

North Dakota Department of Mineral Resources May Director's Cut and March 2023 Production Numbers

Oil Production Numbers

February 32,447,435 barrels = 1,158,837 barrels/day (final) RF +16%

New Mexico 48,179,691 barrels = 1,720,703 barrels/day +3%

March 34,803,491 barrels = 1,122,693 barrels/day -3% RF +12%

1,519,037 all-time high Nov 2019

1,083,091 barrels/day = 97% from Bakken and Three Forks

39,602 barrels/day = 3% from Legacy Pools

Revised Revenue 1,000,000 barrels/day

Forecast

Crude Price (\$barrel)	ND Light Sweet	WTI	ND Market
February	71.32	76.86	72.43 RF-3%
March	69.80	73.37	69.86 RF-7%
Today	65.00	70.87	67.94 RF-9%
All-time high (6/2008)	125.62	134.02	126.75
Revised Revenue Forecast			75.00

Gas Production and Capture

February - Final	85,060,275 MCF	=	3,037,867 MCF/Day
95% Capture	80,460,378 MCF	=	2,873,585 MCF/Day

March 94,577,637 MCF = 3,050,892 MCF/Day +0%

95% Capture 89,885,715 MCF = 2,899,539 MCF/Day

3,179,517 all-time high 9/2022 3,021,655 all-time high 9/2022

Wells Permitted	Drilling
February	70

March 89

April 89 All-time high 370 in 10/2012

Rig Count

February 46 March 45 April 43 Today 39

Today 39 All-time high 218 in 5/29/2012

Federal Surface 0 New Mexico 107

Waiting on Completions

February 487 March 483

Inactive

February 1,900 March 1,900

Completed

February 96 (Preliminary) March 62 (Preliminary)

April 51 (Preliminary) RF-15%

Revised Rev Forecast 30-40-50-<u>60</u>

Producing

February 17,506

March 17,650 (Preliminary) All-time high 17,791 in 10/2022

15,446 wells 88% are now unconventional

Bakken/Three Forks Wells

2,204 wells 12% produced from legacy

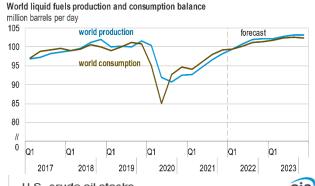
conventional pools

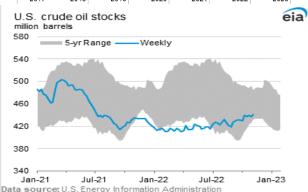
Fort Berthold Reservation Activity

	Total	Fee Land	Trust Land
Oil Production (barrels/day)	144,190	51,091	93,099
Drilling Rigs	7	3	4
Active Wells	2,641	648	1,993
Waiting on Completion	29		
Approved Drilling Permits	229	32	197
Potential Future Wells	3,911	1,116	2,795

Comments:

The drilling rig count has fallen to 39 due to road restrictions but is expected to return to the mid-forties with a gradual increase expected over the next 2 years.





There are 18 frac crews currently active.

OPEC+ announced unilateral oil production cuts earlier this month amounting to 1.7 million barrels per day (bpd), bringing total cuts by the group to 3.7 million bpd until the end of the year. Russia sanctions, China economic activity, looming recessions, and shifting crude oil supply chains continue to create significant price volatility.

Crude oil transportation capacity including rail deliveries to coastal refineries is adequate, but could be disrupted due to:

US Appeals Court for the ninth circuit upholding of a lower court ruling protecting the Swinomish Indian Tribal Community's right to sue to enforce an agreement that restricts the number of trains that can cross its reservation in northwest Washington state.

DAPL Civil Action No. 16-1534 continues, but the courts have now ruled that DAPL can continue normal operations until the

USACOE EIS is completed.

Drilling activity is expected to slowly increase with operators maintaining a permit inventory of approximately 12 months.

There are 0 active, 1 recording, 0 NDIC reclamation projects, 0 remediating, 0 permitted, 6 suspended surveys.

US natural gas storage is 18% above the five-year average. Both US and world crude oil inventories are slightly average while the US strategic petroleum reserve is at the lowest level since 1983.

The price of natural gas delivered to Northern Border at Watford City has increased \$0.03 to \$1.78/MCF today, it is at the lowest level since 3rd quarter 2020 during the pandemic. There is currently enormous oversupply in the Midwest US and LNG prices in Europe have decreased to fourth quarter 2021 levels. Current oil to gas price ratio is 38:1. The state-wide gas flared volume from February to March decreased 12.9 MMCFD to 151.4 MMCF per day, the statewide percent flared was unchanged at 5% and Bakken gas capture percentage was unchanged at 95%. The historical high flared percent was 36% in 09/2011.

