Petroleum Petroleum n e w s



Page Kathy Neset honored by Williston API for outstanding achievements

BAKKEN

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Exporting at Berthold



BNSF trains load at Enbridge's Berthold Station in Ward County, North Dakota in late October. The 80,000 barrel per day rail facility was designed to stage three unit trains. Berthold Station also provides truck offloading, crude oil storage and access to Enbridge's North Dakota pipeline system.

Tallgrass and Hiland launch Bakken to Cushing open season

Tallgrass Pony Express Pipeline LLC and Hiland Crude LLC, have announced an open season for shipper commitments under a joint tariff of the two companies' connecting pipelines that will transport crude oil from the Williston Basin to the Cushing, Oklahoma, Midcontinent hub.

Hiland's Double H pipeline, which is currently under construction with initial startup service planned to begin in late December, will transport crude from receipt points in the Williston Basin and the Powder River Basin to a hub at Guernsey, Wyoming. The Tallgrass Pony Express pipeline, which went into commercial service in October, then transports crude from the Guernsey hub to Cushing. While both companies held open seasons for each pipeline individually, the new open season is for crude transport from the Williston and Powder River basins all the way to Cushing. The joint tariff open season is expected to close on Dec. 12.

Both Tallgrass and Hiland are planning to expand the current capacities of their two pipelines "based on commitments

see OPEN SEASON page 11

Enbridge US affiliate testing interest in Cushing rail terminal

Enbridge Energy Partners, EEP, the 34 percent-owned U.S. affiliate of Calgary-based Enbridge, is testing producer and shipper response to building a rail terminal at Cushing, Oklahoma, as it continues its measured advance in the use of rail to ease pipeline pressures.

EEP said that if it receives enough commitments it will establish a 120,000 barrel per day terminal at the Cushing storage hub to load two unit trains per day by the end of 2016. No price tag has been established.

Bryan Boaz, who helps oversee the EEP rail portfolio, told Reuters there is "tremendous interest" in the proposal, which Savage Services would operate and Watco Cos. would act as rail service provider.

He said the crude oil would likely originate in Western Canada, with the final destinations determined by consumer interest.

Boaz said EEP's philosophy is to "pipe all we can and rail the rest."

He said the project would see Watco return an old rail line

from Cushing to Davenport, Oklahoma, to service. Enbridge has 20 million barrels of storage in Oklahoma

see RAIL TERMINAL page 12

GOVERNMENT

Taking issue

Industry cites numerous issues with ND's proposed oil conditioning rules

By MAXINE HERR

For Petroleum News Bakken

Industry leaders are calling for changes to the North Dakota Industrial Commission's, NDIC, proposed field rules for conditioning Bakken crude.

The commission decided at its Nov. 13 meeting to open the document to public comment for one week to allow interested parties to offer any further insight or recommendations. The North Dakota Petroleum Council, along with individual operators and other industry groups were quick to criticize the commission's plans to set specific operating temper-

see TAKING ISSUE page 6

Proposed rules may not prevent rail explosions

The North Dakota Industrial Commission's efforts to regulate oil conditioning comes as part of a four-step process to help avoid additional train explosions like the one that killed 47 people in Lac-Megantic near Quebec, Canada, in July 2013 and the oil train crash near Casselton, North Dakota, in December 2013. The Federal Railroad Administration is

see **PROPOSED RULES** page 6

MOVING HYDROCARBONS

Fact-checking XL

President's claims that crude from pipeline is destined for world markets scoffed

By GARY PARK

For Petroleum News Bakken

wice during his November Pacific Rim trip to two global summits, President Barack Obama indicated he will not easily be budged from his well-entrenched views on Keystone XL.

In answer to a question at a news conference in Australia he said: "I won't hide my opinion about this, which is that one major determinant of whether we should approve a pipeline shipping Canadian oil to world markets, not to the United States, is does it contribute to the greenhouse

see XL FACT CHECKING page 12

TransCanada sticking to rail business option

Whether or not Keystone XL is built, its proponent TransCanada is likely to enter the rail business, Chief Executive Officer Russ Girling said.

But the size of that role will hinge on the fate of XL and other pipeline applications, he said.

Girling told reporters after TransCanada's recent annual investor conference that his

see RAIL OPTION page 12

DRILLING & COMPLETION

Montana activity slows

Trend in declining DSU, drilling apps in North Dakota spills across state line

By MIKE ELLERD

Petroleum News Bakken

s Petroleum News Bakken reported in the Nov. 23 edition, drilling and spacing unit applications filed with the North Dakota Industrial Commission were down considerably in November, and that trend is being seen across the state line in Montana where the number of drilling and spacing unit applications on the Montana Board of Oil and Gas Conservation's December hearing docket declined noticeably from the previous docket in October.

In October, 13 Montana operators filed applications seeking creation of a total of 14 temporary spacing units, permanent status for nine existing temporary units and authorization to drill wells on

15 DSUs. In December, six operators are seeking creation of five new temporary DSUs, permanent status for six DSUs and authorization to drill on four units. Under Montana rules, a DSU is first established as temporary but if and when a well is drilled and goes on production, the status of the DSU must be changed to permanent.

Continental and Oasis

Among the Montana operators filing applications the board will consider during a Dec. 4 hearing is Continental Resources which is seeking authorization to drill an additional Bakken/Three Forks well on a permanent unit in the Elm Coulee field in Richland County. Continental is also seek-

see MONTANA ACTIVITY page 11

contents

Petroleum News Bakken

ON THE COVER

Taking issue

Industry cites numerous issues with ND's proposed oil conditioning rules



Fact-checking XL

President's claims that crude from pipeline is destined for world markets scoffed

SIDEBAR, Page 1: TransCanada sticking to rail business option

Montana activity slows

Trend in declining DSU, drilling apps in North Dakota spills across state line

Tallgrass and Hiland launch Bakken to Cushing open season

Enbridge US affiliate testing interest in Cushing rail terminal

ASSOCIATIONS & EVENTS

3 Williston API names award winners

Neset Consulting president takes home top honors for her outstanding achievements advocating for the oil and gas industry



BAKKEN STATS

- 7 XTO tops IPs, permits up, Baytex transfers wells
- **7** Bakken producers' stock prices
- **8** IPs for ND Bakken wells, Nov. 18-24
- 9 North Dakota oil permit activity, Nov. 18-24
- **10** ND weekly county permit totals, Nov. 18-24
- 10 Top 10 Bakken wells by IP rate, Nov. 18-24

LEGAL COLUMN

4 Royalty interests v mineral interests

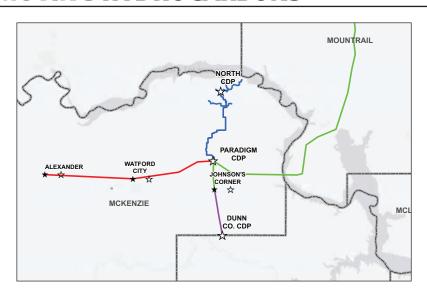
Title of document does not control interpretation of conveyance; trial judges can make opposing decisions on same set of facts



MIDSTREAM & DOWNSTREAM

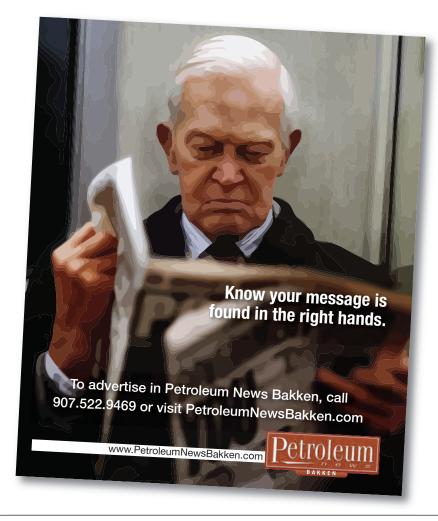
5 Another ND refinery proposal floated

MOVING HYDROCARBONS



3 Paradigm secures strategic partners

A 20-inch pipeline project proposed to cross Lake Sakakawea would move oil from the core of the Bakken and relieve truck traffic



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ASSOCIATIONS & EVENTS

Williston API names award winners

Neset Consulting president takes home top honors for her outstanding achievements advocating for the oil and gas industry

By MAXINE HERR

For Petroleum News Bakken

he Williston Basin chapter of the American Petroleum Institute, Williston API, achievement award winners were recognized at the Williston petroleum banquet held on Nov. 20 with top honors for an individual going to Kathy Neset.

The awards are meant to celebrate the positive contributions and accomplishments of the oil and gas industry throughout the Williston Basin. The Williston API presents four awards: industry innovation, community service, and outstanding achievements both for a company and an individual.

Neset, president of Neset Consulting in Tioga, North Dakota, was presented with the Outstanding Achievement award for an individual which identifies a person deserving of recognition for an activity or accomplishment that can be described as an outstanding achievement in the Williston Basin. Neset is often called upon to present, educate, and advocate on behalf of the industry and North Dakota.

"She presents clear, concise and compelling information on the responsible development of energy in the Bakken," the Williston API said in a statement. "As both a geologist and a farmer/rancher, her voice carries credibility and accuracy of information that benefits not only the oil and gas industry, but landowners and the state of KATHY NESET North Dakota."



Other award recipients

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The Outstanding Achievement company award was given to St. Paul-based Corval Group which has offices in Helena and Billings, Montana, as well as Beulah and Fargo, North Dakota. The company was named for its commitment to the founders' core values, particularly a value for increased safety.

"As a result of this commitment to a culture of safety, Corval Group recently achieved a major national safety milestone by completing 1 million hours of work without a recordable OSHA injury," Williston API said. "This accomplishment now places the company in the top 1 percent of safe contractors throughout the country."

