was to hedge as much as possible 15 to 18 months out, the new price environment calls for a new strategy, Bliffen said.

"We can establish a decent return at those prices and it's also kind of a doomsday strategy," he said. "We won't hedge as much as we can ... but still putting on some cash flow protection at \$60 for the next two years gives us a lot of protection in a \$40 oil world." ●

Contact Maxine Herr at maxine606@msn.com

PUT THE BEST
IN YOUR FRAC.
GET THE MOST
OUT OF YOUR
WELL.

Increase production in the Bakken with high quality ceramics that outperform inferior proppant.

CARBO enables operators to build durable fractures with higher long-term conductivity that are proven to deliver increased production, EUR and return on investment.

Our wide-ranging portfolio of high quality ceramic proppant enables operators to design and build fractures to address the unique characteristics of formations in the Bakken. Manufactured to have a low internal porosity, our proppant is strong and durable to withstand pressure cycling and avoid the creation of fines, maintaining *more space to flow*® for the life of the well.

Choose CARBO proppant for increased conductivity in realistic downhole conditions and lower your finding and development cost per BOE.

carboceramics.com/ceramic-proppant

CARBO
Production. Enhanced.

Proudly made in the USA

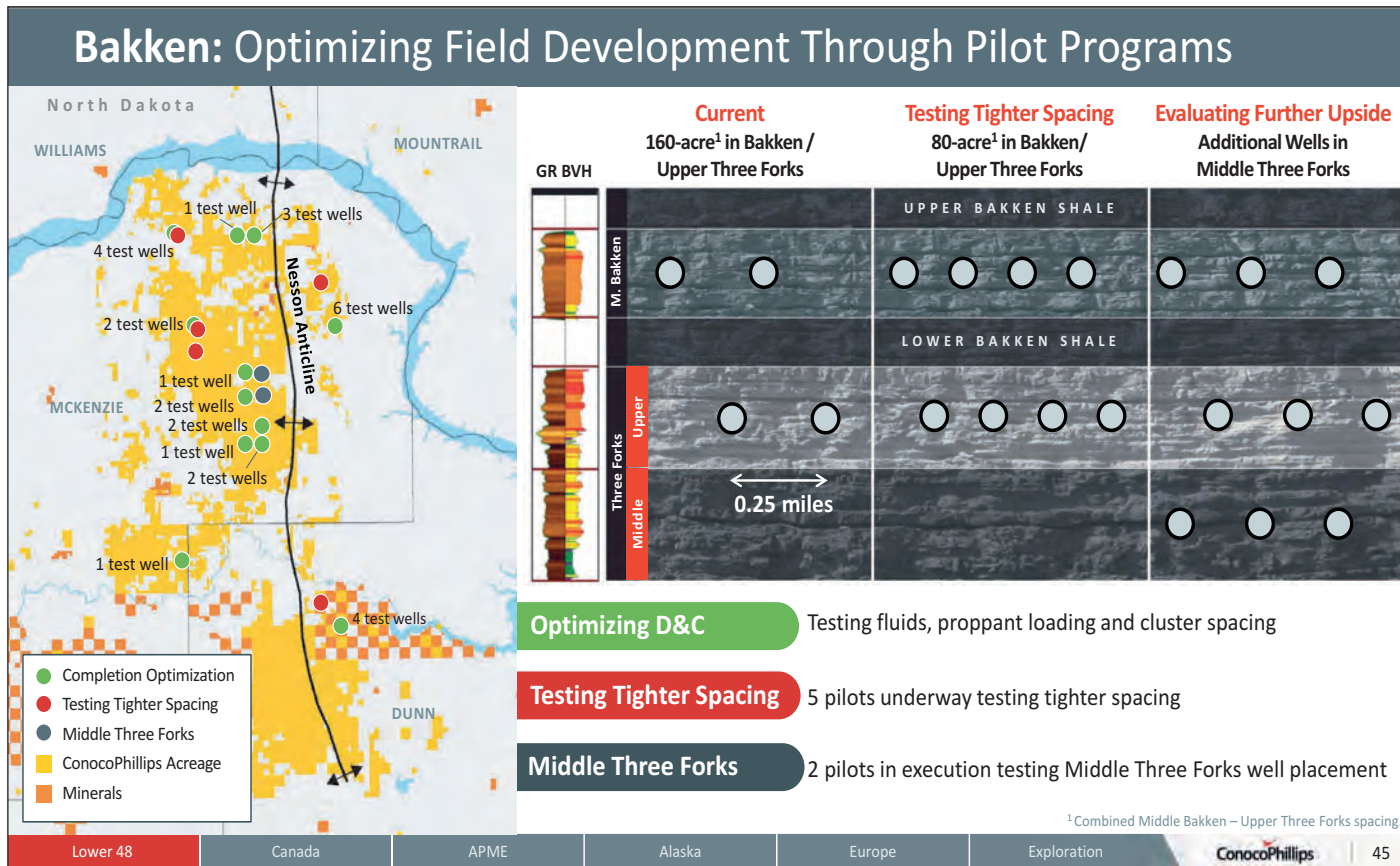
● COMPANY UPDATE

ConocoPhillips' optimistic look ahead

While lowering Bakken rigs to three in 2015, plans call for 10 rigs by 2017 as spacing and middle Three Forks pilots continue

By MIKE ELLERD

Petroleum News Bakken



After twice cutting its 2015 capital expenditure budget to nearly one-third of what it spent in 2014 along with plans to reduce its Bakken rig count to three by mid-year, ConocoPhillips is now looking ahead and anticipates ramping up that rig count to 10 by 2017. That increase in drilling activity, Executive Vice President for Exploration and Production Matt Fox told analysts and investors on April 8, is expected to result in a Bakken production increase of 20 percent between 2014 and 2017. "And that level of capital activity with our 600 million barrel resource base, we've got at least 10 years of drilling inventory to continue development of the Bakken," Fox said.

In addition, ConocoPhillips, which operates in the Bakken under its wholly owned subsidiary Burlington Resources, has been focusing on capital efficiency improvements over the last four years, a focus it plans to continue as it proceeds up a "learning curve." Fox said the company saw an approximately 40 percent reduction in the number of drilling days between 2011 and 2014 along with an approximately 50 percent reduction in completion cost per proppant unit. "And one of the reasons that we are continuing to see this learning curve and cost benefit is because most of our wells now are drilled from multi-well pads," Fox said. "In fact, in 2015, 90 percent of our wells will be drilled from multi-well pads."

In the Bakken the company's core operations are along the Nesson Anticline where it is the top producer in that region of northern McKenzie County. According to the latest data available from the North Dakota Department of Mineral Resources released April 14, Burlington Resources ranked as North Dakota's fifth largest Bakken oil producer averaging 62,997 barrels per day from operated, non-confidential wells.

Spacing pilots

In addition to focusing on cost efficiencies, ConocoPhillips is also focusing on the technical and science side of its Bakken operations. The company is currently developing the middle Bakken and upper Three Forks resources on a combined spacing of 160 acres, i.e., two middle Bakken and two upper Three Forks wells per 640 acres.

see CONOCO OUTLOOK page 9

SERVING THE BAKKEN SINCE 2009



E3 ENVIRONMENTAL
Enhancing Execution with Experience

Environmental Services

- ▶ Permitting
- ▶ State Siting
- ▶ NEPA (USFS, BLM, USACE)
- ▶ Environmental Surveys
- ▶ Environmental Inspections
- ▶ Emergency Response Planning
- ▶ Cultural Resource Services

PH: 888-414-2048

WWW.GO2E3.COM

MINNESOTA

NORTH DAKOTA

WISCONSIN



PETROLEUM NEWS BAKKEN NETWORK

WOULD YOU LIKE YOUR AD HERE?

To advertise in Petroleum News Bakken please call 907-522-9469 or visit PetroleumNewsBakken.com.

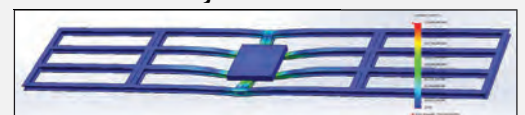


VERN WHITTEN PHOTOGRAPHY
WWW.VERNWHITTENPHOTOGRAPHY.COM

CUSTOM AERIAL PHOTOGRAPHY
WHITTENAERIALS@AOL.COM

CANVAS PRINTS (701) 261-7658

KNOW what your mats can handle.



Certified. Engineered. Load Rated. Security.

TRIGMAT.COM 855-444-MATS (6287)

• MOVING HYDROCARBONS

Washington tribe sues BNSF to stop oil trains

By MIKE ELLERD

Petroleum News Bakken

The Swinomish Indian Tribal Community of northwest Washington state filed a lawsuit in U.S. District Court April 7 in an attempt to stop Burlington Northern Santa Fe Railway from transporting crude oil across tribal lands en route to Tesoro's refinery at Anacortes. The tribe alleges BSNF has violated a 1991 easement agreement with the tribe that set limits on the number of trains allowed to cross tribal lands per day, as well as the number of cars in each train. Specifically, the agreement states that "Burlington Northern agrees that, unless otherwise agreed in writing, only one eastern bound train, and one western bound train, (of twenty-five (25) cars or less) shall cross the Reservation each day."

The suit specifically targets trains carrying Bakken crude oil. "The particular type of crude oil BNSF is shipping across the Right-of-Way is known as 'Bakken' crude," the complaint states, "so named for having originated in the Bakken Shale Formation located in parts of Montana, North Dakota, and southern Canada." The complaint goes on to say that crude oil "is a notoriously dangerous cargo to ship by rail." and adds that "A July 2014 report prepared by the U.S. Pipeline and Hazardous Materials Safety Administration indicates that

Bakken Crude is even more dangerous to ship than other types of crude oil."

The suit seeks a permanent ban on both trains longer than 25 cars and all shipments of Bakken crude. "The Tribe is entitled to a permanent injunction prohibiting BNSF from (1) running more than one train of twenty-five cars or less in each direction over the Right-of-Way per day and (2) shipping Bakken Crude across the Reservation." The complaint also seeks judgments against BNSF for trespass and breach of contract with judgment amounts to be determined at trial.

"We told BNSF to stop, again and again. We also told BNSF: convince us why we should allow these oil trains to cross the Reservation," Brian Cladoosby, tribal chairman, said in a written statement. "And we listened for two years, even while the trains kept rolling. But experiences across the country have now shown us all the dangers of Bakken Crude. It's unacceptable for BNSF to put our people and our way of life at risk without regard to the agreement we established in good faith."

A spokesperson for BNSF acknowledged that the company had received the complaint and was in the process of reviewing it. ●

Contact Mike Ellerd at mellerd.pnb@gmail.com

BNSF counters alleged spill reporting violations

In a March 19 report, the Washington Utilities and Transportation Commission took Burlington Northern Santa Fe to task for allegedly not properly reporting 14 hazardous materials releases in the state between Nov. 1, 2014, and Feb. 24, 2015. However, BNSF said it found that more than 90 percent of the alleged violations had inaccuracies.

The Bellingham Herald reported that six of the releases occurred in early December 2014 and accounted for 465 of the total 700 alleged reporting violations. While BNSF did, in fact, report the releases, the violations apparently resulted from BNSF not reporting the releases within 30 minutes of occurrence.

In a April 7 statement, BNSF said that from an initial review of the report, it found that in six of the incidents, BNSF noted the report was inaccurate in claiming that the releases were not reported to the proper hotline. In two other incidents, BNSF said the releases did not involve hazardous materials as defined by Washington state statute. The timing of another two releases was based on when the releases were suspected to have occurred, not when they were confirmed. And in one case the train was not in the custody of BNSF nor was it on BNSF property nor was it in transit.

"We are disappointed we were not provided the opportunity to review the report and correct some of the misinformation before it was issued," BNSF said. "The crux of the issue for BNSF centers on conflicting Washington state regulations," the company said, adding that the railroad is "committed to complying with all applicable regulatory guidelines and BNSF continues to review and update its reporting protocols in response to changing standards and interpretations of those standards."

— MIKE ELLERD

In a April 7 statement, BNSF said that from an initial review of the report, it found that in six of the incidents, BNSF noted the report was inaccurate in claiming that the releases were not reported to the proper hotline.

continued from page 8

CONOCO OUTLOOK

However, Executive Vice President for Technology and Products Al Hirshberg said the company's reservoir models indicate a tighter spacing would be beneficial. As a result, the company currently has five pilots testing 80-acre spacing with four middle Bakken and four upper Three Forks wells per 640-acres along the anticline extending from north-central McKenzie County down to northwest Dunn County (see slide).

But because those pilots are ongoing, the company does not yet have sufficient data on which to make any downspacing decisions. "We don't have definitive results yet from those tests, so we are continuing to drill 160-acre spacing until we have that," Hirshberg said.

Middle Three Forks testing

The company is also looking deeper into the Three Forks formation with two ongoing pilots where it is testing the middle bench on the crest of the anticline in McKenzie County. Hirshberg said results from a single middle Three Forks well has provided "some early results" that are "pretty promising," with performance comparable to upper Three Forks wells.

"So these pilots are starting to look at how broad of an area can we get these kind of results out of the Middle Three Forks and ultimately that will allow us to evaluate multi-layer development of this area along the lines of what you see on the left-hand side in terms of the well configuration," Hirshberg said.

The bigger picture

Looking ahead at what the future might hold for crude oil and natural gas prices, Chief Executive Officer Ryan Lance said that ConocoPhillips is anticipating a lower and more volatile commodity market over the next three years. However, even in that market environment, Lance said his company can "win" because of its "flexible and resilient" portfolio.

And integral to that "winning portfolio" is an increase in capital allocation to the company's North American unconventional plays. "They are capturing a large percentage of the capital as we think about the plan going forward over the next three years," Lance said, adding that the North American unconventional have shorter cycle times, higher returns

and higher margins.

The company is planning to spend approximately \$11.5 billion per year from 2015 through 2017, down from a previous 2014-17 capex of approximately \$16 billion per year. At the same time, the company plans to grow production from the 1.5 million barrels of oil equivalent per day output in 2014 to an anticipated 1.7 million boepd in 2017.

"So while we are keeping capital flat at \$11.5 billion, there are some internal workings that are freeing up more flexibility for the company as we think about the capital program and the risk to the commodity price environment over the next couple of years," Lance said. "But even at this lower capital spend, we still are going to grow the company." ●

Contact Mike Ellerd at mellerd.pnb@gmail.com

continued from page 5

RAIL SAFETY

ophy for them."

Rail traffic has increased in North Dakota by 233 percent between 2000 and 2012 and the state has seen more than 75 accidents related to track and equipment problems in the last five years, according to the PSC. Approximately 60 percent of the 1.1 million barrels of oil produced daily from the Bakken region is being moved by rail.

