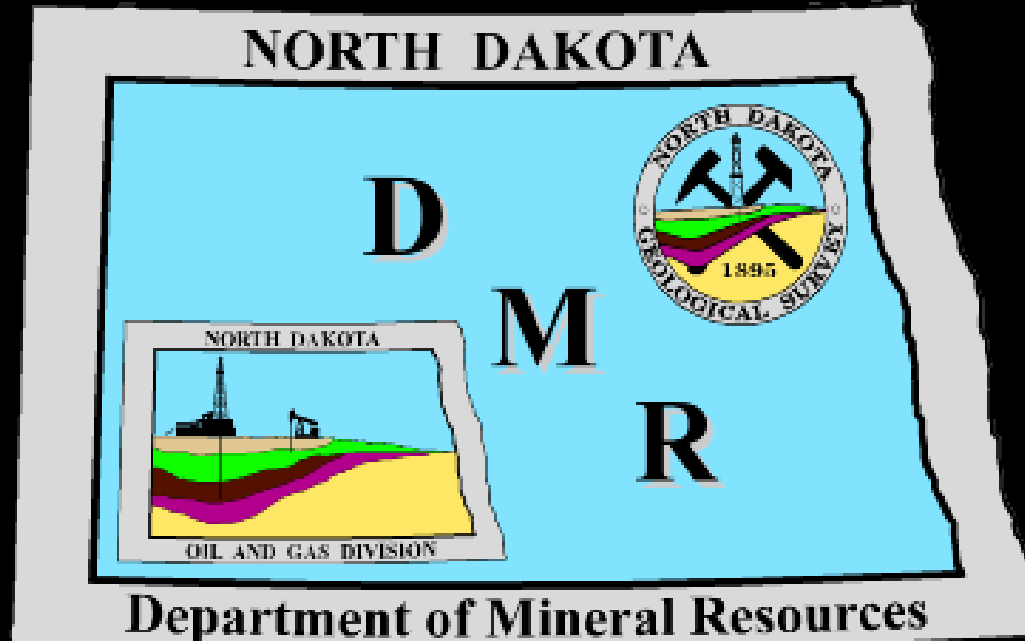


North Dakota Department of Mineral Resources



<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

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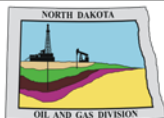
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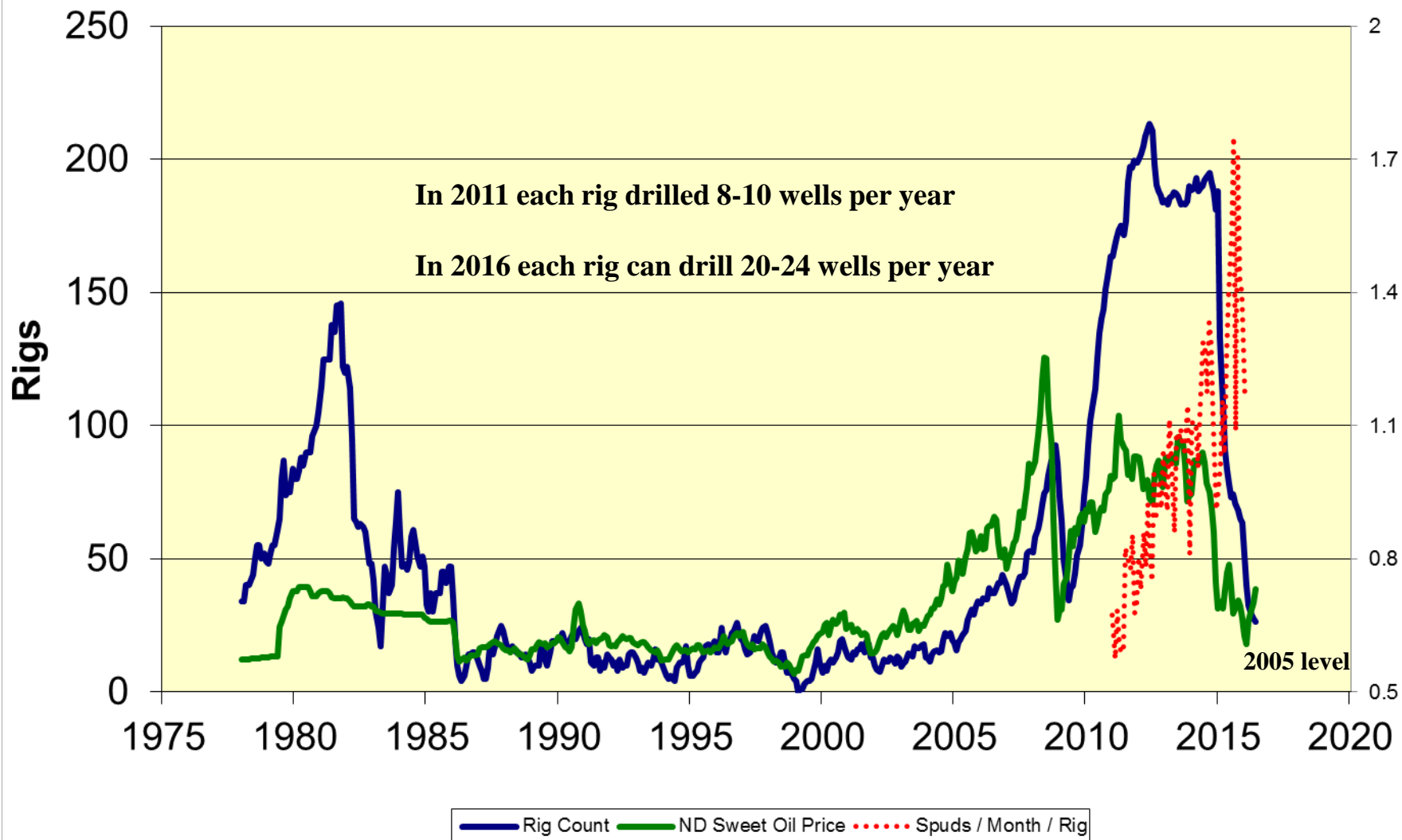
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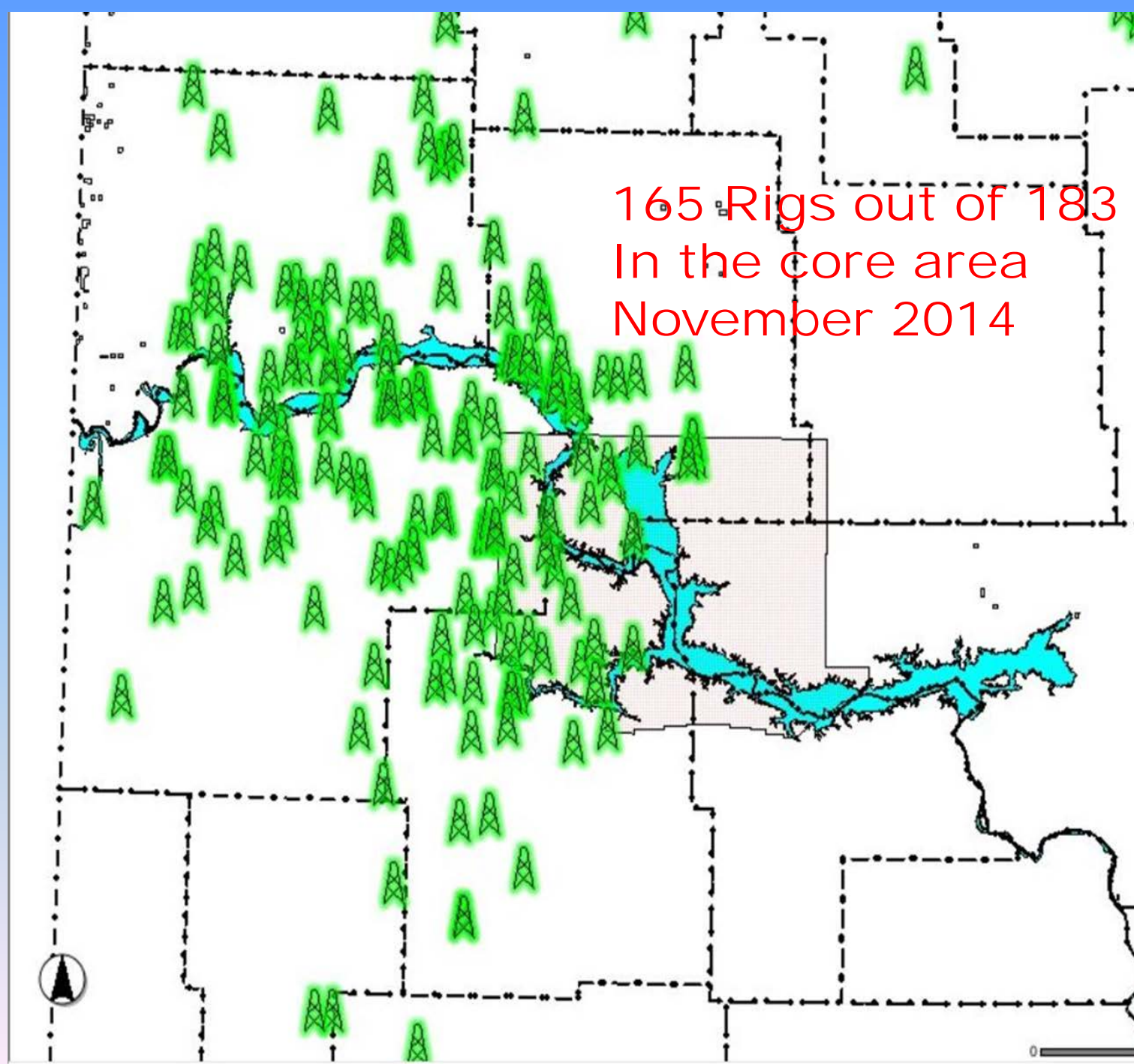


