



Oil and Gas Update

May 6, 2021 | Western Energy Roundtable

Katie Haarsager, Public Information Officer



THE DRILL DOWN:

- Production
- Gas Capture & Utilization
- Enhanced Oil Recovery
- Spill.nd.gov
- Plugging and Reclamation
- 2021 Legislation & Federal Activities
- County by County Update

An aerial photograph of a North Dakota landscape during autumn. The terrain is covered in dense forests with trees displaying vibrant yellow and orange foliage. In the center, a circular oil field with several pumpjacks is visible, surrounded by a dirt road. The background shows rolling hills under a clear blue sky.

North Dakota Production

ND PRODUCTION – FEBRUARY 2021



1,083,020
BARRELS PER DAY

1,519,037
Record Nov 2019



2,703,948
MCF PER DAY

3,145,172
Record Nov 2019



15,773
PRODUCING WELLS

16,280
March 2020

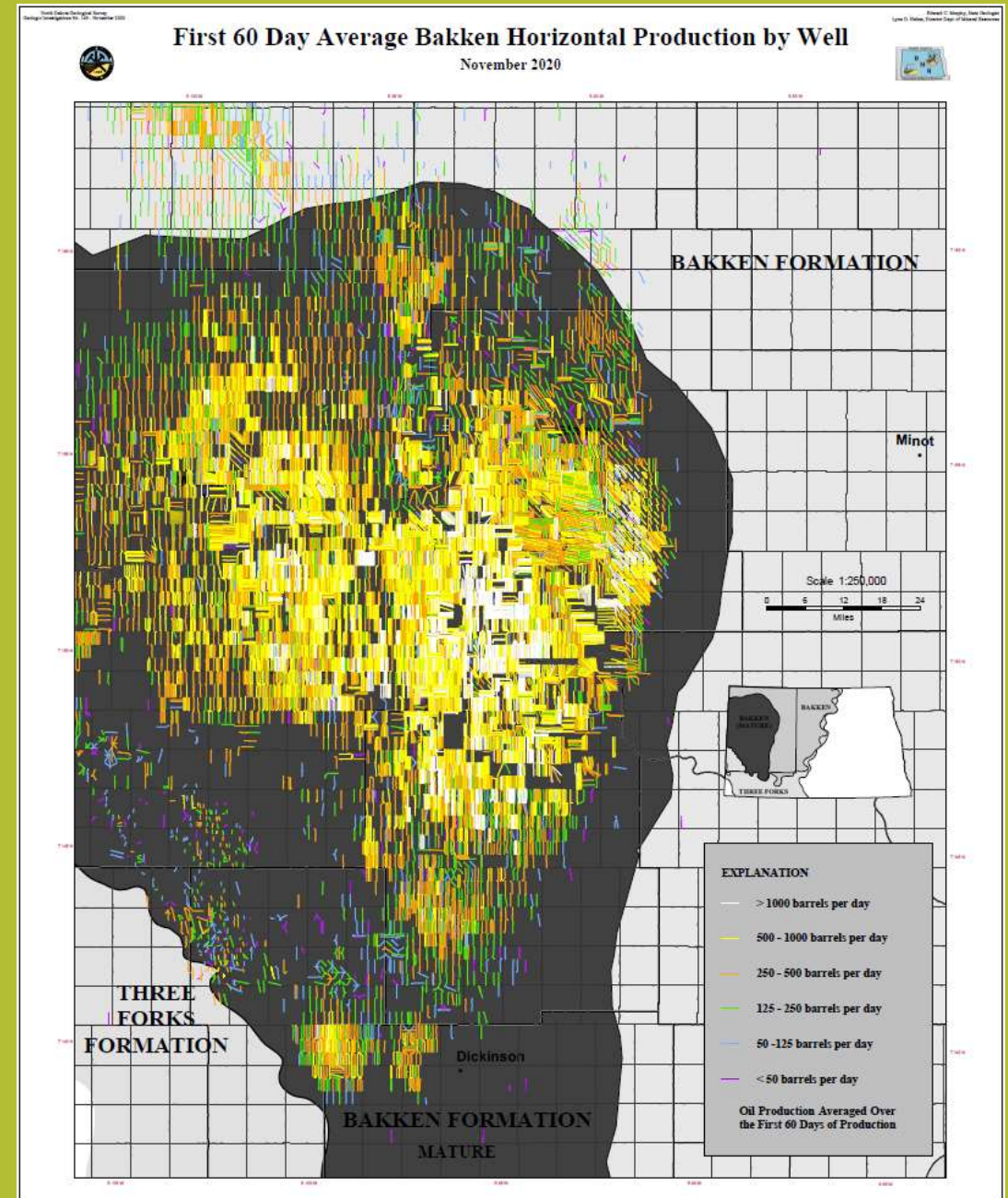
This map of North Dakota displays the following counties and their locations:

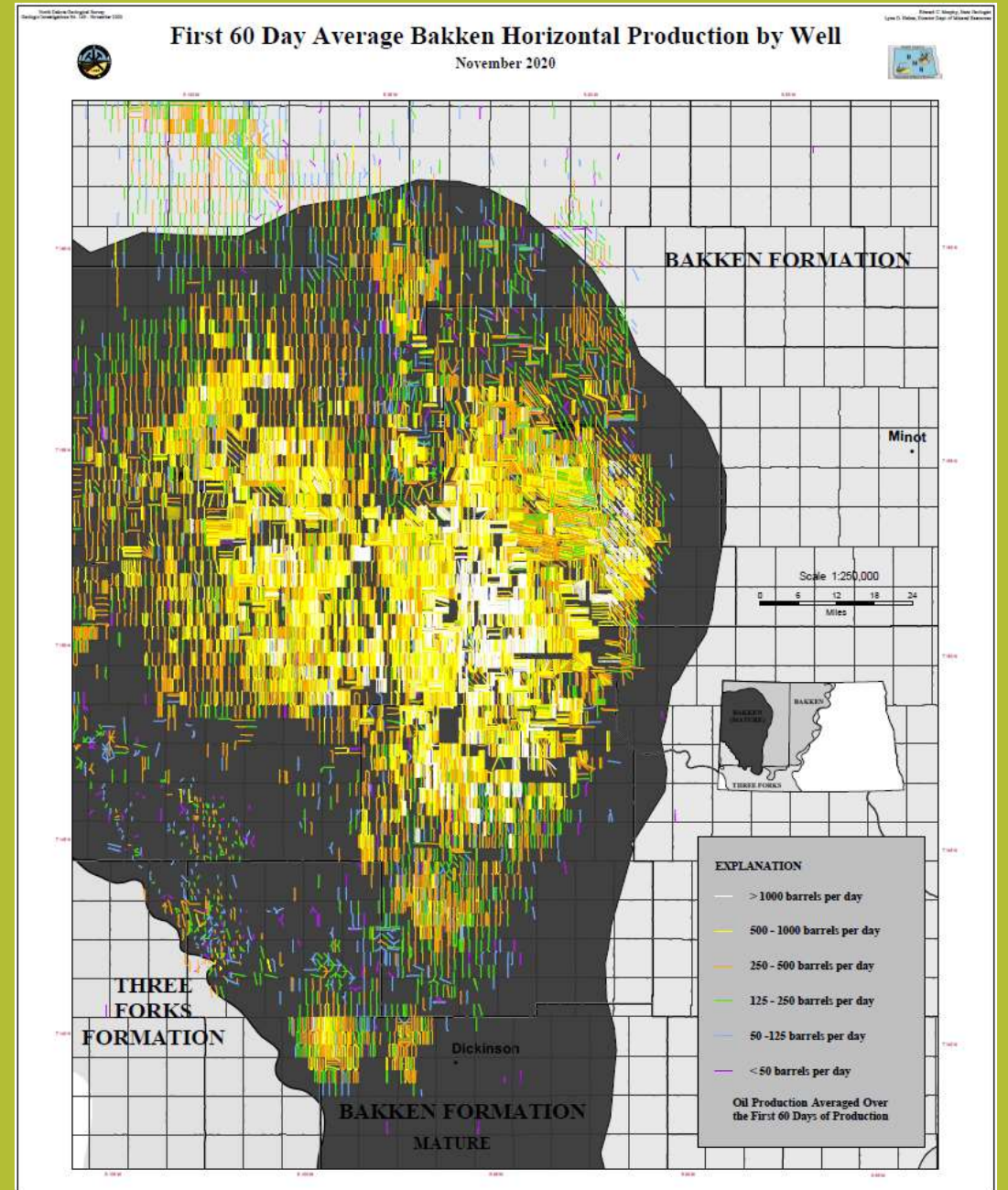
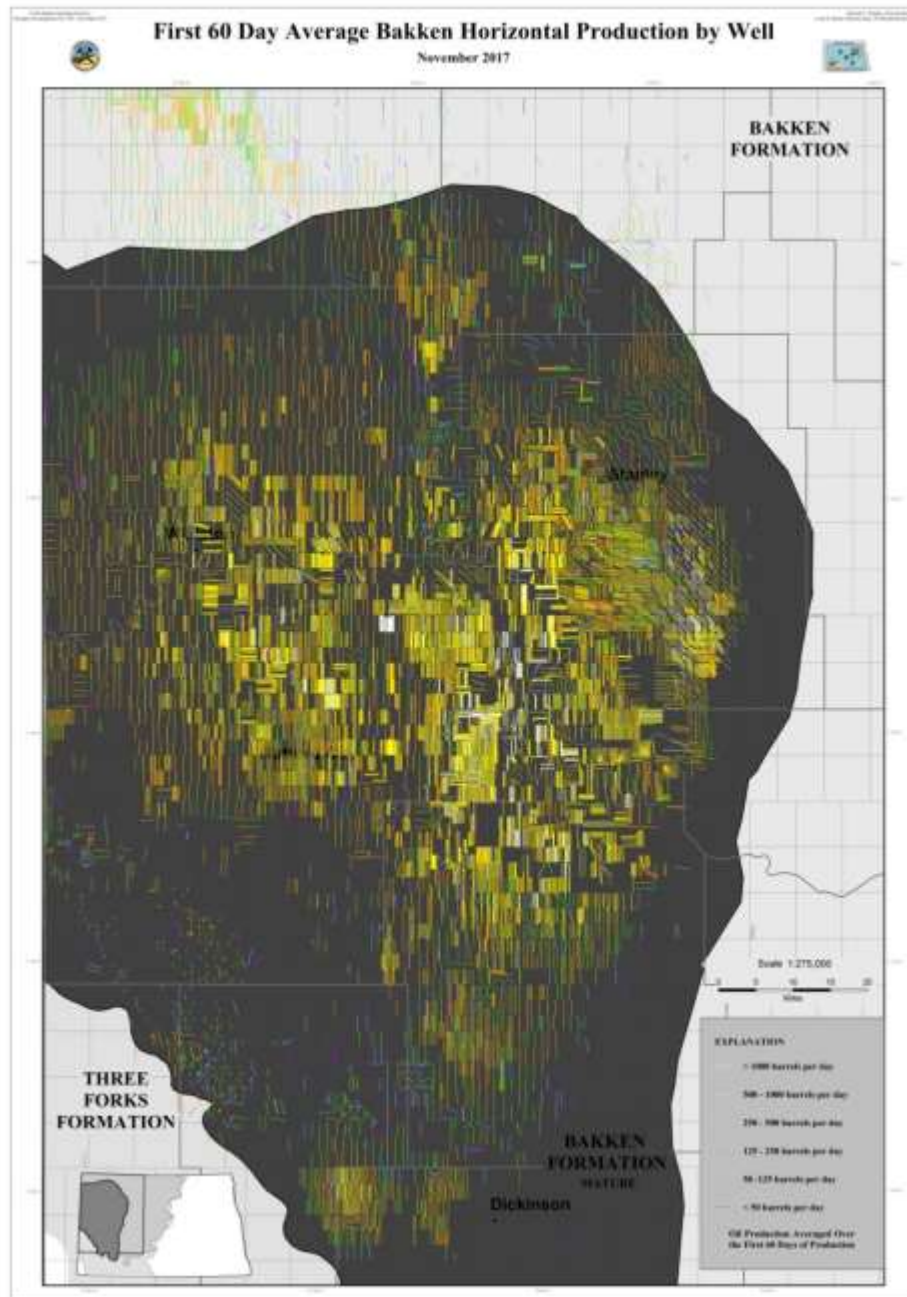
- Northwest:** Grand Fork, Towner, Renville, Williams, McLean, Cavalier, Bottineau, and Sherman.
- West:** Williston, Epping, Ray, Toga, Alexander, Watford City, Killdeer, and Hettinger.
- Central:** Grand Fork, Towner, Renville, Williams, McLean, Cavalier, Bottineau, and Sherman.
- East:** Grand Fork, Towner, Renville, Williams, McLean, Cavalier, Bottineau, and Sherman.
- South:** Grand Fork, Towner, Renville, Williams, McLean, Cavalier, Bottineau, and Sherman.

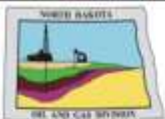
The map also shows major cities such as Bismarck, Grand Fork, Minot, and Williston, as well as numerous smaller towns and villages. The Missouri River is depicted flowing through the western part of the state, and the Red River is shown in the northeast. The map is color-coded with various shades of green, yellow, and brown to represent different geographical features and land use.