Halliburton won the Industry Innovation award which recognizes significant achievement for advancements in technology, systems, processes and their application in the oil and gas industry in the Williston Basin. The company received the award for the creation of their Frac of the FutureTM approach to modern fracturing operations. The method combines technology and equipment to minimize environmental impact, reduce pad footprint, improve reliability, reduce the number of personnel on location and increase safety.

The Community Service award is given to individuals and organizations with a commitment to their community and contributions to community service. This year, the award was presented to Williston-based JMAC Resources for their outstanding support of community projects, organizations and schools in Williston and surrounding areas. JMAC Resources is a civil and energy services contracting business in the Bakken. •

Contact Maxine Herr at maxine606@msn.com

MOVING HYDROCARBONS

Paradigm secures strategic partners

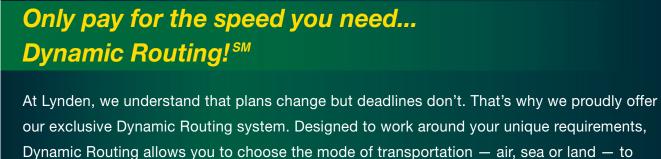
A 20-inch pipeline project proposed to cross Lake Sakakawea would move oil from the core of the Bakken and relieve truck traffic

By MAXINE HERR

For Petroleum News Bakken

trategic partnerships could be the key to success for Dallas-based Paradigm Energy Partners LLC's plans to construct a pipeline to service oil producers in McKenzie County and cross Lake Sakakawea to send crude from terminals in Mountrail County.

Paradigm teamed first with Grey Wolf Midstream, an affiliate of Missouri River Resources, a tribally chartered company that develops oil and gas resources for the Three Affiliated Tribes. Paradigm said Nov. 21 that it had formed a joint venture to develop the 76-mile long pipeline with Phillips 66 Partners. The joint venture of Phillips 66 and Paradigm, called the Pipeline JV, will equally divide 88 percent ownership while Grey Wolf will own the remaining 12 percent. The Sacagawea Pipeline project will also include construction of a rail terminal on a 710-acre site near Palermo in Mountrail County. The rail-loading facility is designed to have an initial capacity of 100,000 barrels per day, with the flexibility to be expanded to 200,000 bpd. Under the terms of the



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LEGAL COLUMN

Royalty interests v mineral interests

Title of document does not control interpretation of conveyance; trial judges can make opposing decisions on same set of facts

By JANNELLE STEGER COMBS

For Petroleum News Bakken

n Oct. 28, the North Dakota Supreme Court issued a final ruling in a case that started in 2010 and that it had already heard 26 years before.

On Dec. 19, 1952, Finlay F. Hamilton acquired a one-fourth interest in 80 mineral acres in Bowman County. Between March 7, 1953, and Feb. 28, 1956, Hamilton executed 15 deeds to various individuals using preprinted "mineral deed" forms. In the blank spaces on the form, in typewritten text, the deed con-

veyed various undivided fractional "royalty" interests. Hamilton died June 7, 1956, in Duluth, Minnesota.

In 2010, Lawrence A. Hamilton and other individuals, who are Finlay Hamilton's



JANNELLE STEGER COMBS

grandchildren and successors to his mineral interests, brought action against Ronald Rowland and other grantees, or their successors, of the 15 mineral deeds. Hamilton requested that the district court judge find that the deeds conveyed royalty interests, instead of mineral interests.

In 2010, Lawrence A. Hamilton and other individuals, who are Finlay Hamilton's grandchildren and successors to his mineral interests, brought action against Ronald Rowland and other grantees, or their successors, of the 15 mineral deeds.

Hamilton moved for summary judgment and provided other deeds that Finlay F. Hamilton had executed elsewhere in North Dakota where he did not add the word "royalty" to the blank spaces on the "mineral deed" form. Rowland argued that the face of the deed was unclear and raised a fact issue. If there are contests of facts, summary judgment is not a proper way to dispose of a case. There must be a trial, before a judge or jury, to resolve factual issues.

Case at ND Supreme Court

The court noted that it wasn't the first time one of Finlay Hamilton's deeds had caused issue with title. In 1988, another deed from him for lands in Bowman

In this case the title "Mineral Deed" on the document was not enough to change the deed from transferring only a royalty interest to transferring minerals.

County had been discussed at the North Dakota Supreme Court. The Hamilton heirs alleged then that the mineral deeds conveyed only a non-participating royalty interest and reserved the mineral rights as well as the executive right to lease with Finlay F. Hamilton. In that case, Hamilton had deeded out all but a 0.4166667 mineral acre amount if the deeds were considered mineral deeds. His heirs' interests were leased in 1981 by Williams Co. for all 80.03 net mineral acres that Hamilton originally owned.

Williams sued the Hamilton heirs for the return of the bonus rental excess it paid. That case also was disposed of at the Supreme Court because it was not a final judgment. That action also did not include the grantees in the mineral deeds with the "royalty" language on its face in the lawsuit. The appeal was dismissed on technical grounds, and never appealed later with a final judgment. The trial judge's finding that the deeds conveyed royalty interests rather than mineral interests stood as between Williams Co. as the lessor and the Hamilton heirs.

In the present Hamilton case, the parties had a bench trial after which the trial judge declared the deeds conveyed royalty interests and not minerals. In this second appeal, the Supreme Court found summarily that the trial judge did not clearly err in its judgment of the nature of the interest conveyed.

Lessons learned

During the week of Nov. 17, oral arguments were held at the Supreme Court regarding interpretation of deeds held by Soo Line Railroad. Both parties involved emphasized how the title of the documents alone is not sufficient to interpret a deed grant. In this case the title "Mineral Deed" on the document was not enough to change the deed from transferring only a royalty interest to transferring minerals. It is also a lesson that even if a prior case had a finding of fact, unless appealed, that case record will stand as between the parties. Two different trial judges looked at the same document, decades apart, and each found differently. •

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PARADIGM PARTNERS

Rail JV Agreement, Phillips 66 will own between a 50 and 70 percent interest with Paradigm's ownership percentage subject to the achievement of certain milestones associated with the Pipeline JV.

"Paradigm is excited to be partnering with Phillips 66, a recognized global leader in refining, marketing and midstream," Paradigm CEO Troy Andrews said in a statement. "Phillips 66 Partners pairs quality, safety and reliability with Paradigm's flexible custom gathering, storage and transport solutions for crude oil and natural gas producers in the Bakken Shale of North Dakota. Further, these projects will provide long-term, reliable and cost-effective take away options, increased flow assurance, additional outbound capacity and market optionality for producers and marketers in the basin."

Additionally, the Pipeline JV will own and construct a crude oil storage terminal and central delivery point for various crude gathering systems in Keene.

The Sacagawea Pipeline project will deliver crude oil from various points in and around Johnson's Corner in McKenzie County. The 20-inch pipeline will then cross Lake Sakakawea and enter Mountrail County and connect to the Dakota Plains rail facility near New Town. Since some of the volume will be unloaded at that point, Paradigm plans to construct 16-inch pipe from New Town to its final destination near Stanley. The Palermo Rail terminal and Enbridge's Stanley facilities will allow access to all three U.S. coasts for third party shippers. Open season was extended and will close on Dec. 15.

During an informal hearing with the state's Public Service Commission on Oct. 22, Paradigm asked to have some protections from competitors considering pipeline projects within 10 miles on either side of the Sacagawea Pipeline. Paradigm's Vice President of Engineering and Construction Tommy Janik said commercial research shows that there are more than 400,000 barrels of crude production available for transport in McKenzie County so other companies

"That helps us more than anything, we think, with the routing, the aligning of the crossing and the crossing itself." —Tommy Janik, Paradigm Midstream **Partners**

will likely join in the efforts to provide a means to move crude oil by pipe versus

"We think if there are 400,000 available there and we're moving 230,000 or so, there may be 100,000 that can move out by pipe or other means now," Janik said. "So that still leaves 60- to 70,000 barrels available for others to move."

The transactions are expected to close in the fourth quarter of 2014 with total capital cost for the joint ventures estimated to be approximately \$300 million, subject to the terms set forth in the final agreements. Both the pipeline and rail terminal are expected to begin operations in the first quarter of 2016.

Crossing Lake Sakakawea

Paradigm needs to obtain approval from the U.S. Corps of Engineers and the Three Affiliated Tribes to construct pipeline across Lake Sakakawea, but by partnering with Grey Wolf, Janik is confident in Paradigm's chances of obtaining necessary permits.

"That helps us more than anything, we think, with the routing, the aligning of the crossing and the crossing itself," he told the commission.

Janik told the commission that there is a private company developing plans to construct a Bakken Bridge pipeline which would act as a carrier for other pipelines through the lake, but Paradigm still plans to construct its pipeline on its own. Janik said the Bakken Bridge is proposed to be a 60-inch diameter pipe that could be filled with 10 to 15 pipelines in order to consolidate the approvals needed for midstream companies to cross Lake Sakakawea, and the private company is currently working with the Bureau of Land Management which is taking the lead on federal regulation of the project. •

> Contact Maxine Herr at maxine606@msn.com

DIVIDE BURKE WILLIAMS MOUNTRAIL **MCKENZIE** DUNN MERCER LEGEND WATFORD EXPRESS(In Progress) SACAGAWEA PIPELINE(Q4 2015) LITTLE MISSOURI EXPLORER(In Progress) GOLDEN VALLEY BILLINGS CHARLSON EXTENSION / CHARLSON GATHERING (Q4 2014) N 0 2.5 5 PARADIGM NORTH DAKOTA PIPELINES



MIDSTREAM & DOWNSTREAM

Another ND refinery proposal floated

For the second time in less than a year, a proposal has emerged to build a refinery at Devils Lake. Eagles Ledge Energy, a privately held Canadian energy company, discussed plans for 20,000 barrel per day diesel refinery at a public meeting in Devils Lake on Nov. 24.