Not the first

The PSC budget bill is not the first to meet objections from House Republicans on rail safety. Sen. George Sinner introduced Senate Bill 2293 which would have created a rail safety committee to address statewide needs but it was defeated in the House with a 34-55 vote. In February, the House rejected House Bill 1357 which would have required any train operating in the state to have at least two crew members on board. ●

Contact Maxine Herr at maxine606@msn.com



Give your career a lift with a Master of Energy Business.

TU's MEB is ranked in the top 40 online graduate business programs by U.S. News & World Report.

Online delivery | www.utulsa.edu/meb



THE UNIVERSITY of
TULSA
Collins College of Business

GOVERNMENT

Aiming to restore landowner trust

North Dakota lawmakers advance legislation to establish the 'best of the best' pipeline construction design and monitoring rules

By MAXINE HERR

For Petroleum News Bakken

North Dakota legislators have advanced several pieces of oil and gas legislation to help mend fences between landowners and the industry.

House and Senate Republicans credit a multi-faceted collaboration for the passage of a few oil and gas bills presented to the Legislature, primarily a bill for more stringent rules for gathering pipelines.

House Bill 1358 is an all-encompassing gathering pipeline monitoring bill which provides \$1.5 million to clean up legacy oil and gas issues such as saltwater spill damage and abandoned wells and pipelines. It also funds a \$1.5 million study by the University of North Dakota's Energy and Environmental Research Center for technology advancements to monitor gathering lines. Finally, it gives \$500,000 to a pilot project intended to remediate salt and other soil contaminants from legacy spills. The money comes from the abandoned oil and gas well plugging and site reclamation fund which is currently at \$11 million.

"If we don't get in front of some of these concerns ... we're going to continue to have issues putting pipe in the ground," Rep. Todd Porter of Mandan said at an April 14 press conference.

The gathering pipeline bill was described by legislators as a "landmark piece of legislation" because it took language from five separate bills to create the "best of the best" pipeline design and monitoring rules, Porter said. The Legislature passed basic regulatory requirements on gathering pipelines in the 2013 session, but HB 1358 advances those regulations to require companies: to submit construction design plans to the North Dakota Industrial Commission, upon request; to be subject to inspections by a third party; and to bond gathering pipeline operations. The bill applies to gathering



From left, Rep. Dick Anderson, Sen. Kelly Armstrong, Rep. Mike Nathe and Rep. Todd Porter.

pipelines carrying crude oil, natural gas, carbon dioxide or water produced in association with oil and gas development. EERC must provide recommendations on the pipeline technology research pilot program to NDIC no later than Dec. 1, 2015, in order to allow NDIC to write new rules based on research findings. Then the Legislature will likely address further regulations for pipeline technology systems during the 2017 session.

"Anytime we can take a look at this technology and develop it, the better off we're going to be," said Rep. Mike Nathe of Bismarck. "North Dakota is leading that effort to make our systems safer and better as we go forward."

EERC excited for project

EERC's Associate Director for Research John Harju told Petroleum News Bakken that his group is prepared to figure out how to improve the state's pipelines through assessments of what is currently being done and how, as well as what materials are available to do things better.

see PIPELINE RULES page 16

Transforming rubbish to roads

A bill to study recycling of drill cuttings was approved by the North Dakota Legislature April 14 in an effort to develop beneficial uses for the byproduct of oil production.

Rep. George Keiser of Bismarck joined fellow Republicans following the final vote in announcing the passage of House Bill 1390 that establishes one or more pilot projects through the state Department of Health. The department will examine and determine standards for rules governing the operation and permitting of commercial oilfield special waste recycling facilities.

North Dakota produces approximately 1 million tons of oil drilling waste each year. Keiser said there are companies transforming drill cuttings into useful products like road surface material or covers for other types of pits around the world, and there is interest from waste disposal operators in North Dakota to do the same.

Currently, drill cuttings are stabilized and buried at the drilling location or at special waste landfills. By giving them a new use, Keiser said the project is a "win-win" for North Dakota.

"It's really an exciting opportunity," Keiser said. "We're going to take a byproduct we're currently putting into the ground which doesn't have any value — and may long-term potentially create an

see RUBBISH TO ROADS page 16



GEORGE KEISER

GLASSER IMAGES



PERCHERON
ENERGY | FIELD SERVICES | SURVEY

"I'm dedicated to handling your project the right way, every step of the way."

*Katie, Document Specialist
Percheron Field Services*

DISCOVER THE PERCHERON EXPERIENCE
FULLY INTEGRATED LAND SERVICES YOU CAN COUNT ON

From right-of-way to surveying, lease acquisitions to environmental support, Percheron delivers consistent, reliable and fully integrated land services throughout the United States. You need people on your side who know every aspect of the industry. We bring together the right people, process and technology to create the complete Percheron Experience—so you get consistent results, every time.

For your convenience, Percheron has Regional offices in Denver, CO, and Dickinson, ND, to support operations in the Bakken Shale.

TO LEARN MORE call 888.232.3149 | visit percheronllc.com

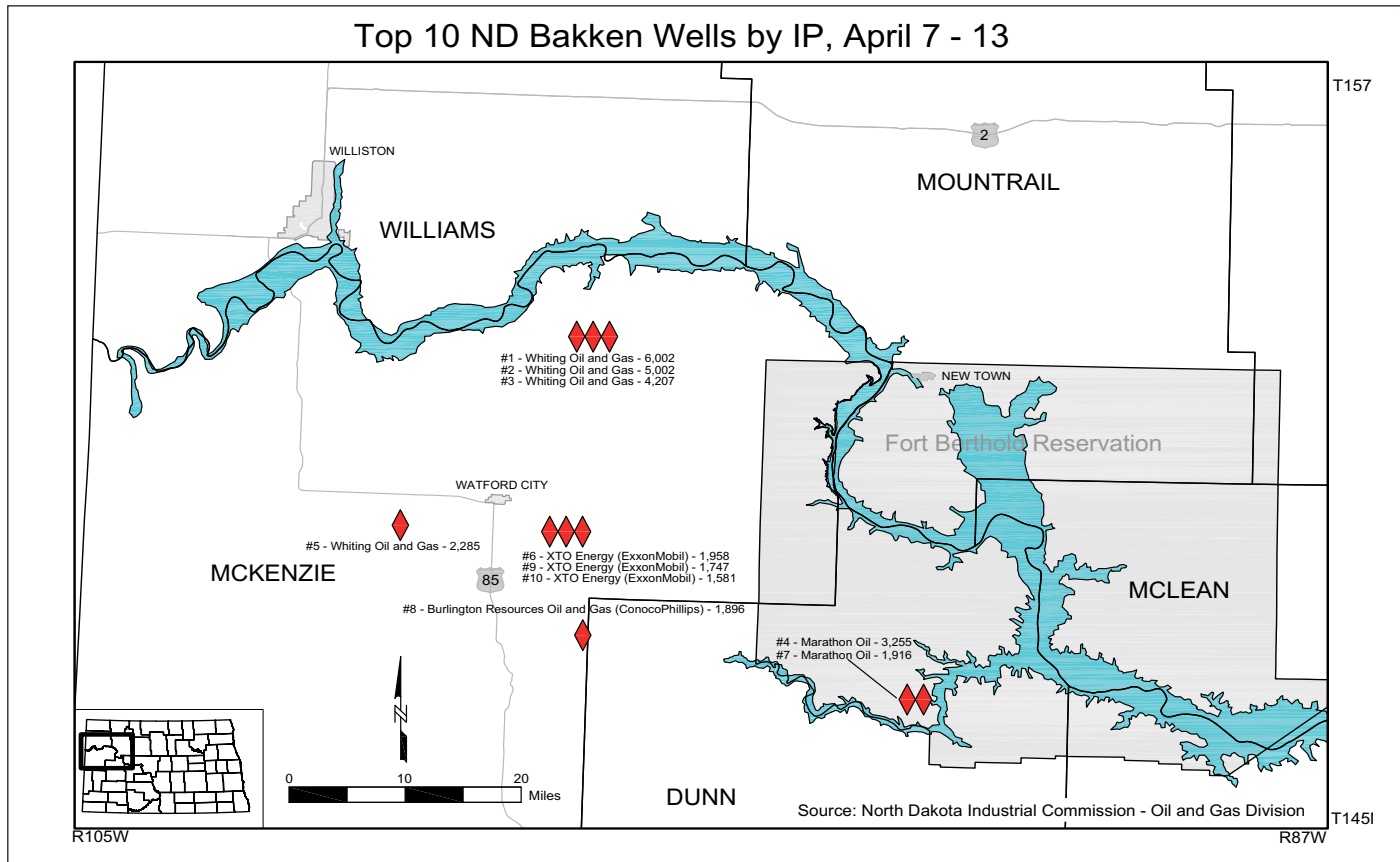
© Copyright Percheron llc. 2014

Petroleum NEWS BAKKEN Stats

● BAKKEN COMMENTARY

Whiting tops all of the week's stats charts

BIGHORN ENGINEERING



MIKE ELLERD

Petroleum News Bakken

Although North Dakota's oil production declined in February according to preliminary data released by the Department of Mineral Resources on April 14, the decline was not felt across the board. The state's top three producers all saw their output rise to some extent in the month, and combined they accounted for 30 percent of the state's production. They were the only Bakken operators breaking the 100,000 bpd mark (see chart on page 15). Full February production data see is available at the following link: <http://bit.ly/1ELmTg6>.

Whiting Oil and Gas gained on its position as North Dakota's top Bakken producer averaging 132,132 barrels per day, up 2.3 percent over January. Continental Resources, the state's No. 2 producer, saw a 4.1 percent increase in output averaging 117,072 bpd in February. Hess Corp.,

North Dakota's third largest Bakken production, held ground with production averaging 110,724 bpd, a slight rise (23 bpd) over January.

Among the remaining top 10 Bakken producers in the state, ExxonMobil subsidiary XTO Energy and ConocoPhillips subsidiary Burlington Resources each held their positions as the Nos. 4 and 5 producers, respectively, even though Burlington's production fell by 1.4 percent (XTO's production increased but by less than 1 percent). EOG Resources slipped one position to the No. 7 spot after a 7.1 percent output decline, moving Statoil up one position to the No. 6 spot even though its production also fell by 3.1 percent. Marathon Oil moved up to No. 8 after its production increased 4.5 percent. Oasis Petroleum's production also increased in February, but not as much as Marathon's, putting Oasis in the No. 9 position. And QEP Energy held firm its No. 10 position after a nearly 12

percent rise in output.

Whiting sets IP record

Whiting came in with the top three 24-hour initial production oil volumes among those reported in North Dakota between April 7 and 13, one of which set a new state record (see story on page 1). Whiting's Flatland Federal 11-4TFH, an offsetting upper Three Forks well in the Twin Valley field in northern McKenzie County, yielded 6,002 barrels in the first 24 hours of production, making that the highest ever oil IP recorded in the state according to Petroleum News Bakken's research. While the well was tested in October, 2014, it was on confidential status and the IP data were only recently posted on DMR's website.

Two other wells on the same pad came in with the Nos. 2 and 3 IPs reported for the week. The No. 2 IP came from a middle Bakken well that produced 5,002 barrels in the first 24 hours, and a second bench

Three Forks well produced 4,207 barrels putting it in the No. 3 spot. Another Whiting well, a middle Bakken well in the Arnegard field in central McKenzie County, came in with the No. 5 IP reported for the week at 2,285 barrels (see map this page and charts on pages 13 and 15).

Of the remaining six IPs on this week's top 10 list, Marathon Oil filled two positions with two common-pad wells in the Moccasin Creek field in northern Dunn County, one a middle Bakken well in the No. 4 spot at 3,255 barrels and the other a Three Forks well in the No. 7 spot at 1,916 barrels.

XTO filled the Nos. 6, 9 and 10 spots with three common-pad wells in the Siverston field in eastern McKenzie County with IPs of 1,958, 1,747 and 1,581 barrels. The No. 6 well is completed in the middle Bakken while the other two XTO wells are completed in the Three Forks formation.

Rounding out the list is a Burlington Resources well middle Bakken well in the Haystack Butte field in east-central McKenzie County that filled the No. 8 position at 1,896 barrels.

The week's top 10 IPs averaged 2,985 barrels, the highest average thus far in 2015 surpassing the previous high average of 2,808 barrels. That average was bolstered by the three Whiting wells and Marathon's No. 4 well.

North Dakota permitting

A total of 36 well permits were issued in North Dakota between April 7 and 13, most in McKenzie and Mountrail counties (see charts on pages 14 and 15). That is an increase of four over the 32 permits issued the previous week, which was the lowest number of permits issued in any week thus far in 2015. Whiting received the most permits at ten, four in McKenzie County, four in Williams County and two in Mountrail County. ●

OASIS
PETROLEUM

Committed to the Bakken
Supporting Williston and Surrounding Communities

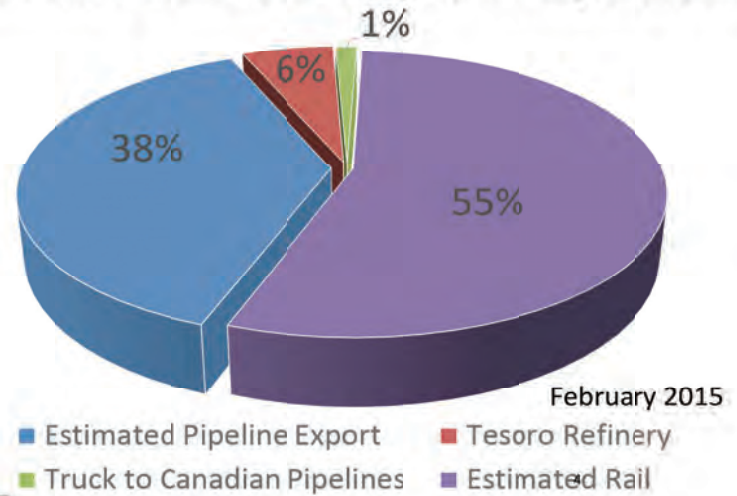
Responsibly Developing Our Natural Resources

US Williston Basin Oil Production - 2015

MONTH	ND	Eastern MT*	SD	TOTAL
January	1,191,198		4,686	--
February	1,177,094			--
March				--
April				--
May				--
June				--
July				--
August				--
September				--
October				--
November				--
December				2