WELLS

| | |
|---|---------------|
| Active Dec 2020 | 15,798 |
| Conventional | 2,112 |
| Bakken/Three Forks | 13,686 |
| Inactive Dec 2020 | 2,687 |
| WTI \$35-\$45 > 90 days = EIA 1/30/2021 | |
| Waiting on Completion Dec 2020 | 668 |
| WTI \$45-\$50 > 90 DAYS = EIA 3/4/2021 | |
| Permitted Dec 2020 | 1,673 |
| WTI \$55-\$60 > 90 days ?? EIA 5/3/2021 | |
| Increase Density Dec 2020 | 11,949 |
| ICO 31152 | |
| Total | 34,884 |
| Estimated Final | |
| \$60/BO = 55-65 Rigs = 20 Yr | 40,000 |
| \$70/BO = 65-75 Rigs = 45 Yr | 65,000 |
| \$80/BO = 70-80 Rigs = 70 Yr | 85,000 |



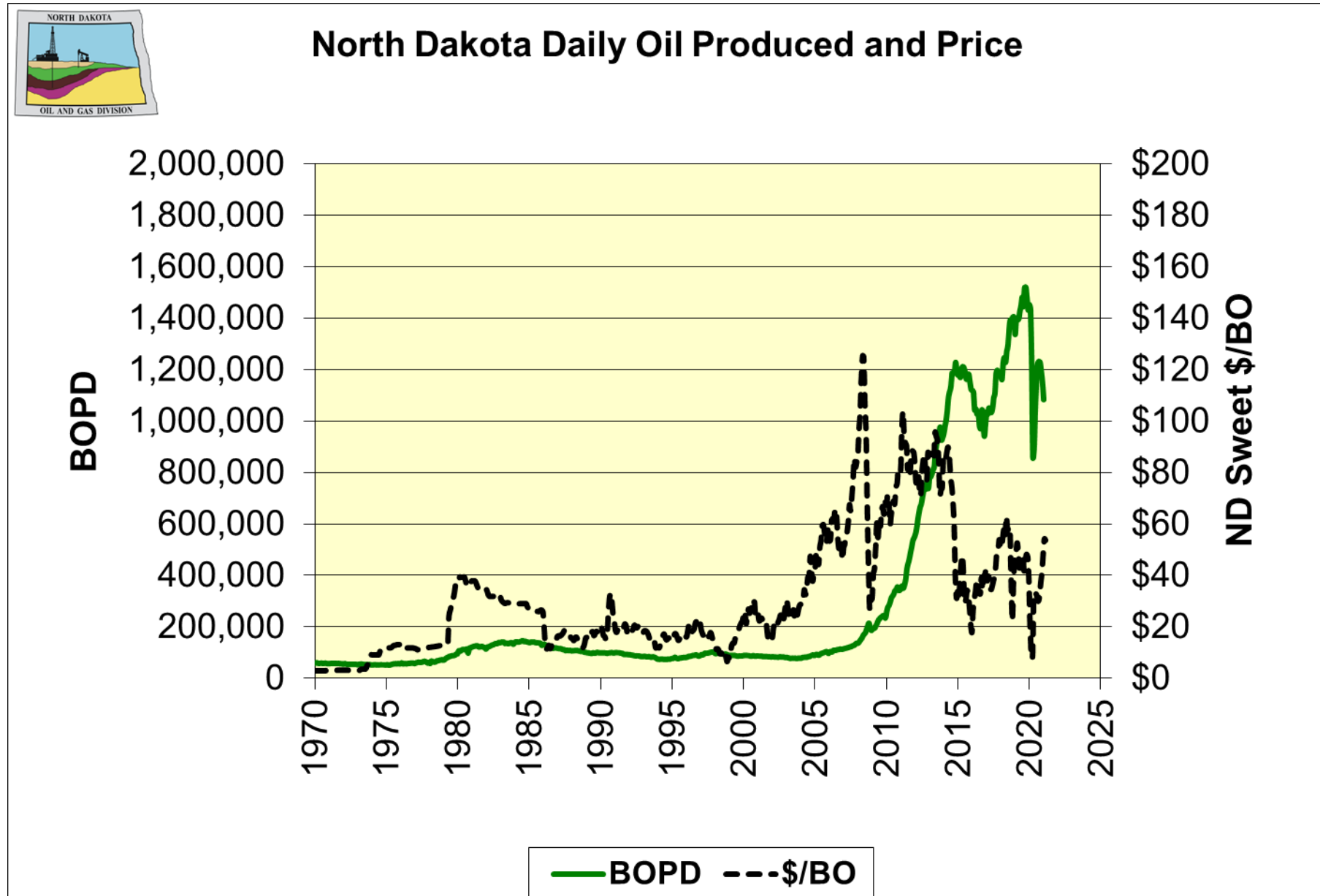




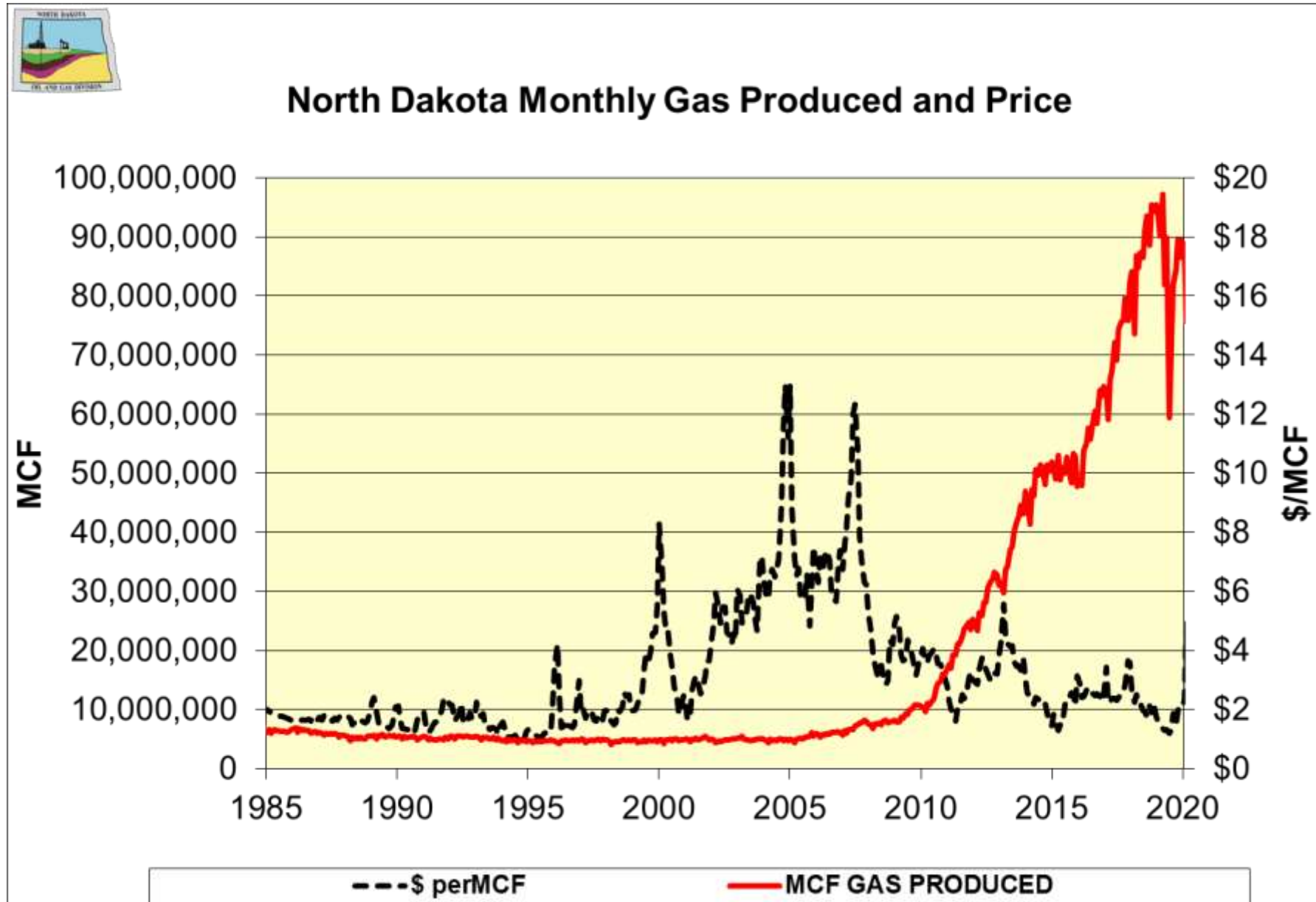
North Dakota Average Monthly Rig Count



DAILY OIL PRODUCTION



DAILY GAS PRODUCTION



An aerial photograph showing a landscape with rolling hills covered in dense forest with vibrant autumn foliage in shades of yellow, orange, and brown. In the center of the image, there is a cleared, reddish-brown area where several industrial structures, likely part of a gas capture and utilization facility, are visible. A dirt road or path winds through the landscape, and the sky is a clear, pale blue.