According to the Devils Lake Journal, According to the Devils Lake Eagles Ledge has "secured" a 354-acre tract of Journal, Eagles Ledge has land for a proposed \$200 million project northwest of the City of Devils Lake. The company is completing due diligence on licensing and regulatory issues and is planning to issue an "Environmental Impact Summary." The company is also planning to hold an "annexation

"secured" a 354-acre tract of land for a proposed \$200 million project northwest of the City of Devils Lake.

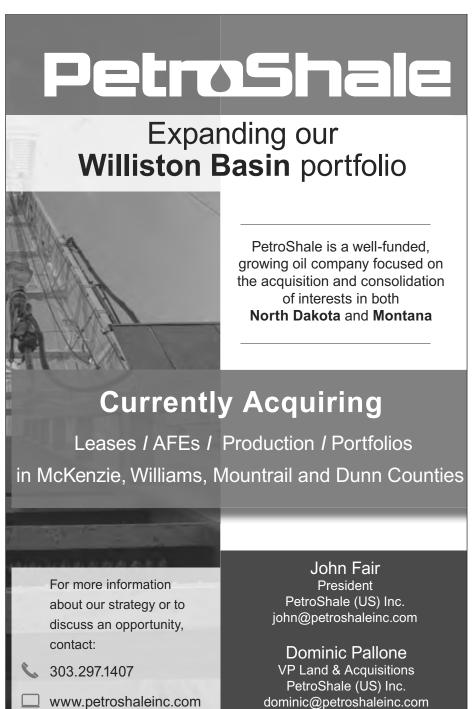
meeting" in December. Eagles Ledge said it is also forming a new entity to operate the proposed refinery to be known as American Dakota Refinery LLC.

In December 2013, a Michigan based company floated a proposal for a \$250 million, 20,000 bpd diesel and jet fuel refinery for Devils Lake. However, to date nothing concrete has emerged on that proposed project.

Arizona-based Quantum Energy has proposed building up to five 20,000 bpd diesel refineries in the Bakken region. Quantum announced in August it had signed purchase options for refinery sites at Fairview and Baker in Richland and Fallon counties, Montana. Quantum was also looking at a site in the Billings area, but the company said due to an inability to secure a land deal, it ceased negotiations for the Billings site as of Oct. 30.

Then on Nov. 3, Quantum announced that it had signed a two-year option on 260 acres near Stanley in Mountrail County. OilVoice reported Nov. 25 that Quantum signed options on acreage near Berthold in Ward County for another proposed refinery.

-MIKE ELLERD



TAKING ISSUE

atures, pressures and techniques in order to establish a standard barrel of Bakken oil.

"We support the NDIC's overall concept of a Reid Vapor Pressure Target but oppose the micromanagement of how we reach that target," NDPC President Ron Ness stated in a submitted letter.

The proposed order would require the state's oil to be treated at temperatures of at least 115 degrees Fahrenheit and pressures of at least 50 pounds per square inch, psi, in order to stay at or below a Reid vapor pressure of 13.7 psi. The order requires operators who are not already complying with temperature and pressure parameters to undergo a quarterly third party test of the crude to ensure that the Reid vapor pressure has not exceeded 13.7 psi. Any operator seeking alternative methods to condition the oil must request approval by going before the commission through the formal hearing process. In addition, transload rail facilities must submit a notice to the Department of Mineral Resources if they discover that any Bakken crude oil received exceeds the 13.7 psi threshold and also provide the source of the oil and action taken to deal with the non-

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PROPOSED RULES

responsible for regulating train speeds, routing and track maintenance while the federal Pipeline and Hazardous Materials Safety Administration develops rules regarding rail cars and coordinates training of emergency service workers to respond in the event of an accident. NDIC made a commitment to work with the U.S. Department of Transportation to be responsible for the composition of the Bakken crude oil transported across the country.

Ron Ness of the North Dakota Petroleum Council has insisted that there is too much focus on the commodity and not enough on keeping trains on the tracks through proper railroad maintenance and safety standards. A recent study by the American Fuel and Petroleum Manufacturers, AFPM, shows that controlling the Reid vapor pressure may have little effect on train safety.

In its comments to NDIC regarding the proposed order (see story, page 1), AFPM cited its Crude Stabilization paper dated Oct. 1, 2014, which determined that any significant release in a derailment may result in a large fire regardless of the Reid vapor pressure. The paper concluded that while vapor pressure

see **PROPOSED RULES** page 11

compliance.

The American Petroleum Institute, API, noted that Bakken operators may develop operating procedures on an individual basis considering a variety of factors unique to their businesses and the NDIC should not interfere by requiring specific parameters.

"We believe that if NDIC's goal is to limit the vapor pressure of crude oil, then the most effective and clear way to do so would be to prescribe a vapor pressure specification and not operating requirements," API Group Director of Downstream and Industry Operations Robert Greco, III said in a statement.

Greco also points out that while the commission expects operators to follow conditioning standards at well sites, it fails to recognize that crude oil may not be directly transported from the well. Some may be gathered and transported from a storage area and further processed by additional facilities.

"In that case, the rules to meet 13.7 psi should be imposed on the stream that leaves the processing facility (e.g. stabilizer) for transport, with those results then applicable to every well or lease processed by the additional equipment and facilities," Greco explained in an effort to show that the order is unclear in its intent and implementation.

Temperature issues

While operators generally support the NDIC's efforts to improve the marketability and safe transportation of crude oil, they request greater flexibility in the methods to achieve it. Hess Corp. proposed using a gasliquid separator and/or an emulsion heater-treater to heat fluids to a range of 90 to 120 degrees Fahrenheit that can be retained for at least 30 minutes.

"Hess' Bakken operating experience has shown that as retention time in a gas-liquid separator and/or emulsion heater-treater is increased, the temperature requirements to lower vapor pressure values is decreased," the company said in a submitted statement. Operators feel that the higher temperatures could limit operators' ability to use gas gathering pipelines which cannot operate with fluids heated to more than 120 degrees Fahrenheit without negatively impacting the equipment. XTO Energy Engineering Manager for Western Operations Matthew Gusdorf said the pipelines are designed to operate at moderate temperatures to allow higher pressures to maximize gas volume throughput, so higher temperature gas can be accepted but only at lower pressures.

"Imposing the temperature requirements would have a dramatic effect on the ability to gather gas and could subsequently lead to a step-change increase in flaring," Gusdorf said.

The NDPC also contends that the NDIC's proposed order does not take into account all operating conditions such as daily flow rates and ambient temperatures and ultimately creates unintended consequences such as flaring, emissions, and fire hazards.

Measuring pressures

Hess stated its concerns about sampling practices, noting that the commission did not fully clarify how Reid vapor pressures would to be measured. The company recommended that sampling be done in a simple procedure that is repeatable and does not require equipment with limited availability. Hess proposed an amendment to the proposed rules that would only require quarterly testing until a historical trend of compliance is established. Then testing would only be conducted annually. Since Hess currently operates 53 central facilities and 283 well sites, it feels the proposed quarterly sampling would be "unduly burdensome" to its operations. It estimates that the price to comply with sampling at that frequency would add \$1 million to \$2 million to operating costs each year. Hess also requested that the third party testing requirement be amended to allow for testing to be done by sufficiently trained Hess personnel and then





RON NESS

BRENT LOHNES

periodically audited by a qualified third party.

Overstepping railroad boundaries

Operators challenged the NDIC's authority to regulate rail transloading facilities since it is preempted by the Hazardous Materials Transportation Act which prohibits states from imposing requirements on railroad safety in addition to federal government regulations. Federal rules already provide limitations on flashpoint, initial boiling point, packing requirements, labeling and placarding requirements.

"Since the federal hazardous materials regulations governing the transportation of petroleum crude oil do not regulate RVP (Reid vapor pressure) and would allow Bakken crude with an RVP greater than 13.7 to be transported, North Dakota's RVP restrictions are preempted, as they would preclude the transportation of a hazardous material that is authorized for transportation under the HMTA," David Friedman, regulatory vice president for the American Fuel and Petroleum Manufacturers, AFPM, said in submitted comments.

"By their very nature, rail transloading facilities operate in interstate commerce because the vast majority of crude oil produced in North Dakota is shipped out of state for refining," Hess Field and Plant Operations Director Brent Lohnes explained. Lohnes added that an additional layer of state regulation on these shipments could cause discrimination of out-of-state crude that may not meet the 13.7 psi and restrict the state's terminals' ability to handle that production.

"The field rule would ... slow the transportation of out-of-state Bakken crude oil, and thus conflict with a key purpose of federal transportation safety law," Lohnes continued.

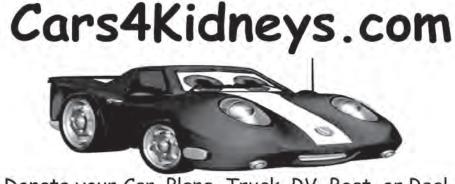
Taking responsibility

API accused NDIC of making rail terminals do its job of ensuring producers comply with regulations. If the commission expects every incoming load of crude oil to comply, API feels the testing should be conducted by the regulators or an independent third party on behalf of the regulators, or monitored and reported by the producers themselves. Furthermore, API is unclear on how NDIC expects rail operators to dispose of any non-compliant crude oil since stabilization equipment would be a multi-million dollar expense for rail terminals and the intent of NDIC was to keep all conditioning and stabilization requirements at the well-head

Senior Vice President Nathan Savage of the Savage rail facility near Trenton, North Dakota, expressed concerns that testing crude on every inbound truck or pipeline would be "extremely onerous, very expensive and operationally infeasible."

