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page MDU Resources to sell Fidelity and pursue a second Bakken refinery

BAKKEN

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Connecting north with south



Although literally running east and west, the Four Bears Bridge near New Town connects communities on the north and south sides of Lake Sakakawea over some 140 miles between Williston and Garrison.

Pipeline group finalizes report

Despite innovative technology and continual safety training, pipeline operators still believe utilizing farmers and ranchers' eyes and ears to detect and prevent pipeline leaks is one of the best layers of protection they have.

The North Dakota Pipeline Technology Working Group met on Nov. 4 to finalize a draft report that will identify the latest technology and monitoring systems to control oil and gas pipeline leaks. The 15-member advisory group was formed by Gov. Jack Dalrymple in January in response to a Tesoro pipeline release in northwestern North Dakota which spilled more than 20,000 barrels of crude in October 2013. The technical working group includes private-sector engineers as well as representatives from state and federal agencies and pipeline companies.

see PIPELINE GROUP page 18

6M pound fracks paying for WPX

In the Bakken, larger completions are accelerating production and increasing returns for WPX Energy Inc., Rick Muncrief, WPX president and CEO said in a Nov. 5 earnings conference call.

"We are extremely excited about what we have seen there," he said, adding that the company's oil production is up 44 percent in third quarter 2014 versus third quarter 2013.



RICK MUNCRIEF

"We have seen some nice performance from some of our larger stimulations," Muncrief said. In July WPX finished its first completion using 6 million

see WPX FRACKS page 17

Oneok wraps up 2 more projects

Oneok Partners has completed construction of its Garden Creek III natural gas processing plant in McKenzie County along with the expansion of its Bakken NGL pipeline. In an Oct. 30 press release, Oneok said construction of the 100 million cubic feet per day Garden Creek III plant was completed three months ahead of schedule and brings Oneok's current Williston Basin TERRY SPENCER processing capacity to more than 600



mmcf per day, a six-fold increase in the Tulsa-based midstream's Williston Basin capacity since 2010. "Delivering this new facility well ahead of schedule is another positive

see ONEOK PROJECTS page 18

LAND & LEASING

Less attractive

7,487 McKenzie County acres average just \$396 in NDTL O&G lease auction

By MIKE ELLERD

Petroleum News Bakken

mong the nominations in the North Dakota Department of Trust Lands Minerals Management Division's Nov. 4 oil and gas lease auction were 7,487 acres in 56 tracts in west-central and southeast McKenzie County (see map), but unlike past auctions when acreage in the county typi-

cally leased at a premium, the McKenzie County acreage in the November auction did not attract much interest.

While two tracts in the county topped the auc-



tion bringing \$6,600 and \$6,300 per acre, those were small tracts of less than eight acres each. The remaining 54 McKenzie County tracts, which ranged in size from four to 160 acres, brought from \$10 to \$875 per acre. Overall, the 56 McKenzie County tracts averaged only \$396 per acre.

Minerals Management Division Director Drew Combs told Petroleum News Bakken that he sees three possible

reasons for the low lease prices in McKenzie County. First he said lower crude oil prices certainly could be a factor but doesn't know just how

see **LEASE AUCTION** page 19

COMPANY UPDATE

litting up a gear

Marathon reports banner quarter with 30% resource play production growth

By STEVE SUTHERLIN

For Petroleum New Bakken

arathon Oil Corp. averaged saration on conlent per day of production in the Bakken during third quarter 2014, up 47 percent over the year-ago average and 12 percent over the previous quarter, Lee Tillman, Marathon president and CEO LEE TILLMAN said in a Nov. 4 conference call.

"We've shifted up a gear in the Bakken," Tillman said. "We brought 19 new wells to sales in the Bakken, and we recompleted 16 wells in the Hector and Ajax areas of the Bakken with 13



brought to sales."

Tillman said eight of the new wells are piloting enhanced completions, with encouraging early results.

Marathon added an incremental drilling rig in late September to provide additional capacity for high-density spacing and enhanced completion pilots in the Bakken, Tillman said.

The company reached total depth on 25 gross company operated wells in the

third quarter, compared to 19 gross wells reaching total depth in second quarter 2014, and the time to

see BANNER QUARTER page 19

MOVING HYDROCARBONS

New rail rules released

Transport Canada wraps up final round of rail safety improvement measures

By GARY PARK

For Petroleum News Bakken

he Canadian government has introduced its final round of rail safety measures in response to last year's Lac-Megantic disaster that claimed 47 lives by hiring additional auditors to conduct a "blitz" and by tightening rules to prevent runaway trains.

Transport Minister Lisa Raitt said there will also be stepped up enforcement of regulations relating to the labeling of hazardous materials, such as the Bakken crude involved in the explosions and fire in Lac-Megantic.

The changes are the latest in a series of regulato-



LISA RAITT

ry moves across North America after the Canadian Transportation Safety Board, TSB, issued its final report on the Ouebec

Canada has previously toughened tank car safety rules and ordered railways to do risk assessments, produce emergency response plans and improve the security of parked trains.

Transport Canada said it is continuing to research crude oil properties to ensure

they are properly classified and is starting a "targeted inspection campaign" on railways to ensure their labeling matches the contents of trains.

Raitt noted that crude oil is something that needs

see RAIL RULES page 18

contents

ON THE COVER

Less attractive

7,487 McKenzie County acres average just \$396 in NDTL O&G lease auction

Shifting up a gear

Marathon reports banner quarter with 30% resource play production growth

New rail rules released

Transport Canada wraps up final round of rail safety improvement measures

Pipeline group finalizes report 6M pound fracks paying for WPX Oneok wraps up 2 more projects

BAKKEN STATS

- **9** Whiting tops IP; six wells north of the lake
- **9** Bakken producers' stock prices
- 10 IPs for ND Bakken wells, Oct. 28-Nov. 3
- **11** North Dakota oil permit activity, Oct. 28-Nov. 3
- **12** ND weekly county permit totals, Oct. 28-Nov. 3
- **12** Top 10 Bakken wells by IP rate, Oct. 28-Nov. 3
- **14** ND well operator transfers, Oct. 17-Oct. 28

COMPANY UPDATE

3 MDU realigns focus on lower-risk growth

Fidelity goes up for sale with focus on utility, pipeline and construction business units amid plans for a second Bakken refinery

4 ConocoPhillips focusing on fundamentals

Global E&P remains flexible amid oil price downturn by focusing more on mature plays staying within its steady-growth strategy

- **6** Oasis focused on infrastructure and ops
- **7** Statoil posts loss on short-term issues



Petroleum News Bakken

8 Building an even stronger Whiting

CEO Volker looks to 'push the bigger ball up the hill' with Kodiak acquisition as his company looks at 20 percent growth in 2015

14 EOG innovates drilling and downspacing

Oil growth targets are adjusted for second time this year as company finds new techniques that bring significant production hikes

15 WPX assets drive Legacy's third quarter

16 Lightstream engaged in upstream battle

One-time star in Saskatchewan Bakken caught in crosshairs of an industry under fire with investors clamoring for remedial action



LEGAL COLUMN

15 ND Supreme Court makes rare reversal

Self-represented parties must meet same standard as lawyers; justices cite trial court errors in reversing ruling to dismiss case

MOVING HYDROCARBONS

5 TransCanada rejoins pipeline battle

Application for Energy East pipeline filed with National Energy Board, but it faces the same opposition forces as Keystone XL



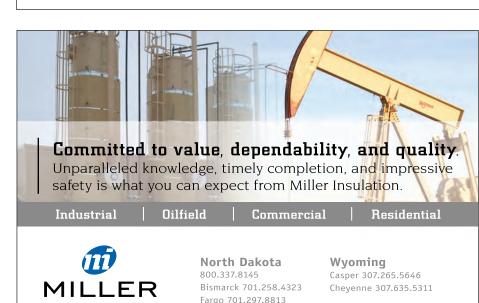
- **6** Crude prices casting doubt on Bakken pipeline
- **8** TLLP continues Bakken midstream growth
- **15** Liquids-rich Bakken ExxonMobil's most active unconventional play
- **17** Keystone XL costs soar to \$8 billion

PEOPLE TALK

6 UND confirms Erickson as head of EERC

Longtime researcher says financial plan will enable expansion of center's developing technical, strengthening of existing programs





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MDU realigns focus on lower-risk growth

Fidelity goes up for sale with focus on utility, pipeline and construction business units amid plans for a second Bakken refinery

By MAXINE HERR

For Petroleum News Bakken

DU Resources provided its third quarter results on Nov. 3 which included an announcement that the company plans to sell Fidelity Exploration and Production to provide more capital for its other businesses, including opening a second refinery much like its Dakota Prairie Refinery nearing completion outside of Dickinson.

"Although we continue to see attractive investment opportunities at Fidelity, the capital required to effectively grow the business would compromise our ability to

fund the substantial opportunities we are seeing at our other lines of business." David Goodin, president and CEO of MDU Resources Group said during a conference call with analysts on Nov. 4. "We expect to grow DAVID GOODIN our utility, pipeline



and construction business units in a more meaningful way and pursue that growth with a lower overall business-risk profile."

Fidelity controls 12,000 net acres in Mountrail County and more than 96,000 net acres in Stark County, North Dakota, and Richland County, Montana. The company closed on the sale of more than 4,300 acres in Mountrail County and some operated acreage in south Texas in September and October, respectively.

Fidelity's value

Fidelity ranked 21st among the top 50 Bakken oil producers in North Dakota in August for operated, non-confidential wells with average daily output of 11,279 barrels according to the latest data available from the North Dakota Department of Mineral Resources. The company reported \$16.6 million adjusted earnings during the third quarter. Results were primarily driven by 12 percent lower average realized oil prices at \$85.10 for the quarter compared to last year, as well as higher depreciation, depletion,

Outlook

Marketing Fidelity Exploration & Production Company

- Continue to see attractive investment opportunities; however capital required to grow the business would compromise ability to fund the substantial opportunities at other lines of business
- Expect data room will be available in early 2015
- During marketing and potential sale process, continue to focus operations on production

"Our initial preference is to look at it as an entity-type, collective sale. But we'll keep our options open to other possibilities."

-David Goodin, MDU Resources

amortization and lease operating expenses. Goodin said the company plans to open a data room to disclose valuation of Fidelity

in early 2015.

"We expect to pursue the sale process in a deliberate and thorough manner," he said. "Our initial preference is to look at it as an entity-type, collective sale. But we'll keep our options open to other possibilities. We'll have to see what the process holds in that regard."

Fidelity's CEO Kent Wells said he sees the business sale as a way for an investor to tap into some valuable acreage.

"(We have) a unique Rockies platform where someone could come in with some really good cash flowing assets, a great organization in place," Wells said. "It could be a unique opportunity for someone to make a move into the U.S. oil shale play."

Goodin said selling the business came as part of a comprehensive internal review along with outside advisors considering the growth potential of each of MDU Resources' business lines.

In the meantime, Fidelity will concentrate on production and continue to develop its acreage with one rig running in the Bakken and one each in the Paradox Basin in Utah and Rusk County in east Texas. But a slowdown is in store to adjust to the oil price decline and the subsequent delay of service pricing.

"There is no reason to continue to drill in a high \$70 oil world if you are still affording costs that are supportive of a \$100 well," Goodin said. "So we will hesitate but we won't stop drilling."

Dakota Prairie Refinery's twin

While MDU Resources' pipeline business WBI Energy has yet to officially proceed on the proposed 20,000 barrels per day diesel refinery's permitting process, Goodin said the work is "well under way." The company did not offer a location of the plant, but said a preferred site has been identified in the Bakken region and Goodin said the refinery would look "very similar, if not a twin" to the first plant. A spring 2015 construction start is planned if the company chooses to proceed. WBI Energy teamed with Calumet Specialty Products Partners on its Dakota Prairie Refinery project which is scheduled to be in service by

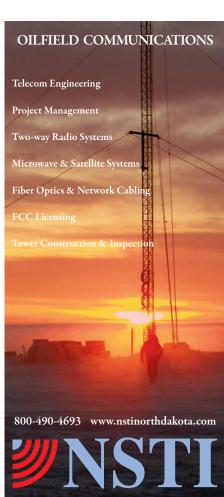
The pipeline group is also working on plans for the Wind Ridge Pipeline project, a 95-mile natural gas pipeline designed to deliver approximately 90 million cubic feet per day to a fertilizer plant near Spiritwood, North Dakota.

Jan. 1, 2015, and WBI Energy CEO Steve Bietz said the company has discussed a potential partnership on the second refinery with Calumet.

The pipeline group is also working on plans for the Wind Ridge Pipeline project, a 95-mile natural gas pipeline designed to deliver approximately 90 million cubic feet per day to a fertilizer plant near Spiritwood, North Dakota. The company said it is pushing marketing efforts for the pipeline and will continue to advance the project as much as interest allows.

"We really continue to believe there is a need for the pipeline with reduced flaring and increased gas production in the area," Bietz said. "We think there is a need for it and we're going to keep pushing forward with the project." ●

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COMPANY UPDATE

ConocoPhillips focusing on growth fundamentals

Global E&P remains flexible amid oil price downturn by focusing more on mature plays staying within its steady-growth strategy

By MAXINE HERR

For Petroleum News Bakken

ConocoPhillips is content to stay on its intended 3 to 5 percent growth path for volume and margins in 2014. The company plans to continue that growth through 2017, in part by its operations in the unconventional resource plays of the Bakken and Eagle Ford.

"We're following the plan and the path we laid out two years ago, and it's working," Chairman and CEO Ryan Lance said in a call with analysts on Oct. 30.

The company said because of the repositioning it has done as a company over the past two years it is able to respond to the recent oil price downturn without impacting that 3 to 5 percent strategy.

"We've caught up the portfolio, lowered the overall cost of supply, and significantly increased our degree of capital flexibility," Lance said. "Events like the recent price downturn underscore the importance of staying focused on the fundamentals. We know this is a cyclical business and we've been here before," he continued. "We intend to make prudent adjustments at this time, while continuing to monitor the environment."

ConocoPhillips does business as Burlington Resources Oil and Gas in North Dakota and it ranked fourth among the top 50 Bakken oil producers in the state with an average daily output of 69,882 barrels from operated, non-confidential wells based on the latest data available from the Department of Mineral Resources for August.

Bakken helps boost output

Within the Lower 48 states, ConocoPhillips' third quarter production averaged 343,000 barrels of oil equivalent per day, boepd, which was led by the company's Bakken and Eagle Ford assets. The Bakken averaged 55,000 boepd over the quarter, up 21,000 boepd from the third quarter last year, marking a 62 percent increase.

"We continued to pilot test a 160-acre downspacing in the Bakken, but based on the results we've seen to date, it's too early to make a decision on ultimate spacing there," Matt Fox, executive vice president of exploration and production, said in the Oct. 30 conference call.

The company touts the lowest cost of supply unconventional portfolio compared to its peers, which the company said puts them in the best position to stand lower prices. "And remember that not all unconventionals are created equal and being in the sweet spot matters now more than ever," Fox said.

The company's total realized price over the first nine months of the year was \$68.71 per boe, compared with \$68.36 per boe in the first nine months of 2013. This reflected higher overall bitumen, natural gas liquids and natural gas prices, partially offset by lower crude prices. Despite the changes in prices, production is





expected to grow by 4 percent over 2013.

"This is exactly in line with the guidance we provided at the start of the year and we're well positioned to deliver our longer term growth target with strong momentum going into 2015," Fox said. "This momentum comes from a continued ramp from recent startups at FCCL Malaysia, the UK and Norway and ongoing strong production from our unconventionals."

Staying on track with its growth target, full-year 2014 production from continuing operations, excluding Libya, is expected to be approximately 1.5 billion boepd.

Dollars going to mature plays

Lance said the company may "throttle back" on its less mature unconventional plays, while continuing to invest in its highest margin short cash cycle projects in the Eagle Ford and the Bakken.

"These are the best returns on our portfolio and give us the confidence that we need to meet our volume target of 3 to 5 percent even with a bit lower capital next year," he said.

Fox said the price downturn offers an opportunity to exercise the company's flexibility and change its plans a bit.

"We don't need to ramp as quickly in the Permian as we previously thought, so we could take some scope there, and the same applies in the Niobrara and to some of our plays in Western Canada," Fox said. "So those are the primary areas where we could take some flexibility without having any significant impact on the rate between now and 2017."

ConocoPhillips also has its finger on the pause button for exploration and is reviewing its commitments and possible opportunities in that realm.

"(We'll) choke back a little bit in exploration, but we're still committed to exploration as an engine for organic growth of the company in the long-term," Fox said. "So we need to be balancing a long-term view of the company's growth potential with these short-term conditions that we find ourselves in."

Lower prices provide potential for the company to acquire new properties, and Fox said that is something being watched continually around the world and if something worked well within the portfolio at an appropriate price, then ConocoPhillips would certainly take advantage. •

Contact Maxine Herr at maxine606@msn.com

MOVING HYDROCARBONS

TransCanada rejoins pipeline battle

Application for Energy East pipeline filed with National Energy Board, but it faces the same opposition forces as Keystone XL

By GARY PARK

For Petroleum News Bakken

'ransCanada has entered the regulatory arena with its Energy East pipeline proposal hardened by combat over Keystone XL and ready to wage battle for one of the biggest infrastructure projects ever built in Canada.

Energy East has been put by some in the same league as the Canadian Pacific railway, built in the 1880s connecting the Pacific Coast with Ontario as a means to

entice western regions to join the Canadian confedera-

The railway had its foes, but they seem timid in comparison with the political, environmental and aboriginal forces that view RUSS GIRLING the pipeline as any-



thing but the "nation-building" project hailed by proponents.