Gas capture details are as follows:

Statewide	95%
Statewide Bakken	95%
Non-FBIR Bakken	95%
FBIR Bakken	97%
Trust FBIR Bakken	97%
Fee FBIR	95%
Big Bend	93%
Deep Water Creek Bay	59%
Twin Buttes	60%
Charlson	88%

The Commission established the following gas capture goals:

74%	October 1, 2014 - December 31, 2014
77%	January 1, 2015 - March 31, 2016
80%	April 1, 2016 - October 31, 2016
85%	November 1, 2016 - October 31, 2018
88%	November 1, 2018 - October 31, 2020
91%	November 1, 2020

BLM On 1/27/21 President Biden issued an executive order that mandates a "pause" on new oil and gas leasing on federal lands, onshore and offshore, "to the extent consistent with applicable law," while a comprehensive review of oil and gas permitting and leasing is conducted by the Interior Department. There is no time limit on the review, which means the president's moratorium on new leasing is indefinite. The order does not restrict energy activities on lands the government holds in trust for Native American tribes.

On 7/7/21 North Dakota sued the Department of Interior (DOI), Secretary of Interior Debra Haaland, Bureau of Land Management (BLM), Director of the BLM Nada Culver, and Director of the Montana-Dakotas BLM John Mehlhoff in US District Court for the District of North Dakota. The lawsuit requested the court:

Compel the Federal Defendants to hold quarterly lease sales. Oral arguments are scheduled for 1/12/22 in Bismarck.

Prohibit the Federal Defendants from cancelling quarterly lease sales.

Enjoin the Secretary implementing a moratorium on federal lease sales.

Declare that Federal Defendants are in violation of MLA, FLPMA, NEPA, and APA.

Grant other relief sought and as the court deems proper to remedy the violations.

On 01/14/2022 Judge Traynor denied North Dakota's motion without prejudice. In the Order on Mandamus, the Court noted that "a fully developed factual record is necessary to resolve the instant dispute." The Court also held that because Federal Defendants had given the Court "assurances at the hearing the process to start Federal oil and gas leasing sales in North Dakota was imminent" mandamus relief was "unnecessary." However, the Court noted that "if the Defendants do not hold to their word and cancel any planned future sale, North Dakota may bring this action for review of the specifically cancelled sales once this Court has the benefit of a complete record.". Federal Defendants cancelled the Q1 2022 lease sale, but held a small Q2 sale.

North Dakota filed a motion for preliminary injunction on 1/6/23, a hearing on the motions was held 2/21/23 in Minot with final briefing documents filed 3/14/23. On 3/27/23 U.S. District Judge Daniel Traynor in Bismarck ordered the Bureau of Land Management (BLM) to resume conducting quarterly oil and gas lease sales in North Dakota that had been illegally cancelled by BLM.

On 6/28/22 DAKOTA RESOURCE COUNCIL, CENTER FOR BIOLOGICAL DIVERSITY, CITIZENS FOR A HEALTHY COMMUNITY, LIVING RIVERS & COLORADO RIVERKEEPER, MONTANA ENVIRONMENTAL INFORMATION CENTER, RIO GRANDE RIVERKEEPER, SIERRA CLUB, WATERKEEPER ALLIANCE, WESTERN WATERSHEDS PROJECT, and WILDEARTH GUARDIANS sued DOI to challenge leasing decisions on 173 parcels including those in North Dakota. On 8/09/2022 the U.S. District Court in DC granted North Dakota's Motion to Intervene in the NGO's challenge to the legality of BLM's quarterly lease sales in Dakota Resource Council et al. v. U.S. Department of the Interior et al., 1:22-cv-01853-CRC.

On 9/6/22 the BLM and a group of NGOs filed a proposed settlement in the District Court of Montana in which BLM agrees to not issue drilling permits on 2019 and 2020 federal leases in North Dakota, Montana and South Dakota pending the completion of revised NEPA analyses that must take into account factors such as the social cost of carbon. This illustrates the revival of the "sue and settle" litigation strategy whereby the Biden Administration settles litigation brought by NGOs in a manner that furthers the Biden Administration's policy goals. The case was filed on 1/12/2021 by the same group of NGOs involved in North Dakota's leasing cases. The proposed settlement would cover 5 lease sales that authorized the sale of 113 leases encompassing 58,617 acres in North Dakota, Montana, and South Dakota. 55 North Dakota Parcels, 9,564.347 Federal Acres in North Dakota, leases Expire in 2029 and 2030 so if permitting is delayed 7-8 years 130 wells will not be drilled, 58,329,000 barrels of oil will not be produced, GrossProductionTax + OilExtractionTax + SalesTax + PersonalIncomeTax + FedRoyaltyShare + NDTLRoyalties @ \$50/barrel = \$8,006,217 per month = \$960,746,074 in ten years.

