

Spring 2020

# BASIN BITS

The Official Publication of the Western Dakota Energy Association



## Infrastructure Investments:

## Planning for Future Growth in the Bakken

**COMPLIMENTARY  
PLEASE TAKE ONE!**

Innovative Solutions for  
Using Excess Natural Gas

Virus Will Require  
State to Re-Think  
Legacy Fund Plans

Your Gateway to  
a Career in the  
Energy Sector





## MANUFACTURING LP Since 1973

THE NEW AUTHORIZED HOTSY DEALER IN SASKATCHEWAN

- Minimize down time with mobile service out of all nine branches including;

BISMARCK, ND  
2805 Morrison Ave., Suite C  
Bismarck, ND 58504  
Toll Free: 800-279-0172

WILLISTON, ND  
406 8<sup>th</sup> Ave. E  
Williston, ND 58801  
Toll Free: 877-803-3913

REGINA, SK  
121 Dewdney Ave E  
Regina, SK S4N 4G3  
Toll Free: 855-634-8727



## PRESSURE WASHERS

[www.HotsyAB.com](http://www.HotsyAB.com)



- Skids made to fit in Truck bed or UTV's

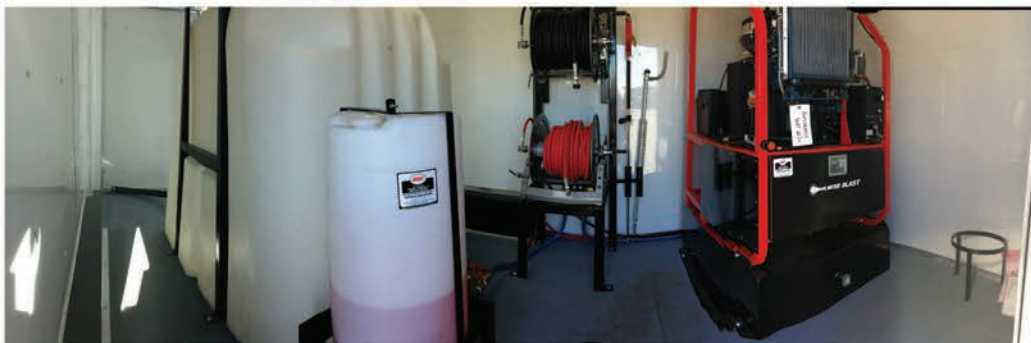


### APPLICATIONS / OPTIONS

- Wet and Dry Steam options
- Portable Truck, Trailer, and Skid Units
- Hydro Excavation
- Wash fleet vehicles and equipment
- Wash water recycling options
- Custom designs as required



- Insulated custom mobile trailers for every need.



## PARTS WASHERS

[www.StormKingPW.com](http://www.StormKingPW.com)



- Custom sizes available

### APPLICATIONS / OPTIONS

- Parts Washers remove grease, oil, dirt, and other debris from Valves, Drill Pipe Ends, and tools.
- Air agitated Caustic Dip Tanks. Fully insulated Natural Gas or electric heated
- Dip Tanks remove bitumen oil, paint, and carbon. Ideal for cleaning Pigs.

COMPLETELY  
AUTOMATIC

INCREASE  
PRODUCTIVITY

IMPROVE  
SAFETY

SAVE  
MONEY



**1-800-328-1555**



**ARIAT**  
**WORK** **FR**



**NOBODY** SELLS MORE  
**ARIAT**  
**FLAME RESISTANT CLOTHING.**



WILLISTON WATFORD CITY MINOT DEVILS LAKE JAMESTOWN GRAFTON GRAND FORKS



PROTECT

**14,000**

GOOD PAYING  
JOBS IN NORTH  
DAKOTA

CONTINUE TO MINE  
COAL IN NORTH  
DAKOTA FOR

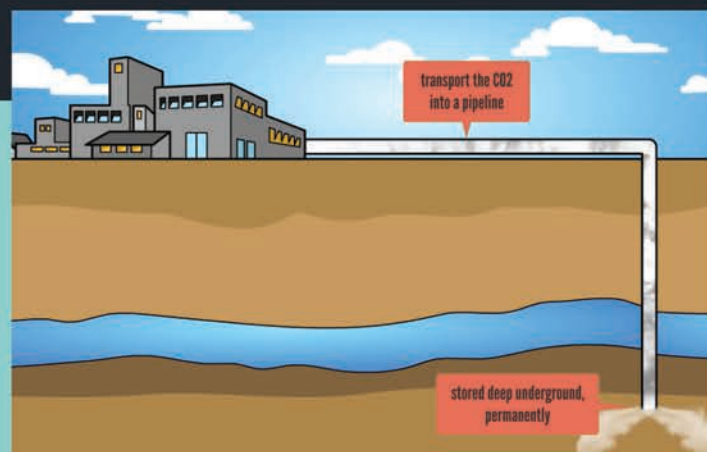
**800**  
YEARS

# CARBON CAPTURE IS HERE

WE KNOW THAT OUR LAND, OUR AIR,  
AND OUR WATER ARE PRECIOUS RESOURCES.

Which is why North Dakota's coal industry is heavily invested in researching and developing next generation technology like Carbon Capture, Utilization, and Storage.

This research will not only enhance our nation leading clean air standards but protect 14,000 good paying jobs by using homegrown energy resources.



[SECUREENERGYFUTURE.ORG/CCUS](https://secureenergyfuture.org/ccus)



# Employee Benefits

**NORTH DAKOTA STYLE**

Let our experts help you custom-design an employee benefits package that works for you today and helps you get to where you want to be tomorrow.

**Let's get started on your employee benefits plan.**

Contact an agent today.



**Holly Bohler**

Williston • 701.715.9029



**Nicole Wolla**

Dickinson • 701.715.9028



**Ryan Hartje**

Bismarck • 701.255.5562



**Derek Van Dyke**

Minot • 701.858.5019



**ND**

**EmployerPlansND.com**

Blue Cross Blue Shield of North Dakota is an independent licensee of the Blue Cross & Blue Shield Association



# THE NAME SAYS IT ALL

Heatec (**HEAT•TECHNOLOGY**) specializes in designing, engineering and manufacturing process heating equipment for petrochemical plants and other industries.

With our experience and knowledge, we can help you choose a custom system right for you. Give a specialist a call today at **423.821.5200** or visit us online at **www.heatec.com**

## PRODUCTS

THERMAL FLUID HEATERS

BATH HEATERS

WASTE HEAT RECOVERY

REGEN GAS HEATERS

ELECTRIC HEATERS

FUEL GAS CONDITIONING



**HEATEC**  
an Astec Industries Company



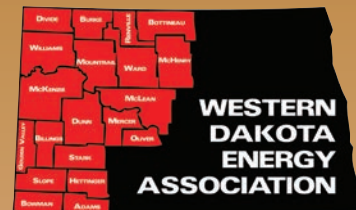
**HEATEC, INC.** an Astec Industries Company

5200 WILSON RD • CHATTANOOGA, TN 37410 USA 800.235.5200 • FAX 423.821.7673 • [heatec.com](http://heatec.com)





# Table of Contents



## BASIN BITS

**Basin Bits is Printed for:**  
The Western Dakota Energy Association

**Association Office**  
1661 Capitol Way  
Bismarck, ND 58501  
www.ndenergy.org

**Geoff Simon, Executive Director**  
Tel: (701) 527-1832 (cell)  
Email: geoff@ndenergy.org

**Printed by:**  
Matrix Group Publishing Inc.  
Please return undeliverable addresses to:  
5605 Riggins Court, Second Floor  
PO Box 41270  
Reno, NV 89504  
Toll-free: (866) 999-1299  
Toll-free fax: (866) 244-2544  
www.matrixgroupinc.net

**President & CEO**  
Jack Andress

**Operations Manager**  
Shoshana Weinberg  
sweinberg@matrixgroupinc.net

**Publisher**  
Jessica Potter

**Editor-in-Chief**  
Shannon Savory  
ssavory@matrixgroupinc.net

**Senior Editor**  
Alexandra Kozub  
akozub@matrixgroupinc.net

**Editors**  
Jenna Collignon, Kaitlin Vitt

**Finance/Administration**  
Lloyd Weinberg, Nathan Redekop  
accounting@matrixgroupinc.net

**Director of Circulation & Distribution**  
Lloyd Weinberg  
distribution@matrixgroupinc.net

**Sales Manager – Winnipeg**  
Neil Gottfred

**Sales Manager – Hamilton**  
Jeff Cash

**Sales Team Leader**  
Tanina Di Piazza

**Account Executives**  
Albert Brydges, Andrew Lee, Bonnie Petrovsky (in memoriam),  
Brenda McPhee, Brian MacIntyre, Cheryl Klassen, Colleen Bell,  
Frank Kenyeres, Jim Hamilton, Jon Beroud, Julie Welsh, Marilyn  
Beek, Michael Couto, Rob Gibson, Sandra Kirby, Tenisha Myke

**Advertising Design**  
James Robinson

**Layout & Design**  
Cody Chomiak

©2020 Matrix Group Publishing Inc. All rights reserved.  
Contents may not be reproduced by any means, in whole or  
in part, without prior written permission of the publisher.  
The opinions expressed in this publication are not  
necessarily those of Matrix Group Publishing Inc.

### OPENING REMARKS

- 8 From the Desk of the Western Dakota Energy Association's President
- 11 From the Desk of the Western Dakota Energy Association's Executive Director

### ON THE COVER

- 14 Infrastructure Investments: Planning for Future Growth in the Bakken

### FEATURES

- 19 Tech Talk: Seeking Innovative Solutions for Using Excess Natural Gas
- 20 New Weather Stations Proactively Tackle Disruption in the Industry
- 24 Virus Will Require State to Re-Think Legacy Fund Plans: State Budget Outlook Puts Wish Lists on Back Burner
- 26 Urea Plant a Godsend for Growers
- 28 Today's Lesson: Funding Education Expansion
- 30 Investment 101: Growing the State's Workforce Will Fill Gaps in the Labor Pipeline & Help North Dakota Flourish\*
- 31 Gateway to Science: Growing Future Scientists & Engineers
- 34 New Tax-Sharing Agreement Aims to Stimulate Investment on Fort Berthold Reservation
- 35 And the Winners Are...

### IN THE SPOTLIGHT

- 37 Kompleks Assessment Solutions: Providing Homegrown Solutions to Complex Problems

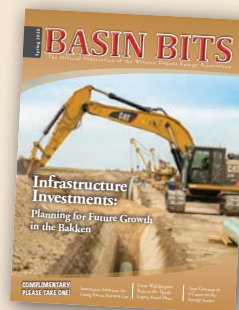
### WDEA NEWS

- 39 Regional Roundup
- 40 Tools of the Trade
- 41 The Bakken Top 20

### INDEX TO ADVERTISERS

## SPECIAL NOTICE:

It is important to acknowledge that in these unprecedented times resulting from both the COVID-19 pandemic and the separate drop in oil price, we are dealing every day with the impact of the unknown. In these uncertain times, we must all work together to get through them and come out the other side. It could take months instead of weeks, and it is crucial we take each day as it comes, planning for both what we face next and for the future, when we eventually get back to our normal routines. While it might be difficult at times, we must stay safe, we must stay healthy, and we must stay positive, tough as it may be, during these trying times.



**On the cover:** This issue's cover shows ONEOK's Elk Creek Pipeline under construction. The 900-mile pipeline, completed in December 2019, runs through North Dakota, Wyoming, and Colorado. It can transport up to 240,000 bpd of unfractionated NGLs and could be expanded to 400,000 bpd with additional pump facilities. Photo provided by Brad Borrer, ONEOK.



## From the Desk of the Western Dakota Energy Association's President



**Shannon Holter**

President

Western Dakota Energy Association

Production Foreman, Murex Petroleum

Member, Bowbells City Council

## Radioactivity is All Around Us:

### Common Sense Required to Address TENORM Issue

#### ABOUT THE WDEA

The Western Dakota Energy Association (WDEA) is the trusted and unified voice for the betterment of the citizens of North Dakota and WDEA membership

#### WDEA'S 2020 EXECUTIVE COMMITTEE SERVES WESTERN NORTH DAKOTA

President: Shannon Holter, City of Bowbells

Vice-President: Trudy Ruland, Mountrail County

Past President: Supt. Gary Wilz, Killdeer Public School District

Daryl Dukart, Dunn County

Zach Gaaskjolen, City of Stanley

Supt. Shon Hocker, Dickinson School District

Mayor Lyn James, City of Bowman

Doug Nordby, McKenzie County

John Phillips, Coal Conversion Counties, Beulah

Supt. Brad Rinas, Coal Conversion Counties, Washburn

**T**ENORM. What is it? It's one of those things that when people hear it, they tend to think the worst. TENORM stands for technologically enhanced naturally occurring radioactive material. We know it's associated with oil and gas production, but probably the biggest issue associated with handling it is a lack of public knowledge about what is NORM—all the natural materials around us that contain radioactivity.