He gave an example that if Savage received 75,000 barrels of crude per day by truck, Reid vapor pressure testing would equate to an additional expense of \$96,000 a day. Installing the necessary equipment to conduct the testing would cost \$1.2 million. His other concern was the continuous flow of crude oil from pipelines into his facility and no practical means to isolate the source wells for the crude or to stop the incoming flow pending pressure test results. ●

Contact Maxine Herr at maxine606@msn.com



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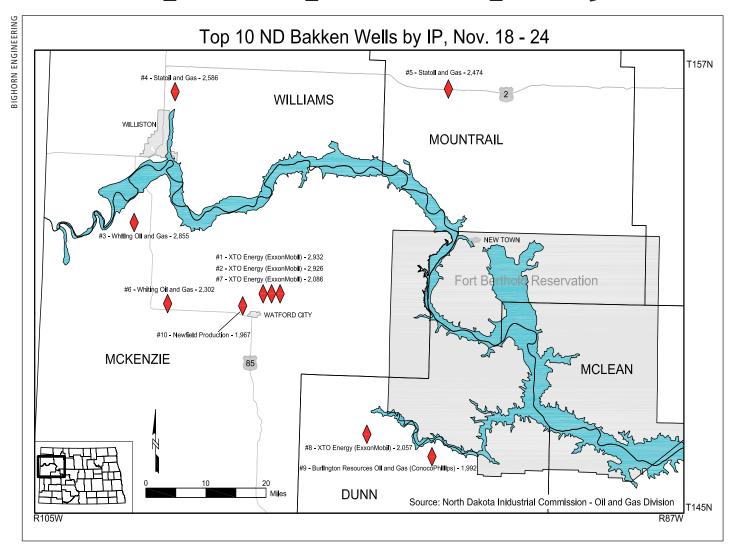
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Petroleum BAKKEN Stats

BAKKEN COMMENTARY

XTO tops IPs, permits up, Baytex transfers wells



MIKE ELLERD

Petroleum News Bakken

Two XTO Energy wells on a common pad in the Siverston field in McKenzie County came in with the week's top two 24-hour initial production, IP, volumes

and a third well on that pad was the No. 7 IP well for the week (see map this page and chart on page 10). A Three Forks well on the XTO pad topped the week's IP list at 2,932 barrels and at just six barrels less, a Middle Bakken well on the pad was No. 2 at 2,926 barrels. The No. 7 well

is a middle Bakken well and had an IP of 2,086 barrels. XTO also had the No. 8 IP at 2,057 barrels from a second bench Three Forks well in the Corral Creek field in Dunn County.

In third place was a Whiting middle Bakken well in the Elk field in McKenzie County with an IP of 2,855 barrels. Whiting also had the No. 6 spot at 2,302 barrels from a middle Bakken well in the Rawson field in McKenzie County.

Statoil had the Nos. 4 and 5 IPs of 2,586 and 2,474 barrels from a Three Forks well in the East Fork field in Williams County and a middle Bakken well in the Alger field in Mountrail County.

Burlington Resources was No. 9 on the list with 1,992 barrels from a middle Bakken well in the Corral Creek field. Newfield rounded out the list with an IP of 1,967 barrels from a middle Bakken well in the South Tobacco Garden field in McKenzie County.

ND permitting up

Seventy-eight North Dakota well permits were issued between Nov. 18 and 24 (see pages 9 and 10). That is an increase over the 62 issued during the previous reporting period. Twenty-two of the permits are for wells in McKenzie County, 16 in Dunn, 10 in Mountrail and nine in Williams with the others in Bottineau, Burke, Divide and stark counties.

Baytex transfers wells to SM Energy

Following SM Energy's acquisition of 61,000 net acres from Baytex announced in July, Baytex formerly transferred 103 wells to SM Energy this week. The full transfer chart can be seen at http://bit.ly/1vk3vly. Those were the only well transfers for the week. ●



Looking for a rig report?

North Dakota

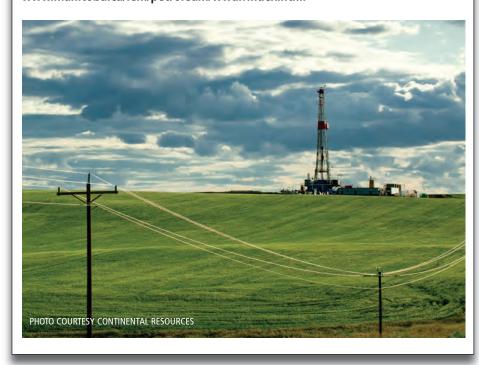
The best list for North Dakota is updated daily by the North Dakota Oil and Gas Division at www.dmr.nd.gov/oilgas/riglist.asp

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



Bakken producers' stock prices Closing prices as of Nov. 25 along with those from previous Wednesday

Company	Exchange	Symbol	Closing price	Previous Wed.
Abraxas Petroleum Corporation	NASDAQ	AXAS	\$4.21	\$3.99
American Eagle Energy Corporation	NYSE	AMZG	\$1.32	\$1.24
Arsenal Energy USA, Inc.	TSE	AEI	\$8.14	\$7.90
Baytex Energy USA Ltd.	NYSE	BTE	\$26.90	\$26.07
Burlington Resources Co., LP (ConocoPhillips)	NYSE	COP	\$71.73	\$72.13
Condor Petroleum	TSE	CPI	\$0.19	\$0.20
Continental Resources, Inc.	NYSE	CLR	\$53.88	\$52.86
Crescent Point Energy US Corporation	TSE	CPG	\$35.45	\$35.30
Denbury Onshore, LLC	NYSE	DNR	\$9.97	\$9.69
Emerald Oil, Inc.	NYSEMKT	EOX	\$2.67	\$2.51
Enerplus Resources USA Corporation	NYSE	ERF	\$15.24	\$15.14
EOG Resources, Inc.	NYSE	EOG	\$96.74	\$98.33
Fidelity Exploration & Production (MDU)	NYSE	MDU	\$25.88	\$25.45
Halcon Resources	NYSE	HK	\$3.03	\$2.88
Hess Corporation	NYSE	HES	\$82.31	\$82.37
Kodiak Oil and Gas (USA), Inc.	NYSE	KOG	\$9.70	\$9.76
Legacy Reserves Operating LP	NASDAQ	LGCY	\$20.68	\$19.31
Marathon Oil Company	NYSE	MRO	\$33.11	\$32.77
Mountain Divide, LLC (Mountainview Energy)	CVE	MVW.V	\$0.30	\$0.28
Newfield Production Company	NYSE	NFX	\$33.68	\$33.12
Northern Oil and Gas	NYSE	NOG	\$11.46	\$11.24
Oasis Petroleum North America	NYSE	OAS	\$26.19	\$25.85
Oxy USA, Inc. (Occidental Petroleum)	NYSE	OXY	\$86.36	\$86.04
PetroShale Inc.	CVE	P SH	\$1.79	\$1.70
QEP Energy Company	YSE	QEP	\$24.94	\$23.46
Samson Resources Company (KKR & Co)	NYSE	KKR	\$22.33	\$22.83
SM Energy Company	NYSE	SM	\$52.86	\$50.33
Statoil Oil and Gas LP	NYSE	STO	\$22.21	\$22.07
Triangle USA Petroleum Corporation	NYSE	TPLM	\$7.01	\$6.50
Whiting Oil and Gas Corporation	NYSE	WLL	\$54.99	\$55.03
WPX Energy Williston, LLC	NYSE	WPX	\$16.09	\$16.27
XTO Energy, Inc. (ExxonMobil)	NYSE	XOM	\$94.78	\$95.61