BLM has posted for comment NEPA Number: DOI-BLM-HQ-3100-2023-0001-EA, Project Name: Supplemental Environmental Assessment Analysis for Greenhouse Gas Emissions Related to Oil and Gas Leasing in Seven States from February 2015 to December 2020, Project Type: Environmental Assessment, Project Status: In Progress - Public Review and Comment Period, Lead Office: HQ-310. Bureau of Land Management has released an updated environmental assessment for public comment. The additional review analyzes greenhouse gas emissions that may result from reasonably foreseeable development of 3,600 oil and gas leases that were sold in 74 lease sales between February 2015 and December 2020 that were the subject of litigation. The leases span approximately 3,433,615 acres in Colorado, Montana, New Mexico, Utah, Wyoming, North Dakota, and South Dakota. The environmental analysis looks at the development activity that would result in greenhouse gas emissions due to well development and production operations, as well as the end-use of the petroleum products produced from oil and gas leases. The supplemental analysis is in response to numerous court rulings and settlements. It incorporates new information and ensures

consistency with recent court decisions, Executive and Secretarial Orders, and Department of the Interior policy. This analysis of greenhouse gas emissions supplements the greenhouse gas analysis provided in the previous National Environmental Policy Act (NEPA) documents supporting the 74 lease sales. The previous environmental assessments or determinations of NEPA adequacy, decision records, and findings of no significant impacts for the 74 lease sales are listed on BLM's State Oil and Gas Lease Sale website, which contains detailed information for the lease sales in each field office. Decisions related to the affected lease sales will be made separately and will include additional analysis of impacts to other resources, as appropriate. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov).

BLM published a new final rule 43 CFR Parts 3100, 3160 and 3170 to update and replace its regulations on venting and flaring of natural gas_effective 1/17/16. The final rule can be viewed online at https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/methane-and-waste-prevention-rule. North Dakota, Wyoming, Montana, Western Energy Alliance, and IPAA filed for a preliminary injunction to prevent the rule going into effect until the case is settled. A hearing in Casper, Wyoming was held 1/6/17. On 1/16/17 the court denied all of the petitioners' motions for preliminary injunctions. On 2/3/17 the US House of Representatives voted 221-191 to approve a Congressional Review Act resolution against the rule. On 3/28/17 President Trump issued an executive order which in part directs "The Secretary of the Interior shall review the following final rules, and any rules and guidance issued pursuant to them, for consistency with the policy set forth in section 1 of this order and, if appropriate, shall, as soon as practicable, suspend, revise, or rescind the guidance, or publish for notice and comment proposed rules suspending, revising, or rescinding those rules". This rule is included in the list as item (iv). North Dakota plans to continue active participation in the litigation of this rule until the BLM takes final action eliminating the rule. On 5/10/17 the Senate voted 51 to 49 against the CRA, allowing the rule to remain in effect.

The Bureau of Land Management (BLM) is proposing new regulations very similar to the venting, flaring, and leaks during oil and gas production activities on Federal and Indian leases rules of 2016 that were struck down by the court. The proposed regulations would be codified in the Code of Federal Regulations and would replace the BLM's current requirements governing venting and flaring, which are more than four decades old. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov)

BLM The Bureau of Land Management on 1/20/23 announced the North Dakota Draft Resource Management Plan and its associated draft environmental impact statement are available for public comment for a 90-day period ending April 20, 2023. The comment period has been extended to end 5/20/23. The draft resource management plan and draft environmental impact statement address management of approximately 58,500 acres of BLM-administered surface and 4.1 million acres of federal mineral estate in North Dakota for the next 20 to 30 years. Key issues raised during the public scoping period included mineral and energy resources, wildlife, recreation, water resources, air, and climate. In response to Tribal concerns, a "no surface occupancy" lease stipulation within a half mile of the Missouri River, Lake Sakakawea, and Lake Oahe has been added to the alternatives included in the documents. This stipulation is consistent with the Mandan, Hidatsa and Arikara Nation's Tribal Resolution and recognizes the regional importance of the Missouri River as a major supply of public drinking water. The drafts and additional documents associated with this project, as well as a venue to submit comments, are available on the ePlanning webpage: https://eplanning.blm.gov.