The prospect won't wash with the well-funded, highly organized opposition that doesn't believe Energy East is the chance for Canada to thumb its nose at the Obama administration, whose refusal to give the green light to Keystone XL has widened the gulf in bilateral energy and trade relations.

What isn't clear is whether TransCanada has learned enough from its XL stumbles to win the day with Energy East during the next 16 months until the Canadian government is committed to making its final decision.

Gearing up for a fight

But the symbols of doing its homework were on full display Oct. 30 when the company rolled out boxes containing 30,000 pages of documents as part of its application to Canada's National Energy

To underpin its 18 months of planning, TransCanada said it was offering exhaustive details on environmental planning measures, design and construction methods for safe operations, findings from an independent environmental and socioeconomic assessment and conclusions drawn from meetings with more than 7,000 individuals, 5,500 landowners and 158 aboriginal communities.

At its news conference to launch the regulatory filing it had panels of experts to explain the benefits, including representatives of business, trade unions and municipalities to demonstrate the depth and breadth of support.

The C\$12 billion scheme, spanning six of Canada's 10 provinces and 2,800 miles, is designed to ship 1.1 million barrels per day of oil sands bitumen and possibly Bakken crude on a converted natural gas pipeline, which would displace 700,000 bpd of crude imported to Eastern

TransCanada Chief Executive Officer Russ Girling said the project "will support thousands of jobs across the country and generate billions of dollars in government tax revenues over both the shortand long-term."

Girling also made a case for Energy East as the "safest and most efficient access to markets for Canada's growing crude oil production, ensuring we realize the greatest value for our natural resources."

Questioning the need

Typical of a counter-attack was a report issued by environmental groups on the day before TransCanada filed its regulatory application.

Environmental Defense Greenpeace, drawing on Statistics Canada international trade data, took issue with TransCanada's repeated claims that Eastern Canadian refiners rely on imported crude for 86 percent of their feedstock, often listing Saudi Arabia, Nigeria, Venezuela and Algeria as the leading sources of crude for refineries in Ontario, Quebec and Atlantic Canada.

The environmentalists estimated that Saudi Arabia, Algeria and Nigeria made up 14 percent of Eastern Canada's crude imports in the first eight months of 2014, while Venezuela didn't even make the

They said that during the January-August period, the United States was the chief supplier of crude to Quebec and New Brunswick, accounting for about 50 percent of the imports, reflecting the shift among refiners to draw their supplies from the Bakken and Eagle Ford plays.

Otherwise, Statistics Canada showed Quebec received 11 percent of its imports from Algeria and 2.6 percent from Nigeria, with the balance coming from Norway, Angola, Mexico, Azerbaijan, Kazakhstan and the United Kingdom.

The United States was the major source of crude for New Brunswick's Irving Oil refinery, followed by Saudi Arabia at 22 percent, with the balance coming from Egypt, Norway, Angola, Ivory Coast, Brazil, Cameroon and the United Kingdom.

Adam Scott, a spokesman for Environmental Defense, said there is no evidence to support TransCanada's claims that Energy East will play a major role in nation building and job creation.

"A lot of people are very concerned about making sure Canada gets value for its resources and we really want to make sure that nobody is misled by this marketing ploy of theirs," he told the Globe and Mail. "It's very disingenuous."

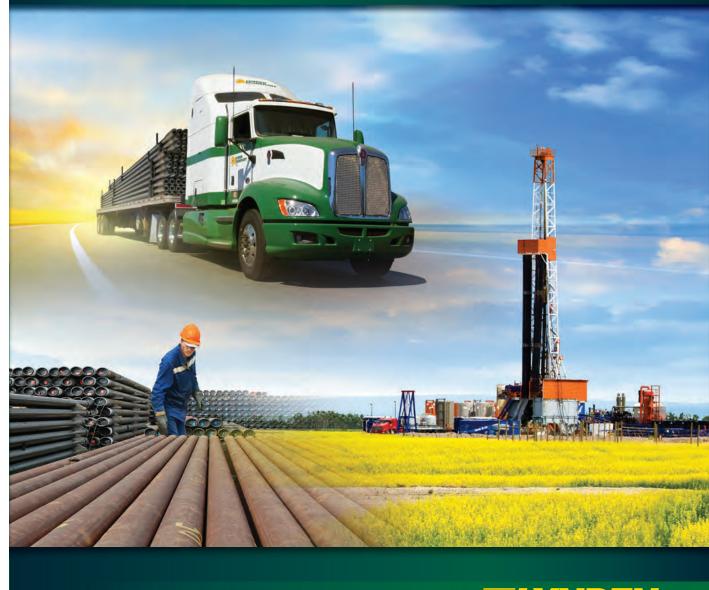
Adding to the fodder

A report from the consulting firm of Deloitte commissioned by TransCanada in September 2013 outlined the benefits to domestic customers of Energy East, saying it would provide access to lower cost feedstock, a stable and long-term supply of crude and "increased negotiat-

see **PIPELINE BATTLE** page 7



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PEOPLE TALK

UND confirms Erickson as head of EERC

Longtime researcher says financial plan will enable expansion of center's developing technical, strengthening of existing programs

By ROSE RAGSDALE

For Petroleum News Bakken

Tom Erickson has been named as the new director of the University of North Dakota's Environmental Research Center, EERC. Erickson was appointed acting director in May and interim director in July.

UND Provost and Vice President for Academic Affairs Thomas DiLorenzo, Ph.D., said he met with more than 30 individuals and groups as he considered the future leadership for the EERC and concluded that good scientific inquiry is the basis for the work at the center.

"President (Robert) Kelley and I believe in Tom's leadership abilities and in the team around him, and we

believe that Tom and the team should continue to be given the opportunity to shine," said DiLorenzo.

Erickson said he is "thrilled" to accept the directorship. "It is my honor to continue leading the outstanding staff at the EERC and working alongside the current leadership team and UND officials to map out a positive path forward," he added.

Tenure at UND

Erickson, who earned both bachelors and masters degrees in chemical engineering at UND, was first hired as a student at the university's Energy and Mineral Research Center in 1986, and two years later



TOM ERICKSON

was hired as a full-time research specialist according to UND.

He held a number of different positions at the university including research engineer, analytical research supervisor, research manager, and senior research manager. Erickson served as an associate director for research at EERC from 1999 to 2011, a position focused on development of advanced fossil and renewable energy power and fuel power systems.

Erickson later served as associate director for business, operations and intellectual property. In that role,

see **PEOPLE TALK** page 8

MOVING HYDROCARBONS

Crude prices casting doubt on Bakken pipeline

By MIKE ELLERD

Petroleum News Bakken

Two weeks after extending an open season on its proposed Bakken-to-Cushing crude oil pipeline, Enterprise Products Partners is expressing some concern about the project's future.

The proposed 1,200-mile, 30-inch pipeline would carry crude oil from the Williston, Powder River and Denver-Julesburg basins to the Midcontinent hub at Cushing, Oklahoma. In the initial design, the pipeline would have a capacity of approximately 340,000 barrels per day with expansion potential to over 700,000 bpd. Enterprise launched an open season for shipper commitments on Sept. 4 and on Oct. 17 extended the open season to Nov. 14.

In a third quarter earnings conference call with industry

analysts on Oct. 30, Chief Operations Officer James Teague said that among the company's projects that could be pushed back due to current volatility in the crude oil market, the Bakken pipeline is the most likely to be affected. "If it's (market volatility) impacted anything we're doing ... it's probably that Bakken project because ... it's kind of simple — it's the furthest from the market," Teague said in response to an analyst's question. "We haven't seen any impact in what we're doing out in the Permian, we haven't seen any impact on what we're doing in the Eagle Ford"

And Senior Vice President Bill Ordermann said the Bakken pipeline project has not been included in the company's 2015 and 2016 capital expenditure budget, "so when we're talking about \$3 billion and \$4 billion in 2015 and '16, that's without the Bakken pipeline," Ordermann said.

Energy Products Partners, however, is still hoping to get sufficient shipper commitment to proceed with the pipeline. While Teague said crude oil prices are not helping the project and that he would be more confident with crude selling at \$100 per barrel than at \$80, he did say that a "high quality producer" has made a "sizable commitment" on the proposed pipeline, although more commitment is needed. "We have a threshold that if we reach that threshold, we'll build and at this point we haven't reached the threshold, but we do have one sizable producer that's made a pretty sizable commitment."

But that doesn't mean the company isn't getting close to its threshold. "We're not as far away as I thought we'd be from that threshold," Teague said. Ordermann said it will

see BAKKEN PIPELINE page 8

• COMPANY UPDATE

Oasis focused on infrastructure and ops

Bakken operator applying lessons learned to improve planning and avoid variances in production guidance as development proceeds

By MIKE ELLERD

Petroleum News Bakken

asis Petroleum posted another record quarter in the Bakken with production averaging 45,873 barrels of oil equivalent per day in the third quarter, a 5 percent quarter-over-quarter growth. However, that output was below the company's guidance range of 47,000 to 49,000 boepd and Oasis said it has identified the root causes and is acting to correct them.

In a Nov. 5 earnings conference call with analysts, Oasis' Chief Operating Officer Taylor Reid said the shortfall was due primarily to infrastructure and operational issues, which he said are not only important now, "but will be equally important as we plan for Q4 and for 2015."

On infrastructure, Reid noted that during times of wet weather, North Dakota counties impose load limits on roads that restrict the passage of heavy trucks, which affects Oasis because it transports both crude oil and produced water in areas where it doesn't have gathering infrastructure. Because of closures in the third quarter, Oasis was forced to shut in a number of wells resulting in approximately 700 boepd less production than anticipated.

In addition, while more than 90 percent of Oasis' wells are connected to gas infrastructure, Reid said that in certain large spacing units third party infrastructure was either not in place or did not have the capacity to take all of gas produced in the unit, resulting in the company flaring about 400 boepd more than was expected. "While we have found some short-term solutions to reduce gas flaring, the medium to long-term solution is to get the appropriate gas infrastructure in place ahead of our drilling program," Reid said. "This will be a significant focus for us in 2015."

On the operational side, Reid said issues associated with full spacing unit drill-outs resulted in an additional approximately 800 boepd in production loss. As spacing units are drilled with higher densities, Reid said, problems

with one well can be magnified and impact production of all wells on the unit. He said issues with one well on a 13-well pad "significantly" delayed initial production and later forced multiple shut-ins of producing wells on the pad. Reid believes the issues with that particular pad are resolved, "but even more importantly, we have taken that experience and used it to improve planning and execution on our development going forward."

In addition, lower than projected production from lower bench Three Forks wells in the company's North Cottonwood area in Mountrail County resulted in an additional variance of approximately 600 boepd.

Collectively, those variances resulted in a shortfall of approximately 2,500 boepd, and Reid noted that when combined with the company's actual third quarter production of just under 46,000 boepd, that shortfall would put production above the midpoint of the guidance range. "The point is that the variances are mostly operational or infrastructure and they are things that we will address going forward," Reid said.

3Q operations

Reid said Oasis, which operates exclusively in the Williston Basin, set a record for the most wells completed in a single quarter at 66 gross operated completions and that many of those completions were pushed into the latter part of the quarter. In updated plans, Oasis has pushed back the completion of approximately 15 gross operated wells into 2015 "to better account for cycle times associated with full spacing unit development and to account for potential weather-related delays." With those completions pushed into 2015, Reid said the company will complete approximately 195 wells in 2014, not quite hitting the company's 2014 target of 205 completions.

Oasis had 61 gross operated wells waiting on completion at the end of the quarter and expects to have 79 wells awaiting completion at the end of the year.

Reid said Oasis again experienced road closures at the beginning of the fourth quarter and is now forecasting a more conservative approach to downtime in the current quarter, and added that the company now expects to produce between 47,000 and 49,000 boepd in the quarter.

In August, the latest month for which production data are available, Oasis stood as North Dakota's ninth largest Bakken oil producer averaging 48,687 barrels per day from operated, non-confidential wells. In Montana, Oasis was the third largest Bakken producer in August averaging 6,166 bpd.

Over the third quarter, Oasis' average sale price per barrel of crude, without derivative settlements, was \$87.17. In the second quarter, the company's average price was \$94.48 and in the third quarter 2013 averaged \$100.75.

Going forward

Chief Executive Officer Tommy Nusz said it is too early to discuss specific plans for 2015 given the uncertainty in oil prices, but he did say that protecting the company's balance sheet while executing on plan is very important. "As always, the oil price environment, the service cost environment and our financial position are extremely important in our planning process. But infrastructure is just as important as we determine both where we drill and how fast we drill."

Nusz said not only will Oasis continue to look for ways to manage risk, but will also manage outside services, including drilling, to maintain flexibility. "As we've talked about before, of the 16 rigs that we're currently running, 10 of them have contracts that have less than five months remaining. As we head into 2015, this gives us the ability to actively manage our capital program, depending on the operating environment." ●

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COMPANY UPDATE

Statoil posts loss on short-term issues

Negative net income due to lower oil and gas prices and impairments offset by strong operational performance and cash generation

By MIKE ELLERD

Petroleum News Bakken

Statoil saw a net income loss of approximately \$769 million (4.8 billion Norwegian kroner, NOK, based on an average quarterly exchange rate) in the third quarter. However, at the same time, the Norwegian state-owned integrated multinational saw its global production increase nearly 2 percent averaging 1.829 million barrels of oil equivalent per day in the quarter despite divestments and deferrals that impacted the company's production by over 100,000 boepd in the quarter.

The negative third quarter net income was due mainly due to impairments including startup delays at an oil sands project in Alberta, additional write-downs in several plays including the Gulf of Mexico and Angola, and a drop in value of products the company has in operational storage.

However, those were all quarter-specific issues, and in an Oct. 29 earnings call with analysts, Chief Financial Officer Torgrim Reitan said the company has strong cash generation and its adjusted earnings are in keeping with expectations. Reitan said the company also delivered strong operational performance in the quarter and its ongoing efficiency program which started in 2013 is on track. Reitan added that the company is progressing with its strategy of "value-creating transactions" and new discoveries.

"Our earnings are impacted by the lower prices, and the reported income is reported by quarterly specific items," Reitan said in the earnings conference call. "But our underlying operations are strong, including our improvement program, which is on track, and we continue to deliver strategic progress."

Reitan also said the volatility in the crude oil market is nothing new and something that Statoil includes in its business plans. "The recent developments are well within the outcomes we prepare for when we do our business planning. For us, this is all about resilience and being ahead of the game," he told analysts. "We have secured a strong position, and taken measures well before the most recent volatility started. We are taking action when we can, and not waiting until we have to, so we are well positioned to handle different scenarios."

In an Oct. 29 press release, Statoil's acting President and Chief Executive Officer Eldar Saetre said the company's



TORGRIM REITAN



strategy remains strong. "Safe and efficient operations are our top priorities, and we continue developing the business according to plan." Saetre was appointed acting CEO after long-time CEO Helge Lund resigned in October to take the helm of the British integrated oil and gas multinational BG Group.

Saetre has been with Statoil since 1980, serving as executive vice president and chief financial officer from 2003 to 2010 and as executive vice president for marketing, processing and renewable energy from 2010 until he was appointed interim CEO in October. Statoil's board has formed a search committee for a permanent replacement; Saetre is not a candidate for that position.

Third quarter stats

Of Statoil's 1.829 billion boepd average daily third quarter production, a record 742,800 boepd came from the company's international operations, up 2.5 percent over second quarter international production of 725,300 boepd.

In North America, Statoil's production averaged 269,400 boepd in the third quarter, up 3.9 percent over the 258,800 boepd average in the second quarter.

The company's three onshore U.S. plays, the Marcellus, Eagle Ford and Bakken, averaged 218,800 boepd in the third quarter, up 4.3 percent from the second quarter average of 209,700 boepd. Those three plays accounted for 81 percent of Statoil's North American produc-

Statoil's overall third quarter output of 1.829 billion boepd was 62.9 percent liquids, a mix heavily influenced by international production which averaged 75 percent liquids in the quarter. In North America, the product mix was 50.8 percent liquids, but that more balanced mix was mainly the result of Statoil's Marcellus production, which at 131,000 boepd accounted for nearly half of North America output and was 86.6 percent gas. Statoil has offshore interests in the Gulf of Mexico which averaged 24,800 boepd in the third quarter and was nearly 100 percent liquids. Statoil's other North American production comes from the Canadian oil sands and Newfoundland offshore.

Statoil's average liquids price for its Norwegian production averaged \$93.70 per barrel in the third quarter, and its international liquids price averaged \$87.40 for an overall weighted average liquids price of \$91.20 per barrel for the quarter, again based on average quarterly currency exchange rates. That weighted average price is down 8.5 percent from \$99.70 in the second quarter and down 11.40 percent from \$102.90 in the third quarter 2013.

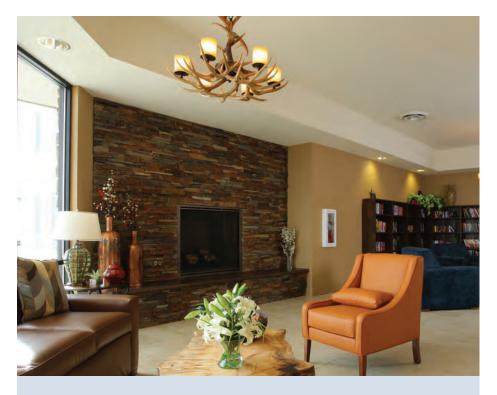
In the Bakken

In the Bakken, Statoil's third quarter production averaged 54,800 boepd — 91.7 percent liquids — a 9.2 percent increase over second quarter average production of 50,200 boepd. Production from the Bakken accounted for 24.9 percent of Statoil's U.S. production and 20.2 percent of North American production.