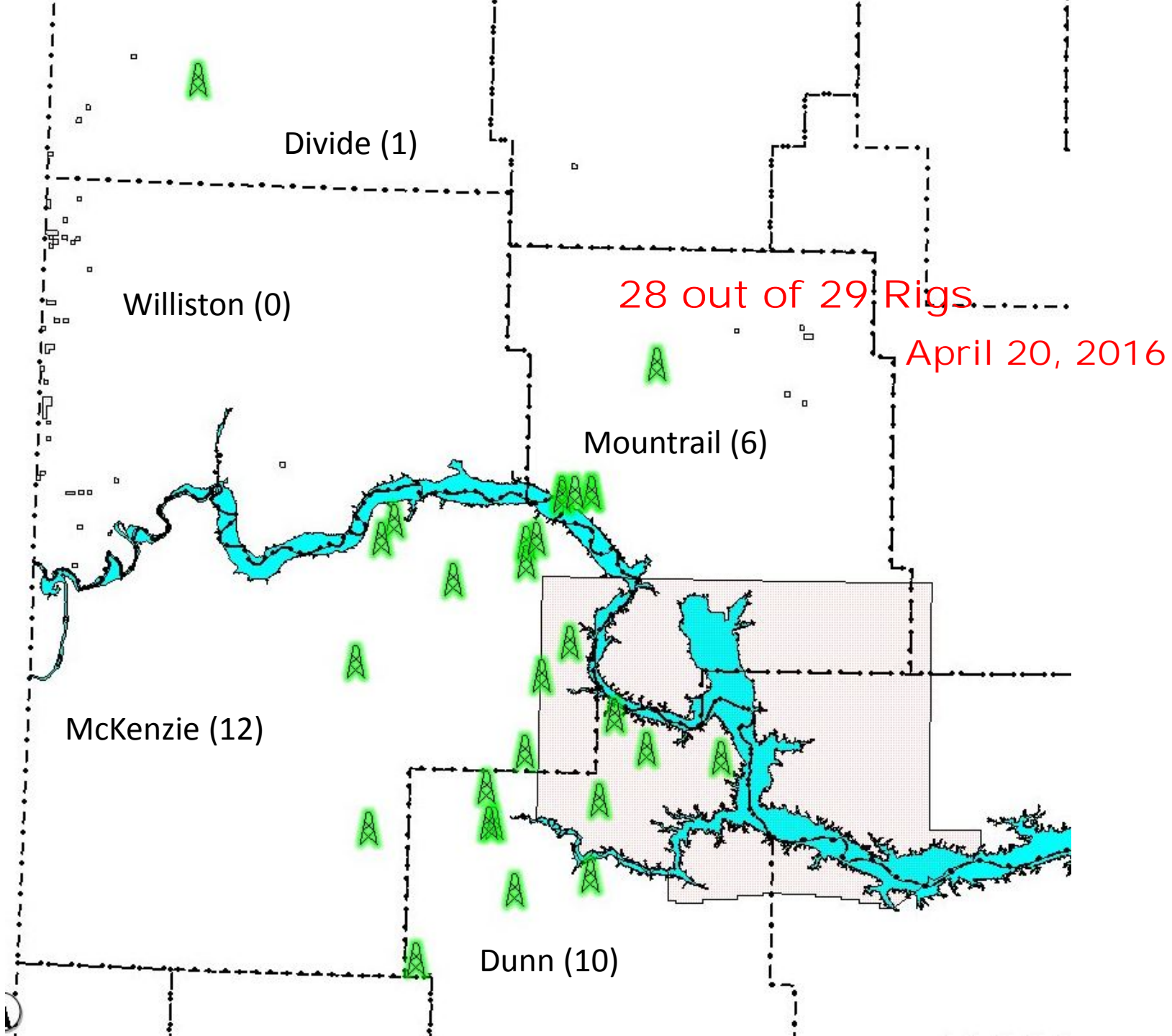


North Dakota Average Monthly Rig Count



165 Rigs out of 183
In the core area
November 2014





General Guidelines for Inactive Well - Waiver

Policy Goal:

The North Dakota Industrial Commission (NDIC) is charged with "fostering, ... encouraging, and ... promoting the development, production, and utilization of the *state's* natural resources of oil and gas in the state in such a manner as will prevent waste." The Commission is promulgating this Policy to prevent waste.

North Dakota Century Code (NDCC) § 38-08-04 (1) (l) and North Dakota Administrative Code (NDAC) § 43-02-03-55 (1) define what constitutes abandonment of a well and the operator's obligation to plug such a well and reclaim its site.

NDAC § 43-02-03-55 (3) was drafted to give the operator of an abandoned well sufficient time either to restore production or plug and reclaim the well.

Inactive Well – Waiver (IAW) Status may only be given to wells that have met the following criteria.

1. Proposed IAW Approval Procedure

1. The operator must submit a Sundry Notice – Form 4 intent to request a waiver to plug and reclaim an abandoned well pursuant to NDAC § 43-02-03-55 Part (3). The request must include:
 - a. Documentation of why the well is currently in an inactive or abandoned status.
 - b. A statement that the well is uneconomic to produce at current crude oil price.
 - c. A statement that wellhead equipment complies with NDAC § 43-02-03-28 and 43-02-03-29 with regard to subsurface pressure control and well and lease equipment is in good working order.
 - d. The current casing and tubing pressure.
 - e. If the well was in abandoned status prior to January 1, 2016 (last production prior to October 2014), document why the well was not returned to production at that time.

As of 4/30/16 there were 1,590 inactive wells

The estimated price point for return to production is >\$40-45 per barrel WTI

General Guidelines for Not Completed - Waiver of Wells

Policy Goal:

The North Dakota Industrial Commission (NDIC) is charged with "fostering, ... encouraging, and ... promoting the development, production, and utilization of the *state's* natural resources of oil and gas in the state in such a manner as will prevent waste." The Commission is promulgating this Policy to prevent waste.

North Dakota Century Code (NDCC) § 38-08-04 (1) (l) and North Dakota Administrative Code (NDAC) § 43-02-03-55 (1) define what constitutes abandonment of a well and the operator's obligation to plug such a well and reclaim its site.

NDAC § 43-02-03-55 (2) was drafted to give the operator of an abandoned well sufficient time either to restore production or plug and reclaim the well.

This Policy does nothing to change the existing text or application of NDAC § 43-02-03-55 (2) to a well which has previously produced oil or gas.

NDAC § 43-02-03-55 (3) and this policy are drafted to eliminate the waste which would otherwise occur by application of NDAC § 43-02-03-55 (2) to horizontal Bakken wells for which completions have been deferred.

Not Completed – Waiver (NCW) Status may only be given to wells that have been drilled but whose casing has not yet been perforated (i.e. the well is incapable of producing oil or gas because completion operations have not yet been performed).

As of 4/30/16 there were 890 Not Completed wells

The estimated price point for completion is \$50-60 / barrel WTI

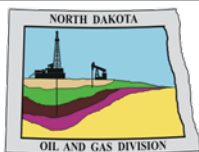
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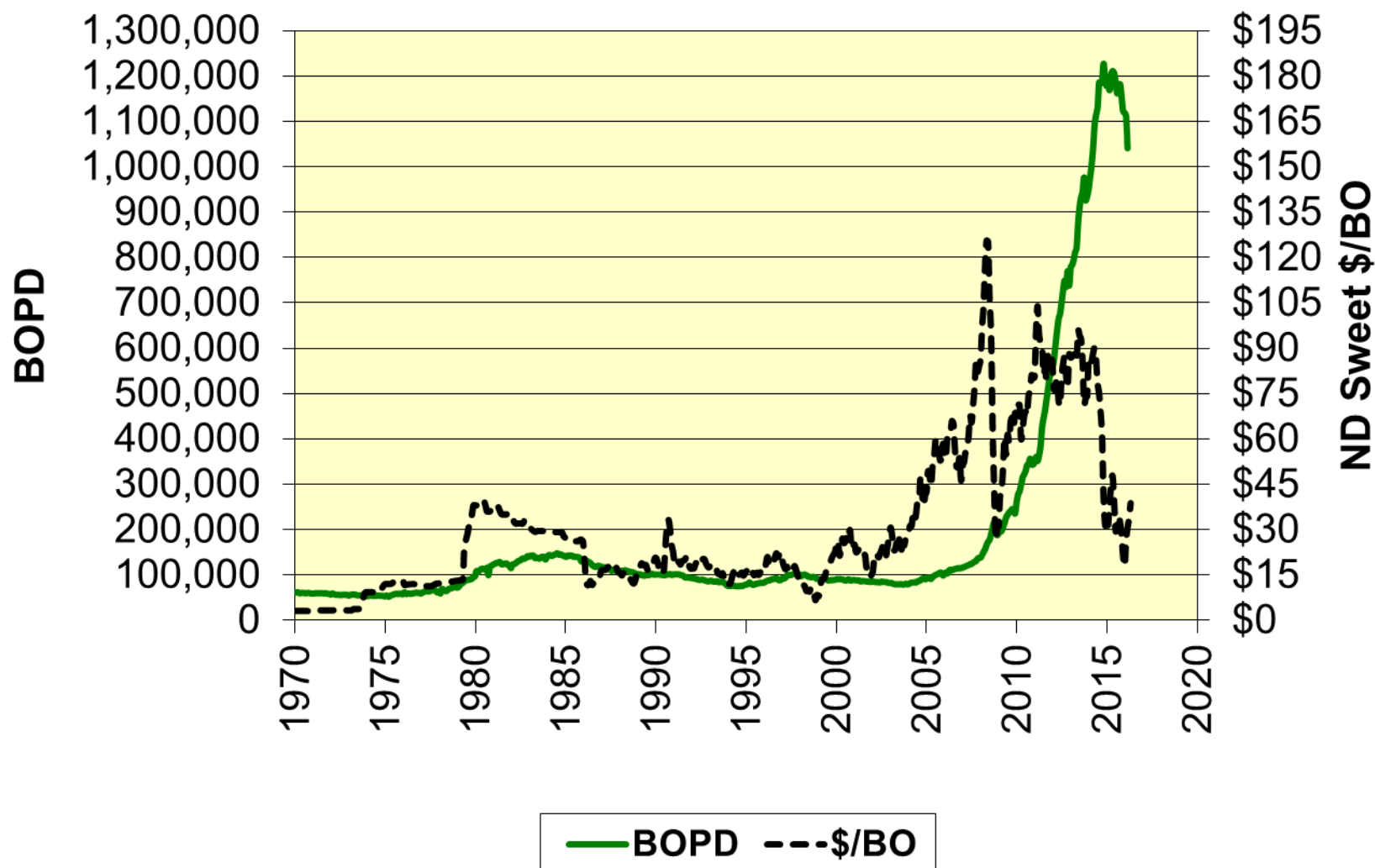




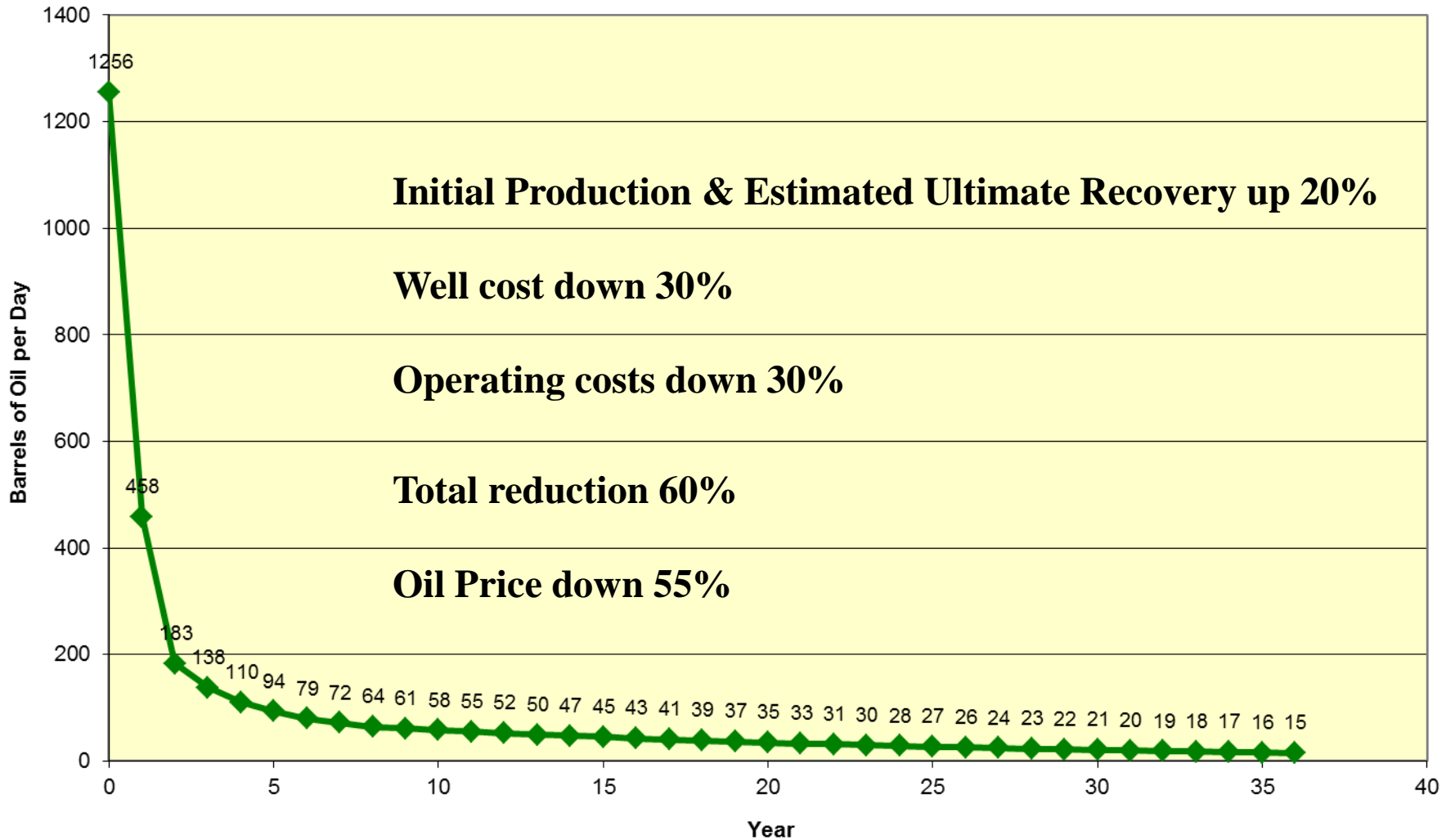




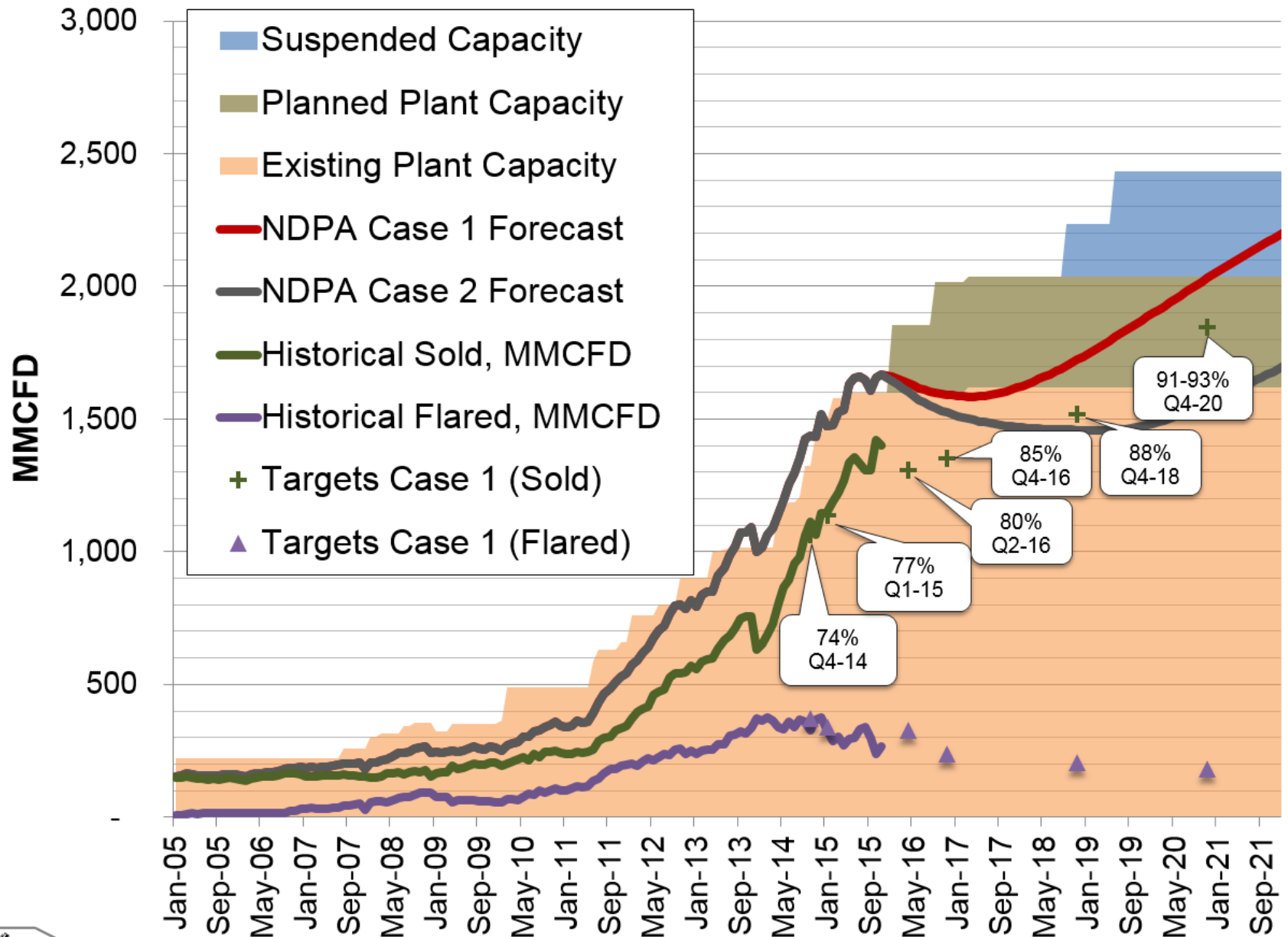
North Dakota Daily Oil Produced and Price



Typical Bakken Well Production



Solving the Flaring Challenge



Bakken Forward > > >





Bakken Forward > > >

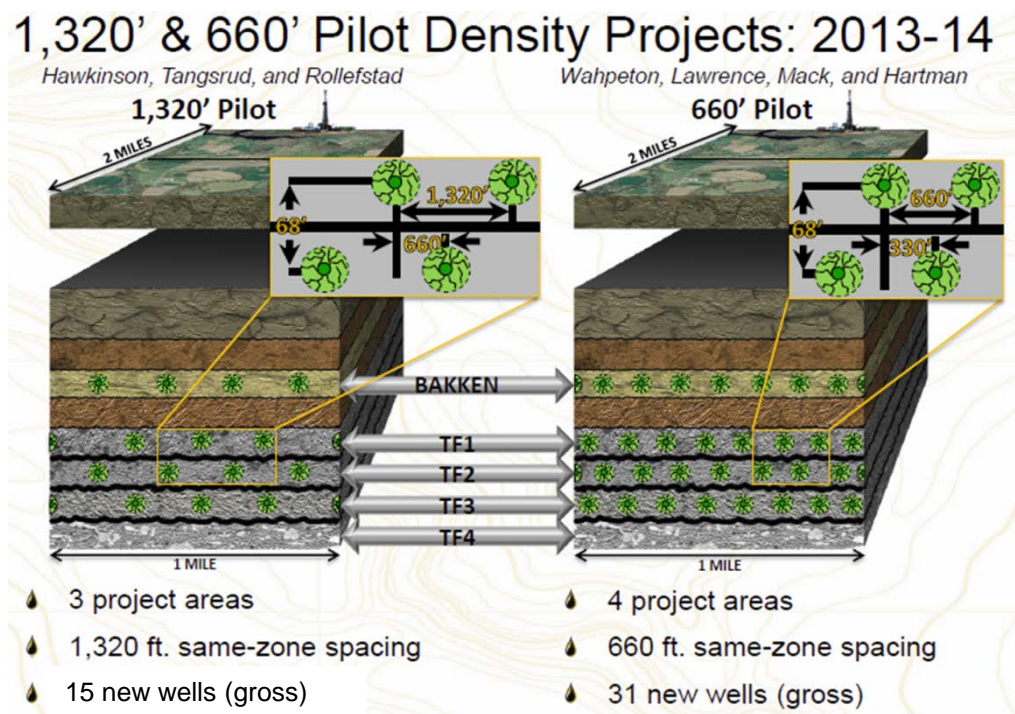
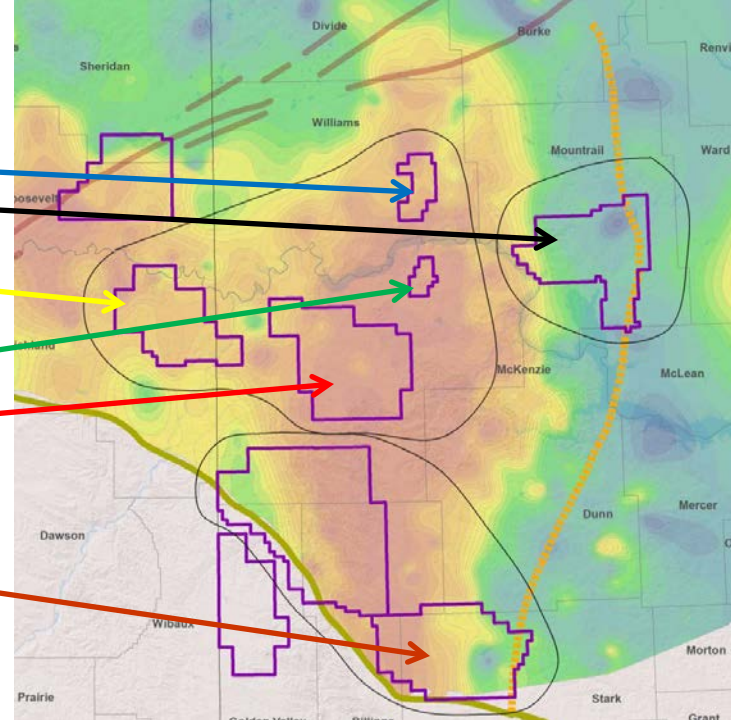
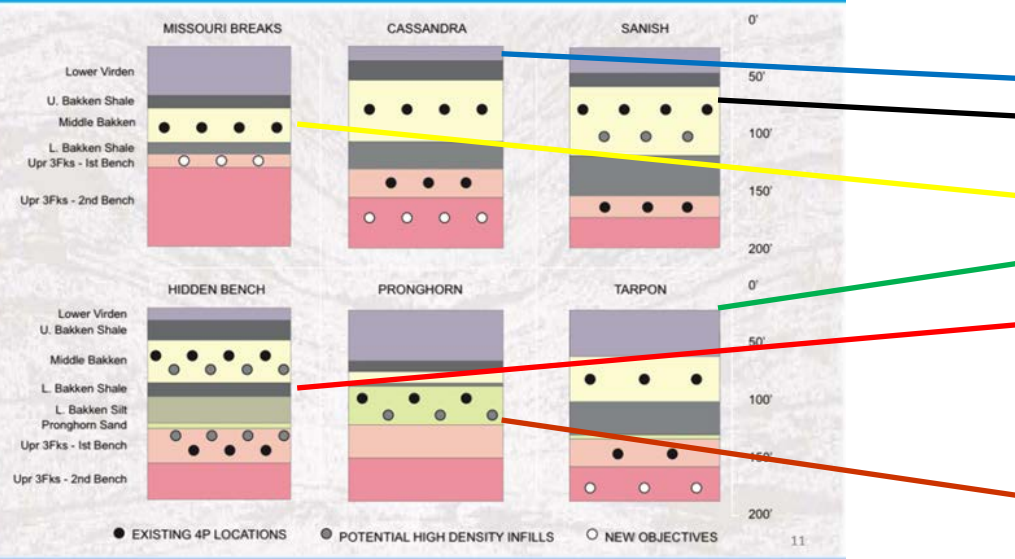




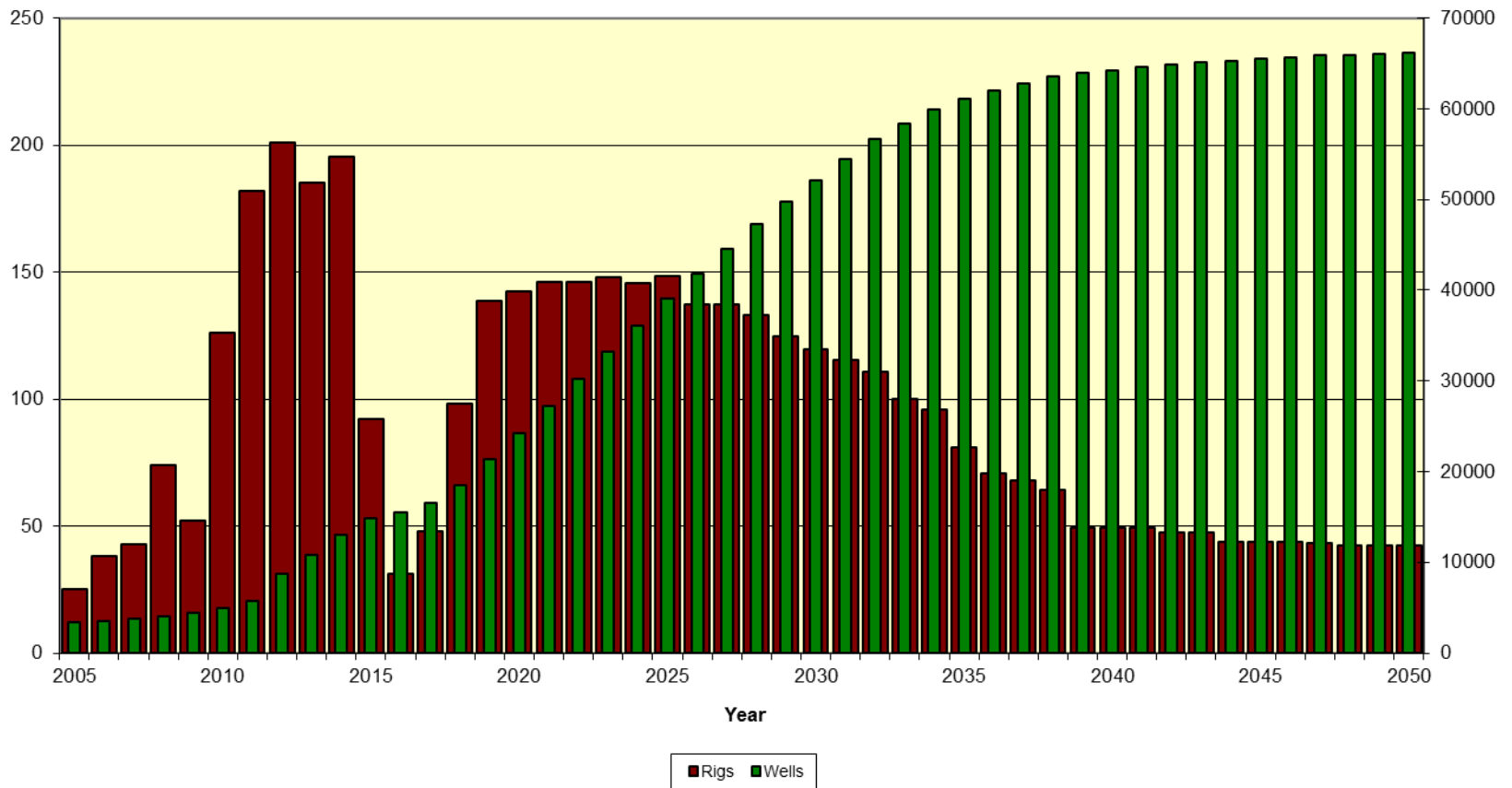
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Williston Basin Primary and Prospective Drilling Plan by Area



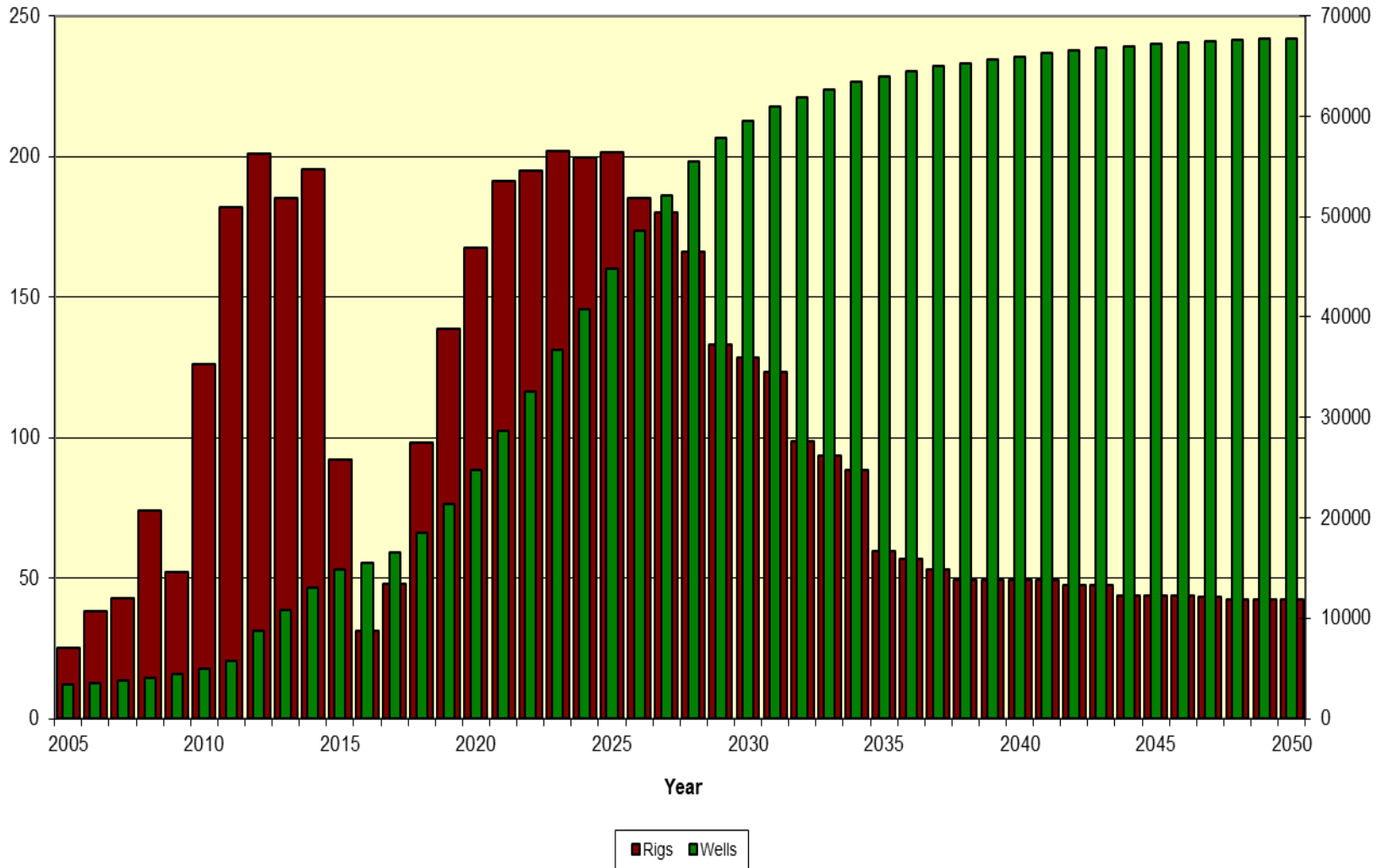
North Dakota Rigs and Wells



Bakken Forward > > >



North Dakota Rigs and Wells



Wells

13,050 active

2,014 conventional

11,036 Bakken/Three Forks

1,590 inactive

+\$40 for 90 days

(4/11/16) 16 days to go

890 waiting on completion

+\$50 for 90 days

NYMEX Nov 2016

1,995 permitted

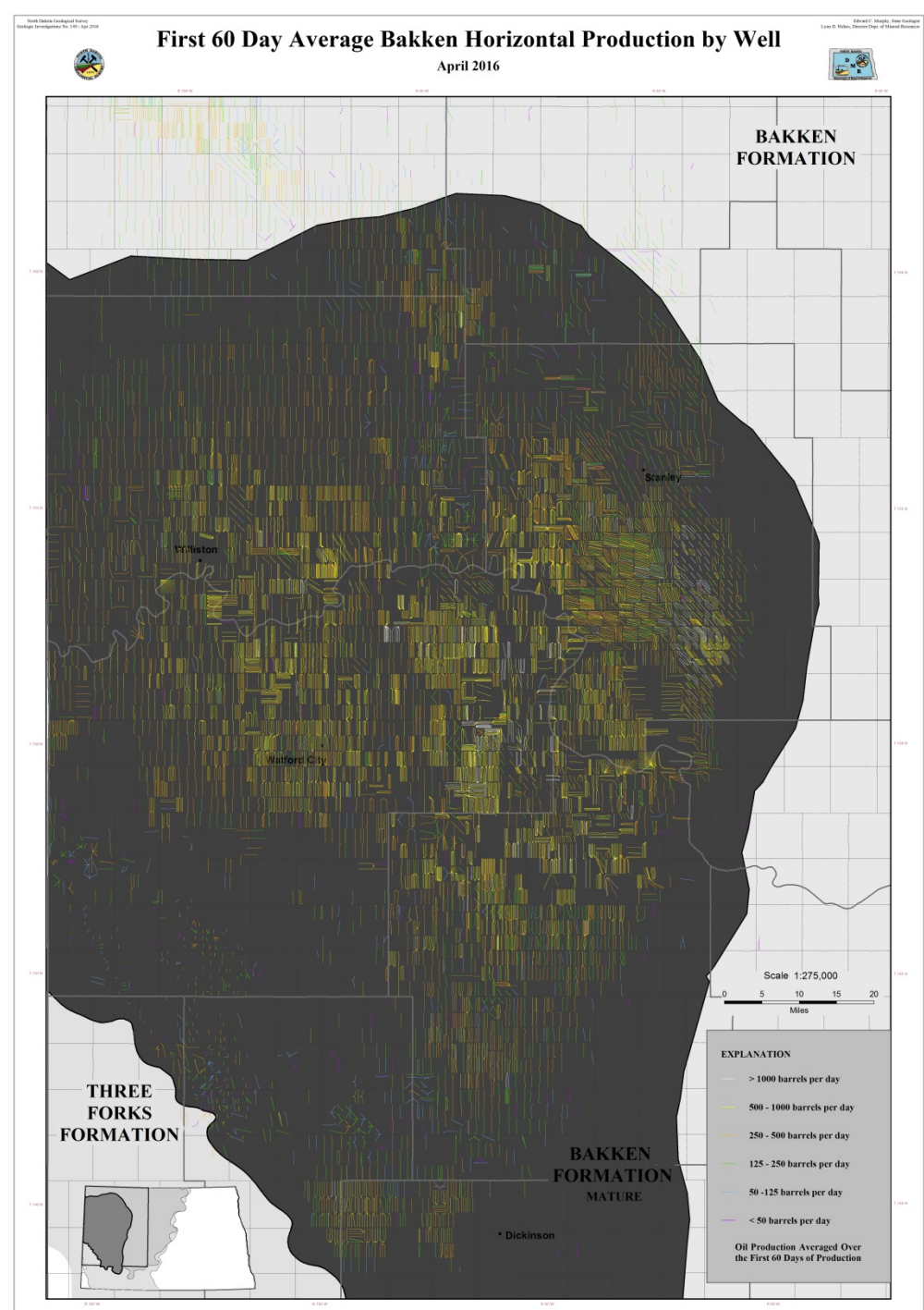
+\$60 for 90 days

NYMEX \$56 max

13,532 increased density approved

31,057 total

55,000-65,000 estimated ultimate



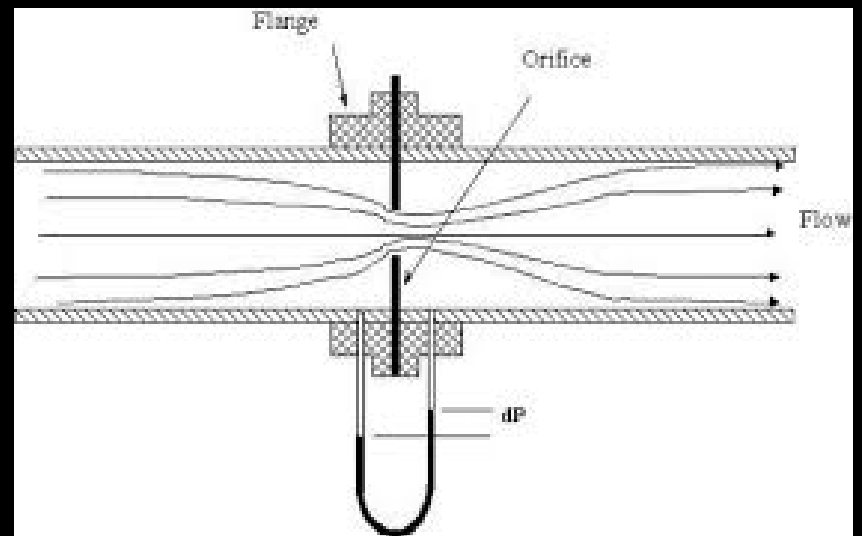


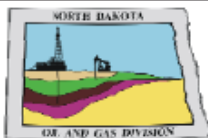
43-02-03-48. MEASUREMENT OF OIL. Oil production may not be transported from a well premises or central production facility until its volume has been determined through the use of properly calibrated meter measurements or tank measurements. All meter and tank measurements, and volume determinations must conform to **American petroleum institute standards** and be corrected to a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter].





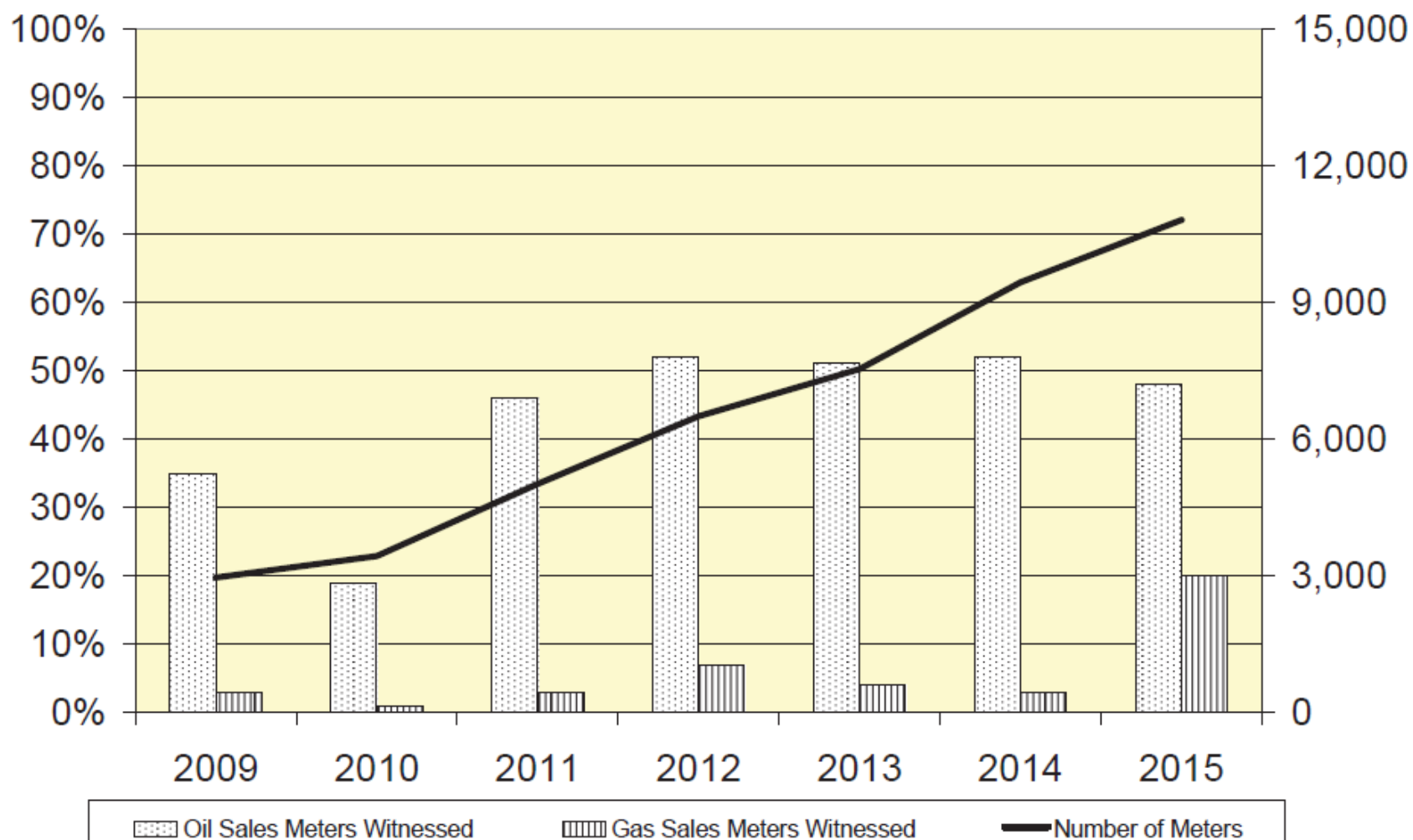
43-02-03-44. METERED CASINGHEAD GAS. All casinghead gas produced shall be reported monthly to the director in units of one thousand cubic feet [28.32 cubic meters] computed at a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius]. Associated gas production may not be transported from a well premises or central production facility until its volume has been determined through the use of properly calibrated measurement equipment. All measurement equipment and volume determinations must conform to **American gas association standards**. The operator of a well shall notify the director of the connection date to a gas gathering system, the metering equipment, transporter, and purchaser of the gas. Any gas produced and used on lease for fuel purposes or flared must be estimated and reported on a gas production report (form 5b) in accordance with section 43-02-03-52.1.





Sales Meter Tests

The Oil and Gas Division regulates oil and gas meter accuracy and royalty owner information.
We witness tests on approximately half of all oil sales meters.



43-02-03-52. REPORT OF OIL PRODUCTION. The operator of each well in every pool shall, on or before the first day of the second month succeeding the month in which production occurs, file with the director the amount of production made by each such well upon form 5 or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included. Wells for which reports of production are not received by the close of business on said first day of the month may be shut in for a period not to exceed thirty days. The director shall notify, by certified mail, the operator and authorized transporter of the shut-in period for such wells. Any oil produced during such shut-in period shall be deemed illegal oil and subject to the provisions of North Dakota Century Code section 38-08-15.

Form 5

Monthly volume of oil stored, produced, and sold

Monthly volume of water produced

43-02-05-12. REPORTING AND MONITORING REQUIREMENTS.

1. The operator of an injection well shall meter or use an approved method to keep records and shall report monthly to the industrial commission, oil and gas division, the volume and nature, i.e., produced water, makeup water, etc., of the fluid injected, the injection pressure, and such other information as the commission may require. The operator of each injection well shall, on or before the fifth day of the second month succeeding the month in which the well is capable of injection, file with the director a sworn statement showing the amount of injection by each well upon forms furnished therefor, or approved computer sheets. The operator shall retain all records required by the industrial commission for at least six years.

Form 16

Monthly disposal water total volume and source volumes

Form 5SWD

Monthly volume of oil recovered from each produced water disposal well

43-02-03-80. REPORTS OF PURCHASERS AND TRANSPORTERS OF CRUDE OIL. On or before the first day of the second month succeeding that in which oil is removed, purchasers and transporters, including truckers, shall file with the director the appropriate monthly reporting forms. The purchaser shall file on form 10 and the transporter on form 10a the amount of all crude oil removed and purchased by them from each well or central production facility during the reported month. The transporter shall report the disposition of such crude oil on form 10b. All meter and tank measurements, and volume determinations of crude oil removed and purchased from a well or central production facility must conform to American petroleum institute standards and corrected to a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter]. Prior to removing any oil from a well or central production facility, purchasers and transporters shall obtain an approved copy of a producer's authorization to purchase and transport oil from a well or central production facility (form 8) from either the producer or the director.

The operator of any oil rail facility shall report the amount of oil received and shipped out of such facility on form 10rr.

Form 10

Monthly volume purchased from each source well

Form 10A

Monthly volume transported from each source well

43-02-03-83. GAS PROCESSING PLANT REPORTS. Each operator of a gas processing plant, cycling plant, or any other plant at which gas processing, gasoline, butane, propane, condensate, kerosene, oil, or other products are extracted from gas shall furnish to the director a report containing the amount of gas received from each lease or well on form 12a. Crude oil recovered shall be reported to the director, on form 5 on or before the close of business on the first day of the second month succeeding that in which oil is removed. Other operations shall be reported to the director, on form 12 and 12a, on or before the fifth day of the second month following that in which gas is processed.

Form 12

Monthly volume of gas processed and products recovered

Form 12A

Monthly volume of gas from each source well

43-02-03-48.1. CENTRAL PRODUCTION FACILITY - COMMINGLING OF PRODUCTION.

1. The director shall have the authority to approve requests to consolidate production equipment at a central location.
2. Commingling of production from two or more wells in a central production facility is prohibited unless approved by the director. There are two types of central production facilities in which production from two or more wells is commingled that may be approved by the director.
 - a. A central production facility in which all production going into the facility has common ownership (working interests, royalty interests, and overriding royalties).
 - b. A central production facility in which production going into the facility has diverse ownership.
3. The commingling of production in a central production facility from two or more wells having common ownership may be approved by the director provided the production from each well can be accurately determined at reasonable intervals. Commingling of production in a central production facility from two or more wells having diverse ownership may be approved by the director provided the production from each well is accurately metered prior to commingling. Commingling of production in a central production facility from two or more wells having diverse ownership that is not metered prior to commingling may only be approved by the commission after notice and hearing.

43-02-03-48.1. CENTRAL PRODUCTION FACILITY - COMMINGLING OF PRODUCTION.

a. Common ownership central production facility. The application for permission to commingle oil and gas in a central production facility with common ownership must be submitted on a sundry notice (form 4) and shall include the following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) An affidavit executed by a person who has knowledge as to the state of title indicating ownership is common.

(4) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed at least once every three months. A copy of all tests are to be filed with the director on form 11 within thirty days after the tests are completed.

43-02-03-48.1. CENTRAL PRODUCTION FACILITY - COMMINGLING OF PRODUCTION.

b. Diverse ownership central production facility. The application for permission to commingle oil and gas in a central production facility having diverse ownership must be submitted on a sundry notice (form 4) and shall include the following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well, and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) The name of the manufacturer, size, and type of meters to be used. The meters must be proved at least once every three months and the results reported to the director within thirty days following the completion of the test.

(4) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed monthly. A copy of all tests are to be filed with the director on form 11 within thirty days after the tests are completed.

4. Any changes to a previously approved central production facility must be reported on a sundry notice (form 4) and approved by the director.