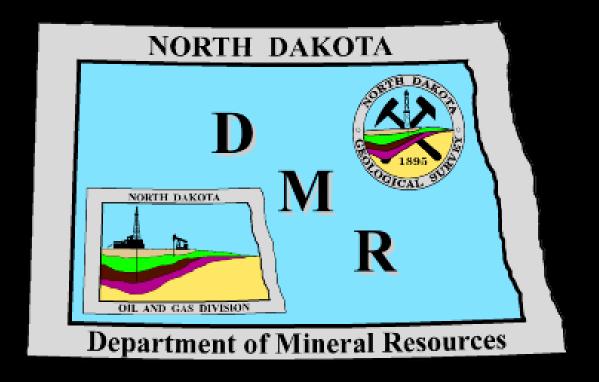
## North Dakota Department of Mineral Resources



http://www.oilgas.nd.gov

http://www.state.nd.us/ndgs

600 East Boulevard Ave. - Dept 405 Bismarck, ND 58505-0840 (701) 328-8020 (701) 328-8000 Wells 13,885 active

2,024 1,971 conventional 11,891 746 Bakken/Three Forks

1,458 inactive

+\$40 for 90 days

865 waiting on completion

+\$50 for 90 days

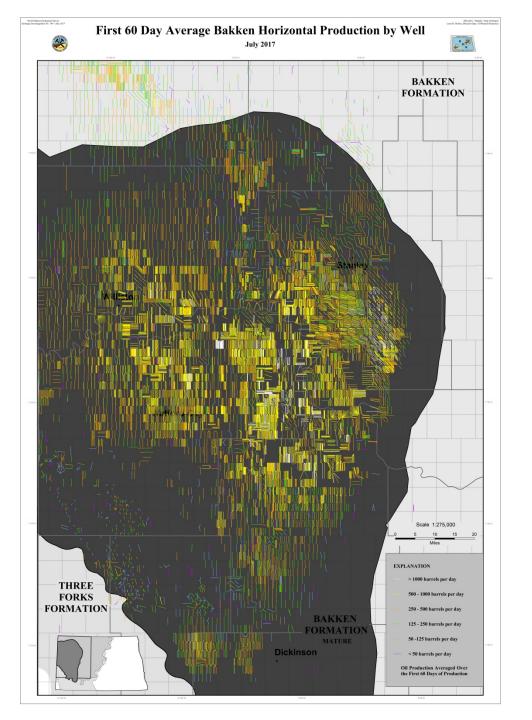
1,930 permitted

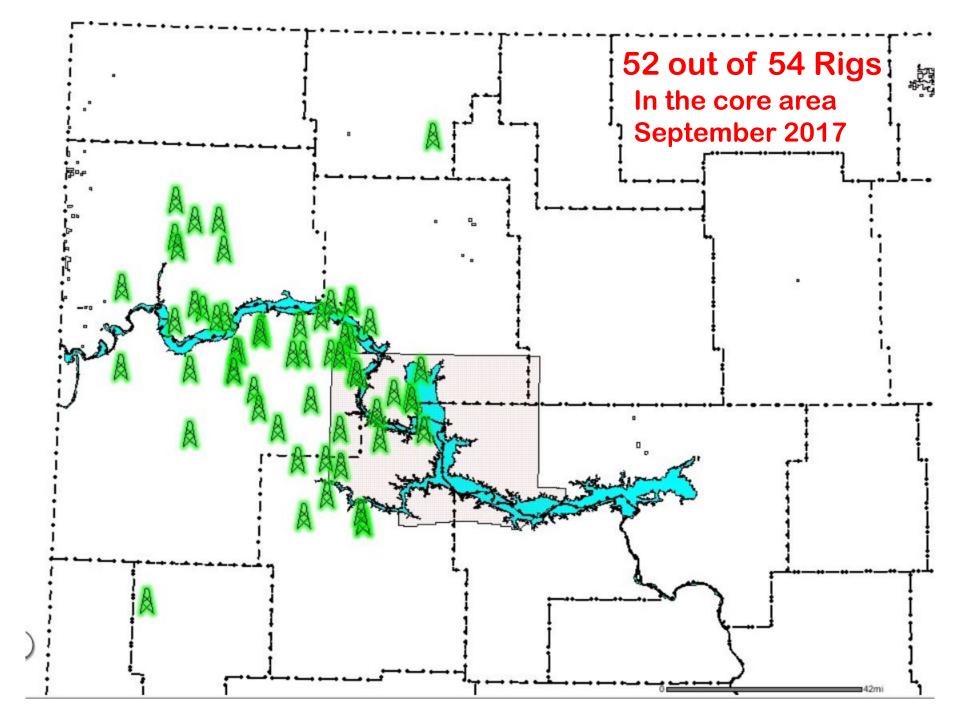
+\$60 for 90 days NYMEX 2024+

13,256 increased density approved 9/5/17 31,394 total

55,000-65,000 estimated final







## Impact

Wells drilled and completed - \$99.9 billion Wells drilled not yet completed - \$8.8 billion Natural Gas gathering and processing - \$13 billion Rail and rail transportation facilities - \$1.25 billion Crude Oil transmission pipelines - \$2 billion

Total estimate - \$125 billion

This does not include the investments in housing and infrastructure made by private firms and state-local-federal government.

NDIC Rule Changes

**EOR Field Tests** 

\$50/barrel & \$60/barrel

Missouri River Mineral Review

### **NDIC Rule Changes**

**EOR Field Tests** 

\$50/barrel & \$60/barrel

Missouri River Mineral Review



### NORTH DAKOTA INDUSTRIAL COMMISSION DEPARTMENT OF MINERAL RESOURCES OIL AND GAS DIVISION

### SUMMARY OF PROPOSED 2018 RULES

NDAC CITE	Bull E	DDODGOED GUANGE			
NDAC CITE	RULE	PROPOSED CHANGE			
43-02-03 GENERAL RULES					
43-02-03-01	Definitions	"Treating Plant" does not include treating tank bottoms at well site or facility			
43-02-03-05	Enforcement of Laws, Rules, and Regs	Requires contractors know regs before conducting operations			
43-02-03-14.2	Oil and Gas Metering Systems	Requires serial numbers of oil and gas meters to be submitted			
43-02-03-15	Bond and Transfer of Wells	Requires principal to submit drawing identifying location of pipelines off site			
43-02-03-17	Sign on Well or Facility	Clarifies signs must be on both the well and facility			
43-02-03-22	Defective Casing or Cementing	Requires MIT if suspect defective casing or cementing Requires subsequent MIT if casing integrity is questionable after remedial work			
43-02-03-28	Safety Regulation	Clarifies ignition sources (not just boiler/generator) must be at a safe distance			
43-02-03-30	Fires, Leaks, Spills, or Blowouts HB1151	Leak/spill involving CO, PW, NGL notification NR if < 10bbis, stays on site built >9-01-2000			
43-02-03-30.1	Leak and Spill Cleanup	Requires Fm4 w/in 10 days of spill cleanup			
43-02-03-33	Notice of Intention to Plug Well	Notice must include well bore diagram			
43-02-03-34.1	Reclamation of Surface \$B2333	Requires reclamation to original condition per 38-08-04.12 (SB2333)			
43-02-03-34.1	Reciamation of Surface 3B2333	Authorizes Director to require an environmental assessment of the site			
43-02-03-49	Oil Production Equip, Dikes, and Seals	Requires dikes around production equipment at new production facility			
		Synthetic liner required on dikes and within diked area			