Reitan said Statoil is currently operating six drill rigs in the Bakken. He also said Statoil has made improvements in drilling efficiencies through standardization, simplification and coordination. In the Bakken drilling time efficiencies improved 25 percent by the end of 2013 and have improved an additional 10 percent thus far in 2014.

In August, Statoil ranked as North Dakota's eighth largest Bakken oil producer averaging 55,191 barrels of oil per day for operated, non-confidential wells according the latest data available from the Department of Mineral Resources. •

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continued from page 5

PIPELINE BATTLE

ing power for long-term crude oil supply contracts."

Deloitte said Quebec refineries currently get only 8 percent of their supplies from Canadian sources, while those in Atlantic Canada cover 17 percent of their needs from offshore Newfoundland production.

The report said 45 percent of Quebec's feedstock and 50 percent of Atlantic Canada's came from member nations in the Organization of Petroleum Exporting Countries.

This adds a new issue to the fodder that opponents of Energy East will draw from, along with claims that the pipeline will pose a threat to waterways and water sources, contribute to climate change and endanger the lifestyles of aboriginal communities.

The environmentalists have mounted threats with Kevin Metcalf, a campaigner with Toronto350.org, the spinoff from a U.S. group with a similar name, declaring the stage is set "for a major confrontation around tar sands in 2015" as Canada prepares for a federal election.

"Would-be federal leaders who want to talk tough on climate will need to show that they have a plan to keep this carbon in the ground," he said.

Environmental Defense said XL and Northern Gateway pipelines have been delayed by "overwhelming public opposition. Eastern Canadians won't accept the risks any more than British Columbia or U.S. residents."

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OMPANY UPDATE

Building an even stronger Whiting

CEO Volker looks to 'push the bigger ball up the hill' with Kodiak acquisition as his company looks at 20 percent growth in 2015

By MAXINE HERR

For Petroleum News Bakken

Combined assets and budgets due to its acquisition of Kodiak Oil and Gas should allow Whiting Petroleum to achieve a 20 percent growth in 2015.

The Kodiak acquisition is scheduled to close in December creating the leading player in the Williston Basin. Whiting's budget for next year is \$3.8 billion, which is equal to the combined budgets of the two entities in 2014.

"This is a testament to the quality of both companies' assets and to Whiting's ability to increase capital productivity across the entire asset base due to our focus on efficient operations and leading-edge technology," Chief Executive Officer and President Jim Volker said in an Oct. 30 call with analysts announcing third quarter results.

Whiting has scheduled a special share-holder meeting for Dec. 3 to vote on the approval of the Kodiak transaction. The combined companies will have more than 3,460 net drilling locations over 855,000 net acres and Whiting plans to increase Kodiak's rig fleet from seven to 12 by the fourth quarter of 2015.

Best completion techniques vary

Whiting posted record production in the

third quarter led by completion of its Flatland Federal well which targets the second bench of the Three Forks. It flowed nearly 6,000 barrels of oil equivalent per day using coiled tubing which proved comparable to



JIM VOLKER

cemented liner plug-and-perf completions. This well is in Whiting's Tarpon area which is in the Sand Creek field south of Lake Sakakawea in northern McKenzie County.

"They're just huge wells in Tarpon with both of those completions," Volker said, adding that coiled tubing completions will likely work best with drilling in eastern Sanish field where it can eliminate the drillout of the plugs.

"So I think we'll see limited use of the coiled tubing completions, but it is a good tool," he added.

Another notable four-well pad in its Hidden Bench field, which is in the Arnegard field in west central McKenzie County, produced an average initial production rate of 3,278 boepd per well. The four wells were completed with 30 stages and five perforation clusters per stage, creating 150 entry points.

continued from page 6

BAKKEN PIPELINE

all depend on whether producers are willing to believe in the project and step up with commitments. "We're in conversations with a very large number of them right now and frankly got the indication they needed more time, so we extended the open season here through Nov. 14 ... and we'll see what we can pull together by then," Ordermann said. "We certainly continue to dial up with it."

When asked if there are potential opportunities to capture shipper commitment for the pipeline amid the narrowing price differentials relative to West Texas Intermediate which are making rail transport to the East and West Coasts less attractive, Teague said "Absolutely. If this thing is successful, that's going to be a major part of its success," he added. "People are recognizing that rail is going to be difficult."

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continued from page 6

PEOPLE TALK

he was responsible for accounting and contracting services, business practices and policies, operations safety, protection of intellectual property, and support for facilities, engineering and construction. He was also involved in the development intended to "enable and enhance the cutting-edge research of the center," according to UND.

In an Oct. 23 press release, UND said that Erickson and the leadership team at EERC "are committed to developing and enhancing strategic collaborative partnerships, protecting relevant intellectual property, and advancing EERC-developed technologies into the commercial marketplace."

Erickson had been acting director of the 235-employee center located in Grand Forks, North Dakota, since its longtime former director Gerald Groenewold was put on leave May 5 and subsequently fired by UND President Robert Kelley.

Leadership and focus

Along with Erickson, others in the leadership at EERC include Associate Director for Research John Harju; Associate Director for marketing, outreach and administrative resources Deb Haley; and interim Associate Director for Business Operations Erin O'Leary. In addition, Michael Holmes, Ed Steadman, and Chris Zygarlicke serve as deputy associate directors for research and Anne Fiala is deputy associate director for marketing, outreach, and administrative resources

"With a new financial plan in place, we are focused on strategically expanding our technical programs under development and strengthening our existing programs," Erickson said in the Oct 23 press release. "With the strong and focused group of employees at the EERC, I am very confident of a bright future ahead. I am also looking forward to working along with Provost DiLorenzo on further collaborations with other key departments within the university family in order to strengthen relationships and build future research opportunities."

Since 1983, the center has had nearly 1,300 clients in 52 countries, more than 960 of which have been from the private sector, including many Fortune 500 companies. The center's research portfolio totaled \$202.5 million in fiscal year 2014. ●

Contact Rose Ragsdale at roseragsdale@gmail.com New completion technologies proved successful in the company's Brehm well in Sanish field where Whiting used a slickwater fracturing design to produce 3,770 boepd from a 6,800-foot lateral.

"Adjusted for lateral length, this is one of the most productive wells we have drilled in the prolific Sanish field and speaks very well for our plans for further infill drilling," Volker said.

Senior Vice President of Exploration and Development Mark Williams said Whiting's acreage position is generally in the sweet spots of the basin, but geology varies throughout the acreage. The slickwater fractures have allowed Whiting to obtain excellent production results in the Sanish, Missouri Breaks and Pronghorn fields.

"What we've been trying to do here over the last couple of years is fine-tune our completions to the geology in each of those different areas," Williams said. "So I think that's the important takeaway here. It's just going to be subtly different from one area to the other."

Whiting's overall net daily production from all of its assets reached a record 116, 675 boepd over the third quarter, representing a 6 percent sequential increase over the previous quarter. The Bakken/Three Forks assets averaged 87,480 boepd and represented 75 percent of Whiting's total production over the three-month period as the company currently controls more than 663,000 net acres.

Positioned for sliding prices

Volker said the company's goal of 20 percent growth in 2015 is achievable assuming an \$80 per barrel of oil, but even another \$10 drop would not cause the activity to dwindle much. Whiting's realized oil price for the third quarter was \$74.88 per boe compared to \$81.21 during the same period in 2013. Volker said the rates of return wouldn't even change much at \$70 a barrel with its combined entity position with Kodiak.

"I think we're going to push the bigger

ball up the hill just as fast as Whiting did in 2014," Volker said. "We're going to take that combined entity and grow it at least as fast as Whiting grew alone in 2014," he continued. "Everything that we own in one way or another is being in a good area ... and we're trying to concentrate our rigs in the areas that are giving us the biggest bang for the buck."

He added that even at today's oil prices, capital availability for the company will be more than \$4 billion in 2015. However, he echoed the words of Occidental Petroleum President Steve Chazen saying service companies enjoyed price increases when oil prices were high, so Volker also hopes "they'll be as flexible on the way down" so the company can maintain its \$8.5 million drilling completion cost.

Who wants to dance?

If the company is seeking capital, it is prepared to flaunt its gas plant assets in the Williston Basin. Volker confirmed that there is a lot of interest in Whiting's gas plants which are worth significantly more than what was spent to develop them. So he said he will always consider selling the assets or partnering with others to develop more plants in the future.

"I do think it's a big number if we ever wanted to monetize them all. The capture prices being paid by people who would want to be a partner, whether be a financial partner or, what I would call, a joint operating partner there with us have been pretty enticing," Volker said. "We're just going to kind of fill up our dance card and see maybe who wants to be our partner for a longer period of time."

Senior Vice President of Operations Rick Ross announced construction of a new plant in the company's Cassandra development which is in the Ray field of northern Williams County. It is expected to come online in January processing 15 million to 20 million cubic feet per day. ●

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MOVING HYDROCARBONS

TLLP continues Bakken midstream growth

Tesoro Logistics LP, TLLP, had a busy third quarter in North Dakota during which it completed the second phase of its High Plains crude oil pipeline reversal, increased storage capacity at its Bakken Area Storage Hub, and began construction of its Connolly crude oil gathering system in Dunn County that will connect with the High Plains system.

In an Oct. 31 third quarter conference call, Tesoro Corp. CEO and TLLP Chairman Greg Goff said TLLP began delivering crude oil in August on its reversed High Plains pipeline running from the Johnsons Corner area in northeast McKenzie County to Ramberg Station in eastern Williams County. Goff said TLLP delivered more than 135,000 barrels per day on that system in the third quarter and expects volumes to increase to 150,000 bpd in the fourth quarter. In addition, he said TLLP is planning three new interconnections on the High Plains system, two of which are rail facility destinations.

TLLP also added 240,000 barrels of storage capacity at the BASH facility near Ramberg Station, according to Goff, bringing the total capacity in the Ramberg area to 480,000 barrels.

With construction proceeding on the \$150 million Connolly gathering system, the first barrels are expected to be delivered to the High Plains system by the end of the year with volumes increasing in 2015. Goff said the project is expected to be fully completed by the end of 2015. TLLP has also announced that it will construct and operate a pipeline connecting the Connolly system to the Basin Transload rail facility at Beulah in southern Mercer County.

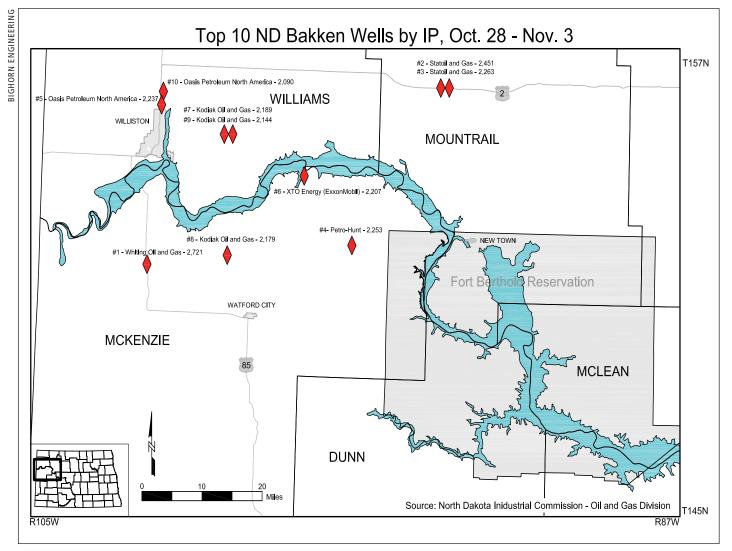
The growth activity didn't stop at the end of the quarter. On Oct. 19, TLLP and QEP Resources announced that TLLP was acquiring QEP Field Services in a \$2.5

see TLLP GROWTH page 15

Petroleum BAKKEN Stats

BAKKEN COMMENTARY

Whiting tops IP; six wells north of the lake



MIKE ELLERD

Petroleum News Bakken

Whiting topped the week's initial production, IP, list for wells producing the highest volumes in the first 24 hours of production at 2,721 barrels from a middle

Bakken well in the Lonesome field in northern McKenzie County (see charts on pages 10 and 12). That was one of four wells on the Top 10 list this week in McKenzie County, the other six wells were all north of Lake Sakakawea in Williams and Mountrail counties (see map). The top 10 IPs reported for the week fell within a narrow range from the high of 2,721 to 2,090 barrels.

Two common-pad Statoil wells in the Alger field in Mountrail County came in with the Nos. 2 and 3 IPs at 2,451 and 2,263 barrels. Those two wells are com-

pleted in the middle Bakken and Three Forks formations.

In the No. 4 spot was a Petro-Hunt middle Bakken well in the Clear Creek field in northeastern McKenzie County with an IP of 2,253 barrels.

Oasis had the Nos. 5 and 10 wells, both in the Cow Creek field in Williams County. The No. 5 well is completed in the middle Bakken and had an IP of 2,237 barrels, while the No. 10 well targets the Three Forks and had an IP of 2,090 barrels.

XTO Energy had the sixth highest IP with a Three Forks well in the Grinnell field in McKenzie County at 2,207 barrels.

Two common-pad, middle Bakken Kodiak wells in the Stockyard Creek field came in with the Nos. 7 and 9 IPs at 2,189 and 2,144 barrels. In the No. 8 spot is a Kodiak middle Bakken well in the Poe field in McKenzie County which had an IP of 2,179 barrels.

ND permitting

Seventy six well permits were issued in North Dakota between Oct. 28 and Nov. 3, one for salt water injection and the others for oil wells (pages 11, 12, and 13). That is up from the 58 permits issued the previous week but even with the week before. Most of the permits were for Bakken system wells, but two permits were issued for Red River wells in Bowman County and two for Madison-pool wells in McHenry County.



Looking for a rig report?

North Dakota

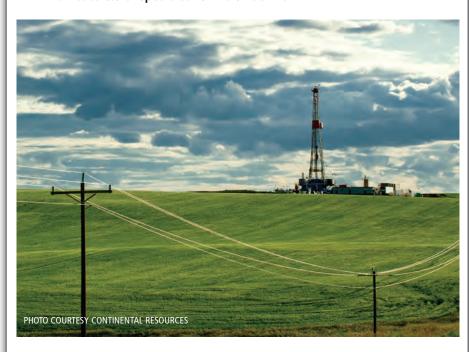
The best list for North Dakota is updated daily by the North Dakota Oil and Gas Division at www.dmr.nd.gov/oilgas/riglist.asp

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



Petroleum Bakken producers' stock prices Closing prices as of Nov. 6 along with those from previous Wednesday

Company	Exchange	Symbol	Closing price	Previous Wed.
Abraxas Petroleum Corporation	NASDAQ	AXAS	\$4.09	\$4.10
American Eagle Energy Corporation	NYSE	AMZG	\$1.53	\$1.86
Arsenal Energy USA, Inc.	TSE	AEI	\$8.25	\$7.99
Baytex Energy USA Ltd.	NYSE	BTE	\$28.22	\$31.66
Burlington Resources Co., LP (ConocoPhillips)	NYSE	COP	\$69.84	\$70.75
Continental Resources, Inc.	NYSE	CLR	\$53.55	\$56.53
Crescent Point Energy US Corporation	TSE	CPG	\$36.33	\$37.01
Denbury Onshore, LLC	NYSE	DNR	\$11.46	\$12.61
Emerald Oil, Inc.	NYSEMKT	EOX	\$2.78	\$3.47
Enerplus Resources USA Corporation	NYSE	ERF	\$13.41	\$14.61
EOG Resources, Inc.	NYSE	EOG	\$96.07	\$93.13
Fidelity Exploration & Production (MDU)	NYSE	MDU	\$26.48	\$28.26
Halcon Resources	NYSE	HK	\$2.94	\$3.19
Hess Corporation	NYSE	HES	\$83.17	\$82.89
Kodiak Oil and Gas (USA), Inc.	NYSE	KOG	\$10.11	\$10.44
Legacy Reserves Operating LP	NASDAQ	LGCY	\$21.65	\$22.56
Marathon Oil Company	NYSE	MRO	\$33.57	\$34.38
Mountain Divide, LLC (Mountainview Energy)	CVE	MVW.V	\$0.32	\$0.34
Newfield Production Company	NYSE	NFX	\$31.83	\$32.58
Northern Oil and Gas	NYSE	NOG	\$10.50	\$10.99
Oasis Petroleum North America	NYSE	OAS	\$26.11	\$30.13
Oxy USA, Inc. (Occidental Petroleum)	NYSE	OXY	\$86.47	\$88.85
PetroShale Inc.	CVE	PSH	\$1.70	\$1.83
QEP Energy Company	YSE	QEP	\$24.46	\$24.33
Resolute Natural Resources Company, LLC	NYSE	REN	\$3.23	\$3.59
Samson Resources Company (KKR & Co)	NYSE	KKR	\$21.27	\$22.25
SM Energy Company	NYSE	SM	\$52.60	\$56.09
Statoil Oil and Gas LP	NYSE	STO	\$22.16	\$23.60
Triangle USA Petroleum Corporation	NYSE	TPLM	\$7.00	\$7.93
Whiting Oil and Gas Corporation	NYSE	WLL	\$57.82	\$60.03
WPX Energy Williston, LLC	NYSE	WPX	\$17.58	\$19.17
XTO Energy, Inc. (ExxonMobil)	NYSE	XOM	\$95.04	\$94.59

