

Moving N.D. Oil & Gas







North Dakota Governor's Pipeline Summit

North Dakota Governor's Pipeline Summit

BY PETROLEUM NEWS BAKKEN

l Anderson opened the North Dakota AGovernor's Pipeline Summit with praise for the individuals in attendance that represented the state's midstream oil and gas industry.

"We've gathered some of the brightest and the best industry leaders in one location," the commissioner of N.D.'s Commerce Department said. "They're going to talk ... about their current and potential investments in building the state's pipeline infrastructure."

Then Anderson set the tone for Gov. Jack Dalrymple's message: North Dakotans want as many trucks off their roads and highways as possible; tanker trucks carrying oil being at the top of the list. That's going to take transmission pipelines, lots of pipelines, and lots of gathering lines.

Plus, North Dakotans want gas flaring to stop, which is wasting a valuable commodity and harming the environment.

That's going to take lots more processing facilities.

Pipelines are critical

"Build more, do more, gather more. And please do it as soon as you possibly can because there's no single thing that helps us more with the impacts on our communities," Dalrymple told the audience, after thanking them for being there and for the investment and jobs they had brought to North Dakota.



GOV. JACK DALRYMPLE AL ANDERSON

"A couple years ago if you told me there would be 107 people interested in signing up for a conference on pipelines I might have questioned your sanity," he said.

But pipelines, which the governor now considers exciting, "are a critical and very important part of our transportation landscape out here, and considered the safest and most reliable and most cost effective way to transport oil and gas, and in addition ... they reduce, significantly, the impacts of oil development to our roadways and to our communities - and that's where we really become your allies in this," Dalrymple said.

"As far as we're concerned in North Dakota, you can't go too fast in getting the gathering systems built, getting the pipelines hooked together, getting them operational. There is no single thing that I can think of that can do more to reduce the human impacts of rapid oil development than pipelines," he said.

"Based on production estimates ...

Congressional delegation greets summit

More than 100 industry and state officials met for the North Dakota Governor's Pipeline Summit in mid-June. The event was held at the National Energy Center of Excellence on the Bismarck State College campus.

North Dakota's Congressional delegation conferenced in from Washington, D.C., reiterating the governor's message about the significance of the oil and gas industry to North Dakota, now the second largest oil producer in the U.S., and about the importance of building pipelines and infrastructure as quickly as possible.





SEN. JOHN HOEVEN



within the next three to five years, we are on track to have our state's production actually handled by pipeline," Dalrymple said.

"Ideally, we would like to see as many feeder lines as possible, connecting our well sites to the transmission pipelines," he said, naming one example, the "Four Bears pipeline in western North Dakota near Watford City," which is 77 miles long and when it went into operation eliminated 11 million truck miles annually.

Stop wasting gas

OVERVIEW

Pipelines, he said, also "play a huge

role in the transportation of natural gas. ... One of the obvious benefits of gathering systems for natural gas is the reduction in flaring," the governor said.

"North Dakotans really don't like flaring. They ... are people who come from an agricultural background and they see a flare and they just see nothing but waste. And waste bothers North Dakotans tremendously. It bothers me."

In the end, the governor believes the interests of the industry and the interests of the citizens of North Dakota are aligned.

"Bring the economic benefits, but get rid of any of the less pleasant sideaffects," he said.



The 31th Annual Meeting of the North Dakota Petroleum Council will be held September 18-20 in Medora, ND. An agenda is below:

> September 18: ND Oil Pac Golf Tournament **BBQ** and Social

September 19:

Board Meeting Annual Meeting opens Social Chairman's Banquet

Kringstad sets stage for summit

By KAY CASHMAN Petroleum News Bakken

oving quickly through 29 well-illustrated slides, the director of the North Dakota Pipeline Authority gave attendees of the North Dakota Governor's Pipeline Summit a concise picture of the transportation modes and processing facilities available for oil and gas produced in the state, as well as an overview of what was needed, and planned, to meet future production needs. "I want to set the stage properly for this tremendous panel of JUSTIN KRINGSTAD industry speakers," said Justin Kringstad, referring to the 10 pipeline company executives invited by Gov. Jack Dalrymple to talk about their firms' planned and potential investments in pipeline and processing infrastructure - investments that would reduce impacts and increase safety on North Dakota's roads and highways, utilize the flared natural gas, and provide reliable and efficient routes to markets that offered a

So what does Padd stand for?

The abbreviation Padd stands for Petroleum Administration for

September 20: Annual Meeting continues Lunch Adjourn in afternoon

This year's Annual Meeting festivities will begin Tuesday, September 18 with the ND Oil Pac Golf Tournament at Bully Pulpit starting at 11:30 am MDT. Meeting registration and a welcoming social will be held at the Chuckwagon beginning at 5:30 p.m. MDT with an Old West BBQ, drinks and entertainment.

The Annual Meeting will officially begin at 1 pm MDT, September 19 at the Medora Community Center with a NDPC year in review, followed by a great lineup of speakers. The Chairman's Banquet will begin at 6:45 p.m. MDT at the Medora Community Center. The meeting will continue with breakfast the next morning and conclude in the early afternoon.

Registration for the 2012 Annual Meeting will be available online at www.ndoil.org and NDPC will start accepting sponsorships on July 17 at 9 am CDT. Hotels in Medora will accept reservations for this event starting that day, July 17.

Defense District because the U.S. Department of Energy divides the country into regions for planning purposes. The result is a geographic aggregation of the 50 states and the District of Columbia into five districts.

Padd II, as used in the adjacent article, is the Midwest, including the states of Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee and Wisconsin.

competitive price for the area's sweet, light Bakken crude.

Although the U.S. Williston basin extends into eastern Montana and northern South Dakota, almost all the petroleum pro-

see KRINGSTAD page B3

continued from page B2 KRINGSTAD

duction in the region comes from the Bakken petroleum system in western North Dakota, as will the "bulk" of future crude, Kringstad noted.

Recognizing activity across the border to the west, "Montana is a little bit of a wild card right now," he said, "but their crude and natural gas production will have an immediate impact ... on transportation infrastructure, so we need to keep them in the works here as well," he continued, pointing to a presentation slide named, "Forecasting Williston Basin Oil Production, BOPD," that shows a slight amount oil coming from South Dakota and increasing amounts from eastern Montana, but never more than about 100,000 barrels of oil per day between now and 2025.

Challenges for North Dakota, industry

Kringstad laid out four challenges facing North Dakota and its petroleum industry. The first three were as follows:

1. Moving oil out of the Williston basin to viable markets the safest, efficient and most economical way possible, which industry experts agree is via pipeline.

2. Moving oil within the Williston basin; again utilizing pipelines, albeit smaller gathering lines, to transport the oil in the safest, efficient and most economical way possible.

3. Congestion and a decrease in demand for light, sweet crude in the Great Lakes mid-continent region, Padd II, where pipeline and rail transport exist and are being expanded to take more North Dakota oil to market.

"I want to set the stage for Challenge No. 1 ... what's currently happening, in order to move our crude oil to markets outside the Williston basin," Kringstad told summit attendees.

"You can see, as of March 2012, we have just a little over a quarter of our crude being moved by railcar out of the region," he said, pointing to the slide titled "Williston Basin Oil Transportation."

"The remaining 72 percent is being moved by pipeline, either to markets outside of North Dakota or to the Tesoro Mandan refinery just across the river" in South Dakota.

"Our current pipeline infrastructure," he said, pointing to the map "North Dakota Crude Oil Pipelines," includes "the Enbridge pipeline system (in red) ... on the northern tier of North Dakota, which moves 235,000 barrels per day ... east toward the Great Lakes and the mid-continent region of the United States. We have in gold our Tesoro pipeline system which transports crude oil to the Mandan refinery," he said, noting the refinery was being expanded.

"And last, but not least, we have the True companies, or the Butte Pipeline System, which has a hub, as you can see, down near Baker, Montana ... (has) 144-150,000 barrels a day moving south to Guernsey, Wyoming. Once it gets to Guernsey, the crude oil then travels east toward the midcontinent refining markets."

ered to markets in 2007 (pipeline only) through today (a combination of pipeline, rail and tanker truck), and how Kringstad thinks it will be moved through 2025 (pipeline only), providing daily production stays under 1.6 million barrels a day.

"In black we have the pipeline systems at the bottom that have been rubber stamped. Those are officially going forward. Today you are going to hear from those other six projects (shown in multi-colors), which are proposed pipelines that you can see have a tremendous amount of export capacity for the region," he said.

The six projects are at various stages of business development or still being permitted.

Per Kringstad's estimates, if just three of the six projects move forward and are completed on schedule, all North Dakota crude will be transported to market via pipeline by January 2014.

"With the projected growth, even if I am conservatively optimistic, it looks very promising," he said.

Moving crude within North Dakota

Challenge 2 involves transporting oil from wells to one of the export pipeline transmission systems or to a railway loading site

As of February, "about 74 percent is moving by truck (26 percent by pipeline), so there is a tremendous opportunity for growth in our crude gathering in North Dakota," Kringstad said.

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"We ... keep track of all the wells and

slide titled, "North Dakota Crude Gathering," where the color grey means the oil from a well site is transported by tanker truck and where the colored dots mean it's moved by gathering lines - essentially a smaller diameter pipeline.

Kringstad slides can be found at http://bit.ly/QIItxV

The next slide (not shown here) has graphs for each of the four major oil producing counties in North Dakota, showing how much oil is currently being gathered by pipe and how much by tanker truck, and then moved to a main pipeline or rail loading facility for transport to market.

Mountrail, the "birthplace of the modern Bakken play in North Dakota ... (and) having the highest amount of growth" now has gathering lines to transport 45 percent of its crude oil.

"In time you can see that the infrastructure" has been developed," Kringstad said.

"In some of the more emerging counties ... you can see tremendous opportunities for investment" for gathering systems, with 95 percent of the oil produced in Williams county being transported from the well by truck; 89 percent in McKenzie county; and78 percent in Dunn.

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see KRINSGTAD page B4

MOVING HYDROCARBONS

Minnesota lawmaker wants FERC action

A Minnesota congressman has joined the campaign to ensure "discriminatory practices" by Enbridge do not stand in the way of new pipelines to carry oil from the Bakken formation.

