THE DRILL DOWN:

- Production
- Gas Capture & Utilization
- Enhanced Oil Recovery
- Spill.nd.gov
- Plugging and Reclamation
- 2021 Legislation & Federal Activities
- County by County Update
North Dakota Production
ND PRODUCTION – FEBRUARY 2021

1,083,020 barrels per day
2,703,948 MCF per day
15,773 producing wells

1,519,037 barrels per day
3,145,172 MCF per day
16,280 producing wells

Record Nov 2019
Record Nov 2019
March 2020
RIG COUNT – 16 (5/3/2021)
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Dec 2020</strong></td>
<td>15,798</td>
</tr>
<tr>
<td>Conventional</td>
<td>2,112</td>
</tr>
<tr>
<td>Bakken/Three Forks</td>
<td>13,686</td>
</tr>
<tr>
<td><strong>Inactive Dec 2020</strong></td>
<td>2,687</td>
</tr>
<tr>
<td>WTI $35-$45 &gt; 90 days = EIA 1/30/2021</td>
<td></td>
</tr>
<tr>
<td><strong>Waiting on Completion Dec 2020</strong></td>
<td>668</td>
</tr>
<tr>
<td>WTI $45-$50 &gt; 90 DAYS = EIA 3/4/2021</td>
<td></td>
</tr>
<tr>
<td><strong>Permitted Dec 2020</strong></td>
<td>1,673</td>
</tr>
<tr>
<td>WTI $55-$60 &gt; 90 days ?? EIA 5/3/2021</td>
<td></td>
</tr>
<tr>
<td><strong>Increase Density Dec 2020</strong></td>
<td>11,949</td>
</tr>
<tr>
<td>ICO 31152</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34,884</td>
</tr>
<tr>
<td><strong>Estimated Final</strong></td>
<td></td>
</tr>
<tr>
<td>$60/BO = 55-65 Rigs = 20 Yr</td>
<td>40,000</td>
</tr>
<tr>
<td>$70/BO = 65-75 Rigs = 45 Yr</td>
<td>65,000</td>
</tr>
<tr>
<td>$80/BO = 70-80 Rigs = 70 Yr</td>
<td>85,000</td>
</tr>
</tbody>
</table>

![First 60 Day Average Bakken Horizontal Production by Well](image.png)

First 60 Day Average Bakken Horizontal Production by Well
November 2020
North Dakota Monthly Gas Produced and Price

- MCF
- $/MCF

$0 $2 $4 $6 $8 $10 $12 $14 $16 $18 $20

10,000,000 20,000,000 30,000,000 40,000,000 50,000,000 60,000,000 70,000,000 80,000,000 90,000,000 100,000,000


- MCF Gas Produced
- $ per MCF

DAILY GAS PRODUCTION
GAS CAPTURE POLICY

NDIC Order 24665
Updated September 2020

- Increase the volume of captured gas and reduce the percentage of flared gas
- Incentivize investment in gas capture infrastructure

74% Oct 2014-Dec 2014
77% Jan 2015-March 2016
80% April 2016-Oct 2016
85% Nov 2016-Oct 2018
88% Nov 2018-Oct 2020
91% Nov 2020
CAPTURING NATURAL GAS IN ND

Statewide

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

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

February 2021 Data – Non-Confidential Wells
CAPTURING NATURAL GAS IN ND
Unified Spill/Tier II Reporting System

North Dakota uses a whole-of-government approach for developing long-term strategies for managing energy development in an environmentally responsible manner. The state’s Unified Spill/Tier II reporting system is a tool for an effective state response and a mitigation strategy for unanticipated spill events.

This effort also provides transparency with stakeholders, including fellow North Dakotans, producers, transporters, developers and media members. In accordance with state and federal law, the intentional or unintentional release of hazardous materials must be reported to the state within 24 hours of the incident. This can be accomplished by using this reporting system to meet the requirement of notifying all state agencies, both online and by calling 1-833-995SPEL (1-833-995-7455). This number provides a one-call routing menu with options for reporting based on the nature of the spill.

Immediate Spill/Release Reporting Criteria

- Any spill/release that has an impact, or potential impact, to public health
- Waterways impacted/threatened
- Injuries or Deaths
- Evacuations, or potential need for
- Any spill/release that has immediate impact to wildlife

If an emergency, call 9-1-1

Any immediate spill reporting criteria met? YES
- Call 9-1-1 immediately
- Complete Online Incident Report Form at www.spill.nd.gov (within 24 hrs of incident)

Any immediate spill reporting criteria met? NO
- Call 1-833-995SPEL (as soon as possible)
Plugging & Reclamation
To provide economic relief to businesses and their employees in Western North Dakota, the Bakken Restart Task Force sought use of the CARES Act Funds to facilitate a program plugging abandoned wells in the state which would create work for those who may otherwise be seeking assistance from unemployment.

The Department of the Treasury released CARES Act Guidance which provided their interpretation of the above limitations on the permissible use of Fund payments.

The CARES Act provides that payments from the Fund may only be used to cover costs that:
1. are necessary expenditures incurred due to the public health emergency with respect to the Coronavirus Disease 2019 (COVID–19);
2. were not accounted for in the budget most recently approved as of March 27, 2020 (the date of enactment of the CARES Act) for the State or government; and
3. were incurred during the period that begins on March 1, 2020 and ends on December 31, 2021.