see ND IP page 12



eum IPs for ND Bakken wells

Oct. 28-Nov. 3, 2014

This chart contains initial production rates, or IPs, for active wells that were filed as completed with the state of North Dakota from Oct. 28-Nov. 3, 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, Oct. 28-Nov. 3. 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)
_	gton Resources Oil and Gas (ConocoPhilli											
27308	Lillibridge 21-27MBH	Johnson Corner	NENW 27-150-96	4SEC	MCK	Bakken	horz.	21,077'	9/28/14	1,683	2,654	1,082
27060	Norman 21-4MBH 2SH	Johnson Corner	LOT3 4-150-96	4SEC	MCK	Bakken	horz.	20,582'	9/16/14	1,872	2,539	840
27578	Sequoia 31-4TFH	Hawkeye	LOT8 4-152-95	2SEC	MCK	Bakken	horz.	21,786'	9/27/14	1,296	1,919	312
Contin 26874	ental Resources Lawrence 11-24H1	North Tioga	NENW 25-159-95	2SEC	WIL	Bakken	horz.	20,242'	10/12/14	1,130	1,203	1,833
		North Hoga	NEINW 25-159-95	23EC	VVIL	Dakkeli	norz.	20,242	10/12/14		1,203	1,033
Kodiak 27407	Koala 4-4-31-13H	Poe	LOT4 4-151-99	4SEC	MCK	- Bakken	horz.	22,570'	9/4/14	2,179	3,183	1,848
26424	P Manning 154-99-2-2-11-14H	Stockyard Creek	LOT2 2-154-99	2SEC	WIL	Bakken	horz.	21,025'	9/14/14	2,189	2,293	3,839
26422	P Manning 154-99-2-2-11-14H	Stockyard Creek	LOT2 2-154-99	2SEC	WIL	Bakken	horz.	20,600'	9/14/14	2,144	2,293	2,341
Petro-l			2012 2 131 33		VVIL	Bullion	11012.		3/10/11		2,13	_,_,_
27368	Brenna 152-96-24C-13-1HS	Clear Creek	SWSW 24-154-96	2SEC	MCK	- Bakken	horz.	20,504'	10/12/14	2,253	5,312	1,298
	on Exploration		011011 21 20 1 30					,,,,,,	10/12/11	,	3,012	,
27911	Bootleg 5-14-15TFH	Stockyard Creek	NENW 14-154-99	ICO	WIL	Bakken	horz.	19,076'	9/15/14	453	453	1,090
Statoil	Oil and Gas	,						,	., .,			,
21374	Barstad 23-14 #4TFH	Alger	SWSE 23-156-93	2SEC	MNT	Bakken	horz.	19,800'	9/26/14	2,263	1,849	5,630
21373	Barstad 23-14 #5H	Alger	SWSE 23-156-93	2SEC	MNT	Bakken	horz.	19,720'	9/23/14	2,451	1,514	5,134
[riangl	le USA Petroleum										,	
28419	State 152-102-36-25-3H	Elk	SWSE 36-152-102	2SEC	МСК	- Bakken	horz.	20,531'	10/20/14	671	398	1,572
28420	State 152-102-36-25-4H	Elk	SWSE 36-152-102	2SEC	МСК	Bakken	horz.	20,633'	10/26/14	868	817	1,155
Whitin	ng Oil and Gas											
28611	Bartleson 13-18-2XH	Sanish	LOT3 18-153-92	ICO	MNT	Bakken	horz.	20,505'	10/12/14	1,160	982	3,851
28610	Bartleson 13-18-3XH	Sanish	LOT3 18-153-92	ICO	MNT	_ Bakken	horz.	20,032'	10/11/14	1,807	788	3,350
27018	Gajewski 31-18H	Lonesome	NWNE 18-151-101	2SEC	МСК	Bakken	horz.	20,595'	4/20/14	2,721	1,015	4,607
NPX F	nergy Williston											
23682	Martin Fox 20-17HB	Mandaree	SESW 20-149-93	2SEC	DUN	Bakken	horz.	20,877'	10/22/14	1,142	28	2,545
23681	Martin Fox 20-17HX	Mandaree	SESW 20-149-93	2SEC	DUN	- Bakken	horz.	20,998'	10/1/14	656	28	190
XTO Fr	nergy (ExxonMobil)											
26326	Boomer Federal 34X-35G	Lost Bridge	LOT3 35-148-97	2SEC	DUN	Bakken	horz.	20,803'	9/22/14	879	1,323	2,997
23587	Kristensen 24X-9B	 Temple	SESW 9-159-96	2SEC	WIL	_ Bakken	horz.	19,033'	10/16/14	584	704	1,853
26862	Ruby State Federal 34X-36B	Grinnell	SWSE 36-154-97	2SEC	МСК	- Bakken	horz.	19,612'	9/15/14	1,546	496	676
26861	Ruby State Federal 34X-36F	Grinnell	SWSE 36-154-97	2SEC	МСК	- Bakken	horz.	20,340'	8/29/14	2,207	4,255	340
27748	Willey 31X-3F	West Capa	LOT2 3-154-97	2SEC	WIL	Bakken	horz.	20,919'	10/12/14	655	1,769	2,566
27747	Willey 31X-3G	West Capa	LOT2 3-154-97	2SEC	WIL	Bakken	horz.	20,425'	10/17/14	812	947	4,180
		IPs :	for ND wells released t	from confi	dential	status						
NDIC	Well Name	Field	Location	Spacing	Co.	Geologic Target	Wellbore	Total	IP Test Date	IP Rate	IP Nat. Gas	
No.							Туре	Depth		(bbl)	(mcf)	(bbl)
	ental Resources											
23583	Columbia Federal 7-5H	Dollar Joe	LOT3 5-155-97	2SEC		Bakken	horz.	20,911'	10/9/14	755	1,311	1,275
27868	Skar 2-28H1	Stoneview	SESW 28-160-95	N/A	DIV	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27639	Stark 1-26H1	Temple	NWNE 26-159-96	2SEC	WIL	Bakken	horz.	19,462'	N/A	N/A	N/A	N/A
23272	Caretan 1-28H	St. Demetrius	NWNE 28-141-99	2SEC	BIL	Bakken	horz.	20,568'	8/14/14	656	808	868
Emeral		F D. H.		2050		D. H.L.		20.020	= /0 /4 4	1 452		2.005
26717	Pirate 4-2-11H	Foreman Butte	LOT3 2-149-102	2SEC	MCK	Bakken	horz.	20,829'	5/2/14	1,452	1,422	3,905
	akken Investments II	Charma Caralla	NUME 44 440 00		1401/	D. H.L.		N1 / A	21.72	21/2	21.72	N1 / A
27885	BW-R Peterson- 149-99-1102H-4	Cherry Creek	NWNE 14-149-99	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27886	BW-Kraetsch- 149-99-1423H-4	Cherry Creek	NWNE 14-149-99	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27681	EN-Pederson-LW- 154-94-0408H-2	Alkali Creek	SESW 33-155-94	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27682	EN-Pederson-LW- 154-94-0408H-3	Alkali Creek	SESW 33-155-94	N/A	MNT	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Kodiak 24650	Oil and Gas	 Truax	NENW 27 154 00	N/A	WIL	Bakken	horz	N/A	N/A	N/A	N/A	N/A
	P Wood 154-98-3-27-16-3H	IIudx	NENW 27-154-98	IN/A	VVIL	Dakken	horz.	IN/A	IV/A	IV/A	IV/A	IV/A
Vlarat l 27837	hon Oil Pears Chest USA 31 ATEU	McGrogory Dutto-	NI\A/NI\A/ 4 1 4 7 0 4	N1/A	DUM	Bakken	hora	N/A	NI/A	N/A	NI/A	N/A
	Bears Ghost USA 21-4TFH	McGregory Buttes	NWNW 4-147-94	N/A	DUN	Bakken Bakken	horz.		N/A	N/A N/A	N/A	
27836	Richanda USA 21-4H	McGregory Buttes	NWNW 4-147-94	N/A	DUN	-	horz.	N/A 20.014'	N/A	N/A 1 005	N/A	N/A
27140	Freeberg 34-32TFH	Reunion Bay	SWSE 32-151-93	2SEC	MNT	Bakken	horz.	20,914'	8/28/14	1,995	2,018	2,476
	eld Production	Tohooca Carilari	1072 5 450 00	4656	D.4.011	Dalder	h	21 507	7/5/4 *	1 111	1 701	700
27845	Blue Angel 150-99-5-8-5HLW	Tobacco Garden	LOT3 5-150-99	4SEC	MCK	Bakken	horz.	21,587'	7/6/14	1,111	1,701	700
26611	Hoffman 149-98-14-23-3H	Pembroke	NWNE 14-149-98		МСК	Bakken	horz.	21,203'	8/2/14	912	1,771	482



North Dakota oil permit activity

Oct. 28-Nov. 3, 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

Well Name	Location	Footages	Field	Geologic	Wellbore	Elev.	NDIC	API No.	NDIC date
	Location	Footages	Field	Target	Туре	Elev.	No.	APT NO.	INDIC date
Bottineau Co.									
Enduro Operating		-							
NSCU H-717-H1	NENE 7-161-79	660'FNL and 723'FEL	Newburg	N/A**	conf.	1,471'	29877	33-009-02431	10/31/14
NSCU H-717-H2	NENE 7-161-79	750'FNL and 894'FEL	Newburg	N/A**	conf.	1,471'	29876	33-009-02430	10/31/14
Bowman Co.									
Denbury Onshore									
CHSU 42-24SH 15	SENE 24-131-105	1,818'FNL and 476'FEL	Cedar Hills	N/A**	conf.	3,103'	29883	33-011-01534	10/31/14
Petro-Sentinel	•		•		•	•	•		•
Coyote Creek 2-34	NESW 34-131-104	2,126'FSL and 1,819'FWL	Coyote Creek	Red River	vert.	3,165'	29846	33-011-01533	10/29/14
Miller 2-28	SWSE 28-131-104	1,140'FSL and 1,940'FEL	Coyote Creek	Red River	vert.	3,143'	29836	33-011-01532	10/28/14
Divide Co.	-					-			
Mountain Divide (Mountainview Energy)	١								
Reistad 23-1 SWD	SESE 23-162-101	225'FSL and 895'FEL	Fortuna	N/A*	conf.	2,220'	90322	33-023-90322	10/31/14
Dunn Co.	0202 20 102 101	223 102 4114 030 122		1.47.		_,	30022	00 020 0002	10/01/11
Dunn Co.									
Enerplus Resources USA									
Rebutia 149-92-35B-05H	NENW 35-149-92	270'FNL and 1,886'FWL	Heart Butte	N/A*	conf.	2,189'	29819	33-025-02719	10/28/14
HRC Operating (Halcon Resources)	lugue e die e	CAAIFA:: 1:	1,16 -			2 2		22 522	40.5
Fort Berthold 147-94-3A-10-6H	NENE 3-147-94	611'FNL and 1,287'FEL	McGregory Buttes	Bakken	horz.	2,343'	29847	33-025-02722	10/29/14
Fort Berthold 147-94-3A-10-10H	NENE 3-147-94	597'FNL and 1,261'FEL	McGregory Buttes	Bakken	horz.	2,343'	29848	33-025-02723	10/29/14
Fort Berthold 147-94-3A-10-12H	NENE 3-147-94	568'FNL and 1,208'FEL	McGregory Buttes	Bakken	horz.	2,345'	29849	33-025-02724	10/29/14
Newfield Production	Annuale 12 112 22	FOOLENIA LA CASTILITATION	1			0.04-1		22 22 22 2	4015-11
Jorgenson Federal 148-96-10-15-3H	NWNE 10-148-96	582'FNL and 2,639'FWL	Lost Bridge	N/A*	conf.	2,019'	29856	33-025-02728	10/30/14
Jorgenson Federal 148-96-10-15-11H	NENW 10-148-96	486'FNL and 2,544'FWL	Lost Bridge	N/A*	conf.	2,011'	29858	33-025-02730	10/30/14
Jorgenson Federal 148-96-10-15-12H	NWNW 10-148-96	518'FNL and 2,576'FWL	Lost Bridge	N/A*	conf.	2,013'	29857	33-025-02729	10/30/14
Petro-Hunt	CMCM 7 445 07	400 50 403 514	Lint. R. if.	N1 / A *	lr	2 4001	20025	22 025 02724	10/20/11
Dolezal 145-97-7C-6-4H	SWSW 7-145-97	486'FSL and 492'FWL	Little Knife	N/A*	conf.	2,499'	29835	33-025-02721	10/28/14
Dolezal 145-97-7C-6-5H	SWSW 7-145-97	497'FSL and 418'FWL	Little Knife	N/A*	conf.	2,505'	29834	33-025-02720	10/28/14
WPX Energy Williston	CENE 3C 140 03	1 012 511 454 551	Mandana	N1/A*		2.0761	20052	22 025 02726	10/20/14
Beaks 36-35HC	SENE 36-149-93	1,913'FNL and 454'FEL 1,887'FNL and 411'FEL	Mandaree	N/A*	conf.	2,076'	29852	33-025-02726	10/30/14
Beaks 36-35HD	SENE 36-149-93	1,887 FNL and 411 FEL	Mandaree	N/A*	conf.	2,079'		33-025-02725	10/30/14
Beaks 36-35HZ	SENE 36-149-93	1,939 FNL and 496 FEL	Mandaree	N/A*	conf.	2,074'	29853	33-025-02727	10/30/14
XTO Energy (ExxonMobil) Werre Trust Federal 44X-34D	SESE 34-148-96	250'FSL and 1,190'FEL	Bear Creek	N/A*	conf.	2,443'	29871	33-025-02731	10/31/14
Werre must rederal 44A-54D	J2L3L 34-140-90	[230 F3L allu 1,130 FLL	Dear Cleek			2,443	1 230/1		
	•	,		14/7		·		00 020 02701	,,
McKenzie Co.	•	,		14/71		<u> </u>		00 010 01/01	
McKenzie Co. Burlington Resources Oil and Gas (Conoc	coPhillips)	,						100 020 02/02	
	coPhillips) SWSW 21-150-96	814'FSL and 518'FWL	Pershing	N/A*	conf.	2,301'	29867	33-053-06421	10/31/14
Burlington Resources Oil and Gas (Conoc			Pershing Pershing	N/A* N/A*		2,301 ['] 2,355 [']			10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW	SWSW 21-150-96	814'FSL and 518'FWL		N/A* N/A* N/A*	conf.	2,355' 2,356'	29867	33-053-06421	10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH	SWSW 21-150-96 NENE 28-150-96	814'FSL and 518'FWL 420'FNL and 685'FEL	Pershing	N/A* N/A* N/A* N/A*	conf.	2,355' 2,356' 2,355'	29867 29873	33-053-06421 33-053-06423	10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL	Pershing Pershing	N/A* N/A* N/A*	conf.	2,355' 2,356'	29867 29873 29872	33-053-06421 33-053-06423 33-053-06422	10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL	Pershing Pershing Pershing Johnson Corner	N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf.	2,355' 2,356' 2,355' 2,355'	29867 29873 29872 29874 29875	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte	N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. horz.	2,355' 2,356' 2,355' 2,355' 2,439'	29867 29873 29872 29874 29875	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL	Pershing Pershing Pershing Johnson Corner	N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf.	2,355' 2,356' 2,355' 2,355'	29867 29873 29872 29874 29875	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte	N/A* N/A* N/A* N/A* N/A* Bakken Bakken	conf. conf. conf. conf. conf. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439'	29867 29873 29872 29874 29875 29888 29888	33-053-06421 33-053-06422 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06431	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL	Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken	conf. conf. conf. conf. conf. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262'	29867 29873 29872 29874 29875 29888 29887	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06431	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32THD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken	conf. conf. conf. conf. conf. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261'	29867 29873 29872 29874 29875 29888 29887 29831 29828	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06411 33-053-06417 33-053-06414	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 5-29-32BHD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken	conf. conf. conf. conf. conf. horz. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,262'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 5-29-32BHD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken	conf. conf. conf. conf. conf. horz. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,262' 2,261'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 5-29-32BHD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken	conf. conf. conf. conf. conf. horz. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,262'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 7-29-32BHD Thompson 7-29-32BHD	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken Bakken	conf. conf. conf. conf. horz. horz. horz. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,262' 2,261' 2,261'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06431 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06413	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 5-29-32THD Thompson 5-29-32BHD Thompson 7-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken	conf. conf. conf. conf. conf. horz. horz. horz. horz.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,262' 2,261'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 7-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 360'FNL and 2,275'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Grail Grail	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken N/A*	conf. conf. conf. conf. conf. horz. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320'	29867 29873 29872 29874 29875 29888 29887 29887 29828 29829 29829 29827	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06418	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14 10/30/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 7-29-32BHD Thompson 7-29-32BHD Thompson 7-29-31BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,344'FEL 360'FNL and 2,275'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Grail Grail Especial Grail Grail	N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken N/A*	conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320'	29867 29873 29872 29874 29875 29888 29887 29828 29830 29829 29827 29850	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06418 33-053-06418	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14 10/30/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28MBH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,344'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Grail Grail Esple Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken N/A*	conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29829 29827 29827 29850	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06415 33-053-06418 33-053-06418	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14 10/30/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 6-29-32BHD Thompson 7-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HS	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 749'FSL and 806'FWL 845'FSL and 806'FWL 893'FSL and 846'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Esple Nest Eagle Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken N/A*	conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29829 29829 29827 29850 29878	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06427 33-053-06426	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/30/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HS Etstatis 32-29HW	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest Eagle Nest Eagle Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A*	conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320' 2,447' 2,446' 2,446' 2,448'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827 29850 29881 29879 29878 29882	33-053-06421 33-053-06423 33-053-06422 33-053-06425 33-053-06432 33-053-06431 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06420 33-053-06420 33-053-06420	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28MBH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Mewfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HX	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 749'FSL and 806'FWL 845'FSL and 806'FWL 893'FSL and 846'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Esple Nest Eagle Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken Bakken N/A*	conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,320' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29829 29829 29827 29850 29878	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06427 33-053-06426	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/30/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28MBH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HV Etstatis 32-29HX XTO Energy (ExxonMobil)	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest Eagle Nest Eagle Nest Eagle Nest Eagle Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf. conf. conf. conf. conf. conf. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29829 29829 29827 29850 29881 29879 29878 29882 29882	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06431 33-053-06417 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06429 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/30/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 6-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HX XTO Energy (ExxonMobil) Johnsrud Federal 34X-14A	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NENW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,384'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,2447' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827 29850 29881 29879 29878 29882 29880	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06428 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28MBH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HV Etstatis 32-29HX XTO Energy (ExxonMobil)	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest Eagle Nest Eagle Nest Eagle Nest Eagle Nest Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf. conf. conf. conf. conf. conf. conf. conf. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29829 29829 29827 29850 29881 29879 29878 29882 29882	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06431 33-053-06417 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06429 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 6-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HX XTO Energy (ExxonMobil) Johnsrud Federal 34X-14A	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NENW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,384'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,2447' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827 29850 29881 29879 29878 29882 29880	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06428 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 6-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HW Etstatis 32-29HX XTO Energy (ExxonMobil) Johnsrud Federal 34X-14A Johnsrud Federal 34X-14AXB MCHenry Co.	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NENW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,384'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,2447' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827 29850 29881 29879 29878 29882 29880	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06428 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28MBH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Wewfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HX XTO Energy (ExxonMobil) Johnsrud Federal 34X-14A Johnsrud Federal 34X-14A	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NENW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,384'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,2447' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29831 29828 29830 29829 29827 29850 29881 29879 29878 29882 29880	33-053-06421 33-053-06423 33-053-06422 33-053-06424 33-053-06425 33-053-06432 33-053-06417 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06429 33-053-06429 33-053-06428 33-053-06428	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/30/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 10/30/14
Burlington Resources Oil and Gas (Conoc Kirkland 14-21TFH ULW Kirkland 41-28MBH Kirkland 41-28TFH Morgan 41-28MBH Morgan 41-28TFH ULW Emerald Oil Coleman Federal 1-16-21H Coleman Federal 2-16-21H QEP Energy Thompson 1-29-32T2HD Thompson 4-29-32THD Thompson 5-29-32BHD Thompson 6-29-32BHD Thompson 7-29-32BHD Newfield Production Rolla Federal 153-96-29-13H WPX Energy Etstatis 32-29HA Etstatis 32-29HB Etstatis 32-29HW Etstatis 32-29HX XTO Energy (ExxonMobil) Johnsrud Federal 34X-14A Johnsrud Federal 34X-14A MCHenry Co. Sedalia Energy	SWSW 21-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 NENE 28-150-96 SWSW 9-148-102 SWSW 9-148-102 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NWNE 29-150-95 NENW 32-149-94 SWSW 32-149-94	814'FSL and 518'FWL 420'FNL and 685'FEL 385'FNL and 714'FEL 455'FNL and 657'FEL 490'FNL and 629'FEL 210'FSL and 1,151'FWL 210'FSL and 1,201'FWL 649'FNL and 1,334'FEL 650'FNL and 1,409'FEL 649'FNL and 1,359'FEL 650'FNL and 1,384'FEL 650'FNL and 1,434'FEL 360'FNL and 2,275'FWL 749'FSL and 806'FWL 845'FSL and 833'FWL 893'FSL and 846'FWL 701'FSL and 792'FWL 797'FSL and 819'FWL 249'FSL and 2,519'FEL 249'FSL and 2,459'FEL	Pershing Pershing Pershing Johnson Corner Boxcar Butte Boxcar Butte Grail Grail Grail Grail Grail Grail Eagle Nest	N/A* N/A* N/A* N/A* N/A* N/A* N/A* Bakken Bakken Bakken Bakken Bakken N/A* N/A* N/A* N/A* N/A* N/A* N/A*	conf. conf. conf. conf. conf. conf. conf. horz. horz. horz. horz. conf.	2,355' 2,356' 2,355' 2,355' 2,439' 2,439' 2,262' 2,261' 2,261' 2,261' 2,446' 2,446' 2,446' 2,446' 2,446'	29867 29873 29872 29874 29875 29888 29887 29828 29830 29829 29827 29850 29850 29881 29879 29878 29882 29880	33-053-06421 33-053-06423 33-053-06422 33-053-06425 33-053-06432 33-053-06431 33-053-06414 33-053-06416 33-053-06415 33-053-06418 33-053-06429 33-053-06427 33-053-06420 33-053-06420 33-053-06420	10/31/14 10/31/14 10/31/14 10/31/14 10/31/14 11/3/14 11/3/14 11/3/14 10/28/14 10/28/14 10/28/14 10/28/14 10/31/14 10/31/14 10/31/14 10/31/14 10/31/14