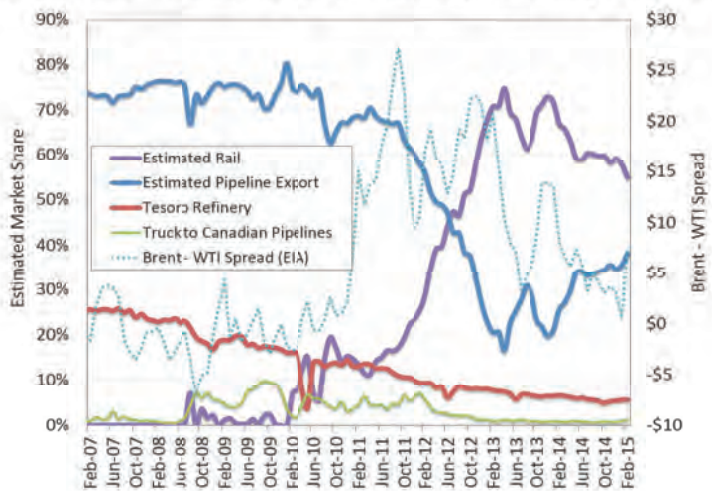
JJ Kringstad - North Dakota Pipeline Authority

Estimated Williston Basin Oil Transportation



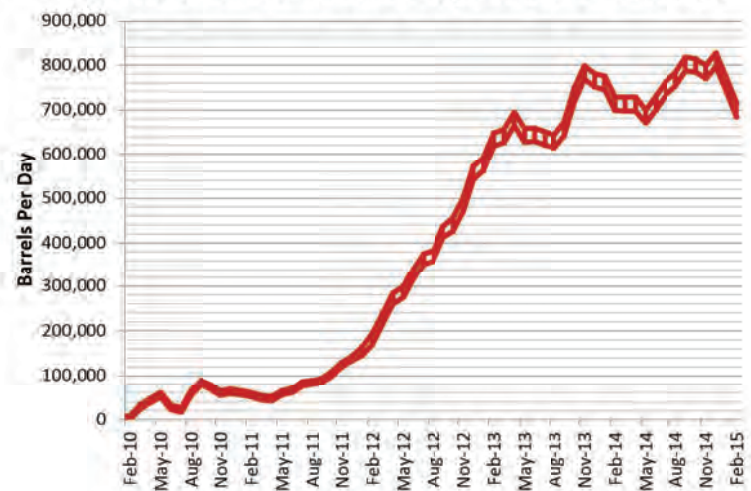
JJ Kringstad - North Dakota Pipeline Authority

Estimated Williston Basin Oil Transportation



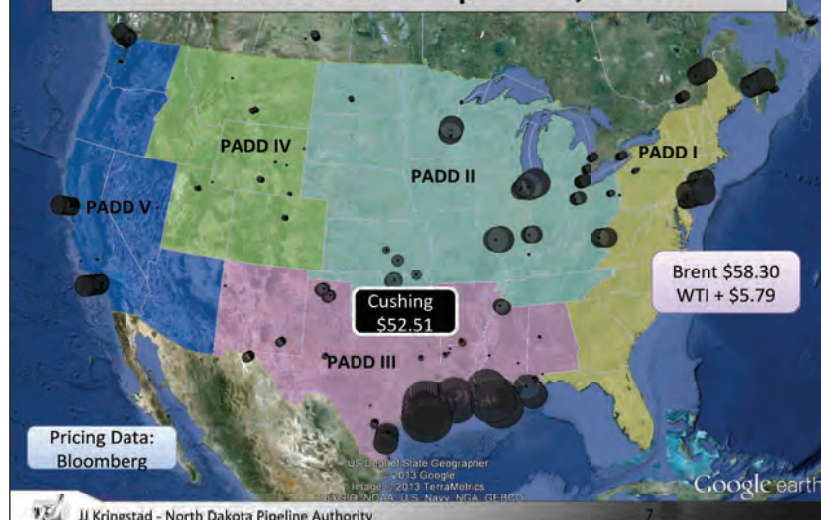
JJ Kringstad - North Dakota Pipeline Authority

Estimated ND Rail Export Volumes



JJ Kringstad - North Dakota Pipeline Authority

Crude Oil Prices – Apr. 14, 2015



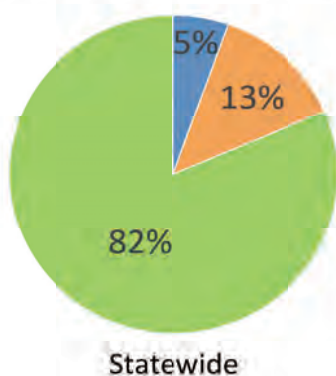
JJ Kringstad - North Dakota Pipeline Authority

TransCanada: Upland Pipeline



JJ Kringstad - North Dakota Pipeline Authority

Solving the Flaring Challenge



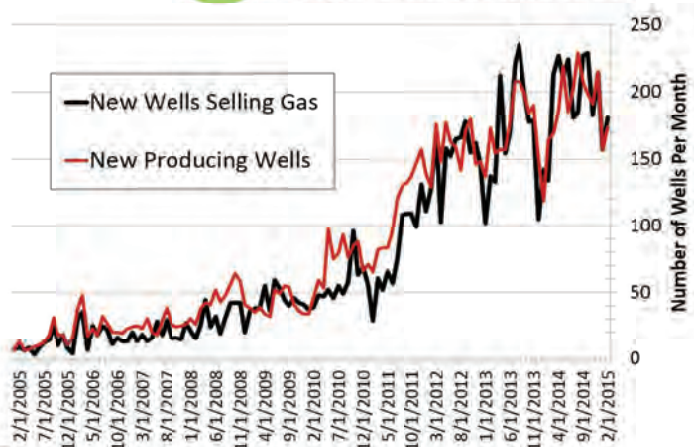
GREEN – % of gas captured and sold
Blue – % flared from zero sales wells
Orange – % flared from wells with at least one mcf sold.

Simple Terms
Blue – Lack of pipelines
Orange – Challenges on existing infrastructure

Feb 2015 Data – Non-Confidential Wells

JJ Kringstad - North Dakota Pipeline Authority

Capturing the 5% Faster Well Connections



JJ Kringstad - North Dakota Pipeline Authority



IPs for ND Bakken wells

April 7-13, 2015

This chart contains initial production rates, or IPs, for active wells that were filed as completed with the state of North Dakota from April 7-13, 2015 in the Bakken petroleum system, which includes formations such as the Bakken and Three Forks. The completed wells that did not have an available IP rate (N/A) likely haven't been tested or were awarded confidential (tight-hole) status by the North Dakota Industrial Commission's Department of Minerals. This chart also contains a section with active wells that were released from confidential status during the same period, April 7-13. Again, some IP rates were not available (N/A). The information was assembled by Petroleum News Bakken from NDIC daily activity reports 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 because of space limitations. Some of the companies, or their Bakken petroleum system assets, have been acquired by others. In some of those cases, the current owner's name is in parenthesis behind the owner of record, such as ExxonMobil in parenthesis behind XTO Energy. If the chart is missing current owner's names, please contact Ashley Lindly at alindly@petroleumnewsbakken.com.

County (Co.) abbreviations are as follows — BIL: Billings, BOT: Bottineau, BOW: Bowman, BRK: Burke, DIV: Divide, DUN: Dunn, GDV: Golden Valley, MCH: McHenry, MCK: McKenzie, MCL: McLean, MER: Mercer, MNT: Mountrail, REN: Renville, SLP: Slope, STK: Stark, WRD: Ward, WIL: Williams

IPs for completed North Dakota wells

NDIC No.	Well Name	Field	Location	Spacing	Co.	Geologic Target	Wellbore Type	Total Depth	IP Test Date	IP Rate (bbl)	IP Nat. Gas (mcf)	IP Water (bbl)
Continental Resources												
29366	Rader 2-24H	Avoca	NENW 24-154-100	N/A	WIL	N/A	conf.	N/A	N/A	963	N/A	732
29367	Rader 3-24H1	Avoca	NENW 24-154-100	N/A	WIL	N/A	conf.	N/A	N/A	651	N/A	1,027
Emerald Oil												
28254	Excalibur 6-25-36H	Boxcar Butte	NENE 25-149-102	N/A	MCK	N/A	conf.	N/A	N/A	1,410	N/A	3,334
Hess Bakken Investments II												
28719	EN-Neset- 156-94-0706H-5	Big Butte	SWSE 7-156-94	2SEC	MNT	Bakken	horz.	20,481'	3/16/15	553	655	613
27161	GN-Tom Jen- 157-97-0409H-2	Ray	SESE 33-158-97	2SEC	WIL	Bakken	horz.	20,676'	3/20/15	583	869	539
28485	HA-Dahl- 152-95-0706H-6	Hawkeye	SWSW 7-152-95	2SEC	MCK	Bakken	horz.	21,525'	3/16/15	1,506	2,545	241
28179	HA-Rolfsrud- 152-96-1720H-3	Westberg	NENE 17-152-96	2SEC	MCK	Bakken	horz.	20,250'	3/30/15	1,356	2,595	143
Marathon Oil												
28075	Anthony USA 23-14H	Moccasin Creek	NESW 14-147-93	ICO	DUN	Bakken	horz.	23,148'	2/3/15	3,255	1,697	2,343
24745	Melvain Fox USA 14-4TFH	Moccasin Creek	NWSE 14-147-93	ICO	DUN	Bakken	horz.	24,828'	2/19/15	1,916	1,498	1,496
Oasis Petroleum North America												
28046	Holmes Harbour 5501 14-5 2B	Tyrone	LOT1 5-155-101	4SEC	WIL	Bakken	horz.	20,965'	2/18/15	1,470	1,028	3,413
Petro-Hunt												
29385	State 159-94-25B-36-1H	East Tioga	NWNW 25-159-94	2SEC	BRK	Bakken	horz.	19,179'	4/4/15	387	512	1,360
SM Energy												
28813	James 16-35H	Camp	SESE 35-152-100	2SEC	MCK	Bakken	horz.	20,300'	1/7/15	939	1,275	623
28228	Overland 20-17-162-98H 4MD	Blooming Prairie	SWSW 20-162-98	2SEC	DIV	Bakken	horz.	17,639'	1/25/15	871	894	885
Whiting Oil and Gas												
30119	Shirley Moen 44-34-3H	Arnegard	SESE 34-150-100	2SEC	MCK	Bakken	horz.	20,812'	3/18/15	2,285	3,700	1,695
XTO Energy (ExxonMobil)												
28939	Allen 21X-17A	Dollar Joe	NENW 17-155-96	4SEC	WIL	Bakken	horz.	20,387'	3/8/15	1,172	1,988	1,556
28941	Allen 21X-17B	Dollar Joe	NENW 17-155-96	2SEC	WIL	Bakken	horz.	19,622'	3/20/15	1,245	2,854	2,077
28940	Allen 21X-17E	Dollar Joe	NENW 17-155-96	2SEC	WIL	Bakken	horz.	20,098'	3/15/15	1,280	2,290	924
28942	Allen 21X-17F	Dollar Joe	NENW 17-155-96	2SEC	WIL	Bakken	horz.	N/A	3/25/15	605	1,106	2,026
28553	HM Hove 34X-33D	West Capa	SWSE 33-155-96	2SEC	WIL	Bakken	horz.	20,390'	3/1/15	1,580	3,961	793
28552	HM Hove 34X-33G	West Capa	SWSE 33-155-96	2SEC	WIL	Bakken	horz.	20,213'	3/5/15	1,302	1,628	3,680
28741	Johnson 24X-31A	Siverston	SESW 31-150-97	2SEC	MCK	Bakken	horz.	20,894'	3/17/15	1,958	3,520	1,264
28742	Johnson 24X-31E	Siverston	SESW 31-150-97	2SEC	MCK	Bakken	horz.	20,952'	3/13/15	1,335	1,955	1,428
28887	Johnson 24X-31EXH	Siverston	SESW 31-150-97	4SEC	MCK	Bakken	horz.	21,801'	3/22/15	1,747	2,380	1,105
28743	Johnson 24X-31F	Siverston	SESW 31-150-97	2SEC	MCK	Bakken	horz.	20,793'	3/9/15	1,581	3,215	1,712

IPs for ND wells released from confidential status

NDIC No.	Well Name	Field	Location	Spacing	Co.	Geologic Target	Wellbore Type	Total Depth	IP Test Date	IP Rate (bbl)	IP Nat. Gas (mcf)	IP Water (bbl)
Burlington Resources Oil and Gas (ConocoPhillips)												
29189	Ora 32-24MBH	Haystack Butte	SWNE 24-148-98	2SEC	MCK	Bakken	horz.	22,204'	12/16/14	1,896	2,440	1,728
Continental Resources												
29627	Mary 1-16XH	Ranch Creek	SESW 16-149-98	ICO	MCK	Bakken	horz.	25,518'	2/4/15	821	881	1,490
Hess Bakken Investments II												
28915	EN-VP and R- 154-94-2536H-3	Alkali Creek	SWSE 24-154-94	2SEC	MNT	Bakken	horz.	20,835'	3/17/15	1,194	1,545	648
Hunt Oil												
28748	Smoky Butte 160-100-18-19H-1	Smoky Butte	NWNE 18-160-100	2SEC	DIV	Bakken	horz.	18,872'	12/14/14	355	304	904
Newfield Production												
25072	Sand Creek State 153-96-16-2H	Sand Creek	SESE 16-153-96	SEC	MCK	Bakken	horz.	14,950'	1/8/15	1,449	3,276	363
Oasis Petroleum North America												
28061	Helling Trust Federal 5494 43-22 16T3	Alkali Creek	SWSE 22-154-94	2SEC	MNT	Bakken	horz.	20,770'	2/21/15	961	1,204	1,016
25247	Mabel Federal 5201 41-12T	Camp	SWSW 12-152-101	2SEC	MCK	Bakken	horz.	20,446'	11/9/14	531	526	2,607
28127	McCaughey 5501 13-3 7T2	Tyrone	LOT2 3-155-101	2SEC	WIL	Bakken	horz.	20,955'	2/7/15	787	220	1,095
Oxy USA (Occidental Petroleum)												
28039	William Kubischta 4-11-14H-143-96	Fayette	NWNE 11-143-96	2SEC	DUN	Bakken	horz.	20,295'	10/14/14	504	187	1,741
Samson Resources (KKR & Co.)												
28950	Ness 3229-4H	Blooming Prairie	LOT1 5-162-98	2SEC	DIV	Bakken	horz.	18,970'	2/28/15	454	89	1,253
28949	Ness 3229-6H	Blooming Prairie	LOT1 5-162-98	2SEC	DIV	Bakken	horz.	18,570'	2/26/15	653	606	1,595
29032	Odyssey 0508-6H	Blooming Prairie	LOT1 5-162-98	2SEC	DIV	Bakken	horz.	17,754'	2/22/15	557	705	932
Whiting Oil and Gas												
27521	Flatland Federal 11-4HR	Twin Valley	LOT4 4-152-97	2SEC	MCK	Bakken	horz.	20,435'	10/10/14	5,002	12,706	2,673