Item 1: “Necessary Expenditures Incurred Due to the Public Health Emergency” is clarified in the Department of Treasury’s guidance as including:

“The requirement that expenditures be incurred “due to” the public health emergency means that expenditures must be used for actions taken to respond to the public health emergency. These may include expenditures incurred to allow the State, territorial, local, or Tribal government to respond directly to the emergency, such as by addressing medical or public health needs, as well as expenditures incurred to respond to second-order effects of the emergency, such as by providing economic support to those suffering from employment or business interruptions due to COVID–19-related business closures. Funds may not be used to fill shortfalls in government revenue to cover expenditures that would not otherwise qualify under the statute. Although a broad range of uses is allowed, revenue replacement is not a permissible use of Fund payments. The statute also specifies that expenditures using Fund payments must be “necessary.” The Department of the Treasury understands this term broadly to mean that the expenditure is reasonably necessary for its intended use in the reasonable judgment of the government officials responsible for spending Fund payments.”
Average unemployment rate from January to September 2020 in North Dakota’s top 16 oil & gas producing counties increased **2.29%**.

The average unemployment in the remaining 37 counties increased **0.28%**.
## CARES ACT FUNDING OVERVIEW:

<table>
<thead>
<tr>
<th>Description</th>
<th>CARES Act Funding Awarded</th>
<th>Paid to Date by Funding Source</th>
<th>Total Paid to Date</th>
<th>Estimated Work/Invoices Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plugging</strong>&lt;br&gt;Plugging of Abandoned wells in North Dakota confiscated by the NDIC.</td>
<td>$33,175,000</td>
<td>$33,175,000</td>
<td>$6,100,572</td>
<td>$39,275,572</td>
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<tr>
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<td></td>
<td><strong>CARES Act/AWPSRF Future Work</strong></td>
</tr>
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<td></td>
<td>$13,300,000</td>
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<tr>
<td></td>
<td></td>
<td><strong>157,719 man-hours</strong></td>
<td><strong>1,380 FT jobs</strong></td>
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<td><strong>280 wells</strong></td>
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<tr>
<td><strong>Reclamation</strong>&lt;br&gt;Reclamation of abandoned sites confiscated.</td>
<td>$16,300,000</td>
<td>$16,300,000</td>
<td>$12,718,837</td>
<td><strong>$32,700,000</strong></td>
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<td></td>
<td><strong>45,872 man-hours</strong></td>
<td><strong>1,925 FT jobs</strong></td>
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<td></td>
<td><strong>1,380 FT jobs</strong></td>
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<tr>
<td><strong>DUC Well Completions</strong>&lt;br&gt;Reimbursement of funds for water acquisition, handling, and disposal for completion of DUC wells.</td>
<td>$16,000,000</td>
<td>$11,684,461</td>
<td>$0</td>
<td><strong>$4,315,534</strong></td>
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<td></td>
<td><strong>32 ND companies</strong></td>
<td><strong>400 FT jobs</strong></td>
<td></td>
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<td></td>
<td></td>
<td><strong>$4,600,000 sales tax</strong></td>
<td><strong>47 wells</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Operating</strong>&lt;br&gt; Covid-19 costs: hand sanitizer, non-contact thermometers, webinar upgrade, etc.</td>
<td>$1,512</td>
<td>$1,512</td>
<td>$0</td>
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<tr>
<td></td>
<td></td>
<td><strong>3,705 FT jobs</strong></td>
<td><strong>$7,815,000 sales tax</strong></td>
<td></td>
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<tr>
<td><strong>TOTAL:</strong></td>
<td>$65,476,512</td>
<td>$61,160,973</td>
<td>$18,819,349</td>
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<tr>
<td></td>
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<td><strong>$79,978,870</strong></td>
<td><strong>CARES Act $4,315,539</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>1,875 acres</strong></td>
<td><strong>1,230 crop</strong></td>
<td><strong>Future AWPSRF costs $46,000,000</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>1,230 crop</strong></td>
<td><strong>645 pasture</strong></td>
<td><strong>SW Bonds $5,825,000</strong></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td><strong>CARES/AWPSRF/Civil $40,175,000</strong></td>
</tr>
</tbody>
</table>

**Future AWPSRF costs $46,000,000**

**SW Bonds $5,825,000**

**CARES/AWPSRF/Civil $40,175,000**
PASSED

- SB 2065 – DMR Bill relating to regulation of permitting and amalgamation of underground storage.
- HB 1055 – DMR Bill relating to mailing of printed Orders to interested parties
- HB 1452 – Establishes the Clean Sustainable Energy Authority
- HB 1395 – Appropriation of CARES Act Funds
- HB 1096 – Addition of CO2 Flowlines to definition of “gas or liquid transmission facility”
- SB 2014 – Industrial Commission Budget including studies on Salt Caverns and Hydrogen

FAILED

- HB 1054 – DMR Bill relating to the requirement of single well bonds for abandoned oil and gas wells.
- SB 2064 – DMR Bill proposed relating to the definition of person adding in “responsible corporate officer”
March 2021 US Department of Interior launched review of federal oil and gas leasing program

- Key step to determining whether current administration will permanently halt new leases on federal land and water.
- Kicks of public forum on oil and gas leasing to generate an interim report released early summer 2021 outlining next steps and recommendations.

OTHER ND IMPACTS

▪ Revive Economic Growth and Reclaim Orphaned Wells Act – “REGROW Act” – filed in Congress April 2021
  ▪ Providing states, tribes, and federal agencies resources to properly plug orphaned wells.

▪ Dakota Access Pipeline
  ▪ Army Corps is conducting an environmental and safety review expected to be complete in early 2022.
  ▪ Current administration has indicated the pipeline can continue to operate while the review is in progress.
County by County
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES

DUNN COUNTY
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES

MCKENZIE COUNTY
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES

4-5 rigs

MOUNTRAIL COUNTY