		Requires all discharged wastes to be promptly removed, not just accidently spilled			
43-02-03-51.3	Treating Plant Construction and Operation	Requires Fm4 w/in 30 days of TP construction/modification			
		Clarifies that prior approval needed before modify TP			
		Authorizes Director to shut-in TP operations if noncompliant			
43-02-03-51.4	Treating Plant Abandonment & Reclamation	Removes duplication in Adm Codelanguage appears under 43-02-03-34.1			
43-02-03-53.3	SHF Construction & Operation Requirements	Requires Fm4 w/in 30 days of TP construction/modification Authorizes Director to shut-in TP operations if noncompliant			
43-02-03-53.4	SHF Abandonment & Reclamation	Removes duplication in Adm Codelanguage appears under 43-02-03-34.1			
43-02-03-55	Abandonment of Wells, TPs, & SHFs	Clarifies Comm can require shut-in inj wells plugged after notice & hearing			
43-02-03-88.1	Special Procedures	Clarifies Comm must receive comments by 5pm last business day prior to hearing			
43-02-05 UNDE	RGROUND INJECTION CONTROL				
		Requires all SWD wells to have surface casing set below Fox Hills Fm			
43-02-05-06	Construction Requirements	Requires Director approval to perf after initial completion			
		Clarifies surface facilities must be constructed pursuant to saltwater handling facilities rules			
43-02-05-09	Pressure Limitations (formerly Operating Regs)	Moves existing language to 43-02-05-12			
	Reporting, Monitoring, and Operating Regs	Identifies forms needed to report monthly injection			
43-02-05-12		Requires initial and annual press test of all inj lines leaving the pumphouse site			
		Added annular injection prohibition currently residing in 43-02-05-09			
43-02-06 ROYA	LTY STATEMENTS				
		Requires point of sale for oil and gas			
43-02-06-01	Books Commission Statement	Requires weighted average price and point of sale for natural gas liquids			
43-02-00-01	Royalty Owner Information Statement	Modifies rule to conform to existing statutemust clearly identify deductions			
		Requires gross and net mineral acres in spacing unit			
43-02-11 CERTIFICATION OF HORIZONTAL, RE-ENTRY, AND TWO-YEAR INACTIVE WELLS					
43-02-11-01	Definitions HB1043	Removes reference to tax incentives repealed by HB1043			
43-02-11-02	Appl to Certify Hor, Hor RE, Two-Yr Inactive HB1043	Removes qualifying well certification for tax incentives repealed by HB1043			
43-02-11-04	Appl for Tax Exempt for Hor Well HB1043	Removes tax incentives repealed by HB1043			
43-02-11-05	Appl for Tax Exempt for Hor RE Well HB1043	Removes tax incentives repealed by HB1043			
43-02-11-06	Appl for Tax Exempt for Two-Yr Inactive Well HB1043	Removes tax incentives repealed by HB1043			
43-02-11-07	Books & RecordsSubstantial Reports HB1043	Removes reference to tax incentives repealed by HB1043			
43-02-11-08	Appl for Tax Exempt for Shallow Gas Well	Removes requirement to notify all working interest owners and gas purchasers			
43-05-01 GEOLOGIC STORAGE OF CARBON DIOXIDE					
43-05-01-19	Facility Closure SB2333	Requires reclamation to original condition per 38-08-04.12 (SB2333)			