ND IP continued from page 13

NDIC No.	Well Name	Field	Location	Spacing	Co.	Geologic Target	Wellbore Type	Total Depth	IP Test Date	IP Rate (bbl)	IP Nat. Gas (mcf)	IP Water (bbl)
27520	Flatland Federal 11-4TFH	Twin Valley	LOT4 4-152-97	2SEC	MCK	Bakken	horz.	21,670'	10/11/14	6,002	10,932	1,717
27522	Flatland Federal 11-4TFHU	Twin Valley	LOT4 4-152-97	2SEC	MCK	Bakken	horz.	21,640'	10/12/14	4,207	10,340	1,322
WPX Energy												
26836	Wolf Chief 27-34HB	Mandaree	NENW 27-149-93	2SEC	DUN	Bakken	horz.	21,024'	3/4/15	861	363	294
26837	Wolf Chief 27-34HC	Mandaree	NENW 27-149-93	2SEC	DUN	Bakken	horz.	21,156'	3/5/15	1,234	30	5,934
26838	Wolf Chief 27-34HZ	Mandaree	NENW 27-149-93	2SEC	DUN	Bakken	horz.	21,270'	2/22/15	802	438	746
XTO Energy (ExxonMobil)												
29012	Nelson 24X-11E	Garden	SESW 11-151-98	2SEC	MCK	Bakken	horz.	20,845'	3/2/15	1,521	3,623	2,609

—Ashley Lindly | alindly@petroleumnewsbakken.com



North Dakota oil permit activity

April 7–13, 2015

Abbreviations - Following are the abbreviations used in the report and what they mean:

FNL = From North Line | FEL = From East Line

FSL = From South Line | FWL = From West Line

Permits issued

Well Name	Location	Footages	Field	Geologic Target	Wellbore Type	Elev.	NDIC No.	API No.	NDIC date
Dunn Co.									
Oxy USA (Occidental Petroleum)									
State Dvorak A 8-16-21H-142-96	NENE 16-142-96	510'FNL and 1,017'FEL	Manning	Bakken	horz.	2,349'	31047	33-025-02899	4/10/15
State Dvorak A 9-16-21H-142-96L	NENE 16-142-96	510'FNL and 937'FEL	Manning	Bakken	horz.	2,348'	31048	33-025-02900	4/10/15
McKenzie Co.									
Oasis Petroleum North America									
Andersmadson 5201 42-24 3B	SESW 24-152-101	257'FSL and 1,633'FWL	Camp	Bakken	horz.	1,881'	31053	33-053-06860	4/13/15
Andersmadson 5201 42-24 4T	SESW 24-152-101	257'FSL and 1,666'FWL	Camp	Bakken	horz.	1,881'	31054	33-053-06861	4/13/15
Andersmadson 5201 42-24 5B	SESW 24-152-101	257'FSL and 1,699'FWL	Camp	Bakken	horz.	1,880'	31055	33-053-06862	4/13/15
Andersmadson 5201 42-24 6T	SESW 24-152-101	257'FSL and 1,732'FWL	Camp	Bakken	horz.	1,880'	31056	33-053-06863	4/13/15
Thunderbird Resources									
Watson B N34-11-2H	SWSE 11-146-99	275'FSL and 2,306'FEL	Ranch Creek	N/A*	conf.	2528'	31042	33-053-06852	4/10/15
Watson B N34-11-3H	SWSE 11-146-99	300'FSL and 2,306'FEL	Ranch Creek	N/A*	conf.	2528'	31041	33-053-06851	4/10/15
Watson B N34-11-4H	SWSE 11-146-99	325'FSL and 2,306'FEL	Ranch Creek	N/A*	conf.	2529'	31040	33-053-06850	4/10/15
Whiting Oil and Gas									
Smokey 2-16-21-15H3	NWNE 16-149-98	382'FNL and 2,331'FEL	Pembroke	Bakken	horz.	2,381'	31049	33-053-06856	4/13/15
Smokey 2-16-21-16H	NWNE 16-149-98	555'FNL and 2,285'FEL	Pembroke	Bakken	horz.	2,373'	31052	33-053-06859	4/13/15
Smokey 2-16-21-16H3	NWNE 16-149-98	512'FNL and 2,296'FEL	Pembroke	Bakken	horz.	2,375'	31051	33-053-06858	4/13/15
Smokey 2-16-21-16HA	NWNE 16-149-98	468'FNL and 2,308'FEL	Pembroke	Bakken	horz.	2,378'	31050	33-053-06857	4/13/15
XTO Energy (ExxonMobil)									
Homer Federal 14X-32B	SWSW 32-154-96	301'FSL and 290'FWL	Grinnell	N/A*	conf.	2,112'	31046	33-053-06855	4/10/15
Homer Federal 14X-32F	SWSW 32-154-96	331'FSL and 290'FWL	Grinnell	N/A*	conf.	2,113'	31045	33-053-06854	4/10/15
Homer Federal 14X-32F2	SWSW 32-154-96	361'FSL and 290'FWL	Grinnell	N/A*	conf.	2,111'	31044	33-053-06853	4/10/15
Mountrail Co.									
EOG Resources									
Austin 92-1807H	SESE 18-154-90	390'FSL and 845'FEL	Parshall	N/A*	conf.	2,311'	31043	33-061-03674	4/10/15
Shell 5-1930H	LOT1 19-153-89	547'FNL and 425'FWL	Parshall	N/A*	conf.	2,107'	31032	33-061-03666	4/9/15
Shell 6-1930H	LOT1 19-153-89	497'FNL and 425'FWL	Parshall	N/A*	conf.	2,107'	31031	33-061-03665	4/9/15
Shell 48-3231H	SWSE 32-153-89	480'FSL and 2,125'FEL	Parshall	N/A*	conf.	2,014'	31022	33-061-03660	4/7/15
Shell 49-3231H	SWSE 32-153-89	530'FSL and 2,125'FEL	Parshall	N/A*	conf.	2,014'	31021	33-061-03659	4/7/15
Shell 52-1930H	LOT1 19-153-89	397'FNL and 425'FWL	Parshall	N/A*	conf.	2,107'	31030	33-061-03664	4/9/15
Hess Bakken Investments II									
EN-Frandson- 154-93-2116H-7	SWSE 21-154-93	597'FSL and 1,913'FEL	Robinson Lake	N/A*	conf.	2,299'	31027	33-061-03661	4/8/15
EN-Frandson- 154-93-2116H-8	SWSE 21-154-93	597'FSL and 1,946'FEL	Robinson Lake	N/A*	conf.	2,299'	31028	33-061-03662	4/8/15
EN-Frandson- 154-93-2116H-9	SWSE 21-154-93	597'FSL and 1,979'FEL	Robinson Lake	N/A*	conf.	2,299'	31029	33-061-03663	4/8/15
Statoil Oil and Gas									
Vachal 3-34 #5TFH	SESE 3-155-93	364'FSL and 1,210'FEL	Alger	N/A*	conf.	2,469'	31033	33-061-03667	4/9/15
Vachal 3-34 #6H	SESE 3-155-93	364'FSL and 1,182'FEL	Alger	N/A*	conf.	2,469'	31034	33-061-03668	4/9/15
Vachal 3-34 #7H	SWSW 3-155-93	258'FSL and 1,182'FWL	Alger	N/A*	conf.	2,493'	31038	33-061-03672	4/9/15
Vachal 3-34 #8TFH	SWSW 3-155-93	258'FSL and 1,210'FWL	Alger	N/A*	conf.	2,439'	31037	33-061-03671	4/9/15
Vachal 3-34 XW #1H	SWSW 3-155-93	258'FSL and 1,154'FWL	Alger	N/A*	conf.	2,439'	31039	33-061-03673	4/9/15
Whiting Oil and Gas									
Kaden TTT 11-25H	NWNW 25-154-92	546'FNL and 401'FWL	Sanish	Bakken	horz.	2,102'	31035	33-061-03669	4/9/15
Westin TTT 11-25H	NWNW 25-154-92	501'FNL and 401'FWL	Sanish	Bakken	horz.	2,103'	31036	33-061-03670	4/9/15

To view this chart in its entirety, please visit: <http://bit.ly/1E2UdJX>



Top 50 North Dakota Bakken oil producers

February 2015

Company	BPD*
1. Whiting Oil and Gas Corp.	132,132
2. Continental Resources	117,072
3. Hess Corp.	110,724*
4. XTO Energy (ExxonMobil)	67,823
5. Burlington Resources Oil & Gas LP (ConocoPhillips)	62,997*
6. Statoil Oil & Gas LP	59,081
7. EOG Resources, Inc.	58,903
8. Marathon Oil Co.	56,062
9. Oasis Petroleum North America	55,690
10. QEP Energy Co.	49,694
11. WPX Energy Williston	38,060
12. Halcon Resources	31,286
13. Petro-Hunt	26,837
14. SM Energy Co.	26,391
15. Newfield Production Co.	19,658
16. Oxy USA Inc. (Occidental Petroleum)	19,197
17. Slawson Exploration Co., Inc.	16,254
18. Enerplus Resources USA Corp.	13,516
19. Triangle USA Petroleum Corp.	11,946
20. Hunt Oil Co.	11,040
21. Zavanna LLC	10,790
22. Samson Resources (KKR & Co.)	7,565
23. Murex Petroleum Corp.	7,201
24. Fidelity Exploration & Production (MDU)	6,868
25. Emerald Oil, Inc.	5,865
26. Lime Rock Resources III-A	5,134
27. Abraxas Petroleum	4,672
28. American Eagle Energy Corp.	3,221
29. Crescent Point Energy U.S. Corp.	3,131
30. Sinclair Oil and Gas Co.	2,623
31. Liberty Resources Management Co.	2,440
32. SHD Oil & Gas	1,719
33. Petrogulf Corp.	1,571
34. Denbury Onshore, LLC	1,003
35. Arsenal Energy USA Inc.	1,001
36. Cornerstone Natural Resources	921
37. North Plains Energy	742
38. Mountain Divide (Mountainview Energy)	640
39. Armstrong Operating	539
40. True Oil LLC	451
41. Thunderbird Resources LP	372
42. Bakken Hunter, LLC	237
43. Legacy Reserves Operating LP	115
44. Rim Operating, Inc.	101
45. Windsor Energy Group	93
46. Resource Drilling	86
47. Gadeco	66
48. Condor Petroleum	24
49. Pride Energy, an Oklahoma General Partnership	24
50. Petro Harvester Operating	23

Note: Hess-owned Hess Bakken Investments production was added to Hess' separate production, so their total output determined their ranking. And ConocoPhillips-owned Burlington production was added to ConocoPhillips' separate production.

Information derived from the preliminary February 2015 Oil and Gas Production Report published by the North Dakota Industrial Commission, Department of Minerals' Oil and Gas Division. This is oil produced by wells operated by these companies; it does not identify the percentage of oil from the Bakken petroleum system oil production from wells on confidential status and the figures are rounded to the nearest whole.

Full February production data see is available at the following link: <http://bit.ly/1ELmTg6>

—Ashley Lindly | alindly@petroleumnewsbakken.com

Petroleum ND weekly county permit totals

April 7-13, 2015

County	Permits issued	Permits issued for confidential wells	Permits renewed	Location resurveys authorized
Divide	0	0	0	2
Dunn	2	0	0	0
McKenzie	14	6	2	2
Mountrail	16	14	0	0
Williams	4	0	0	0
Totals	36	20	2	4

Petroleum Top 10 Bakken wells by IP rate

April 7-13, 2015

Whiting Oil and Gas				
27520	Flatland Federal 11-4TFH	Twin Valley	MCK	6,002
27521	Flatland Federal 11-4HR	Twin Valley	MCK	5,002
27522	Flatland Federal 11-4TFHU	Twin Valley	MCK	4,207
Marathon Oil				
28075	Anthony USA 23-14H	Moccasin Creek	DUN	3,255
Whiting Oil and Gas				
30119	Shirley Moen 44-34-3H	Arnegard	MCK	2,285
XTO Energy (ExxonMobil)				
28741	Johnson 24X-31A	Siverston	MCK	1,958
Marathon Oil				
24745	Melvain Fox USA 14-4TFH	Moccasin Creek	DUN	1,916
Burlington Resources Oil and Gas (ConocoPhillips)				
29189	Ora 32-24MBH	Haystack Butte	MCK	1,896
XTO Energy (ExxonMobil)				
28887	Johnson 24X-31EXH	Siverston	MCK	1,747
28743	Johnson 24X-31F	Siverston	MCK	1,581

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 April 7-13, 2015 in the Bakken petroleum system, as well as active wells that were released from tight-hole (confidential) 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; field; county; IP oil flow rate in barrels of oil.

Petroleum Looking for a rig report?

North Dakota

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

Saskatchewan

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

Manitoba

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

Subscribe at **PETROLEUMNEWSBAKKEN.COM**

COMPANY UPDATE

American Eagle struggles with debt load

American Eagle Energy reported a greater than anticipated fourth quarter loss and announced it entered into a forbearance agreement after missing \$5.8 million of a \$9.8 million interest payment as of April 1 on bonds it sold in August 2014. Essentially, the agreement means the four holders who collectively own or manage more than 50 percent face amount of American Eagle's August notes have delayed legal action on the company's payment default. American Eagle ended its fourth quarter 2014 with \$13.6 million of negative working capital but improved to a negative \$9 million by Feb. 28.

The Denver-based junior produced an average of 2,588 barrels of oil equivalent per day during the fourth quarter, marking a 38 percent increase year-over-year and an 18 percent increase from the third quarter but falling short of its anticipated 2,600 to 2,700 boepd. It had 54 gross (32.2 net) operated wells producing in the Bakken and Three Forks by the end of 2014, which compares to 28 gross (13.7) net operated wells a year prior.

Oil and gas sales reached \$14.5 million for the fourth quarter, which was a 15 percent decrease quarter-over-quarter but 7 percent higher than a year prior. The company said in a statement on April 7 that the year-over-year increase was due to low oil prices offset by higher production from the three gross (1.9 net) wells added to production during the fourth quarter.

Other financials

American Eagle's oil price per barrel was affected by an agreement that locks in a \$10 discount to West Texas Intermediate pricing which dropped it to \$60.97 per barrel, but settled hedges added \$11.06 per barrel for a realized oil price of \$72.03 per barrel during the fourth quarter. This was down from \$85.66 during the third quarter.