In a letter to the U.S. Federal Energy Regulatory Commission, Democrat Collin Peterson avoided naming any pipelines but argued there is a "critical need" for capacity in addition to the one pipeline that runs eastward from North Dakota to Minnesota.

"We need to ensure that new market participants have open access to the common carrier pipelines located across the country and are given the same treatment as more established companies," he told FERC chairman Jon Wellinghoff.

His call to FERC for "fair and prompt consideration to these concerns in order to ensure a fair platform for the development of the energy infrastructure that is essential to meeting our energy needs" follows a formal complaint to FERC by High Prairie Pipeline, which accused Enbridge of refusing an interconnection with its existing line in Minnesota.

High Prairie has proposed a 450-mile line from North Dakota to Clearbrook, Minn., feeding into the Enbridge system to provide an outlet for rapidly increasing Bakken volumes.

It told FERC that Enbridge had the capacity to handle High Prairie's planned flow of 150,000 barrels per day, but refused to make it available except on "proposed terms that are unjust, unreasonable and unduly discriminatory."

FERC is currently examining that complaint.

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-PETROLEUM NEWS BAKKEN







Crude by rail a recent development

Transporting "crude oil by rail ... has been a recent development for North Dakota," Kringstad said, showing a slide with 12 BNSF Railway crude loading locations in the state and three more planned, for a total of 15.

His next overhead showed Canadian Pacific with four crude loading facilities, all in the western part of the state.

All told, "250,000 barrels a day or more are leaving the region by railcar," he said.

Another slide, "Williston Basin Oil Production & Export Capacity, BOPD," shows how North Dakota crude was deliv-





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continued from page B3 KRINGSTAD

was being produced in the United States, in about 2005 mid-continent refineries began converting and expanding to accommodate the promise of increasing amounts of lower cost heavy crude from Alberta's oil sands, thus helping to create the third challenge defined by Kringstad.

Pipeline capacity to the region from the northwest was also increased to meet the coming demand.

"You can see in red the major pipeline systems all funneling down toward that Great Lakes mid-continent region, so we're having quite a bit of congestion taking place in Pad II," he said in reference to "Pipeline Challenge #3," a map of crude oil pipelines provided by CAPP, the Canadian Association of Petroleum Producers, and including such pipeline giants as Enbridge and TransCanada. "The same companies that are working on solutions for North Dakota, are also working on solutions for the North American industry as a whole," he noted.

In the next slide, these three major Padd II refineries are expected to buy less light oil per day than in 2013: BP, Whiting, Ind., -260,000 barrels of oil per day; ConocoPhillips, Wood River, Ill., -130,000 bpd; and Marathon, Detroit, Mich., -65,000 bpd.

The fourth challenge

The fourth challenge North Dakota "will be facing ... likely in the coming years is North America as a whole" with its tremendous growth in shale resources," Kringstad said.

"We're going to have to keep our eye very closely on the North American outlook for North Dakota crude oil because we're now a major player."

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Watch for it in the next issue

When Justin Kringstad, director of the North Dakota Pipeline Authority, commissioned a natural gas study from Bentek Energy in March, he knew forecasting natural gas production and, by association, oil, was important for planning purposes for both industry and the various levels of government in North Dakota.

And he knew, based on what was happening in older eastern Montana wells, that there was a chance gas production would increase as North Dakota's oil wells aged, but if he suspected just how dramatic that increase would be, he didn't say until all the research and analysis was complete.

Bentek's conclusions, which were released in late July, were that natural gas production in the Williston basin could more than quadruple from current levels, pushing North Dakota into a leading role in supplying the U.S. natural gas market.

While forecasting oil production was not a primary objective of the study, it is an essential part of determining the associated gas forecast, Bentek said.

Under the base case, production in North Dakota could more than quadruple by 2025 to more than 2 million barrels per day by 2025. (May production was about 640,000 barrels per day.)

North Dakota officials initially estimated it would require \$3 billion to \$4 billion to build the necessary infrastructure to handle the natural gas, Kringstad told Amy Dalrymple of The Jamestown Sun.

Now that investment may need to be as much as \$15 billion, he said.

State and industry officials think industry will use the study as a tool for infrastructure planning.

"There are companies that are looking for the next opportunity," Kringstad said.

The Aug. 19 edition of Petroleum News Bakken will carry an in-depth report on Bentek's study results and industry's reaction to it.

For more information, contact Kay Cashman at publisher@petroleumnews.com to connect with the writer assigned to the project.

Gas flaring a major issue

Kringstad then turned to natural gas, starting with a slide showing gas being flared from an oil well. About one-third of the gas produced in conjunction with oil in North Dakota is flared for lack of a delivery system and processing facilities.

"The flaring image that you see here is an issue that must be aggressively attacked by industry in order to get it curbed as quickly as possible," he told the audience, echoing what the governor and N.D. Congressional delegation had said before him.

Slide 35, "ND Gas Facility/System Intake," showed the state's natural gas production in red, "growing very quickly alongside" its crude oil.

There are 16 plants in operation, with three news plants "in the works" and "one major expansion up in the Tioga area," he said, reiterating the need for "a tremendous amount of investment" in natural gas gathering lines, processing, and bigger pipelines to take it to market.

There have been some victories

"One very exciting development," Kringstad said, pointing to a slide titled "ND Gas Gathering Statistics," "you can see (here) in red," and that's the number of wells that we have had that are not connected to natural gas gathering in western North Dakota. For the first time in March, "due to great working conditions this last winter," the red line dips down.

"We want to see the number of wells

MOVING HYDROCARBONS

that are flaring continue to decrease. ... We want to get that downward slope moving as quickly as possible," he said.

The next graph, "First Time Gas Sales Per Month," showed the number of new wells getting connected into a gas gathering system in a given month. Again, March showed the best connections of any previous month.

"We want to continue to see that trend moving with an upward motion," Kringstad said.

The next overhead showed two million homes being heated by natural gas produced and processed in western North Dakota

Working to better understand 'our natural gas future'

At the "pipeline authority we are aggressively working toward a better understanding of our natural gas production, our natural gas future," Kringstad said.

"We saw some interesting trends in Montana with some of the older Bakken wells," he said, referring to a new report the North Dakota Pipeline Authority commissioned and which "should give us a much better understanding of our future natural gas production, and the processing and pipeline infrastructure that's needed."

Keep your eyes open for that if you have an interest in that topic. \bullet

Editor's note: An article on the results of that study will appear in the second August edition of Petroleum News Bakken.

- Predict the long-term economic viability of the reservoir through geochemical and flow modeling
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For More Information:



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NuStar to build second St. James rail facility

NuStar Energy LP plans to add a second railcar offloading unit train facility at its terminal in St. James, La., the company said July 27 during a second quarter earnings call.

Curt Anastasio, president and chief executive officer of the San Antonio midstream firm, said the expansion was due to customer demand, pointing to growing oil production from the Bakken petroleum system in North Dakota.

"Capacity for our second unit train facility will be a minimum of 70,000 barrels per day," Chris Cho in NuStar's corporate communication department told Petroleum News Bakken the same day.

Cho said the company expects the project to be completed "in the first or second quarter of 2013." NuStar Energy is a publicly-traded limited partnership with 8,420 miles of pipeline; 89 terminal and storage facilities that store and distribute crude oil, refined products and specialty liquids; two asphalt refineries; and a fuels refinery with a combined throughput capacity of 118,500 barrels per day.

The partnership's combined system has approximately 98 million barrels of storage capacity. The second largest independent liquids terminal operator in the nation, NuStar has operations in the United States, Canada, Mexico, the Netherlands, the United Kingdom and Turkey.

-KAY CASHMAN



Pipelines versus tanker trucks

Pipelines and gathering systems: Bridger, Belle Fourche VP talks about how to reduce, eliminate trucks hauling oil on ND roads

LONG LOAD

Got Pipelines?

By MIKE ELLERD For Petroleum News Bakken

where the term of term

Tad True came to this summer's North Dakota Governor's Pipeline Summit with an answer, as well as to explain the difference between reducing and eliminating truck traffic.

True, vice president of True companies Bridger Pipeline and Belle Fourche Pipeline, says he understands trucks are fundamental to a well-functioning society, but he also knows the huge number of trucks on North Dakota roads is a contentious issue for the state's citizens.

How to reduce truck miles

True began with telling a story, ignoring Bridger's pipelines in Mountrail, McKenzie, Dunn, Billings, Stark and Golden Valley counties, and focusing on the recently completed Four Bears main pipeline and Four Bears gathering system.

The Four Bears pipeline starts 13 miles west of New Town and consists of 77 miles of 12-inch, epoxy-coated steel pipe running south-southeast to within 12 miles of Belfield.

True said they receive oil through two truck terminals at Keene and Killdeer, as well as through multiple gathering systems.

From Belfield the oil continues through pipelines to two different delivery points, one into the Butte Pipe Line near Baker, Mont., and the other at the Bakken Oil Express Rail Terminal at Dickinson. start the process all over again. He said this example would result in a total roundtrip distance of 232 miles.

But with the Four Bears pipeline, a truck would only have to travel a total roundtrip of 30 miles to get the oil from the well to the terminal at Keene, eliminating approximately 200 miles from the length of the truck haul for the same 220 barrels.

True then estimated that based on a savings of 200 miles per truck haul from the Keene area, and a savings of 108 miles from the Killdeer area, Four Bears is presently eliminating more than 50,000 truck miles per day from state Route 22 and U.S. Route 85.

He also mentioned several anticipated expansions in the Bakken region that will allow Four Bears to further reduce the number of truck miles, including: a pipeline from Baker, Mont., to Guernsey, Wyo.; completion of on-ramp to the Keystone XL pipeline; and an expansion to the Bakken Oil Express rail facility. He said when these expansions are complete and Four Bears was running at full capacity, the pipeline should eliminate more than 75,000 tanker truck miles per day from North Dakota roads, translating into a 25 million truck-miles-per-year reduction. But True emphasized that while the Four Bears reduces the number of haul miles, in the absence of a gathering system, it does not eliminate tanker trucks from the road.

to 2,200 truckloads are needed to the well site in the first year for everything from rig components and water tanks coming to the site, to crude oil leaving the site.

