For Immediate Release
January 17, 2023
Lynn Helms, Ph.D., Director ND Department of Mineral Resources

NORTH Dakota | Mineral Resources
Be Legendary.™

North Dakota Department of Mineral Resources January Director's Cut November 2022 Production Numbers

Oil Production Numbers

October	34,774,367 barrels	= 1,121,754 barrels/day (final)	
New Mexico	48,616,372 barrels	= 1,568,270 barrels/day -3.4%	
November	32,931,469 barrels	= 1,097,716 barrels/day -2.1%	RF +9.8%
	1,519,037	all-time high Nov 2019	
	1,058,025 barrels/day	= 96% from Bakken and Three Forks	
	39,691 barrels/day	= 4% from Legacy Pools	
Revised Revenue Forecast	**1,000,000 barrels/day**		

Crude Price ($barrel)	ND Light Sweet	WTI	ND Market	
September	83.93	87.03	83.65	RF+67%
October	82.18	84.39	82.07	RF+64%
Today	74.50	79.86	77.18	Est. RF+54%
All-time high (6/2008)	125.62	134.02	126.75	
Revised Revenue Forecast			**50.00**	

Gas Production and Capture

October	97,531,984 MCF	=	3,146,193 MCF/Day	
94% Capture	92,895,776 MCF	=	2,996,638 MCF/Day	
November	90,870,989 MCF	=	3,029,033 MCF/Day	-4%
95% Capture	92,807,966 MCF	=	2,842,285 MCF/Day	
			3,175,779 all-time high 9/2022	
			3,021,655,384 all-time high capture 9/2022	

Wells Permitted	Drilling	Seismic
October	77	1
November	86	0
December	94	0
		All time high 370 in 10/2012

Rig Count

October	43	
November	40	
December	44	
Today	43	All time high 218 in 5/29/2012
Federal Surface	2	
New Mexico	100	

Waiting on Completions

October	489
November	447

Inactive

October	1,886
November	2,271

Completed

October	54 (Preliminary)	
November	58 (Preliminary)	
December	104 (Preliminary)	**RF+100%**
Revised Rev Forecast	30-40-50-60	

Producing

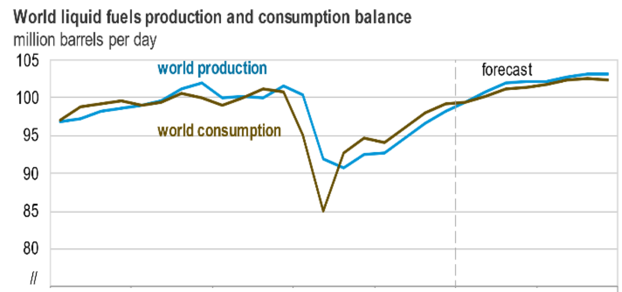
October	17,791	
November	17,563 (Preliminary)	NEW all-time high 17,791 10/2022
	15,411 wells	88% are now unconventional Bakken/Three Forks Wells
	2,152 wells	12% produce from legacy conventional pools

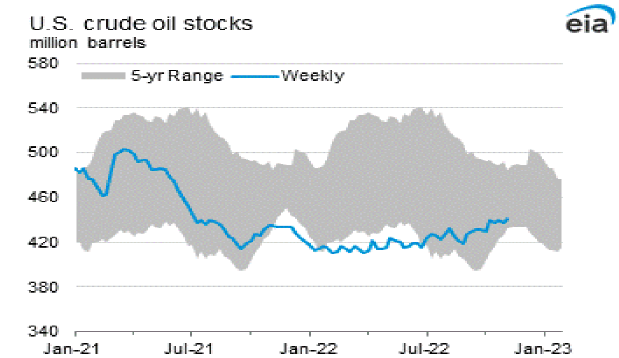
Fort Berthold Reservation Activity

	Total	Fee Land	Trust Land
Oil Production (barrels/day)	169,455	70,735	116,418
Drilling Rigs	5	3	2
Active Wells	2,638	646	1,992
Waiting on Completion	16		
Approved Drilling Permits	235	33	202
Potential Future Wells	3,914	1,118	2,796

Comments:

The drilling rig count has stalled in the low to mid-forties with a gradual increase expected over the next 2 years.





Data source: U.S. Energy Information Administration

The number of active completion crews increased to 20 before the blizzard, no completion activity the last week of December, there are now 19 active crews.

OPEC+ is managing production month to month. Russia sanctions, China COVID lockdowns, and looming recessions have created significant price volatility in an already volatile market.

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.

Potential railroad worker strike – reported that a tentative deal has been reached.

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

A survey of operators by JPT revealed the following:

“The surge in the cost of services and supplies pushed the average oil price needed to justify drilling a new oil well in the Mid-Continent to $65/bbl, according to a survey of industry experts by the Federal Reserve Bank of Kansas City released on 8 July.