For the fourth quarter, the company reported \$7.9 million of adjusted earnings before interest, taxes, depreciation and amortization which was a 3 percent increase year-over-year but a 13 percent decrease from the third quarter. The decrease was a result of lower realized oil prices and higher lease operating expenses of \$25 per barrel of oil equivalent, although the company did have lower administrative expenses and higher oil production sales volumes. Adjusted EBITDA per boe was \$33.13 for the quarter, a drop from \$44.92 in the previous quarter and \$44.24 from the fourth quarter 2013.

Liquidity lightens

American Eagle's assets as of Feb. 28 consisted of \$19 million in cash and \$12 million in receivables compared to the \$25.9 million in cash and \$9.5 million in receivables as of Dec. 31, 2014. It also has \$175 million in total debt outstanding on its secured bonds sold in August 2014. The company's liabilities as of Feb. 28 included

see AMERICAN EAGLE page 18

continued from page 10

PIPELINE RULES

"We're not being told to develop a new material or pipeline construction," Harju said. "What they're telling us to do is much more straightforward than that. It's to benchmark the performance of materials, do failure analysis and put forward recommendations on what we see there."

He said EERC will tap into its network of producers, gatherers, engineering firms and knowledge from other states to determine what is best for North Dakota, and he sees no problem with the December deadline.

"It's what we do," Harju said. "Yes, it's going to be a challenge, but we're up to the challenge."

He said vendors interested in the pilot project have been contacting EERC since the legislation was introduced. In anticipation of the project, his research team has already discussed some ways to conduct the study.

"I think there are multiple reasons that we've had (pipeline) failures. We need to look at those failures and see what we can glean from them," Harju said. "I suspect that there's been materials issues ... construction issues, that there's been monitoring system failures. We'll be looking critically at each of the failures and how

"If we don't get in front of some of these concerns ... we're going to continue to have issues putting pipe in the ground."

—Rep. Todd Porter

each of them might have been mitigated."

The other pilot project funded by the bill will address reclamation issues from legacy oil and gas wells and pipelines — those placed prior to 1983 where there is no responsible party — to determine the best way to restore that land.

Ombudsman bill

Senate Bill 2271 is legislation to support landowners and expedite proper pipeline installation. The bill creates an ombudsman through the Agriculture Commissioner's office to represent landowners in communicating their requests for easement placement and reclamation. Sen. Kelly Armstrong of Dickinson acknowledged that as the Bakken play matures, issues develop that require cooperation between landowners, industry, regulators, and lawmakers.

"So much of this is to restore trust and continue the trust between landowners and industry," Armstrong said. ●

Contact Maxine Herr
at maxine606@msn.com

continued from page 10

RUBBISH TO ROADS

issue — and transform it into a useable product."

Companies collect enough drill cuttings on every well to fill an Olympic-size swimming pool, according to the state's Department of Mineral Resources Director Lynn Helms. Legislators were told that third-party science has proven for one recycling company that it can remove 99.99 percent of the hydrocarbons from the drill cuttings, but the cuttings also contain high concentrations of salt that would need to be removed.

Sen. Connie Triplett of Grand Forks told Petroleum News Bakken following the Senate's approval of the bill on April 9 that oil companies also benefit from the recycling because once the cuttings are turned into a beneficial use, they are absolved of liability for any potential problems.

The bill sets aside about \$65,000 for the project. The measure was endorsed by the House with an 87-6 vote after approval by the Senate and now goes to Gov. Jack Dalrymple for his signature.

"We rely on the health department processes and such that through our regulations we are protecting the environment," Triplett said, "and then we have the benefit to the landowners that they don't have to think about what's there on their land for the rest of eternity."

The bill sets aside about \$65,000 for the project. The measure was endorsed by the House with an 87-6 vote after approval by the Senate and now goes to Gov. Jack Dalrymple for his signature.

—MAXINE HERR

Contact Maxine Herr
at maxine606@msn.com

Petroleum News Bakken seeks ad sales rep

Looking for experienced salesperson to work from home in North Dakota. Contact Kay Cashman at publisher@petroleumnews.com or 907.561.7517



PREVENT EROSION & PROTECT SHORELINES WITH FLEXAMAT

BROCK
WHITE 60
CONSTRUCTION MATERIALS *Years and building!*

A great alternative
to Rip Rap!

Flexamat

Bismarck Minot Fargo
701-222-3010 701-839-0509 701-282-9255

For more information about Flexamat visit
www.BrockWhite.com/Flexamat

HELPING BUILD YOUR SUCCESS

BORENE LAW FIRM - IMMIGRATION LAW

**Do you need
Skilled Workers?
We can help!**

Oil and Gas Jobs

- Engineers
- Technicians
- IT Professionals
- Mechanics
- CDL Truck Drivers

Community Jobs

- Nurses
- Doctors, Dentists
- Accountants
- Managers
- Service workers

- Many more occupations

**U.S. Work Visas
Available Now for
Professionals and Skilled
Workers from Canada,
Australia, Mexico and other
countries**



Scott Borene - sborene@borene.com



BORENE LAW FIRM
IMMIGRATION LAW

3950 IDS Center Minneapolis www.borene.com 612.321.0082

MOVING HYDROCARBONS

TransCanada scraps Quebec terminal

Tanker port on St. Lawrence River abandoned over beluga whale concerns, delaying planned startup date for Energy East pipeline

By GARY PARK

For Petroleum News Bakken

TransCanada has caved in to extreme pressure, led by the provincial premiers of Quebec and Alberta, and scrapped current plans for an export oil terminal on the St. Lawrence River as a key element of its Energy East project.

The company said it is now looking for an alternative site to the marine terminal it planned for Cacouna in response to those concerned about the threat posed by tankers to a beluga whale habitat.

As a result, 1.1 million barrels per day of Western Canadian crude oil from the Alberta oil sands and Saskatchewan's Bakken formation — 450,000 bpd of which was likely to have been shipped from Cacouna — is not expected to move on Energy East until 2020, 12 to 15 months later than targeted.

But the company said the estimated project cost of C\$12 billion remains unchanged.

TransCanada Chief Executive Officer Russ Girling said the decision was prompted by an expected change in the status of the whales to "endangered" and related discussions with communities and key stakeholders.

"We have always said regarding the beluga whale and other species that if the project presented a material impact, we would be prepared to adjust it in order to eliminate or mitigate that impact, just like we have done in many instances since

planning began two years ago," the company's website said.

Trans Canada said the decision to abandon Cacouna "was certainly not made because of opposition from some well-funded groups that want to deny Canadians the right to benefit from a reliable domestic supply of energy that ensures Canadians enjoy the quality of life they've come to expect in this country every day."

The company said it has also decided to accelerate the preparation of an emergency response plan for submission earlier than previously intended to Canada's National Energy Board.

In addition to environmentalists and other activist groups, TransCanada felt the heat from Quebec Premier Philippe Couillard and Alberta Premier Jim Prentice late last year when they urged the company to explore sites other than Cacouna.

But Prentice argued Energy East would be "stronger as a piece of national-building infrastructure if there is a port facility in the province of Quebec."

Energy East is also designed to provide feedstock for the two refineries in Quebec and the Irving Oil facility at Saint John, New Brunswick, as well as opening export routes through Quebec and New Brunswick.

In addition, TransCanada estimates the project will support 14,000 direct and indirect full-time jobs across Canada during



RUSS GIRLING

development and construction and generate more than C\$7 billion in incremental tax revenues in its first 20 years of operation, plus billions more dollars in spin-off economic activity.

Cacouna and Saint John, New Brunswick, were the two preferred tanker ports that would have handled an average 175 Suezmax tankers (capable of holding 1 million barrels of crude) and Aframax tankers (with capacity for 450,000 barrels) every year, opening the way for exports from Energy East of 450,000 pd.

A spokesman for TransCanada would not say whether the company is now looking for a replacement site to match the volumes planned for Cacouna.

"We're taking this one step at a time," the spokesman said. "The fact that there

are two marine terminals as part of the project is also a sign of what our shippers want. They want those options."

BMO Capital Markets analyst Carl Kirst said in a research note there is some upside to the decision to abandon Cacouna.

"On the positive side, we think being responsive/sensitive to the Quebec environmental challenge will help generate a smoother regulatory process and this in turn should improve the odds of this project," he said.

The main selling feature of Energy East is the prospect to eliminate 700,000 bpd of imported crude as feedstock for Quebec and Ontario refineries, while offering producers in Western Canada a sales alternative to a swamped North American market. ●

Contact Gary Park through publisher@petroleumnews.com



NORTHWEST LININGS & GEOTEXTILE PRODUCTS, INC.

Northwest Linings has over 41 years of experience in the Oil & Gas industry, supplying & installing geomembrane liners for tanks, pits, pads, secondary containment, landfills, and ponds. In addition, we supply geotextiles, geogrids, erosion blankets, straw logs, gabions, and other geosynthetics throughout the United States.

21000 77th Ave S
Kent, WA 98032
P: 253-872-0244
F: 253-872-0245

"Helping to Protect the Environment"

Visit us at: www.northwestlinings.com



AE2S WATER SOLUTIONS

- Project Development & Marketing
- Land Services/GIS/Mapping
- Water Sourcing
- Fresh Water Delivery Systems
- Water Reservoirs/Storage
- Water Treatment/Recycling/Reuse
- Produce Water Gathering Systems
- Salt Water Disposal

www.ae2sWaterSolutions.com

AE2S CONSTRUCTION

- Project/Program Management
- Drill and Production Pad Infrastructure Wiring/Install
- Electrical Installation & Upgrades
- Instrumentation & Controls
- Site/Facility Lighting, Safety, & Security
- Energy Efficiency & Preventative Maintenance
- Maintenance & Service

www.ae2sConstruction.com

AE2S OPERATIONS

- 24/7 Operations & Maintenance
- Performance Coaching
- System Optimization
- Customized Web-based Operator Logs & Reporting
- System Integration with SCADA
- Technology Application & Piloting
- Asset Management
- Regulatory Compliance & Agency Coordination
- Process & Technical Support

www.ae2sWaterSolutions.com/Operations



ENVIRONMENT & SAFETY

Flare appears to be cause of grassland fire

A natural gas flare from a Whiting well is being blamed for a grassfire which burned 4,500 acres of U.S. Forest Service land and some private property near Watford City on April 14.

Dry, windy conditions across North Dakota caused Gov. Jack Dalrymple to issue a statewide burn ban on April 10, but the ban does not apply to any type of engineered design that is part of an operating system, such as a well site flare, according to North Dakota Department of Emergency Services Director Greg Wilz.

He told Petroleum News Bakken that he will remind the industry that flaring systems need to be cleared and not obstructed by anything that could catch fire and cause problems. He said the fire potentially began when a flare spit out some oil which landed on some nearby "organics" and ignited them. McKenzie County Emergency Manager Karolin Rockvoy said this fire isn't the first to be caused by a flare. Her staff has responded to two others in the past 10 days within the county. "I'm concerned because when the governor puts on that burn ban statewide ... how do we deal with this?" she said. "To be over here and see the tumbleweeds flying through on the highway ... it's just a matter of time before one of these goes flying through a flare."

Watford City, Keene, New Town and Mandaree fire departments were fighting the grassfire along with the U.S. Forest Service, and Nuverra Environmental Solutions and PetroHunt came with water trucks to assist, protecting the Tobacco Gardens campground and homes.

Jerry Samuelson of McKenzie County Emergency Services said some of the

see **GRASSLAND FIRE** page 19

COMPANY UPDATE

Penn West sells royalty stake to tackle debt

By **GARY PARK**

For Petroleum News Bakken

Penn West Petroleum is skimming off Saskatchewan assets from its Viking oil play on the western fringes of the Williston Basin as part of a C\$321 million deal to cut debt and ride out stormy crude prices.

It is selling almost 45,000 acres of Dodsland land where production is 93 percent liquids and where it had expected to drill 100 wells a year over a five-year period.

Freehold Royalties will also acquire interests in 277,000 acres in five areas of Western Canada to add 1,400 barrels of oil equivalent per day to its portfolio.

It expects its share of production from the Viking properties to be about 660 boe per day this year, adding C\$14.8 million to operating income. In the final quarter of 2014, Freehold reported production of 9,800 boe per day, up 4 percent from a year earlier, mainly the result of acquisitions.

Penn West Chief Executive Officer Dave Roberts said in a news release that the sale "marks a critical milestone in our ongoing strategic focus to reduce debt and strengthen our balance sheet without materially impacting (adjust earnings) or production volumes."

He described the deal as a "creative" solution to "challenging circumstances."

The company said proceeds from the transaction, expected to close May 6, represent about 50 percent of its commitment to pay C\$650 million from asset sales to settle outstanding principal amounts owing to holders of unsecured notes.

Penn West has already cut its dividend twice since December, while Freehold trimmed payments to shareholders in January at a time when Canada's oil and natural gas firms are increasingly turning to equity issues to raise money and offset shrinking cash flow.

Freehold said it will fund the transactions with a C\$297 million public equity

see **PENN WEST** page 19

continued from page 16

AMERICAN EAGLE

\$30 million in accounts payable and accruals and \$9.8 million in accrued interest compared to \$42.4 million and \$6.6 million, respectively, on Dec. 31, 2014.

The company announced in January that it had sold non-operated working interests in its oil and gas properties located in Divide County for \$9.5 million to enhance its liquidity position. At that time, American Eagle said it would continue to hold additional working interest and production from other non-operated wells and was contemplating sales of additional assets. The company had originally anticipated spending \$60 million to develop 10 net wells in 2015 with one or two rigs. Instead, it laid down rigs and monetized all of its crude oil hedge positions for December 2014 through December 2015, generating \$13 million for the company. The hedges represented approximately 414,000 barrels of oil at an average price of \$89.59 per barrel.

In the latest data available from the North Dakota Department of Mineral Resources, American Eagle ranked 28th among the top 50 Bakken oil producers in North Dakota in February for operated, non-confidential wells with an average daily output of 3,221 barrels.

—MAXINE HERR

Contact Maxine Herr
at maxine606@msn.com



QUALITY MAT COMPANY

Beaumont
Texas

Houston
Texas

Killdeer
North Dakota

1-800-227-8159

QMAT.COM

ROCK drill site



MAT drill site



AFTER



AFTER



ROCK DRILL SITE

Disadvantages

- Damaging native farm land
- Lost work time due to unsafe work surface
- Delays in drilling
- Unable to access due to bad weather
- Wasting unnecessary amounts of rock
- Unnecessary extra cost
- High reclamation expense

MAT DRILL SITE

Advantages

- No reclamation cost
- Reduce the environmental impact
- Reduce the amount of rock on native farm lands
- Minimize unnecessary accidents
- Mats provide a safe and stable work surface
- 24/7 all-weather access with no down time
- Potential to drill one to two more additional wells per year
- Reduce the amount of truck traffic on roads
- No additional cost
- Protect existing flowlines

WORLD'S LARGEST SUPPLIER

MANUFACTURING SINCE 1974

continued from page 18

GRASSLAND FIRE

fire was stopped by Lake Sakakawea as well as a creek leading to the lake about three miles south of the Tobacco Gardens resort. He told Petroleum News Bakken that the fire reignited at a hot spot later in the evening after the other fire had been contained. Crews were able to contain the second fire overnight.