#### ROYALTY STATEMENTS CHAPTER 43-02-06

43-02-06-01. ROYALTY OWNER INFORMATION STATEMENT. Whenever payment is made for oil or gas production to an interest owner, whether pursuant to a division order, lease, servitude, or other agreement, all of the following information must be included on the check stub or on an attachment to the form of payment, unless the information is otherwise provided on a regular monthly basis:

- The lease, property, or well name or any lease, property, or well identification number used to identify the lease, property, or well; provided, that if a lease, property, or well identification number is used the royalty owner must initially be provided with the lease, property, or well name to which the lease, property, or well name refers.
- The month and year during which sales occurred for which payment is being made.
- One hundred percent of the corrected volume of oil, regardless of ownership, which
  is sold measured in barrels, and one hundred percent of the volume of either wet or
  dry gas, regardless of ownership, which is sold or removed from the premises for the
  purpose of sale, or sale of its contents and residue, measured in thousand cubic feet.
- Price.
  - a. Oil. Weighted Point of sale and weighted average price per barrel received by the producer for all oil sold during the period for which payment is made. The price would be the net price received by the producer after purchaser's deductions. The purchaser's deductions are to be explained pursuant to subsection 6.
  - Gas <u>and natural gas liquids</u>. Weighted <u>Point of sale and weighted</u> average price per thousand cubic feet [28.32 cubic meters] received by the producer for all gas sold during the period for which payment is made. <u>Point of sale and weighted average price per gallon received by the producer for all natural gas liquids sold during the period for which payment is made. The price would be the net price received by the producer after purchaser's deductions. The purchaser's deductions are to be explained pursuant to subsection 6.</u>
- Total amount of state severance and other production taxes.
- Any other deductions or adjustments. Those not explained on the statement or in a separate mailing must be explained to the royalty owner upon inquiry to the disburser. The amount and purpose of each deduction or adjustment made, including transportation, processing, compression, utilities, and administrative costs.
- Net value of total sales after deductions.