roleum IPs for ND Bakken wells

Nov. 18-24, 2014

This chart contains initial production rates, or IPs, for active wells that were filed as completed with the state of North Dakota from Nov. 18-24, 2014 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, Nov. 18-24. 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, GV: 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)
Contin	ental Resources											
26526	Jerry 3-8H	Poe	SWSW 8-151-100	2SEC	MCK	Bakken	horz.	20,970'	10/17/14	784	1,092	846
26531	Jerry 4-8H	Poe	SESW 8-151-100	2SEC	MCK	Bakken	horz.	20,835'	11/2/14	903	962	1,145
23750	Rochester 4-24H	N. Tobacco Garden	SWSE 24-151-99	2SEC	МСК	Bakken	horz.	20,890'	10/30/14	1,461	1,907	691
26477	Rochester 7-24H1	N. Tobacco Garden	SWSE 24-151-99	2SEC	MCK	Bakken	horz.	21,022'	11/5/14	1,031	1,584	930
27340	Vachal 6-27H1	Alkali Creek	NENE 27-154-94	2SEC	MNT	Bakken	horz.	20,560'	N/A	N/A	N/A	N/A
27341	Vachal 9-27H2	Alkali Creek	NENE 27-154-94	2SEC	MNT	Bakken	horz.	21,050'	N/A	N/A	N/A	N/A
Emeral	d Oil											
28121	Mary Samsonite 1-16-21H	St. Demetrius	NENW 16-141-99	2SEC	BIL	Bakken	horz.	20,685'	10/26/14	634	1,030	1,046
Oasis P	Petroleum North America											
26897	Delta 6093 24-15 2T	Gros Ventre	SENE 15-160-93	2SEC	BRK	Bakken	horz.	19,050'	9/23/14	644	415	556
27157	Delta 6093 24-15 4T2	Gros Ventre	SENE 15-160-93	2SEC	BRK	Bakken	horz.	18,874'	9/10/14	58	39	1,173
27531	Delta 6093 14-15 10T	Gros Ventre	NENE 15-160-93	2SEC	BRK	Bakken	horz.	18,800'	9/24/14	269	432	911
27760	White 5198 12-6 1T2	Siverston	LOT3 6-151-98	2SEC	MCK	Bakken	horz.	21,508'	10/10/14	772	9	5,189
Petro-l						-						
27471	Moody 159-94-15B-22-2H	North Tioga	NENW 15-159-94	2SEC	BRK	Bakken	horz.	19,310'	10/31/14	627	377	1,450
27470	Moody 159-94-15B-22-3H	North Tioga	NENW 15-159-94	2SEC	BRK	Bakken	horz.	19,217'	10/29/14	449	469	1,690
27469	Moody 159-94-15B-22-4H	North Tioga	NENW 15-159-94	2SEC	BRK	Bakken	horz.	19,090'	11/3/14	492	479	1,534
Slawso	n Exploration									_		
26103	Goldenban 2-2-1MLH	Sanish	SWSW 2-153-91	2SEC	MNT	Bakken	horz.	20,215'	3/18/14	547	410	583
Statoil	Oil and Gas					-						
27575	Barstad 23-14 8H	Alger	SWSE 23-156-93	2SEC	MNT	Bakken	horz.	21,826'	10/10/14	2,474	1,704	5,031
24755	Melissa 31-30 #3TFH	East Fork	SWSE 31-156-100	2SEC	WIL	Bakken	horz.	21,270'	10/23/14	2,586	2,085	6,663
24756	Melissa 31-30 #4H	East Fork	SWSE 31-156-100	2SEC	WIL	Bakken	horz.	20,650'	10/10/14	1,928	1,693	5,410
24757	Melissa 31-30 #5TFH	East Fork	SESE 31-156-100	2SEC	WIL	Bakken	horz.	19,940'	10/20/14	1,627	1,625	5,890
27982	Paulson 36-1 3TFH	Briar Creek	NWNW 36-152-104	2SEC	MCK	Bakken	horz.	20,080'	10/21/14	1,114	1,227	4,467
27981	Paulson 36-1 2H	Briar Creek	NWNW 36-152-104	2SEC	MCK	Bakken	horz.	20,205'	10/16/14	1,961	2,006	5,615
Whitin	g Oil and Gas					-				_		
28612	Bartleson 13-18H	Sanish	LOT3 18-153-92	2SEC	MNT	Bakken	horz.	18,300'	N/A	N/A	N/A	N/A
28424	Good Shepherd 41-15-2H	Rawson	NENE 15-150-101	2SEC	MCK	Bakken	horz.	20,532'	10/26/14	2,302	2,305	4,600
XTO En	ergy (ExxonMobil)									_		
26653	Jan 14X-34A	Siverston	SWSW 34-151-98	2SEC	MCK	Bakken	horz.	21,368'	10/15/14	2,926	6,531	1,329
26652	Jan 14X-34B	Siverston	SWSW 34-151-98	2SEC	МСК	Bakken	horz.	21,830'	10/30/14	2,086	5,106	920
26651	Jan 14X-34E	Siverston	SWSW 34-151-98	2SEC	МСК	Bakken	horz.	21,769'	10/23/14	2,932	4,475	1,286
26650	Jan 14X-34F	Siverston	SWSW 34-151-98	2SEC	МСК	- Bakken	horz.	22,210'	10/10/14	1,075	2,538	415
27925	Willey 31X-3H	West Capa	LTO2 3-154-97	4SEC		Bakken	horz.	20,909'	10/30/14	1,294	2,388	1,753
		IP	s for ND wells released	from con	fidenti	al status						
NDIC	Well Name	Field	Location	Spacing	Co.	Geologic Target	Wellbore	Total	IP Test Date	IP Rate	IP Nat. Gas	IP Water

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)
Burling	ton Resources Oil and Gas (ConocoPhill	ips)										
27889	CCU Olympian 11-2MBH	Corral Creek	LOT3 2-146-94	U	DUN	Bakken	horz.	21,007'	9/29/14	1,992	1,373	1,008
27890	CCU Olympian 11-2TFH	Corral Creek	LOT3 2-146-94	U	DUN	Bakken	horz.	21,053'	10/4/14	1,008	712	672
19954	CCU Olympian 21-2TFH	Corral Creek	NENW 2-146-94	U	DUN	Bakken	horz.	21,173'	9/21/14	1,800	1,587	1,248
27307	Copper Draw 21-27MBH	Johnson Corner	NENW 27-150-96	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
28074	Shenandoah 14-36MBH ULW	Keene	SWSW 36-153-96	N/A	MCK	Bakken/T.F.	horz.	N/A	N/A	N/A	N/A	N/A
Contine	ental Resources											
27695	Berlain 2-30H	Patent Gate	NENE 30-151-100	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27694	Berlain 3-30H	Patent Gate	NENE 30-151-100	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
23806	Bismarck 4-9H	Brooklyn	SWSW 9-155-98	2SEC	WIL	Bakken	horz.	20,933'	9/15/14	437	429	743
23807	Bismarck 5-9H	Brooklyn	SWSW 9-155-98	2SEC	WIL	Bakken	horz.	21,046'	9/22/14	994	936	1,202
28138	Jefferson 6-17H1	Crazy Man Creek	NENE 17-153-99	2SEC	WIL	Bakken	horz.	21,222'	9/5/14	118	98	91
26949	Oakdale 4-13H1	Jim Creek	NWNE 24-146-96	N/A	DUN	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Fidelity	Exploration and Production (MDU)	_										
27190	Minot State 34-33-28H	Stanley	SESW 34-155-94	4SEC	MNT	Bakken	horz.	20,600'	6/20/14	812	410	135
Hess Ba	akken Investments II			_								
28395	AN-Evenson- LW-152-95-1003H-2	Antelope	SWSW 10-152-95	N/A	MCK	Sanish	horz.	N/A	N/A	N/A	N/A	N/A