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 Wate (bbl)
Oasis F	Petroleum North America											
27113	Hagen Banks 5298 #42-31 3T	Banks	SESW 31-12-98	2SEC	MCK	Bakken	horz.	20,862'	7/17/14	658	0	992
25764	Hannan Kaydence 5501 12-1T	Cow Creek	LOT3 1-155-101	N/A	WIL	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
24909	Kaleb 5501 12-1B	Cow Creek	LOT3 1-155-101	2SEC	WIL	Bakken	horz.	20,325'	7/11/14	2,090	1,219	5,490
27219	Mallard 5692 31-22 5T	Alger	NWSW 22-156-92	2SEC	MNT	Bakken	horz.	20,840'	8/17/14	1,410	1,142	2,769
27220	Mallard 5692 31-22 6B	Alger	NWSW 22-156-92	2SEC	MNT	Bakken	horz.	20,778'	8/12/14	1,933	1,181	5,199
27221	Mallard 5692 31-22 12T2	Alger	NWSW 22-156-92	2SEC	MNT	Bakken	horz.	21,000'	8/7/14	1,316	741	5,361
27600	Oasis Meiers 5692 43-18 6T	Alger	SWSE 18-156-92	SEC	MNT	Bakken	horz.	20,470'	8/3/14	1,260	551	5,749
27467	Shaw 6092 11-23 2T	Cottonwood	NWNW 23-160-92	2SEC	BRK	Bakken	horz.	19,234'	9/20/14	111	21	709
27246	Tufto 5501 11-13 2B	Cow Creek	NWNW 13-155-101	2SEC	WIL	Bakken	horz.	20,350'	5/31/14	2,237	320	4,591
27245	Tufto 5501 11-13 3T	Cow Creek	NWNW 13-155-101	2SEC	WIL	Bakken	horz.	20,238'	6/4/14	1,505	448	5,636
27250	Tufto 5501 13-13 4T	Cow Creek	NWNE 13-155-101	2SEC	WIL	Bakken	horz.	20,503'	6/21/14	398	265	509
27251	Tufto 5501 13-13 6T	Cow Creek	NWNE 13-155-101	2SEC	WIL	Bakken	horz.	18,374'	6/5/14	1,013	286	2,584
Oxy US	SA (Occidental Petroleum)											
26078	Evelyn Stroh 2-17-20H-143-96	Fayette	SESW 8-143-96	2SEC	DUN	Bakken	horz.	21,300'	5/1/14	842	375	2,441
26077	Evelyn Stroh 3-17-20H-143-96	Fayette	SESW 8-143-96	2SEC	DUN	Bakken	horz.	21,193'	5/1/14	940	343	2,265
Slawso	on Exploration											
27911	Bootleg 5-14-15TFH	Stockyard Creek	NENW 14-154-99	ICO	WIL	Bakken	horz.	19,076'	9/15/14	453	453	1,090
26991	Zulu 5-21H	Van Hook	SWSE 21-152-92	SEC	MNT	Bakken	horz.	14,620'	8/8/14	508	343	163
28208	Zulu 6-21TFH	Big Bend	SWSE 21-152-92	SEC	MNT	Bakken	horz.	14,580'	8/2/14	175	118	173
Statoil	Oil and Gas									_		
27814	Maston 34-27 #2H	Banks	SESW 34-153-98	N/A	MCK	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
28232	Myron 9-4 #3H	Squires	SWSE 9-155-103	N/A	WIL	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
WPX E	nergy Williston									_		
26153	Alfred Old Dog 19-18HZ	Reunion Bay	NENW 30-150-93	2SEC	DUN	Bakken	horz.	21,308'	10/2/14	1,531	0	5,778
26152	Alfred Old Dog 30-31 HD	Reunion Bay	NENW 30-150-93	2SEC	DUN	Bakken	horz.	21,220'	8/19/14	968	961	2,227
23683	Martin Fox 20-17HY	Mandaree	SESW 20-149-93	N/A	DUN	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
XTO Er	nergy (ExxonMobil)											
27743	Brandvik Federal 44X-13D	Corral Creek	SESE 13-147-96	N/A	DUN	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
27742	Brandvik Federal 44X-13G	Corral Creek	SESE 13-147-96	N/A	DUN	Bakken	horz.	N/A	N/A	N/A	N/A	N/A
Zavanr	 na											
27300	Husky 33-28 8TFH	Williston	SWSW 33-155-100	N/A	WIL	Bakken	horz.	N/A	N/A	N/A	N/A	N/A

 $\textbf{ND PERMITS} \ continued \ from \ page \ 11$

 $\label{lem:bar-equation} \textbf{Abbreviations - Following are the abbreviations used in the report and what they mean:}$

FNL = From North Line | FEL = From East Line

FSL = From South Line | FWL = From West Line

Well Name	Location	Footages	Field	Geologic Target	Wellbore Type	Elev.	NDIC No.	API No.	NDIC date			
Mountrail Co.												
EOG Resources												
Fertile 69-0509H	LOT2 5-151-90	570'FNL and 1,812'FEL	Parshall	N/A*	conf.	1,973'	29838	33-061-03390	10/29/14			
Fertile 70-0509H	LOT2 5-151-90	670'FNL and 1,812'FEL	Parshall	N/A*	conf.	1,972'	29837	33-061-03389	10/29/14			
Fertile 71-0905H	SESE 9-151-90	650'FSL and 300'FEL	Parshall	N/A*	conf.	2,102'	29833	33-061-03388	10/28/14			
Fertile 72-0905H	SESE 9-151-90	600'FSL and 300'FEL	Parshall	N/A*	conf.	2,104'	29832	33-061-03387	10/28/14			
Fertile 74-0905H	SWSE 9-151-90	600'FSL and 1,550'FEL	Parshall	N/A*	conf.	2,118'	29821	33-061-03384	10/28/14			

see ND PERMITS page 13



ND weekly county permit totals

County	Permits issued	Permits issued for confidential wells	Permits renewed	Location resurveys authorized
Bottineau	2	2	0	0
Bowman	3	1	0	0
Divide	1	1	0	0
Dunn	13	10	5	0
McKenzie	20	13	7	0
McHenry	2	2	0	0
Mountrail	12	10	0	0
Renville	1	1	0	0
Williams	22	8	0	0
Totals	76	48	12	0



Top 10 Bakken wells by IP rate

		-	-
g Oil and Gas			
Gajewski 31-18H	Lonesome	MCK	2,721
Oil and Gas			
Barstad 23-14 #5H	Alger	MNT	2,451
Barstad 23-14 #4TFH	Alger	MNT	2,263
lunt			
Brenna 152-96-24C-13-1HS	Clear Creek	MCK	2,253
etroleum North America			
Tufto 5501 11-13 2B	Cow Creek	WIL	2,237
ergy (ExxonMobil)			
Ruby State Federal 34X-36F	Grinnell	MCK	2,207
Oil and Gas			
P Manning 154-99-2-2-11-14H	Stockyard Creek	WIL	2,189
Koala 4-4-31-13H	Poe	MCK	2,179
P Manning 154-99-2-2-11-15H	Stockyard Creek	WIL	2,144
etroleum North America			
Kaleb 5501 12-1B	Cow Creek	WIL	2,090
	Gajewski 31-18H Oil and Gas Barstad 23-14 #5H Barstad 23-14 #4TFH lunt Brenna 152-96-24C-13-1HS etroleum North America Tufto 5501 11-13 2B ergy (ExxonMobil) Ruby State Federal 34X-36F Oil and Gas P Manning 154-99-2-2-11-14H Koala 4-4-31-13H P Manning 154-99-2-2-11-15H etroleum North America	Gajewski 31-18H Coil and Gas Barstad 23-14 #5H Barstad 23-14 #4FH Alger Alger Alger Alger Alger Clear Creek Clear Creek Cow Cow Creek Cow Cow	Gajewski 31-18H Coil and Gas Barstad 23-14 #5H Barstad 23-14 #4FH Alger MNT Alger MCK Clear Creek MCK etroleum North America Tufto 5501 11-13 2B Cow Creek WIL ergy (ExxonMobil) Ruby State Federal 34X-36F Grinnell MCK Oil and Gas P Manning 154-99-2-2-11-14H Koala 4-4-31-13H Poe MCK P Manning 154-99-2-2-11-15H Stockyard Creek WIL etroleum North America

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 Oct. 28-Nov. 3, 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.