<del>9.</del> 10.	9.10. Owner's share of the total value of sales prior to any tax deductions.				
<del>10.</del> 11.	Owner's share of sales value less deductions.				
<del>11.</del> 12.	An address where additional information may be obtained and any questions answered. If information is requested by certified mail, the answer must be mailed by certified mail within thirty days of receipt of the request.				
History. Effective November 1, 1983; amended effective April 1, 1984; November 1, 1987; May 1, 1992.					
General Autho NDCC 38-08-		Law Implemented NDCC 38-08-06.3			

Owner's interest in sales from the lease, property, or well expressed as a decimal.

Gross and net mineral acres in the spacing unit.

8.

<del>8</del>.<u>9.</u>

### TIMETABLE FOR ADOPTING OIL AND GAS RULES (tentative in RED FONT)

<u>2017</u> Jun 27:	Requested ideas f/rule changes at Annual Inspector Meeting
Jul 28:	Received interoffice comments for proposed rules
Aug 22:	IC meeting—received approval to proceed with proposed rulemaking
Aug 23:	Sent legal ad to North Dakota Newspaper Association for rules notice File full notice + rules w/Leg Council (LC) via hand-delivery LC sends rules notice to interested parties w/in 15 business days after receiving them
Aug 30:	Write reg analysis f/rules impacting industry > \$50,000 All papers (10 daily + 42 weekly) to publish proposed rules notice Aug 30 – Sep 5
Oct 11:	Rules hearing (Case 26062) @ 9 am, Oil and Gas Division Field Office, 1000 E Calgary Ave, Bismarck
Oct 11:	Rules hearing @ 1 pm, Oil and Gas Division Field Office, 926 E Industrial Drive, Dickinson
Oct 12:	Rules hearing @ 8:30 am, Home Place Lodge and Suites, 1505 15 <sup>th</sup> Ave West, Williston
Oct 12:	Rules hearing @ 2 pm, Oil and Gas Division Field Office, 7 3 <sup>rd</sup> St SE, Suite 107, Minot Minimum ten-day comment period starts (to receive input on proposed rules)
Oct 23:	Comment period ends—11 days from final hearing date
Nov 27:	Finalize responses to all comments rec'd (oral-hearing + written comments) Finalize appropriate amendments to rules
Nov 28:	IC approve rules w/ICO # (Case 26062): Prepared Aff of mailing to all parties
Nov 28:	Write small entity reg analysis and small entity impact statement Complete small entity regulatory analysis required to minimize adverse impact on small entities Complete small entity impact statement required if has an adverse impact on small entities Submit final rules to Attorney General (AG) for legal opinion including:
Dec 20:	Receive opinion from AG's office File rules+AG opinion w/LC
<u>2018</u> Jan 17:	(Rules filed w/LC btn Nov 2-Feb 1 become effective Apr 1, 2018.)  Notify all interested parties (+ post on web) of Adm Rules Comm hearing after LC posts agenda
Mar 14:	Administrative Rules Committee Hearing (Notify all interested parties when LC posts agenda)

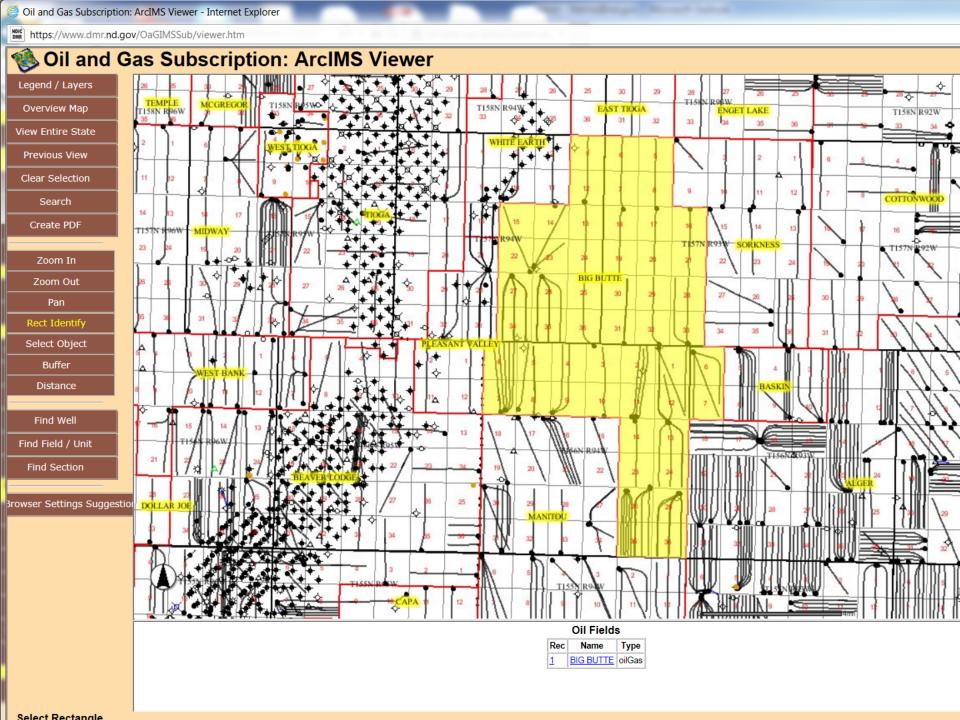
Apr 1: Adopt final rules

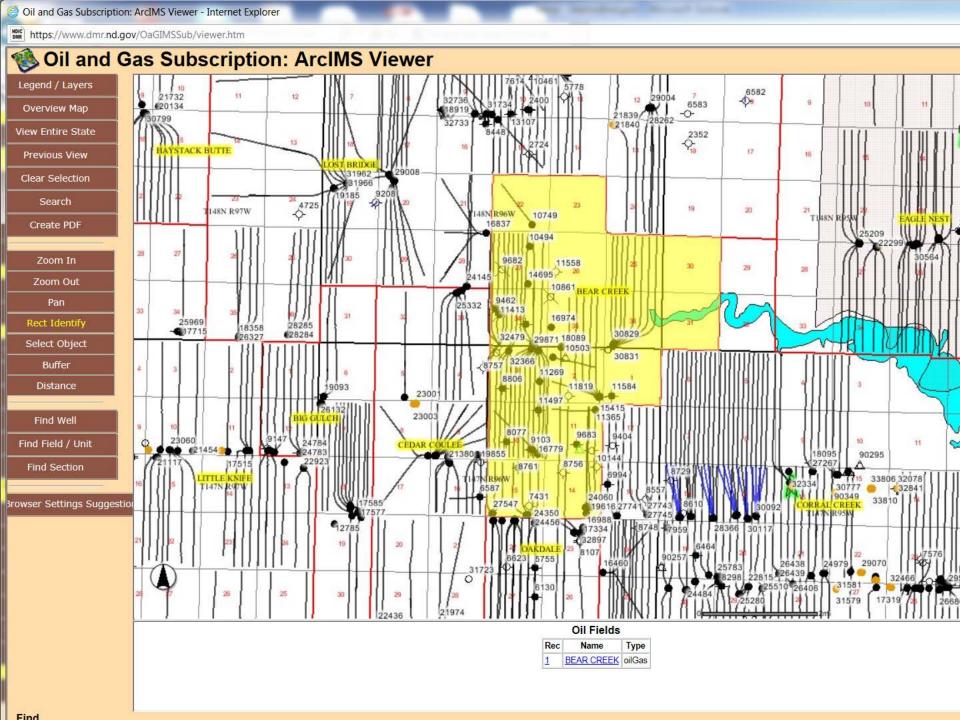
NDIC Rule Changes

## **EOR Field Tests**

\$50/barrel & \$60/barrel

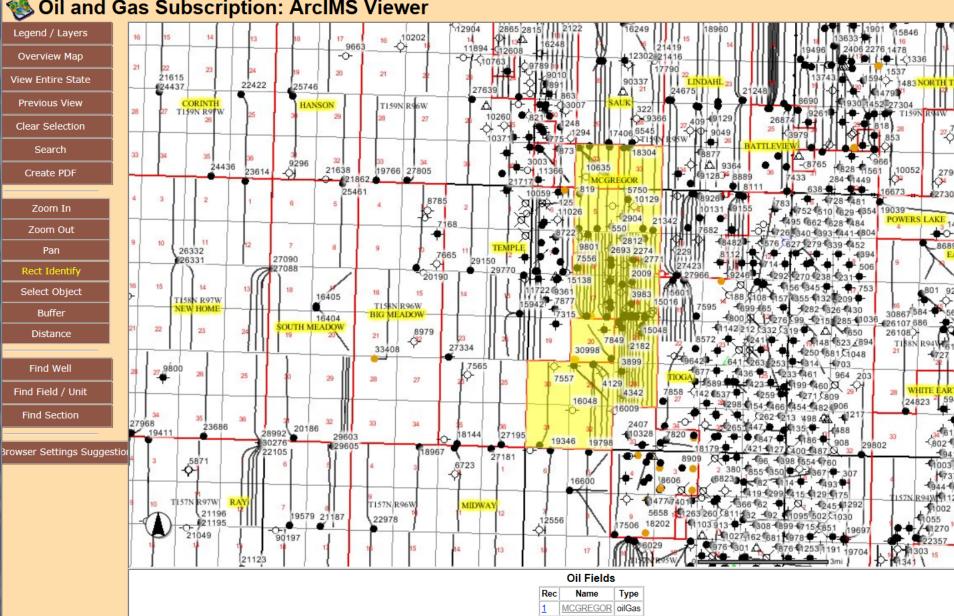
Missouri River Mineral Review





https://www.dmr.nd.gov/OaGIMSSub/viewer.htm

### Oil and Gas Subscription: ArcIMS Viewer



NDIC Rule Changes

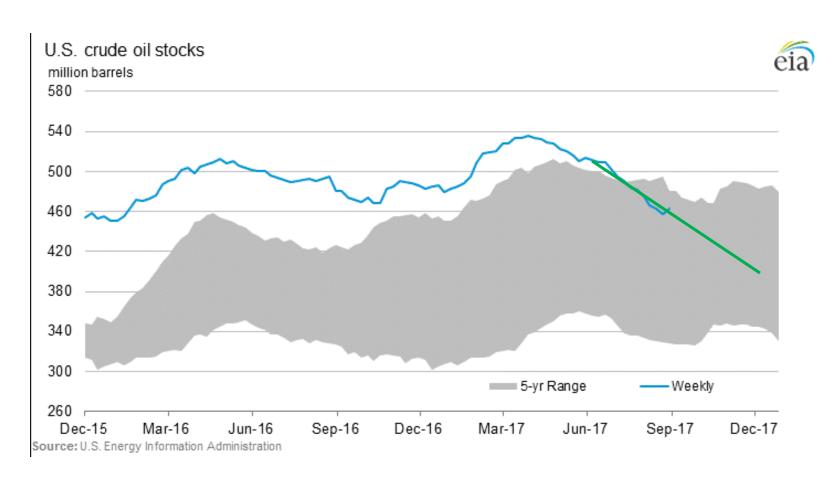
**EOR Field Tests** 

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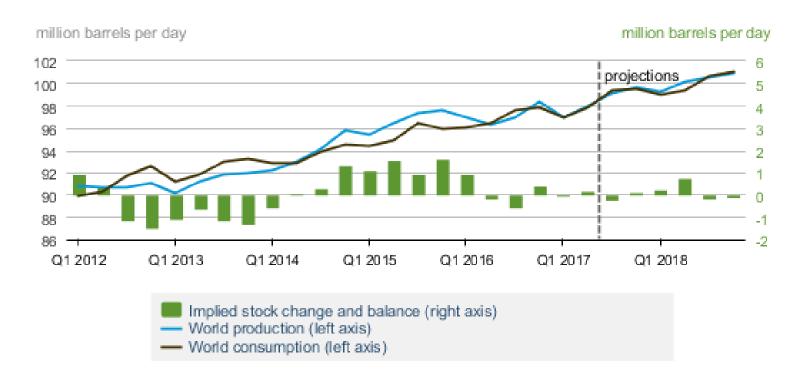
Missouri River Mineral Review

Storage East Coast 18 of 20=90% Permian 84 of 120=70% Rockies 22 of 40=55% Total US 462 of 735=63%

Cushing 58 of 70=83% Gulf Coast 232 of 395=59% West Coast 49 of 100=49% Normal 400 of 735=54%



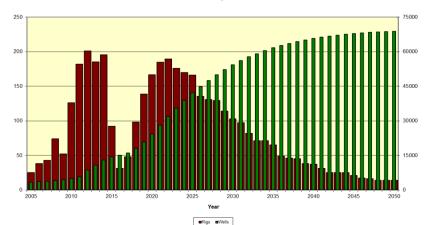
### World liquid fuels production and consumption balance



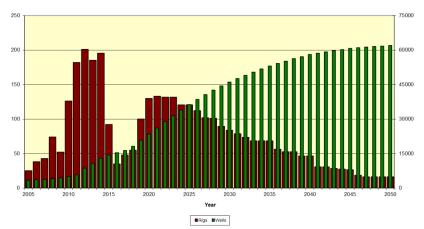


Source: Short-Term Energy Outlook, August 2017

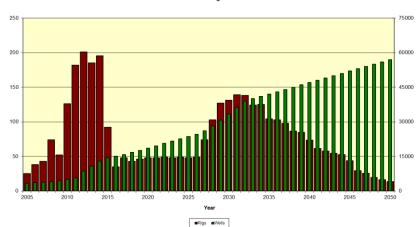
#### North Dakota Rigs and Wells



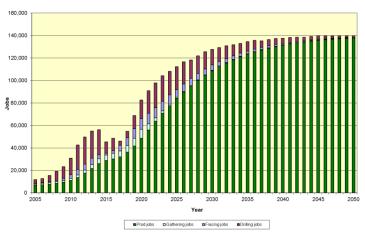
#### North Dakota Rigs and Wells



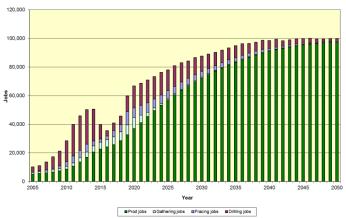
North Dakota Rigs and Wells



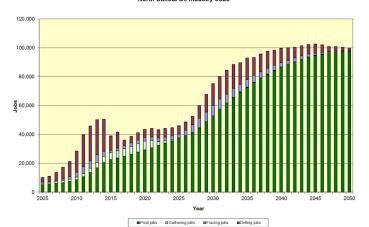
#### North Dakota Oil Industry Jobs



North Dakota Oil Industry Jobs



North Dakota Oil Industry Jobs

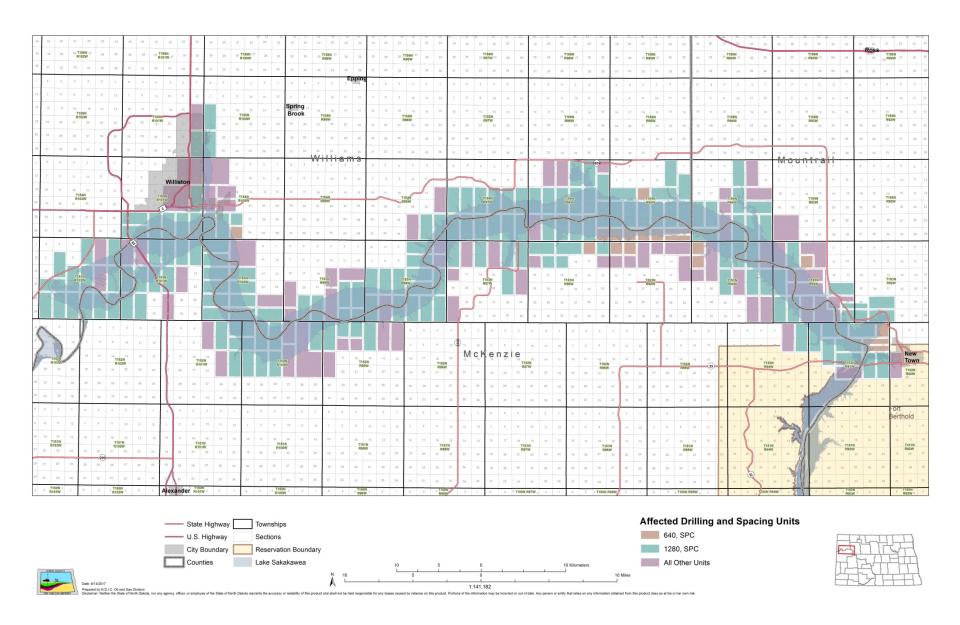


NDIC Rule Changes

**EOR Field Tests** 

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## **Missouri River Mineral Review**