North Dakota law governing the oil and gas industry says “all vegetation must be removed to a safe distance from

any production equipment” near a well site.

Department of Mineral Resources spokeswoman Alison Ritter said that if the cause of the fire is confirmed to be oil moving from the flare pit, it would likely mean the equipment malfunctioned. Whiting Petroleum has been working with landowners affected by the fire to deal with lost fences and pasture land.

—MAXINE HERR

Contact Maxine Herr
at maxine606@msn.com

continued from page 18

PENN WEST

offering and a C\$33 million private placement with Canadian National Railway’s pension trust funds.

Penn West said it spent C\$49 million of capital in the Viking play during the final quarter of 2014, drilling 33 wells, raising the year’s total to 99 wells, with 103 wells brought into production.

The company said it was continuing to target average per well costs in the area below C\$800,000, and announced a

planned drilling program of 23 net wells in the first quarter on capital spending of C\$32 million.

Overall, Penn West reported production of 97,143 boe per day in the fourth quarter, including 51,624 bpd of light oil and natural gas liquids.

Its primary focus remains on the Duvernay, Cardium and Slave Point plays in Alberta, which are major contributors to its proved plus probable reserves of almost 300 million barrels. ●

Contact Gary Park through
publisher@petroleumnews.com

continued from page 3

ONSTAD Q&A

Petroleum News Bakken: As you look back at this session, what are your biggest victories and disappointments?

Onstad: The biggest disappointment is I thought there was a western delegation really working towards that formula and I’m disappointed in the fact that they gave in too early. To go home today and we only got to 30 percent with no contingency in place, and then hope there’s going to be a special session. We didn’t address property tax. That’s a disappointment. We still have a chance to deal with that. I think we made some headway with human trafficking, with some childcare and pre-K and the education part of that. We’ve beefed up law enforcement; we’re trying to look at more rehabilitation and some of those smaller social programs. I think the housing incentive fund will be restored. Those have been good things. But that infrastructure funding is still a real disappointment.

Petroleum News Bakken: This is your second session serving as the House minority leader. How do you approach the job?

Onstad: I’ve got to believe that I’m here representing my constituents. I tell my caucus members your constituents come first. We’re not going to be telling you how to vote. We discuss everything and they can get a flavor for it so they’re informed ... but you just kind of keep telling yourself I’m representing people that wanted me here.

Petroleum News Bakken: Do you think the Republicans take a different tactic?

Onstad: I would say they’re more about a philosophy that they’re really going to support. It doesn’t necessarily mean what their constituents want. I think probably that’s the difference. So when the next election comes around, people make choices. ●

Contact Maxine Herr
at maxine606@msn.com



One of thousands of projects using Polyguard RD-6 non-shielding coating. Our first was in 1988.



The Global Leader in Fire and Gas Safety Systems



Providing Life-Safety Solutions with Engineered Fire and Gas Detection Systems—Superior Performance and Reliability



Toll-free: 800.765.3473
det-tronics@det-tronics.com
www.det-tronics.com



I want in!

To advertise in the next issue of Petroleum News Bakken, please call 907.522.9469 or visit PetroleumNewsBakken.com.

RD-6 Fastest Coating in the West (or the Bakken)



“Did you know you were going over 2 miles a day?”

Contractors say there is no faster or trouble free girth weld coating system than Polyguard RD-6.

On a recent project (12" pipe, FBE mainline coating) a first time crew coated 150 joints on day 1 after training. On day 2, after adding a driver to the 5 man crew, 201 joints were completed.

You will also find that no coating system has less installation problems than Polyguard RD-6.

Ask someone who has installed it. Vist us at

www.PolyguardProducts.com/par

Innovation based. Employee owned. Expect more.®

Polyguard

Phone: (1) 214.515.5000

www.PolyguardProducts.com



continued from page 1

NDTL MAY SALE

in Williams County, all are either on the fringe or outside of the Bakken petroleum system core (see map — note tract sizes are not to scale).

Stark County has the highest nominated acreage at 7,195 acres in 95 tracts (76 acres per tract), followed by Billings County at 3,892 acres in 35 tracts (111 acres per tract), Divide with 3,699 acres in 44 tracts (84 acres per tract), Burke with 2,940 acres in 38 tracts (77 acres per tract), Dunn with 2,638 acres in 30 tracts (88 acres per tract), Mountrail with 900 acres in 10 tracts (90 acres per tract), McKenzie with 889 acres in seven tracts (127 acres per tract), Williams with 800 acres in six tracts (133 acres per tract), and Renville with 240 acres in two tracts (120 acres per tract).

Nominators

American Land Services of Bismarck nominated three tracts in McKenzie County and one in Mountrail County; Rusty Waters of Edmond, Oklahoma, nominated the two tracts in Renville County; Ancient Sunlight Resources LLC of Bismarck nominated one tract in Williams County; and Robert J. Eynon Agency Inc. of Williston nominated another Williams County tract. All of the remaining 260 tracts were nominated by Northern Energy Corp. of Bismarck.

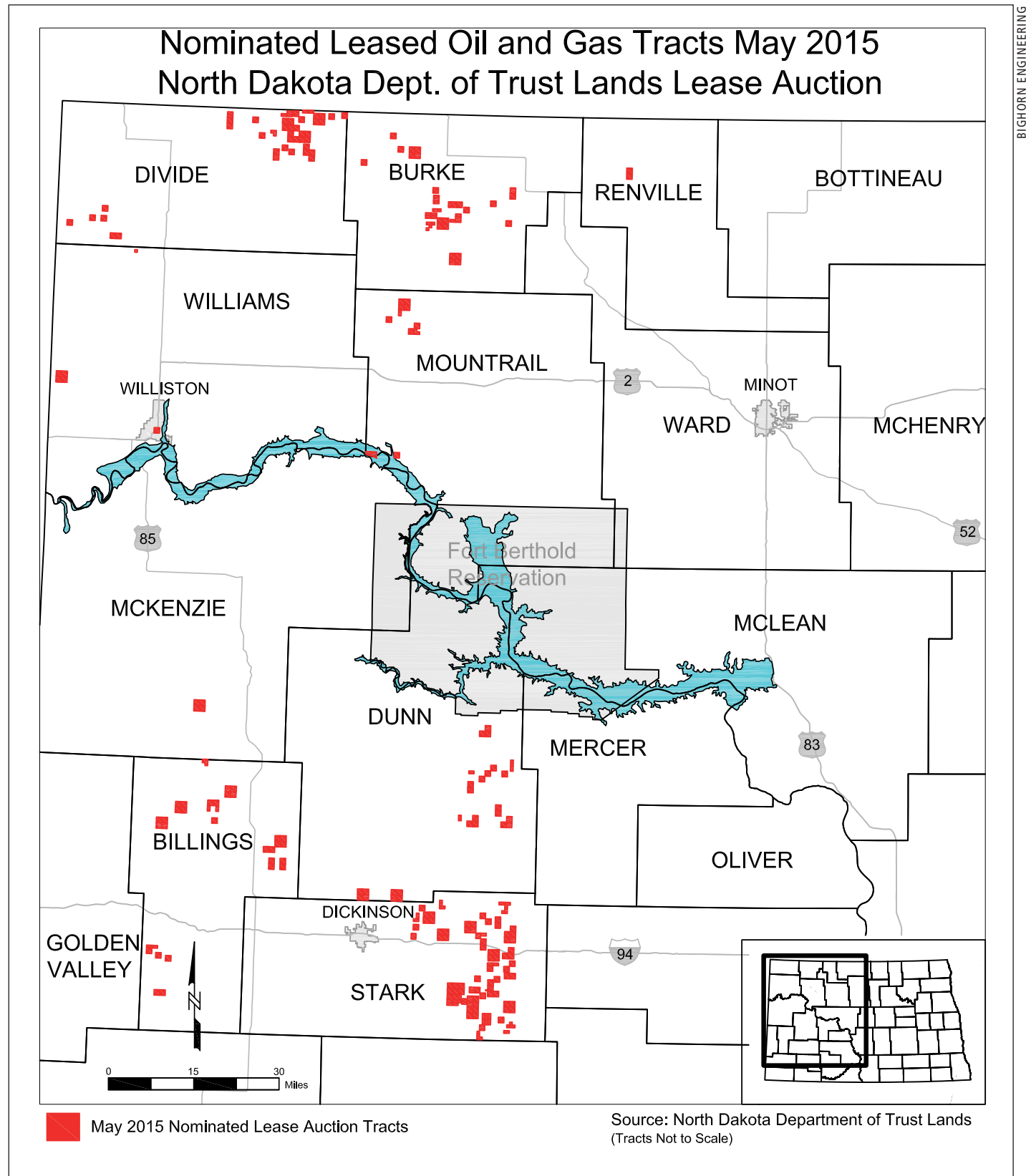
The auction is scheduled to begin at 9 a.m. Central Daylight Time on May 5 and will be held in the House chambers at the state Capitol in Bismarck.

In comparison

While the nominated acreage is an increase from February, the total is still below the 10-year May auction average of 25,899 and the 10-year average for all quarterly Trust Lands auctions of 31,125 acres. The highest total acreage leased in any Trust Lands quarterly auction over the last 10 years was the 114,298 acres leased in the November 2006, and the lowest acreage was in February 2014 when just 2,552 acres were leased.

Other upcoming auctions

The Montana/Dakotas office of the U.S. Bureau of Land Management will hold its next lease auction on May 5 in Billings. Acreage in BLM auctions alternates among tracts in Montana, North



Dakota and South Dakota, and the May auction is limited to Montana leases. The acreage nominated for the May BLM auction is one of the lowest acreage totals in the history of that office with leases on only three tracts totaling 160 acres. Two of the tracts are in southeast Roosevelt County near the North Dakota border, one at 80 acres and the other at 40. The third is

a 40-acre tract in Powder River County near the Wyoming border in southeast Montana.

The Minerals Management Bureau of the Montana Department of Natural Resources and Conservation will hold its next oil and gas lease auction in Helena on June 2. The nominations for that auction closed on March 19 and a total of 19,504

acres were nominated in 39 tracts across 11 counties in north-central, eastern and southwest Montana. The final nominations list for the June Montana auction will be released on or about May 11.

—MIKE ELLERD

Contact Mike Ellerd
at mellerd.pnb@gmail.com

REACHING THE WORLD WITH METHANOL IN A BOX®

The World's First And Only Single Step
Natural Gas-to-Methanol Conversion Process

THE IDEAL GTL SOLUTION

- Simple, low maintenance design
- Small footprint
- Easily transportable product
- Low CAPEX
- Accepts off spec gas
- Accepts gas at variable flow rates

GasTechnologies offers the Micro-GTL®, Mini-GTL®, Methanol In A Box®, GTL In A Box® and small scale GasTechno® process technology which provides an excellent environmental compliance solution while converting flared gas into high value, commercially saleable liquid fuels and chemicals.

CONTACT
Walter Breidenstein, CEO
email: walterb@gastechno.com

Global Headquarters: Gas Technologies LLC
PO Box 640, Wallow Lake, Michigan 49796-0640 USA
Global Licensing (UK): Haybarn House Business Centre, 118 South Street, Dorking, Surrey, RH4 2EU United Kingdom
Southeast Asia Regional Center: Changi Business Park, Singapore
Middle East Administrative Center: Abu Dhabi, United Arab Emirates

Patented • Tested • Proven • Demonstrated
tel: +1 231-535-2914 • www.gastechno.com

Two years later
BLM lease prices fall

The publication
of record for
the Bakken oil
and gas industry.

SUBSCRIBE TODAY!
907-522-9469
petroleumnewsbakken.com

continued from page 1
XTO ACTIVITY

West Capa, Dollar Joe and Grinnell fields, all contiguous fields in far southeast Williams County although a portion of the Grinnell field extends south into northern McKenzie County. The lone 320-acre unit is in the Squaw Creek field on the Fort Berthold Indian Reservation in far eastern McKenzie County.

The company wants to drill up to 12 additional wells on all of the 1,280s, and on the 2,560s, it wants to drill two wells across section lines for densities of 107 and 1,280 acres per well, respectively. On the 320-acre unit, the company wants to drill up to six wells for a density of 53 acres per well.

XTO's parent ExxonMobil reduced its overall 2015 budget, but at approximately 12 percent, it was the smallest company-wide budget cut among the top 10 Bakken oil producers. At the same time, XTO has seen marked improvements in cost efficiencies, and the subsidiary is not planning to implement any significant Bakken slowdowns in 2015. "In the Bakken, we increased net production by 38 percent last year, which reflects the addition of 144 new wells, increased well productivity, and accelerated pad development in our core acreage," ExxonMobil Chairman and CEO Rex Tillerson told analysts in March. "We averaged 13 operating rigs in 2014, and we will likely average close to that level this year."

Other drilling apps

In addition to XTO, Whiting Petroleum, filing as Whiting Oil and Gas Corp., filed three applications seeking authorization from the commission to drill up to 14 additional wells on each of 10 existing 1,280s in the Banks, Poe and Sand Creek fields, all contiguous fields in north-central McKenzie County.