Many people do not realize how common NORM actually is. NORM is everywhere. In fact, it is about as natural and organic as it gets. Our air, water, food, and soil contain NORM.

NORM associated with oil and gas production includes silt, sediment, and other particulates brought to the surface by drilling operations. NORM is not produced by humans; it was put there by nature. Oil producers just bring it to the surface through extraction procedures. Pipes, tanks, treaters, and filter socks are some of the places it becomes concentrated. Filter socks seem to draw the most attention from people who do not understand NORM.

Radioactivity is measured in picocuries. North Dakota requires special disposal of any material exceeding 5 pCi/g (picocuries per gram). The level is typically higher than that in filter socks. How does it get there? Produced water is filtered through the sock before it's injected down

a saltwater disposal well. The sock catches the sediment, silt, and other particulates, while allowing water to flow through.

Like any other filter, the sock eventually becomes plugged and is replaced with a new one. The used sock, which has concentrated the NORM, is temporarily stored in a special container on-site. After the container is full, it is hauled to a special landfill (currently out-of-state), where it is disposed of properly.

How much radioactivity is concentrated in filter socks? On average, the level in a filter sock is from 13.8 to 32.8 pCi/g. Comparing that figure to the level in some everyday items might surprise people. Fresh ground coffee contains 27 pCi/g, phosphate fertilizer has up to 127 pCi/g, and sunflower seeds contain eight pCi/g. Another product emitting low-level radioactivity is the granite countertops commonly found in our homes. The very spot where people prepare their food has a level of 27 pCi/g, which is higher than most filter socks.


In addition to filter socks, TENORM is commonly found in tank sludge, pipe scale, filters, and other equipment at oil and gas producing operations. As noted, disposal of the material requires special treatment, but it's essential the public understands the health risk associated with the material is extremely low.

Radiation is everywhere, so we're all exposed to it. But more important than the level of radioactivity is individual exposure



or the amount the body absorbs. To put this in perspective, a person could stand next to a dumpster full of used filter socks and receive the same or less exposure than a single day of the average exposure from naturally occurring background radiation.

The bottom line is that all of us want to reduce our exposure, regardless of the source of radiation. The less time spent around radioactive material, the better. But proper protective equipment and handling, including the use of gloves and proper containers, are good industry practices that further minimize the minor risk associated with the handling and disposal of TENORM.

NORM is something we live with every day. So, to hear the word TENORM and instantly form a negative opinion is unfair. Learning what it is, and how to handle and dispose of it properly, will help us all understand the issue and manage it appropriately. 



*The less time spent around radioactive material, the better... proper protective equipment and handling, including the use of gloves and proper containers, are good industry practices that further minimize the minor risk associated with the handling and disposal of TENORM.*

*\*It is important to acknowledge that in these unprecedented times resulting from both the COVID-19 pandemic and the separate drop in oil price, we are dealing every day with the impact of the unknown. In these uncertain times, we must all work together to get through them and come out the other side. It could take months instead of weeks, and it is crucial we take each day as it comes, planning for both what we face next and for the future, when we eventually get back to our normal routines. While it might be difficult at times, we must stay safe, we must stay healthy, and we must stay positive, tough as it may be, during these trying times.*



**BARR**

serving the oil and gas industry

Barr Engineering Co. provides integrated engineering and environmental services to clients working on oil and gas exploration and production, at refineries, and with pipelines and terminals. We're familiar with feedstocks, processes, products—and the associated challenges. We have over 900 employees and 10 offices across North America, including one in Bismarck, as well as a satellite office in Williston. Barr provides engineering and design and environmental services for construction, operations, and regulatory permitting and compliance projects. We also work with clients on projects involving:

- release response
- investigation and cleanup
- fate and transport modeling
- long-term remediation
- site restoration and reclamation

contact: Mandar Nangare at 701.255.5474 or [mnangare@barr.com](mailto:mnangare@barr.com) | [www.barr.com](http://www.barr.com)  
North Dakota | Minnesota | Michigan | Missouri | Utah | Colorado | Alberta



# Jameson Safety LLC

‘So your workers have  
an understanding of  
awareness and safety.’



(701) 609-0968  
<https://jamesonsafety.info/>

4917 11<sup>th</sup> Avenue West  
Suite 504  
Williston, ND 58801



## From the Desk of the Western Dakota Energy Association's Executive Director



**Geoff Simon**  
Executive Director  
Western Dakota Energy Association

### Lessons Learned from the Pandemic:

### The Only Thing Certain is Uncertainty

**N**orth Dakotans have persevered through lots of ups and downs in the state's history, but the reversal of fortune and truly frightening events of this year will likely change the state forever.

North Dakota was slammed in March with a double-barreled punch to the gut. Early in the month, negotiations broke down between Russia and Saudi Arabia about oil supply cuts aimed at stabilizing oil prices, which had begun to decline due to falling global demand resulting from a deadly, new virus spreading in China.

In response to the failure to reach a deal with Russia, the Saudis launched an all-out price war. Oil prices and stock indexes took a nosedive after Saudi Arabia stunned the world by offering a discount in oil prices of \$6 to \$8 per barrel to customers in Asia, the U.S., and Europe.

Concern about plummeting oil prices sent shockwaves through North Dakota oil producers and policy makers, but in mid-March, the state and the world were smacked by an even bigger punch. The novel coronavirus that started in China had begun to spread rapidly across the U.S., arriving in North Dakota with the announcement on March 11 that a Ward County man in his 60s had contracted COVID-19, the disease associated with the virus.

On a Sunday night just four days later, "out of an abundance of caution," Gov. Doug Burgum ordered the closure of North Dakota's Kindergarten to Grade 12 schools in an effort to slow the spread of COVID-19. Everyone hoped the shutdown would be short-lived, but with confirmation of additional cases

*The novel coronavirus that started in China had begun to spread rapidly across the U.S... The economic damage will be profound... With more than half of North Dakota's tax revenue attributable to the oil industry through production, extraction, and sales taxes, the coming budget crunch will be a tremendous test for Gov. Doug Burgum and the state legislature.*

in the ensuing days, it became clear no one could say with any certainty when school would resume.

Based on advice from the Centers for Disease Control that public gatherings of 10 or more people temporarily cease, the shutdown gradually spread through society. Basketball tournaments and other sporting events were immediately cancelled, church services were suspended, air travel all but ceased, and eventually bars, restaurants, and other businesses closed to the public. Citizens were urged to "shelter in place," or self-quarantine if they felt ill. But perhaps the scariest part of all was the pervasive uncertainty—no one could say when society would return to normal.


The reality is life will never be the same. It's another 9/11-like event, not just for the United States, but for every country on Earth. The world will be forever changed.

The terms "social distancing" and "community spread" will always be part of the American lexicon. Stay six feet apart (or two meters, if you're Canadian). It's difficult to imagine society will return to previously accepted standards, even after the pandemic ends. We've known for a long time that hugs and handshakes spread germs, but the worst

that happened to huggers and handshakers was maybe a bad cold or the flu. But with the prospect of contracting a potentially lethal disease, will it ever be the same?

The economic damage will be profound. The rig count in North Dakota was already plummeting in April, and many of the new wells that were being completed were immediately shut in. With more than half of North Dakota's tax revenue attributable to the oil industry through production, extraction, and sales taxes, the coming budget crunch will be a tremendous test for Gov. Doug Burgum and the state legislature.

Will any good come from the pandemic? Undoubtedly, we will be better prepared if, and when, another deadly virus begins to spread. People have also developed a newfound appreciation for the doctors, health care workers, and medical researchers who are helping us get through this nightmare.

We've also developed an appreciation for the truly important things in life—our families, friendships, and quality of life—and the freedom to enjoy them. The lesson everyone should learn from this experience is that nothing in life is certain. The world could end tomorrow, so live every day to the fullest. 



## BILFINGER WESTCON

Proudly serving the Oil Patch since 1981

Industrial General Contractor



Civil  
Structural  
Mechanical  
Equipment Setting  
Planning/Scheduling  
Progress Reporting  
Cost Reporting  
Project Management  
Subcontractor Management

**Bismarck, ND 701-222-0076**

## HIGH COUNTRY FUSION



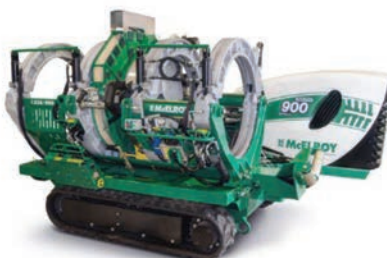
A DIVISION OF CONSOLIDATED PIPE & SUPPLY CO.

### "The Perfect Fit Solution"

High Country Fusion is a leading supplier of high density polyethylene pipe, molded fittings, equipment rental, repairs, technical support, and sales.

High Country Fusion is dedicated to serving the Bakken and surrounding areas with all of your HDPE, steel, piping, and equipment needs.

A worldwide leader in piping, fittings, structures, fusion equipment and all accessories for the energy, oil and gas, utility, industrial, water and sewer markets.



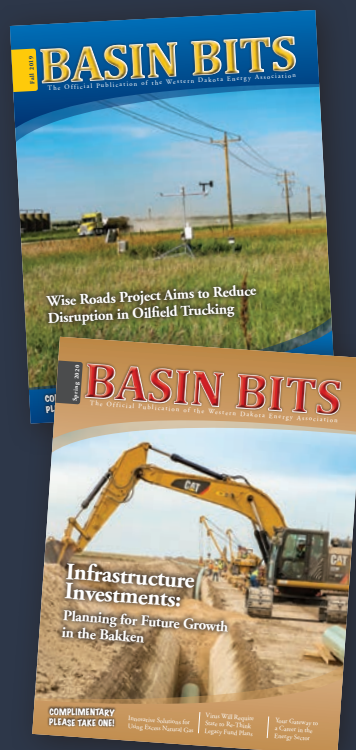
**McELROY**

11118 30 J St. SW  
Dickinson, ND 58601  
PH: 701-483-4232  
FX: 800-706-9301  
[www.highcountryfusion.com](http://www.highcountryfusion.com)

**Piper**  
OILFIELD PRODUCTS

22 40<sup>th</sup> Avenue North East  
Minot, ND 58703

Office: (701) 839-0910  
[www.piper-oilfield.com](http://www.piper-oilfield.com)



## BE SEEN IN THE BAKKEN AND BEYOND

Did you know *Basin Bits* is distributed to thousands of key industry players across the U.S. and Canada?

Put your best foot forward and expand your reach by putting your product right in front of these decision-makers.

Contact

[sales@matrixgroupinc.net](mailto:sales@matrixgroupinc.net) or  
call (866) 999-1299 to book  
your space today.





# **SIMPLE SOLUTION – COMPRESSION SERVICES**

Providing customers quality natural gas compression services safely and efficiently – 24/7.



## **THE POWER TO PERFORM.**

J-W Power Company specializes in an extensive line of natural gas compression packages designed specifically to meet your requirements. Our products are engineered to surpass anticipated performance in day-to-day operations.

We offer simple solutions where quality configuration meets ease of operation.



**Sales | Service | Rental**

[sales@jwenergy.com](mailto:sales@jwenergy.com)  
[www.jwpower.com](http://www.jwpower.com)

**972-233-8191**





*The 900-mile Elk Creek Pipeline  
runs through North Dakota,  
Wyoming and Colorado.*



# Infrastructure Investments:

## Planning for Future Growth in the Bakken

By Paul Adair

Last year, North Dakota smashed a new daily oil production record, with nearly 1.52 million barrels of oil per day produced in November. In addition, natural gas production in the state topped three billion cubic feet per day, which was a first for the state, and North Dakota's producers went from capturing 81 percent of natural gas volume to 84 percent, further reducing flaring in the state.

"Last year, 2019, started out pretty strong, with good oil prices, a lot of investment, and a gas capture policy that allowed more flexibility for the industry," says Lynn Helms, director of the state's Department of Mineral Resources. "Then, in the second half of the year, oil prices took a step back, as did investment by about 10 percent. But even with that drop, we still saw a five percent increase in oil production over the previous year, an increase

of 13 percent in natural gas production, and a 24 percent increase in the daily volume of gas captured. We may not have hit all of our targets, and there's still some infrastructure that needs to get built, but last year was a strong year for us. This year, so far, certainly doesn't look nearly as good."