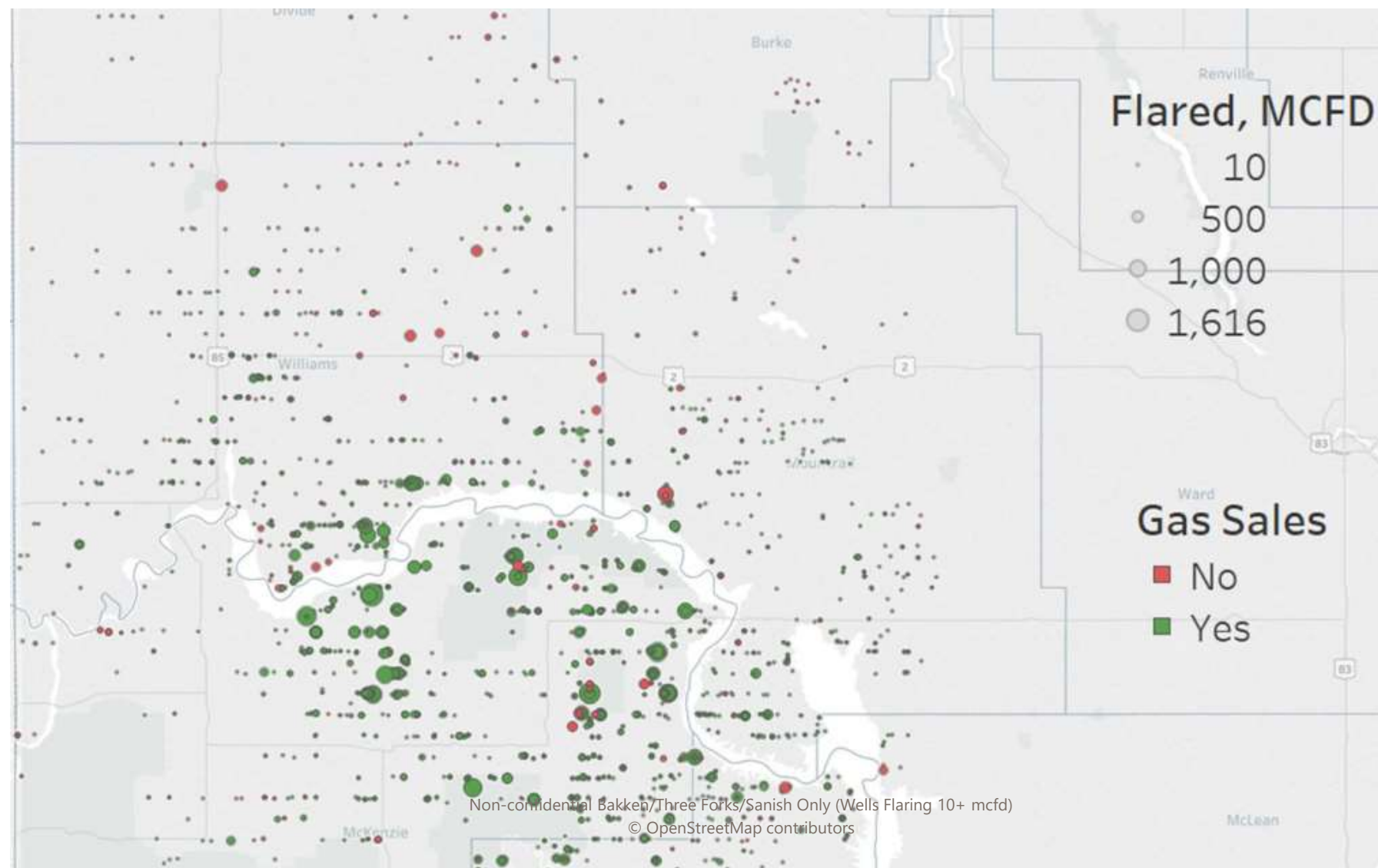
Gas Capture & Utilization

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**

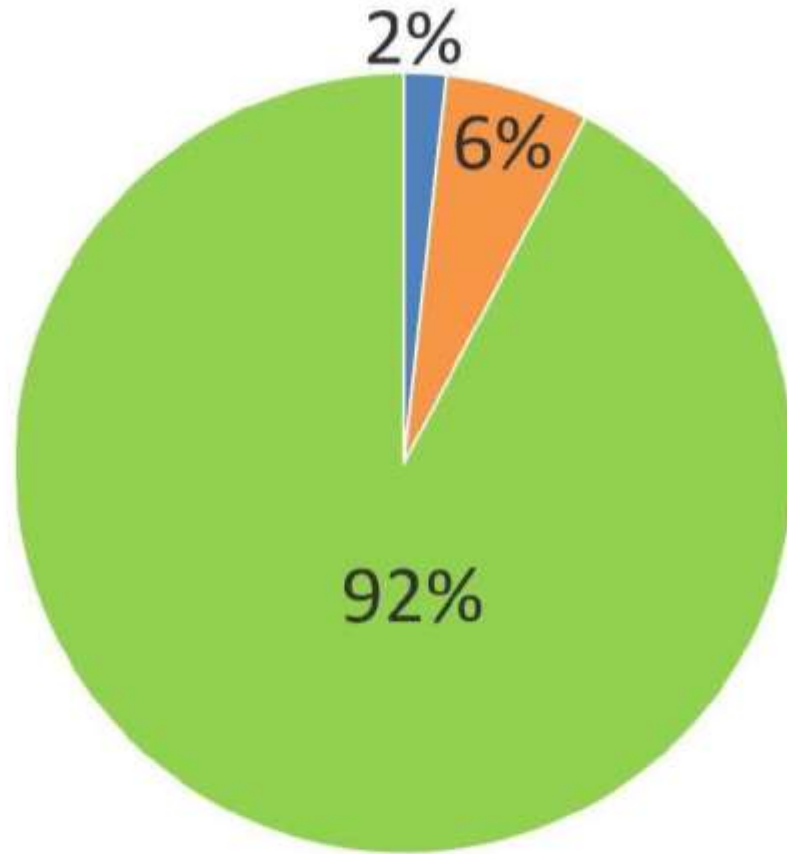
88%

**Nov 2018-
Oct 2020**

91%

Nov 2020

CAPTURING NATURAL GAS IN ND



Statewide

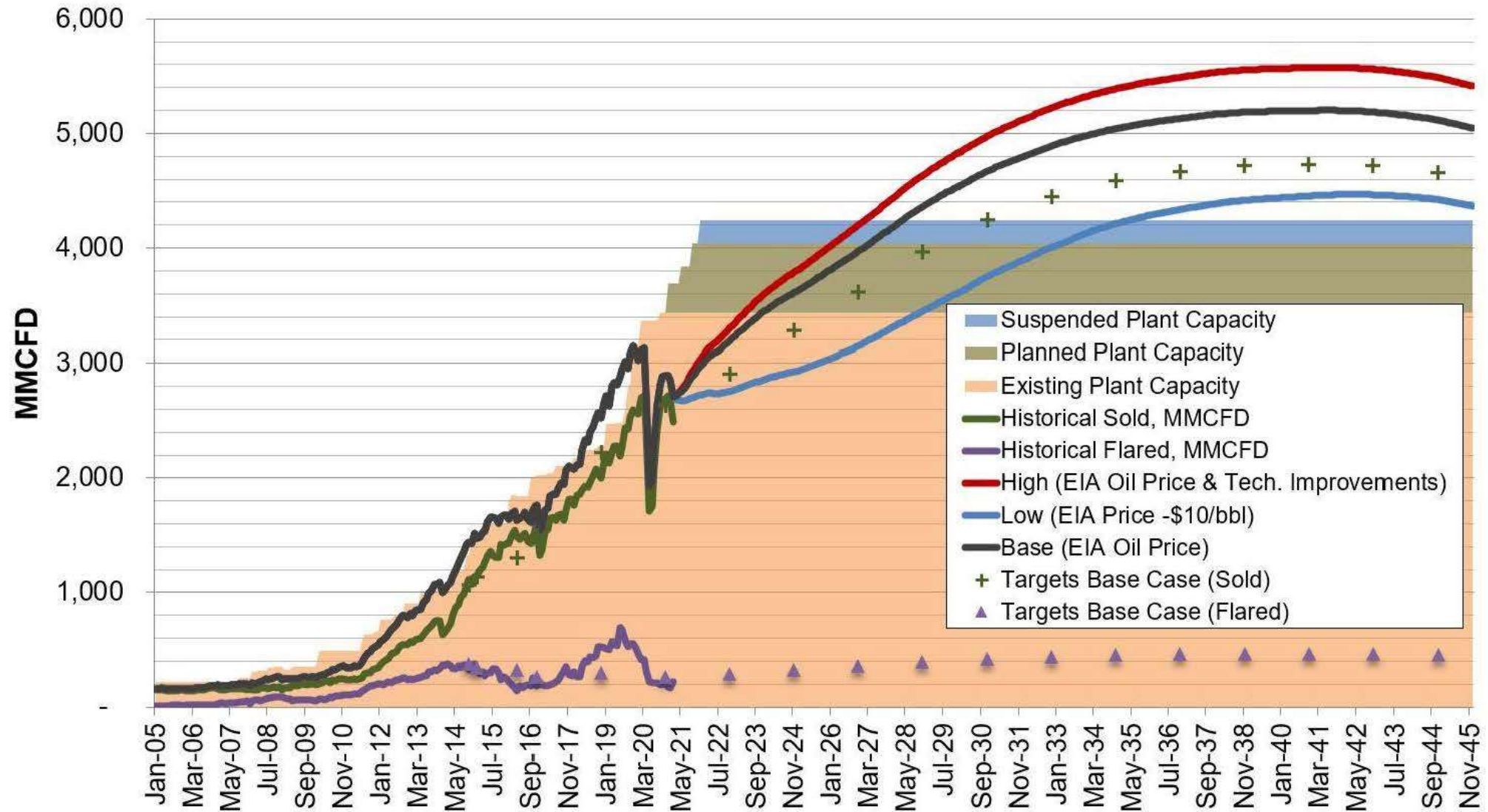
GREEN – % of gas captured and sold
Blue – % flared from zero sales wells
Orange – % flared from wells with at least one mcf sold.

Simple Terms

Blue – Lack of pipelines
Orange – Challenges on existing infrastructure

February 2021 Data – Non-Confidential Wells

CAPTURING NATURAL GAS IN ND

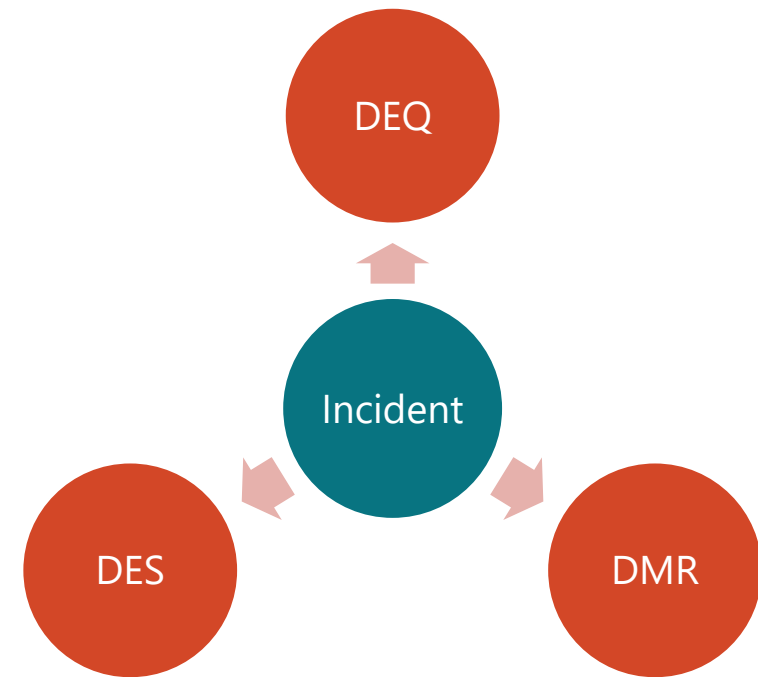


An aerial photograph of a landscape during autumn. The terrain is covered with trees displaying vibrant yellow and orange foliage. In the center, a baseball field with a reddish-brown infield is visible, surrounded by green grass. A dirt path or road curves through the lower right portion of the image. The background shows rolling hills under a clear blue sky.

Emergency Response

SPILL.ND.GOV

NEW UNIFIED SPILL
REPORTING JAN 2021



UNIFIED SPILL REPORTING SYSTEM



CLICK HERE TO REPORT A SPILL

Spills, discharges, and emergency releases can cause serious harm to public health and the environment. Federal and state laws require federal and/or state agencies be notified in the event of an accidental spillage of any materials that may pollute water, air or soil.

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 **1-833-99SPILL (1-833-997-7455)**. 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



Plugging & Reclamation

CARES ACT FUNDING

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:

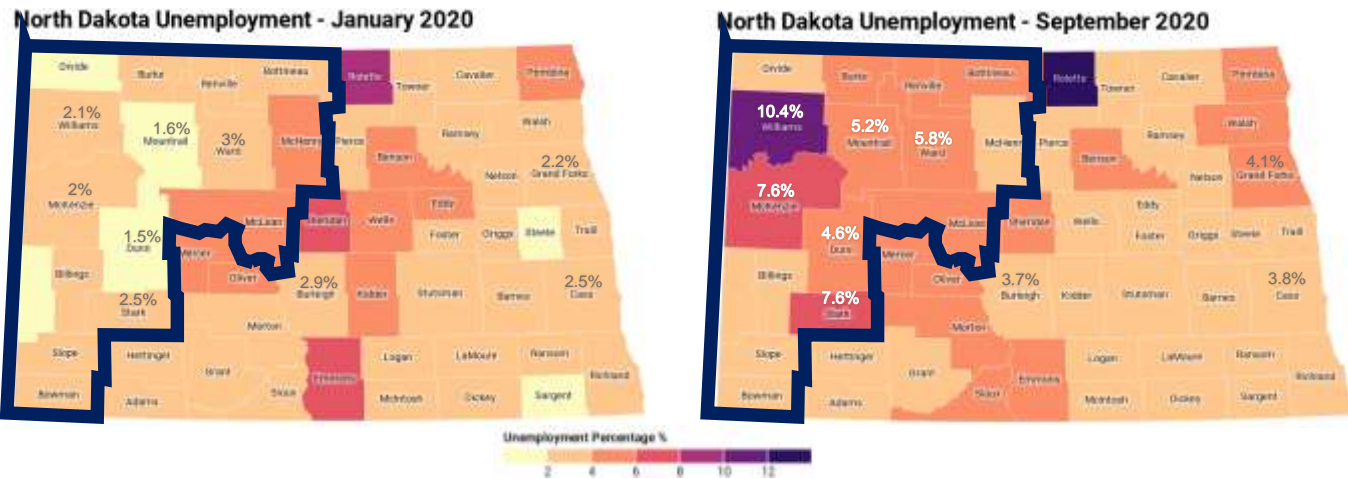
1. are necessary expenditures incurred due to the public health emergency with respect to the Coronavirus Disease 2019 (COVID-19);
2. were not accounted for in the budget most recently approved as of March 27, 2020 (the date of enactment of the CARES Act) for the State or government; and
3. were incurred 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%**.



Top 16 Oil and Gas Producing Counties

Jan-20, 2.71%

Sep-20, 5.00%

37 Other North Dakota Counties

Jan-20, 3.61%

Sep-20, 3.89%

Statewide

Jan-20, 3.34%

Sep-20, 4.23%

CARES ACT FUNDING OVERVIEW:

| | CARES Act Funding Awarded | Paid to Date by Funding Source | | Total Paid to Date | Estimated Work/ Invoices Pending |
|--|------------------------------|-----------------------------------|---------------|--|--|
| | | <u>CARES Act</u> | <u>AWPSRF</u> | | <u>CARES Act/AWPSRF Future Work</u> |
| <u>Plugging</u> Plugging of Abandoned wells in North Dakota confiscated by the NDIC. 375 wells | \$33,175,000 | \$33,175,000 | \$6,100,572 | \$39,275,572 157,719 man-hours 1,380 FT jobs 280 wells | \$13,300,000 95 wells |
| <u>Reclamation</u> Reclamation of abandoned sites confiscated. 185 sites | \$16,300,000 | \$16,300,000 | \$12,718,837 | \$29,018,837 45,872 man-hours 1,925 FT jobs 176 sites = 880 acres | \$32,700,000 201 sites |
| <u>DUC Well Completions</u> Reimbursement of funds for water acquisition, handling, and disposal for completion of DUC wells. | \$16,000,000 | \$11,684,461 | \$0 | \$11,684,461 32 ND companies 400 FT jobs \$4,600,000 sales tax 47 wells | \$4,315,534 \$3,215,000 sales tax 33 wells |
| <u>Operating</u> Covid-19 costs: hand sanitizer, non-contact thermometers, webinar upgrade, etc. | \$1,512 | \$1,512 | | | |
| <u>TOTAL:</u> 1,875 acres 1,230 crop 645 pasture | \$65,476,512 | \$61,160,973 | \$18,819,349 | \$79,978,870 3,705 FT jobs \$7,815,000 sales tax | CARES Act \$4,315,539 Future AWPSRF costs \$46,000,000 SW Bonds \$5,825,000 CARES/AWPSRF/Civil \$40,175,000 |



2021 ND Legislation & Federal Activities

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”

OTHER ND IMPACTS

- 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 off public forum on oil and gas leasing to generate an interim report released early summer 2021 outlining next steps and recommendations.
- Climate Leadership and Environmental Action for our Nation's Future Act - "*CLEAN Future*" Act – filed in Congress on March 2021.

