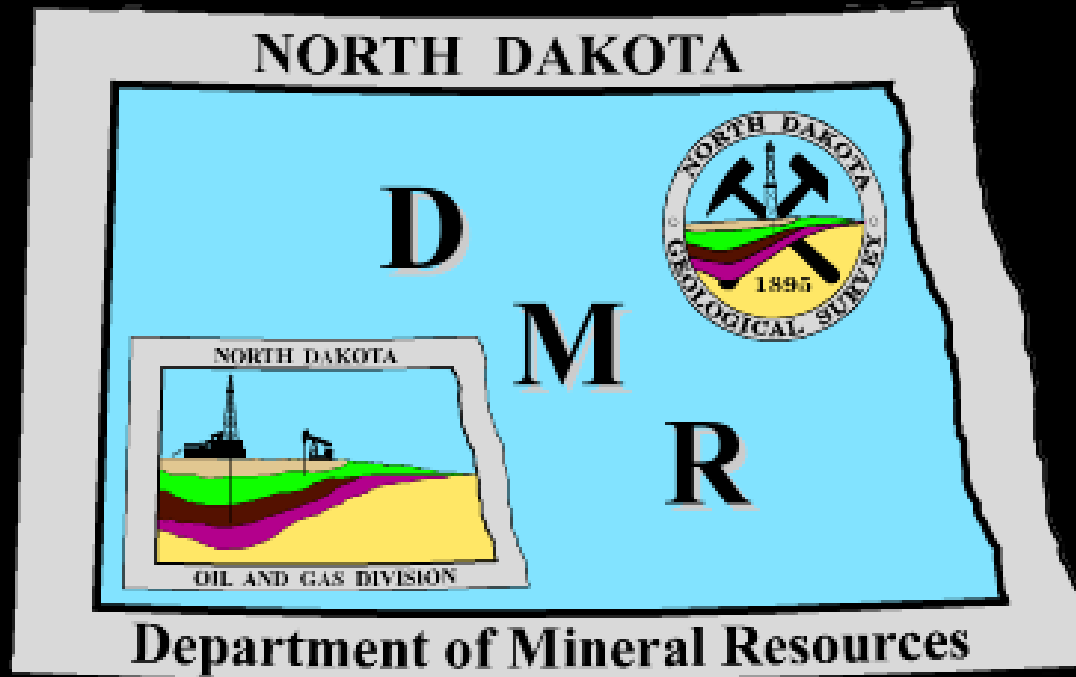


North Dakota Department of Mineral Resources



<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

13,885 693 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

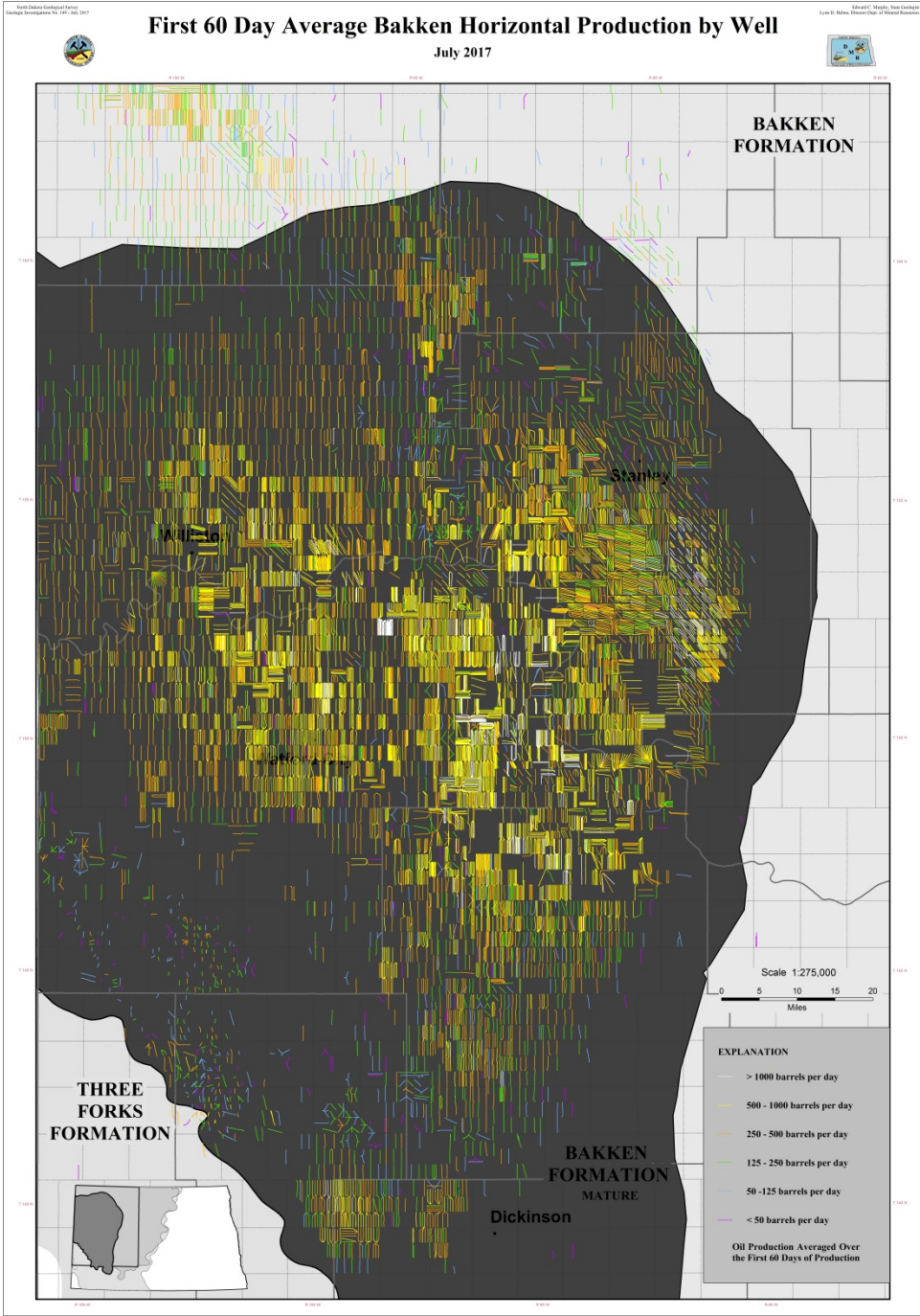
+\$60 for 90 days

NYMEX 2024+

13,256 increased density approved 9/5/17

31,394 total

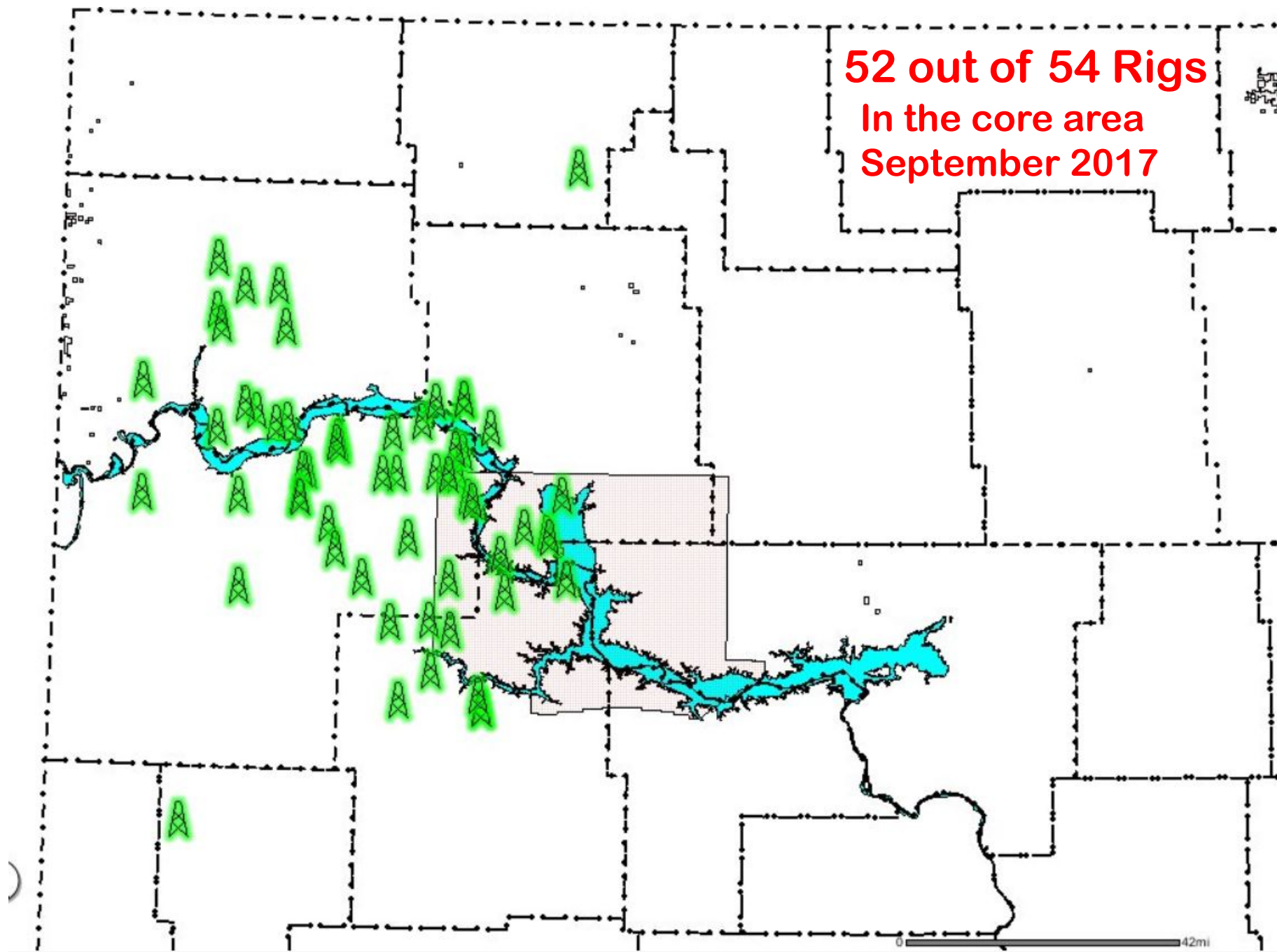
55,000-65,000 estimated final



165 Rigs out of 183
In the core area
November 2014



**52 out of 54 Rigs
In the core area
September 2017**



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.

Coming Attractions

NDIC Rule Changes

EOR Field Tests

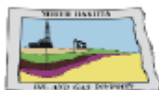
\$50/barrel & \$60/barrel

Coming Attractions

NDIC Rule Changes

EOR Field Tests

\$50/barrel & \$60/barrel



NORTH DAKOTA INDUSTRIAL COMMISSION

DEPARTMENT OF MINERAL RESOURCES

OIL AND GAS DIVISION

SUMMARY OF PROPOSED 2018 RULES

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
43-02-03-28	Safety Regulation	Requires subsequent MIT if casing integrity is questionable after remedial work
43-02-03-30	Fires, Leaks, Spills, or Blowouts HB1151	Clarifies ignition sources (not just boiler/generator) must be at a safe distance
43-02-03-30.1	Leak and Spill Cleanup	Leak/spill involving CO, PW, NGL notification NR if < 10bbls, stays on site built >9-01-2000
43-02-03-33	Notice of Intention to Plug Well	Requires Fm4 w/in 10 days of spill cleanup
43-02-03-34.1	Reclamation of Surface SB2333	Notice must include well bore diagram
43-02-03-49	Oil Production Equip, Dikes, and Seals	Requires reclamation to original condition per 38-08-04.12 (SB2333)
43-02-03-51.3	Treating Plant Construction and Operation	Authorizes Director to require an environmental assessment of the site
43-02-03-51.4	Treating Plant Abandonment & Reclamation	Requires dikes around production equipment at new production facility
43-02-03-53.3	SHF Construction & Operation Requirements	Synthetic liner required on dikes and within diked area
43-02-03-53.4	SHF Abandonment & Reclamation	Requires all discharged wastes to be promptly removed, not just accidentally spilled
43-02-03-55	Abandonment of Wells, TPs, & SHFs	Requires Fm4 w/in 30 days of TP construction/modification
43-02-03-88.1	Special Procedures	Clarifies that prior approval needed before modify TP
43-02-05 UNDERGROUND INJECTION CONTROL		
43-02-05-06	Construction Requirements	Authorizes Director to shut-in TP operations if noncompliant
43-02-05-09	Pressure Limitations (formerly Operating Regs)	Removes duplication in Adm Code--language appears under 43-02-03-34.1
43-02-05-12	Reporting, Monitoring, and Operating Regs	Requires Fm4 w/in 30 days of TP construction/modification
43-02-06 ROYALTY STATEMENTS		
43-02-06-01	Royalty Owner Information Statement	Authorizes Director to shut-in TP operations if noncompliant
43-02-11 CERTIFICATION OF HORIZONTAL, RE-ENTRY, AND TWO-YEAR INACTIVE WELLS		
43-02-11-01	Definitions HB1043	Removes duplication in Adm Code--language appears under 43-02-03-34.1
43-02-11-02	Appl to Certify Hor, Hor RE, Two-Yr Inactive HB1043	Requires Fm4 w/in 30 days of TP construction/modification
43-02-11-04	Appl for Tax Exempt for Hor Well HB1043	Authorizes Director to shut-in TP operations if noncompliant
43-02-11-05	Appl for Tax Exempt for Hor RE Well HB1043	Removes duplication in Adm Code--language appears under 43-02-03-34.1
43-02-11-06	Appl for Tax Exempt for Two-Yr Inactive Well HB1043	Requires Fm4 w/in 30 days of TP construction/modification
43-02-11-07	Books & Records--Substantial Reports HB1043	Authorizes Director to shut-in TP operations if noncompliant
43-02-11-08	Appl for Tax Exempt for Shallow Gas Well	Removes duplication in Adm Code--language appears under 43-02-03-34.1
43-05-01 GEOLOGIC STORAGE OF CARBON DIOXIDE		
43-05-01-19	Facility Closure SB2333	Requires Fm4 w/in 30 days of TP construction/modification

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

2017

- 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 15th Ave West, Williston
- Oct 12:** Rules hearing @ 2 pm, Oil and Gas Division Field Office, 7 3rd 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
(Rules filed w/LC btn Nov 2-Feb 1 become effective Apr 1, 2018.)

2018

- Jan 17:** 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

Coming Attractions

NDIC Rule Changes

EOR Field Tests

\$50/barrel & \$60/barrel

Oil and Gas Subscription: ArcIMS Viewer

Legend / Layers

Overview Map

View Entire State

Previous View

Clear Selection

Search

Create PDF

Zoom In

Zoom Out

Pan

Rect Identify

Select Object

Buffer

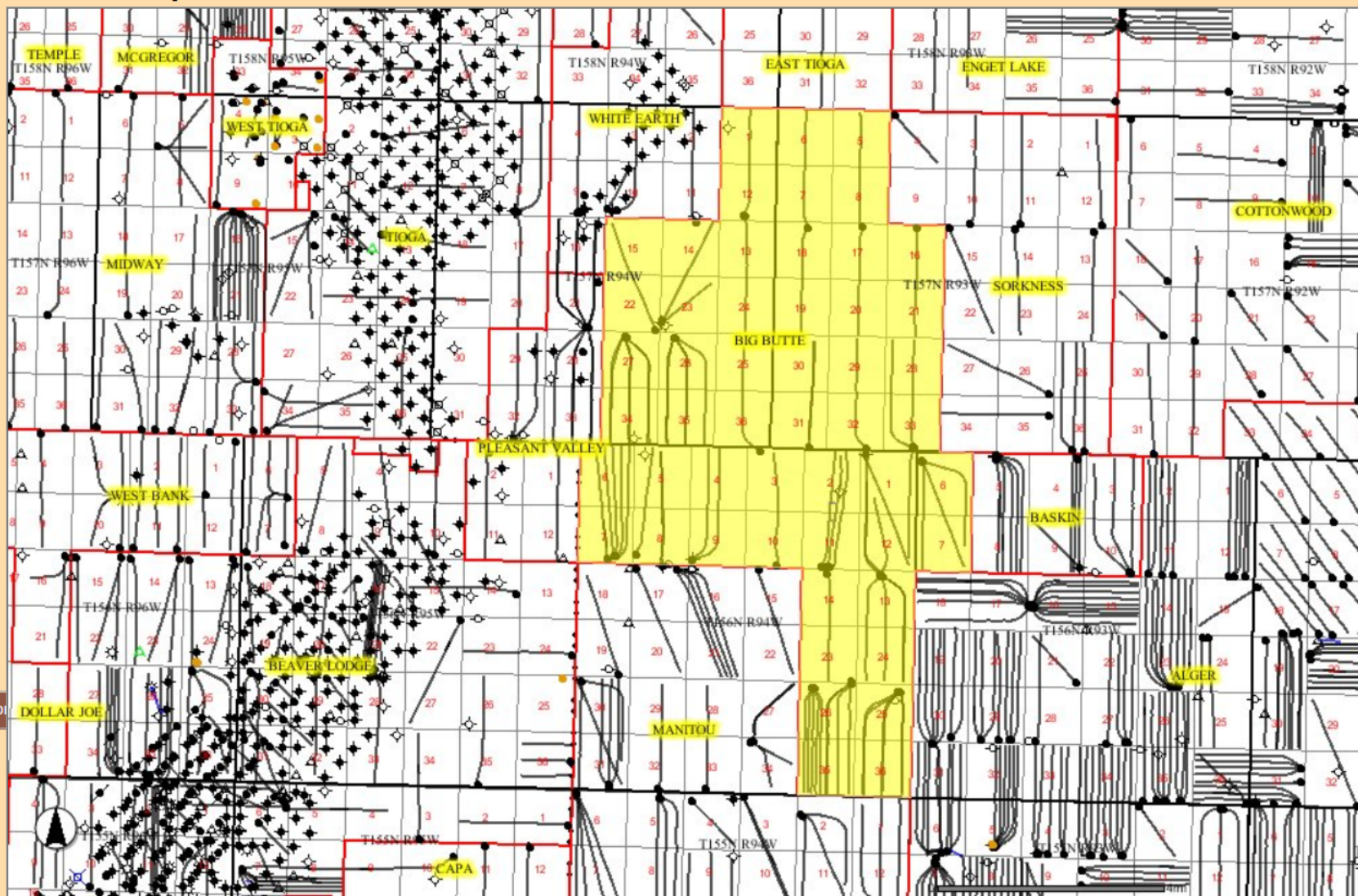
Distance

Find Well

Find Field / Unit

Find Section

Browser Settings Suggestion



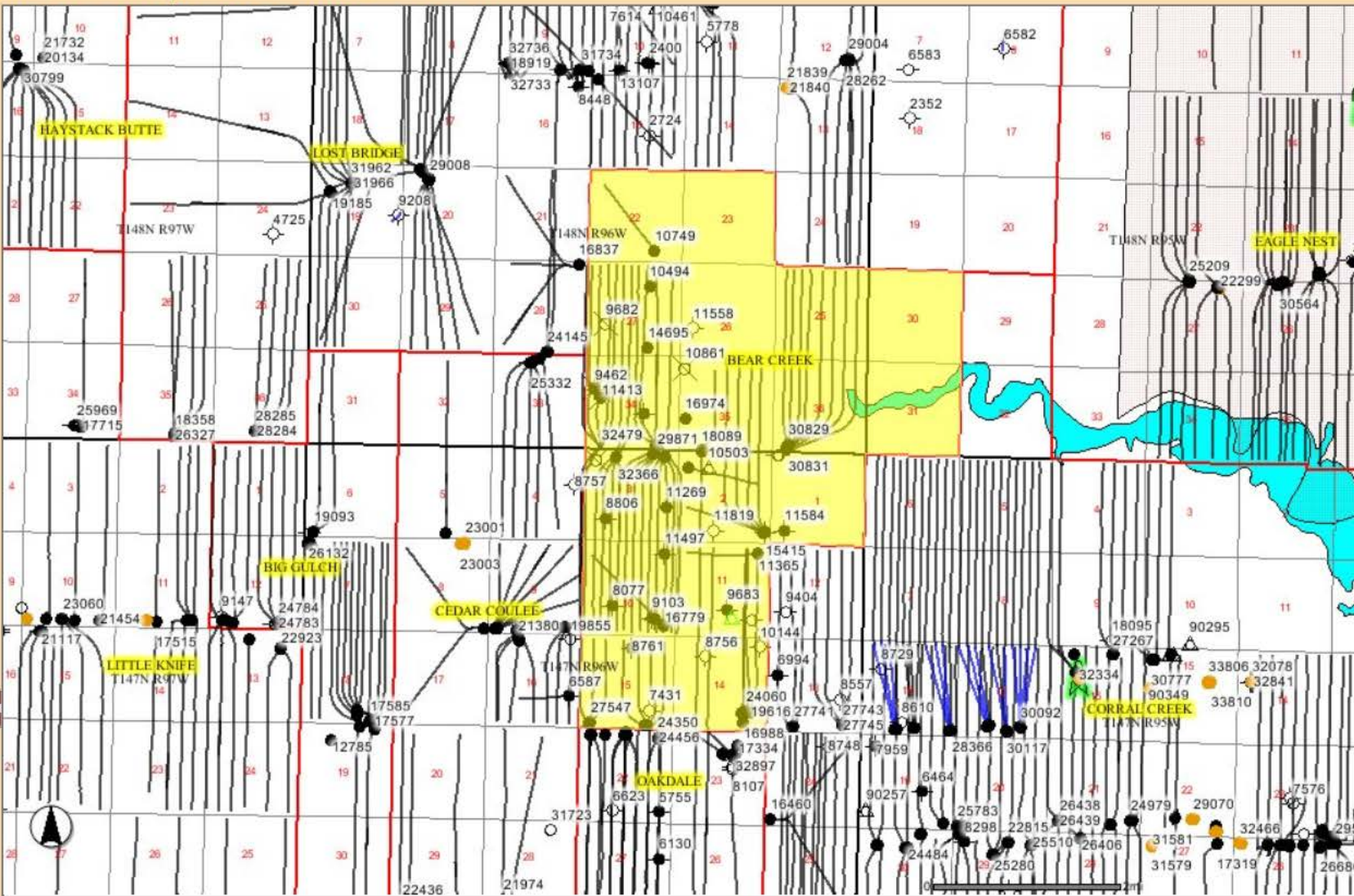
Oil Fields

Rec	Name	Type
1	BIG BUTTE	oilGas

Oil and Gas Subscription: ArcIMS Viewer

- Legend / Layers
- Overview Map
- View Entire State
- Previous View
- Clear Selection
- Search
- Create PDF
- Zoom In
- Zoom Out
- Pan
- Rect Identify
- Select Object
- Buffer
- Distance
- Find Well
- Find Field / Unit
- Find Section

Browser Settings Suggestion



Oil Fields

Rec	Name	Type
1	BEAR CREEK	oilGas

Oil and Gas Subscription: ArcIMS Viewer

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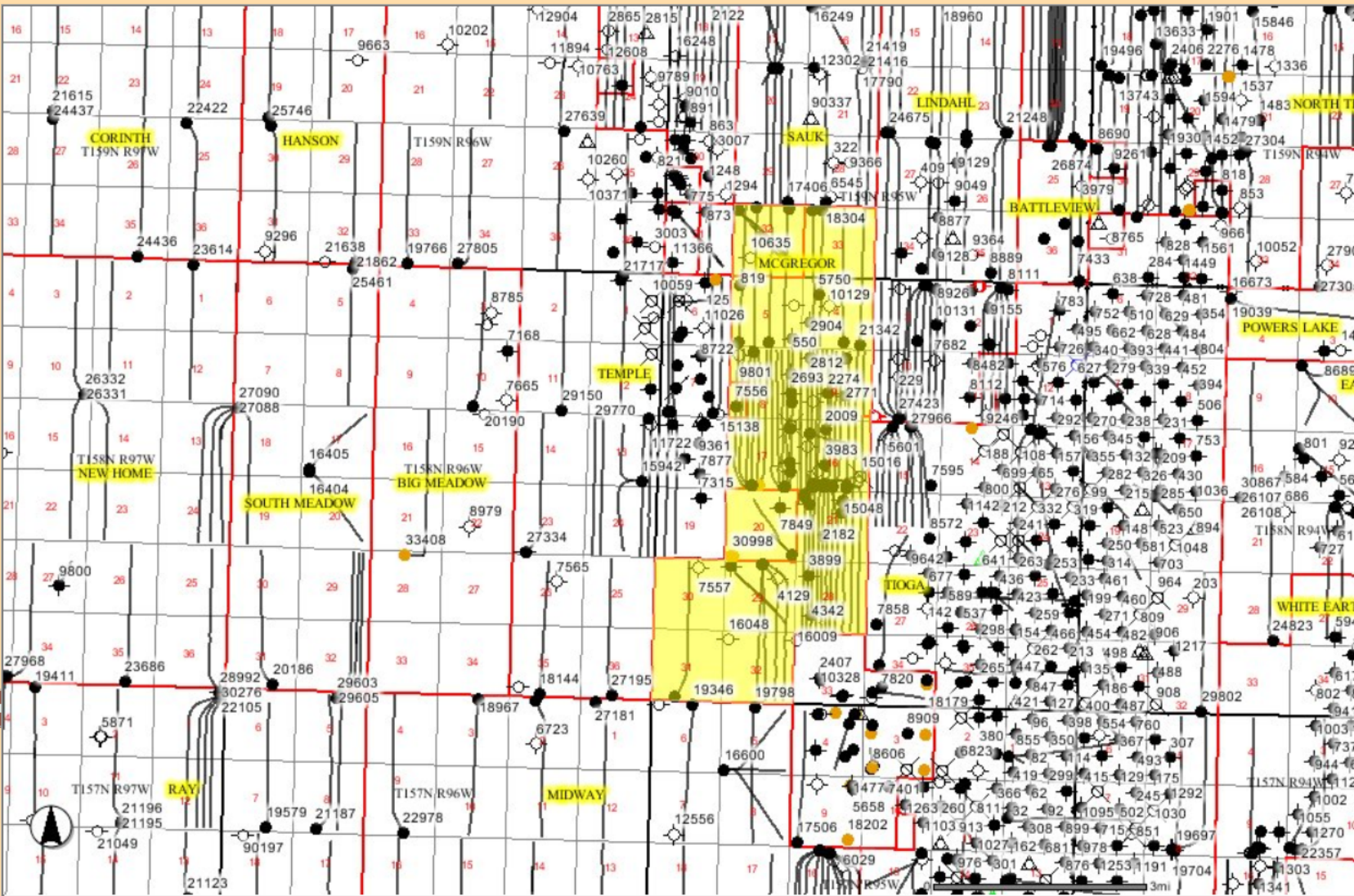
Distance

Find Well

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Find Section

Browser Settings Suggestion



Oil Fields

Rec	Name	Type
1	MCGREGOR	oilGas

Coming Attractions

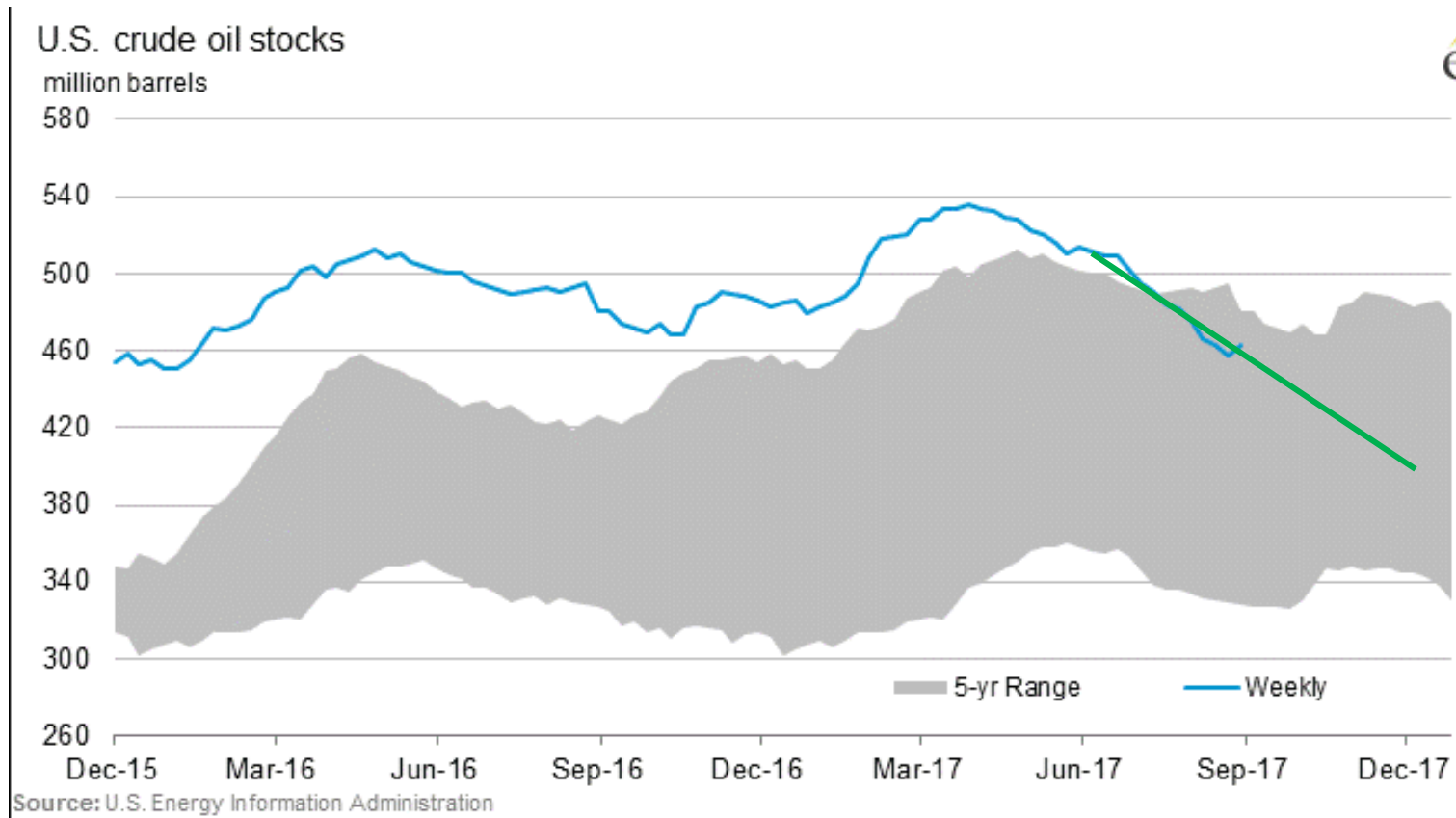
NDIC Rule Changes

EOR Field Tests

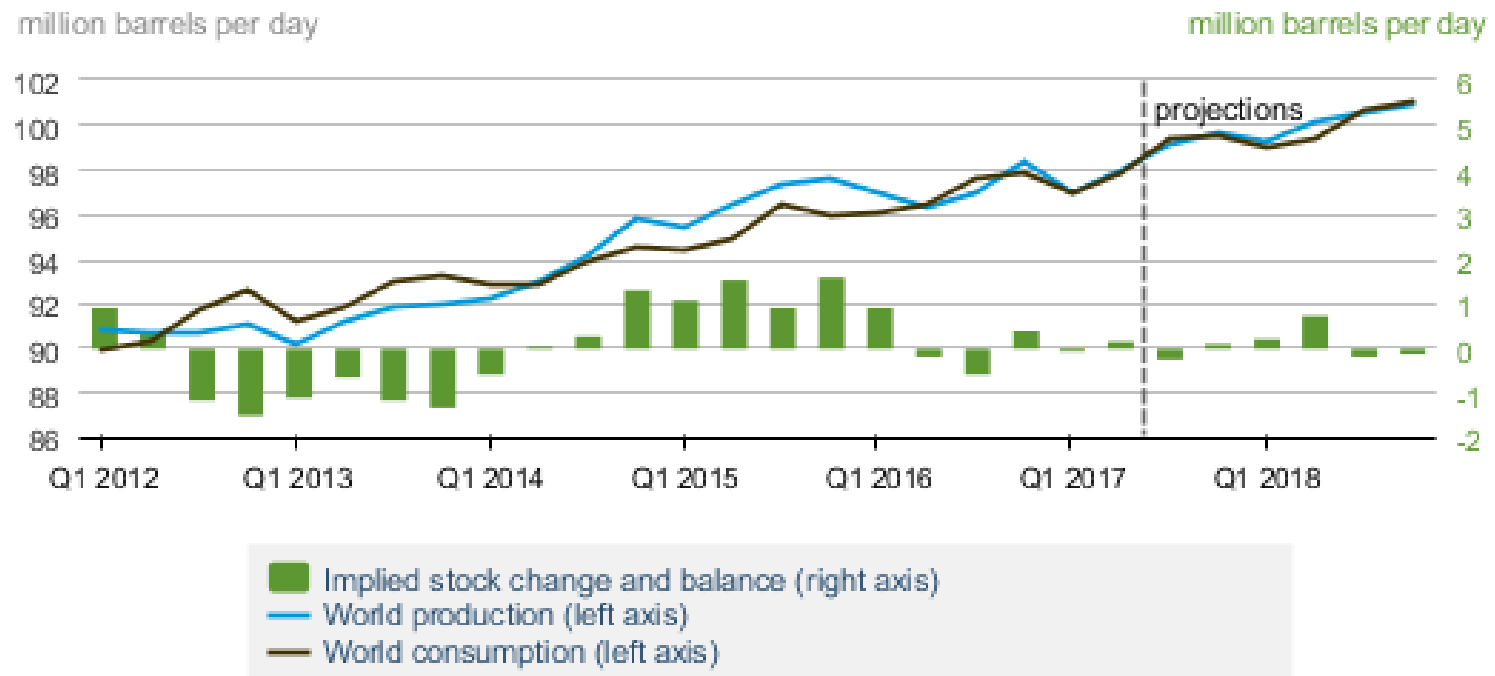
\$50/barrel & \$60/barrel

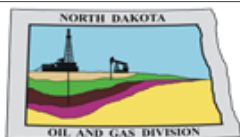
Storage East Coast 18 of 20=90%
 Permian 84 of 120=70%
 Rockies 22 of 40=55%
 Total US 462 of 735=63%

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

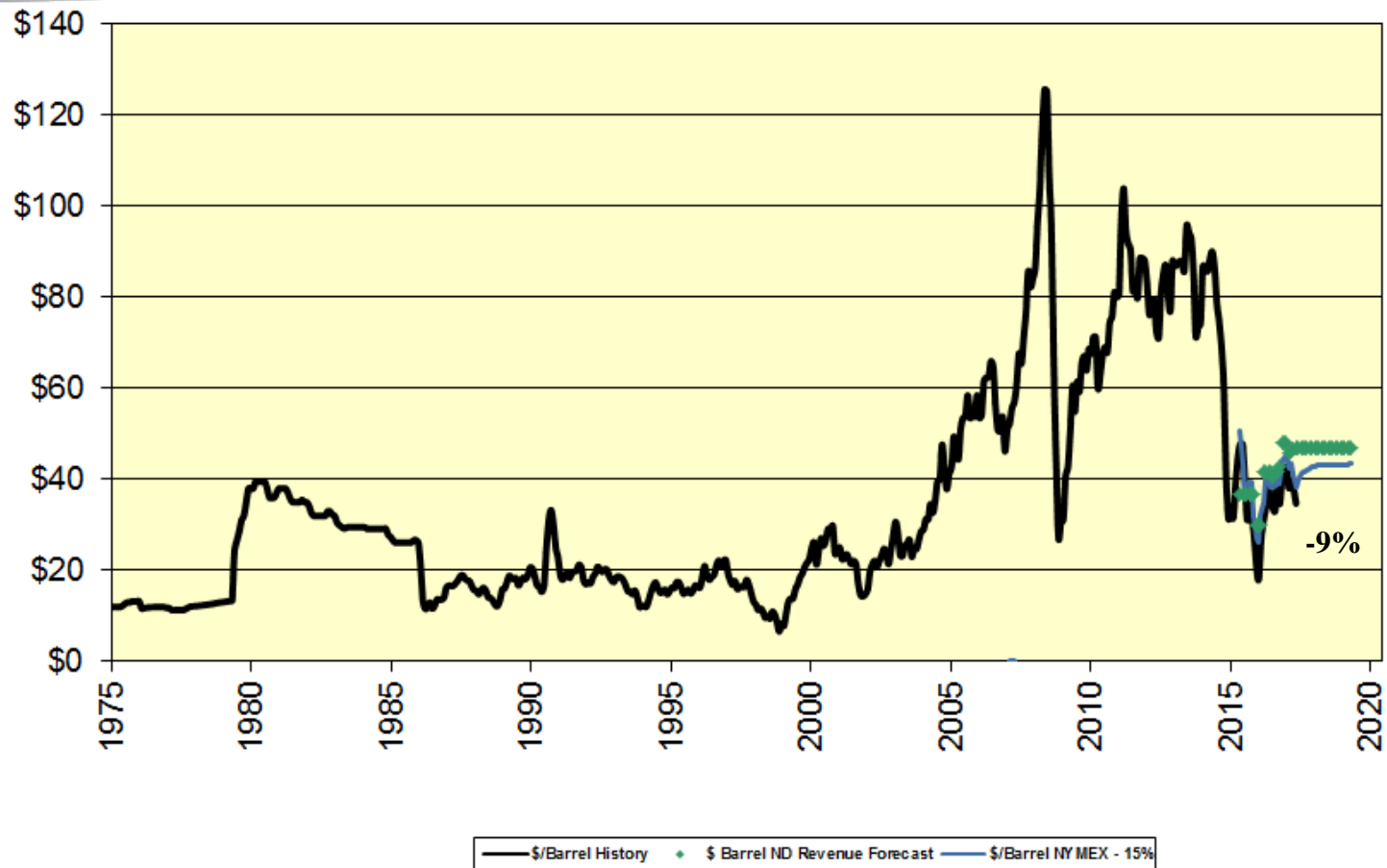


World liquid fuels production and consumption balance

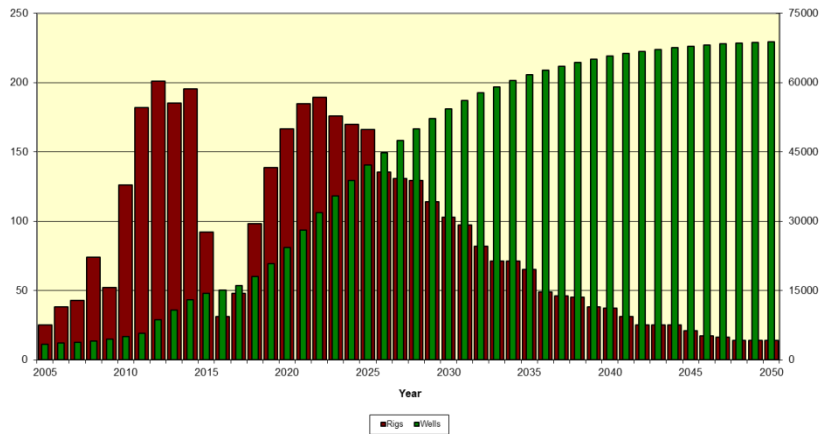




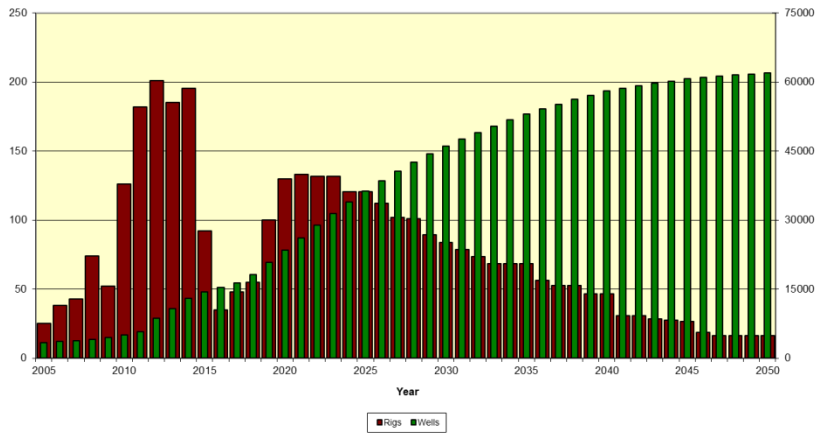
North Dakota Oil Production and Price



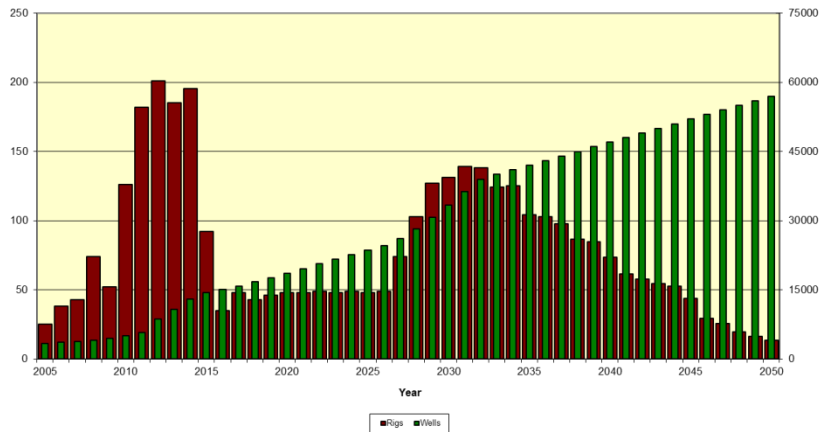
North Dakota Rigs and Wells



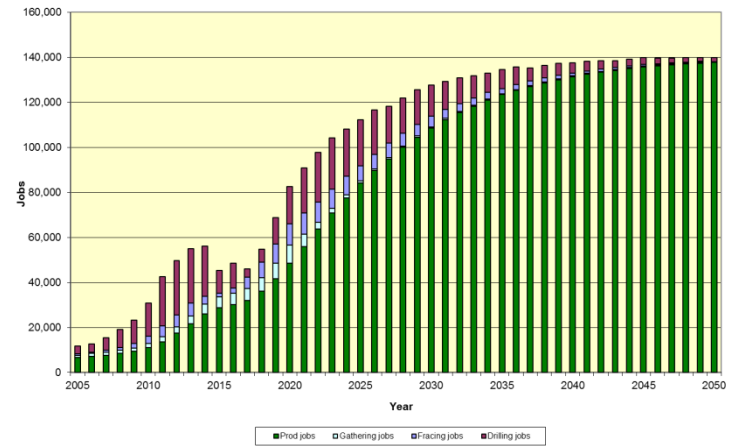
North Dakota Rigs and Wells



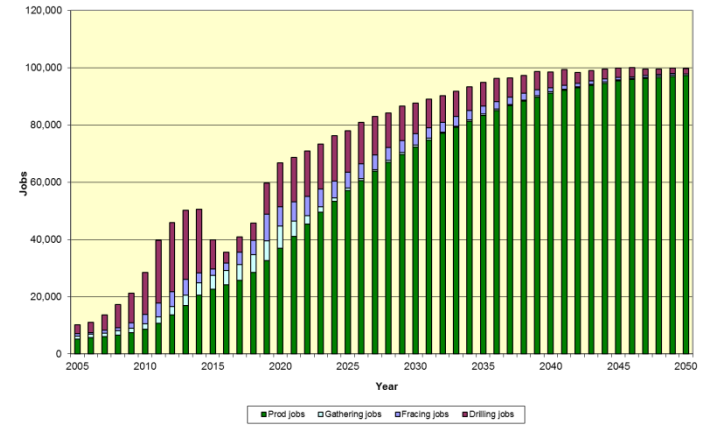
North Dakota Rigs and Wells



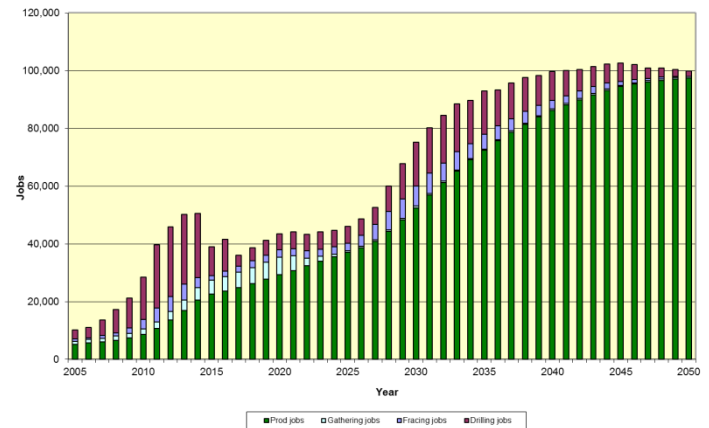
North Dakota Oil Industry Jobs



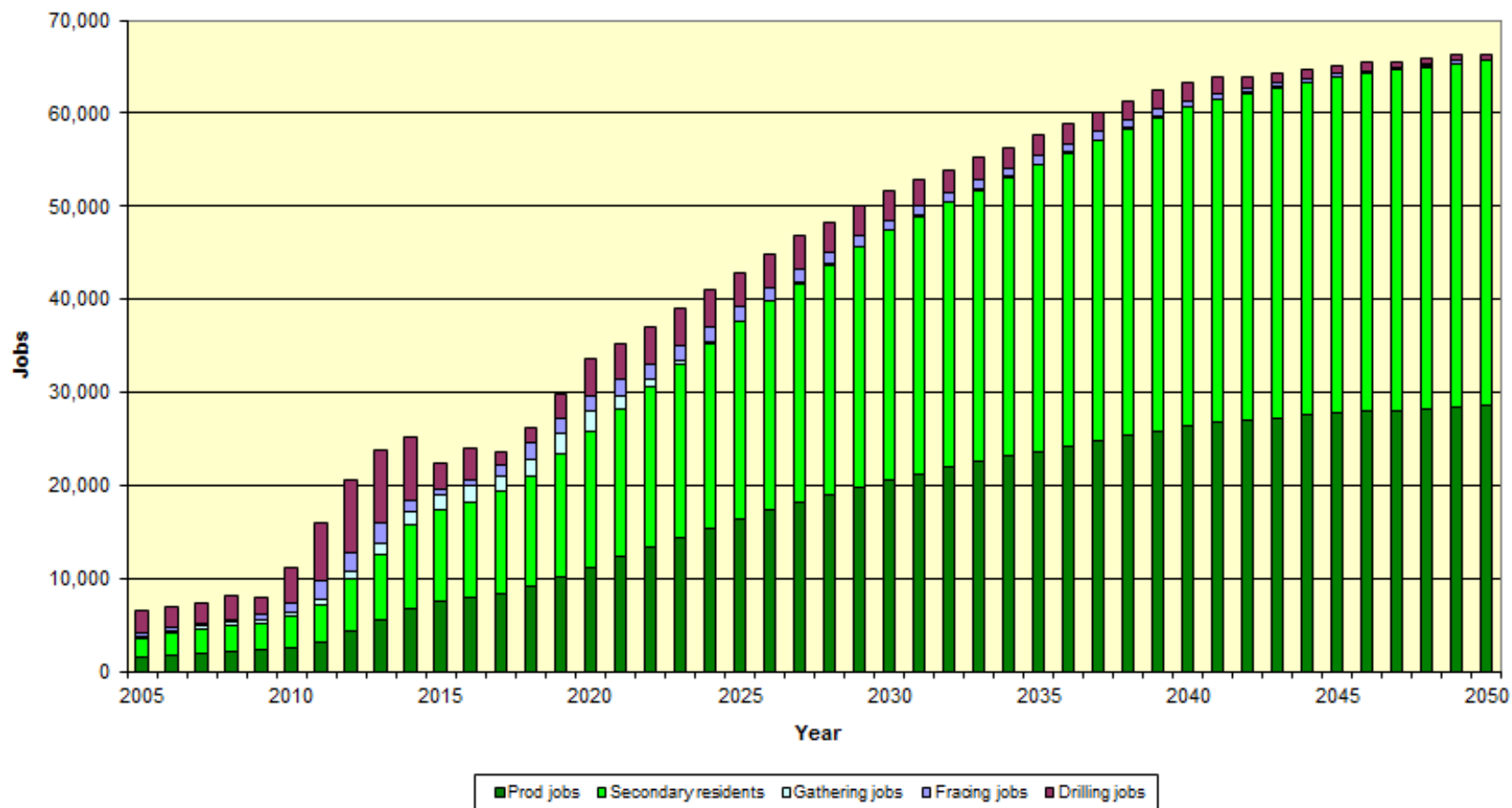
North Dakota Oil Industry Jobs



North Dakota Oil Industry Jobs

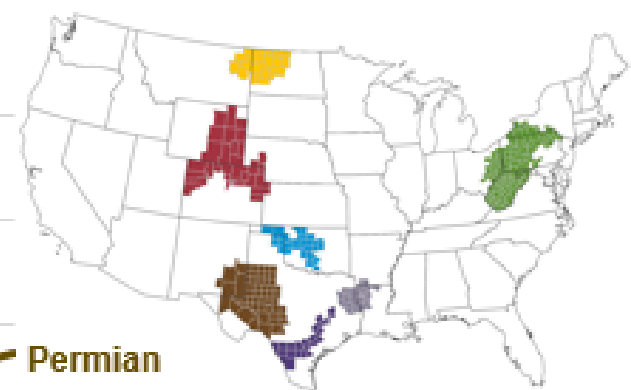
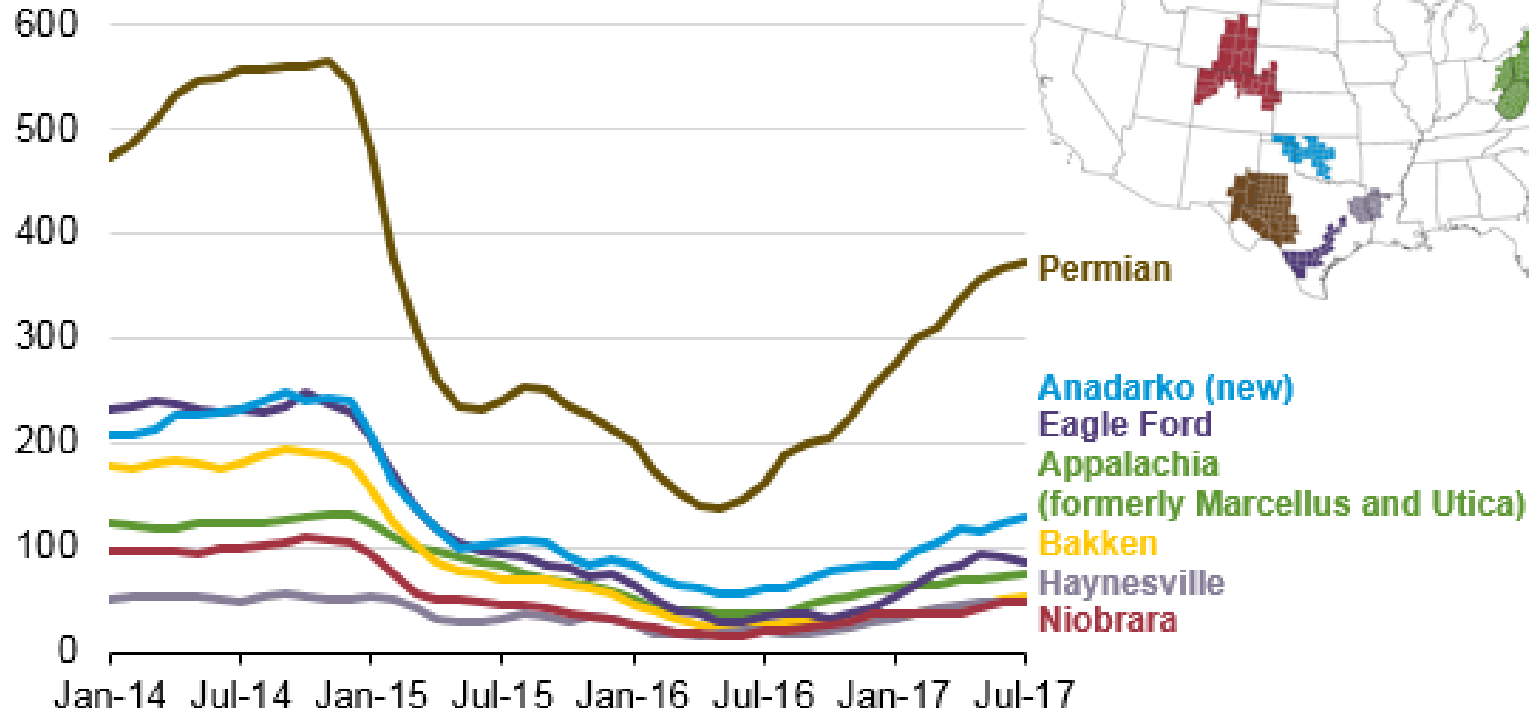


Williston



Rig count in EIA's *Drilling Productivity Report* regions

number of active drilling rigs



Enerplus – Canada & Appalachia
HRC - Permian
Marathon – Anadarko & Eagle Ford
Petroshale
Slawson - Anadarko
WPX - Permian

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%

New-well oil production per rig

barrels/day