see ND IP page 10



roleum North Dakota oil permit activity

Nov. 18-24, 2014

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

		Permi	1						_
Well Name	Location	Footages	Field	Geologic Target	Wellbore Type	Elev.	NDIC No.	API No.	NDIC date
Bottineau Co.	1-0-0-0-10-11	. 001465	1.1014	raiget	Tiybe	LICV.	I INU.		The date
Enduro Operating		0.440 51	I., .	A1 /A ##		4 474	20050		11/20/1
NSCU Q-712-H2	SWNW 15-161-79	2,113'FNL and 833'FWL	Newburg	N/A**	conf.	1,474'	30050	33-009-02432	11/20/14
Bowman Co.									
Denbury Onshore									,
CHSU 31-36SH 15	NENE 36-131-105	200'FNL and 1,120'FEL	Cedar Hills	N/A**	conf.	3,046'	30073	33-011-01537	11/21/14
CHSU 42-31SH 14	NENE 31-131-104	1,255'FNL and 170'FEL	Cedar Hills	N/A**	conf.	3,095'	30026	33-011-01536	11/18/14
CHSU 44-36NH 15	SESE 36-131-105	840'FSL and 625'FEL	Cedar Hills	N/A**	conf.	3,052'	30017	33-011-01535	11/18/1
Divide Co.									
SM Energy					_			_	_
Ashley 3-26HS	NENW 26-163-100	350'FNL and2,415'FWL	West Ambrose	N/A*	conf.	2,168'	30055	33-023-01293	11/20/1
Bud 1-26HS	NENE 26-163-100	400'FNL and1,270'FEL	West Ambrose	N/A*	conf.	2,180'	30065	33-023-01296	11/21/1
Gertrude 1-26HN	NENE 26-163-100	300'FNL and 1,270'FEL	West Ambrose	N/A*	conf.	2,177'	30067	33-023-01298	11/21/1
Helen 1B-26HN	NENE 26-163-100	250'FNL and1,270'FEL	West Ambrose	N/A*	conf.	2,176'	30068	33-023-01299	11/21/1
Jessica 3B-26HN	NENW 26-163-100	300'FNL and 2,415'FWL	West Ambrose	N/A*	conf.	2,168'	30056	33-023-01294	11/20/1
Norma 1B-26HS	NENE 26-163-100	350'FNL and 1,270'FEL	West Ambrose	N/A*	conf.	2,179'	30066	33-023-01297	11/21/1
Rilye 3B-26HS	NENW 26-163-100	400'FNL and2,415'FWL	West Ambrose	N/A*	conf.	2,168'	30054	33-023-01292	11/20/1
Whitney 3-26HN	NENW 26-163-100	250'FNL and 2,415'FWL	West Ambrose	N/A*	conf.	2,167'	30057	33-023-01295	11/20/1
Dunn Co.									
Burlington Resources Oil and Gas (Conocc	Phillips)								
Cecilia Stroh 14-7MBH	SESW7-143-96	237'FSL and 1,921'FWL	Cabernet	N/A*	conf.	2,555'	30070	33-025-02765	11/21/1
Cecilia Stroh 24-7MBH	SESW7-143-96	237'FSL and 1,966'FWL	Cabernet	N/A*	conf.	2,553'	30071	33-025-02766	11/21/14
Cecilia Stroh 44-7MBH	SESE 7-143-96	242'FSL and 660'FEL	Cabernet	N/A*	conf.	2,437'	30075	33-025-02768	11/21/1
Elizabeth Stroh 14-7MBH	SESW7-143-96	237'FSL and 1,876'FWL	Cabernet	N/A*	conf.	2,555'	30069	33-025-02764	11/21/14
Elizabeth Stroh 24-7MBH	SESW7-143-96	237'FSL and 2,011'FWL	Cabernet	N/A*	conf.	2,550'	30072	33-025-02767	11/21/1
Elizabeth Stroh 44-7MBH	SESE 7-143-96	242'FSL and 705'FEL	Cabernet	N/A*	conf.	2,440'	30076	33-025-02769	11/21/14
Kodiak Oil and Gas		20515111 14 2751551	T.,	5.11	Ι.	2 2521	20044		11/10/1
Moccasin Creek 2-3-2-13H	NWNE 3-147-93	335'FNL and 1,375'FEL	Moccasin Creek	Bakken	horz.	2,050'	30011	33-025-02751	11/18/1
Moccasin Creek 2-3-2-14H	NWNE 3-147-93	354'FNL and 1,351'FEL	Moccasin Creek	Bakken	horz.	2,049'	30012	33-025-02752	11/18/1
Moccasin Creek 2-3-34-2H3 Moccasin Creek 2-3-34-2H3A	NWNE 3-147-93 NWNE 3-147-93	317'FNL and 1,399'FEL 281'FNL and 1.446'FEL	Moccasin Creek Moccasin Creek	Bakken Bakken	horz.	2,049'	30019	33-025-02754 33-025-02753	11/18/1
Moccasin Creek 2-3-34-3H	NWNE 3-147-93	299'FNL and 1,422'FEL	Moccasin Creek	Bakken	horz.	2,049'		33-025-02755	11/18/1
Oxy USA (Occidental Petroleum)	1444123 217 33	2331112 4114 1,122122	Wioccasiii Creek	Burken	11012.	2,013	30020	33 023 02733	11/10/1
Elroy Kadrmas 6-3-10H-143-96	SESE 34-144-96	448'FSL and 727'FEL	Fayette	Bakken	horz.	2,219'	30053	33-025-02761	11/20/14
Kary 5-24-13H-144-97 L	LOT1 30-144-96	402'FNL and 418'FWL	Cabernet	Bakken	horz.	2,294'	30059	33-025-02763	11/20/1
State 3-25-36H-144-97 L	LOT1 30-144-96	401'FNL and 458'FWL	Cabernet	Bakken	horz.	2,294'	30058	33-025-02762	11/20/1
XTO Energy (ExxonMobil)	•							•	
Deep Creek Federal 43X-5D	NESE 5-148-96	1,752'FSL and 333'FEL	Lost Bridge	N/A*	conf.	2,051'	30042	33-025-02757	11/19/1
Deep Creek Federal 43X-5G	NESE 5-148-96	1,728'FSL and 315'FEL	Lost Bridge	N/A*	conf.	2,051'	30041	33-025-02756	11/19/1
Deep Creek Federal 43X-5H	NESE 5-148-96	1,776'FSL and 351'FEL	Lost Bridge	N/A*	conf.	2,051'	30043	33-025-02758	11/19/1
Thorp Federal 11X-28A	NWNW 28-148-97	216'FNL and 292'FWL	Little Knife	N/A*	conf.	2,075'	30046	33-025-02759	11/20/1
Thorp Federal 11X-28E	NWNW 28-148-97	213'FNL and 262'FWL	Little Knife	N/A*	conf.	2,075'	30047	33-025-02760	11/20/1
McKenzie Co.									
Continental Resources									
							_		
Hendrickson 12-36H	SESE 36-153-94	343'FSL and 915'FEL	Elm Tree	Bakken	horz.	2,080'	30013	33-053-06476	11/18/1
Hendrickson 12-36H Omlid 2-7H1	SESE 36-153-94 SESW 7-151-97	343'FSL and 915'FEL 445'FSL and 1,365'FWL	Elm Tree Elidah	Bakken N/A*	horz.	2,080' 2,145'	30013 30034	33-053-06476 33-053-06486	
									11/19/1
Omlid 2-7H1	SESW 7-151-97	445'FSL and 1,365'FWL	Elidah	N/A*	conf.	2,145'	30034	33-053-06486	11/18/14 11/19/14 11/19/14 11/19/14
Omlid 2-7H1 Omlid 3-7H	SESW 7-151-97 SESW 7-151-97	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL	Elidah Elidah	N/A* N/A*	conf.	2,145' 2,150'	30034 30035	33-053-06486 33-053-06487	11/19/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1	SESW 7-151-97 SESW 7-151-97	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL	Elidah Elidah	N/A* N/A*	conf.	2,145' 2,150'	30034 30035	33-053-06486 33-053-06487	11/19/14 11/19/14
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL	Elidah Elidah Elidah	N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153'	30034 30035 30036	33-053-06486 33-053-06487 33-053-06488	11/19/1 11/19/1 11/19/1 11/19/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL	Elidah Elidah Elidah Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf.	2,145' 2,150' 2,153' 2,360'	30034 30035 30036	33-053-06486 33-053-06487 33-053-06488 33-053-06483	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL	Elidah Elidah Elidah Blue Buttes Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf.	2,145' 2,150' 2,153' 2,360' 2,360'	30034 30035 30036 30031 30030	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482	11/19/1- 11/19/1- 11/19/1- 11/19/1- 11/19/1- 11/19/1-
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95 SESE 5-151-95 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL	Elidah Elidah Elidah Blue Buttes Blue Buttes Blue Buttes Blue Buttes Blue Buttes Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,360'	30034 30035 30036 30031 30030 30029 30028 30027	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06481 33-053-06479	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95 SESE 5-151-95 SESE 5-151-95 SESE 5-151-95 SESE 5-151-95 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL	Elidah Elidah Elidah Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,360' 2,480'	30034 30035 30036 30031 30030 30029 30028 30027 30082	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL	Elidah Elidah Elidah Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06481 33-053-06480 33-053-06479 33-053-06502 33-053-06503	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 475'FEL 238'FSL and 475'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL	Elidah Elidah Elidah Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1 BW-Wilso- 149-99-3625H-4	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL 375'FSL and 1,993'FEL	Elidah Elidah Elidah Blue Buttes Juniper	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06481 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/24/1 11/18/1
Omlid 2-7H1 Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 475'FEL 238'FSL and 475'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL	Elidah Elidah Elidah Blue Buttes	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/24/1 11/18/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-1 BB-Siversto- L-151-95-1719H-1 BW-Wilso- 149-99-3625H-4 BW-Wilso- 149-99-3625H-5 Statoil Oil and Gas	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95 SWSE 36-149-99 SWSE 36-149-99	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL 375'FSL and 1,993'FEL 375'FSL and 1,9960'FEL	Elidah Elidah Elidah Blue Buttes Juniper Juniper	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371' 2,373'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06504 33-053-06504 33-053-06477 33-053-06478	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/18/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1 BW-Wilso- 149-99-3625H-4 BW-Wilso- 149-99-3625H-5 Statoil Oil and Gas Banks State 16-21 XE #1TFH	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL 375'FSL and 1,993'FEL 375'FSL and 1,996'FEL	Elidah Elidah Elidah Blue Buttes Juniper Juniper Banks	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371' 2,373'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015 30016	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504 33-053-06477 33-053-06478	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/18/1 11/18/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1 BW-Wilso- 149-99-3625H-4 BW-Wilso- 149-99-3625H-5 Statoil Oil and Gas Banks State 16-21 XE #1TFH Banks State 16-21 #5H	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL 375'FSL and 1,993'FEL 375'FSL and 1,993'FEL 669'FSL and 849'FEL	Elidah Elidah Elidah Elidah Blue Buttes Juniper Juniper Banks Banks	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371' 2,373' 2,150'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015 30016	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504 33-053-06477 33-053-06478	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/24/1 11/18/1 11/18/1 11/21/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-1 BW-Wilso- 149-99-3625H-4 BW-Wilso- 149-99-3625H-5 Statoil Oil and Gas Banks State 16-21 XE #1TFH Banks State 16-21 #8TFH	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95 SWSE 36-149-99 SWSE 36-149-99 SESE 9-152-98 SESE 9-152-98	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 375'FSL and 1,993'FEL 375'FSL and 1,996'FEL 669'FSL and 849'FEL 669'FSL and 877'FEL 669'FSL and 905'FEL	Elidah Elidah Elidah Elidah Blue Buttes Juniper Juniper Banks Banks Banks	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371' 2,373' 2,150' 2,150'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015 30016 30060 30061	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06504 33-053-06477 33-053-06478 33-053-06498 33-053-06494 33-053-06495	11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/19/1 11/24/1 11/24/1 11/24/1 11/18/1 11/21/1 11/21/1
Omlid 2-7H1 Omlid 3-7H Omlid 3-7H Omlid 4-7H1 Hess Bakken Investments II BB-Federal- 151-95-0817H-2 BB-Federal- 151-95-0817H-3 BB-Federal- 151-95-0817H-4 BB-Federal- 151-95-0817H-5 BB-Federal- 151-95-0817H-6 BB-Siversto- 151-95-2019H-4 BB-Siversto- 151-95-2019H-5 BB-Siversto- L-151-95-1719H-1 BW-Wilso- 149-99-3625H-4 BW-Wilso- 149-99-3625H-5 Statoil Oil and Gas Banks State 16-21 XE #1TFH Banks State 16-21 #5H	SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESW 7-151-97 SESE 5-151-95	445'FSL and 1,365'FWL 445'FSL and 1,320'FWL 445'FSL and 1,275'FWL 331'FSL and 565'FEL 308'FSL and 542'FEL 284'FSL and 519'FEL 261'FSL and 495'FEL 238'FSL and 472'FEL 216'FSL and 530'FEL 249'FSL and 530'FEL 282'FSL and 530'FEL 375'FSL and 1,993'FEL 375'FSL and 1,993'FEL 669'FSL and 849'FEL	Elidah Elidah Elidah Elidah Blue Buttes Juniper Juniper Banks Banks	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf.	2,145' 2,150' 2,153' 2,360' 2,360' 2,360' 2,360' 2,480' 2,481' 2,483' 2,371' 2,373' 2,150'	30034 30035 30036 30031 30030 30029 30028 30027 30082 30083 30084 30015 30016	33-053-06486 33-053-06487 33-053-06488 33-053-06483 33-053-06482 33-053-06480 33-053-06479 33-053-06502 33-053-06503 33-053-06504 33-053-06477 33-053-06478	11/19/14 11/19/14 11/19/14