Even though a number of gas processing plants came online last year, which has allowed North Dakota to come closer to its current gas capture goal of 88 percent (91 percent by November 1, 2020), the state still believes natural gas production will reach five billion cubic feet per day sometime within the next decade. This means additional processing infrastructure and takeaway capacity (to the tune of about \$18 billion in investment) will be required before too long.

"Even if oil production experiences a slower growth rate into the future, we are expecting a significant growth in natural gas production," says Justin Kringstad, director at the North Dakota Pipeline Authority.

"Right now, there are a number of new gas plant projects that account for just over a billion cubic feet per day under construction or in the planning phase, and these additional plants will be absolutely necessary for North Dakota to address gas capture and assist the industry in reaching targets set by the Oil and Gas Division of the Industrial Commission. But by the mid-2020s, we expect to be back in an environment where we will need additional investment."

Throughout the last decade, Tulsa-based ONEOK has dedicated itself to building the critical midstream infrastructure required by its customers and has endeavored to do its part in helping reduce flaring in the Bakken in a safe and environmentally responsible manner.

ONEOK's Elk Creek Pipeline was completed late last year and is now providing critical natural gas liquids (NGL) takeaway capacity to the region. As such, NGL volume is now flowing on the fully completed



900-mile pipeline, which extends from the Williston Basin to ONEOK's existing mid-continent NGL facilities in Bushton, Kansas. This \$1.4-billion project has the capacity to transport up to 240,000 barrels per day of unfractionated NGLs and has the capability to be expanded to 400,000 barrels per day with additional pump facilities. Eventually, ONEOK expects total Rocky Mountain NGL volume transported on the Elk Creek and Bakken NGL pipelines to reach much more than 240,000 barrels per day.

"The completion of Elk Creek provides critical NGL transportation to producers in the highly productive Williston, Powder River, and Denver-Julesburg basins," says Terry K. Spencer, ONEOK president and CEO. "Elk Creek, combined with ONEOK's investments in additional natural gas processing infrastructure in the region, will help producers significantly reduce natural gas flaring in North Dakota."

Looking ahead, however, and considering the impact of the COVID-19 crisis and the ongoing oil standoff between Russia and Saudi Arabia, the road ahead seems very rough—much rougher than it did even a few short months ago. Even the most pessimistic prognosticators would have had a hard time predicting where oil finds itself today.

The severe and sudden drop in oil prices has had a chilling effect on the industry, and it would appear as though investors will not be backing substantial growth in the Bakken, at least through the first half of 2020. Should operators look to grow production, they will have to do so through free cash flow, and, with this recent fall in oil prices, that may prove to be exceedingly difficult to accomplish.

"We are anticipating a very difficult investment climate for the next while," says Helms. "There won't be much outside capital pouring into the exploration and production sector in an effort to grow that industry segment. That said, however, we expect outside capital will continue coming into the midstream and gas processing side, but even that will be lessened."

A major investor last year, ONEOK has reduced its growth capital guidance to a range of \$1.60 billion to \$2.40 billion, with a midpoint of \$2.0 billion, a decrease of approximately \$500 million from what it had previously planned. The hope is that this new range will offer the company a measure of flexibility in a volatile market to adjust accordingly to volatile producer activity.

"Given the significant inventory of flared natural gas in the Williston Basin



*The ONEOK Demicks Lake plant in North Dakota. Photos in this spread provided by Brad Borror, ONEOK.*

and fully contracted growth in the Permian Basin, and factoring in the current commodity price environment and assumed rig reductions, we expect our 2020 results to be within our previously announced guidance ranges," says Spencer. "We are working with our producers on any updates to their drilling plans and evaluating the impact on our future volume expectations, and we will make adjustments to financial guidance, if appropriate."

As part of its reduction in capital expenditures, ONEOK has suspended its 200-million cubic feet per day expansion of the Demicks Lake natural gas processing facility, its Demicks Lake III project, and any related infrastructure in the Williston Basin, as well as its 100,000 barrel per day additional expansion of the West Texas LPG pipeline in the Permian Basin. In addition, the scope of the Elk Creek Pipeline expansion will also be reduced, with the ability to add future pump stations incrementally to meet its customers' changing needs.

"The planning and work we have already completed will allow us to quickly resume these suspended capital-growth projects when the environment improves and our customers require these services," says Spencer. "Break-even prices for our well-capitalized producer customers have improved significantly over the last several years, which gives us the confidence the Williston Basin will remain a competitive producing region through this volatile and uncertain commodity price environment."



*The Elm Creek Pipeline can transport up to 240,000 bpd of unfractionated NGLs.*

# INGU

## Pipers® Deeper Pipeline Insights With Ease

Free-floating Pipers® collect data from inside inaccessible or unpiggable pipelines – and with no shutdown required, operators save time and money with every inspection.



### Leak detection survey

Identify and localize leaks in any pipeline under operational conditions.



### Geometric survey

Combined with a cleaning pig, Pipers® can map a pipeline including the bend angles and radii.

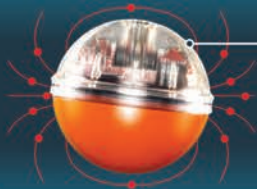
### Deposit survey

Pipers® can identify flow restrictions such as deposits, diameter changes, or a collapsed liner.



### Magnetic survey

Pipers® assess the overall wall condition of a pipeline (pristine to corroded), detect fittings, welds, and areas with severe metal loss.



### GO WITH THE FLOW

Free-floating and CSA certified, Pipers® move along with the liquid in the pipeline – they won't get stuck, even in complex systems.

LEARN MORE AT  
**INGU.COM**



# THE INGU ADVANTAGE

In Calgary, Canada's oil capital, one company is changing how pipeline data is captured – even here in North Dakota, where nearly 27,000 miles of gathering pipelines operate and traditional inspections are costly. INGU Solutions and their innovative sensors, Pipers®, are creating a safer, more efficient future for pipeline leak detection and prevention.

INGU's founder John van Pol started the company in 2014, after learning of the difficulties operators face while inspecting certain pipelines. He also saw that the cost of shutting down operations to perform inspections was prohibitive. Working to solve these problems, INGU designed the first Pipers® – small enough to fit and collect data in almost any operational pipeline, even those considered unpiggable or inaccessible. As of March 2020, INGU has screened more than 150 pipelines, totalling over 430 miles.

The field deployment of the Pipers® is simple. INGU sends Pipers® to the site, and an operator activates them and drops them into an operational pipeline. For up to 24 hours, it will flow freely, collecting data, after which it is retrieved from a designated point.

The collected data highlights INGU's capabilities. Pipers® are 2.2 inches in diameter and are able to withstand pressures up to 1,450 psi, and operate between -4 and 140 °F. Pipers® contain multiple sensors, including a pressure sensor to identify blockages, an acoustic sensor to detect leaks, and a magnetometer to assess the wall condition.

Once retrieved, the Pipers® are sent back to INGU where the data is extracted and analyzed, and the results are provided to the operators, who only pay for the information they need. This allows for informed decisions and deeper insights about their pipelines, with zero downtime – resulting in a more efficient inspection with better leak prevention and detection.

INGU's success also comes from recognition by some of the industry's biggest players. INGU was one of the first companies selected by Chevron Technology Ventures' Catalyst Program in 2017. Another boost to INGU's reputation came in May of 2018, as the company was selected by iPIPE (Intelligent Pipeline Integrity Program) to verify its leak detection and prevention capabilities throughout the pipelines of North Dakota.

iPIPE is a consortium of industry leaders, focusing on the development of emergent technologies to help avoid leaks in real-world settings. The representatives saw the potential of the Pipers® in one of the most difficult aspects of the entire industry, and the field tests confirmed the leak prevention capability of the Pipers®.

"North Dakota is a state with a lot of gathering pipelines. That's really our sweet spot in the market," John told host Russel Treat on [a recent episode of \*The Pipeliners Podcast\*](#). "When the first iPIPE pitch session came, we took the opportunity and pitched our project, and fortunately we got selected as one of the first companies to participate in the iPIPE program."

But iPIPE was just the beginning. Other global programs are now taking notice, such as Forbes, who selected INGU as one of 19 (out of 3,000 competitors) "[Innovative Tech Startups to Watch](#)". INGU received a top ten placement at the Most Promising Companies at the 2019 Rice Alliance Startup Roundup in Houston. And in November, INGU received growth capital from Energy Innovation Capital and Chevron Technology Ventures, allowing it to scale its operations.

Pipers® are used in oil and gas fields all around the world. With their proven ability to detect leaks, improve pipeline safety, and save operators time and money, the INGU difference is a welcome addition to the industry.



**The first and only vertical cuttings dryer  
capable of processing water-based  
cuttings with a Class 1 - Division 1,  
explosion proof, air cooled control panel.**



- Designed to reduce drill cuttings moisture on waste solids by 95%.
- Recover thousands of gallons of drilling fluid and water that would normally have been disposed of with the waste drill cuttings.
- Dewatered waste solids dramatically reduce waste disposal trucking fees.
- Direct-drive technology for oil-based and water-based applications.

**281-261-5778 • [www.ElginSeparationSolutions.com](http://www.ElginSeparationSolutions.com)**



# Tech Talk: Seeking Innovative Solutions for Using Excess Natural Gas

By Mark Halsall

Last summer, the daily volume of gas flared hit an all-time-high in North Dakota's oil patch. Industry professionals are interested in researching ways to extract more oil in the Bakken while, hopefully, curbing flaring over the long-term.

A two-year pilot project that received an \$8 million grant from the U.S. Department of Energy and was approved by the North Dakota Industrial Commission in November was underway. The project, which has since been put on hold indefinitely as a result of the evolving COVID-19 pandemic, was going to focus on a new, enhanced oil recovery process that would use a proprietary foam and natural gas mixture to be injected underground.

The team had hoped the pilot project would offer a sustainable, game-changing technology that could have been used across the Bakken and in other unconventional plays.

Carbon dioxide is already being used for enhanced oil recovery in the Bakken, according to the North Dakota Department of Mineral Resources. This pilot project that is no longer taking flight had hoped to mark the first time natural gas and foam would have been used in the Bakken to help unlock the potential of enhanced oil recovery innovation.

Currently, most crude oil is left behind in the hydraulically fractured rock produced by fracking. The foam and gas method would increase the pressure in the subsurface, enabling the injected natural gas to enter very tight spaces within the rock, pushing out oil that wasn't extracted initially.

North Dakota Department of Mineral Resources Director Lynn Helms believes the foam and gas method could lead to more oil being squeezed out of existing wells. He points out that similar projects in Texas have shown a 30 to 70 percent increase in oil recovery.

If proven successful one day, Helms feels this technology could lead to a significant increase in the state's oil production. The current oil recovery rate, he says, is about 20

*"The technology is very scalable. If it's successful, it could be applied to hundreds or thousands of spacing units in the Bakken formation [and] that could reduce flaring to almost zero."*

percent in the core area of the Bakken, but he believes that number could rise as high as 35 percent if the technology could be proven successful and be widely adopted by the oil industry.

Helms maintains the foam and gas method could also result in a dramatic reduction in flaring, since the technology would store produced natural gas underground, while the infrastructure for transporting it to processing is constructed.

"It has the potential to provide temporary storage, which relieves the pressure on gas capture and flaring," he says.

"The technology is very scalable," Helms adds. "If it's successful, it could be applied to hundreds or thousands of spacing units in the Bakken formation [and] that could reduce flaring to almost zero. We would move toward lower carbon oil production, and that's certainly a worthy goal," he says.

## DEALING WITH SOUR GAS

Helms notes there's also work underway aimed at addressing another concern in North Dakota's oilfields. It has to do with a contaminant in some natural gas called hydrogen sulfide, also known as sour gas.

Hydrogen sulfide, which is toxic when inhaled, is normally handled at a processing plant after it has been extracted at a well site. However, if there's too high a concentration of it in the natural gas, the gas can be rejected by the processing companies because the new gas gathering and processing infrastructure has been built for sweet natural gas.

Helms says a group of agricultural input suppliers is currently studying the viability of transforming the hydrogen sulfide scavenger into a soil enhancement product.

He notes that one Bakken oil producer, Enerplus Resources, is assisting with the research project by providing samples of the hydrogen sulfide scavenger used in sulfur treatment equipment the company recently installed at its well sites.

According to Helms, if the group is able to produce a safe and effective soil enhancement product from hydrogen sulfide, it could not only help solve North Dakota's sour gas problem; it could also provide a new fertilizer source for the state's farmers.


"I'm told our soils in North Dakota have a high pH, and they are very low in sulfur, so this looks like it could be a good fit," he says.

## NEW CYROGENIC CAPACITY

Another positive development for North Dakota's oil and gas industry, says Helms, is the move by XTO Energy, Inc. and Outrigger Energy II to expand the natural gas gathering and processing system in the Williston Basin.