Search using the NEPA number: DOI-BLM-MT-C030-2020-0085-RMP-EIS. Written comments related to the documents may also be submitted by mail to: North Dakota Field Office, Attention: North Dakota RMP/EIS, 99 23rd Ave. West, Suite A, Dickinson, ND 58601. The BLM will hold public meetings (in-person and/or virtual) to exchange information and collect comments. When these meetings are planned, details will be listed on the ePlanning page and announced

by news release. For more information, contact Project Leader Kristine Braun at (701)227-7725 or by email: blm mt north dakota rmp@blm.gov.

BLM On 4/3/23 The Bureau of Land Management (BLM) proposed new regulations that, pursuant to the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, and other relevant authorities, would advance the BLM's mission to manage the public lands for multiple use and sustained yield by prioritizing the health and resilience of ecosystems across those lands. To ensure that health and resilience, the proposed rule provides that the BLM will protect intact landscapes, restore degraded habitat, and make wise management decisions based on science and data. To support these activities, the proposed rule would apply land health standards to all BLM-managed public lands and uses, clarify that conservation is a "use" within FLPMA's multiple-use framework, and revise existing regulations to better meet FLPMA's requirement that the BLM prioritize designating and protecting Areas of Critical Environmental Concern (ACECs). The proposed rule would add to provide an overarching framework for multiple BLM programs to promote ecosystem resilience on public lands.

DATES: Please submit comments on this proposed rule on or before June 20, 2023 or 15 days after the last public meeting. The BLM is not obligated to consider comments made after this date in making its decision on the final rule.

ADDRESSES: Mail, personal, or messenger delivery: U.S. Department of the Interior, Director (630), Bureau of Land Management, 1849 C St. NW, Room 5646, Washington, DC 20240, Attention: 1004–AE92. Federal eRulemaking Portal: https://www.regulations.gov. In the Searchbox, enter "1004–AE–92" and click the "Search" button. Follow the instructions at this website. For Comments on Information-Collection Requirements: Written comments and recommendations for the information-collection requirements should be sent within 30 days of publication of this document to www.reginfo.gov/public/do/PRAMain. Find this specific information collection by selecting "Currently under Review—Open for Public Comments" or by using the search function. You may also provide a copy of your comments to the BLM's Information Collection Clearance Officer via the above address with "Attention PRA Office," or via email to BLM_HQ_PRA_Comments@blm.gov. Please reference OMB Control Number 1004–0NEW and RIN 1004–AE92 in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: Stephanie Miller, Deputy Division Chief for Wildlife Conservation, at 202–317–0086, for information relating to the BLM's national wildlife program or the substance of this proposed rule. For information on procedural matters or the rulemaking process, you may contact Chandra Little, Regulatory Analyst for the Office of Regulatory Affairs, at 202–912–7403. Individuals in the United States who are deaf, deafblind, or hard of hearing, or who have a speech disability, may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

Congress_On 08/07/2022 the US Senate and on 08/12/2022 the US House passed HR 5376 which is expected to be signed into law by the president and contains numerous provisions that will negatively impact oil and gas producers and transporters. NDIC is in the process of analyzing the potential impact of Section 10101. CORPORATE ALTERNATIVE MINIMUM TAX, Section 10201 EXCISE TAX ON REPURCHASE OF CORPORATE STOCK, Section 13104 CREDIT FOR CARBON OXIVDE SEQUESTRATION, Section 13502 ADVANCED MANUFACTURING PRODUCTION CREDIT critical minerals, Section 60113 METHANE EMISSIONS REDUCTION PROGRAM, Section 50262 MINERAL LEASING ACT MODERNIZATION, on North Dakota's mineral industries.

EPA On 6/3/16 the final rule proposing a suite of changes to Clean Air Act permitting requirements for new and modified emissions sources in the oil and natural gas industry was published in the Federal Register. On 6/29/16 the NDIC decided to file a Petition for Review with the US Appeals Court for the District of Columbia to defend the state's sovereign jurisdiction over oil and gas regulation. Thirteen other states have joined this effort. North Dakota declined the standard offer to explore settlement through the court's mediation program.