ConocoPhillips subsidiary Burlington Resources wants to drill up to 14 additional wells on a 1,280 in the Clear Creek field in northeast McKenzie County and up to eight wells on a 1,280 in the nearby Siverston and/or Pershing

April 2015 North Dakota Industrial Commission Additional Well Applications

Applicant	Wells per Unit ^A	Acres per Unit	Acres per Well	Units	Total Wells	Field	County ^B	Pool ^C
Burlington Resources Oil & Gas Co. LP	8	1,280	160	1	8	Siverston and/or Pershing	MCK	BKN
Burlington Resources Oil & Gas Co. LP	14	1,280	91	1	14	Clear Creek	MCK	BKN
Burlington Resources Oil & Gas Co. LP	2	2,560	1,280	1	2	North Fork	MCK	BKN
Continental Resources, Inc.	3	320	107	2	6	Stoneview	BRK	BKN
Marathon Oil Co.	2	2,560	1,280	2	4	Reunion Bay and/or Big Bend	MNT	BKN
Sinclair Oil & Gas Co.	6	1,280	213	1	6	Lone Butte	MCK	BKN
SM Energy Co.	11	1,280	116	1	11	Camp and Indian Hill	MCK	BKN
Whiting Oil and Gas Corp.	14	1,280	91	2	28	Banks	MCK	BKN
Whiting Oil and Gas Corp.	14	1,280	91	2	28	Sand Creek	MCK	BKN
Whiting Oil and Gas Corp.	14	1,280	91	6	84	Poe	MCK	BKN
XTO Energy Inc.	12	1,280	107	9	108	Capa	WIL	BKN
XTO Energy Inc.	2	2,560	1,280	1	2	Capa	WIL	BKN
XTO Energy Inc.	12	1,280	107	12	144	West Capa	WIL	BKN
XTO Energy Inc.	2	2,560	1,280	12	24	West Capa	WIL	BKN
XTO Energy Inc.	12	1,280	107	7	84	Dollar Joe	WIL	BKN
XTO Energy Inc.	2	2,560	1,280	4	8	Dollar Joe	WIL	BKN
XTO Energy Inc.	12	1,280	107	18	216	Grinnell	MCK, WIL	BKN
XTO Energy Inc.	2	2,560	1,280	9	18	Grinnell	MCK, WIL	BKN
XTO Energy Inc.	6	320	53	1	6	Squaw Creek	MCK	BKN
April Totals				92	801			

A: Represents the maximum number of wells requested for a given spacing unit
B: DUN = Dunn, MCK = McKenzie, MNT = Mountrail, WIL = Williams
C: BKN = Bakken

fields. Burlington also wants to drill two wells on an overlapping 2,560 in the neighboring North Fork field.

SM Energy is looking to drill up to 11 wells on a 1,280 in the Camp and Indian Hill fields in northwest McKenzie County. Continental Resources wants to drill up to three wells on each of two existing 320s in the Stoneview field in southeast Burke County. Sinclair Oil and Gas wants to drill up to six wells on a 1,280 in the Lone Butte field in southwest McKenzie County. And Marathon Oil is seeking authorization to drill up to two wells on an overlapping 2,560 in Reunion Bay and/or Big Bend fields in the Van Hook peninsula in southwest Mountrail County.

In perspective

Combined, the seven North Dakota operators filing

drilling applications in April are looking to drill up to 801 additional wells on 92 existing spacing units. That is by far the largest number of additional wells sought by North Dakota operators in 2015, obviously driven by XTO whose 610 additional wells account for 76 percent of the wells requested. In comparison, in March, seven operators filed applications seeking a maximum of 183 wells on 27 DSUs with Whiting (68), Hess (38), XTO (38) and Burlington (28) accounting for most of those applications.

All of the additional wells are targeting the Bakken pool, which encompasses multiple formations including the Bakken, Three Forks and Pronghorn. ●

Contact Mike Ellerd
at mellerd.pnb@gmail.com

continued from page 1
OASIS IN MT

for four temporary 1,280-acre spacing units, all in the Elm Coulee Northeast field in Richland and Roosevelt counties. The company has one producing Bakken well on each spacing unit, and under Montana rules, spacing units are initially designated as temporary but that status has to be changed to permanent for ongoing production.

The four wells went on production between January and November 2014 and have been on production between 101 and 304 days. Those wells have average productions of 142 barrels per day (304 days of production), 183 bpd (172 days), 345 bpd (101 days) and 461 bpd (107 days).

In addition, Oasis filed applications seeking approval to pool interests in 28 other permanent 1,280-acre spacing units, all in the Elm Coulee Northeast field.

Oasis also filed applications seeking authorization to drill up to four additional Bakken/Three Forks wells on each of the four spacing units, and is seeking authorization to pool all interests in all four.

Oasis is also asking the board to establish a temporary overlapping 2,560-acre drill spacing unit, also in the Elm Coulee Northeast field in Roosevelt County, for the purpose of drilling three horizontal Bakken/Three Forks wells. There too, Oasis is seeking authorization to pool interests.

In addition, Oasis filed applications seeking approval to pool interests in 28 other permanent 1,280-acre spacing units, all in the Elm Coulee Northeast field.

Other Montana Bakken apps

SM Energy is seeking permanent status for two 1,280-acre DSUs in the Bainville II field in Roosevelt County where it has one producing well on each. Both wells went on production in February. One produced 6,814 barrels over 15 days for an average of 454 bpd, and the other produced 10,341 barrels over the first 27 days for an average of 383 bpd. SM Energy also wants to pool all interests in both of those DSUs.

Kraken Oil and Gas wants the board to grant permanent status to two 640-acre temporary spacing units, both in the Elm Coulee field in Richland County and allow pooling of

April 2015 North Dakota Industrial Commission Drill Spacing Unit Applications

Applicant	Units	Acres	Type ^A	Wells	Field	County ^B	Pool ^C
BTA Oil Producers, LLC	1	320	N	One	Ash Coulee	BIL	TYL
Burlington Resources Oil & Gas Co. LP	1	2,560	O	One	Siverston and/or Pershing	MCK	BKN
Continental Resources, Inc.	2	1,680	N	Multiple	Elm Tree and/or Sanish	MCK, MNT	BKN
Continental Resources, Inc.	1	1,280	N	Multiple	Elm Tree and/or Sanish	MCK, MNT	BKN
Continental Resources, Inc.	1	480	N	Multiple	Elm Tree and/or Sanish	MCK, MNT	BKN
Corinthian Exploration (USA) Corp.	4	160	N	Up to four	Northeast Landa	BOT	SPF/MAD
Liberty Resources Management Co., LLC	2	2,560	O	Up to three	Hanson and/or Temple	WIL	BKN
Liberty Resources Management Co., LLC	2	2,560	O	Up to three	Big Meadow and/or Temple	WIL	BKN
Murex Petroleum Corp.	1	1,280	N	Up to eight	Daneville	DUN	BKN
Murex Petroleum Corp.	1	640	N	Up to four	McGregor	WIL	BKN
Newfield Production Co.	1	1,280	O	Up to eight	Sand Creek	MCK	BKN
Oasis Petroleum North America LLC	2	2,560	O	Up to two	Baker and/or Last Chance	MCK	BKN
Peregrine Petroleum Partners, Ltd	1	1,280	N	Up to four	Covered Bridge	MCK	BKN
Petro-Hunt, LLC	2	2,560	O	One	Little Knife	DUN, MCK	BKN
QEP Energy Co.	1	2,560	N	One	Spotted Horn and/or Squaw Creek	MCK	BKN
QEP Energy Co.	1	2,560	N	Up to three	Spotted Horn and/or Squaw Creek	MCK	BKN
Samson Resources Co.	1	2,560	O	One	Blooming Prairie	DIV	BKN
Samson Resources Co.	1	1,280	N	Up to seven	Blooming Prairie	DIV	BKN
SHD Oil & Gas, LLC	1	7,520	O	Up to two	Heart Butte	DUN	BKN
SHD Oil & Gas, LLC	1	7,520	O	Up to two	Heart Butte	DUN	BKN
SHD Oil & Gas, LLC	1	4,000	O	Up to three	Deep Water Creek Bay	DUN	BKN
SHD Oil & Gas, LLC	1	3,520	O	Up to 27	Van Hook and/or Heart Butte	DUN, MCL	BKN
Slawson Exploration	2	2,560	O	Up to two	Reunion Bay and/or Big Bend	MNT	BKN
Whiting Oil and Gas Corp.	3	2,560	O	Up to two	Truax and/or Grinnell	MCK, WIL	BKN
Whiting Oil and Gas Corp.	1	2,560	N	Up to two	Truax	MCK, WIL	BKN
XTO Energy Inc.	2	2,560	O	Up to two	Haystack Butte	MCK, DUN	BKN
XTO Energy Inc.	4	640	O	Up to four	Squaw Creek	MCK	BKN
Total April DSUs	42						

A: N = New, O = Overlapping
B: BIL = Billings, BOT = Bottineau, DUN = Dunn, MCL = McLean, MCK = McKenzie, MNT = Mountrail, WIL = Williams
C: BKN = Bakken, MAD = Madison, SPF = Spearfish, TYL = Tyler

all interests in those units. The wells on the two units went on production in April and June 2014 and have averaged 33 and 100 bpd over 284 and 232 days, respectively.

In other Montana Bakken activity, Burlington Resources is asking permission to drill an additional well on an existing 1,280 spacing unit in Richland County and Statoil wants to pool interests in a 1,280-acre DSU, also in Richland County.

In the Southern Alberta Bakken, Anadarko E&P Onshore is seeking permanent status for a spacing unit in Toole County where it has a producing Bakken well. Production data for that well are not yet available on the board's website.

Conventional Montana apps

Not all activity in Roosevelt County targets the Bakken

formation. Forth Worth Operating Co. filed applications seeking five temporary spacing units in the county for the purpose of drilling one test well into the Nisku formation on each DSU.

Interstate Explorations wants the board to designate permanent status to a 320-acre spacing unit in Wibaux County for production from a Red River formation well. Production data from that well are not yet available.

And far outside of Montana's Bakken, Baldwin Lynch Energy is asking for approval for an enhanced recovery project targeting the Lakota formation in Carbon County in south-central Montana.

—MIKE ELLERD

Contact Mike Ellerd
at mellerd.pnb@gmail.com

continued from page 1

DEETHREE SPLIT

bases within DeeThree,” the company said in a news release.

“The board believes that the reorganization will, over time, result in a better combined market value for Granite and Boulder as standalone entities than within a single entity and business plan, thereby maximizing shareholder value.”

What drove the split?

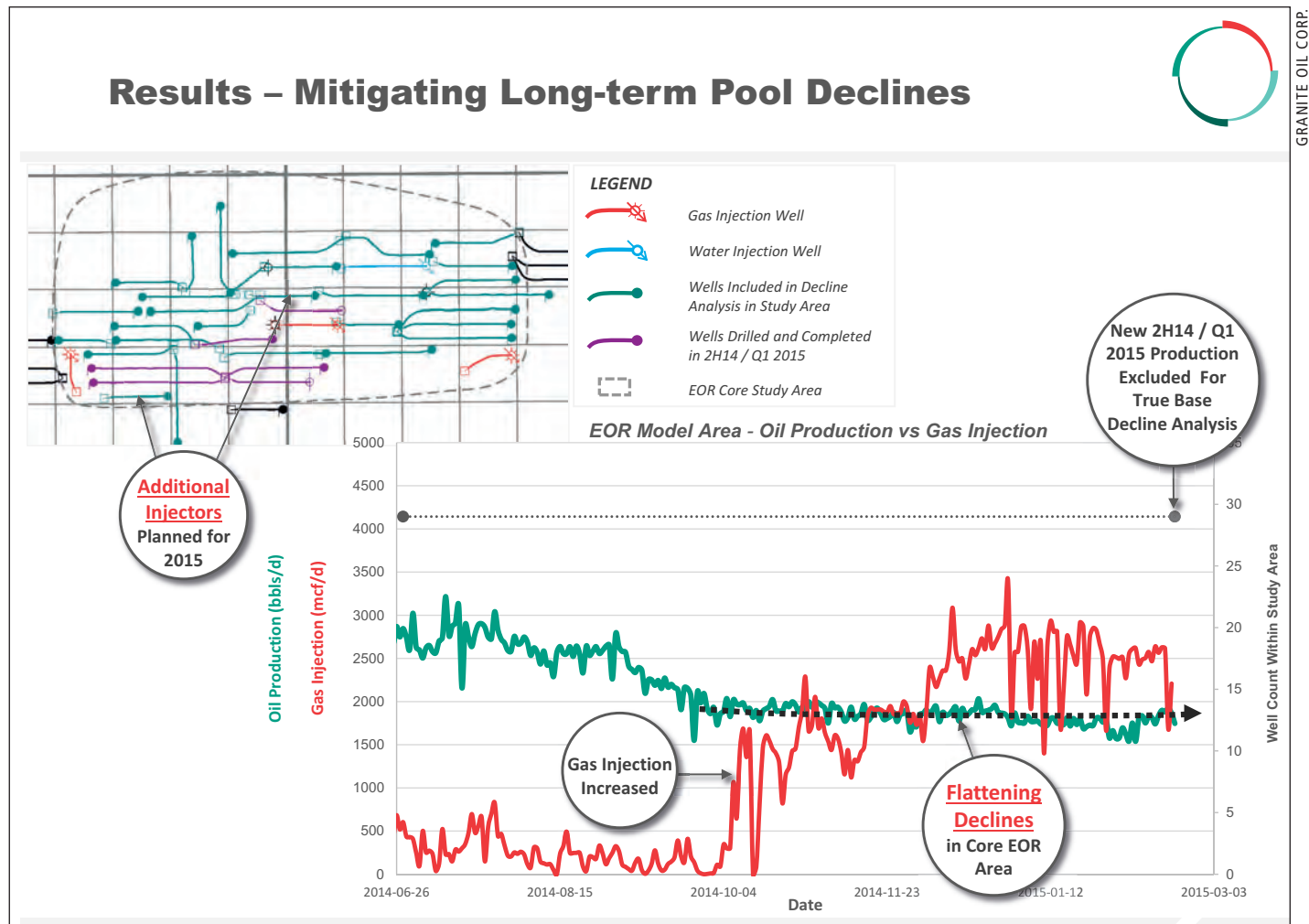
The corporate leaders were not available to discuss the thinking behind their decision in more detail, leaving others such as Chad Ellison, an analyst with Dundee Capital markets, to speculate.

Admitting he was caught off guard, he cautioned that a depressed commodity market is not necessarily a welcoming atmosphere for junior dividend players.

But he told the Calgary Herald the market will now be forced to “independently value two high-quality but different natured assets.”

After its foundation in 2007, DeeThree went public two years later, drilled its first upper Bakken horizontal well in 2011, acquired Brazeau assets the same year and paid the price for being a natural gas-weighted junior, taking a full body blow when investors became disaffected with less-than-promising results from the Alberta Bakken. Share values took a sharp dive four years ago after acquiring a stake in that play.

But management clawed its way back by diversifying operations and directing two-thirds of drilling to the Belly River formation in central Alberta to boost production.



Output projections

In its April 7 release, DeeThree projected Granite will exit 2015 with production of 4,100 barrels of oil equivalent per day and total proved plus probable reserves of 17 million boe, while Boulder is forecast to have an exit rate of 9,000 boe per day from 34.7 million 2P (proved plus probable) reserves. Granite has an estimated horizontal

well inventory of 162, while Boulder has more than 400 prospects.

Directors, officers and certain shareholders of DeeThree, holding 17 percent of the company’s common shares, have unanimously recommended approval of the deal.

Alberta Bakken development

The reorganization coincides with DeeThree announcing promising results

from the Alberta Bakken that is being developed with a natural gas injection enhanced oil recovery operation.