ND PERMITS continued from page 12

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

Well Name	Location	Footages	Field	Geologic Target	Wellbore Type	Elev.	NDIC No.	API No.	NDIC date
Fertile 75-0905H	SWSE 9-151-90	550'FSL and 1,550'FEL	Parshall	N/A*	conf.	2,118'	29822	33-061-03385	10/28/14
Fertile 76-0905H	SWSE 9-151-90	500'FSL and 1,550'FEL	Parshall	N/A*	conf.	2,119'	29823	33-061-03386	10/28/1
Hess Bakken Investments II EN-Cvancara- 155-93-1522H-10	SWSE 10-155-93	300'FSL and 2,309'FEL	Alger	N/A*	conf.	2,456'	29886	33-061-03394	11/3/1
Secure Energy Services USA	34/35 10-133-93	300 F3L allu 2,303 FEL	Aigei	IN/A	Com.	2,430	23000	33-001-03394	11/3/14
Locken SWD #4	NESW 35-154-91	2,340'FSL and 2,460'FWL	Sanish	N/A*	conf.	2,296'	90321	33-061-90321	10/28/14
Slawson Exploration		, ,		,		<u>'</u>	-		
Howitzer {Federal} 5 SLTFH	SESE 23-152-93	250'FSL and 625'FEL	Big Bend	N/A*	conf.	2,041'	29859	33-061-03391	10/30/14
Whiting Oil and Gas		·			-				
Oddie 44-7H	SESE 7-154-91	1,000'FSL and 851'FEL	Sanish	Bakken	horz.	2,340'	29884	33-061-03392	11/3/14
Oddie 44-7-2H	SESE 7-154-91	955'FSL and 851'FEL	Sanish	Bakken	horz.	2,342'	29885	33-061-03393	11/3/14
Renville Co.									
Enduro Operating									
LDCMU 9-32-H1	SWNE 9-161-85	1,517'FNL and 1,480'FEL	Little Deep Creek	N/A**	conf.	1,755'	29889	33-075-01477	11/3/14
Williams Co.									
Continental Resources					-				
Bendixon 1-10H	SESW 10-159-100	265'FSL and 2,140'FWL	Green Lake	N/A*	conf.	2,055'	29820	33-105-03837	10/28/14
Hayes 4-6H	SESW 6-153-99	350'FSL and 2,249'FWL	Crazy Man Creek	Bakken	horz.	2,306'	29842	33-105-03844	10/29/14
Hayes 5-6H1	SESW 6-153-99	350'FSL and 2,294'FWL	Crazy Man Creek	Bakken	horz.	2,308'	29843	33-105-03845	10/29/14
Helena 4-7H Maynor 1-35H	SESW 7-155-98 NWSW 35-154-100	250'FSL and 2,083'FWL 1,803'FSL and 434'FWL	Brooklyn Crazy Man Creek	Bakken Bakken	horz.	2,188'	29866 29839	33-105-03852 33-105-03841	10/30/14
Maynor 2-35H1	NWSW 35-154-100	1,770'FSL and 405'FWL	Crazy Man Creek	Bakken	horz.	2,227'	29840	33-105-03842	10/29/14
Maynor 3-35H	NWSW 35-154-100	1,737'FSL and 372'FWL	Crazy Man Creek	Bakken	horz.	2,226'	29841	33-105-03843	10/29/14
Stangeland 4-7H1	SESW 6-153-99	350'FSL and 2,494'FWL	Crazy Man Creek	Bakken	horz.	2,317'	29844	33-105-03846	10/29/14
Stangeland 5-7H	SESW 6-153-99	350'FSL and 2,539'FWL	Crazy Man Creek	Bakken	horz.	2,320'	29845	33-105-03847	10/29/14
Hess Bakken Investments II						1			
SC-Norma- 154-98-0706H-7	SESE 7-154-98	525'FSL and 420'FEL	Truax	N/A*	conf.	2,407'	29816	33-105-03834	10/28/14
SC-Norma- 154-98-0706H-8	SESE 7-154-98	525'FSL and 387'FEL	Truax	N/A*	conf.	2,407'	29817	33-105-03835	10/28/14
SC-Norma- LE-154-98-0706H-1 GN-Raylena- 158-98-1621H-3	SESE 7-154-98 NENE 16-158-98	525'FSL and 354'FEL 450'FNL and 1,099'FEL	Truax Rainbow	N/A*	conf.	2,409'	29818 29824	33-105-03836 33-105-03838	10/28/14
GN-Raylena- 158-98-1621H-2	NENE 16-158-98	450'FNL and 1,066'FEL	Rainbow	N/A*	conf.	2,200'	29825	33-105-03839	10/28/14
GN-Raylena- 158-98-1621H-1	NENE 16-158-98	450'FNL and 1,033'FEL	Rainbow	N/A*	conf.	2,200'	29826	33-105-03840	10/28/14
SC-Ellingsberg- LW-154-98-3230H-2	SWSW 32-154-98	325'FSL and 223'FWL	Truax	N/A*	conf.	2,211'	29860	33-105-03848	10/30/14
Kodiak Oil and Gas		•							
P Wood 154-98-13-22-15-4H3A	SWSW 22-154-98	346'FSL and 660'FWL	Truax	Bakken	horz.	2,237'	29870	33-105-03855	10/31/14
P Wood 154-98-13-22-16-4H	SWSW 22-154-98	346'FSL and 600'FWL	Truax	Bakken	horz.	2,237'	29869	33-105-03854	10/31/14
P Wood 154-98-13-22-16-12H	SWSW 22-154-98	346'FSL and 570'FWL	Truax	Bakken	horz.	2,235'	29868	33-105-03853	10/31/14
P Wood 154-98-14-22-16-2H P Wood 154-98-14-22-16-3H	SESW 22-154-98 SESW 22-154-98	971'FSL and 1,950'FWL 942'FSL and 1,940'FWL	Truax Truax	Bakken Bakken	horz.	2,154 ['] 2,161 [']	29863 29864	33-105-03849 33-105-03850	10/30/14
P Wood 154-98-14-22-16-3HA	SESW 22-154-98	914'FSL and 1,929'FWL	Truax	Bakken	horz.	2,170'	29865	33-105-03851	10/30/14
		Permit	s renewed						
		Terrine	- I	Geologic	Wellbore		NDIC		
Well Name	Location	Footages	Field	Target	Туре	Elev.	No.	API No.	NDIC date
Dunn Co.									
Petro-Hunt									
Marinenko 145-97-30B-31-3H	NENW 30-145-97	250'FNL and 1,480'FWL	Little Knife	N/A*	conf.	2,649'	26901	33-025-02348	11/3/14
Marinenko 145-97-30B-31-4H	NENW 30-145-97	250'FNL and 1,380'FWL	Little Knife	N/A*	conf.	2,649'	26902	33-025-02349	11/3/14
Marinenko 145-97-30B-31-5H	NENW 30-145-97	250'FNL and 1,280'FWL	Little Knife	N/A*	conf.	2,650'	26903	33-025-02350	11/3/14
Whiting Oil and Gas	.				1.		I		1
Faiman 24-33PH	SWSE 33-141-97	345'FSL and 2,081'FEL	St. Anthony	Bakken	horz.	2,570'	26896	33-025-02347	10/31/14
Faiman 44-33PH	SWSE 33-141-97	390'FSL and 2,081'FEL	St. Anthony	Bakken	horz.	2,570'	26895	33-025-02346	10/31/14
McKenzie Co.									
Enerplus Resouces	NENNY 22 4 42 04	200 5111 144 70 51411		21/2*		2.4521	1,0004	22 252 22244	44 /2 /4
Hall 23-21H	NENW 23-149-94	300'FNL and 14,70'FWL	Squaw Creek	N/A*	conf.	2,152'	19881	33-053-03344	11/3/14
Fort Berthold 152-93-19D-18-4H	SESE 19-152-93	280'FSL and 1,062'FEL	Four Bears	Bakken	horz.	2,026'	26914	33-053-05450	11/3/14
Fort Berthold 152-93-19D-18-5H	SESE 19-152-93	280'FSL and 1,032'FEL	Four Bears	Bakken	horz.	2,026'	26913	33-053-05449	11/3/14
Fort Berthold 152-93-19C-18-6H	SESW 19-152-93	250'FSL and 2,413'FWL	Four Bears	Bakken	horz.	2,027'	26907	33-053-05444	11/3/14
Fort Berthold 152-93-19D-18-7H	SWSE 19-152-93	250'FSL and 2,463'FWL	Four Bears	Bakken	horz.	2,028'	26906	33-053-05443	11/3/14
Triangle USA Petroleum									
Gullickson Trust 150-101-36-25-2H	SESE 36-150-101	470'FSL and 1,220'FEL	Rawson	Bakken	horz.	2,436'	21826	33-053-03856	11/3/14
Gullickson Trust 150-101-36-25-4H	SESE 36-150-101	470'FSL and 1,170'FEL	Rawson	Bakken	horz.	2,438'	21828	33-053-03858	11/3/14
		Permit	s cancelled						
	Location	Footages	Field	Geologic	Wellbore	Elev.	NDIC	API No.	NDIC date
I Well Name	LOCALIOII	Toolages	i iciu	Target	Туре	LIEV.	No.	ALLINO.	INDIC date
Well Name									
Williams Co.									
Williams Co. Kodiak Oil and Gas P Wood 154-98-3-27-16-3H	NENW 27-154-98	450'FNL and 2,464'FWL	Truax	Bakken	horz.	2,188'	24650	33-105-02950	10/31/14

^{*}Note: The geologic target for these wells was not listed in its well file because they are tight (confidential) holes, but the following fields produce from the Bakken pool; Alger, Bear Creek, Bear Den, Big Bend, Eagle Nest, Fortuna, Green Lake, Heart Butte, Johnson Corner, Little Knife, Lost Bridge, Mandaree, Parshall, Pershing, Rainbow, Sand Creek, Sanish, Squaw Creek, and Truax.

^{**}Note: The geologic target for these wells was not listed in its well file because they are tight (confidential) holes, but the Cedar Hills field produces from the Lodgepole pool, the Little Deep Creek and Pratt fields produce from the Madison pool, and the Newburg field produces from the Spearfish/Charles pool.

COMPANY UPDATE

EOG innovates drilling and downspacing

Oil growth targets are adjusted for second time this year as company finds new techniques that bring significant production hikes

By MAXINE HERR

For Petroleum News Bakken

exploration prowess and willingness to test new technology, so it has no plans to shy away from those even in the midst of an uncertain oil price future.

The company reported its third quarter 2014 financial and operations update on Nov. 4, which includes successful drilling results from the third bench of the Three Forks in its Antelope Extension area in northeast McKenzie County. The Mandaree 134-05H well came online at 1,410 barrels of oil per day, which compares to 1,620 bpd in an adjacent well targeting the second bench and another producing 1,745 bpd from the first bench. EOG continues to test and drill Three Forks wells through its Antelope acreage with plans to expand Three Forks testing in the core of the Bakken in 2015.

EOG also began a downspacing campaign at the beginning of 2014, systematically testing spacing patterns to determine a development program that maximizes the field's resource potential. It began with spacing at 1,300 feet between wells and became so confident with it that the company began testing 700-foot spacing and is prepared to pilot 500- and 300-foot spacing. Additionally, EOG has reduced its overall Bakken

drilling costs by integrating self-sourced sand and identifying drilling efficiencies, as well as refining completion techniques in both areas.

"At EOG, we are never satisfied with the status quo. We are constantly identifying efficiencies in our drilling practices and making breakthroughs in completion methodology that raise the bar on EOG's ongoing outstanding performance," Chairman and Chief Executive Officer Bill Thomas told analysts in a Nov. 5 conference call.

'Organic prospect generating machine'

EOG's 2015 plan is to continue managing its capital expenditures and cash flow while maintaining low debt. Even with crude oil prices at \$80 a barrel, Thomas said the company can sustain double digit growth through 2017 and beyond in its three key plays of the Bakken, Eagle Ford and Delaware Basin. In fact, the company determined it could still achieve 10 percent direct after tax rate of return at a \$40 per barrel price. EOG's average crude oil and condensate price for the quarter was \$97.33 a barrel with a composite of its U.S., Canada, Trinidad and other international production coming in at \$97.13 a barrel.

"We plan to invest in our highest return crude oil plays and reduce our activity in our combo plays," he

said. "We still expect to be a leader in crude oil organic growth next year."

In fact, exploration will certainly not take a backseat to development in EOG's plans because Thomas said it is a small part of the company's overall budget.

"Our entry cost is extremely low because we're out front where nobody else is looking, so we don't expect to have a significant pull back on that," he said. "The company is a very prolific, organic prospect generating machine and we think we can continue to do that at a very, very low cost."

EOG generated twice the amount of drilling inventory in 2014 than it has actually drilled because of that commitment to organic growth. While exploration is its preferred way to grow the company, Thomas said EOG will take a look at low-cost acreage acquisitions in this volatile price environment.

"I've been with the company 35 years and every time we go through one of these price cycles, EOG outperforms and we come out of that price cycle better than we entered it."

Creating better wells

Through drilling and completion improvements, EOG realized strong capital efficiencies and well results in its

see **EOG TECHNIQUES** page 17



ND well operator transfers

Oct. 17-Oct. 28, 2014

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

NDIC No.	Well Name	Wellbore Type	Geologic Target	Field	IP test date	IP Rate (bbl)	Location	Count
Octobe	er 17, 2014	•	_	•				•
From: B	OH Inc.							
Γο: Envi	ronmentally Clean Systems, LLC							
90305	State SWD #1	confidental	N/A	Eagle Nest	N/A	N/A	LOT 3 36-149-95	MCI
rom: N	larathon Oil Company							
o: Tria	ngle USA Petroleum Corporation							
1165	Orvie 24-20H	horizontal	Bakken	Strandahl	11/6/14	810	SESW 20-157-102	WIL
1310	Merlyn Olson 34-8H	horizontal	Bakken	Zahl	4/11/12	120	SWSE 8-159-101	WII
1335	Mary Sveet 34-21H	horizontal	Bakken	Strandahl	6/1/12	466	SWSE 21-157-103	WIL
1361	Kay Arnson USA 34-35H	horizontal	Bakken	Strandahl	5/28/12	860	SWSE 35-157-103	WIL
1407	Opal Holte USA 24-20H	horizontal	Bakken	Strandahl	6/18/12	368	SESW 20-157-103	WIL
1575	Strand 44-19H	horizontal	Bakken	Strandahl	6/10/12	658	SESE 19-157-102	WII
1612	Hoff 34-19H	horizontal	Bakken	Strandahl	8/11/12	35	LOT4 19-157-103	WI
1613	Ione Barstad USA 31-30H	horizontal	Bakken	Strandahl	8/20/12	414	LOT4 19-157-103	WI
3433	Ivan Hoff 31-28H	horizontal	Bakken	Strandahl	11/27/12	301	NWNE 28-157-103	WI
0185	Strand SWD 1	vertical	Dakota	Strandahl	N/A	N/A	SWNW 21-157-103	WI
rom: D	akota-3, LLC							
o: Miss	souri River Resources ND, LLC							
168	Drags Wolf 1	vertical	Sanish	Antelope	12/19/66	51	NWSW 27-152-94	MC
rom: X	TO Energy, Inc.							
o: Den	bury Onshore, LLC							
382	T. R. Federal 4-12	vertical	Duperow	T.R.	3/5/80	436	NWNW 12-141-101	BIL
Octobe	er 24, 2014							
rom: H	less Corporation							
o: End	uro Operating LLC							
440	NSCU K-709	confidental	N/A	Newburg	N/A	N/A	NWNE 20-161-79	ВО
173	NSCU J-706	confidental	N/A	Newburg	N/A	N/A	SESW 20-161-79	ВО
Octobe	er 28, 2014							
rom: N	learburg Producing Company							
o: Eme	rald Oil, Inc.							
5569	Nygaard 1-31	vertical	Red River	Moline	6/13/04	260	SWNW 31-149-102	МС
rom: E	nduro Operating, LLC							
o: Mur	ex Petroleum Corporation							
5056	Burbidge 1	vertical	Madison	Greene	1/11/77	149	NESE 27-160-85	REI

LEGAL COLUMN

ND Supreme Court makes rare reversal

Self-represented parties must meet same standard as lawyers; justices cite trial court errors in reversing ruling to dismiss case

By JANNELLE STEGER COMBS

For Petroleum News Bakken

A lower court ruling in a case that originates from Desert Partners IV L.P. suing to quiet title to minerals has been reversed by the North Dakota Supreme Court. John Benson and Brian Benson also made claim to the same minerals, and defended the action without legal representation when the case came up in the McKenzie County District Court.

History of case

The parties proceeded to summary judgment where legal matters can be decided when there are no material contested facts. Both Desert Partners and the Bensons moved for summary judgment. Desert Partners did not request a hearing; however, the Bensons requested a hearing and filed a notice of hearing scheduled for Oct. 30, 2013. That hearing was canceled due to scheduling issues with the district court, but no new notice of hearing was issued to any of the parties for the new

hearing date of Nov. 1, 2013. On Dec. 3, 2013, the district court ordered judgment in favor of Desert Partners ruling that there was no dispute as to the material facts and no parties appeared for the hearing Nov. 1, 2013.



JANNELLE STEGER COMBS

The Bensons emailed an unsigned notice of appeal and faxed a signed copy of the notice on Feb. 3, 2014; however, the clerk of district court on Feb. 4 responded that they were unable to file documents submitted by email or fax. The Bensons then mailed their original notice of appeal to the district court in McKenzie County on Feb. 4. The court received it Feb. 7; however, the deadline for filing the notice of appeal was Feb. 6, so the Bensons missed the appeal deadline by one day.

There are provisions for extending the time for appeal, but the Bensons did not attempt any of those methods. North

Dakota has moved to an electronic filing system for its trial courts for a number of years. All attorneys, unless they request an exemption, must only file into the electronic system. The rules allow an exemption for "documents filed by self-represented litigants." It never specifies how a self-represented litigant can file any paper.

Pro se same standard as lawyers

While the state Supreme Court made a point that self-represented litigants must be held to the same rules as lawyers, there are specific rules that do apply only to pro se parties in an action. The Supreme Court ruled that the faxed, signed notice of appeal was acceptable under the rules. Now the rules have been changed for the notice to be filed with the Supreme Court, which does allow email or fax filing.

The Bensons claimed that they never received notice of the change of hearing. The clerk and the Bensons agreed that they had noted that the clerk called the Bensons to indicate that the hearing would be rescheduled because of scheduling conflicts. The Bensons never heard from the

court again until the judge granted the summary judgment motion in favor of the plaintiffs. The case is reversed and the Bensons will get a chance to argue their motion at a summary judgment hearing.

Best practices

As remarkable as it is that mineral owners would risk valuable property rights by representing themselves, self-representation by mineral owners does occur on a fairly regular basis in North Dakota. The state has worked diligently to open court access on the Internet to out-of-state individuals and self-represented individuals. Because that information is available, it can often be appealing to forgo the costs of an attorney and "go it alone." While Benson won at this stage, this likely would never have gone to the Supreme Court if counsel had been retained. A motion to contest the judgment because of a lack hearing notice would likely have succeeded with the trial judge.

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MOVING HYDROCARBONS

Liquids-rich Bakken ExxonMobil's most active unconventional play

While ExxonMobil saw its earnings decline by 8 percent to \$8.07 billion in the third quarter, the company's Bakken production continues to rise and remains the most active unconventional play in the integrated global giant's portfolio.

Jeff Woodbury, ExxonMobil's vice president for investor relations, said in an Oct. 31 third quarter conference call that the company's resource base in the Bakken is approaching 1 billion barrels of crude oil "and gross operated production is up more than six-fold since we first entered the play in 2008." The Bakken, he said, "remains our most active unconventional play and is the liquids growth engine in the U.S." Gross operated production in the Bakken has increased 38 percent year-over-year "reflecting higher activity levels," he added.

ExxonMobil's subsidiary XTO Energy operates the Bakken assets and is running 13 drill rigs in the Bakken, up from the 10 rigs it ran in the basin in third quarter 2013, Woodbury said, adding that the company has had a 25 percent net year-over-year increase in wells brought on production. "We continue to achieve strong results and increased efficiencies through our development drilling in core areas."

In August, the most recent month for which the North Dakota Department of Mineral Resources has posted production data, XTO Energy ranked as the state's sixth largest Bakken oil producer averaging 63,094 barrels per day for operated, non-confidential wells. In July, XTO's North Dakota Bakken oil production averaged 61,754 bpd, and in August 2013 averaged 40,605 bpd. In Montana, XTO was the fourth largest Bakken oil producer in August averaging 5,230 bpd.

On drilling and completion costs, Woodbury said the company has seen those in the Williston Basin decrease 25 percent since 2011 by "optimizing completions and leveraging pad development." Those savings are, in part, due to ExxonMobil's proprietary completion technique known as XFrac. That process

see EXXON PRODUCTION page 17

 $continued\ from\ page\ 8$

TLLP GROWTH

billion deal that includes a majority ownership of QEP Midstream which operates crude oil and natural gas gathering systems in the Williston, Green River, Uinta and Vermillion basins in North Dakota, Wyoming, Utah and Colorado.