An agreement between the two companies announced in January will see Outrigger build a 70-mile-long natural gas pipeline that will feed a new, 250-million-cubic-feet-per-day cryogenic processing plant to be constructed near Williston. There are also plans for a plant expansion of an additional 200 million cubic feet per day.

Outrigger CEO Dave Keanini said in a company statement that the new plant and pipeline will provide other Williston Basin operators access to much needed gathering and cryogenic processing capacity.

"Moreover, this additional midstream capacity for gas production north of the Missouri River allows the State of North Dakota to make strides toward its goal of minimizing gas flaring in the Basin," he said. 



# New Weather Stations Proactively Tackle Disruption in the Industry

*This weather station was installed last fall at Antelope Creek in McKenzie County during phase two of the project.*



*The view from the station on Rat Lake Road in southwestern Mountrail County, which was installed during phase one of the Wise Roads project. The project gives real-time information of the area, like this water truck on the road.*

By Kaitlin Vitt

A project launched last year in North Dakota aims to minimize weather-related disruptions in the oil industry, but the benefits extend beyond just the oilfields.

When roads get wet from heavy rainfall, local governments impose weight restrictions to protect gravel roads, the same gravel roads oil operations use. Though this is beneficial to reduce damage to the roads, sometimes operations are shut down unnecessarily.

Until now, people have been relying on weather data that sometimes comes from a station 30 to 40 miles away from the area they are concerned about. But Wise Roads (Weather Information System to Effectively Reduce Oilfield Delays and Disruption) aims to target this. Through this project, research-grade weather stations are being installed in the Bakken to monitor weather conditions, providing accurate, consistent, localized data.

For this project, the Western Dakota Energy Association (WDEA) has partnered with the North Dakota Agricultural Weather



Network (NDAWN) and the Local Technical Assistance Program (LTAP) of the Upper Great Plains Transportation Institute. In phase one, 10 test sites were installed. Phase two is ongoing, with the goal of 15 more Wise Roads weather stations. In total, 50 sites are funded and will continue to be installed as time permits, hopefully in 2020.

"It isn't cheap, but if you have to shut down the industry due to poor conditions, that would be even more expensive, and then everyone has to get involved," says Curtis Glasoe, the LTAP lead for Wise Roads. "We want to go as long as we can without having to reconstruct the roads."

Each weather station costs about \$10,000, and the partners involved say the benefits go beyond the investment. When road restrictions are in place for a few days, oil production may need to be shut down. By the time operations are up and running again, the company could have millions of dollars in lost revenue.

Industries besides oil, such as agriculture, will also benefit from this project. Jonathan Rosencrans, WDEA meteorologist, says he's talked with farmers and ranchers who own land in the area, in addition to local officials, and, though it was the first they'd heard about the project, they were excited about it.

Ultimately, Wise Roads will help get oil out of the ground and crops out of the field. For example, producers can use the weather stations to determine the potential for crop diseases. The data from both Wise Roads and previously existing weather stations is publicly available on NDAWN's website, [www.ndawn.ndsu.nodak.edu/current.html](http://www.ndawn.ndsu.nodak.edu/current.html).

## BETTER ROADS, BETTER RESULTS

Wise Roads partners are looking into embedding probes in gravel roadbeds near the stations to provide moisture density levels. Right now, these probes are inserted into soil adjacent to the weather stations, but gravel and soil don't have the same composition. Getting an accurate look at the data from the gravel will help to determine the best way to build gravel roads and will give a better idea of how much rainfall these roads can withstand, helping to know when to leave roads open and when to close them.

"We can coordinate the closures with people, so we can keep the industries growing without damaging the roads," says Glasoe, adding that though there is existing research similar to this along state highways, to his knowledge, this is the first research of its kind for county roads.

Though it's still early in the project, by assessing anecdotes and based on the results

*The weather station installed during phase two along a road in Four Bears Village in McKenzie County last fall.*



from the initial 10 test sites, the results are clear: Wise Roads is working.


People involved with this project, like Daryl Ritchison, director of NDAWN, say the new stations have already given examples of some roads that, in the past, would have been closed due to non-local weather data could have remained open, which is a positive sign for 2020, when the network is expected to be operational.

"In 2020, we will be able to enhance our knowledge of how this has been helping," says Ritchison. "We had some test beds and, so far, it has proven that we can get much more accurate rainfall patterns than before, helping counties determine which roads should be closed and which can be open."

The stations installed so far have been in Dunn, McKenzie, Mountrail, and

Williams Counties, which produce more than 90 percent of North Dakota's crude oil. The stations installed this spring are considered phase two of the project. During this phase, ongoing communication with the oil industry is being done to see where these companies plan to be drilling in the next five to 10 years.

"The core is almost drilled out," says Geoff Simon, executive director of the WDEA. "That means additional drilling activity will be moving out from those core counties, or at least to the periphery."

Wise Roads is a collaborative effort, bringing together various partners and interacting with different industries out in the field, something that will continue as the project moves into its next phase. 



**Petro-Hunt, LLC**

701-258-1557

P.O. Box 935, Bismarck, ND 58502

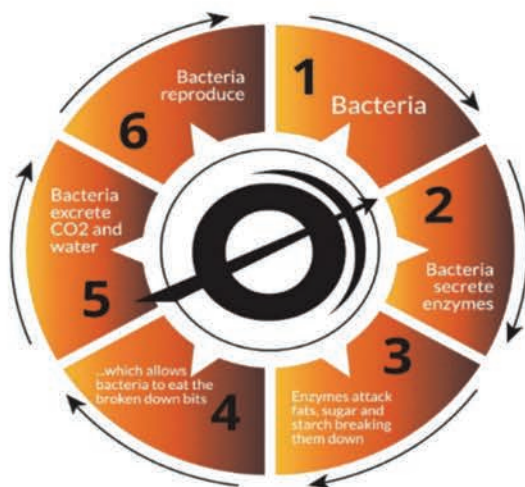
[www.petrohunt.com](http://www.petrohunt.com)



**OUR MISSION:** Utilizing Technology, to Leave the Environment Better For Future Generations.

**OUR SERVICE:** Orion Biotechnology International is a service company that provides a safe, effective, and environmentally friendly method of remediating pollutants on land and water.

**OUR METHOD:** The method we use is bioaugmented bioremediation which is introducing microbes previously collected from other sites and commercially cultivated. These microbes have been proven to have a high tolerance for inhospitable environments combined with a superior ability to use the resources (oxygen, nitrogen etc.) available-hence out competing local microbes and cleaning sites rapidly.



- The microbes consume and convert the oil.
- The converted oil becomes a fatty acid.
- Microbes perish after all the oil is consumed.
- The end-products are: carbon, energy for higher organisms, carbon dioxide and water.





**Before**

**After**

**Project:** Oil Spill Clean-up  
**Contaminant:** Maddison Oil  
**Method:** Bioremediation  
**Product:** Athena  
**Clean up time:** 60 Days

## **GENERAL PRODUCT BENEFITS**

- Cost Effective-minimum disruption to sites where structures are involved.
- Total elimination of “Cradle to Grave Liability”-it destroys the contaminate.
- Works rapidly-projects are closed on time within target dates.
- Non-Toxic
- Tolerant of pH levels between 5.5-10.0
- Activated by either salt water or fresh water
- Optimal Temperature range of 32F-120F
- Certified Pathogen Free

The proprietary blend of microbes has undergone the rigorous testing required to be listed as a Microbiological Culture on the Environmental Protection Agency National Contingency Plan Product Schedule. It is certified as being pathogen free and has been used for many years and no toxicity has been noted.

While there is no requirement for pathogen testing, this product is routinely checked for the most common health pathogens so you can be certain nothing has crept in during the production process and you're getting a high quality, consistent product every time you order.

**Contact Information:**  
**Website:** [orionbioint.com](http://orionbioint.com)

**Luke Lee- 701-421-5825**  
**Email:** [llee@chiefos.net](mailto:llee@chiefos.net)

# Virus Will Require State to Re-Think Legacy Fund Plans:

## State Budget Outlook Puts Wish Lists on Back Burner

By Geoff Simon

**T**he 2019 North Dakota Legislature formed an interim study committee in hopes of resolving what has been a burning question the past few years—what to do with the earnings from the state's Legacy Fund. But with the outbreak of the COVID-19 pandemic and the ensuing downturn in the state's economy, any earnings may be needed to support the basic functions of state government.

House Majority Leader Chet Pollert, who chairs the interim committee, agreed that “all bets are off” when it comes to using the earnings for non-essential spending.

“Things can turn around quickly, but I’m not counting on it,” says Pollert. “We may have to again look at plugging holes in the state budget with those dollars.”

North Dakota voters established the Legacy Fund in 2010. It's the state's oil tax trust fund, and, prior to the economic crisis, the fund's investments had been generating hundreds of millions of dollars of earnings. Thirty percent of all oil tax revenue collected by the state is deposited in the Legacy Fund. For the first seven years of the fund's existence, earnings had to be reinvested. But for the first time, at the end of the 2017-19 biennium, the Legacy Fund's earnings for the two years—a total of \$454 million—were transferred to the state general fund.

The 2019 Legislature devoted most of the cash to patching up the state's budget



*Sen. Rich Wardner pitching his ideas at a North Dakota Association of Counties meeting back in October.*

and replenishing its “rainy day” fund, which was depleted during the 2017 session, following the slump in oil prices. With the state restored to relatively good financial shape, citizens and policy makers had begun to debate how to use the earnings from the now nearly \$7 billion fund. Among possible uses, the language that established the study committee directed members to consider tax relief, reinvestment, and research and technological advancements, and to promote workforce development and career and technical education.

The spread of the virus has forced everyone to put those wish lists on hold. But, some

day, conditions will improve, so it makes sense to continue talking about different ideas in the meantime.

### MANY IDEAS ALREADY ON THE TABLE

Several ideas for use of the earnings were floated during the 2019 session, but all were rejected. One would have asked voters to change the constitution, so all earnings would once again be reinvested. Calculations presented by Rep. Corey Mock, D-Grand Forks, showed that if all earnings were reinvested for the next 40 years, the Legacy Fund would grow to \$143 billion.



Also rejected during the session was a proposal introduced by Rep. Craig Headland, R-Montpelier, that would have created the Income Tax Rate Reduction Fund. Headland's legislation would have used Legacy Fund earnings to reduce personal and corporate income taxes, possibly eliminating them altogether within 10 years.

Senate Majority Leader Rich Wardner, R-Dickinson, who serves on the interim Legacy Fund Earnings Committee, has pitched several ideas. He believes any use of the money should accomplish three things: improve quality of life, reduce the tax burden, and lessen the state's dependence on the federal government.

Wardner would like to devote 25 percent of the Legacy Fund's earnings to the state's Highway Trust Fund, which he said would fend off a need to raise the state's motor fuel tax.

"It's going to keep taxes down because we're not going to raise the fuel tax," says Wardner. "We're going to raise the quality of life because fewer people will die on the highways, and we're not going to be so dependent on the federal government and the dollars we get from them."

Wardner would also like to see earnings used to help meet school construction

needs. His priority is schools in the oil patch that are struggling to cope with enrollment increases attributable to growth in the oil industry. Wardner says he has no difficulty finding school administrators to agree with him.

At the Legacy Fund Earnings Committee's most recent meeting in February in Watford City, nearly a dozen superintendents from western North Dakota school districts described their construction needs.

Leslie Bieber, Western Dakota Energy Association board member and the superintendent in Alexander, said her district completed an expansion in 2016 and saw its enrollment surge 40 percent just two years later. Another project is set to begin this spring, adding a vocational-agriculture and industrial arts facility in the district.

"Schools from the west to the east are saying the same thing," says Bieber. "School infrastructure is a need and a priority."

The Legacy Fund Earnings Committee will meet twice more prior to the 2021 legislative session. Chairperson Pollert expects the next meeting will occur in late June or early July.



*Rep. Chet Pollert chairing a Legacy Fund Earnings Committee meeting in Fargo, ND.*

# FEAR FACTS

Navigating the complexities of the oil and gas industry takes knowledge, foresight and the ability to make confident decisions quickly. Our experienced, professional team provides keen insight into business issues that impact energy services clients.

Contact our Energy Services Team to learn how we can impact your bottom line.