The technology has been used to slow declines in production from existing wells (see slide), with the first horizontal well flowing at 1,000 bpd of 30 degree API oil and 500,000 cubic feet per day of natural gas at a wellhead pressure of 300 pounds per

see DEETHREE SPLIT page 24



Oil Patch Bits

LTE recognized for its environmental stewardship

LTE said it has hit a major home run winning the VZ Environmental Award for Excellence in Environmental Stewardship at the third annual Rocky Mountain Oil & Gas Awards. The annual Rocky Mountain gala ceremony was held at the Sheraton Denver Downtown Hotel on March 10, where hundreds of oil and gas executives gathered together to celebrate those companies who excel in the key areas of operational excellence, innovations in technology, CSR, health and safety and environmental stewardship. LTE has shown true innovation in environmental stewardship, practices, and technology which are proven to be economically sustainable and have a clear environmental benefit.

The VZ Environmental Award for Excellence in Environmental Stewardship recognizes efforts, initiatives, and technological developments that have minimized or eliminated the environmental footprint of the oil and gas industry.

The oil and gas awards recognize the outstanding achievements made within the upstream and midstream sectors of the North American oil and gas industry. The awards show the industry’s motivation to develop by recognizing and rewarding the efforts of corporations and individuals. For more information, visit their website at www.oilandgasawards.com.



COURTESY LT ENVIRONMENTAL

Bakken Players

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
Abutec	24	E3 Environmental, LLC	8	North Dakota Petroleum Council	
aeSolutions	3	Empire Oil Company	4	North Slope Telecom (NSTI)	
Alaska Textiles		Environ Corp.		Northern Oilfield Services Inc.	3
American Association of Railroads (AAR)		Fortis Energy Services		Northwest Linings & Geotextile	17
Anvil Corporation		Four Seasons Equipment		Oasis Petroleum	11
Arctic Catering		Futaris		Oilfield Improvements	
Beaver Creek Archaeology	2	Halcon Resources		Percheron, LLC	10
Bluetick	2	IFR Workwear		Petroleum News Bakken	8
Brock White	16	Kilo Technologies Ltd.		PetroShale	
BTL Liners		Lister Industries		Polyguard Products	19
CESI Chemical		Lounsbury & Associates	4	QEP Resources	
City of Grand Forks, ND		LT Environmental		Quality Mat	
ClearSpan Fabric Structures		Lynden	24	R360 Environmental Solutions	
Cruz Energy Services LLC (A CIRI Co.)		M SPACE		Ramada	
CST Storage		Marmit Plastics		TenCate	
D&S Factors		McAda Drilling Fluids Inc.		Trinity Health Occupational Medicine	
DAWA Solutions Group		Midwest Industrial Supply		Unit Drilling Company	
Deister, Ward & Witcher, Inc.	6	Miller Insulation Co.	23	Vactor Manufacturing	
DET-TRONICS	19	MT Rigmat LLC		Wanzek Construction	
Diamond R Enterprises		Netsch Pumps North America	5		

continued from page 1

ND OUTPUT

no precipitation in February.”

Perhaps even more notable is that in February just one well was brought on production in the state, in stark contrast to the 47 wells brought on production in January, and the 173 put on production in December. “Only one increase — one well in terms of wells producing — between January and February, which is also a record in terms of the lowest increase that I could find as far as I went back,” he added.

“In the poll that we do of the major operators, it looks like there could be another five rigs that are on the line or on the margin in terms of possibly being laid down.” —Lynn Helms, North Dakota Department of Mineral Resources

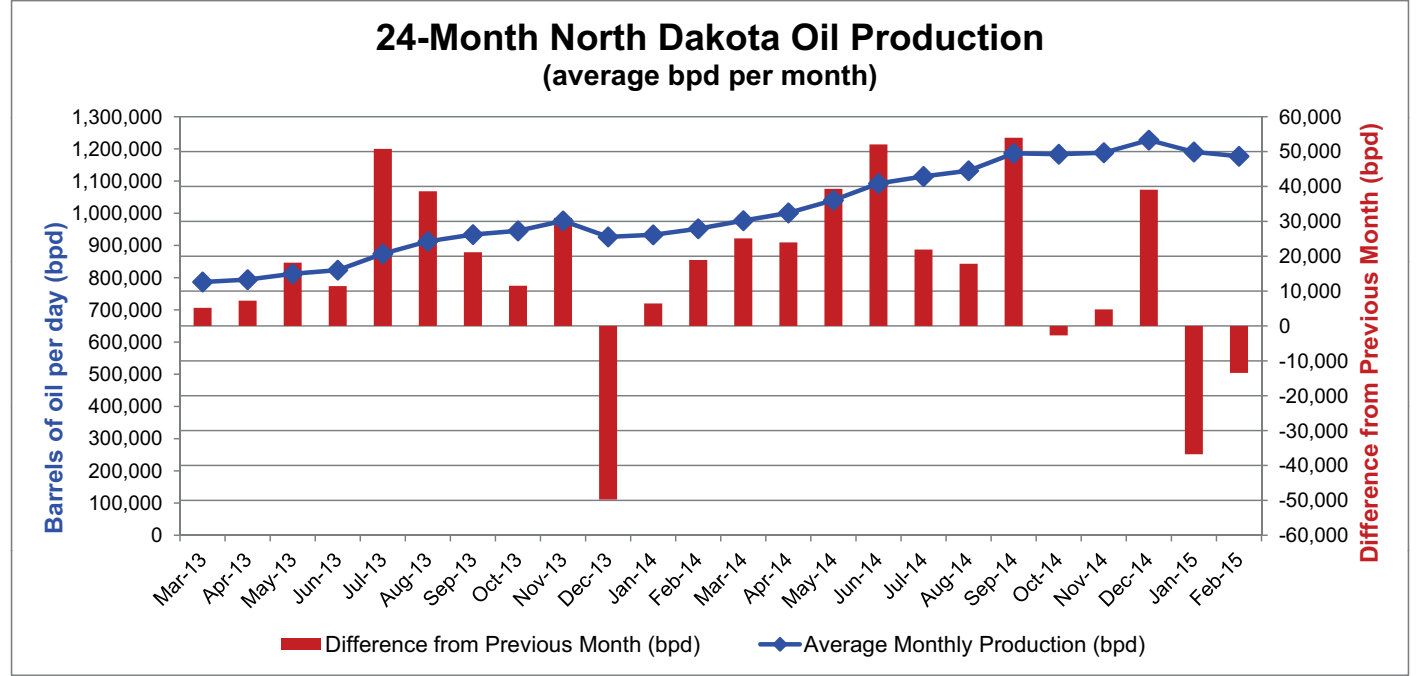
Backlogs and tax triggers

And adding to the dynamic is the increasing number of wells drilled but not yet fractured, with another approximately 75 added to the list of uncompleted wells bringing the total number awaiting completion to an estimated 900, a record high. At that rate, Helms estimates that by June there could be 1,000 or more wells waiting on completion.

Contributing to the backlog of completions is the larger of two state tax incentive triggers, which at current crude oil prices is expected to go into effect on June 1. That trigger eliminates the extraction tax for all wells up to the first 24 months of production, and drops the extraction tax from 6.5 to 4 percent for all wells beyond the first 24 months of production.

Looking forward, Helms expects to see 1 to 2 percent declines in production in March, April and May. But in June he expects to see a rise in production as operators begin to catch up on well completions. Helms thinks production could get back in the 1.2 million bpd range the state hit in December 2014.

Another factor influencing 2015 production is the requirement that wells be put on production within a year of spudding. Helms said there are some 125 wells that have to be brought on production in June,



Data source: North Dakota Department of Mineral Resources Oil and Gas Division

and another approximately 200 that could be under the same requirement by December. As a result, he thinks production at the end of the year could be on par with production at the beginning of the year, which was approximately 1.19 million bpd.

Tumbling rig count

As of April 14, North Dakota’s rig count stood at 91 — a decline of 17 from the 108 rigs operating at the end of March. It is also a decline of 42 rigs from February and 69 rigs from the end of January.

Helms expected the rig count in mid-April would be in the 120 to 130 range rather than 91 as of the day of the press conference, and he was surprised at the rapid rate of the decline. “Going into this thing in December, operators were telling us they were going to ladder their rigs down as contracts expired and that’s what we had built our plans around,” he said. “But as they got into January and February and crude prices were as weak as they were, quite a few operators started actually buying their rig contracts and laying rigs down, which is a very expensive proposition.”

And the rig count could decline even more. “In the poll that we do of the major operators, it looks like there could be another five rigs that are on the line or on the margin in terms of possibly being laid down.”

Other February numbers

The one well that went on production in February put the number of producing wells

As of April 14, North Dakota’s rig count stood at 91 — a decline of 17 from the 108 rigs operating at the end of March. It is also a decline of 42 rigs from February and 69 rigs from the end of January.

in North Dakota at 12,198. Seventy-five percent were producing from the Bakken petroleum system with the remaining 25 from conventional “legacy” pools.

While oil production fell in February, natural gas production increased slightly with gas production averaging 1,473,826 thousand cubic feet per day, up from the 1,473,516 mcf per day in January.

A total of 197 drilling permits were issued in February, down 20 percent from the 246 permits issued in January. In March the number of drilling permits fell to 190. ●

Contact Mike Ellerd at mellerd.pnb@gmail.com

Committed to value, dependability, and quality.
Unparalleled knowledge, timely completion, and impressive safety is what you can expect from Miller Insulation.

Industrial | Oilfield | Commercial | Residential

MILLER INSULATION CO. INC
millerinsulation.com

North Dakota 800.337.8145 Bismarck 701.258.4323 Fargo 701.297.8813 Dickinson 701.225.5877 Williston 701.572.2718	Wyoming Casper 307.265.5646 Cheyenne 307.635.5311
Utah North Salt Lake 801.936.8352	

3520 East Century Avenue P.O. Box 1393 Bismarck, ND 58502

Petroleum NEWS BAKKEN

Two years later

BLM lease prices fall

The publication of record for the Bakken oil and gas industry.

SUBSCRIBE TODAY!
907-522-9469
petroleumnewsbakken.com

Petroleum NEWS BAKKEN

Bartlett & West

For over 60 years — engineering clean and safe water for our communities and for you. **&you**

Delivering Engineering Solutions

- Surveying and construction observation
- Water supply, treatment, and distribution
- Land development
- GIS and information management
- Easement acquisition
- Permitting and environmental services
- Transportation design
- Pipeline and pump station design

BARTLETT & WEST

BILLINGS MT ■ BISMARCK ND ■ 800.474.4117 ■ BARTWEST.COM

continued from page 1

GAS CAPTURE

Dakota Department of Mineral Resources Director Lynn Helms said at an April 14 press conference. "I'm just really pleased to see the numbers and be able to look back and say wow, what we did over the

last year in terms of inventing a whole new way of reducing flaring and controlling production ... is really working. It's a necessary part of the business if you're going to reduce flaring to 10 percent which is the ultimate goal."

He said much of the decrease in flaring also came from increased compression on

pipelines that enabled greater volumes and the use of many more well site capture units. Also, Hess' Tioga gas plant was able to reach 84 percent of full capacity, but it is still waiting for further gas gathering expansions south of Lake Sakakawea to make it able to take an even bigger chunk out of the flaring problem. DMR has currently ordered production curtailment of 1,800 barrels per day to meet gas capture goals and operators are self-curtailling another 7,000 bpd. Helms said it makes a significant impact to production as the more than 14,000 bpd drop from January to February would have been much less if curtailments weren't necessary. In February, even more production — around 12,000-13,000 barrels per day — was curtailed. Helms expects greater production restrictions to return in June when more wells are expected to be completed (see related story, page 1).

"We've had everything working in our favor in terms of less curtailments and better gas capture, but as we come into the summer months and as we hit this June completions surge I think we're going to see those curtailments creep back up in that 12- to 13,000 range," Helms said.

But more compression capacity is expected this summer as well, Helms said,

with Oneok, Hiland and Hess all planning additional projects to move more gas out of northeast McKenzie County.

Implementing oil conditioning

Oil conditioning orders went into effect on April 1 and one concern was that the process could increase flaring as operators work to remove volatile gases from the oil. Helms said it's still too early to tell what impact conditioning will have on production and flaring, but he was pleased to report that 90 percent of 1,000 heater treaters surveyed by inspectors were found to be in compliance of the new order. Operators of the other 10 percent have requested more time to achieve the 13.7 psi vapor pressure. Helms also said of the 600 vapor pressure tests turned into his office, only 1 percent were too high. In those cases, operators are given 48 hours to adjust their equipment and retest. DMR has been able to review the pressure tests and give approval within 24 hours of receiving them, Helms said.

Hunt requests flaring approval

The high gas capture percentage proves operators are clearly finding ways to curb flaring, although some exceptions still apply as the North Dakota Industrial Commission will hear from one operator asking for permission to flare gas from select Bakken wells at its hearings on April 22-24. Hunt Oil is asking the commission to authorize flaring for one well each in the Alexandria, Smoky Butte and Green Lake fields along the border of Divide and Williams counties. In its applications, the company states that all three wells are not economically feasible to connect to gas gathering systems or equip with an electrical generator to utilize the gas.

—MAXINE HERR

Contact Maxine Herr
at maxine606@msn.com

continued from page 22

DEETHREE SPLIT

square inch over a five-day test.

"The real key is that it demonstrates in our view that the EOR is working," said Jonathan Fleming, Granite's vice president of capital markets.

Dundee Capital's Ellison said the EOR scheme could yield recovery factors that are better than 4 percent booked to date and unlock additional drilling locations with tighter well spacing.

He said in a note that decline rates have begun to moderate on the overall pool "which we view as a materially positive development given the company's historical 40 percent plus decline rate."

"We expect to see improving capital efficiencies providing stronger sustainability metrics in addition to a clean balance sheet." DeeThree started work on the upper Bakken siltstone at Ferguson near the Montana border four years ago after discovering it by checking logs from an original vertical well. The upper Bakken siltstone overlies the Alberta Bakken's two shale source rock intervals.

The company noted that the middle Bakken siltstone in Alberta was popular with several producers a few years ago, but was largely determined to be uneconomic.

—GARY PARK

Contact Gary Park through
publisher@petroleumnews.com

**Only pay for the speed you need...
Dynamic Routing!SM**

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden, you only pay for the speed you need!



LYNDEN

Innovative Transportation Solutions

www.lynden.com 1-888-596-3361

ABUTEC™ Advanced
Burner
Technologies

**ELIMINATE
WORRY.
EMBRACE
RELIABILITY.**

- Industry proven systems
- Advanced burner designs
- Pilot/flare presence monitoring

98%
DESTRUCTION
REMOVAL
EFFICIENCY

HP 1500

HP 3000

www.abutec.com