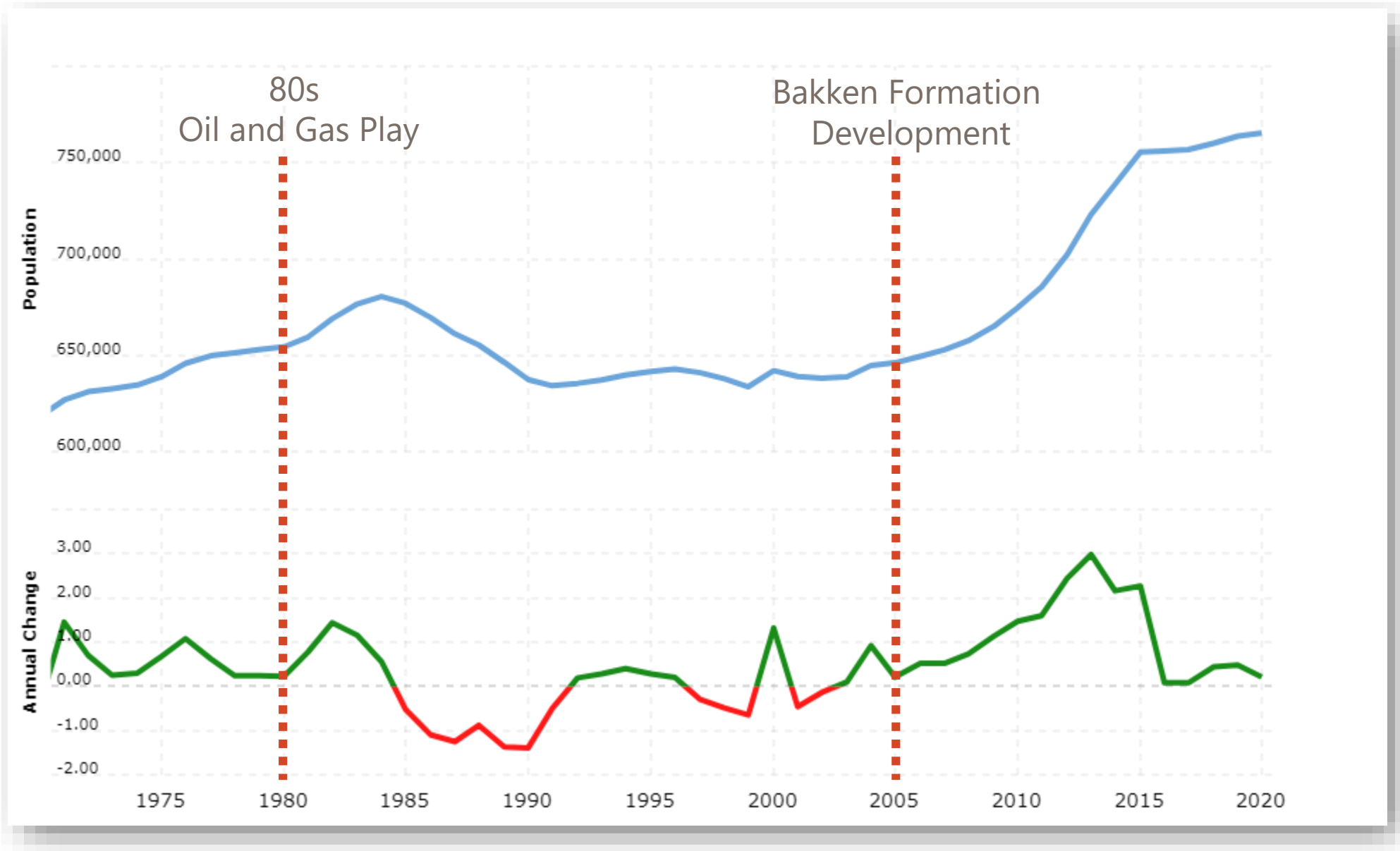
OTHER ND IMPACTS

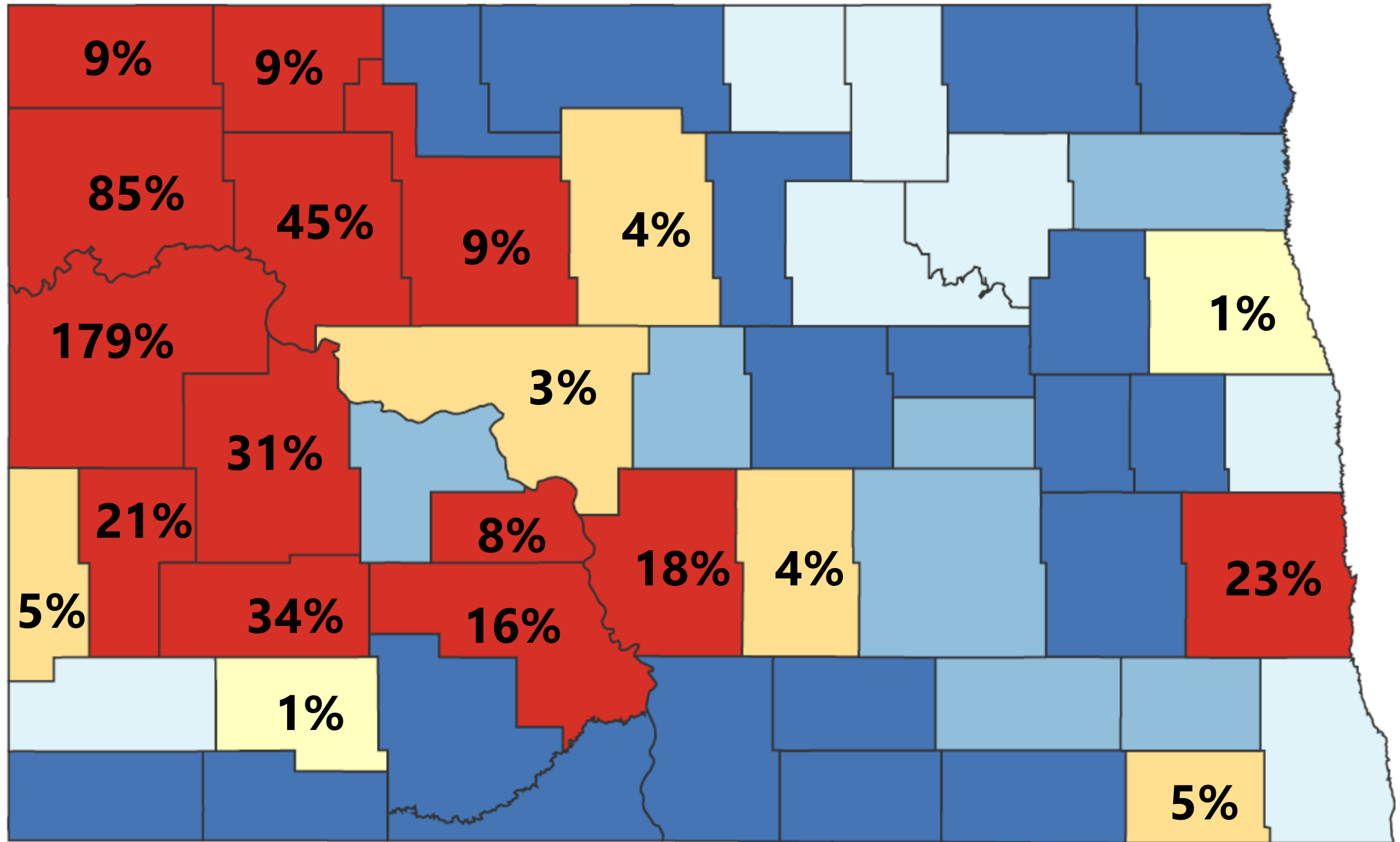
- Revive Economic Growth and Reclaim Orphaned Wells Act – *“REGROW Act” – filed in Congress April 2021*
 - Providing states, tribes, and federal agencies resources to properly plug orphaned wells.
- Dakota Access Pipeline
 - Army Corps is conducting an environmental and safety review expected to be complete in early 2022.
 - Current administration has indicated the pipeline can continue to operate while the review is in progress.



County by County

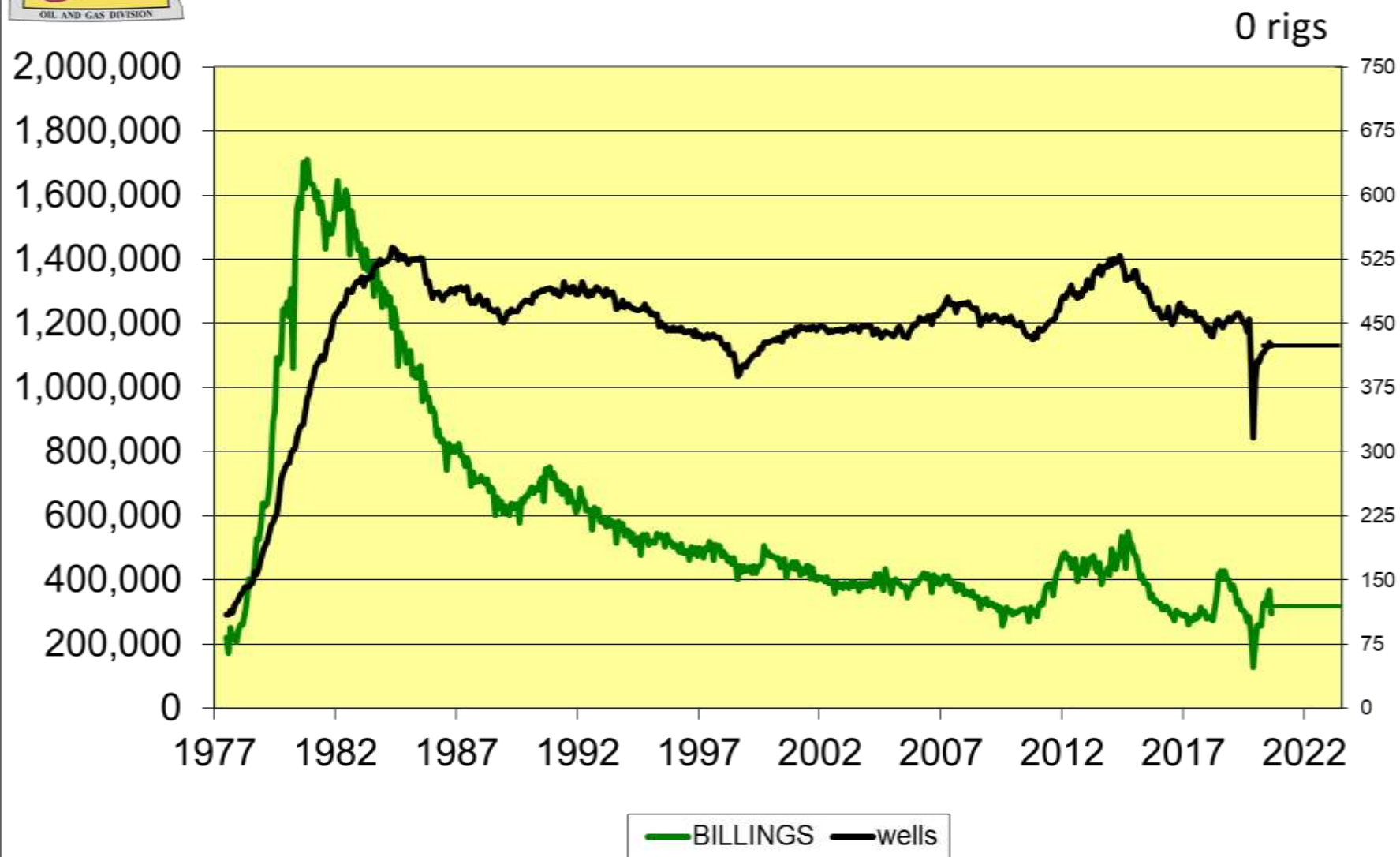
CENSUS REVIEW



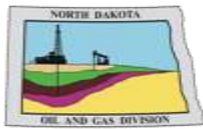




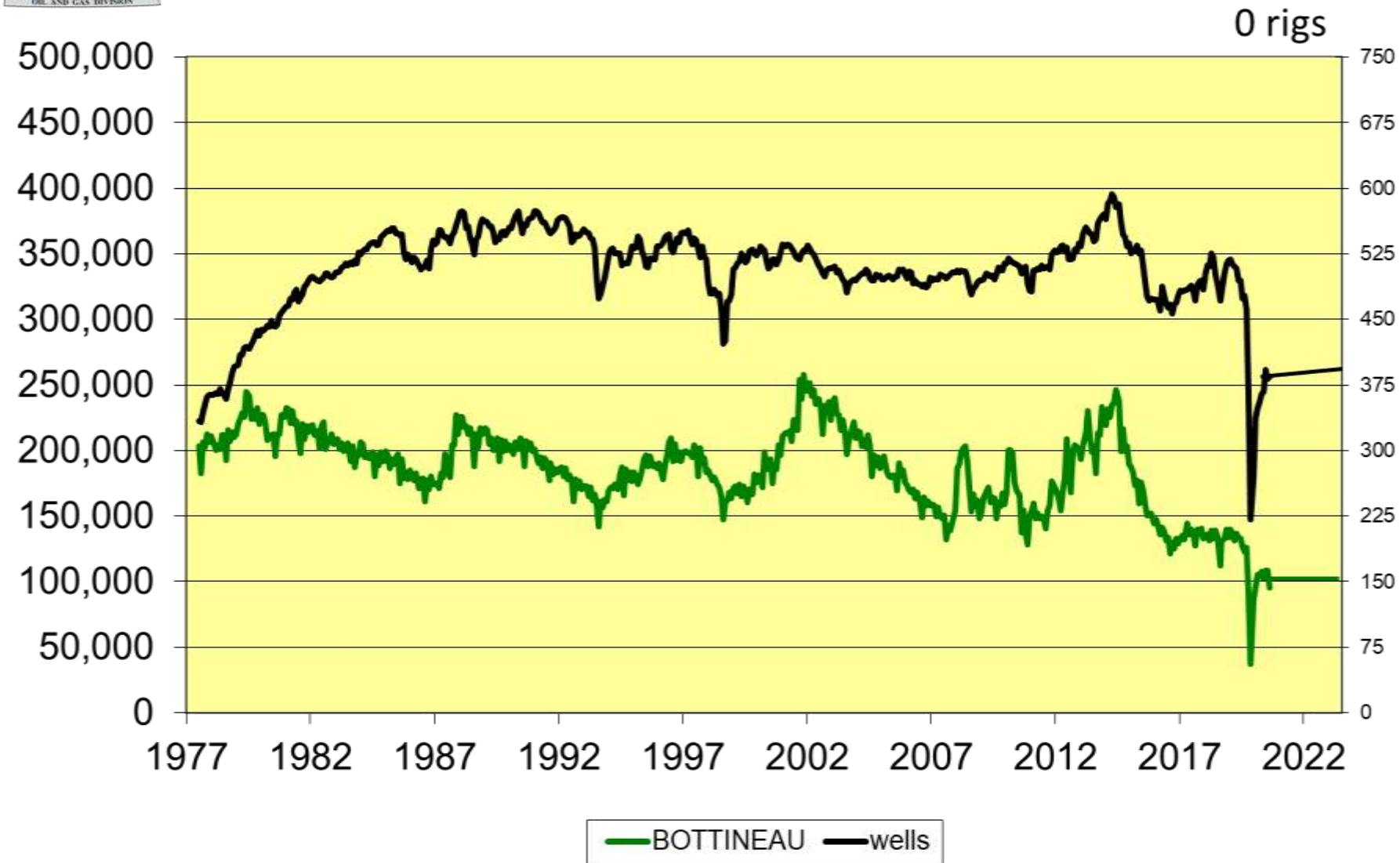
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