IDIC lo.	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)
28328	EN-Freda- 154-94-2635H-7	Alkali Creek	NWNW 26-154-94	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
28065	EN-State C- 156-93-1615H-7	Alger	NWSW 16-156-93	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
28066	EN-State C- 156-93-1615H-8	Alger	NWSW 16-156-93	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
28067	EN-State C- 156-93-1615H-9	Alger	NWSW 16-156-93	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27815	HA-Mogen-LE- 152-95-0805H-1	Hawkeye	SESE 8-152-95	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Hunt C		Hawkeye	3232 0 132 33		IVICI	Danteri	11012.		NA		14/74	
22265	Frink 2-17H	Parshall	SWSW 17-153-89	N/A	MNT	- Bakken	horz.	N/A	N/A	N/A	N/A	N/A
22144	Severance 2-9-4H	Parshall	SESW 9-153-89	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
	hon Oil	, distingui	32311 3 133 03	,	14.114.1		11012.		14//	,	14//	,,,
v iai ati 26644	Big Eagle USA 41-17TFH	Van Hook	NWNE 17-150-92	N/A	MNT	- Bakken	horz.	N/A	N/A	N/A	N/A	N/A
	eld Production					_					14/71	
28095	Wehrung 150-99-14-23-4H	S. Tobacco Garden	SESW 11-150-99	2SEC	МСК	- Bakken	horz.	21,389'	7/11/14	1,967	698	1,509
28094	Wehrung 150-99-14-23-5H	S. Tobacco Garden	SESW 11-150-99	2SEC	MCK	Bakken	horz.	21,629'	7/11/14	1,367	1,893	939
	SA (Occidental Petroleum)		01011 11 100 00			_	1.0.2.		77 = 27 = 1		2,000	
27372	Delvin Dukart 4-30-31H-143-95	Manning	SESW 19-143-95	2SEC	DUN	Bakken	horz.	20,307'	5/22/14	729	332	2,306
Petro-			22277 22 2 12 22						-77			,
27367	Brenna 152-96-23D-14-2HS	Clear Creek	SWSW 24-152-96	N/A	МСК	- Bakken	horz.	N/A	N/A	N/A	N/A	N/A
QEP Er			0.0000 2.1 202 00			_	1.0.2.				1471	
22363	Kirkland 15E-23/14H	Grail	SWSE 23-149-95	N/A	МСК	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
	il and Gas		31112 21 2 11 11	•								
26811	Luke 13-36H	Clarks Creek	LOT3 36-151-95	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
26810	Marc 13-36H	Clarks Creek	LOT3 36-151-95	 N/A	MCK	Bakken	horz.	 N/A	N/A	N/A	N/A	N/A
26809	Mattie 13-36H	Clarks Creek	LOT3 36-151-95	 N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Sinclai	r Oil and Gas										7	
27849	Bighorn 2-6H	Mary	SESW 31-147-97	2SEC	DUN	Bakken	horz.	21,700'	9/11/14	935	1,116	4,686
SM En											,	
26775	Molander 27-34-161-99H 1CN	Burg	NENW 27-161-99	2SEC	DIV	Bakken	horz.	18,569'	6/1/14	101	58	435
26776	Molander 22-15-161-99H 1XC	Burg	NENW 27-161-99	2SEC	DIV	Bakken	horz.	19,103'	6/1/14	347	544	842
Statoil	Oil and Gas											
27005	Brown 30-19 5TFH	Alger	NENW 31-156-93	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27006	Brown 30-19 6H	Alger	NENW 31-156-93	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Whitin	ng Oil and Gas					_						
6249	Karst 21-17-1H	Estes	NENW 17-150-104	2SEC	МСК	Bakken	horz.	20,027'	5/25/14	894	325	1,804
7426	Pavlish 11-30PH	South Heart	NENW 30-140-97	2SEC		Bakken	horz.	20,418'	6/1/14	1,218	669	1,175
7427	Pavlish 41-30PH	South Heart	NENW 30-140-97	2SEC		Bakken	horz.	21,340'	5/23/14	1,433	667	1,791
7687	Roen 34-10-2H	Elk	SWSE 10-152-102		МСК	Bakken	horz.	22,074'	5/23/14	2,855	1,315	4,289
KTO Fr	nergy (ExxonMobil)											
27740	Brandvik 24X-13E2	Corral Creek	SESW 13-147-96	2SEC	DUN	Bakken	horz.	21,150'	10/8/14	2,057	2,254	1,651
27741	Brandvik Federal 24X-13F	Corral Creek	SESW 13-147-96	_	DUN	Bakken	horz.	20,872'	9/29/14	1,649	1,690	2,116

-Ashley Lindly | alindly@petroleumnewsbakken.com



County	Permits issued	Permits issued for confidential wells	Permits renewed	Location resurveys authorized
Bottineau	1	1	0	0
Bowman	3	3	0	0
Divide	8	8	0	0
Dunn	19	11	2	2
McKenzie	29	22	3	0
Mountrail	10	4	0	0
Williams	8	2	3	0
Totals	78	51	8	2

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Petroleum Top 10 Bakken wells by IP rate

XTO En	ergy (ExxonMobil)							
26651	Jan 14X-34E	Siverston	MCK	2,932				
26653	Jan 14X-34A	Siverston	MCK	2,926				
Whitin	g Oil and Gas							
27687	Roen 34-10-2H	Elk	MCK	2,855				
Statoil	Oil and Gas							
24755	Melissa 31-30 #3TFH	East Fork	WIL	2,586				
27575	Barstad 23-14 8H	Alger	MNT	2,474				
Whitin	g Oil and Gas							
28424	Good Shepherd 41-15-2H	Rawson	MCK	2,302				
XTO En	ergy (ExxonMobil)							
26652	Jan 14X-34B	Siverston	MCK	2,086				
27740	Brandvik 24X-13E2	Corral Creek	DUN	2,057				
Burlington Resources Oil and Gas (ConocoPhillips)								
27889	CCU Olympian 11-2MBH	Corral Creek	DUN	1,992				
Newfie	eld Production							
28095	Wehrung 150-99-14-23-4H	S. Tobacco Garden	MCK	1,967				

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 Nov. 18-24, 2014 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.

OPEN SEASON

received in this and other binding open seasons requiring expansion of the Pony Express and Hiland Crude systems," the companies said in press releases. The Tallgrass and Double H systems have current capacities of 230,000 and 50,000 barrels per day, respectively.

Tallgrass announced the open season on

its expansion on Nov. 3 and that open season is scheduled to close on Dec. 5. "Beginning in mid-2015, Pony Express expects to provide shippers who commit to the full expansion a pro rata share of interim capacity of approximately 100,000 barrels/day," Tallgrass said.

Hiland launched an open season on its expansion of the Double H on Nov. 19. The expansion of the Double H will proceed in phases with 45,000 bpd of interim capacity planned for availability to shippers commit-

ting to volumes at some point in the first half of 2015. Hiland said full capacity, which includes pipe expansions as well as additional pumping facilities, is scheduled for completion in December 2016.

Hiland's portion of the project has receipt points at the Sieler Station at Baker in Fallon County in southeastern Montana, and at the North Wright and Douglas stations in Campbell and Converse counties in eastern Wyoming. The Pony Express was a former natural gas pipeline that Tallgrass

acquired from Kinder Morgan in 2012 and converted to crude oil transport.

While Hiland and Tallgrass have a joint tariff for direct crude transport from the Williston Basin to Cushing, the Guernsey hub provides access to other pipelines as well as rail terminals, including True Cos.' Fort Laramie rail facility.

—MIKE ELLERD

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continued from page 1

MONTANA ACTIVITY

ing permanent status for four existing temporary spacing units in the Elm Coulee field in Richland County where the company has producing Bakken/Three Forks wells. Production data for three of the four wells has been posted on the board's website. One of the wells went on production in June and more than 86 days of production yielded 8,312 barrels for an average of 97 bpd. Another went on production in July and produced 19,076 barrels over 63 days for an average of 303 bpd. And the third well for which data are available

went on production in September and over 30 days yielded 3,159 barrels for an average of 105 bpd.

Oasis Petroleum is seeking creation of three temporary overlapping 2,560-acre spacing units and permanent status for an existing 2,560, all in the Elm Coulee Northeast field in Roosevelt County, also in far eastern Montana. The company has a well producing on the temporary 2,560 that went on production in September and yielded 8,250 barrels over the 18 days on production for an average of 458 bpd.