When they were asked what it would take to get them to substantially increase drilling, they put the number at $98/bbl, which was higher than the closing price for the WTI price in futures trading on 14 July.”

There is 0 survey active, 1 recording, 0 NDIC reclamation projects, 0 remediating, 0 permitted, 6 suspended.

US natural gas storage is less than 1.4% below the five-year average. Both US and world crude oil inventories are approaching normal. US strategic petroleum reserve is at the lowest level since 1984.

The price of natural gas delivered to Northern Border at Watford City has decreased to $2.88/MCF today, lowest since December 2021, due to oversupply in the Midwest US even as LNG prices in Europe remain very high. Current oil to gas price ratio is 27 to 1. The state-wide gas flared volume from October to November increased 37.2 MMCFD to 186,748 MCF per day, the statewide percent flared increased to 6% while Bakken gas capture percentage decreased to 94%. The historical high flared percent was 36% in 09/2011.

Gas capture details are as follows:

Statewide	94%
Statewide Bakken	94%
Non-FBIR Bakken	95%
FBIR Bakken	94%
Trust FBIR Bakken	95%
Fee FBIR	85%
Big Bend	78%
Deep Water Creek Bay	76%
Twin Buttes	59%
Charlson	84%

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 1/20/21 DOI issued order 3395 implementing a 60-day suspension of Federal Register publications; issuing, revising, or amending Resource Management Plans; granting rights of way and easements; approving or amending plans of operation; appointing, hiring, or promoting personnel; leasing; and permits to drill. 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.

What is the percentage of federal lands in ND?

Mineral ownership in ND is 85% private, 9% federal (4% Indian lands and 5% federal public lands), and 6% state. 66% of ND spacing units contain no federal public or Indian minerals, 24% contain federal public minerals, 9% contain Indian minerals,1% contain both.

How many potential wells could be delayed or not drilled by a Biden administration ban on drilling permits and hydraulic fracturing on federal lands?

A spatial query found 3,443 undrilled wells in spacing units that would penetrate federal minerals, 2,902 undrilled wells in spacing units would penetrate BIA Trust minerals (700 tribal minerals and 2,202 allotted minerals), and the total number of wells potentially impacted is 6,345. The minimum number of future Bakken wells is 24,000 so the 3,443 wells on federal public lands = 14%, and the 2,902 wells on trust lands = 12%.

What is the potential federal royalty loss from a Biden administration ban on drilling permits and hydraulic fracturing on federal lands?

A recent study from University of Wyoming estimated the ND loss as follows: 2021-2025 $76 million, 2026-2030 $113 million, 2031-2035 $160 million, and 2036-2040 $221 million for a total of $570 million over 15 years. Please note that 50% of the royalties on federal public lands go to the state and 50% of the state share goes to the county where the oil was produced.

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.

There are 811 tracts nominated for pending lease sales in ND:

> 569 are pending NEPA or surface manager concurrence.
>
> 242 are fully evaluated with Record of Decision by US Forest Service and Corp of Engineers, and waiting for scheduled auction – value to ND 1,037 wells and $4.9 billion (GPT, OET, NDTL royalties, federal royalties, sales tax and income tax)

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 have cancelled the Q1 2022 lease sale, but have now published a potential Q2 sales listing with a protest period ending 5/18/22.

<u>North Dakota filed a motion for preliminary injunction on 1/6/23 and Judge Traynor issued an order for parties to show cause whether the preliminary injunction and mandamus cases should be consolidated.</u>

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. Send your comments on this proposed rule to the BLM on or before January 30, 2023. 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–AE79. Federal eRulemaking Portal: https://www.regulations.gov. In the Searchbox, enter ''RIN 1004–AE79 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 notice to www.reginfo.gov/public/do/PRAMain. Find this particular 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 to the above address with ''Attention PRA Office,'' or by email to BLM_HQ_PRA_Comments@

blm.gov. Please reference OMB Control Number 1004–0211 and RIN 1004–AE79 in the subject line of your comments.

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 is 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). DATES: Comments. Comments must be received on or before February 13, 2023. You may send comments, identified by Docket ID No. EPA–HQ–OAR–2021–0317 by any of the following methods: • Federal eRulemaking Portal: https://www.regulations.gov/ (our preferred method). Follow the online instructions for submitting comments. • Email: a-and-r-docket@epa.gov. Include Docket ID No. EPA–HQ–OAR–2021–0317 in the subject line of the message. • Fax: (202) 566–9744. Attention Docket ID No. EPA–HQ–OAR–2021–0317. • Mail: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA–HQ–OAR–2021–0317, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460. • Hand/Courier Delivery: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center's hours of operation are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal holidays).