Of that estimated 2,000 to 2,200 truckloads in the first year of operation, True said 37 percent would be for transporting crude oil out.

Extending that first year out over a 15year life span of a well, "all of a sudden that becomes 72 percent of the trucks required to service a single well are crude oil trucks."

He said from a pipeline standpoint, these are the trucks that can be eliminated by a gathering system.

As an example, True pointed to a gathering lateral near the Keene terminal con-

True, vice president of True companies Bridger Pipeline and Belle Fourche Pipeline, says he understands trucks are fundamental to a well-functioning society, but he also knows the huge number of trucks on North Dakota roads is a contentious issue for the state's citizens.

one mile of pipe.

In a second example, True pointed to a larger gathering lateral in northern McKenzie county consisting of 32 spacing units connected by 24 miles of 4-inch, 6inch and 8-inch pipe that were scheduled to go into service during week of June 18.

Over the first 15 years of this gathering lateral, True said the system would eliminate 350,000 tanker truckloads. To put this in perspective, he said all of the trucks travel on the same township road, so for someone with a house on a county road, 60 trucks a day would be eliminated.

Shameless advertising

True warned he would end his talk with a "shameless advertisement for the pipeline industry," and showed a slide of a driver's view through the windshield of an automobile looking at the back of a tanker truck with a "LONG LOAD" banner.

He said everyone has seen this type of situation where the truck is attempting to make a left-hand turn at an uncontrolled

The overall capacity of Four Bears is determined by what it can deliver.

The Butte Pipeline has a capacity of 80,000 barrels per day and the Bakken Oil Express a capacity of 25,000 bpd, so the overall capacity of Four Bears is approximately 115,000 bpd.

To demonstrate the effectiveness of Four Bears at reducing truck traffic, True compared the logistics of transporting crude oil via tanker truck to moving it through the pipeline.

In the absence of a pipeline, True said, the only way to transport the crude from a well in northern McKenzie county to a terminal near Belfield is to put the crude in tanker trucks which typically have a capacity of 220 barrels.

A truck loading within 15 miles of Keene would travel south to Belfield to get the oil to market, then return to the well to

How to eliminate trucks carrying oil

True explained that in order to get one well into production approximately 2,000

sisting of one mile of six-inch pipeline connecting two spacing units.

Over the first 15 years of operation True said, this lateral will eliminate 23,000 truckloads. More importantly, he said, during the first month of operation beginning last January the lateral resulted in eliminating nine truck loads per day with just intersection onto a busy highway.

The question you have to ask yourself "after about 40 minutes of sitting there" is "got pipelines?"

Founded in 1948, the True companies are based in Casper, Wyo. ●

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com



Enbridge movin' in the Bakken

Crude takeaway capacity up 600% to 475,000 barrels daily by early 2013; fine-tuning Sandpiper tolls, tariffs, start late 2015

By MIKE ELLERD

For Petroleum News Bakken

COMPANY PRESENTATION

By early 2013 Enbridge will have invest-ed more than \$1 billion dollars in infrastructure to serve North Dakota production, and increased its takeaway capacity to 475,000 barrels of oil per day, up from 80,000 bopd in 1995.

"Enbridge has had operations in North Dakota for over sixty years," said Mike Moeller at the North Dakota Governor's Pipeline Summit June 14, "and we've served North Dakota production for about 20 years through our



MIKE MOELLER

acquisition of the Portal Pipeline system in 1995."

Moeller is director of Enbridge Pipelines North Dakota.

Expansions in 2008 through 2013 will result in nearly a 600 percent increase in capacity, he said.

Outside of North Dakota, Enbridge owns and operates the largest crude oil transportation system in North America which has the capacity to transport more than 2 million bopd in markets such as the U.S. Midwest, eastern Canada, Cushing, Okla. and most recently the U.S. Gulf Coast.

In the past six months, Enbridge has acquired ConocoPhillips 50 percent interest in the Seaway crude pipeline, as well as reverse the direction it moves oil, which provides access for Enbridge shippers to the U.S. Gulf Coast.

Enbridge, he said, has announced plans to expand its mainline system to access the Midwest refinery markets as well as Canadian refineries, and has also announced plans to re-reverse its pipeline to Montreal allowing Bakken light crude access to the Suncor refinery in Montreal and Valero's refinery in Quebec City.

Bakken expansion initiatives

Enbridge has two ongoing initiatives in North Dakota intended to increase crude takeaway capacity, Moeller said.

The first is the Bakken Expansion project which currently operates with a capacity of 25,000 bopd but will soon provide an incremental 145,000 bpd capacity and will be in full service in 2013.

The other initiative is the Berthold rail project that will have rail export capacity of 80,000 bopd in January. Moeller said this project has an aggressive construction and execution schedule "spanning 14 short months from project sanctioning to commissioning and startup," adding that the Beaver Lodge Loop extension, which is part of the Bakken Expansion, will be expanded from 145,000 to 225,000 bopd and can also serve the Berthold rail facility.



QNBRIDGE Next Major Expansion: Project Sandpiper Capacity 225 - 325 KBPD 20" or 24" Diameter In Service Date 2015 **Commercial Structure** 100% "Surcharge" Cost Estimates: \$1.2 - \$1.3 Billion Sandpiper Class V Lakehead Expansion \$0.9 Billion **Proposed Sandpiper Pipeline** Proposed Mainline Lakehead Expansion



One of the concerns express by many Enbridge shippers, Moeller explained, is the challenge they face in making financial commitments to large pipeline projects. Shippers would rather use their financial resources to continue drilling activities and getting their production online.

Consequently, Enbridge is proposing to recover its cost of the Sandpiper project through a surcharge on all barrels transported on the Enbridge North Dakota pipeline system, much like Enbridge's Phase 5 and Phase 6 surcharges that its shippers pay today.

Strategic drivers

The strategic drivers for the projects and Enbridge's mainline initiatives, Moeller continued, are to promote new markets for high quality Bakken crude produced in North Dakota and to provide phased-capacity pending the Sandpiper expansion that will come online in 2015. And there will be rail capacity once the Sandpiper and Bakken Expansion projects are complete to handle any peaks in production or to serve niche markets.

The Enbridge advantage

Moeller told the audience that the advantage that the Enbridge Sandpiper project will offer is a large capacity, and by operating on a 100 percent surcharge, financial commitments are not required so shippers are not putting their balance sheets up against a pipeline project and "they can keep that cash for their capex proposals." The Sandpiper project will provide access to multiple end markets via the Berthold rail facility, the Clearbrook pipeline, and the Enbridge mainline system, and once on the Enbridge mainline, he said, there is an advantage to common carriage status as well as access to multiple premium markets.

Over the last year, Moeller continued, Enbridge has significantly enhanced its ability to access premium markets, providing shippers access to the U.S. Gulf Coast via acquisition and reversal of the Seaway pipeline. Enbridge has enhanced access to Cushing with its recently announced Flanagan South expansion, and enhanced access to Midwest refineries as well as east ern refineries with reversal of Lines 9A and 9B in Montreal. The company is currently working to further broaden access for its shippers, such as Patoka via their Southern Access expansion, and pipe-to-rails offers solutions to Philadelphia. He said these initiatives are well under way, and Enbridge will be issuing announcements on them in the near future. Moeller concluded by telling the audience that Enbridge continues to make significant investments in North Dakota to benefit the production, the Sandpiper project the latest in a long string of initiatives that serve Bakken production in North Dakota as well as eastern Montana. "Where Bakken has not been able to go via pipe before it now has that route as of about 10 days ago." •

B6

Latest on Sandpiper

The Sandpiper pipeline will twin an existing BP line between Beaver Lodge rail facility and Clearbrook, Minn., and Moeller said Enbridge has prepared two cost estimates for the project, one for a 20-inch line and the other for a 24-inch line, which would provide for additional export capacity of between 225,000 and 325,000 bopd.

He added that his counterparts on the Enbridge mainline have been evaluating options over the past six months to deal with congestion on the mainline between Clearbook and Superior, Wis. That Enbridge group recently told Enbridge North Dakota that they are prepared to expand a segment of the mainline if it's supported by the pipeline backstopping.

Designed to take about 300,000 bopd to premium markets in the U.S. and Canada, Moeller said Enbridge believes the valued proposition with the Sandpiper project is that it will not only provide low-cost transportation solutions to market, but it also access to several premium markets for Bakken crude, including Eastern PADD II, eastern Canada, and now the U.S. Gulf Coast.

All that, Moeller said, results in a maximum netback for the producers, as well as the North Dakota state tax coffers, mineral owners and the like because of the trickle down economic effect.

Paying for Sandpiper

Enbridge is in the process of fine-tuning its tolls and tariffs for Sandpiper, and service is targeted to begin in late 2015.

One of the concerns express by many Enbridge shippers, Moeller explained, is the challenge they face in making financial commitments to large pipeline projects. Shippers would rather use their financial resources to continue drilling activities and getting their production online.

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com

COMPANY PRESENTATION

Plains finding niches in the Bakken

In a quiet corner of the Bakken, Plains All American is developing multiple solutions to transport oil and gas out of the region

By MIKE ELLERD

For Petroleum News Bakken

verybody has a niche in the Williston basin's Bakken petroleum system; Plains All American Pipeline found its' by providing transportation in areas overlooked by midstream companies. So said Managing Director of Pipeline **Commercial Operations James Pinchback** at the North Dakota Governor's Pipeline Summit held in Bismarck earlier this summer.

Plains is focusing on a small area in far north northwest North Dakota and northeast Montana where it has two pipelines and a multi-product rail facility currently under construction.

Bakken North pipeline

The first project Pinchback described was the Plains Bakken North pipeline, which is a 12-inch crude line that will run 79 miles from Trenton northwest to the Raymond Station near Outlook, Mont. At Raymond Station, the Bakken North will connect with the Wascana Pipeline, which is owned by the Plains Canadian affiliate and runs from Raymond Station north into Canada, terminating at Regina, Saskatchewan.

From Regina, the Wascana line connects to the Enbridge system which then transports oil to Clearbrook, Minn.



Pinchback said he believes there may also be an opportunity to connect with JAMES PINCHBACK

TransCanada

Regina to reach markets such as Patoka, but he said this will depend on how the Keystone XL project plays out.

at

Genesis of the Bakken North

Pinchback explained that back in 2005 to 2006, Plains was developing and expanding its existing Trenton gathering system on the Montana side of the Bakken, but "unfortunately the drilling kind of moved in a lot of different directions and the focus wasn't really on our Trenton gathering system; it moved elsewhere."