701.255.8442 | [eidebailly.com/industries/energy-services](http://eidebailly.com/industries/energy-services)

**EideBailly®**  
CPAs & BUSINESS ADVISORS

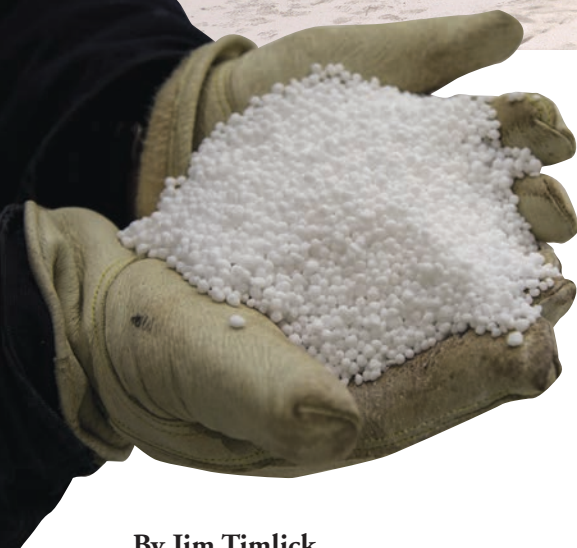




# Urea Plant a Godsend for Growers



*Great Plains Synfuels Plant's storage facility can warehouse up to 53,000 short tons of urea. The plant can churn out about 1,100 tons of urea each day.*



By Jim Timlick

**B**eulah, in North Dakota's Mercer County, is home to about 3,100 folks, according to the most recent U.S. census results.

While it might seem rather unremarkable at first blush, Beulah has recently become an extremely important location for many of the surrounding region's agricultural producers. It is home to the Great Plains Synfuels Plant, North Dakota's only urea fertilizer production facility.

The facility, which began production in January 2018, now has the ability to churn out about 1,100 tons of urea each day. It also has a storage facility capable of

warehousing up to 53,000 short tons at any given time. To put that into perspective, the plant supplies about half of the state's demand for urea and 15 percent of total demand for the product in the region of North Dakota, South Dakota, Minnesota, and Montana.

The Synfuels plant is operated by Dakota Gasification Company, a subsidiary of Basin Electric Power Cooperative, which is headquartered in Bismarck, ND. It has been consistently running near full capacity since it opened for business, and plant manager Dale Johnson says ownership couldn't be happier with the reception its product has received from growers in the region.

"The urea production facility has been a great project for Dakota Gasification Company, in terms of the quality of the construction and overall reliability of the process. It's provided a very nice revenue stream for us, and it's providing an economical fertilizer option for the local farmers," says Johnson, who also serves as vice-president of Dakota Gasification Company.

"We're so proud of this facility and our accomplishments with it," he adds. "This facility has provided another source of local fertilizer and has cut down on logistical challenges

for our customers, who would have to bring in their entire demand from out-of-state or out-of-country."

You aren't likely to find a more enthusiastic supporter of the Synfuels plant than North Dakota Agriculture Commissioner Doug Goehring. Goehring says prior to the plant's opening, growers often had to bring in urea from the Upper Midwest and, sometimes, as far away as Manitoba or Saskatchewan, which created all kinds of logistical challenges.

"We're a nitrogen-deficit region," says Goehring. "The fact that we now have a plant in our backyard has really helped to sustain agriculture to a degree."

Goehring says having access to a local supply of urea will hopefully mean more consistency in pricing for growers in the region. Nitrogen prices have experienced some wild swings over the past couple of years, he explains, due, in part, to a lack of suppliers.

"The issue is if one person or one entity is monopolizing the entire supply, they can pretty much dictate how much that price is going to be," he adds.

Area farmer John Weinand, who sits on the board of the North Dakota Grain Growers Association, says the plant in Beulah has





*Team member Joey Nelson preps for the load out process at the facility.*



*The Great Plains Synfuels Plant is North Dakota's only urea fertilizer production facility.*

been a godsend for growers like him. Not only has it kept prices more competitive, but it has also provided a boost to the local economy.

"I like to see people using what we have here," says Weinand. "It brings money into the state and the local communities. There's nothing wrong with that."


Demand for urea fertilizer has been growing in recent years. Many growers feel

it is a safer, more storable and efficient nitrogen fertilizer that offers more blending options for optimal plant development and nutrition.

"A lot of people like it just for the safety factor alone," Weinand adds. "Anhydrous ammonia is a compressed gas, and the ventilation problems with it can be serious, whereas you're not going to inhale a dry fertilizer [like urea]."

Even though the Synfuels plant is operating at nameplate capacity and first quarter sales for 2020 were strong, Dakota Gas has no immediate plans to expand it.

Goehring would love nothing more than for the company to ramp up production sooner rather than later.

"I like the plant, and I'm so glad it's there," he says. "Anything they want to do to increase capacity or storage, I'm fully supportive of." 

## The Missing Link In Your Supply Chain

**MMR**   
Material • Management • Resources

**INVESTMENT RECOVERY  
RESPONSIBILITY®**

**MMR is a full-service investment  
recovery firm servicing the surplus and  
scrap needs of the oil and gas industry.**



281-944-4212



info@materialmg.com



materialmg.com

# — TODAY'S LESSON — FUNDING EDUCATION EXPANSION



By Paul Adair

When Gary Wilz first started working at the Killdeer Public School in 2003, there were only about 400 students in Kindergarten to Grade 12, and those numbers were in decline. But since oil and gas production took off in the region, the school population has risen more than 60 percent, growing to approximately 650 students, including pre-school. And over the next year, if nothing changes—nobody moves in or nobody moves out—Killdeer is expected to add 30 more students, followed by an additional 30 the year after that.

“When you’re just driving by our building or dropping off your kids, it’s difficult to grasp the severity of the population impacts we are facing—that is, until you come through the doors and you see for yourself how we are being slowly stretched beyond belief,” says Wilz, who, nowadays, is the superintendent. “We just have too many kids for

the space we have, and there isn’t much in terms of personal space. Everyone is getting worn out.”

To address the continuing growth of its student population, Killdeer Public School has made every attempt to maximize every square inch of space it has such as converting storage rooms into makeshift classrooms or dividing its high school weight room into two separate elementary classrooms. This has proven to be untenable for the school, so it’s exploring the potential of building a new school to better handle the demand.

This is a challenge not unique to Killdeer School, and many schools across western North Dakota are also facing severe capacity issues.

Williston and the surrounding area have, perhaps, experienced the most intense increase of population since the recent oil boom. Over 400 companies are headquartered in the region, and, as a result, there has been a hefty influx of oilfield workers, plus all the support staff who accompany production—and their families.

And while there has been a tremendous amount of wealth and revenue generated in the state for companies and individuals thanks to oil production, the same cannot necessarily be said for schools in the region.

“A lot of people think because there’s a lot of tax revenue generated by the Bakken, that surely our schools are also benefitting,” says Joanna Baltes, president of the Williston Public School District #1 School Board. “But, that’s just not the case. There is no additional pot of money we receive to work on building projects; we either need to go look for a bond referendum, or slowly build up money from annual property taxes in a building construction fund.”

The ability, or lack thereof, to secure infrastructure funding has become a major problem for the Williston School District. The district has seen its school population more than double since 2009, but has only been able to build one additional school to meet the demand based on a bond referendum.



Travis Jordan, superintendent at Beulah Public School District 27, has become very familiar with the bond referendum process, having recently secured a \$6.9 million construction bond to update a section of the local high school. The vote in early January was approved with 71 percent in favor and followed a previous attempt in 2018, when voters overwhelmingly rejected a \$17.5 million bond slated for a larger project.

“This will allow us to tear down a major portion of the 1963 addition and construct a new addition right behind it, and it will allow us to update our maintenance, mechanical, and electrical issues throughout the building,” says Jordan. “We need facilities that are adequate for providing education to our students, and this bond lets us to do just that.”


Over in Dickinson, many school campuses find themselves at full or maximum capacity, yet the school population continues to grow. The City of Dickinson is currently working to identify a plan forward that will gain the 60 percent supermajority of voter support required to pass a referendum to build a larger high school and to address the challenges at other campuses. North Dakota is only one of seven states still requiring a supermajority.

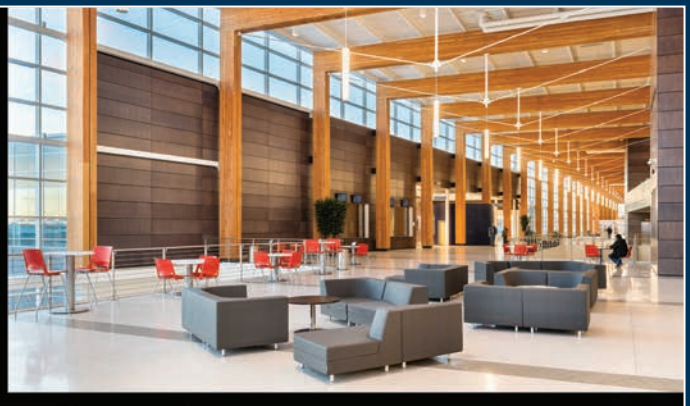
In the meantime, however, officials are also looking at alternative measures to help spread

*“A lot of people think because there’s a lot of tax revenue generated by the Bakken, that surely our schools are also benefitting. But, that’s just not the case...we either need to go look for a bond referendum, or slowly build up money from annual property taxes in a building construction fund.”*

the load such as lengthening the school day by offering early-morning and after-school classes, partnering with Dickinson State University to secure additional classroom space, and reducing kindergarten to a half-day.

“Our story is not so different from a lot of school districts here in the area,” says Dr.

Shon Hocker, superintendent at Dickinson Public Schools. “When you’re a district of about 4,000 kids and are growing at a rate of approximately five percent every year with no sign of slowing, you need to figure out—and sometimes think outside the box—just how to meet the needs of continual growth.” 



**ROUGH RIDER**  
CENTER

**YOUR NEXT MEETING  
STARTS HERE.**

The Rough Rider Center, in Watford City, ND, offers exceptional design features, state of the art audio-visual capabilities, affordable rates, remarkable vistas, and more than 76,000 square feet of space to create professional and memorable events.

[www.roughridercenter.com](http://www.roughridercenter.com)



# Investment 101:

## Growing the State's Workforce Will Fill Gaps in the Labor Pipeline & Help North Dakota Flourish\*

By Paul Adair

While the prosperity of the Bakken has brought many benefits to North Dakota, there have also been challenges related to the growth of oil and gas production. The strength of the oil patch has put a great deal of stress on North Dakota's workforce, as the oil industry's demand and higher wages make it more difficult to find labor to fill the many vacant positions across the state.

North Dakota currently has an astonishingly low unemployment rate of just 2.2 percent, a labor force (those 16 and over who are working or actively looking for work) participation rate of 69.2 percent, and an estimated 30,000 jobs currently open—a number that has more than doubled over the last two years. In addition, 28 percent of job openings in the state tend to remain unfilled for more than three months.

"The simplistic answer to the cause of the challenge is there aren't enough people to fill all the jobs that are needed in the state," says Arik Spencer, president and CEO of the Greater North Dakota Chamber (GNDC). "Ten years ago, we saw a huge influx of individuals coming to work in our state because of the high unemployment rate at the national level, and North Dakota offered

opportunities. The economy has stabilized since then, which has resulted in an extremely tight labor market."

The problem, fuelled largely by high wage demands and a limited talent pool, is not new for North Dakota, as the state has possessed one of the lowest unemployment rates for more than a decade. Labor shortages have, for some time, been a challenge across all industries and sub-sectors.

North Dakota is seeing the largest employment impacts in the manufacturing, energy, and service industries, including retail and hospitality. Another sector where there is a growing concern in relation to workforce is health care, including specialists, technicians, nursing, and aid teams. In addition, Job Service North Dakota's labor market information and data further identifies a significant number of open positions that support these aforementioned industries such as trucking, welding, and skilled trades.

"It's a problem that's continuing to worsen over time because there are no easy answers, nor a silver bullet, to resolve the challenge," says Spencer. "Deeper and more creative solutions will need to emerge to ensure North Dakota's businesses are supported."

North Dakota's businesses community, in collaboration with policy makers and

education providers, will need to increasingly intersect to make certain any approach is holistic and thoughtful of the talent pipeline, up-skilling and retaining current workers and attracting individuals to specific industries and relocating to the state.

There are currently initiatives in place around career readiness, career exploration, and automation, which supports North Dakota's primary sector industries. One of these initiatives, which has started to identify solutions, is ND Career Builders, a skilled workforce scholarship and student loan repayment program through the North Dakota University System that is aimed at attracting people into high-need and emerging occupations in the state.

"Specific to in-state recruitment, North Dakota graduates approximately 6,500 high school students each year," says Spencer. "This is a significant pipeline that local businesses should be approaching to ensure it's not targeted by out-migration to other states."