Other applications

Other operators asking for new temporary spacing units in Richland and

Roosevelt counties are XTO Energy, SM Energy and Kraken Oil and Gas. XTO Energy is seeking authorization to drill wells on three permanent spacing units in the Elm Coulee field in Richland County. SM Energy is asking that the board create a temporary 1,280-acre DSU in Nohly field in Richland County and authorize the drilling of three horizontal Bakken/Three Forks wells. Kraken Oil and Gas is asking the board to create a temporary 1,280 in the northeast Richland and southeast Roosevelt counties and to authorize the drilling of one Bakken/Three Forks well.

In Valley County which borders Roosevelt County on the west, Anadarko

Minerals is seeking authorization to drill a vertical wells into the Nisku, Lodgepole, Mission Canyon and Charles A, B, C and D formations. And Anadarko E&P Onshore filed an application seeking permanent status for a spacing unit in the Southern Alberta Bakken area in Toole County in north-central Montana for production from a Bakken/Three Forks well. Production data from that well are not yet available on the board's website, but the website does indicate that Anadarko E&P has eight other wells permitted in Toole County. ●

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continued from page 6

PROPOSED RULES

could influence the size of the plume, volumes of fluids spilled and the violence created from a derailment overshadow the significance of vapor plume size in influencing the likelihood of crude oil being ignited. Friction from hard braking, hot metal from bending materials, or sparks from metal-tometal contact can ignite nearby grasses or materials and AFPM concludes that those factors are of greater concern than vapor pressure. Furthermore, AFPM feels more study is needed to determine if Bakken crude spills produce larger vapor plumes than any other hazardous material.

Colin Nikiforuk, president of Calgarybased CRNG Energy, analyzed the Turner Mason Bakken crude characteristics study that showed that nearly every sample of crude involved in the Lac-Megantic disaster had Reid vapor pressures higher than 9.2 psi. Nikiforuk concluded that focusing on Reid vapor pressures for crude oil does not improve safety or volatility of the crude. He informed NDIC through submitted comments that Reid vapor pressure is acceptable for refined products such as gasoline or diesel because volatile gases in these prod-

ucts are not dissolved and increases in vapor pressures would coincide with increases in volatile light end volumes. However, the Turner Mason study shows that Reid vapor pressure does not show a correlation to quantities of dissolved volatile gases in Bakken crude.

—MAXINE HERR

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E3 Environmental, LLC4

Oil Patch Bits



Det-Tronics adds Ethernet connectivity to controllerDetector Electronics Corp. has added an Ethernet/Modbus TCP/IP interface based on the

Detector Electronics Corp. has added an Ethernet/Modbus TCP/IP interface based on the Eagle Quantum Premier fire- and gas-safety controller, allowing the controller to communicate with other devices on the Ethernet Local Area Network.

The EQP controller is a flexible, distributed intelligence safety system that provides flame and gas detection, alarm signaling, fault notification and extinguishing agent release control. It integrates component communications on a reliable, fault-tolerant, digital network. Unlike many other fire and gas controllers, the EQP controller is rated for installation in hazardous Class 1/Division 2 and Class 1/Zone 2 locations.

The Ethernet interface board option expands the communication capability of the EQP

controller, which has long supported ControlNet, RS-232 Modbus RTU and RS-485 Modbus RTU protocols. "Being able to communicate using the popular Ethernet Modbus TCP/IP protocol will allow customers to easily integrate a variety of devices into a single EQP-system solution," said Anup Shetty, systems product manager, Det-Tronics.

Det-Tronics is the global leader in fire- and gas-safety systems, providing premium flame and gas-detection and hazard-mitigation systems for high-risk processes and industrial operations. The company designs, builds, tests and commissions SIL 2 Capable flame- and gas-safety products that range from conventional panels to fault-tolerant, addressable systems that are globally certified. Det-Tronics is a part of UTC Building & Industrial Systems, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide.

Wanzek Construction

Bakken Players

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North Dakota Petroleum Council

XL FACT CHECKING

gases that are causing climate change?" Earlier, Obama said XL would give

Canada the ability to "pump their oil, send it through our land, down to the Gulf, where it will be sold everywhere

The essence of his message is that XL is designed as merely a conveyor belt to markets beyond North America.

What he has done is trigger a war of words and soured Canada-U.S. relations by undermining the core purpose of the original Canada-U.S. free trade deal, reinforced by the North American Free Trade Agreement.

To describe XL as an export pipeline is fabrication," an TransCanada Chief Executive Officer Russ Girling told reporters.

"The notion that this oil is going to get

rication by those that are opposed to our project," he said, adding "it is very highly unlikely that any of this crude will leave North America."

addressing RUSS GIRLING

Given that 4.5 million barrels per day

from the Bakken fields to Gulf Coast

refineries, with the Valero refinery in Port Arthur, Texas, committed to take 325,000 bpd.

Valero spokesman Bill Day has told reporters it is "frustrating that we have said numerous times that there is no intention to export any (XL) crude. We have said that over and over and still I hear this come up in debate."

He said Valero's plan is to take XL crude and "make it into gasoline, diesel and jet fuel," with some of the byproducts of bitumen getting exported.

"For people to say it is an export pipeline is just wrong," Day said.

The Valero refinery has only recently been modernized to process some of the world's "worst-quality crude," such as the bitumen-laden production from the oil sands, into gasoline and diesel fuel.

Even the U.S. State Department, in its final environmental impact statement that ended a painstaking and prolonged review process, disputed claims that XL crude would "pass through the United States and be loaded on to vessels for ultimate sale in markets such as Asia," arguing that could not be economically justified.

The State Department said the decline in crude supplies from Mexico and Venezuela means Gulf Coast refineries have a "significant incentive to obtain heavy crude from the oil sands."

The report also said any exports from the United States would be influenced by market conditions, not pipeline scenarios, with the deciding factors confined to "domestic demand versus domestic refining capacity, the cost of natural gas, and refining capacity abroad, including in foreign markets currently importing U.S. refined products such as Mexico, Brazil, Chile and Europe."

Information The Energy Administration's 2013 annual report listed U.S. exports of distillate fuel oil at 898,000 bpd of the 2.59 million bpd produced, while finished motor gasoline exports accounted for 323,000 bpd of the 946,000 bpd produced.

Girling insisted market forces are working strongly in favor of XL and increasing among Alberta and Bakken producers.

"We're a market responsive company. And to the extent that the marketplace wants (XL to be built), TransCanada's going to stay in," he said.

Girling said that some of the 41 senators who voted against fast-tracking XL in a jobs bill did so simply because the project has yet to clear all of the regulatory and legal hurdles, suggesting that once the Nebraska Supreme Court deals with the jurisdictional issue of who controls pipeline decision-making, TransCanada hopes it can "expeditiously move to approval and get this pipeline under construction."

If that doesn't happen there is a

The Canada-U.S. FTA's energy chaptimes of scarcity or national emergency turn Canada into a U.S. colony.

Derek Burney, Canada's ambassador

Burney questioned Obama's figures on XL's job creation potential, including a claim of only 90 permanent jobs, noting that the State Department's review esti-

Canada "against what would be a breach of the spirit and the letter of NAFTA." •

Contact Gary Park through

The NAFTA option

groundswell building in Canada to tackle Obama head-on through a free trade challenge — although such a step would add years to the eight years already consumed since the project was unveiled and would ensure that XL ended on the scrap heap.

ter, later woven into NAFTA, pledges to protect the free flow of oil, except in — a clause that former Canadian Prime Minister John Turner said in 1988 would "sell out the birthright of this nation" and

What nobody had counted on was that the balance of power would shift through the technology-driven unlocking of shale deposits in North America.

to the U.S. from 1989-1993 and a lead free-trade negotiator, said the U.S. was adamant in the original negotiations that it should have "unfettered access to supply from Canada on a non-discriminatory basis and Canada agreed."

He said there is "little doubt" that Obama wants either to veto XL, or stall the project long enough for it to die.

mates the pipeline would generate more than 40,000 jobs and generate taxes in the counties through which the pipeline would run. He warned that a presidential veto could trigger a formal challenge by

continued from page 1

RAIL TERMINAL

and operates the reversed and expanded Seaway pipeline from Cushing to Houston and Port Arthur, Texas, with 600,000 bpd of capacity.

EEP has said its objective is to meet producer and shipper demands for more flexible and economical transportation of high quality crude.

It has viewed rail as one way of boosting availability of new sources of crude to Philadelphia and other eastern U.S. refineries.

—GARY PARK

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exported is pure fab-

In Obama's claims,

Girling said any tankers carrying XLdelivered crude beyond the United States would first have to pass incoming tankers carrying huge volumes of foreign crude to

of oil is imported to the Gulf Coast, he said that describing XL as an export conduit "doesn't make any sense."

XL is designed to carry 730,000 bpd of diluted bitumen from the Alberta oil sands and 100,000 bpd of light crude

continued from page 1

RAIL OPTION

company is in "active negotiations" with XL's committed shippers about moving their crude by train, although it is too soon to disclose when a decision might be made.

"There's a better than 50-50 chance that we will be in that business in some form or fashion in the future, but it will take us some time to actually nail down the agreements to underpin those investments," Girling said.

Despite TransCanada's insistence that pipelines are safer and more efficient, the "marketplace has learned that (rail) is flexible, it can be put in place relatively quickly and it doesn't have the same regulatory hurdles as building pipe does," he said.

"It's likely a business we're in long term, irrespective of Keystone."

TransCanada executives were quizzed on the possibility of TransCanada building a "giant rail loop" to carry oil sands bitumen across the Canada-United States border, thus avoiding the need to obtain a Presidential Permit, which has been the chief stumbling block for XL.

Paul Miller, TransCanada executive vice president and president, liquids pipelines, sidestepped the proposal, saying he remained "cautiously optimistic" that XL will be approved.

—GARY PARK

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