However, Pinchback said, Plains' Trenton gathering system is still in place and serves as a type of core for the company because there are a number of producers in and around the area, and Plains is connected to other gathering systems coming into the Trenton area. He said it made sense for Plains to run a pipeline northwest out of Trenton into Canada due to increased activity in that direction. So with the activity moving to the northwest from Trenton, Pinchback said Plains thought it would be a "pretty nice fit and provide a little niche pipeline option for folks that aren't really being focused on for the expansions that are moving east and south."

Bakken North Pipeline



- Bakken North Pipeline Scope
- > A 12 inch, 79 mile crude oil pipeline from Trenton to Raymond Station close to Outlook, MT Initial capacity of 50 MBPD, expandable to 75 MBPD as development progresses
 - Connection to PAA 12 inch Wascana Pipeline at Raymond Station
- Wascana Pipeline System
 - An existing 12 inch, 100 mile pipeline from Raymond Station to Regina, Saskatchewan 2 Connection to Enbridge Pipeline at Regina, Saskatchewar 2
 - Crude on Enbridge will flow from Regina to Clearbrook, MN
 - Potential connection to TransCanada's Keystone Pipeline flowing to Patoka
- The Bakken North Pipeline system will include the following:
 - Development of a new Trenton station
 - Origination tankage of 80 MB tank
 - Truck and pipeline receipt facilities at the new Trenton Station
 - Opportunity for pipeline/truck receipts along the northwest route of the line
- **Current Construction Status**
 - Pipeline construction started May 24, 2012 expected completion December 2012
 - Tank construction 57% complete expected completion August 2012
 - All permitting completed
 - RoW 98% complete

Manitou Rail Facility

- The Manitou Rail facility will be a multi-product receipt and deliver facility capable of receiving NGL's, crude oil and natural gas
- The NGL Rail Facility will include the following: 8.5 MBD trans-loading capacity
 - Storage for 200 cars
 - Currently in service moving NGL's
- The Crude Oil Rail Facility will include the following:
 - Initially 20 MBPD trans-loading capacity currently in-service moving crude
 - 6 transloaders in operation
 - Expansion to 65 MBPD double loop track/unit train capability by November 2012
 - High speed rail loading rack with 14 enclosed spots
 - 2-150 MB crude oil storage tanks
- The Manitou Gas Plant will consist of the following:
- 50-100 MMCFD cryogenic plant with C2 recovery/reject capability
- > C2 fractionation by year end 2013
- Low pressure full well stream gathering into facility
- Condensate stabilization for the rail facility
- H2S and CO2 treating as required
- Current Construction Status
 - NGL trans-loading in service
- Rail facility earthwork 50% complete and tank construction 40% complete Gas processing facility in design phase

Nelson to Ross Pipeline

Nelson to Ross Pipeline Scope

- A 10 inch, 16.9 mile crude oil pipeline originating at Nelson and terminating at the PAA Manitou Rail Facility northwest of Ross, North Dakota.
- Capacity of the pipeline will be 50 M8PD displacing current truck delivery service
- Connection from the 8 inch Robinson Lake Pipeline at Nelson 65 MBPD Capacity
- The Nelson to Ross Pipeline system will include the following:
 - One 10 inch launcher, two 8 inch and one 10 inch motor operated valves at Nelson
 - One 10 inch receiver at the Ross Terminal
 - One motor operated 10 inch mainline block valve and one 10 inch mainline check valve
 - Opportunity for truck unload at Nelson or additional pipeline connections to the Robinson Lake Pipeline
- Current Construction Status
- North Dakota Siting permit approved
- Pipeline construction to start June 25, 2012 In service projection November 2012
- RoW agreements nearing completion
- Line pipe ready for site delivery

ment in that corridor that "doesn't really have a home," Pinchback said. It's a unique fit for the companies that have good projects in the corridor that need gas processing and crude movement, making it a niche market for Plains.

Manitou will have a unit train facility component scheduled to be completed by November, with the capacity to move 65,000 barrels per day, but the capacity can be expanded if necessary, he said.

The facility will have high-speed rail loading racks. Two 150,000 barrel tanks are currently under construction.

Dirt work is under way for the actual unit train tracks; however, Pinchback said, Plains has been trans-loading crude at the facility since fall 2011 and the company is currently moving between 12,000 and 15,000 barrels a day. The facility, he added, will provide a very nice delivery point for producers in "no man's land" between rail facilities

The gas plant at the Manitou facility will consist of a cryogenic plant with fractionation.

Pinchback explained that Plains is still trying to determine if the capacity should be 50 million or 100 million cubic feet per day, but the plan is to have this plant online by the end of 2013.

He said this will be another marketing option for producers in the area that don't have a lot of other options.

In concluding his discussion of the Manitou facility, Pinchback said it is a multi-port, multi-product facility that is unique in terms of its location.

Nelson Pipeline

The Nelson to Ross crude oil pipeline will be a 10-inch, 16.9 mile long line connecting to Plains' Robinson Lake pipeline at Nelson and running west to the Manitou rail facility near Ross.

The Robinson Lake line runs north from Robinson Lake to Stanley and connects with Enbridge, but with the new Nelson line crude from the Robinson Lake area can go directly to either the Manitou facility or to Enbridge. Trucks will then be able to unload at Nelson eliminating the need for the additional highway miles to the Manitou facility.

Pinchback said the Nelson line will provide access to whatever crude markets want to come into the system at Stanley and at the south end of the Robinson Lake line, and that the Nelson line "saves a lot of pipeline miles not having to lay a new pipe all the way to Stanley every time you want to touch Enbridge." The Nelson line will have a capacity of 65,000 barrels per day, with construction slated to begin in late June, and the pipeline scheduled to be in service by November when the Manitou rail facility is complete.



PLAINS





That thinking was the "genesis" of its Bakken North pipeline.

Bakken North status

Construction on the crude pipeline began in late May, Pinchback said, and Plains is on schedule for a December startup.

Plains is building an 80,000 barrel tank at Trenton as part of its new origination

station scheduled to be completed in August, and it had no problems with its siting permits, and the right of way is nearly finished although the company is doing some minor rerouting.

Initially, the Bakken North line will have a capacity of 50,000 barrels per day to Regina, he said, but that capacity to Regina will be expanded to 75,000 barrels per day following some improvements on the Wascana line.

Getting back to Trenton, a hub with good connectability, Pinchback asserts, Plains has to develop a new station because it is outgrowing the capacity of the old station. The company has plenty of land, new truck unloads and pipeline connections coming in, he said, so in addition to its Bakken North line Plains can also provide options to Enbridge.

Moving up the Bakken North line, Pinchback said Plains has already selected a number of sites where it can build

injection and origination facilities for producers and will see how the growth goes in developing these facilities.

Regarding shipper commitments, Pinchback noted that Plains didn't do an open season nor has it taken any financial commitments because its management feels confident the volume will be there.

Manitou rail facility

"Everybody is building a rail facility, so we decided we would go ahead and build one as well," Pinchback guipped as he changed the focus of his presentation to the new Manitou rail facility located west of Stanley. This facility, he said, is actually a "little bit more" than just a regular crude oil facility in that it also will have natural gas and natural gas liquids, or NGL, capabilities.

Between Stanley and the Rangeland rail facility, the Manitou facility is in a unique position because of the develop-

Finding the right niches

"We're not afraid to spend money; it's just trying to line up with the producers and match where the growth is going to be so that you're not just overbuilding everywhere," Pinchback said in conclusion.

"Plains is open to suggestions," and will continue to throw out options for moving product out of the area. It's just a matter of "finding the right niches," he said.

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com

Smaller player with big prospects

Saddle Butte Pipeline may be a younger and smaller company, but is firmly establishing its presence in the Bakken

By MIKE ELLERD

For Petroleum News Bakken

E ven though his company was "the small guy on the panel, " Saddle Butte Pipeline Senior Vice President for Business Development David Lytle told attendees at the recent North Dakota Governor's Pipeline Summit that Saddle Butte has a "big vision" and is accomplishing a lot of big things to meet the demands of the Bakken petroleum system.

This was, he said, Saddle Butte's first participation in such a forum. Company officials, he said, have been trying to stay focused on their customers, working hard to provide them with efficient and reliable gathering services.

A young, privately held midstream company, Saddle Butte provides crude oil, gas and produced water services. Their main office is in Durango, Colo. but the company also has offices in Denver and Houston, and two field offices in North Dakota, one near Johnsons Corner and the other at a Saddle Butte plant in Watford City.

Lytle said the company started roughly in 2009 at a time when Bakken producers were still trying to figure out details of their development plans such as "the 640s, the 1280s, how many wells per drilling unit." Saddle Butte, he added, was looking at the infrastructure challenges that these plans created and how to properly design the infrastructure to make sure all the capacity to downstream markets would be there.

Hauling production water 'huge deal'

Noting that water was not a being discussed in detail at the Summit, Lytle said that at the front end production water is "a huge deal" and truck trips of all kinds contribute to road issues as well as safety in the communities. Producers are "taking that to heart" and Saddle Butte is working to provide solutions to the challenges that produced water creates.

Although Saddle Butte has only been around a "few short years," Lytle said the company has put together an experienced management team that can provide producers with "friendly wellhead to market" midstream services. He said the senior management team averages 25 years of industry experience which brings a lot of innovative solutions, ideas and an aggressive business mindset.

All the people at Saddle Butte are com-

Saddle Butte Pipeline

- Privately held midstream company
- Providing crude oil, gas and produced water gathering solutions
- Comprised of Saddle Butte Gathering and High Prairie Pipeline
- Experienced organization
- Create an operationally focused business model that provides "producer friendly wellhead to market" midstream services
- Senior management team averages 25+ years of industry experience
- High quality construction, engineering and operations staff
- Seasoned commercial group with proven success
- Locations
- Business offices in Durango, Denver and Houston
- North Dakota field offices near Johnsons Corner and Watford City

Saddle Butte Gathering

- Formed in 2009 to develop gathering and processing in the Bakken
- Initial focus was on the Fort Berthold Reservation
- > As activity grew in McKenzie County, expanded system to the west
- Current assets include:
 - Little Missouri Processing Plant (near Watford City) 25 MMcf/d
 - 25 MMcf/d expansion underway
 - Crude oil terminals at Alexander and Johnsons Corner
 - Deliveries into Enbridge and Four Bears (Bridger)
 - Rail connections under development
 - Since September 2010, SBP has constructed ~250 miles of crude oil and gas pipelines
- Pipeline gathering provides significant benefits through:
- Increased revenue to the state, mineral owners and producers by providing more reliable and cost effective transportation solutions
- Increased road safety and less traffic through elimination of hundreds of truck trips per day



High Prairie Pipeline

- High Prairie Pipeline was created to provide constrained Bakken production with a new, efficient and reliable transportation solution out of the basin
 - ~450-mile, 16-inch system
 - Originates near Alexander, ND and terminates near Clearbrook, MN
 - Includes two lateral pipelines and strategic interconnects:
 - A 17 mile lateral originating at Johnsons Corner
 - An 8 mile lateral originating near Robinson Lake, in Mountrail County
 - Truck stations at Alexander, Johnsons Corner and East New Town
- The project also includes the following facilities:
- 5 FOOL bbl of operational storage

Saddle Butte is also working to develop a number of rail outlets.

Rail provides significant value uplift to producers given the differentials seen today, as well as flexibility and options to move product with the rapid growth in production that has exceeded pipeline capacity, he said.

Since 2010 Saddle Butte has built over 250 miles of crude oil and gas pipelines in McKenzie and Dunn counties, and Lytle said Saddle Butte sees significant growth opportunities in this area over the next few years and beyond.

Its existing trunk line begins at the gathering system on the Fort Berthold reservation and runs through Johnsons Corner and on to Alexander, connecting numerous gathering lines and well connects along the way. Crude oil is delivered into the Johnsons Corner facility or goes on to Alexander, and gas is delivered to its Little Missouri processing plant.

High Prairie pipeline

Saddle Butte's other core focus area in the Bakken is the High Prairie pipeline, which is an interstate crude oil project that will focus primarily on production in McKenzie and Dunn counties.

The 16-inch crude line will begin at Alexander and run some 450 miles east to Clearbrook, Minn., and will have 150,000 barrels per day capacity.

The project includes a 17 mile lateral originating at Johnsons Corner and an eight mile lateral originating near Robinson Lake in Mountrail County.

The High Prairie line will also have truck stations at Alexander, Johnsons Corner and East New Town, as well as a rail loading terminal near Clearbrook with a capacity of 120,000 barrels per day.

The High Prairie project will include approximately 500,000 barrels of operational storage, and significant long-term storage facilities near Clearbrook.

The company is working with shippers for additional storage to "help balance out the peaks and valleys" of the markets and shipper lines.

In addition, Lytle said, Saddle Butte will establish a backhaul service for the High Prairie which should help reduce truck hauls in the area.

The High Prairie system is scheduled to go into service in the fourth quarter of 2013, subject to regulatory approvals. Lytle said Saddle Butte completed an open season on the High Prairie in April and is currently finalizing terms and conditions with

mitted to customer service and are committed to do the right things every day, Lytle continued, and said that dedication to get things done with all of the challenges and all the work that needs to get done "goes well beyond a 40-hour work week."

He said everyone at Saddle Butte, from its construction and field operations personnel in North Dakota to its engineering groups, project management, and the lands and accounting groups, all factor in to executing company plans across the board and keeping customers satisfied.

He said he couldn't say enough good things about the people at Saddle Butte because of these people, Saddle Butte has been able to accomplish a lot in a short period of time.

The dedicated people at Saddle Butte make his and other managers' easier when they can walk into customer's offices and show how well Saddle Butte has been able to execute the things its doing.

- ~500k bbl of operational storage
- A rail loading terminal near Clearbrook (initial capacity of 120k bbls/d)
- Development of significant long-term storage facilities near Clearbrook
- Establishment of a backhaul service
- The new pipeline will increase crude oil take-away capacity by 150k bbls/d
- An anticipated in-service date of 4Q 2013, subject to regulatory approvals
- Completed open season on April 5, 2012
- · Finalizing terms and conditions with prospective shippers



Saddle Butte gathering system

One of Saddle Butte's core focus areas in the Bakken is the Saddle Butte gathering system. Lytle said Saddle Butte began work in the Bakken on the Fort Berthold reservation providing gas and oil gathering services where, at the time, there was a complete lack of infrastructure due to the "newness" of Bakken production.

As activity ramped up throughout McKenzie County, Saddle Butte has expanded its system to the west all the way

to Alexander.

The company's Little Missouri gas processing plant south of Watford City currently has a capacity of 25 million cubic feet per day and the company is now working to double that capacity in order to stay ahead of demand so that the gas is processed and not flared.

Lytle added that Saddle Butte also has two crude oil terminals, one delivering into Enbridge at Alexander and the other delivering into Bridger Pipeline's Four Bears line at Johnsons Corner. prospective shippers.

In his closing comments Lytle first said that Saddle Butte is very proud to have business operations in North Dakota and that it is very thankful for the positive business environment in the state.

He said North Dakota coined the phrase "North Dakota is open for business," and that is "one hundred percent true."

Lytle went on to say that Saddle Butte is very appreciative of its customers who "believed in us and helped us get our business off the ground here in North Dakota."

Saddle Butte employees, he said, work hard every day to live up to customer expectations.

Finally, Lytle thanked all the landowners who agreed to work with Saddle Butte and allowed the company to build its systems. \bullet

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Oneok a major Bakken investor

Fortune 200 firm investing \$3.2-\$3.7B in Bakken-related oil and gas pipeline and processing facilities; developing solutions to flaring

By MIKE ELLERD

For Petroleum News Bakken

Ven though a major investor in the Bakken play, Oneok is probably not yet a household name in North Dakota, Mick Urban told the audience at the North Dakota Governor's Pipeline Summit in June. Working in western states government relations for Oneok, Urban said he wanted to provide a "snapshot" of Oneok.

Oneok is a Fortune 200, premier energy services, company headquartered in Tulsa, Okla. The company is 106 years old and started out as Oklahoma Natural Gas, a distribution company established before Oklahoma was granted statehood.

Today Oneok has more than 2 million customers in Oklahoma, Kansas and Texas that it serves every day.

The culture of the company is service, Urban said.

"When you're running an LDC, a local distribution company," he said, "you're going to see those same customers every single day for 50 years maybe, or more" and "you learn to create great long-term relationships."

Urban then explained that Oneok, Inc. is a 43.4 percent owner of Oneok Partners, which is a master limited partnership, or MLP.

He said MLPs are generally pipeline companies and are organized in ways that reward and encourage capital investment.

Oneok Partners is involved in midstream natural gas gathering, liquids processing and pipelines. As it stands today, he said, Oneok Partners has \$8.9 billion in total assets, and between the Gulf of Mexico and the Canadian border Oneok Partners has between \$4.7 billion and \$5.6 billion in projects under way or announced. Pointing to a slide of a natural gas flare, Urban described it as an "unmet need." He said for someone who has been in the natural gas business for 16 years as he has, seeing a flare prompts a reaction because flaring just isn't the right thing to do. So, he said, Oneok is developing solutions to address this situation. "Just for those of you who don't think about natural gas processing plants every single day, in essence you drill for oil and up comes a lot of other stuff besides oil," including natural gas and natural gas liquids, Urban said. The Bakken, he added, is a liquids-rich play and people are flaring the non-oil product, which includes very valuable natural gas liquids such as butanes,

Growth Projects

Natural Gas Liquids

- \$595 to \$730 million
 - Bakken NGL Pipeline
 - Riverview Rail Facility
 - Overland Pass Pipeline
 Expansion
 - Bushton fractionation
 expansion



System, a 230 mile, \$160 million project in Divide County, an area in which Oneok has not operated before according to Urban

Existing Oneok infrastructure

Urban then pointed to a slide showing U.S. Geological Survey map with oil and gas reserves estimates in the Bakken. Transposed on the map were numerous pipeline traces, a majority of which were blue, and three gas processing plants. Urban said where usgs is showing there is oil and gas, all of those blue lines represent Oneok pipe and "we're where it's happening" he said. The "takeaway," he said, is that these USGS figures indicate 3.65 billion barrels of oil and 1.85 trillion cubic feet of recoverable gas. With its gathering lines and processing plants, he said, Oneok is where the product is.

Stateline I and II plants

Turning his discussion back to the Stateline I and II plants, Urban reiterated that these plants will each have 100 million cubic feet of capacity. Showing the aerial photos of the Stateline I plant under construction, Urban said the plant looks "fantastic" at this point and will be operational this year. Stateline II will be in service next year.

Natural gas liquids

Urban said his discussion thus far had focused on gathering and processing, but would now turn to what happens to the NGLs after they are processed.

Oneok, he said, is developing its

NGL pipeline, which will increase the capacity of the line from the initially proposed 60,000 to 135,000 barrels per day. The estimated cost for the additional pump stations is \$100 million.

Oneok also said it is planning to install additional pump stations on the Bakken

Update: Adding gas plant, NGL pump stations

cessing facility as a sister plant to its existing Garden Creek plant near Watford

City. The proposed Garden Creek II plant will have a processing capacity of 100

million cubic feet per day and is estimated to cost between \$310 million and \$345

Oneok on its continuing investment in North Dakota's energy industry.

In a written statement issued July 17, N.D. Gov. Jack Dalrymple congratulated

"Oneok continues to be a strong partner in expanding North Dakota's energy

industry, especially in the area of natural gas gathering and processing,"

Dalrymple said. "Because of their significant investments in our state, we are able

to further reduce flaring at oil well sites, decrease traffic congestion and impacts

to our roads, and create new markets for our resources. The Garden Creek II plant

will significantly increase North Dakota's capability to process and export natural

Oneok Partners announced in late July that it plans to construct a new gas pro-

The Garden Creek II project and the additional Bakken NGL pipeline pump stations will bump Oneok's Bakken-related investments through 2015 to between \$3.6 billion and \$4.2 billion.

-MIKE ELLERD

propanes and isopropanes.

million.

gas products."