A specific area of interest for Gov. Doug Burgum is an initiative related to occupational licensure reform. As part of his January State of the State address in Grand Forks, Burgum noted that states

*Continued on page 32*



*An artist's rendering of the new, 40,000-square-foot Gateway to Science facility, which features an interactive exhibit gallery space, an education wing, areas for exhibit maintenance, and more.*

# Gateway to Science: Growing Future Scientists & Engineers

By Jeff Eslinger

If you worry about whether there is an adequate “crop” of future employee prospects majoring in Science, Technology, Engineering, and Math (STEM) subjects in college, your worries are misplaced. You should be worrying about grade and middle school. While it is true most students decide on a career while in college, *interest* in STEM subjects begins when children are in the early elementary grades.

Think of it: kids who were beginning elementary school when the Bakken boom started are already college-aged. How many were inspired to choose STEM back then?

Fortunately for energy employers, there is an organization working hard to grow future scientists and engineers. Located in Bismarck, it has an outreach program that regularly works with schools across the state. Appropriately enough, it's called Gateway to Science.

Gateway to Science grew from a storefront in a mall with a mission of “inspiring the discovery of science through hands-on experience” to co-occupying the Frances Leach High Prairie Arts & Science Complex.

In October 2019, Gateway to Science broke ground on what will be a

state-of-the-art science center overlooking the Missouri River. Visitors will have a front-row seat to North Dakota's energy industry, as the river itself, an oil refinery, an electric generation plant, and a wind farm are in plain view from there.

Now, more than ever, the mission of Gateway to Science isn't just to serve Bismarck-Mandan, but to be North Dakota's statewide science center. Already, half of the center's visitors come from outside of Burleigh and Morton Counties, and Gateway to Science on the Go outreach programs bring STEM education to schools in all corners of the state. In 2019, alone, Gateway to Science on the Go brought 60 STEM programs to 31 communities.

“Our vision is to be the premier experience for hands-on science in the region,” says Beth Demke, executive director of Gateway to Science. “To be able to attract and keep students involved in STEM jobs here in North Dakota is very important. They don't just come about that in high school; it starts happening at a young age. Every child is a natural-born scientist. Every child wants to know about the world around them.”

The new building will be 40,000 square feet and will include an expanded

*Continued on page 32*



*The Gateway to Science on the Go outreach programs bring STEM education to schools in all corners of the state.*




*Continued from page 30*

like Arizona have allowed license reciprocity for residents who have moved there from another state, allowing them to practice the same profession without the need for a burdensome relicensing process.

“These initiatives all work on different facets of the challenge to create potential solutions for both North Dakota business and the citizens who are served,” says Spencer.

Last January, at the GNDC Engaging Workforce CEO Roundtable, the agenda was developed to inspire new strategies and use available resources at both state and local levels. Event speakers encouraged participants to go beyond the standard offerings of business and to implement people-centered strategies in their recruitment efforts. Attendees were then challenged to reconsider their approaches to the workforce, to think about the upcoming talent entering the workforce, and to consider approaches that address in-migration of potential talent.

“One of our speakers, Rough Rider Center and Community Enhancement Director Pat Bertagnolli, left individuals at the CEO Roundtable with a profound statement,” says Spencer. “He said, ‘North Dakota operates at its best when the focus of workforce development is mentoring and giving back. It really *is* all about people, not workers. People have passion and families.’ Those organizations that approach recruitment, attraction, and retention through the lens of community engagement will have a distinct advantage in solution generation.” 

*\*Statistics and comments in this article are representative of the workforce culture prior to the COVID-19 pandemic and its continuing impact throughout North Dakota and the rest of the world.*

*Continued from page 31*


main floor interactive exhibit gallery space, an education wing, administration, areas for exhibit maintenance, and a large maker-space area. Well over half of the \$20-million price tag has already been raised with the capital campaign ongoing.

Gateway to Science’s new facility will tell the story of innovation and opportunity in North Dakota, with exhibits on energy, agriculture, health care, transportation, and more. Several industry partners have already stepped up to help develop and sponsor exhibits. For the design and construction of exhibits, Gateway to Science staff are working with the Science Museum of Minnesota, a nationally renowned science center and a leading manufacturer of exhibits. All the exhibits are being developed with visuals depicting North Dakota photography and examples.

“The energy story we’re telling is the all-of-the-above energy story of North Dakota,” says Jason Anderson, president of the Gateway to Science board of directors. “By introducing kids to STEM at these early ages, it is going to spark their interest in STEM careers.”

Every exhibit in the center now, and every exhibit planned for the future, emphasizes interaction with the student.

“Gateway to Science is not a typical museum,” says Demke. “We don’t put anything behind protective glass, so you just read about it. If it’s about a cloud, you’re going to pump up the pressure, pull the plug, and make a cloud. That’s the best kind of learning.”

Just as North Dakota industries need a future supply of STEM employees, Gateway to Science needs North Dakota industry leaders to invest in this building project. To help Gateway to Science continue to inspire young scientists, visit [www.gatewaytoscience.org/building](http://www.gatewaytoscience.org/building). 



**3000 145<sup>th</sup> Street East**  
**Rosemount, MN 55068**

**www.vicsco.com**

**Rosemount 651-423-7400**  
**Hibbing 218-403-0008**





**Serving all of North America with the largest  
fleet of Fast Fusion® equipment and  
certified operators**

**Call Today for a Free Consultation**

**Bill Walters  
701.260.6489  
bill@accelfusion.com**



## **Avoid Costly Damage and Repairs from Utility Strikes**



Badger Daylighting is North America's leading provider of risk mitigating hydrovac excavation services. Our safety driven operators and highly capable trucks increase productivity while protecting your valuable assets.

**Potholing & Daylighting • Slot Trenching • Interior Excavation • Engineering & Design  
Utility Locates • Debris Removal • Pit/Sump Cleans • Storm Drains • Emergency Response  
Pole Holes • Line Jetting • Exposing Foundations • Culvert Cleaning • Test Holes**

**Locations in: Williston, Dickinson, Minot & Watford City**

**Visit us at [www.badgerinc.com](http://www.badgerinc.com) Call 701-300-2115**





*MHA Nation Chairman Mark N. Fox and the Tribal Business Council joined Gov. Doug Burgum and state legislators for a ceremonial bill signing in April 2019.*



## NEW TAX-SHARING AGREEMENT

# Aims to Stimulate Investment on Fort Berthold Reservation

By Paul Adair

With the signing of the new oil tax agreement in February 2019, the Mandan, Hidatsa, and Arikara (MHA) Nation and the State of North Dakota took a major leap toward resolving a long-lasting tax dispute over oil tax revenue. The signing was also a culmination of years of work behind-the-scenes to make it happen.

Negotiations on this historic agreement started during the 2017 legislative session. The leadership from the Fort Berthold Reservation came to the legislature about two-thirds of the way through the session, asking for changes to the oil and gas tax agreement at that time to help offset the negative impacts of energy development on the reservation. MHA Nation was advocating to get away from the straight 50:50 split on oil and gas taxes collected on the reservation, both on fee lands and trust lands, to something that might be more beneficial to all involved.

"The problem was that it is impossible to get consensus on an issue of this magnitude in the legislature during the last five weeks of a session," says Sen. Rich Wardner.



*Representatives from MHA Nation and the State of North Dakota at the ceremonial bill signing held in Bismarck in April 2019.*

During the 2017 legislative session, the two meetings held were, primarily, a lot of talk with no concrete action. That said, Sen. Dwight Cook put together an amendment that established the Tribal Taxation Issues Committee, with the unprecedented move of making Gov. Doug Burgum the committee chair.

"Never in the history of the North Dakota Legislature has the governor ever chaired a

legislative committee," says Wardner. "Tribal leadership wants to talk to the governor, not legislators, but they sometimes forget it's the legislature that makes and changes the laws. But, in this case, the legislature stuck its pride in its back pocket and went to work to improve relationships with all tribal governments in order to also improve the quality of life on the reservation."

*Continued on page 36*



# And the Winners Are...

By Jenna Collignon

**T**his past fall, the Western Dakota Energy Association (WDEA) awarded five \$1,000 scholarships to North Dakota students pursuing careers in an energy-related field. Winners were announced at the WDEA's annual meeting in Minot, ND on October 30 to 31, 2019.

The WDEA would like to thank the businesses and organizations that help to make the scholarships possible. Congratulations to all the scholarship recipients!



## JUSTIN HOWELL

Justin Howell works at Oasis Petroleum and is pursuing a degree in information technology (IT) at Williston State College. After graduating with this degree, he plans to get into the field of IT and help with the short-handedness in the profession.

"I was very excited about receiving this award," says Howell. "It has really helped me while I continue to study toward my degree. This is a profession I wanted to get into for a long time, so I finally made the decision to switch up my old career and pursue a new one, now that my kids are older. Anyone can do anything they put their mind to!"



## EVAN WHEELER

Evan Wheeler is a junior at North Dakota State University and hopes to pursue a career in electrical engineering. He got his first taste of the industry when he was first pursuing a degree in electrical technology at the North Dakota State College of Science. It was there he became interested in the generation of power.

"I'm incredibly grateful for this scholarship because any financial aid takes a little more pressure off the expense of college and allows me to focus more on studying," says Wheeler. "This generosity is not something that comes around every semester, so I definitely appreciate it."



## BRYAN KNOPP

Scholarship winner Bryan Knopp is in his senior year at the North Dakota State College of Science studying surveying and civil engineering.

"I was excited and honored to win the WDEA scholarship," says Knopp. "This scholarship is ultimately going to help me achieve my goal of graduating college debt-free."

Prior to leaving for his second year of college, Knopp signed a contract to work full-time with Brosz Engineering in Bowman, ND starting in May 2020. There, he will be working as a land surveyor and a licensed drone pilot.

"Land surveying will allow me to work outdoors for the majority of the year," says Knopp. "I'm excited to see the technological advances that come in the future."



## JASMIN JOHNSON

When Jasmin Johnson heard she was a recipient of a scholarship, she was elated.

"I'm very grateful to be chosen," says Johnson. "Having this financial help allows me to place school and studying above work."

Upon graduation, Johnson plans to work as an engineer in the petroleum industry so she can remain close to her family in the Minot area.

"I'd like to give back to the community that gave me so much," she adds. "I have a lot of older cousins in this industry—in the petroleum, mechanical, and electrical engineering fields—and they were great role models for me when I was in high school. I have also grown up with experience on our family farm and have always enjoyed taking things apart with my dad, Jeff, and helping him put them back together. Being in this industry is definitely in my blood."

*Continued on page 36*

Continued from page 34

Under the new tax agreement, the oil and gas revenue on trust lands will be split 80 percent to the MHA Nation and 20 percent to the State of North Dakota, while fee lands will be shared 20 percent to the MHA Nation and 80 percent to the State of North Dakota. Because of this agreement, the MHA Nation is expected to see an increase of \$33.6 million in oil and gas tax revenue.

While the tribe benefits with a greater revenue share in the new agreement, the state benefits by the investment in more oil production, which increases revenue for the state and impacts many funds, including the legacy and common schools trust funds.

For the oil and gas industry of North Dakota, this agreement creates a more business-friendly environment and brings a higher degree of clarity going forward. The new tax agreement offers certainty for the industry and confidence they will be able to invest on the reservation knowing their investments will bring a return. Ultimately, this will help increase revenues for the state and positively impact funds such as the legacy and common schools trust funds.

"This agreement creates stability the oil and gas industry needs to make those long-term investments on the Fort Berthold Reservation," says Ryan Rauschenberger, the North Dakota Tax Commissioner. "When there is uncertainty, especially in the area of dual taxation, oil companies have to take that into consideration when planning. Are they going to invest in North Dakota or look to other oil production areas when they decide to expand drilling? This new tax agreement keeps North Dakota on a level playing field, opens up the reservation for more production, and will potentially generate greater revenues because of it."

Continued from page 35



## CHUNCHENG LI

Chuncheng Li is an international student working toward his Ph.D. in the petroleum engineering program at the University of North Dakota.

"I was very happy and incredibly appreciative to learn I had been awarded a scholarship. As a Ph.D. student, I felt my efforts had been recognized," says Li.

"After graduation, I hope I can be in a position where I can pass on my knowledge to more people and still learn from others. Like North Dakota, my hometown also has a big oilfield. Being around so many petroleum engineers, investigators, and professors in various universities, I wanted to be like them when I was young. I'm passionate about petroleum engineering and the molecular simulation technique, which is what my research is focused on. Hopefully, one day, I can produce findings that will greatly benefit the oil industry."

## APPLY FOR A 2020 SCHOLARSHIP!

The WDEA will be awarding scholarships again this fall. Priority will go to students who are planning to work in the oil and gas or coal industries in North Dakota.

Visit [www.ndenergy.org](http://www.ndenergy.org) for selection criteria. The application deadline is mid-September. Recipients will be announced at WDEA's annual meeting, October 7, 2020, in Williston.