spacing units impacted = 1,300 - 2750 wells not drilled

### SB 2134

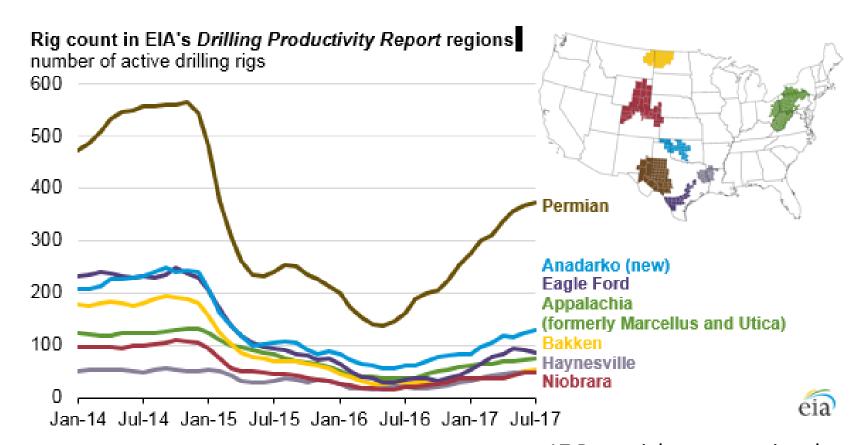
SB 2134						
Effective Date of Bill	April 21, 2017	Emergency Clause				
		Department of Mineral Resources to prepare Request for				
Publication of Invitation by		Proposals. This time line allows 6 weeks to prepare that RFP and				
Department of Mineral Resources	May 25, 2017	determine method for distribution.	61-33.1-03 (2)			
Proposal submittal deadline	June 27, 2017	Two qualifying proposals received	61-33.1-03 (2)			
•	,	Selection must be done by August 28. (Must be done within 90	,			
Selection of Firm	August 22, 2017	days from first <u>publication of invitation</u> .)	61-33.1-03 (2)			
End of NDIC Order appeal period	September 21, 2017	Order appelable for 30 days	, ,			
		This timeline assumes the firm, at the latest, will begin its work on				
		September 1, 2017. This may be a little aggressive in that once a				
		firm is selected there needs to be time allowed to negotiate and				
Firm begins their review	September 22, 2017	finalize a contract.	61-33.1-03 (3) (4) (5)			
Firm provide findings and make						
recommendations on each						
segment of the river the firm		The firm must complete their review within 6 months;				
reviewed.	March 21, 2018	Department may extend the time if deemed necessary.	61-33.1-03 (5)			
Commission shall publish notice of						
the review findings	April 11, 2018	Could take up to 21 days to get notice in county papers.	61-33.1-03 (6)			
Public Comment Period	June 11, 2018	60 days for comments	61-33.1-03 (6)			
Public hearing (s)	June 13, 2018	Public Hearing to be held after the 60 days	61-33.1-03 (6)			
		Preparation of recommendations. This timeline estimates a				
		minimum 30 days. This may require more time depending on the				
Hearing Officer/Staff provides		number of comments whether a transcript of the hearing needs				
recommendation	July 13, 2018	to be prepared, etc.	61-33.1-03 (7)			
		Commission may modify/Commission must take action on each				
		finding. No specific deadline of when the Commission has to				
Commission action	July 26, 2018	act. Have allowed 25 days to get it finalized.	61-33.1-03 (7)			
Distribution of royalties on <b>non-</b>		Within six months after the adoption of the final review findings				
<u>contested</u> acreage	January 22, 2019	by the industrial commission.	See 61-33.1-04 (1)			
Distribution of lease bonus and						
royalty refunds and payment						
demands as may be necessary	July 27, 2020	Land Board and Operators must make payments within 2 years.	61-33.1-04 (2 a & b)			

NDIC Rule Changes

**EOR Field Tests** 

\$50/barrel & \$60/barrel

Missouri River Mineral Review



Taxes
Permian – 3.75% to 7.5%
Anadarko – 7%
Eagle Ford – 7.5%
Appalachia – 0.2%
Bakken – 10%
Haynesville – 5% to 7.5%
Niobrara – 3% to 6%

Federal & Tribal Lands
Permian – <2%
Anadarko – <2%
Eagle Ford – <2%
Appalachia – <2%
Bakken – 9% to 30%
Haynesville – 2% to 9%
Niobrara – 36% to 48%

17 Potential unconventional resource Source Rock formations
Spearfish 1 Charles 2
Tyler 1 Mission Canyon 2
Lodgepole 1 Bakken 2
Birdbear 1 Duperow 1
Winnipegosis 1 Stony Mountain 1

Winnipeg 1

Red River 2

Deadwood 1