Starting with raw natural gas, Oneok builds gathering systems and pipelines from oil wells to collect those liquids which are then taken to a processing plant that basically does one thing; it strips off the natural gas components (methane and ethane) which go into a high-pressure natural gas transmission line and then to market. Everything else, i.e., the butanes, propanes, natural gas, goes into an NGL pipeline to market.

Bakken growth projects

In the gathering and processing units,

Urban said Oneok is spending \$1.1 billion to \$1.2 billion "as we speak."

The company opened the Garden Creek natural gas processing plant northwest of Watford City in January and will process 100 million cubic feet per day. Oneok is also building Stateline I and Stateline II sister processing plants in Williston and Watford City, respectively. Each of those, Urban continued, will process 100 million cubic feet per day. Stateline I will go online in late fall, and Stateline II will go online in early 2013. In addition, Oneok recently

announced the Divide County Gathering

Bakken NGL pipeline that will carry the NGLs processed in the Bakken to market.

Oneok is also upgrading its rail facility at Sidney, Mont. to increase NGL loading capacity from seven rail cars per day to 49 per day. He said because the Garden Creek plant is now on line, Oneok has to get the product to market and until the Bakken NGL line is complete, they are using rail.

Urban went on to say that Oneok and Williams built the Overland Pass pipeline that will transport up to 210,000 barrels per day of NGLs from the Piceance and Denver-Julesburg basins in Colorado as well as from the Opal area in Wyoming.

The Overland Pass line has a fractionator plant at the east end located at Bushton, Kan., and Urban said that plant is being upgraded with greater storage to handle more capacity.

see ONEOK page B15

COMPANY PRESENTATION **Safely transporting Bakken crude**

TransCanada continues to look at ways to get Bakken crude to multiple markets; pipelines provide the safest method of transport

By MIKE ELLERD

For Petroleum News Bakken

ransCanada's President of Energy and Oil Pipelines, Alex Pourbaix, began his talk at the 2012 North Dakota Governor's Pipeline Summit in June by telling the audience that when he got into the pipeline business some 20 years ago it was fair to say it was "one of the most boring businesses on earth," and that he never expected to become the "media darling" he apparently has

become.

Referring to media coverage of the proposed XL Keystone pipeline, Pourbaix said his company monitors news stories and has noticed weeks in which more



ALEX POURBAIX than 4,000 news arti-

cles appeared about the Keystone XL project. What that indicates to Pourbaix is that, as an industry, pipeline companies need to continue to improve communication with the public about the safety and reliability of pipeline systems.

Taking a moment to put North America oil and natural gas demand and production into perspective, Pourbaix said that regardless of what people may hear, North America is in no immediate fear of losing any demand for refined products.

In fact, he continued, the U.S. is the world's largest consumer of refined products at about 20 million barrels per day, and historically more than two-thirds of that product has been coming from outside of the U.S.

With what is happening in Alberta and in the Bakken, Pourbaix believes North America will actually see an opportunity to become energy independent "in our lifetime."

Gulf Coast project

Pourbaix pointed out that with the growth in production in Alberta and in the Bakken petroleum system in Canada and the U.S., TransCanada saw an opportunity several years ago to connect the growing source of supply to the very significant refinery complexes in the U.S. located in the southern PADD II and the Gulf Coast PADD III.

He said that while the Gulf Coast PADD III refining center is the largest refining complex in the world, over the past several decades two-thirds to threequarters of the oil going into that U.S. refining complex has been imported. When President Barack Obama denied the original Keystone permit, Pourbaix said TransCanada made the decision to decouple and move forward with the Gulf Coast portion of the Keystone project and proceed with the line running from Cushing, Okla. to the Gulf Coast because of significant shipper support. The total cost of the project is close to \$2.5 billion, he said, and will have a capacity of about 800,000 barrels a day. This will go a very long way in reducing a significant discount that WTI crude is seeing relative to other crude sources, which he said, is "a really positive thing."

the Keystone XL project. A \$5.3 billion project, the Keystone is planned to run from Hardisty, Alberta through Baker, Mont. to Steel City, Neb. He said the Keystone XL will provide about 800,000 barrels per day of capacity, taking oil from the oil sands in Alberta, and picking up about 100,000 barrels per day in the Bakken and delivering this oil to Mid-Continent markets as well as to the Gulf Coast.

Part of the Keystone XL project is the Bakken Marketlink project, which is essentially the "onramp" for Bakken crude onto the Keystone system at Baker, Mont.

TransCanada had an open season on this portion of the project and signed up 65,000 barrels per day of long-term contracts. With a Bakken capacity of 100,000 barrels per day, Pourbaix said the project represents a significant opportunity for "taking away this great Bakken light, sweet oil."

Other opportunities for Bakken oil

TransCanada has seen a great deal of interest from Bakken producers for other opportunities to get oil out of the region besides the Bakken onramp to the Keystone XL. One such opportunity, Pourbaix said, is after the Keystone XL is built, TransCanada will actually offload some of the base volume from the base Keystone system that runs across southern Saskatchewan and Manitoba then south through eastern North Dakota, South Dakota to Steel City. That, according to Pourbaix, will free up some capacity on the base Keystone system and enable TransCanada to take on more Bakken crude.

In addition, TransCanada has a couple of other projects that have not yet been formally announced, one of which has received a lot of press.

Pourbaix said TransCanada has a huge natural gas pipeline system that runs all the way across Canada to Quebec in the east. Right now, he said, with production declines on the gas side in the Western Canadian Sedimentary Basin, the company has some spare capacity on pipeline grid that runs across Canada, and believes there is an opportunity to convert one or more of those gas lines to crude.

Pourbaix said there is a great market for Bakken crude in eastern Canada where there is about 850,000 barrels per day of refining capacity. Today that is





of Transportation

Pipelines are the Safest Mode

Accident Rate Per Million Ton Miles of Freight in the US



Keystone XL

More relevant to the North Dakota Summit, Pourbaix told the audience, is largely served by offshore imports.

TransCanada believes there is the opportunity to ship light, sweet Canadian crude, synthetic crude, and Bakken crude to that region. The company has received a lot of interest in this possible project from potential shippers and will keep working it, Pourbaix said.

Safety

Pointing to a bar graph showing transportation accident rates for railcars, ships and pipelines from 1999 to 2008, Pourbaix said he believes that "there is not enough understanding among the general public as to the benefits of pipelines over the other methods of transporting."

The bar graph statistics, which were provided by the U.S. Bureau of Transportation Statistics, clearly indicate

see TRANSCANADA page B15



• COMPANY PRESENTATION Alliance making serious commitments

With a dedication to safety, land and communities, Alliance Pipeline says it's a committed, long-term midstream player in North Dakota

By MIKE ELLERD For Petroleum News Bakken

n his opening remarks at the North Dakota Governor's Pipeline Summit earlier this summer, Alliance Pipeline Senior Vice President and Chief Operating Officer Mike McGonagill said the problem of getting pent up natural gas in North Dakota to market is the same problem the Western Canadian Sedimentary Basin faced 13 to 14 years ago. That problem in Canada, he says, was the "genesis" of the Alliance Pipeline Company.

The Alliance pipeline system now consists of 2,300 miles of 36-inch and 42-inch pipe transporting 1.6 billion cubic feet of natural gas per day from western Canada into the upper U.S.



the upper U.S. MIKE MCGONAGILL Midwest, and

accounts for about 14 percent of the natural gas coming into the U.S.

But it's not just natural gas that Alliance moves; McGonagill said the company also transports a lot of the associated constituents within that natural gas, such as the ethanes, propanes and butanes, which go to the Midwest markets in the U.S., and have proven to be been very successful business and operational models. That system, he said, continues to operate today safely without incidents.

Building on the approach of moving high-energy natural gas and moving it safely is why Alliance is in the Bakken, he said.

Referring to a satellite photograph of a portion of the upper Midwest, McGonagill pointed to a prominent bright image of flaring natural gas in the Bakken. Alliance's proposed Tioga lateral pipeline is targeted at that "bright spot" where the flaring is occurring, he said.

Referring to comments made earlier in the day by Gov. Jack Dalrymple, he concurred by saying gas is being wasted and the Tioga lateral pipeline is poised to get it to market.

"I'm really glad, by the way, this is being webcast today" he said. "I appreciate that fact because I'm hoping there are folks out there that want to learn more about pipelines."

Tioga lateral pipeline



Bakken Energy Development



Alliance's Implicit Promise

- Our Commitment to Safety:
 - Designed & constructed to rigorous standards
 - Operated & inspected to ensure ongoing pipeline integrity
- Our Commitment to the Community:
 - \$14 million donated to community causes since start-up
 - \$275,000 donated to ND Future Farmers of America
- Our Commitment to Landowners:
 - We recognize and work to mitigate impacts that pipelines have on land and people

fabric of who we are as pipelines to ensure that we remain incident free."

Second is a commitment to communities.

"Proximity implies accountability" he said, and as a pipeline company, Alliance is in proximity to landowners and communities and is committed to remain and participate in those communities. It's an ongoing commitment, he said, and that is why, for example, Alliance has contributed more than a quarter of million dollars to the Future Farmers of America in North Dakota in the last 11 years.

Why Future Farmers of America? Because that organization is developing tomorrow's leaders today and the organization has a focus on leadership and farm safety, McGonagill said.

The third and last area of Alliance's implicit promise is the company's commitment to landowners.

Right-of-way and landowner issues are extremely important, he said, because pipe is on land that sometimes has been in families for generations.

He said Alliance works hard to establish long-term relationships with the landowners and works hard to mitigate impacts from building the line.

McGonagill noted that Alliance route crosses some of the most productive agricultural land in North America and perhaps even in the world. There are fields on that route that yield over 200 to 220 bushels per acre and soy over 60 bushels per year, which are extremely high yields, he said.

Restoration of rights-of-way is also extremely important to Alliance, he said, and over the last 11 to 12 years the company has developed numerous restoration techniques to ensure that rights-of-way are restored to their same productive levels.

Furthermore, Alliance is voluntarily funding conservation easements to mitigate construction impacts.

Above and beyond regulation

In another voluntary effort, McGonagill told the audience that Alliance is working with North Dakota State University on a native prairie reclamation study to be rolled out later in the summer.