# Feel Valued.

Hamptonality is the extra care we put into everything that's going to make your stay extra awesome. You'll find it at our free hot breakfast. And you'll see it in the personalities of our team members who use their individual styles of hospitality to make you feel extra special.

**CIRCLE OF EXCELLENCE AWARD WINNER 2018**

**Hampton Inn & Suites by Hilton Minot Airport ND**  
1420 North Broadway, Minot, ND  
701.838.1400

[hampton.com](http://hampton.com) | 1.800.hampton | **HILTON HONORS**

© 2014 Hilton Worldwide

# ACCESS

FAST

CONVENIENT

North Dakota Records Information Network

COST-EFFECTIVE

SUBSCRIBE TODAY

*% High Plains Technology*  
1351 Page Drive, Ste. 106 Fargo, North Dakota 58103  
Phone: 701.364.1280 Fax: 701.271.1557  
[www.ndrin.com](http://www.ndrin.com)

# NORTH DAKOTA

*The fastest, easiest and most cost-effective way to retrieve land records in North Dakota.*



*Kompleks Assessment Solutions has been involved in many assessments, ranging from oil and gas developments, crude-by-rail facilities, and saltwater disposals, to grain elevators, pipelines, wind farms, and public utilities.*

# Company Provides Homegrown Solution to Complex Problem



By Jim Timlick

Dustin Bakken likes to describe his company as a small operation that hopes to accomplish big things.

Bakken, along with his wife and business partner, Valerie, launched Kompleks Assessment Solutions (KAS) in April 2019. The Bismarck, N.D.-based start-up provides industrial and agricultural property assessment services to local governments and county agencies throughout the state.

Having previously worked in property assessment at the county and state level for nearly a decade, Bakken was inspired to start his own company after seeing first-hand the need for accurate assessments in North Dakota's western oil and gas producing counties.

"We all know this area is a dynamic and changing environment, and being able to keep up with property assessments is a real challenge for local assessments offices. Typically, their resources are pretty limited as far as the number of staff and resources they have to apply to those assessments," says Bakken. "We wanted to provide a more local option for those local governments."

As the company's name suggests, KAS provides assistance for more complex assessment issues facing many North Dakota counties. To date, it has been involved in a wide variety of assessments, ranging from oil



*Dustin and Valerie Bakken and their children at a trade show in North Dakota.*

*"We all know this area is a dynamic and changing environment, and being able to keep up with property assessments is a real challenge for local assessments offices."*



*Dustin Bakken, co-founder of Kompleks Assessment Solutions.*

and gas developments, crude-by-rail facilities, and saltwater disposals, to grain elevators, pipelines, wind farms, and public utilities. Its current clients include Stark, Foster, and Pembina Counties.

Essentially, KAS serves as a liaison between the county and individual companies.


Bakken submits a request to a company's owners to inspect their property on behalf of the county assessment office. He then takes a thorough inventory of all property on-site and reviews any economic conditions or limitations that could have an influence on the value of the property. An assessment is

calculated and then submitted to the local jurisdiction for review. The aim, he says, is to ensure there are no surprises for the county or a company's ownership throughout the process.

Bakken is KAS's lone employee. He says his company has an advantage over larger competitors in that Kompleks is locally based.

"Right now, there's only one other valuation provider in the state, and they're actually located out of Texas," he says. "Being a local North Dakota company, our costs are going to be significantly lower due to a lack of travel costs and things of that nature. And obviously, we know the market activity and everything going on here, and we have a familiarity with the laws as they pertain to assessments in the state."

Bakken is optimistic about his company's future and sees plenty of room for it to grow over the next few years. Most industrial assessment contracts in the state are typically two years in duration, and a number of them will be coming up for renewal later this year, a fact Bakken and his company are hoping to capitalize on.

"We are looking to grow. We have a big renewal period coming up this year, so we are hopeful the future will hold more contracts for us," he says, adding KAS could look at doing work for private companies down the road. 



**Filter Sales, Filter Disposal, Filter Vessels and Parts.**

**Office: (406) 787-5525**

**Website: [www.owlmt.com](http://www.owlmt.com)**


The Energy & Environmental Research Center




**VALUE-ADDED SOLUTIONS**


Advancing technology to support all-of-the-above energy production

Find out more at [www.undeerc.org](http://www.undeerc.org)



**BRIDGING THE FINANCING GAP**

UTILITY RATE ANALYSIS | FUNDING/FINANCING  
PROJECT DEVELOPMENT AND ADMINISTRATION  
ECONOMIC DEVELOPMENT | ASSET MANAGEMENT  
MUNICIPAL FINANCIAL SERVICES

AE2S **NEXUS**  [www.AE2SNexus.com](http://www.AE2SNexus.com)  
The Financial Link



# Regional Roundup

## COAL CREEK DECISION COMING SOON

Great River Energy, the owner of the 1,100-megawatt Coal Creek Station near Underwood, ND, plans to announce a decision about the plant's future later this year.

Jon Brekke, vice-president of Power Supply for GRE, addressed questions about the fate of the coal-fired power plant at a meeting of the ND Legislature's interim Energy Development and Transmission Committee. It was revealed in February that GRE is considering shutting down one or both units at the plant due to ongoing financial losses.

Legislators were told many of the coal-fired plants in the region have been forced to operate at less than half their design capacity due to competition from federally subsidized wind generation and the recent addition of thousands of megawatts of cheap natural gas-fired generating units. Brekke said Coal Creek Station has been forced to deal with the negative financial impact for more than a decade.

"The persistent low market prices are having an impact on coal fleets nationwide," said Brekke. "That's a situation that's been around since 2008. We've faced low market prices for that long, and they're getting lower in the market as we go forward."

Brekke said GRE is conducting an analysis of the economic conditions facing the coal plant, and if it decides to make any changes to its operations, the decision will be announced in 2020.

"We have great concern about the communities in which we operate, and we're going to do our best to have a good analysis, a good decision-making process, and to communicate that decision, or set of decisions, once we've made it," he said.

With its 1,100-megawatt generating capacity, Coal Creek Station is far and away GRE's largest generation asset, which also includes the Spiritwood Station near Jamestown, ND and wind farms in eastern North Dakota.

## TAX FILING DEADLINE EXTENDED TO JULY 15

Following the federal government's lead, the North Dakota Tax Department has extended the tax filing deadline for all individuals and businesses to July 15.

Tax Commissioner Ryan Rauschenberger says the extension of the deadline by the U.S. Treasury Department is intended to keep \$300 billion of liquidity in the economy to help citizens pay their bills. Individual taxpayers who believe they will be owed a refund on their income taxes should continue to file as they normally would, says Rauschenberger, adding that all refunds will be issued in a timely manner.

Department staff are also working on a case-by-case basis with individual businesses seeking an extension on payment of other taxes administered by the department.

## BAKKEN NOW 2020: WBPC RESCHEDULED FOR FALL

The 2020 Williston Basin Petroleum Conference (WBPC) has been rescheduled for September 1 to 3, 2020. This decision was made following issuance of the CDC's Interim Guidance for Coronavirus Disease 2019 relating to large events and mass gatherings.

"We're still very excited to host the WBPC later this year," says Ron Ness, president of the North Dakota Petroleum Council (NDPC). "We're committed to protecting the health and safety of our attendees, speakers, and exhibitors and will continue to monitor the situation and follow official guidance as we move forward with this new date."

The WBPC has become the most important event for business development and networking in the oil and gas industry in North Dakota and the Rocky Mountain region. The NDPC looks forward to bringing this event to Bismarck in 2020 in the safest way possible. Check [www.wbpcnd.com](http://www.wbpcnd.com) for the latest details.

## ATTEND THE WDEA 2020 ANNUAL MEETING

Get this date on your calendar! The annual meeting of the Western Dakota Energy Association will be held from October 7 to 8, 2020 at the Grand Williston Hotel & Conference Center in Williston, ND.

## PSC OKAYS DENBURY RESOURCES PIPELINE

The ND Public Service Commission has granted a construction permit to Denbury Resources to build a pipeline that will bring carbon dioxide to Bowman County as part of an enhanced oil recovery project. The 12-inch-diameter welded steel Denbury Green Pipeline will be about 18 miles long, with 8.5 miles in Fallon County, MT and 9.2 miles in Slope and Bowman Counties.

## REAL ID DEADLINE EXTENDED ONE YEAR

The deadline for states to comply with federal REAL ID requirements will be extended due to the COVID-19 pandemic. The Department of Homeland Security will extend the deadline to October 1, 2021.

The *REAL ID Act* establishes minimum security standards for license issuance and production and prohibits federal agencies from accepting, for certain purposes, driver's licenses and ID cards from states not meeting the Act's minimum standards. The purposes covered by the act are: accessing federal facilities, entering nuclear power plants, and boarding federally-regulated commercial aircraft.

# Tools of the Trade



## AWARD-WINNING GLOVES FROM HONEYWELL PROTECT WORKERS FROM IMPACT AND CUT HAZARDS

Honeywell has rolled out a new line of award-winning, impact-resistant gloves—Rig Dog™ Xtreme—designed to protect workers from hand and finger injuries while working with hammers, tools, and heavy machinery typical of the oil and

gas industry. Winner of prestigious international design awards, including the Red Dot, iF and Best 100, Rig Dog Xtreme gloves are available in three models to protect workers from specific working conditions and atmospheric challenges:

- Rig Dog™ Mud Grip, featuring a tire-tread pattern palm to squeeze out thick oil and mud to provide better grip for work such as roughnecks on oil rigs;
- Rig Dog™ Waterproof, featuring an integrated water-proof membrane to help keep hands dry in wet applications such as mining; and
- Rig Dog™ Cold Protect, which provides cold-weather protection down to -20° F.

Serious hand and finger injuries from impacts, abrasions, and cuts plague heavy-industry worksites around the world. In the U.S., hand injuries consistently rank number-one on the list of recordable incidents each year for industries like oil and gas, and over three million workplace accidents resulted in lost time for workers in the European Union during 2015. These incidents add up to lost time and profits.

Available in a wide range of sizes, unique colors, and configurations, Rig Dog Xtreme is a feature-rich, premium impact protective glove that includes:

- Patented CoreNest™ technology-engineered design on knuckles that absorbs impact energy to help prevent injury from severe blows;
- Impact-resistance that meets ANSI/ISEA Level 3, a more robust standard for knuckle and finger protection compared to the EN 388 pass/fail rating;
- ANSI A6 / ISO Level F Cut resistant palm;
- Unique palm material that provides exceptional oil grip and has an interior coating to inhibit oil penetration; and
- High-visibility colors for better awareness in low-light conditions and solid red palm provides hand signal communication capability in high-noise areas.

<https://honeywell.com>

## VELO3D PARTNERS WITH DUNCAN MACHINE PRODUCTS TO 3D PRINT OIL AND GAS INDUSTRIAL PARTS

VELO3D recently announced a new customer partnership in the oil and gas industry with Duncan Machine Products (DMP). DMP is expanding into metal additive manufacturing with the VELO3D solution to respond to increasing demand from customers for increased part performance and shorter lead times.

Known for its capabilities to consistently produce high-quality parts with low-angle geometries without support structures, the VELO3D solution consists of Flow™ advanced pre-print software, Sapphire printer, and Assure™ quality management software. DMP expects to take delivery of the system in the second quarter of 2020.

“We chose VELO3D because their Sapphire printer can handle the most geometric complexity, and their support-less process doesn’t require customers to redesign their parts,” says Chris Billings, co-owner of DMP. “We put VELO3D to the test on a series of customer-driven part builds and, in the end, it was an easy decision.”

DMP has received orders to 3D print a minimum of 1,500 parts for downhole tools used in onshore and offshore exploration, and the company believes this order could easily increase tenfold in the next 24 months.

“The conditions under which downhole tools must perform are hostile and include extreme pressure and high-temperature situations, requiring a robust and dependable manufacturing solution.” For this specific program, DMP will be using metal AM to replace investment casting as the manufacturing process.

“Metal AM is a very compatible manufacturing process for the oil and gas industry, given the complex engineering requirements,” says Benny Buller, founder and CEO of VELO3D. “Our SupportFree technology can make highly complex geometries without the burden of post-processing—providing repeatability, process gains, and greater productivity for oilfield service providers.”

[www.duncanmachineproducts.com](http://www.duncanmachineproducts.com)

[www.velo3d.com](http://www.velo3d.com)

## ENDRESS+HAUSER LAUNCHES NETILION IIOT

Endress+Hauser recently launched its IIoT solution platform, Netilion, an ecosystem combining digital services and system components to improve lifecycle and asset management, maintenance, and support of instruments and analyzers.

Netilion enables users to keep track of their installed base, documentation and data management, and instruments’ performance and health status. Its scanner service is a free smartphone app that guides users in capturing field instrument asset data, while using QR code or RFID tag. It can store images and instrument location and accessibility, and critical and quality-relevant information can be associated with the RFID tag.

Its analytics service can create a digital twin of the system to analyze and initiate proactive maintenance measures for critical instruments or swap out discontinued instruments. The health service visualizes diagnostic data provided and receives instructions where maintenance or service is required. The library service helps users organize working files and documents through its file-sharing and data management service. It safely stores documents and makes them available to any device with a web browser, saving time, since the often-tedious search for information is eliminated. Its value service collects process data from the field and makes it accessible anytime, anywhere, and it displays values in the dashboard, history, tracking map, and more. These digital services can be used separately or in concert to improve the management, maintenance, and support of instrumentation systems—regardless of instrument or analyzer type or vendor.

[https://eh.digital/netilion\\_us](https://eh.digital/netilion_us)



# THE BAKKEN TOP 20

*As of early mid-March 2020, there are 56 active rigs drilling in the North Dakota oil patch, according to the North Dakota Oil & Gas Division of the North Dakota Department of Mineral Resources (DMR). This number is up from 55 in both December and January and from 54 in February. The all-time high reached 218 on May 29, 2012.*

The industry projects a substantial reduction in rig count over the next three months. Well completions have begun to fall as a result of oil price, weather, and gas capture.

The number of producing wells in North Dakota, as of mid-March 2020 is 16,000 (preliminary; all-time high was in November 2019), with oil production in January reaching 1,429,515 barrels per day (all-time high was in November 2019). Of the producing wells, 14,847 (93 percent) are from unconventional Bakken – Three Forks and 1,132 (seven percent) produce from legacy conventional pools.

According to the DMR's monthly report released in mid-March, OPEC and Russia discussions earlier in the month about further production restrictions resulting from the effect of the coronavirus on demand ended in the abandonment of the three-year existing agreement. The report adds that "future markets now reflect the 'every man for himself' spiral of price cuts and production increases announced by Saudi Arabia and Russia."

1. **Continental Resources, Inc.**  
Oil production (2020): 5,842,779 bbls  
Gas production (2020): 15,198,896 mcf  
Tel: (405) 234-9000  
Toll-Free: (800) 256-8955  
Killdeer: (701) 764-6582  
Rhame: (701) 279-6688  
Tioga: (701) 664-3001  
Web: [www.contres.com](http://www.contres.com)
2. **Hess Bakken Investments II, LLC**  
Oil production (2020): 3,926,530 bbls  
Gas production (2020): 8,192,893 mcf  
Tel: (713) 496-4000  
Web: [www.hess.com](http://www.hess.com)
3. **Marathon Oil Co.**  
Oil production (2020): 3,195,802 bbls  
Gas production (2020): 4,781,306 mcf  
Tel: (713) 629-6600  
Web: [www.marathonoil.com](http://www.marathonoil.com)
4. **WPX Energy Williston, LLC**  
Oil production (2020): 2,817,217 bbls  
Gas production (2020): 3,965,819 mcf  
Tel: (701) 837-2900  
Web: [www.wpxenergy.com](http://www.wpxenergy.com)
5. **Whiting Oil & Gas Corp.**  
Oil production (2020): 2,810,939 bbls  
Gas production (2020): 8,394,641 mcf  
Tel: (303) 837-1661  
Web: [www.whiting.com](http://www.whiting.com)
6. **Burlington Resources Oil & Gas Co., LP**  
Oil production (2020): 2,584,321 bbls  
Gas production (2020): 5,345,518 mcf  
Tel: (432) 688-6800  
Web: [www.br-inc.com](http://www.br-inc.com)
7. **Oasis Petroleum North America, LLC**  
Oil production (2020): 2,225,440 bbls  
Gas production (2020): 8,426,370 mcf  
Tel: (281) 404-9500  
Web: [www.oasispetroleum.com](http://www.oasispetroleum.com)
8. **XTO Energy Inc.**  
Oil production (2020): 2,128,970 bbls  
Gas production (2020): 5,057,966 mcf  
Tel: (817) 870-2800  
Toll-Free: (800) 299-2800  
Web: [www.xtoenergy.com](http://www.xtoenergy.com)
9. **Slawson Exploration Co., Inc.**  
Oil production (2020): 1,856,027 bbls  
Gas production (2020): 2,287,432 mcf  
Tel: (316) 263-3201  
Web: [www.slawsoncompanies.com/exploration.html](http://www.slawsoncompanies.com/exploration.html)
10. **Equinor Energy LP (Formerly Statoil Oil & Gas LP)**  
Oil production (2020): 1,680,092 bbls  
Gas production (2020): 3,713,108 mcf  
Tel: (713) 918-8200  
Web: [www.equinor.com](http://www.equinor.com)
11. **Petro-Hunt, LLC**  
Oil production (2020): 1,352,730 bbls  
Gas production (2020): 2,879,489 mcf  
Tel: (214) 880-8400  
Bismarck: (701) 258-1557  
Charlson: (701) 675-2467  
Crosby: (701) 982-3351  
Killdeer: (701) 863-6622  
McGregor (Tioga): (701) 546-4601  
Web: [www.petrohunt.com](http://www.petrohunt.com)
12. **Bruin E&P Operating, LLC**  
Oil production (2020): 1,326,667 bbls  
Gas production (2020): 3,184,578 mcf  
Tel: (713) 456-3000  
Web: [www.bruinep.com](http://www.bruinep.com)
13. **Enerplus Resources USA Corp.**  
Oil production (2020): 1,134,249 bbls  
Gas production (2020): 1,556,476 mcf  
Tel: (701) 675-2135  
Web: [www.enerplus.com](http://www.enerplus.com)
14. **EOG Resources, Inc.**  
Oil production (2020): 1,041,483 bbls  
Gas production (2020): 2,698,335 mcf  
Tel: (713) 651-7000  
Toll Free: (877) 363-3647 (EOGR)  
Web: [www.eogresources.com](http://www.eogresources.com)
15. **Newfield Production Co.**  
Oil production (2020): 990,282 bbls  
Gas production (2020): 2,602,086 mcf  
Tel: (281) 210-5100  
Web: [www.newfield.com](http://www.newfield.com)
16. **Kraken Operating, LLC**  
Oil production (2020): 913,760 bbls  
Gas production (2020): 1,613,398 mcf  
Tel: (713) 360-7705  
Web: [www.krakenoil.com](http://www.krakenoil.com)
17. **QEP Energy Co.**  
Oil production (2020): 862,234 bbls  
Gas production (2020): 2,404,389 mcf  
Tel: (303) 672-6900  
Web: [www.qepres.com](http://www.qepres.com)
18. **RimRock Oil & Gas Williston LLC**  
Oil production (2020): 703,604 bbls  
Gas production (2020): 857,664 mcf  
Tel: (303) 339-0885  
Web: [www.rimrockoil.com](http://www.rimrockoil.com)
19. **Crescent Point Energy U.S. Corp.**  
Oil production (2020): 612,401 bbls  
Gas production (2020): 743,011 mcf  
Tel: (888) 693-0020  
Web: [www.crescentpointenergy.com](http://www.crescentpointenergy.com)
20. **Lime Rock Resources III-A, LP**  
Oil production (2020): 549,174 bbls  
Gas production (2020): 486,890 mcf  
Tel: (713) 292-9500  
Web: [www.limerockresources.com](http://www.limerockresources.com)

<b>CONVENTION &amp; VISITORS BUREAU</b> Bismarck-Mandan Convention & Visitors Bureau.....	OBC
<b>COUNCIL</b> North Dakota Petroleum Council .....	IBC
<b>CPA &amp; BUSINESS ADVISORS</b> Eide Bailly.....	25
<b>ENERGY COUNCIL</b> Lignite Energy Council .....	4
<b>ENERGY PRODUCTION &amp; RESEARCH CENTER</b> University of North Dakota Energy & Environmental Research Center .....	38

<b>ENGINEERING &amp; CONSULTING SERVICES</b> Barr Engineering .....	9
<b>ENGINEERS, LAND SURVEYORS, PLANNER &amp; CONSULTANTS</b> Advanced Engineering & Environmental Services Inc. ....	38
<b>ENVIRONMENTAL SERVICES</b> Orion Biotechnology International .....	22-23
<b>EVENT CENTER</b> Rough Rider Center .....	29
<b>HEAVY RIGGING</b> Vic's Crane & Heavy Haul .....	32

<b>HOTEL</b> Hampton Inn & Suites Minot Airport .....	36
<b>HYDROVAC SERVICES</b> Badger Daylight .....	33
<b>INDEPENDENT OIL &amp; GAS COMPANY</b> Whiting Petroleum Corporation .....	42
<b>INDUSTRIAL CLEANING EQUIPMENT</b> Hotsy Water Blast Manufacturing .....	IFC
<b>INDUSTRIAL GENERAL CONTRACTOR</b> Bilfinger Inc. ....	12
<b>INSURANCE</b> Blue Cross Blue Shield of North Dakota.....	5
<b>INVESTMENT RECOVERY SERVICES</b> Material Management Resources .....	27
<b>LAND RECORDS</b> North Dakota Recorders Information Network.....	36
<b>NATURAL GAS COMPRESSION EQUIPMENT</b> J-W Power Company .....	13
<b>OIL &amp; GAS EXPLORATION &amp; PRODUCTION</b> Petro-Hunt, LLC.....	21
<b>OILFIELD</b> Elgin Separation Solutions .....	18
<b>OILFIELD EQUIPMENT SUPPLIER</b> Piper Oilfield Products .....	12
<b>OILFIELD &amp; SAFETY CLOTHING</b> Home of Economy .....	3
<b>PEC SAFETY TRAINING</b> Jameson Safety .....	10
<b>PIPE FUSION &amp; PIPELINE CONSTRUCTION</b> Accel Fusion .....	33
<b>PIPE SUPPLIER</b> High Country Fusion.....	12
<b>PIPELINE INSPECTION</b> INGU Solutions Inc.....	16-17
<b>PROCESS HEATING EQUIPMENT</b> Heatec.....	6
<b>WASTE MANAGEMENT, FILTER SUPPLIER, FILTER VESSEL SALES</b> Oilfield Waste Logistics .....	38

**WHITING**

WWW.WHITING.COM

**LEADING THE WAY**

Whiting Petroleum Corporation is an independent exploration and production company. We are a leading crude oil producer in North Dakota and operate substantial assets in northern Colorado.

At Whiting we are committed to economically attractive and environmentally responsible operations. Our hydraulic fracturing advancements and expertise in exploration have made it possible for us to reduce emissions, minimize surface impacts, and preserve precious water resources.

1700 Broadway | Suite 2300 | Denver, Colorado

**303.837.1661**



WWW.WBPCND.COM



**BAKKEN  
NOW**

# WILLISTON BASIN PETROLEUM CONFERENCE

**1-3 SEPTEMBER 2020**  
BISMARCK EVENT CENTER, BISMARCK, ND

The Williston Basin Petroleum Conference is the largest conference and expo dedicated to the Bakken, Three Forks and other formations of the Williston Basin. Learn more about the petroleum markets and activity in the state, network with industry leaders, and hear about how companies and communities can work together to address challenges.

**Government and elected officials receive a reduced rate. Visit [www.WBPCND.com](http://www.WBPCND.com) for more info and to register.**



**CONNECT**

The North Dakota Petroleum Council and the North Dakota Petroleum Foundation host events throughout the year where you can connect with industry professionals and learn more about oil and natural gas in North Dakota.



## EVENTS

**9 july**

**LARKS DUGOUT  
NIGHT**  
BISMARCK, ND

**26 august**

**OILPAC GOLF  
TOURNAMENT**  
MEDORA, ND

**tbd**

**OILPAC SPORTING  
CLAY SHOOT**  
BISMARCK, ND

**3 december**

**CHRISTMAS  
GALA**  
BISMARCK, ND



## EVENTS

**15-18 june**

**TEACHER EDUCATION  
SEMINAR**  
BISMARCK, ND

**14 july**

**BAKKEN ROCKS  
COOKFEST**  
ARNEGARD, ND

**15 july**

**BAKKEN CLASSIC  
FISHING DERBY**  
NEW TOWN, ND

**16 july**

**BAKKEN ROCKS  
COOKFEST**  
MOHALL, ND



Leave boundaries behind and contact  
us today to explore the limitless  
possibilities of Bismarck-Mandan.



# Bismarck Mandan

NO BOUNDARIES



**Bismarck-Mandan Convention & Visitors Bureau**

**NoBoundariesND.com 800-767-3555**