TLLP, a limited partnership formed between Tesoro Corp. and Tesoro Logistics GP in 2010, was also busy on the West Coast and in Alaska. In the third quarter, the partnership closed on acquisitions of certain terminalling, storage assets on the West Coast and pipeline assets in Alaska from Tesoro Corp. totaling \$243 million.

TLLP is also planning to develop a new \$23 million truck facility at its Anacortes, Washington, terminal. That facility is expected to be completed in 2015.

Tesoro Corp. continues working on permitting for its proposed 360,000 bpd terminal at Vancouver, Washington. In a separate Oct. 31 conference call, Goff said a preliminary rail and marine safety report has been issued by the state of Washington and is currently in a public comment period. He said the final report is scheduled to be released on March 1, 2015. The Vancouver project is a joint venture with Savage Cos.

—MIKE ELLERD

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COMPANY UPDATE

WPX assets drive Legacy's third quarter

Third quarter 2014 results reported by Legacy Reserves Oct. 30 included record production and revenue, with performance driven by the company's acquisition of WPX's assets in the Piceance Basin. Legacy provided WPX with a third-party drop-down opportunity which created incentive distribution rights giving WPX 10 percent ownership with the opportunity to increase that ownership to 30 percent, contingent upon completing other transactions in the future including the potential to partner on third-party acquisitions.

In total, the Midland, Texas-based company closed on \$544 million of acquisitions year-to-date, and has evaluated nearly \$3.5 billion worth of properties, including several sizable asset packages that could transact before the end of the year, the company said in a statement. On Oct. 8, the company had a record \$885 million of immediate liquidity due to issuing \$300 million of equity.

"We wanted to be prepared to be aggressive on the acquisition front," Legacy's Chairman, President and Chief Executive Officer Cary Brown said in a conference call with analysts. "I believe our balance sheet is the best in our peer group and with the current pullback in oil prices and the equity markets, I'm excited about the opportunities that presents."

Lower oil prices have allowed the company to be on the lookout for investment opportunities because the company said it has "the balance sheet to play offense."

"I won't go so far as to say we look forward to lower prices, but I will say the best deals that I've ever made were in down cycles," Brown said.

The lower oil commodity prices don't come as a surprise to Brown who said the company expected to see volatility in prices.

"We've always taken a long-term view that the oil and gas business is one of the few places you can create wealth that keeps pace with inflation," Brown said. "With the hedges we have in place for 2015, I can't imagine a set of circumstances which would lead us to a downward move in our distributions."

Capital spending during the quarter was primarily in the Permian Basin, a focus of Legacy's drilling activity. Total development capital expenditures were \$33.5 million in 2014, heavily weighted toward the company's Permian Wolfberry and Bone Spring drilling. Non-operated capital expenditures comprised 25 percent of total capital expenditures in 2014 with activity primarily in the Permian and Midcontinent regions. The company's Rocky Mountain assets include property within the Williston Basin, however the company did not discuss its assets or production in the basin in its quarterly call.

In the latest data available from the North Dakota Department of Mineral Resources, Legacy ranked 48th among the top 50 North Dakota Bakken oil producers in August for operated, non-confidential wells with an average daily output of 65 barrels.

Overall production during the third quarter increased 60 percent to 32,109 barrels of oil equivalent per day, which was also a 38 percent hike quarter-over-quarter. Executive Vice President and Chief Operating Officer Paul Horne said, "The third quarter gave us a full quarter's effect from all of our acquisitions made during the year. WPX volumes are coming in on plan and we continue to be extremely pleased with that acquisition."

Legacy's averaged realized oil price for 2014 decreased 2 percent to \$89.59 per barrel compared to 2013. This decrease was attributable to higher realized regional differentials partially offset by an increase in the average West Texas Intermediate crude oil price of \$1.48 per barrel.

—MAXINE HERR

COMPANY UPDATE

Lightstream engaged in upstream battle

One-time star in Saskatchewan Bakken caught in crosshairs of an industry under fire with investors clamoring for remedial action

By GARY PARK

For Petroleum News Bakken

hen a 97-minute conference call by Lightstream Resources on Oct. 31 was handed over from company executives (who delivered an unremarkable assessment of third-quarter results and corporate hopes) to analysts and shareholders, things quickly turned stormy.

Once individual investors got their say the mood turned from angst to barely disguised anger.

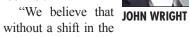
The best the executives could do was defend their performance — not easy given that share values have dropped 95 percent in the past five years and have recently dipped under C\$3 — and suggest that bigger decisions about management were in the hands of directors.

However, Chief Executive Officer John Wright did disclose that the number of vice presidents has been reduced, some employees have been reassigned and the executive compensation program has been revamped.

It's been a tough stretch for Lightstream (formerly PetroBakken), which was one of the pioneers using horizontal drilling in the Saskatchewan Bakken and accounts for 13,800 barrels of oil equivalent per day, or about one-third of the company's total output.

Shareholder jitters

There have been rumblings of discontent within shareholder ranks, culminating two months ago when Jim Byrne, an analyst at BMO Nesbitt Burns, said in a note to clients that "with a long history of poor share price performance, it seems like an opportunity that activists typically look for."



company's strategy, investor interest ... will remain weak."

Byrne reminded investors that faced

with a similar slump in 2011, the company

recuperated by selling some assets and paying down debts.

Now that some of the same debt and performance issues have resurfaced, he suggested it is time for Lightstream to cut its

dividend, or sell assets, or both.

"Perhaps a nudge from existing or new shareholders could be something to light a fire." Byrne said.

There was more than a nudge in the conference call, with one investor arguing it was time to drop the dividend, which costs about C\$100 million a year, and buy back shares, urging management to "think carefully about its use of cash."

Chief Financial Officer Peter Scott said there was "nothing pressing on the debt side of the company that would force" an outright sale.

Scott had previously said Lightstream remains committed to its monthly payout, which some shareholders scoff at, given the returns of 4 cents a share.

"Let's not do anything irrational in an irrational market."

—Lightstream CEO John Wright quoting Warren Buffett

"The long-term plan of the company is to be able to provide some growth as well as a dividend payout," he said.

In answer to those who advanced the sale option, Wright, quoting investment wizard Warren Buffett, said: "Let's not do anything irrational in an irrational market."

Asked what he valued the company at — the current market capitalization is about C\$560 million — Wright said: "You don't play poker with your cards facing your opponent."

But he suggested those who wanted a guide to Lightstream's worth should consider the two non-core asset sales in the third quarter which generated gross proceeds of C\$476 million, raising the total for the year to C\$729 million, which allowed Lightstream to reduce its debt by C\$716 million to C\$1.56 billion by Sept. 30.

Wright, who said he is one of the largest shareholders, described his overall objective as getting Lightstream back on a profitable growth path, insisting "there are a lot of growth opportunities and great investments we could make."

Current production

The latest numbers show average production for the first nine months of 2014 was 41,750 barrels of oil equivalent per day, decreasing to 38,837 boepd in the third

quarter after asset sales, leaving a drilling inventory of 1,950 locations and proved plus probable reserves of 20.9 million boe.

Light oil production from the Bakken and the conventional Mississippian formations in Saskatchewan averaged 14,800 boepd for the first nine months, down 14 percent from a year earlier, with an oil and liquids weighting of 93 percent, from capital spending of C\$78 million. Undeveloped land totals 143,000 acres and drilling inventory is rated at about 900 locations.

The company said it continues "to maximize the free cash flow generated from (the Bakken)," bringing two wells in production in the latest quarter, with seven wells remaining in inventory.

It describes the 2014 drilling program in the Bakken as "moderate," with the focus on "optimizations and expanding our natural gas" enhanced oil recovery projects, EOR, using an extensive network of facilities to maintain low operating costs.

EOR prospects

In the EOR sector, Lightstream recently acquired Creelman oil assets to accelerate expansion of the schemes, with plans to drill two new injection wells this year.

EOR is also coming into play in the company's Cardium land base that stretches from Calgary to Edmonton and yielded an average 18,619 boepd through the first three quarters, with oil and liquids weighting of 68 percent and undeveloped land at 106,000 acres.

see **LIGHTSTREAM** page 19



MOVING HYDROCARBONS

Keystone XL costs soar to \$8 billion

Threshold shifts company/shipper cost split from 25/75 to 50/50; Capline reversal could get Alberta oil sands crude to Gulf Coast

By GARY PARK

For Petroleum News Bakken

TransCanada has entered a new realm in the financing of Keystone XL that it blames almost entirely on the Obama administration, whose delays in issuing a Presidential Permit have opened the door for potential rival Marathon Petroleum to get oil sands crude to the Gulf Coast, company executives told a conference call Nov.

In releasing its third quarter results, TransCanada disclosed that the projected costs of building XL have soared over the past six years since an application was first submitted to regulators to US\$8 billion from US\$5.4 billion, with the company's own investment to this point estimated at US\$2.4 billion.

Alex Pourbaix, TransCanada's development president, said the cost inflation is "overwhelmingly" the result of delays in obtaining a Presidential Permit to build a pipeline crossing the U.S.-Canada border.

He said that a regulatory phase originally expected to take about two years is now entering its seventh year and is also facing a tighter construction market and added

that those higher costs will have their greatest impact on U.S. gasoline users who will ultimately pay for the increases if XL gets built.

Cost split shifts

At the same time, **ALEX POURBAIX** the terms of carrying the project costs have changed.

When the original application was filed, TransCanada was required to cover 25 percent and the shippers 75 percent.

Now that the US\$8 billion "threshold" has been reached, the costs will be shared on a 50/50 basis.

In addition, TransCanada has stopped offering an in-service date for XL, noting only that a decision by the Nebraska Supreme Court on jurisdictional control over the project is not expected before late 2014 or early 2015 — a verdict that the U.S. Department of State is awaiting before delivering its final recommendation to President Barack Obama.

"We're in a bit of a waiting mode," said Pourbaix, noting that TransCanada is taking steps to "limit any (further) growth in capital costs."

The Capline option

While XL remains sidelined, Marathon has seized the chance to examine the possible reversal of its Capline system to ship production from the North Dakota Bakken and Alberta oil sands to the Gulf Coast region.

Company Chief Executive Officer Gary Heminger told analysts at the end of October that Marathon is in the early stages of assessing the switch through a study that could wrap up in the first quarter of 2015 to add 1.2 million barrels per day of new transport capacity to a market that is already benefitting from the surge in crude-by-rail shipments and expansions along established pipeline corridors.

The 40-inch diameter Capline runs 632 miles from St. James, Louisiana, north to Patoka, Illinois, and has more than 10 million barrels of storage capacity. It is owned by subsidiaries of Marathon Petroleum (not to be confused with Bakken operator Marathon Oil), Plains All American Pipeline and BP. Marathon Petroleum operates the pipeline.

"If heavy crude from the Canadian region was available, there's substantial demand in the Louisiana refining corridor," he said. "Most of those refineries in the Baton Rouge through Garyville (rely on heavy crude). So I think there's a lot of volume that could go in that direction some day."

The pipeline owners are assessing the "potential commercial opportunities" for Capline. Marathon Petroleum, which already buys Canadian crude, said the future plans for Capline will "address the expanding crude oil supply in North America and the significant changes in crude oil demand patterns."

Afolabi Ogunnaike, an analyst with energy consultant Wood Mackenzie, said it would not be possible to reverse Capline before 2016 because of supply contracts with the Valero Energy refinery in Memphis, Tennessee.

Another obstacle could echo XL's problems if Marathon is required to obtain a Presidential Permit to move crude from the Alberta oil sands into the U.S. ●

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continued from page 1

WPX FRACKS

pounds of sand on the Ruby multi-well pad, twice the size of its historical Williston completions. As more of the high proppant wells come on line, WPX is seeing a hint of the promise they hold.

Updated type curves of the actual performance of the company's larger stimulations are exceeding a blended infield curve of middle Bakken and Three Forks wells completed with 3 million pounds of proppant, Muncrief said.

Muncrief also said the Ruby 31-30HX well exceeded the blended type curve by 25,000 barrels of oil or 53 percent in its first 86 days of production following cleanout, the Alfred Old Dog 30-31HD well beat the curve by 13,800 barrels or 35 percent in its first 67 days and the Morsette 35-26HD well exceeded the curve by 21,700 barrels or 74 percent in its first 47 days.

"These wells are all in a fairly close location to each other, so we need to spend a little more time; get a little more data — but I can tell you that I personally am very interested," Muncrief said. "And after spending a lot of time in the Bakken, I think that we're going to continue to like the results."

Muncrief said it will take time for WPX to test and assess the promise of its

advanced completion designs across its Bakken acreage.

I think we'll have a good idea by year end 2015," he said, adding that WPX may develop an updated type curve by midyear.

"We're very, very optimistic, I can tell you we're excited about these wells coming on."

In some earlier wells, WPX used submersible pumps to maximize production near term; its large stimulation wells have needed no such boost.

"These wells are all flowing naturally, and we're extremely excited about the productivity," Muncrief said.

Relentless

WPX has pared its drilling costs in the Bakken

The company's average drilling cost fell from \$305 per foot in 2012, to \$184 per foot in 2014, Muncrief said.

"In the Williston we continue to see efficiencies that we're really pleased with," he said, adding that WPX will continue to have a relentless focus on cost across the board: drilling and completion; facilities design; and lease operating expense.

The company completed 14 gross (14 net) Bakken wells in the third quarter of 2014, Muncrief said. For the first nine months of 2014, WPX has completed 39 gross (36 net) wells in the Bakken.

WPX logged 20,100 barrels per day average Bakken production in third quarter 2014, underpinning the company's domestic oil production of 25,800 bpd which grew 52 percent over third quarter 2013. The company's current domestic oil production rate is 29,000 bpd.

In third quarter 2014, WPX realized an

average price of \$84.11 per barrel of oil, Muncrief said. Year to date, the company has seen a 40 percent increase in domestic oil revenues.

—STEVE SUTHERLIN

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 $continued\ from\ page\ 14$

EOG TECHNIQUES

single largest growth engine, the Eagle Ford. EOG has tested a completion method that involves distributing the frack more evenly along the lateral, making contact with more rock — particularly closer to the well bore. Results show that the high density fractures bumped production by 39 percent within the first 60 days compared to other completion techniques used this year.

"We've only completed high density fracks on a handful of wells, so as we go forward ... there's still considerable room left to go in the Eagle Ford, and really all these plays, on improvements in completion technology," Thomas said.

The increased productivity has caused EOG to increase its oil growth

target for the second time this year. It is raising its crude oil and condensate production to 31 percent from 29 percent and its total production growth target moved from 14 percent to 16.5 percent. In regard to natural gas, production was driven by the Delaware Basin and Eagle Ford with total natural gas liquids production increasing 25 percent, and total company natural gas production increasing 3 percent, compared to the third quarter 2013. Total company production increased 17 percent. In the latest data available from the North Dakota Department of Mineral Resources, EOG Resources ranked fifth among the top 50 Bakken oil producers in the state in August averaging 66,183 bpd for operated, non-confidential wells.

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continued from page 15

EXXON PRODUCTION

eliminates the need for multiple plugs commonly used in hydraulic fracture stimulations.

Third quarter stats

ExxonMobil's \$8.07 billion third quarter earnings were down 8 percent from \$8.78 billion in the second quarter and down 11 percent from the first quarter. Since 2010, the highest earnings the company posted were just under \$16 billion in the second quarter 2010.

Over the third quarter, ExxonMobil's total global output averaged 3.831 million barrels per day, of which 2.065 million barrels were liquids consisting of crude oil, natural gas liquids, bitumen and synthetic oil. The largest liquids production came from the company's assets in

Asia averaging 601,000 bpd followed by Africa at 483,000 bpd and the U.S. at 442,000 bpd. ExxonMobil combines production from Canada with its South American production, and that combined production averaged 295,000 bpd in the quarter. Third quarter liquids production was down slightly from second quarter output of 2.048 million bpd but down 6 percent from the third quarter 2013 when liquids output averaged 2.199 million bpd

For the quarter, ExxonMobil's realized crude oil price in the U.S. averaged \$89.60 per barrel, down 9 percent from \$98.55 per barrel in the second quarter. The company's realized crude oil price from production outside of the U.S. averaged \$96.76 per barrel, down 7 percent from \$103.72 in the second quarter.

Asia was ExxonMobil's largest natural gas producer averaging 4.027 billion cubic feet per day and account-

ing for nearly half of the company's total third quarter gas output of 10.595 bcf per day, followed by the U.S. averaging 3.411 bcf per day and accounting for more than a third of the company's gas output.

Over the first three quarters of 2014, ExxonMobil's global daily liquids production averaged 2.087 million bpd and its natural gas production averaged 3.940 mcf per day.

On the refining side, ExxonMobil's average global daily throughput averaged 4.591 million bpd in the quarter. The company's largest refinery throughput was in the U.S. averaging 1.835 million bpd, followed by Europe at 1.499 million bpd, Asia Pacific at 655,000 bpd and Canada at 409,000 bpd.

—MIKE ELLERD

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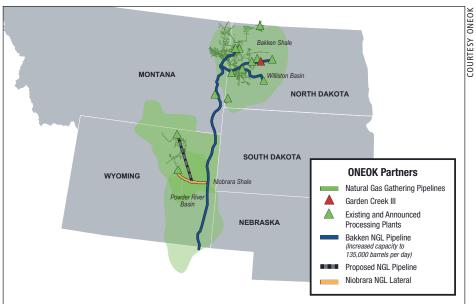
ONEOK PROJECTS

step toward reducing natural gas flaring in North Dakota," Terry Spencer, Oneok Partners president and CEO said in an Oct. 30 press release.