The proposed actions and NDIC comments are as follows:

- o Proposed New Source Performance Standards Docket ID number EPA-HQ-OAR-2010-0505. NDIC comments can be found at http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2010-0505.pdf
- o Draft Control Techniques Guidelines Docket ID number: EPA-HQ-OAR-2015-0216. NDIC comments can be found at http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2015-0216.pdf
- o Proposed Source Determination Rule Docket ID number: EPA-HQ-OAR-2013-0685. NDIC comments can be found at http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2013-0685.pdf
- o Proposed Federal Implementation Plan for Implementing Minor New Source Review Permitting in Indian Country Docket ID number: EPA-HQ-OAR-2014-0606. NDIC comments are at http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2014-0606.pdf.

North Dakota et al. and EPA have filed motions to govern further proceedings and briefing schedules. On 3/28/17 President Trump issued an executive order which in part directs "The Administrator shall review the final rule entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources," 81 Fed. Reg. 35824 (November 3, 2016), and any rules and guidance issued pursuant to it, for consistency with the policy set forth in section 1 of this order and, if appropriate, shall, as soon as practicable, suspend, revise, or rescind the guidance, or publish for notice and comment proposed rules suspending, revising, or rescinding those rules." On 4/7/17 EPA filed a motion to hold the cases in abeyance. On 6/8/17 the NGO environmental groups challenged EPA's November 5th decision to issue a 90 day stay of the Rule's upcoming implementation dates. The NGOs argue that EPA's justifications for its stay (onerous implementation costs and excessive state administrative burdens) of the Rule were already raised and rejected by EPA during EPA's original rulemaking and that the requirements of a "judicial stay" are not met. The NGO's action is a new case, filed in the D.C. Circuit. They have also filed an emergency motion asking the Court to immediately vacate EPA's decision. On November 3 the DC Circuit court issued a 2:1 decision granting the NGO petition and vacating EPA's 90 day stay of the rule. North Dakota filed an amicus brief in support of the EPA stay. On 7/13/17 the same DC Circuit court granted an EPA motion to recall the mandate and granting 14 days for then EPA to seek reconsideration or review by the full court. API and WVA along with other states filed petitions for rehearing en banc, but on 8/10/17 the entire DC Circuit issued an order denying the API and WVa et al States petitions. EPA now proposes a 2-year stay of certain provision in the oil and gas NSPS. North Dakota filed comments on 8/9/17 in support of the proposed 2-year stay. On 11/8/17 EPA published a Federal Register notice request for supplemental comments relating to the current Administration's efforts to change course on the oil and gas sector methane regulations put in place by the Obama Administration. North Dakota did not submit additional comment to EPA because the North Dakota comments submitted on 8/9/17 correctly advocate that EPA's rationale for the two year stay also justifies outright repeal of the original Rule, so it justifies a two year stay. On 9/11/18 EPA proposed targeted improvements to the 2016 New Source Performance Standards for the oil and gas industry that streamline implementation, reduce duplicative EPA and state requirements, and significantly decrease unnecessary burdens on domestic energy producers. This oil and gas targeted improvements package is expected to save up to approximately \$484 million in regulatory costs from 2019 – 2025 or \$75 million annually. NDIC comments can be found at

http://www.nd.gov/ndic/ic-press/EPA-HQ-OAR-2017-0757.pdf. On 9/14/20 EPA's final Methane Rule was officially published in the Federal Register, making the rollback effective. On the very same day, a group of states filed a new lawsuit in the D.C. Circuit asking the court to review EPA's new methane regulations. A number of environmental groups followed suit the next day, asking the court to put an emergency halt to the rule. On 9/17/20 the D.C. Circuit issued an administrative stay, which temporarily freezes the EPA's rollback from taking effect while the court considers a long-term suspension of the rule. The court's order states that the administrative stay "should not be construed in any way as a ruling on the merits." On 10/14/20 North Dakota moved to intervene and on 1/22/21 filed a brief in support of the 2020 rule and requesting dismissal of petitioner's claims.

On 12/6/22 The EPA issued a proposal to update, strengthen, and expand the standards proposed on November 15, 2021 which are intended to significantly reduce emissions of greenhouse gases (GHGs) and other harmful air pollutants from the Crude Oil and Natural Gas source category. First, the EPA proposes standards for certain sources that were not addressed in the November 2021 proposal. Second, the EPA proposes revisions that strengthen standards for sources of leaks, provide greater flexibility to use innovative advanced detection methods, and establish a super emitter response program. Third, the EPA proposes to modify and refine certain elements of the proposed standards in response to information submitted in public comments on the November 2021 proposal. Finally, the EPA proposes details of the timelines and other implementation requirements that apply to states to limit methane pollution from existing designated facilities in the source category under the Clean Air Act (CAA). NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov)