

North Dakota Department of Mineral Resources October Director's Cut and August 2023 Production Numbers

Oil Production Numbers

July 36,601,452 barrels = 1,180,692 barrels/day (final) RF +7%

New Mexico 53,660,799 barrels = 1,730,994 +1%

August 37,799,687 barrels = 1,219,345 barrels/day +3% RF +11%

1,519,037 all-time high Nov 2019

1,177,898 barrels/day = 97% from Bakken and Three Forks

41,447 barrels/day = 3% from Legacy Pools

Revised Revenue 1,100,000 barrels/day

Forecast

Crude Price (\$barrel)	ND Light Sweet	WTI	ND Market	
July	70.35	76.03	71.31 RF+1%	
August	77.15	81.32	76.66 RF+10%	
Today	77.60	83.49	80.55 RF+15%	
All-time high (6/2008)	125.62	134.02	126.75	
Revised Revenue Forecast			70.00	

Gas Production and Capture

July	102,056,651 MCF	=	3,292,150 MCF/Day	
96% Capture	97,690,788 MCF	=	3,151,316 MCF/Day	
August	102,386,154 MCF	=	3,302,779 MCF/Day	+0%
95% Capture	97.626.305 MCF	=	3.149.236 MCF/Day	

3,302,779 MCF/day **NEW** all-time high production August 2023 3,151,316 MCF/day all-time high capture

July 2023

Wells Permitted

July 70 August 87 September 59

All-time high 370 in 10/2012

Rig Count

New Mexico

July 37
August 37
September 37
Today 38
Federal Surface 0

All-time high 218 on 5/29/2012

Waiting on Completions

July 419 August 376

Inactive

July 1,665 August 1,624

Completed

July 83 (Preliminary)
August 91 (Preliminary)
September 129 (Preliminary)

106

Producing

July 18,185

August 18,380 (Preliminary) **NEW** All-time high 18,380

August/2023

16,118 wells 88% are now unconventional

Bakken/Three Forks Wells

2,262 wells 12% produced from legacy

conventional pools

Lynn Helms, Ph.D., Director ND Department of Mineral Resources

Wells PA	Sites Reclaimed
1	0
4	0
1	0
8	0
18	0
9	1
13	2
11	9
0	2
65	14
	1 4 1 8 18 9 13 11

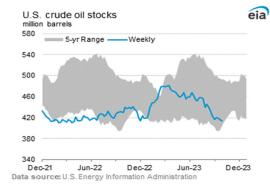
Weekly updates are available at <u>Initial Grant Information - Plugging and Reclamation |</u>
<u>Department of Mineral Resources, North Dakota</u>

Fort Berthold Reservation Activity

	Total	Fee Land	Trust Land
Oil Production (barrels/day)	133,683	49,088	84,595
Drilling Rigs	3	0	3
Active Wells	2,658	650	2,008
Waiting on Completion	12		
Approved Drilling Permits	158	33	125
Potential Future Wells	3,894	1,114	2,780

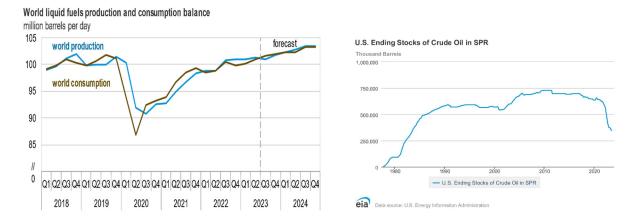
Comments:

The drilling rig count remains low due to workforce, mergers, and acquisitions but is expected to return to the mid-forties with a gradual increase expected over the next 2 years.



eia There are 14 frac crews currently active.

Saudi Arabia announced unilateral oil production cuts amounting to 1 million barrels per day making the OPEC+ total cut 4.7 million bpd until the end of the year. Middle East conflict, Russia sanctions, China economic activity, potential 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. **Corrected Draft EIS was released 9/11/23 with comment deadline of 11/13/23.**

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

Seismic - 0 active, 1 recording, 0 NDIC reclamation projects, 0 remediating, 0 permitted, and 4 suspended surveys, 2 pending.

US natural gas storage is 5% above the five-year average. Both US and world crude oil inventories are average while the US strategic petroleum reserve remains at the lowest level since 1983.

The price of natural gas delivered to Northern Border at Watford City has decreased slightly to \$2.27/MCF today. There is continues to be oversupply in the Midwest US. Current oil to gas price ratio is 35:1. The state-wide gas flared volume from July to August increased 13 MMCFD to 154 MMCF per day, the statewide percent flared increased to 5% and Bakken gas capture percentage was unchanged at 96%. The historical high flared percent was 36% in 09/2011.

Gas capture details are as follows:

Statewide	95%
Statewide Bakken	96%
Non-FBIR Bakken	95%
FBIR Bakken	98%
Trust FBIR Bakken	97%
Fee FBIR	98%
Deep Water Creek Bay	90%
Twin Buttes	57%
Charlson	90%

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.

Lynn Helms, Ph.D., Director ND Department of Mineral Resources

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. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.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. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov)

BLM On 7/24/23 The Bureau of Land Management (BLM) is proposed to revise the BLM's **oil and gas leasing regulations**. Among other things, the proposed rule would reflect provisions of the Inflation Reduction Act pertaining to royalty rates, rentals, and minimum bids, and would update the bonding requirements for leasing, development, production, as well as revise some operating requirements. **North Dakota's requested comment period extension was denied and comments were filed 9/22/2023**. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov). North Dakota has responded to a request to become a cooperating agency and is waiting to receive a draft MOU.

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.

CEQ On 7/31/23 the Council on Environmental Quality (CEQ) is proposing this "Bipartisan Permitting Reform Implementation Rule" to revise its regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA), including to implement the Fiscal Responsibility Act's amendments to NEPA. CEQ invites comments on the proposed revisions. North Dakota's comments were filed 9/29/2023. NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov).

EPA 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)

EPA On 5/23/23 the Environmental Protection Agency (EPA) issued a proposal titled, "New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule". NDIC comments are available by request at Contact | Department of Mineral Resources, North Dakota (nd.gov).

PHMSA On 5/18/23 PHMSA proposed regulatory amendments that implement congressional mandates in the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020 to reduce methane emissions from new and existing gas transmission pipelines, distribution pipelines, regulated (Types A, B, C and offshore) gas gathering pipelines, underground natural gas storage facilities, and liquefied natural gas facilities. Among the proposed amendments for part 192-regulated gas

pipelines are strengthened leakage survey and patrolling requirements; performance standards for advanced leak detection programs; leak grading and repair criteria with mandatory repair timelines; requirements for mitigation of emissions from blowdowns; pressure relief device design, configuration, and maintenance requirements; and clarified requirements for investigating failures. Finally, PHMSA proposes expanded reporting requirements for operators of all gas pipeline facilities within DOT's jurisdiction, including underground natural gas storage facilities and liquefied natural gas facilities. North Dakota's comments were filed 8/16/2023. NDIC comments are available by request at Contact Department of Mineral Resources, North Dakota (nd.gov).

USFWL On 6/22/23 the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS; collectively, the "Services"), propose to revise portions of our regulations that implement the **Endangered Species Act** of 1973, as amended (Act). The proposed revisions to the regulations clarify, interpret, and implement portions of the Act concerning the procedures and criteria used for listing, reclassifying, and delisting species on the Lists of Endangered and Threatened Wildlife and Plants and designating critical habitat, the interagency consultation processes, reinstate the general application of the "blanket rule" option for protecting newly listed threatened species pursuant to section 4(d) of the Act, with the continued option to promulgate species-specific rules. We are also proposing to extend to federally recognized Tribes the exceptions to prohibitions for threatened species that the regulations currently provide to the employees or agents of the Service and other Federal and State agencies to aid, salvage, or dispose of threatened species. We are also proposing minor changes to clarify or correct the existing regulations for endangered and threatened species; these proposed minor changes would not alter the substance or scope of the regulations. We also request comments on an additional provision under consideration, but not currently proposed, that would extend to federally recognized Tribes the exceptions to prohibitions for threatened species that the regulations currently provide to employees or agents of the Service, the National Marine Fisheries Service, and State agencies for take associated with conservation-related activities, streamline our process for permitting of rights-of-way across National Wildlife Refuge System lands and other Service administered lands. By aligning Service processes more closely with those of other Department of the Interior (DOI) bureaus, to the extent practicable and consistent with applicable law, we will reduce the amount of time the Service requires to process applications for rights-of-way across Service-managed lands. We originally proposed revisions that included requiring a preapplication meeting and use of a standard application, allowing electronic submission of applications, and providing the Service with additional flexibility, as appropriate, to determine the fair market value or fair market rental value of rights-of-way across Service-managed lands. We now further propose new permit terms and conditions and other regulatory changes. North Dakota signed onto comments filed by Alabama on 8/21/2023. Comments are available by request at Contact Department of Mineral Resources, North Dakota (nd.gov).