Anticipated to extend over several years, Alliance wants to test, assess and deploy different reclamation methods along rights-of-way. Following a literature search, the study will involve actual field testing of different seed mixes, tillage approaches, and types of plant species to determine what works best to reclaim the prairie along the right-of-way, McGonagill explained. All of this information will be available to the industry, he said, because Alliance believes it's a legacy issue for the company and a way the company can improve overall pipeline construction and development in North Dakota and the upper Midwest. He said North Dakota State has an excellent range management program, and because some of Alliance's employees are graduates of that program, the company has a long affiliation with the university.

The Tioga line, said McGonagill, is pretty simple and will be 80 miles of 12inch pipe that will move gas from the outfall of the Alliance and Hess plants at Tioga to the Alliance mainline near Sherwood, N.D. The Tioga lateral will have an initial capacity of 61.5 million cubic feet per day and can easily be expanded to between 110 and 140 million cubic feet per day. As a result, he said, the Tioga, in conjunction with the Prairie Rose pipeline that runs from a plant at Palermo to the Alliance main line at Bantry and operated by Alliance sister company Aux Sable, will move a signifi-

company Aux Sable, will move a significant amount of natural gas out of North Dakota and to market.

Tioga a FERC regulated project

Because the Tioga pipeline is a lateral to the main line, McGonagill said, it is regulated under FERC, or the Federal

• We work in partnership with landowners to establish long term relationships

Energy Regulatory Commission.

He said Alliance applied to FERC in January and the permitting is currently in the environmental assessment stage.

FERC's staff, he said, does a rigorous review and is careful to take input from all of the various stakeholders including the government, individuals and state agencies in considering what is in the best interest of the public.

McGonagill said the Tioga project is on schedule and Alliance is hoping to have FERC approval this fall so that construction can begin in the fourth quarter and the line can go into service by mid-2013.

Alliance's implicit promise

McGonagill then told the audience that any pipeline business starts with an

implicit promise, and for Alliance that promise is to the land and to the people who live around the pipe. Nobody has "invited us there," he continued, "we're there because of a public need and a public good and we try to serve that well."

The promise, McGonagill said, really falls into three areas, and first is a strong commitment to safety. He said the Interstate Natural Gas Association of America has a task force to which both he and Barry Haugen of WBI Energy belong that is promoting safety to higher levels with the goal of being incident free. This includes designing and executing pipelines to rigorous standards in addition to the ongoing inspection process of "boots on the ground" and "intelligent pigging." That is "part of the

He hoped that landowners would

see ALLIANCE page B15





Nearly 100 years in North Dakota

North Dakota natives Barry Haugen and WBI Energy see exciting future for gas pipelines and midstream development in their state

By MIKE ELLERD

For Petroleum News Bakken

byiously it's a good time to be in the pipeline industry in North Dakota," WBI Energy Executive Vice President and Chief Operating Officer Barry Haugen said in his opening remarks at the North Dakota Governor's Pipeline Summit.

WBI Energy is a

wholly-owned subsidiary of MDU Resources Group, Haugen told the summit attaendees, and its pipelines go back nearly 100 years to the origins of MDU Resources in



Montana and North BARRY HAUGEN Dakota.

He said WBI's regulated operations include more than 3,700 miles of gas pipeline with a daily capability of 860 million cubic feet and 11 interconnecting points to other pipelines.

WBI also has three significant storage fields, one of which, Haugen said, is at Baker, Mont. It's the largest storage field in North America.

In addition, WBI has more than 1,900 miles of non-regulated gathering pipeline.

WBI's history has primarily been in the natural gas gathering and transportation business, Haugen continued, and today the company has a significant footprint in the Montana, Wyoming and the Dakotas with an extensive natural gas transportation system in the Williston basin's Bakken petroleum system. WBI also has a marketing affiliate, and the company is moving into broader areas of the midstream business.

2011 Project

Pipeline Operations

Charbonneau expansion – completed Sept. 2011

 Added more horsepower at the existing Charbonneau Compressor Station in northwestern N.D.

Bakken in 2011, Haugen said. One of these projects was WBI Garden Creek project, which was a 12 mile, 12-inch residue natural gas pipeline connecting Oneok's Garden Creek natural gas processing plant near Watford City to the Northern Border pipeline. Haugen said lines moves in excess of 80 million cubic feet per day.

Another significant project in 2011 was the expansion of the WBI Baker storage facility. Less about taking gas away from the Bakken and more about gas alternatives, he said, the Baker expansion involved new wells, added some additional trunk line, and added more compression, allowing WBI to more effectively store more gas until such time that it may be worth more or for arbitrage purposes, whether that be seasonal or market-related.

The third 2011 WBI project was expansion of a compressor station southwest of Williston. N.D., known as the Charbonneau plant, which allows WBI to get more gas off of its system and onto the Northern Borders pipeline destined for U.S. Mid-Continent markets.

WBIENERGY

Combined, Haugen said, the 2011 projects doubled the transportation capacity of the WBI system to well over 200 million cubic feet per day. With its 2012 projects, he added, the company is looking to double this capacity again.

2012 projects

and will be completed later this year, Haugen said, and will double WBI's transport capacity in that area.

Venturing into more midstream projects

Just last month, Haugen said, "we extended essentially our footprint into what we've traditionally done, which is pipelines, and got more broadly into the midstream business still related to the Bakken" through a 50 percent acquisition in Whiting's Pronghorn midstream assets near Belfield, N.D. in Stark County (Pronghorn is part of the Bakken petroleum system, as is Three Forks).

The acquisition includes a gas processing plant, gas and oil gathering systems, a gas residue line that connects to WBI's high pressure natural gas line, an oil storage terminal that is under construction, and oil pipeline facilities.

Whiting will remain the operator, according to Haugen, but with a 50 percent interest, he said WBI is excited about the opportunities that investment will bring.

Calumet Refining JV

Another non-traditional project WBI recently announced is a joint venture with Calumet Refining to build a diesel topping facility just west of Dickenson, N.D., adjacent to the Bakken Express pipeline.

The facility, he said, will have an inlet capacity of 20,000 barrels per day, which through a distillation process will produce about 10,000 gallons of diesel fuel per day that will be marketed locally. Naptha and the atmospheric bottoms will be shipped out via rail.

Major 2011 projects

WBI had three significant projects in the

The Baker expansion increased withdrawal capacity by about one-third, adding 35 million cubic feet per day.



This year WBI constructed a 16-inch pipeline connecting Oneok's Stateline to the Northern Borders pipeline.

Known as the Stateline pipeline, Haugen said the 12-mile line was originally scheduled to go into service in June, but he said it would probably be July before service begins. This pipeline will move residue gas from Oneok's Stateline I and II plants.

Haugen then said it is interesting that people talk about how to get energy out of the Bakken, but from a natural gas perspective, the growth in the Bakken has also created opportunities on the local demand side, including residential, commercial and industrial demand.

He said WBI is doing piping and measurement modification at the Charbonneau plant in order to increase deliveries into the Williston area and to heavier commercial operations, such as water depots, and even to natural gas-fired electrical generation facilities in the region. That work is ongoing

The project is in the early stages, he said, although "we're certainly spending dollars on extensive feasibility, engineering design, permitting activities, and we're excited about the possibility that this investment has as well to add value to the natural resource production of our state's vast resources."

Excited about the future

A native North Dakotan originally from Williston, Haugen said that he and WBI are excited about the future of the state and the opportunities it offers the energy industry, despite the challenges.

And having been around for nearly 100 years, Haugen said, WBI knows it needs to maintain good relations with landowners and all stakeholders.

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com

Gene Veeder: a different perspective

How pipeline companies can ensure good community relationships; advice from a county job development and landowner viewpoint

By MIKE ELLERD

ADVICE

For Petroleum News Bakken

ollowing presentations by eight pipeline executives at the June North Dakota Governor's Pipeline Summit, McKenzie County Job Development Authority Executive Director and North Dakota rancher Gene Veeder provided an entirely different perspective of pipeline development.

With no slides and feeling like the "odd duck" in the room, Veeder said that while he doesn't work directly in oil and gas, he does know some of the challenges the pipeline companies face when they GENE VEEDER "come into a commu-



nity of 1,500 people and engage a workforce of 1,500."

Descending on a community to build a gas plant or bringing in a crew that is going to build a pipeline, he said, has a big impact on that community.

Landowner perspective

Living on a ranch nearly 100 years old, Veeder said there has been a pipeline on his property for as long as he can remember. That pipeline, he said, carried crude oil to a refinery in Mandan, S.D., and in all the years he has been on the ranch, only once does he remember someone coming on the

ranch to service it. That one event, coupled with airplane flyovers, was all he ever knew about the pipeline.

That experience of the minimal impact a pipeline on his property had on him is the vision that he wants to see for future pipeline development in his community.

Veeder said he doesn't have a lot of energy interests on his own ranch, but still with all of the activity in McKenzie County he said he can drive into his property and see five pipelines, a transmission line, and six roads, all of which have been built in approximately the last 12 months, so naturally, he said, that is a real impact for landowners.

"I'm a very strong proponent of pipelines," he said, but it only takes "one bad player" to impact all other operators.

Five to 10 years ago, he said, the big concern with landowners was "how much are you going to pay me to cross my land."

But now, he said, that has changed and he believes that safety has become as a more important issue with the public. He said the public wants know what's in the pipelines, what's going to happen if there is a spill, and what the safety factor is.

He went on to say that he agrees compensation is still a big issue, but reclamation can be even a bigger one because some of the vegetation on newer pipelines has not yet grown back.

In addition, he said, liability is also a big concern and he doesn't think average landowners know what their long-term liability is for a pipeline.

The landman

Veeder said that all of the people he deals with in the pipeline business are professionals, but he said dealing with landowners goes down to the "lowest denominator," and that, he said, is the landman, and it is that person who initially negotiates the lease with the landowner.

More importantly, and what is sometimes unrecognized by the pipeline company, he continued, is the construction company representing the pipeline company. That, he said, could be one of the biggest challenges currently facing pipeline companies. "You will live and die by the professionalism of that construction company that builds that pipeline," he said, and "the damage control after the construction company that came in and drove too fast on the road in front of my place, or left trash on my place, or drove off right-of-way, that can come right back and park on you later when you try to do another pipeline."

On the water side

Veeder noted that he belongs to a water district which builds its own water pipelines, so another growing issue he sees for the pipeline companies is how the influx of oil pipelines might affect the "water side."

People in the community, he said, are aware of this issue and he believes it is the only issue not being addressed as it should be.

Overall, Veeder said, his office is pleased with how the pipeline grid is coming together in his county. He said the message he is trying to promote in his community is essentially the same message that Bridger Pipeline Vice President Tad True has recently been voicing, which is "if you don't like flares, you have to like pipelines; if you don't like trucks, you have to like pipelines."

Words of advice

Offering some last words of advice, Veeder told the pipeline companies at the summit to hire the highest caliber construction company they can, and make sure its people that are out there on the ground on a daily basis are professional.

The faster a company can get on and off of a landowner's property, the less chance there is of a landowner making a complaint to the pipeline company, he said.

Western North Dakota, he continued, is very rugged land, especially in McKenzie County where erosion and invasive species are important issues on the native prairie, so landowners, he said, don't want to "see you in the rear view mirror," but instead he said, they want to see you six months from now, and they want to see you again a year from now.

"It has been a real pleasant experience working with the pipeline companies," Veeder said in closing, and "I appreciate you all working with us and the employment you bring to us." •

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Addressing Landowners

Always address concerns upfront:

- Depreciation of land values
- Perceived impact to personal privacy and access
- Loss of property rights
- Aesthetic impacts
- Compensation
- Location



Doing it right, start to finish

Communication with landowners, sensitivity to their issues key to happy pipeline companies and happy landowners, says KL&J exec

By MIKE ELLERD

For Petroleum News Bakken

he last speaker at the North Dakota Governor's Pipeline Summit was Niles Hushka, chief operating officer of Kadrmas, Lee & Jackson, or KL&J, an engineering, survey and planning firm providing oil and gas services with offices across North Dakota as well as in Minnesota, Montana, Wyoming and South Dakota.

Saying he would bring several different perspectives to the summit, Hushka began by telling the audience that people in his business are in contact with landowners on numerous occasions.

Last year, he said, KL&J "staked about 1,640 of 1,960 wells that are out there," and went on to explain that through activities such as staking, drilling, electrical installation, pipeline construction, and gath-



ering as-builts, his people hear from landowners "from the beginning to the end."

The second perspective Hushka brought to the summit was that of a landowner.

He explained that he was raised in a large family on a farm near Dickenson, N.D., and when he was growing up working on the farm he "cussed" his grandfather many times for "picking the crummiest land in the country and making us haul bales on it." He later married into a farm family, also in western North Dakota, and with energy development on his land, he now thinks there were "two great visionaries" in his family — one being is grandfather "because he picked some great land," and the other himself because "I picked a great wife with great land," he quipped.

Results of Past Methods



Current Installation Methods



Other pipeline positives for landowners he identified are: they are fully functional in all weather in all seasons; they reduce truck traffic and, consequently, reduce road damage; and despite rumors going around, he said, pipelines have significantly less opportunity for spills than do other methods of transporting products.

Addressing landowners

Hushka identified a number of concerns that are always important to landowners, including potential depreciation of land values, impacts to privacy, real or perceived loss of property rights, aesthetic impacts, and fair monetary compensation.

In addition, he said, there may be places on a landowner's property that are "sacred" to the landowner and the pipeline people need to be sensitive to such issues.

"Have the conversations," he said, and talk to them about what the impacts are going to do to their surroundings. "Talk about the fact that there's going to be weeds on that thing and you're going to have to seed it a couple of times."

As a landowner himself, he urged companies to, "talk to me about it, tell me what's there, do your best to repair the scars and we go from there."

Utility corridors

One of the most important concepts in oil and gas development today, according to Hushka, is the "unit corridor" where all utilities are placed in the same corridor. One advantage to this approach is that you only need to talk to the landowner one time, he said, and once the landowner approves it "then off we move." A lot of other things can go into such a unit corridor, Hushka said, including crude transmission, production water, sales gas, fuel gas, fresh water and communications.

So what do these two perspectives offer for pipeline companies?

Pipelines, Hushka said, add significant value to everyone involved in oil and gas production from engineers to landowners, and they offer the most environmentally safe method of transport.

For the producer, he said, pipelines provide reliability, and for the mineral owner, pipelines provide money that goes back into local economies.

And in terms of impacts, "there are very few things that are going on today

that we can say reduce local impacts," but pipelines, he said, do just that. As an example, he said that as a quick rule of thumb, every six-inch pipeline can move more than 12,000 barrels of product per day and remove about 70 trucks from the

Without providing details, Hushka briefly talked about the current shortage of pipeline capacity in North Dakota and said this situation will soon change because his firm has a lot of pipelines on which they are currently working — all of which will be coming into play. There are many pipelines in the queue today, he said, that will tie together major pipeline systems in the area.

Positive pipeline opportunities

road.

Referring to a landowner's concerns, Hushka talked first about the safety of pipelines.

Pipelines, he said, are being built to historically safe standards that continue to be reinforced and "rigidly adhered to."

The oil companies, he said, are under great scrutiny today, and of all of the different clients his firm works for, the one that has the most rules; the one that adheres the hardest to safety; the one that insists that they do everything exactly right every time is the oil industry.

"There's no lax performance in the field and if there is you're out of there."

Pipeline companies, he said, are also insistent on the quality and standards of the people who work on their projects.

Another pipeline positive for landowners, he said, is their very low profile and limited visibility, and that once the pipelines are in the ground there are only a couple markers left. "All can fit in the same place," depending on terrain, he said.

The corridor may need to be "stretched or narrowed," and typically such corridors range from 100 to 150 feet in width, again depending on terrain.

Once everyone agrees about where the corridor is going, then "one fee is negotiated and off we go."

Hushka said he knows there are unit corridors being negotiated today for oil, production water and gas coming off the

see KL&J page B15

continued from page B9 **ONEOK**

The Bakken NGL pipeline

Turning his focus to the Bakken NGL pipeline, Urban told the audience that it will be the first NGL pipeline coming out of the Williston basin. He said this line will allow Oneok to recover ethane and send it to market whereas currently ethane is left with methane in the natural gas stream.

A 12-inch pipeline extending 525 miles from Eastern Montana to the Overland Express line in northern Colorado, will have an initial capacity of 60,000 barrels per day of raw, unfractionated NGLs.

But that capacity, Urban said, can be expanded to 110,000 barrels with additional pumping stations. Construction is presently underway on four of five spreads in Montana and Wyoming.

The project, which is expected to be operational in the first half of 2013, is estimated to cost between \$450 million and \$550 million.

The Bakken Express crude oil pipeline

Stepping into a new service area, Oneok announced in April the 1,300 mile, \$1.5 billion to 1.8 billion Bakken Express crude oil pipeline that will transport up to 200,000 barrels of crude per day from the Bakken to Cushing, Okla.

Urban said Oneok business development people are presently working with producers and anticipate having an open season either later this summer or early fall.

Oneok is looking to begin construction in late 2013 or early 2014, and Urban said they would like to have the pipeline in service by early 2015.

Total Bakken-related investment

In closing Urban summed up Oneok's

total current investment in Bakken-related operations. Oneok is spending between \$1.5 billion and \$1.8 billion in gas gathering and processing in the Bakken, and another \$595 million to \$730 million on NGL projects in the Bakken.

And with the estimated \$1.5 billion to \$1.8 billion to be spent on the Bakken Express crude oil pipeline, Oneok's total current projected investment in the Bakken is between \$3.2 billion and \$3.7 billion. \bullet

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continued from page B11 **ALLIANCE**

watch the webcast and be willing to voluntarily participate in the study.

A commitment to North Dakota

In closing, McGonagill said Alliance believes ongoing commitments to agencies and organizations in North Dakota are very important. He said Alliance, as well as other pipeline operators, is in North Dakota for long-term commercial development, and along with that, have many employees who live and raise their families in the state.

Alliance wants those employees to understand and be proud of the implicit promise.

That promise, McGonagill reiterated, is a commitment to running the safest pipeline in the business, being involved in communities, and more importantly, a commitment to the land and the people and the generations who will follow.

Contact Mike Ellerd at mellerd@petroleumnewsbakken.com continued from page B10
TRANSCANADA

continued from page B14

to a corridor later.

negotiations.

KL&J

that among these three modes of transporting hydrocarbons, pipelines are by far the safest. Any opportunity where a pipeline can be substituted for tanker trucks or railcars is a very good thing for safety and the public, Pourbaix said.

"Not only are pipelines safe, they are

wellhead, and other utilities can be added

alleviate a lot of the issues and problems

encountered today with right-of-way

Past, current development methods

The unit corridor concept, he said, can

Showing a satellite photograph of the

Artesia field in southeast New Mexico,

Hushka pointed out a very high density of

becoming increasingly safer," he said, pointing to an Association of Oil Pipelines Statistics chart showing a rolling average of the number of spills per 1,000 miles of pipe in the U.S.

Pourbaix said those statistics indicate that less than one spill would be projected for 1,000 miles of pipeline operating over three years, and the total spilled volume projected would be less than 400 barrels.

It is "an incredibly safe industry," he

well pads in the field, and said that was how oil and gas development used to be done. All the white marks on the photograph, he said, are "unreclaimed scars." "

Those will never be reclaimed" he said, because, "this was in an era when we didn't have to reclaim scars; this is when we came in and did what we wanted to do."

Then pointing to a photograph of a modern pipeline installation in a rural, fertile and scenic agricultural area, Hushka said "this is the way we install today," using, he said "very comprehensive methods making sure the topsoil is stripped, making sure that we avoid wooded draws continued, and said it is getting safer every day with new, modern construction techniques; leak detection techniques; and fusion-bonded, epoxy coated pipe.

Pourbaix closed by saying the pipeline industry needs to do a better job of getting this information out to the public because there is a lot of bad information out there. \bullet

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when possible, doing everything possible to bore when we can."

The result, he said, is "a line like the Enbridge Alberta Clipper, which has been fantastically restored."

So when pipeline companies come in today, he said, referring to the photograph, unlike in the past, this is how they do work.

"This," he concluded, "makes a happy pipeline company and a happy landowner." ●

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