While the Garden Creek III plant has an initial capacity of 100 mmcf per day, Oneok said that capacity is expected to be expanded to 120 mmcf per day in the fourth quarter 2015 following completion of additional compression capacity for its Garden Creek and Stateline processing

Oneok anticipates its Williston Basin gas processing capacity will reach approximately 1.2 billion cubic feet per day in the third quarter 2016 with completion of three additional processing plants. Those plants are the Lonesome Creek and Demicks Lake plants in central McKenzie County, and the Bear Creek plant in northwest Dunn County.

Oneok's Bakken NGL pipeline went



into service in 2013 moving unfractionated natural gas liquids from the Williston Basin south to a connection with the Overland Pass NGL pipeline that carries the NGL on to the Midcontinent processing hub at Conway, Kansas. That pipeline had an initial capacity to move 60,000 barrels of NGLs per day, but now with the expansion complete, it can move 135,000 bpd.

In the Powder River Basin of Wyoming, Oneok Partners also complet-

ed its Niobrara NGL lateral pipeline that ties the company's Sage Creek gas plant to the Bakken NGL pipeline. With that lateral completed, a portion of that expanded capacity of the Bakken NGL pipeline will be filled with NGLs coming from the company's Sage Creek plant in the Powder River Basin.

"The expanded NGL Pipeline will accommodate increased NGL volumes from our announced and completed natural gas processing facilities in the Williston Basin and the Niobrara Shale in the Powder River Basin," Spencer said in the Oct. 30 announcement.

With its current processing capacity coupled with over 6,500 miles of gas gathering pipe and over 3 million acres where production is dedicated to its systems, Oneok is the largest independent gas gatherer and processor in the Williston Basin.

-MIKE ELLERD

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continued from page 1

PIPELINE GROUP

The report will provide insight into prevention, detection, response and reclamation of pipeline incidents and a common thread that seems to run through them all — private landowners. The group's discussion repeatedly returned to the importance of landowners being aware of pipelines before digging as well as identifying problems with a pipeline before they potentially become large

"Being out on their property day in and day out, they do detect incidents sometimes quicker than we could with flyovers or anything else," said Pipeline Authority Director Justin Kringstad who serves as chairman of the working group.

Niles Hushka of KLJ Engineering told the group that he is starting to see policy changes within other states which are focused on training landowners, essentially making them partners, in detection and response.

"It is interesting the way they're moving toward that system," Hushka said. "It is to empower the landowner to be more participatory in observation of pipelines and in the early response."

Wayne Armenta with Oneok Partners said while a robust public awareness plan is a part of an operator's integrity management, relationships with landowners are a critical piece of safety.

"That communication and those relationships with landowners can really prevent a lot of incidents when they're familiar with their territory and they see something



JUSTIN KRINGSTAD

going on out there," Armenta said.

Dalrymple sits in

Dalrymple has been monitoring the group's progress and joined the meeting to thank the group for its efforts as well as offer some recommendations. He agreed that there should be a more formal approach to engaging landowners beyond simply providing a phone number to call if they encounter a problem. He also suggested working with county emergency managers to ensure they have the right people and resources available when a problem emerges.

"We can probably do something at the state level to make sure they are trained to have the correct contacts available on a moment's notice so they know what to do in the county if something happens," Dalrymple said.

Hushka recommended developing a database for county emergency managers of all the people in the area who have been trained in the skillsets needed to respond to a leak or spill.

"So if there's a big response required, and they need to call into the system deeper and deeper, I think that could be a great resource to have," Hushka said.

Allan Beshore of the federal Pipeline and Hazardous Materials Safety Administration noted that the discussion is valuable based upon an incident in 2010 in which an Enbridge pipeline ruptured and released more than 840,000 gallons of oil, flowing into the Kalamazoo River in Michigan. He said better coordination could have made a significant difference in the outcome of that rupture.

"There were some initial calls and the guys who responded to those calls didn't recognize a leak because they were looking for something different and they were with a different company," Beshore explained. "If they'd have called the operator at the time then the huge release would have been prevented."

A National Transportation Safety Board, NTSB, report on the Enbridge incident cited factors that worsened the spill, including the company's initial response being ineffective due to a lack of equipment and properly trained person-

Good coordination is critical

Dalrymple said he gets uneasy about companies getting valves shut off quickly in the event of a leak in a pipeline, and asked Scott Fradenburgh of WBI Energy about the company's best practices following its ruptured natural gas line a day earlier. On Nov. 3 a contractor with Central Specialties hit a buried natural gas line with a dozer blade, according to the report filed with the North Dakota Department of Health. Natural gas and compressor oil were released in a fine mist and carried across Highway 85 approximately 5 miles south of the intersection of U.S. Highway 2 and U.S. Highway 85 in McKenzie County. The spill occurred on an active highway construction site and was contained, causing minimal environmental impact.

"Sometimes the best practice is to contain the area and feed the leak until you can get your crews in there," Fradenburgh said. "Luckily, we have dual feeds (at the ruptured site) so we were able to take the pipeline out of service very quickly. It's very well coordinated."

Dalrymple set a Dec. 1 deadline for the final pipeline technology working group report in order to provide background information prior to a state budget meeting to be conducted on Dec. 5 which will include funding for the PSC to hire employees focused on pipeline safety.

-MAXINE HERR

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continued from page 1

RAIL RULES

to be moved and that rail is an increasingly popular mode of transportation, placing the onus on the government to "make sure it's done in the safest possible way," she said.

However, she conceded that not enough is yet known about "the properties of the crude oil that was being carried" on the Montreal, Maine and Atlantic Railway train that was hauling Bakken crude to the Irving Oil refinery in New Brunswick when the unmanned train, left overnight west of Lac-Megantic, rolled downhill into the town where it derailed.

To close that gap she said Transport Canada staff with expertise in the area will be assigned to conduct research into the hazards of crude oil.

TSB also exposed gaps in how the federal government's rail safety regime was applied to MM&A.

It said the MM&A train started down the decline after an engine fire that resulted in power being cut to the train's air brakes,

"We will always remember what happened in Lac-Megantic and I do believe that the measures we are announcing will improve railway safety and make the transportation industry more accountable." —Lisa Raitt, Canadian transport minister

revealing that insufficient hand brakes had been set.

The agency also cited a host of other problems, including mechanical deficiencies with the train, substandard tanker cars and a corporate culture that placed profits above safety.

In addition, Transport Canada, the federal regulator, was fingered for ineffective auditing of MM&A's mandatory safety plans, a lack of follow-up on well-known safety problems and inadequate oversight.

Raitt said the government has agreed to act on the TSB's recommendations, including clearer rules relating to the application of hand brakes on unattended trains and the mandatory use of other equipment to prevent parked trains from running away.

But she emphasized that the most important element of the federal action plan was the decision to recruit 10 more auditors across Canada to examine the safety management systems of railways.

The TSB probe found that MM&A had been operating for nearly a decade without an adequate safety plan before it underwent its first audit.

Inspectors and audits

Canada's auditor-general, in a 2012 report, said that despite guidelines that federally regulated railways should be audited, only a quarter had been put through the process.

Raitt also said her department will be adding to the ranks of 105 inspectors, whose job is to check the conditions of tracks and locomotives, as well as increasing training for employees of railways that fall under federal jurisdiction.

"We will always remember what happened in Lac-Megantic, and I do believe that the measures we are announcing will improve railway safety and make the transportation industry more accountable," she

In addition, Raitt said the government has issued an emergency directive specifying how many brakes must be applied to a stationary train, depending on the slope and the weight of the train.

Previous federal rules called only for a "sufficient" number of handbrakes to be applied.

The directive also includes new requirements for testing handbrakes and using additional defense procedures to prevent trains from rolling away.

Canadian Pacific Rail said it would comply with the emergency directive and the other measures Raitt announced.

"Having clear, consistent industry rules and operating practices is a prerequisite to developing those habits that make the industry and our communities safer," said a CP spokesman.

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continued from page 1

LEASE AUCTION

much that might have affected the lease prices.

Topography in the region, he said, could be another factor. Many of the McKenzie County tracts are in rugged terrain that can make construction difficult and drive up costs, he said. "That's rough country and it could be hard in some places to even find a decent place to build a pad."

But perhaps more importantly, Combs said, is that many of the tracts are adjacent to federally owned land that would require a federal drilling permit for a given spacing unit. "We have a lot of tracts out there that are completely surrounded by BLM land," Combs said, adding that the requirement for federal permits could well make the leases less attractive.

There was more interest during the auction for tracts in Williams and Divide counties. In Williams County, four tracts totaling 320 acres leased for an average of \$3,049 per acre with a high bid of \$4,700. In Divide County 1,133 acres were leased in 16 tracts for an average of \$799 per acre with a high bid of \$1,550 (see chart).

Auction details

Combined, 12,166 acres in 120 tracts were leased in nine western North Dakota counties for an average of \$418 per acre, an average well below the five-year Trust Lands auction average of \$1,213 per acre.

At 7,487, McKenzie County had the most acreage in the auction followed by Divide County with 1,133 acres in 16 tracts. The remaining tracts were in the following counties: Bottineau (874 acres in 18 tracts averaging \$24 per acre), Dunn (776 acres in 14 tracts averaging \$799 per acre), Billings (720 acres in five tracts averaging \$190 per acre), Renville (480 acres in three tracts averaging \$5 per acre), Williams (320 acres in four tracts averaging \$3,049 per acre), Mountrail (297 acres in three tracts averaging \$210 per acre) and Hettinger (80 acres in one tract bringing \$31 per acre).

The two highest bids of \$6,600 and \$6,300 came from Mainstream Investors

Nov.4 North Dakota Trust Lands Oil and Gas Lease Auction Results by High Bidder

High Bidder	County/Counties ^A	Tracts	Total Acres	High Bid (\$)	Total (\$)	Average Price per Acre (\$)
Mainstream Investors, LLC, Minot, North Dakota	MCK	2	15.91	6,600.00	\$102,621.00	\$6,450.09
Northern Energy Corp., Bismarck, North Dakota	BIL, DIV, DUN, MCK, WIL	31	3,306.43	4,700.00	\$736,971.50	\$222.89
Irish Oil & Gas, Inc, Bismarck, North Dakota	BOT, DUN, MNT, WIL	12	710.70	2,500.00	\$665,627.00	\$936.58
Herco, LLC, Billings, Montana	DIV, MCK	6	392.50	1,600.00	\$419,575.00	\$1,068.98
Diamond Resources Co., Williston, North Dakota	DIV	3	240.00	1,400.00	\$336,000.00	\$1,400.00
J.R. Reger, Billings, Montana	MCK	4	640.00	925.00	\$592,000.00	\$925.00
Bakken Production, Inc., Minot, North Dakota	BOT, DIV, DUN	4	68.10	900.00	\$24,135.00	\$354.41
American Land Services, LLC, Bismarck, North Dakota	BOT, MCK	19	2,888.00	875.00	\$1,592,600.00	\$551.45
North Range Resources, LLC, Billings, Montana	MCK	12	1,920.00	340.00	\$601,600.00	\$313.33
Wildcat Oil and Gas, LLC, Bismarck, North Dakota	DUN, MCK	4	172.00	270.00	\$4,200.00	\$24.42
RTR Energy, LLC, Lone Tree, Colorado	HET	1	80.00	31.00	\$2,480.00	\$31.00
Empire Oil Co., Williston, North Dakota	BOT	3	236.56	25.00	\$2,156.56	\$9.12
Gerald Miller, Williston, North Dakota	BOT, DUN	2	160.00	5.00	\$560.00	\$3.50
ROC Oil and Gas Land Management, Columbus, Montana	REN	3	480.00	5.00	\$2,400.00	\$5.00
Davis Exploration, LLC, Billings, Montana	DUN	6	360.00	3.00	\$1,080.00	\$3.00
Vinnie Corp., Minot, North Dakota	BOT	2	88.00	2.00	\$176.00	\$2.00
Kermit and/or Rebecca Anderson, Ronan, Montana	BOT	6	407.92	1.00	\$407.92	\$1.00
TOTALS/HIGH/LOW/AVERAGES		120	12,166.12	4,700.00	\$5,084,182.06	\$417.90

A: BIL, Billings; BOT, Bottineau; DIV, Divide; DUN, Dunn; HET, Hettinger; MCK, McKenzie; MNT; Mountrail; REN, Renville; WIL, Williams.

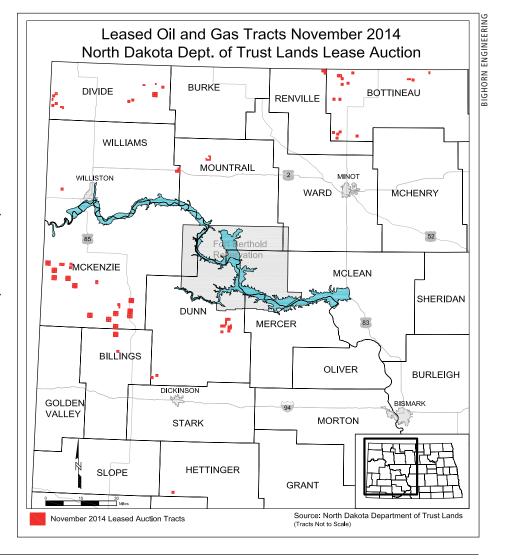
"We have a lot of tracts out there that are completely surrounded by BLM land." —Drew Combs, director, North Dakota Minerals Management Division

of Minot that were paid for two adjacent 7.96 and 7.95-acre tracts in central McKenzie County (see table). Northern Energy Corp. of Bismarck had the third highest bid of \$4,700 for a 79.8-acre tract in Williams County. Irish Oil and Gas of Bismarck paid \$2,500 for three 80-acre tracts, also in Williams County.

Northern Energy picked up the most acreage securing leases on 3,306 acres in 31 tracts in five counties for an average of \$223 per acre (see table). American Land Services of Bismarck spend the most money paying a total of \$1.59 million for 2,888 acres in 19 tracts in McKenzie and Bottineau counties for an average of \$551 per acre.

Detailed results of the Nov. 4 lease auction are available on the Mineral Management Division's website at www.land.nd.gov/minerals/oilandgasleas ing.aspx. •

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continued from page 1

BANNER QUARTER

drill a Bakken well, spud-to-total depth, averaged 16 days in the third quarter.

Tillman also said that three of four high-density spacing pilots have begun drilling, with each pad comprised of six Middle Bakken and six Three Forks first bench wells per drilling-spacing unit.

Production from Marathon's U.S. resource plays, Tillman said, is up more than 40 percent from third quarter 2013.

"Marathon Oil's U.S. resource plays delivered strong operational performance in the third quarter, and we remain on track to achieve greater than 30 percent production growth year-over-year in the resource plays," Tillman said. "Both our Eagle Ford and Bakken net production delivered double-digit growth compared to the previous quarter."

Enhanced completions

More than 30 percent of Marathon's advanced completion design Bakken wells are online, according to Tillman.

Lance Robertson, Marathon vice president of North America production operations, said 17 of 45 advanced completion wells were brought online to sales to date. The company has been testing those wells since the second half of the quarter.

The group is comprised of wells testing most specifically increased proppant loading; a majority of them have had up to 6 million pounds of proppant, he said.

"We've also tested incremental stages in those wells, surfactants in two or three of those wells, as well as incremental stages adding for small or more finite stage delivery, and then a change in fluid volume, both a decrease and in most cases an increase of fluid volume," Robertson said. "And I would say in the overwhelming majority of those wells, the early response of the 30 day IP has been at or above type curve.

"We'd like to see those cumulative production volumes mature a little bit but we're very encouraged by those results and we'll have the balance of those wells, probably two-thirds to three quarters online in sales in the fourth quarter with a few of those completion pilots trailing into the first quarter," Robertson said.

Recompletions

Robertson said Marathon's recompletions in the Hector area had equal success with its recompletions in the Myrmidon area

"What you would find in terms of operational basis as we go into recomplete wells, we're going back into a drilling unit most of the time that has one

or maybe two wells in a 1,280 acre unit and we're going in to move to higher density full field development'" he said. "Those original wells weren't using the best available technology that we understand today and they're three, four maybe five years on production.

"We're re-stimulating those wells to that modern best available technology as we drill and complete the rest of the wells on that pad for efficiency, all at the same time," he said. "Otherwise those wells and pads would have to be shut in for some period as we do the offset stimulations, so rather than having expense workover, this is an opportunity for us to re-stimulate those wells on a capital basis and bring the EURs up."

Robertson said Marathon will continue the recompletion program through the end of the year and evaluate its capital program for about 70 more wells that are viable candidates.

Weaker pricing

In third quarter 2014, Marathon realized an average price of \$82.67 per barrel of liquid hydrocarbons in the Bakken, down from \$95.24 per barrel in the third quarter of 2013, and down from \$90.47 per barrel in the previous quarter.

The Bakken outperformed Marathon's North America average price realizations,

which were \$80.89 in third quarter 2014, \$90.49 in third quarter 2013, and \$86.43 in second quarter 2014.

"Certainly in our core areas in the Bakken we have a lot of confidence going forward in their ability to compete per capital allocation, even with the commodity price correction," Tillman said. "Those are very strong wells for us."

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continued from page 16

LIGHTSTREAM

A new growth target is emerging in the Swan Hills area of northern Alberta, with output to the end of September at 2,592 boepd (94 percent weighted to oil and liquids), although investors have been displeased to hear that seven wells have been suspended, pending an evaluation of technical problems.

Wright said Lightstream hopes to resume drilling in Swan Hills in the second half of 2015. ●

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