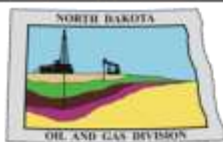
BILLINGS COUNTY



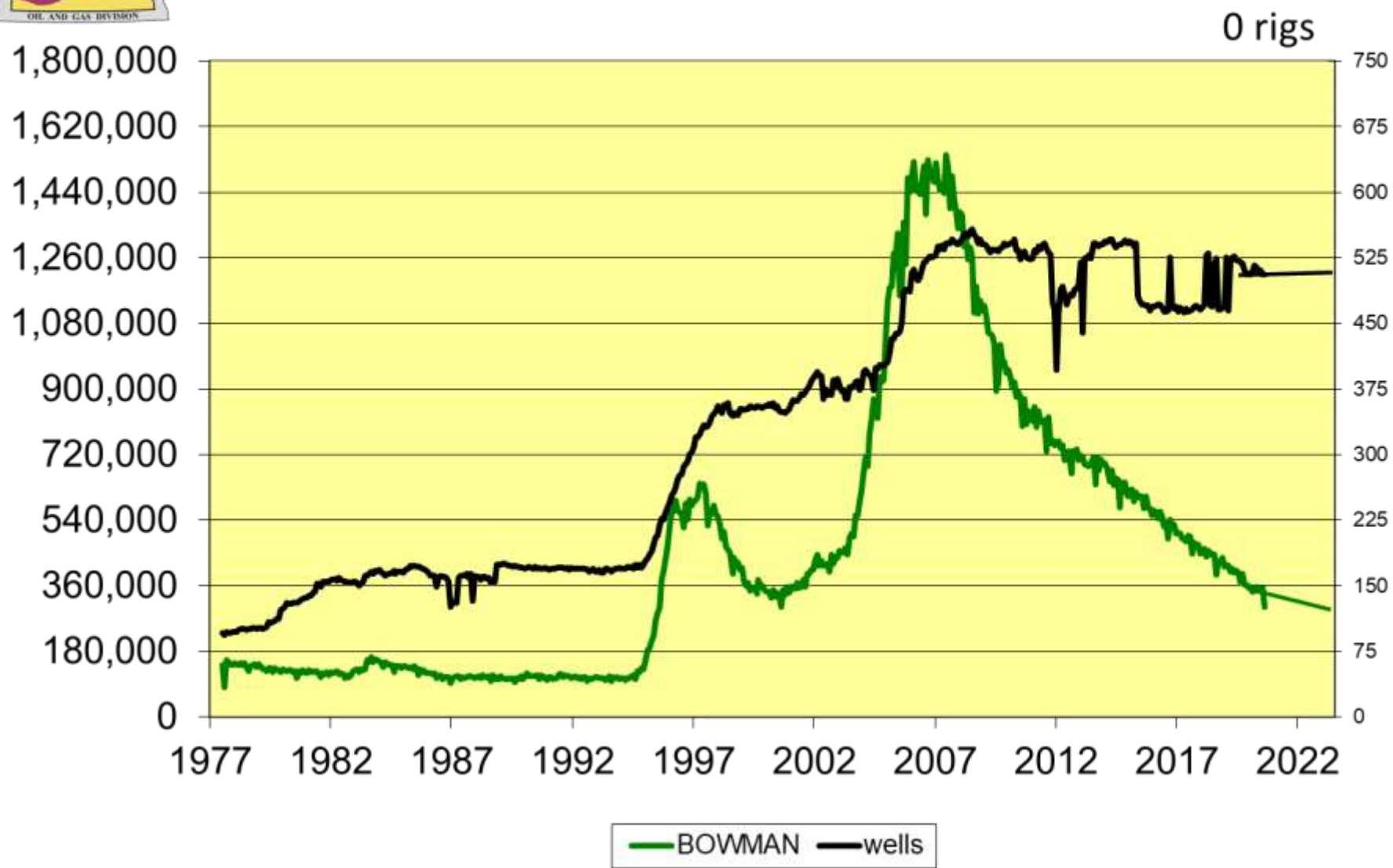
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



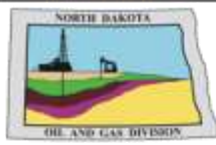
BOTTINEAU COUNTY



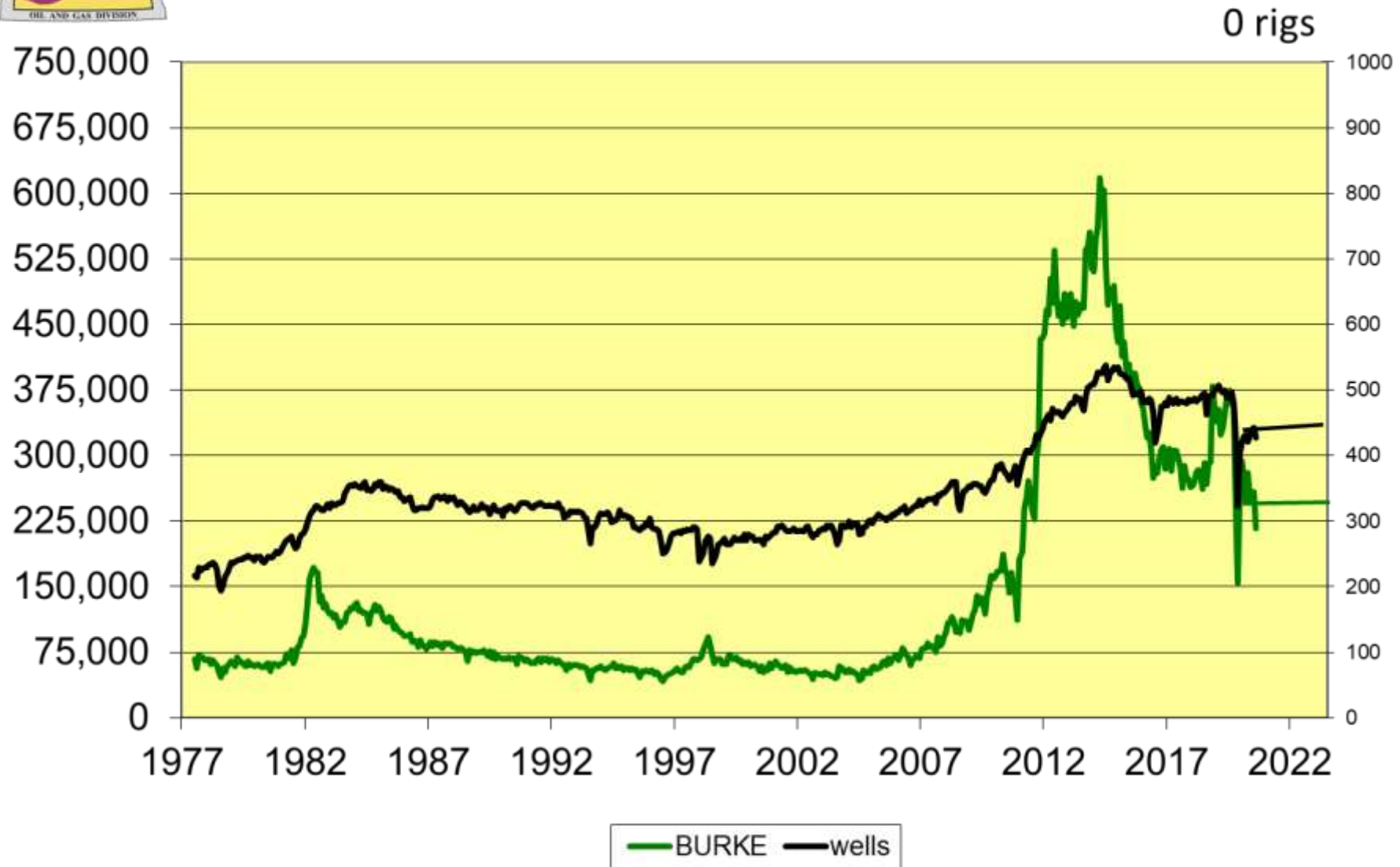
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



BOWMAN COUNTY



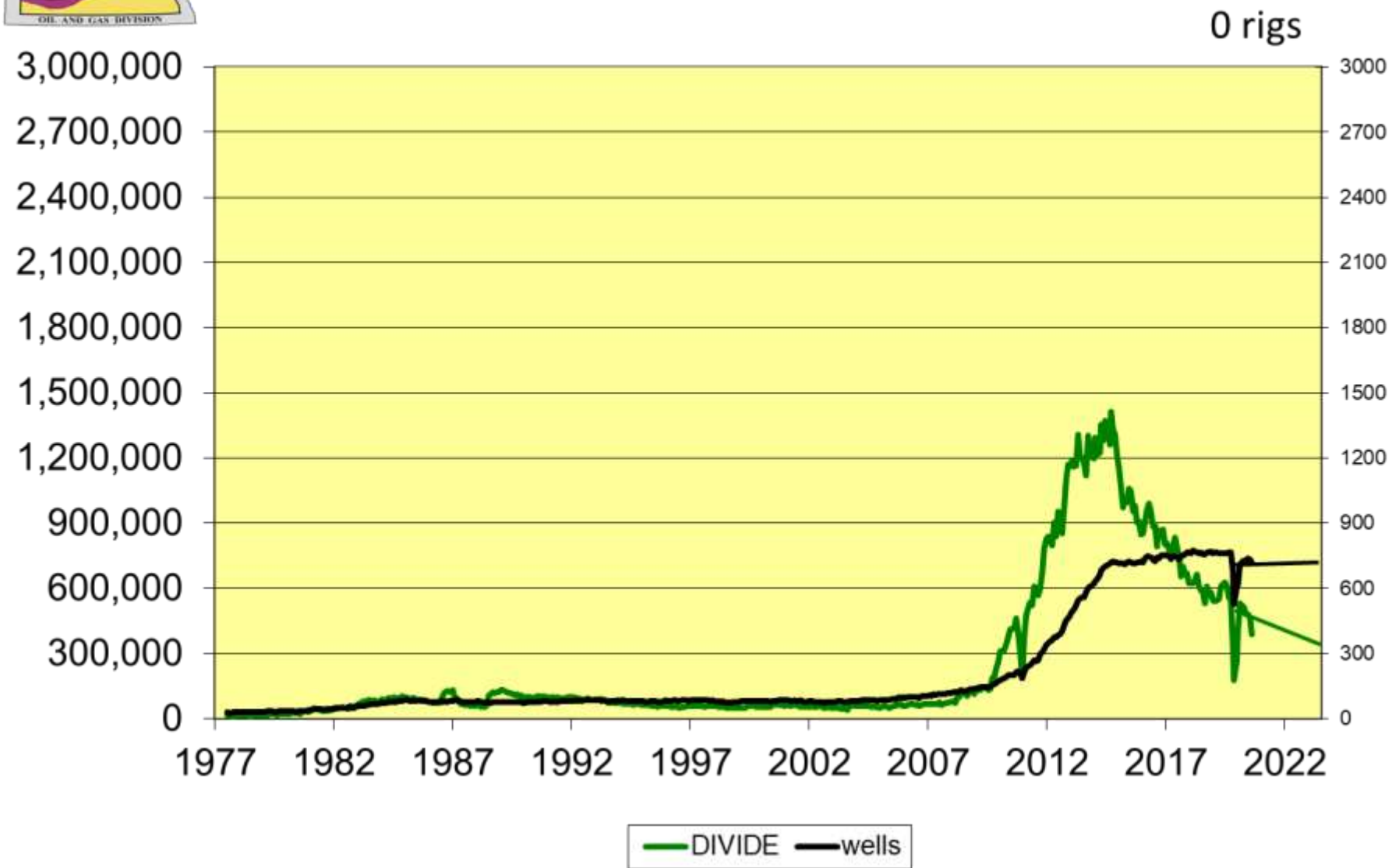
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



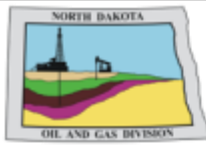
BURKE COUNTY



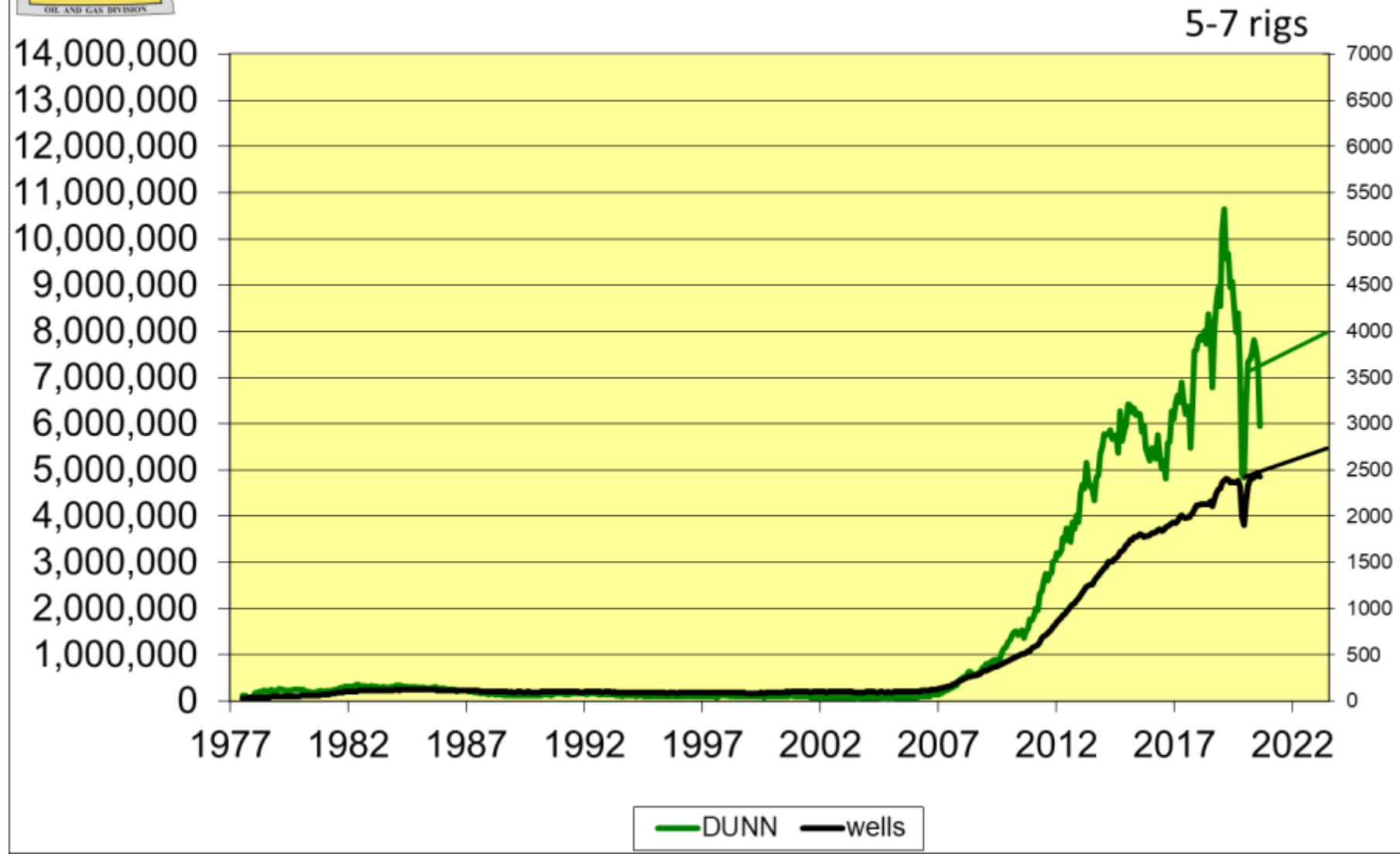
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



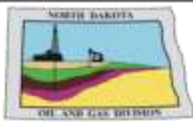
DIVIDE COUNTY



MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES

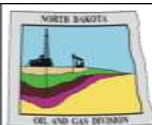


DUNN COUNTY

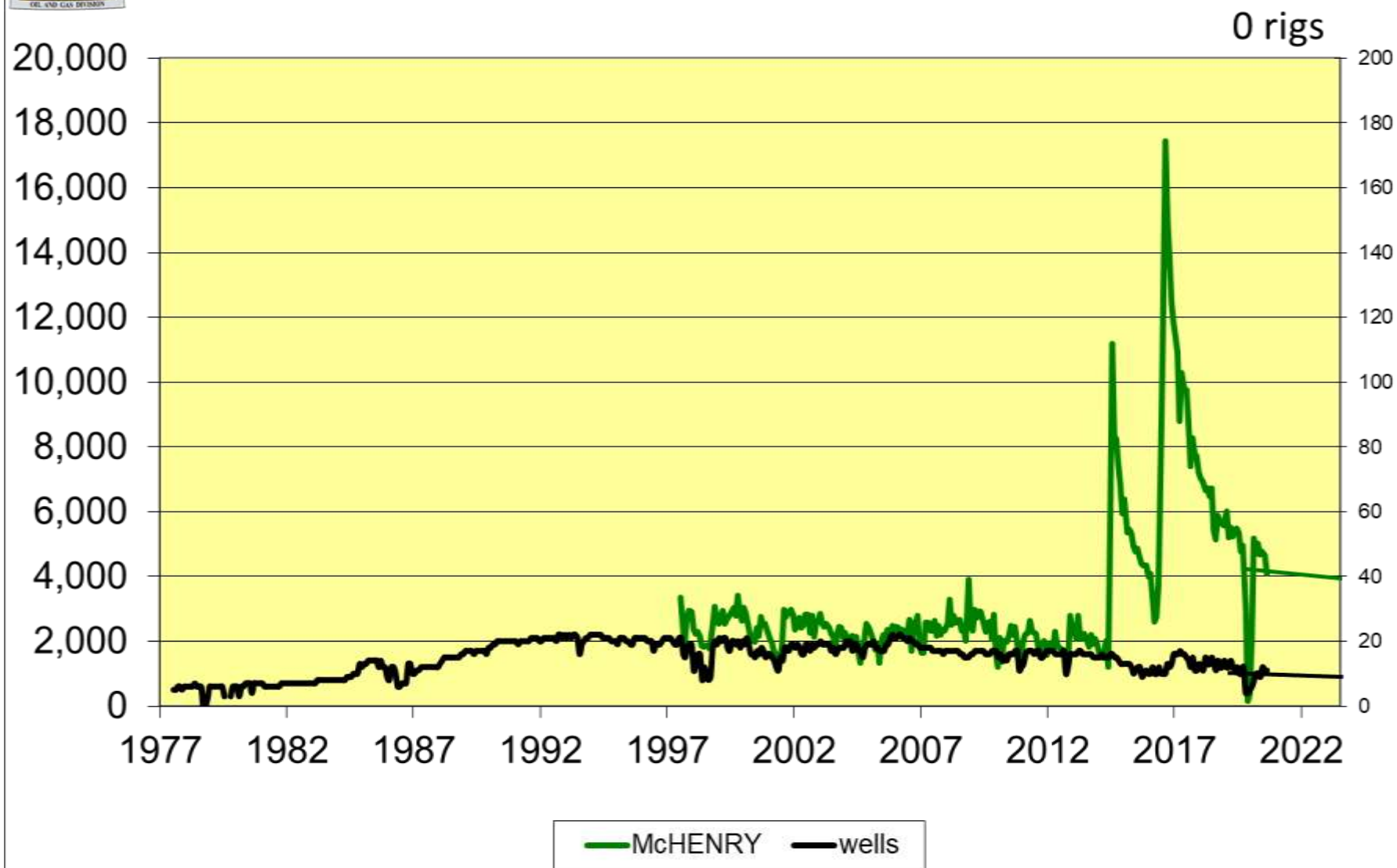


MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES





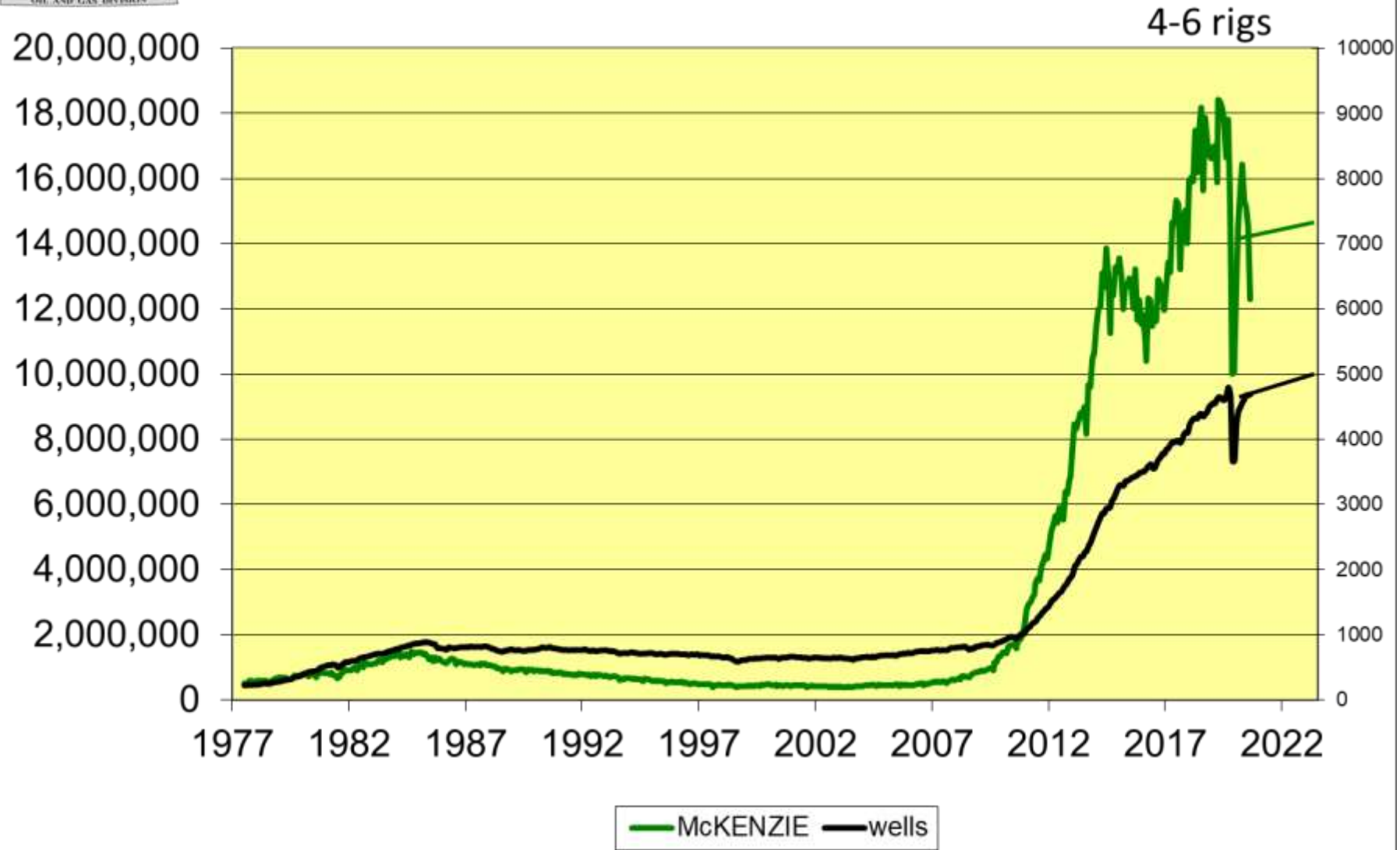
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



MCHENRY COUNTY



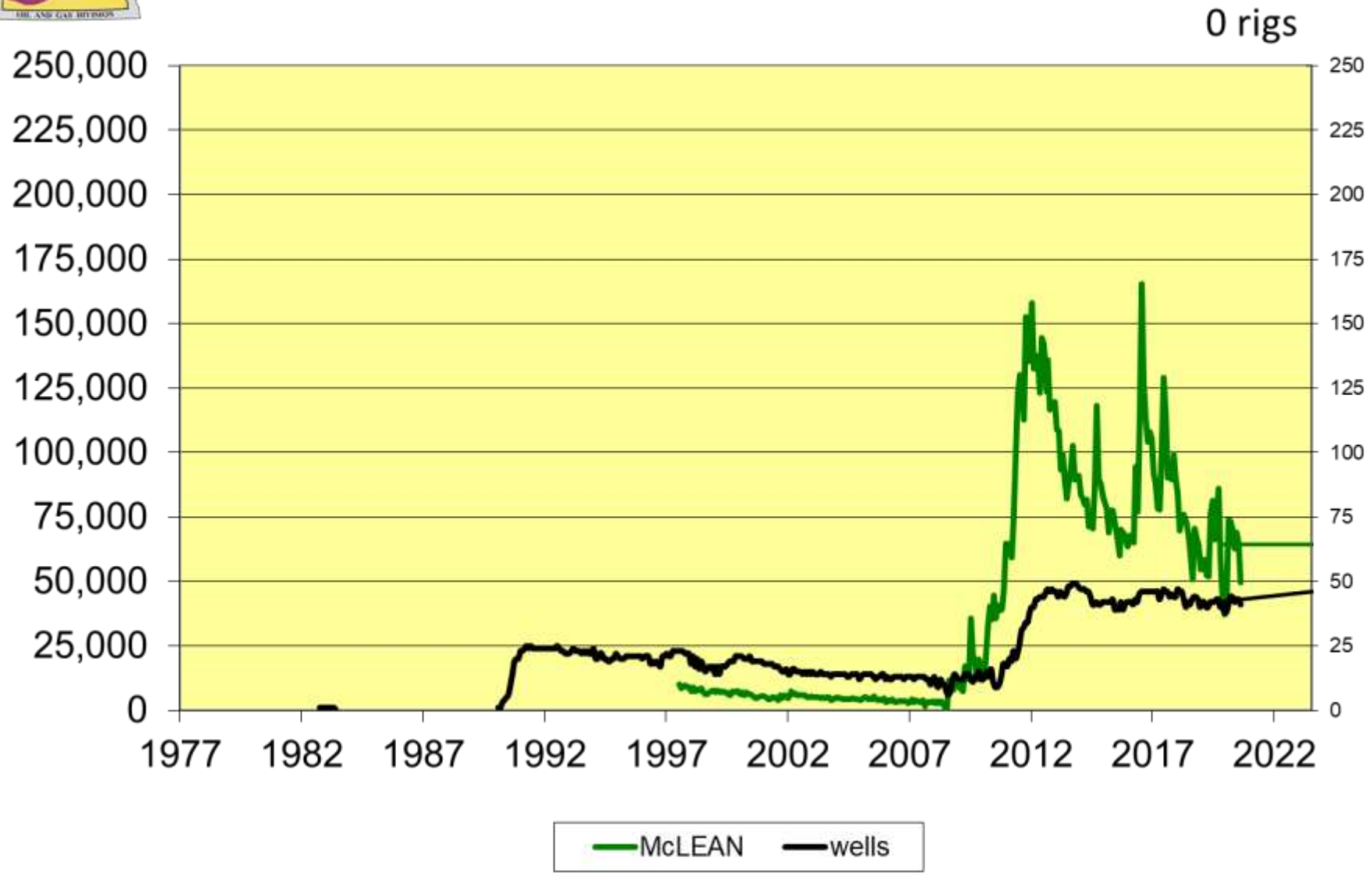
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



MCKENZIE COUNTY



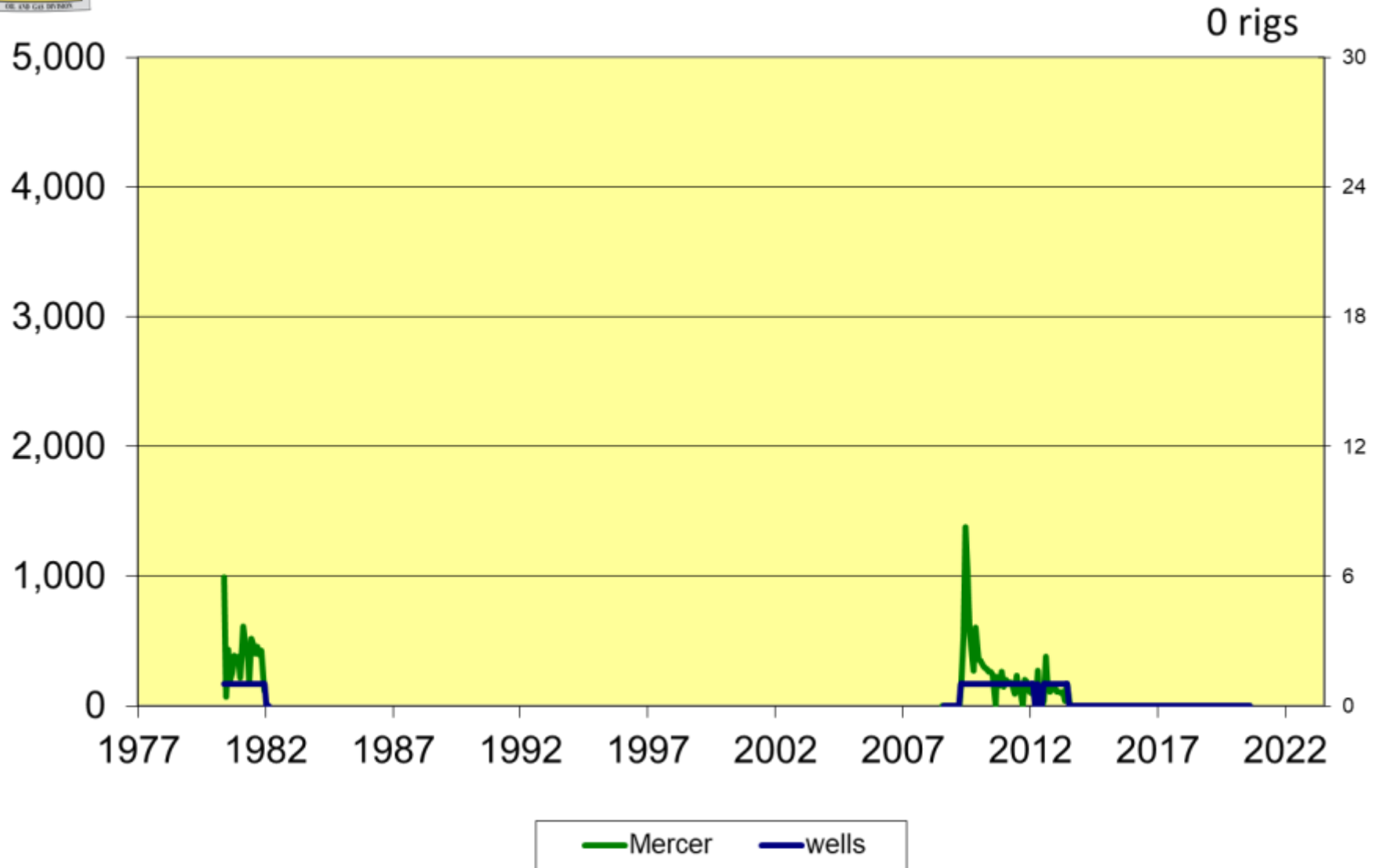
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



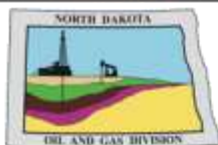
MCLEAN COUNTY



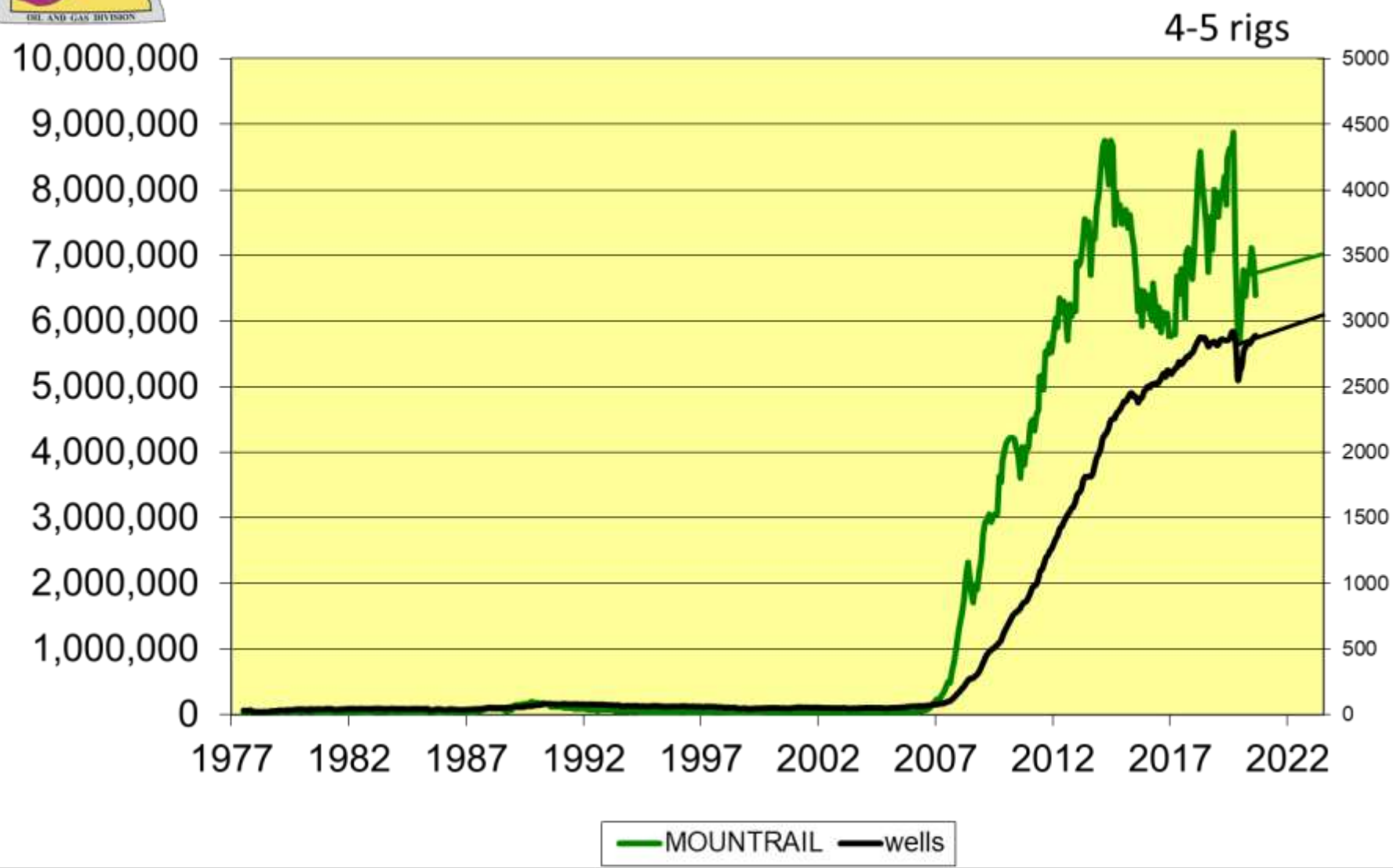
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



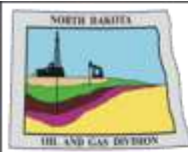
MERCER COUNTY



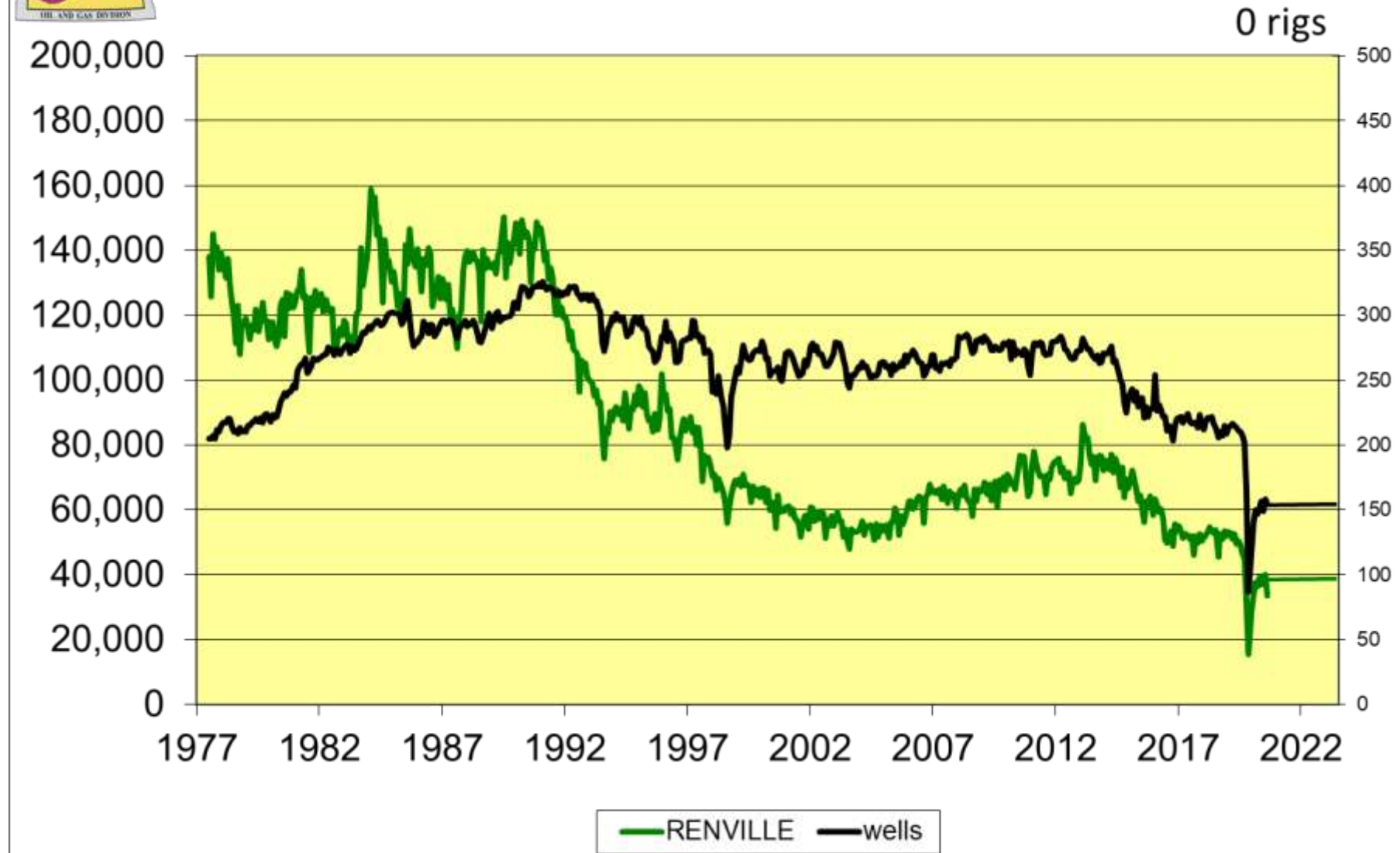
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



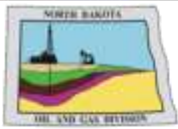
MOUNTRAIL COUNTY



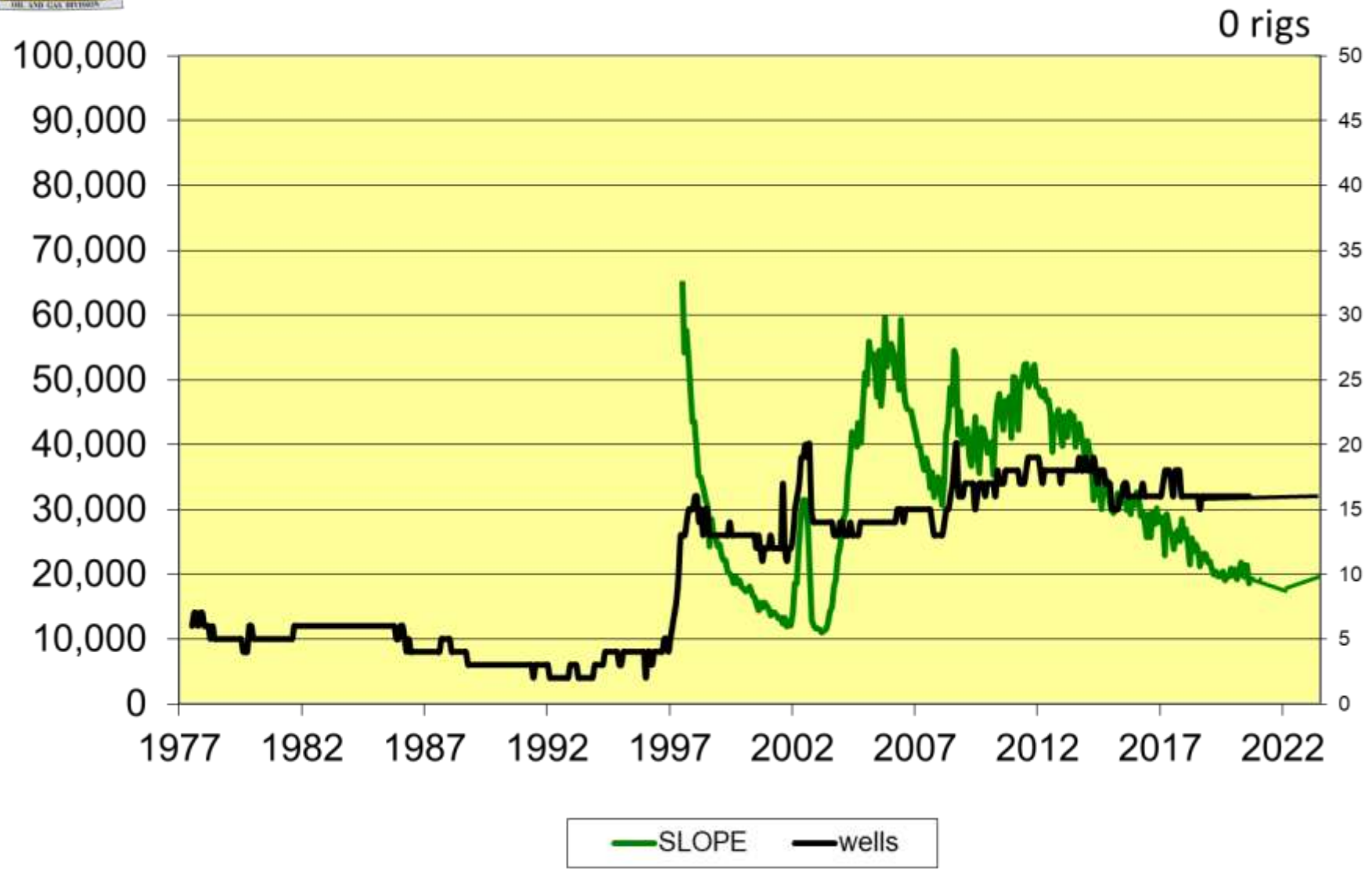
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



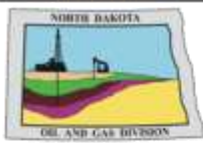
RENVILLE COUNTY



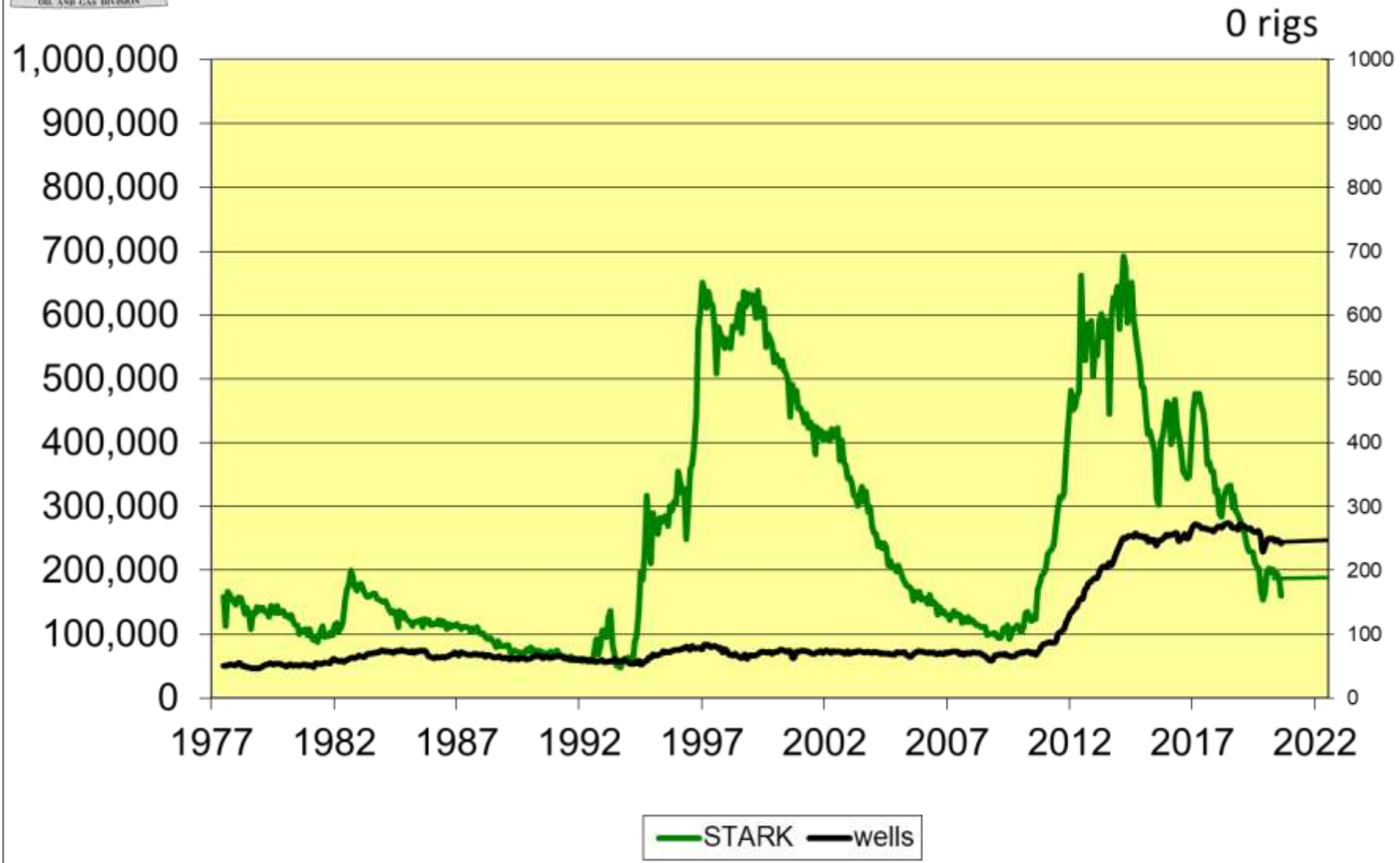
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



SLOPE COUNTY



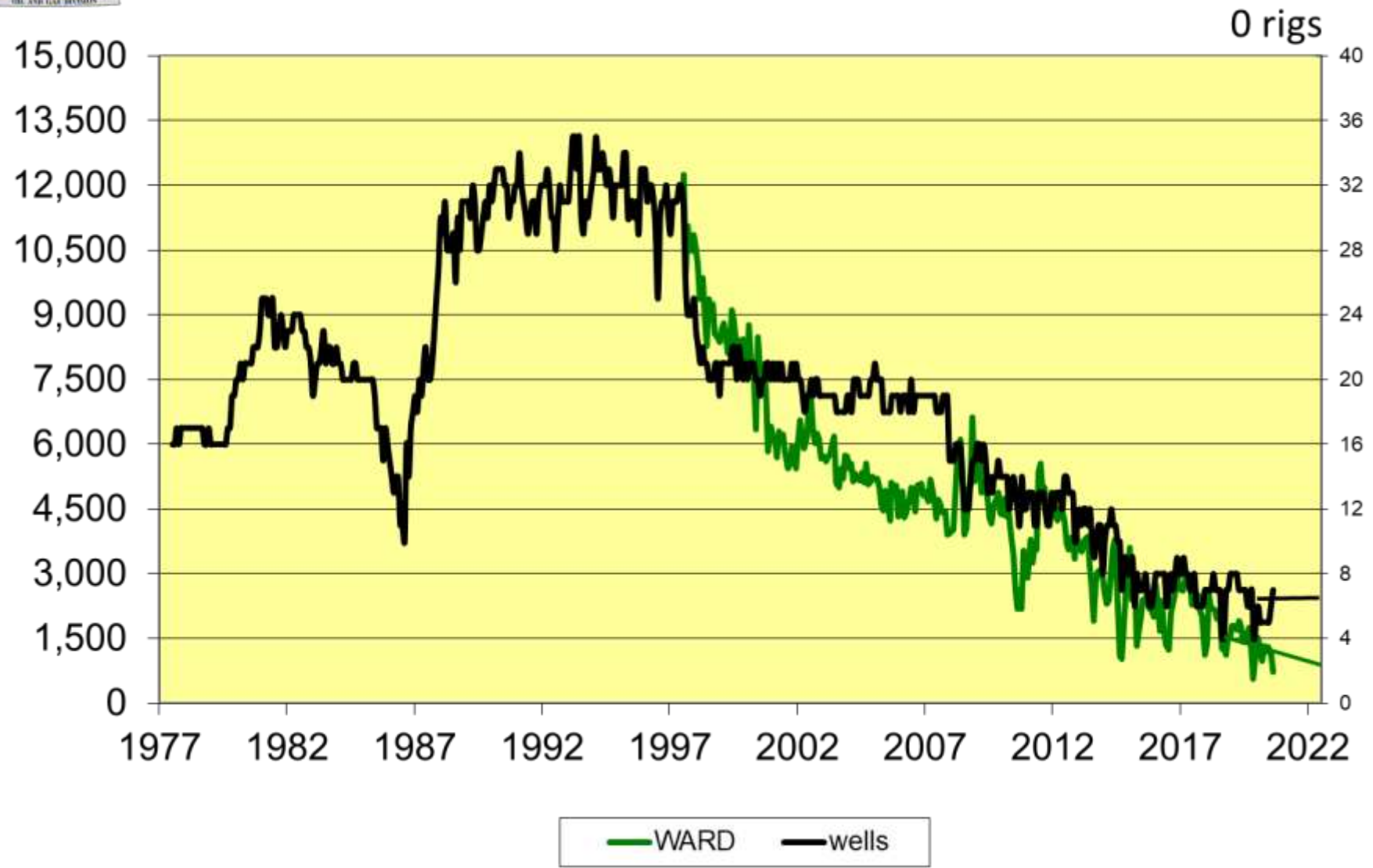
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



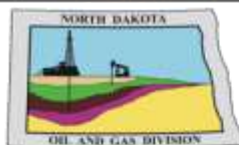
STARK COUNTY



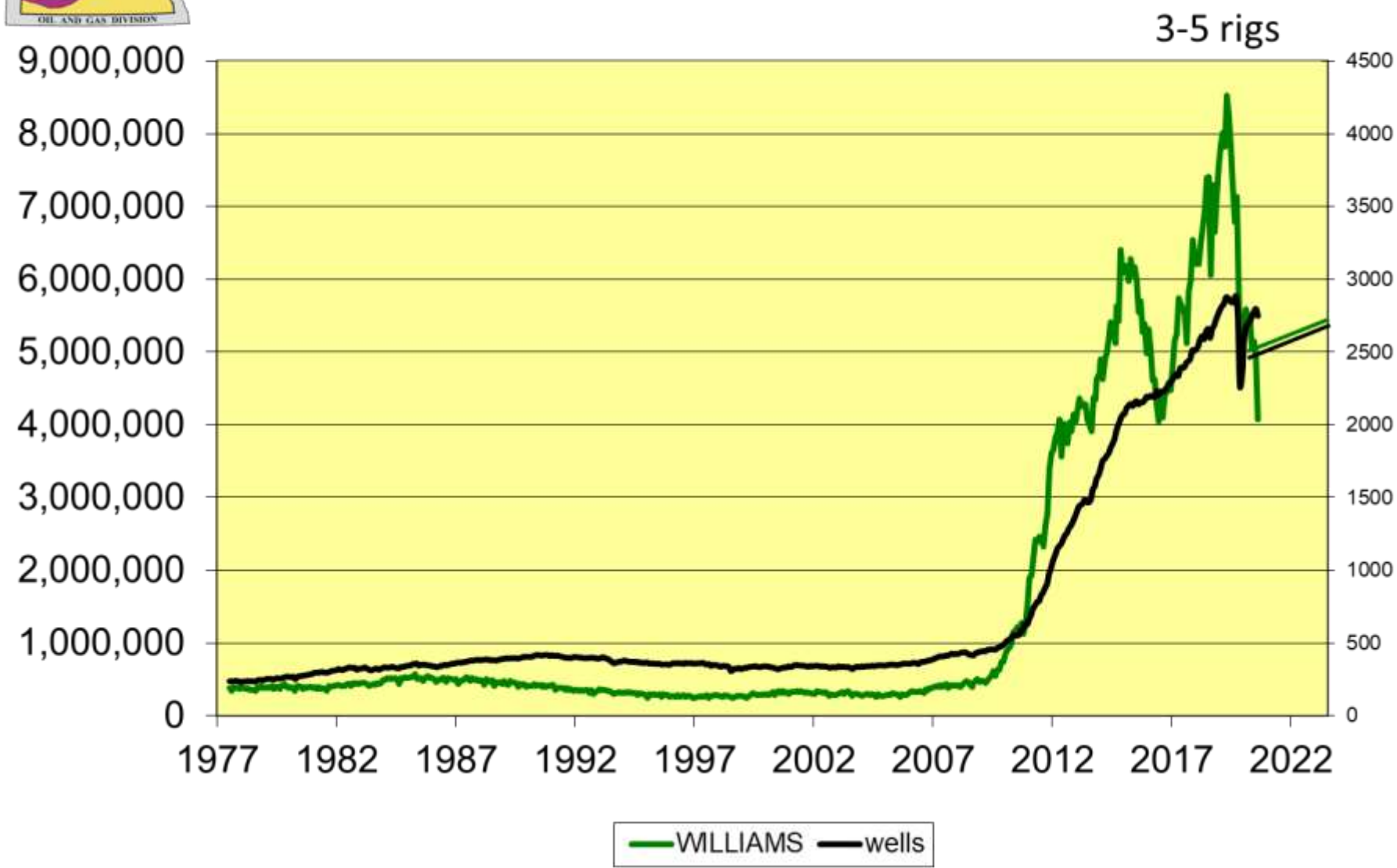
MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



WARD COUNTY



MONTHLY OIL PRODUCTION FOR LOCAL COUNTIES



WILLIAMS COUNTY



North Dakota
Department of Mineral Resources
www.dmr.nd.gov

Phone: 701.328.8020

Email: oilandgasinfo@nd.gov

Mailing Address: 600 East Boulevard Ave. Dept 405; Bismarck, ND 58505