

THOMAS ALEXANDER

**IN THE MATTER OF PROPOSED
AMENDMENTS TO 19.15.2, 19.15.5,
19.15.8, 19.15.9, AND 19.15.25 NMAC**

CASE NO. 24683

SUMMARY OF DIRECT TESTIMONY

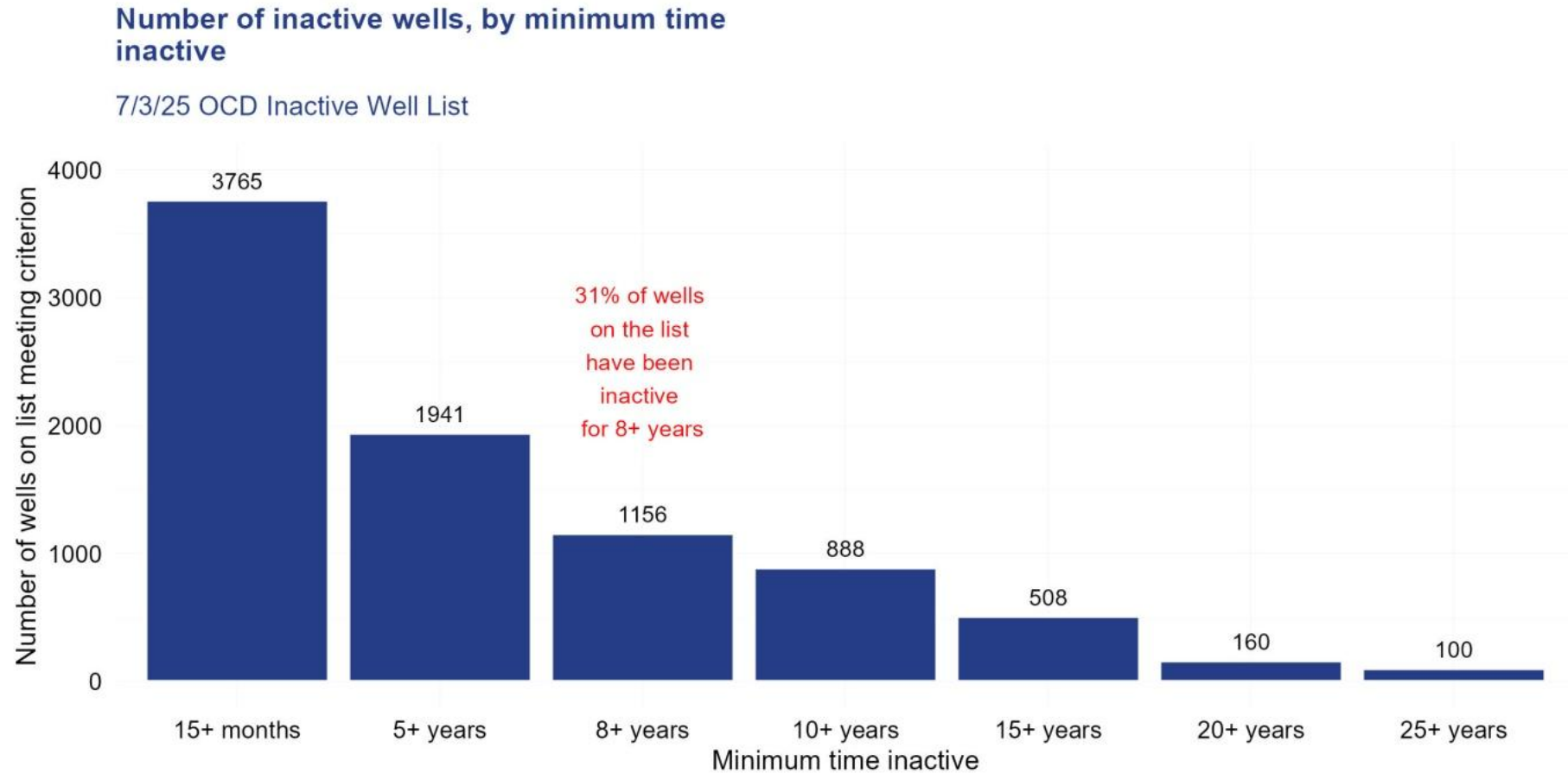
19.15.2.7.A(13) “Approved temporary abandonment,” **“temporary abandonment,” or “temporarily abandonment status”** means the status of a well that is inactive, has been approved in accordance with 19.15.25.13 NMAC and complies with 19.15.25.12 NMAC through 19.15.25.14 NMAC.

19.15.2.7.T(3) ~~“Temporary abandonment” or “temporarily abandoned status”~~ means the status of a well that is inactive.

19.15.2.7.E(8) **“Expired temporary abandonment” or “expired temporary abandonment status”** means the status of a well that is inactive and has been approved for temporary abandoned status in accordance with 19.15.25.13 NMAC, but that no longer complies with 19.15.25.12 NMAC through 19.15.25.14 NMAC.

19.15.2.7.B(7) “Beneficial purposes” or “beneficial use” means an oil or gas well that is being used in a productive or beneficial manner such as production, injection or monitoring, and does not include use of a well for speculative purposes.

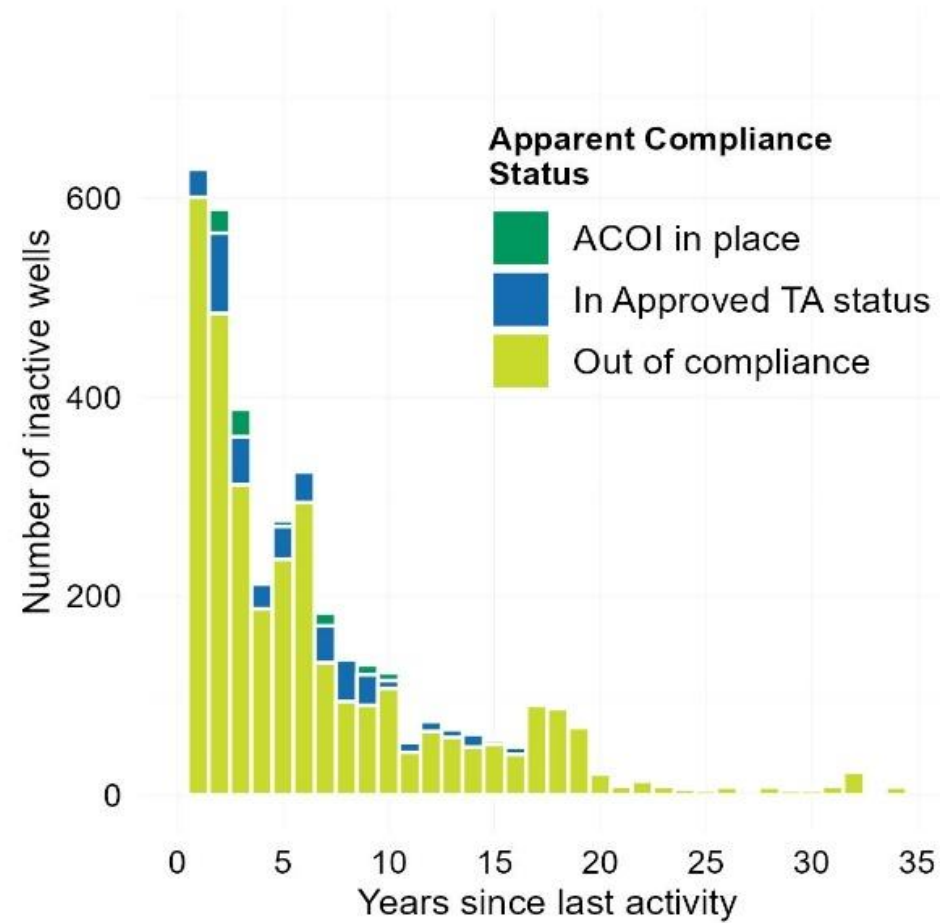
OCD INACTIVE WELL SEARCH LIST (15+ Months inactive) 3-Jul-25				
Well Type	No. of Wells	% of total inactive wells	No. of Operators	%
Total well count (from Inactive Well search output – appears to represent wells other than Plugged & Released, Cancelled, and Never Drilled statuses)	74,582		Not Included in search	
Total inactive wells (15+ months)	3,765	100%	350	100%
Total approved TA wells* on Inactive Well Search list	419	11%	89	25%
Total expired TA wells*	155	4%	67	19%
Total wells under ACOI**	99	3%	3	1%
Wells listed with unusual status (Drilled, New, or Plugged) - <i>excluded from total below</i>	13	< 0.5%	11	3%
Total inactive wells apparently out of compliance ***** (Inactive wells without ACOI coverage or non-expired TA status)***	3,234	86%	346	99%
* The approved and expired TA status wells listed on OCD Inactive Well Search is only a subset of all wells labeled by OCD as having TA status, per OCD's Well History datafiles, and per a July 3rd search of OCD's Well Permitting Search for all TA wells. ** ACOI (Inactive Well Agreed Compliance Order) coverage was determined by the difference between wells included on 2 back-to-back queries of OCD's Inactive Well Search for wells 15+ months inactive— one set to include ACOI wells and one set to exclude them. Wells absent from the "Exclude ACOI" version of the list are presumed to have a compliance order in place. *** Some wells with an ACOI are also listed in expired TA status, so this total is slightly less than the sum of the preceding rows.				



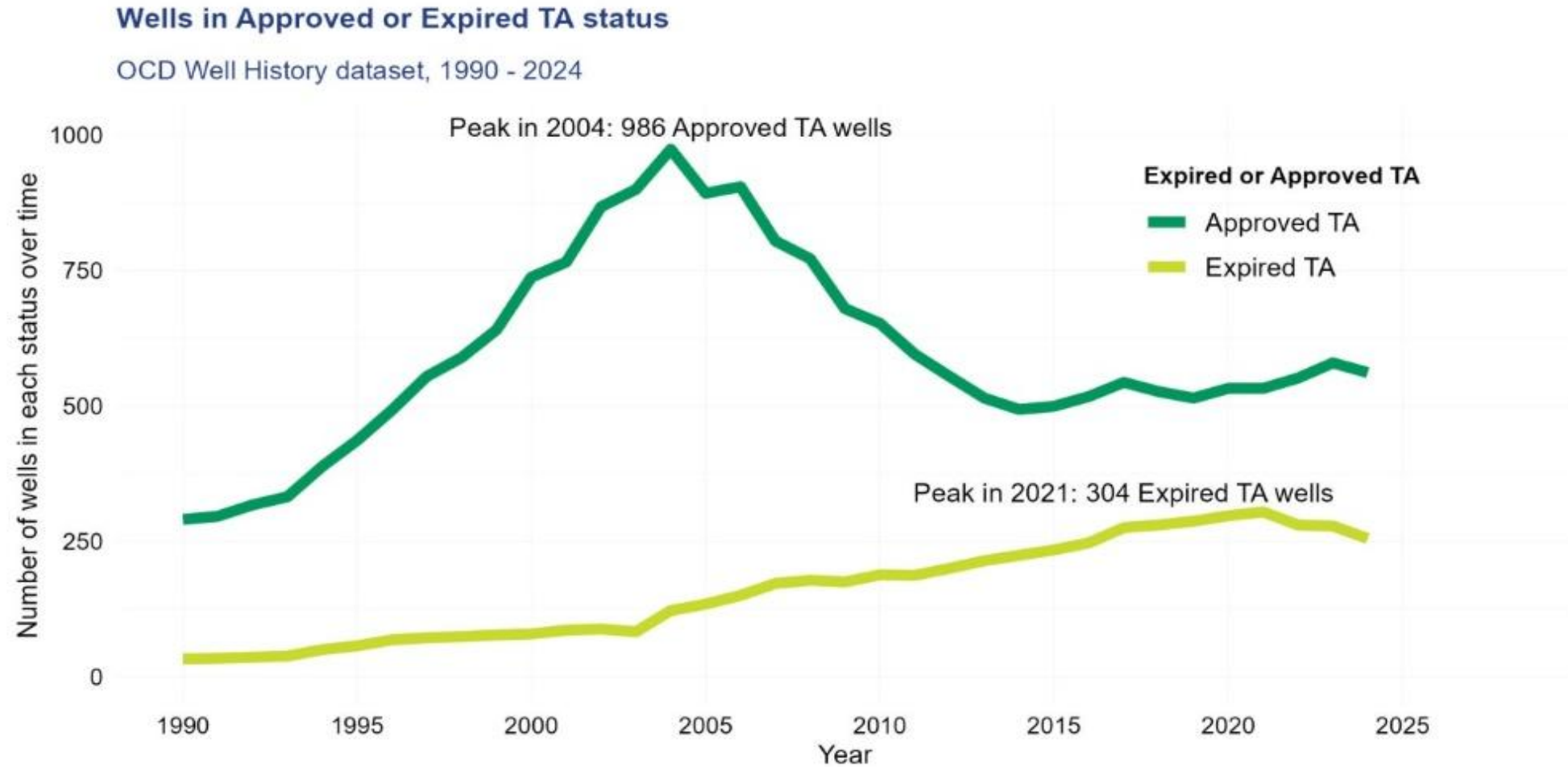
Data reflect wells included in search results from OCD Inactive Well Search tool as of July 3, 2025. Time categories to the left are inclusive of wells in categories to their right.

Inactive wells by length of time inactive

7/3/25 OCD Inactive Well List



See full exhibit version for details of data development.



Wells reported in Approved or Expired TA status by OCD Well History dataset, current as of 7/11/25.

19.15.28.8 WELLS TO BE PROPERLY ABANDONED:

A. The operator of wells drilled for oil or gas or services wells including seismic, core, exploration or injection wells, whether cased or uncased, shall plug the wells as Subsection B of 19.15.25.8 NMAC requires.

B. The operator shall either properly plug and abandon a well or apply to the division to place the well in approved temporary abandonment in accordance with 19.15.25 NMAC within ~~90~~ 30 days after:

- (1) a 60 day period following suspension of drilling operations;
- (2) a determination that a well is no longer usable for beneficial purposes; or
- (3) a period of one year in which a well has been ~~continuously~~ inactive.

PRESUMPTIONS OF NO BENEFICIAL USE:

A. For oil and gas production wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not produced for at least 90 days and has not produced at least 90 barrels of oil equivalent.

B. For injection or salt water disposal wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not injected at least 90 days and at least 100 barrels of fluid.

C. The rebuttable presumptions in this Section do not apply to wells that have been drilled but not completed for less than 18 months and wells that have been completed but have not produced for less than 18 months.

D. Within 30 calendar days after notice of a preliminary determination from the division that a well or wells are not being used for beneficial purposes, a well operator may submit an application for administrative review of such determination through the division's electronic permitting portal. The division shall issue a final determination based on the application, and information available in division records, and any information requested by the division. The final determination may be appealed pursuant to 19.15.4 NMAC. Applications shall to demonstrate beneficial use of a well or wells and the operator shall provide any information requested by the division. Such documentation may shall include:

(1) Documentation demonstrating that the well is reasonably projected to produce in paying quantities; and

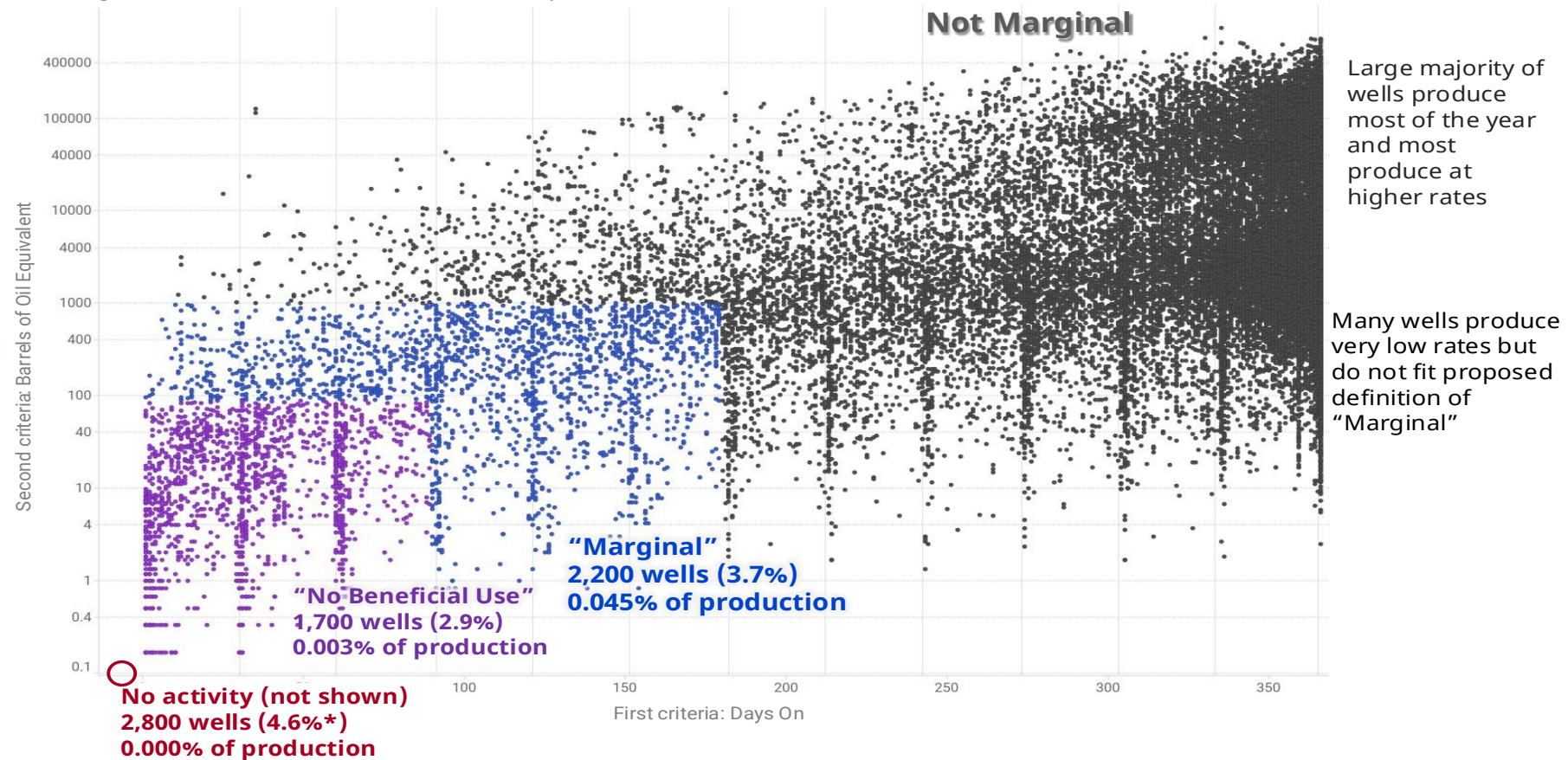
(2) Documentation demonstrating that the operator maintains adequate capitalization or reasonably projected revenue sufficient to meet all reasonably anticipated plugging and environmental liabilities of the well or wells and associated production facilities, not inclusive of any financial assurance associated with the well or wells; and

(3) Other relevant information requested by the division including a A plugging and abandonment plan as described in 19.15.9.9.B NMAC.; and

(4) Other relevant information requested by the division.

Applicants' Exhibit 40: Production vs days of activity of wells in New Mexico during 2024.

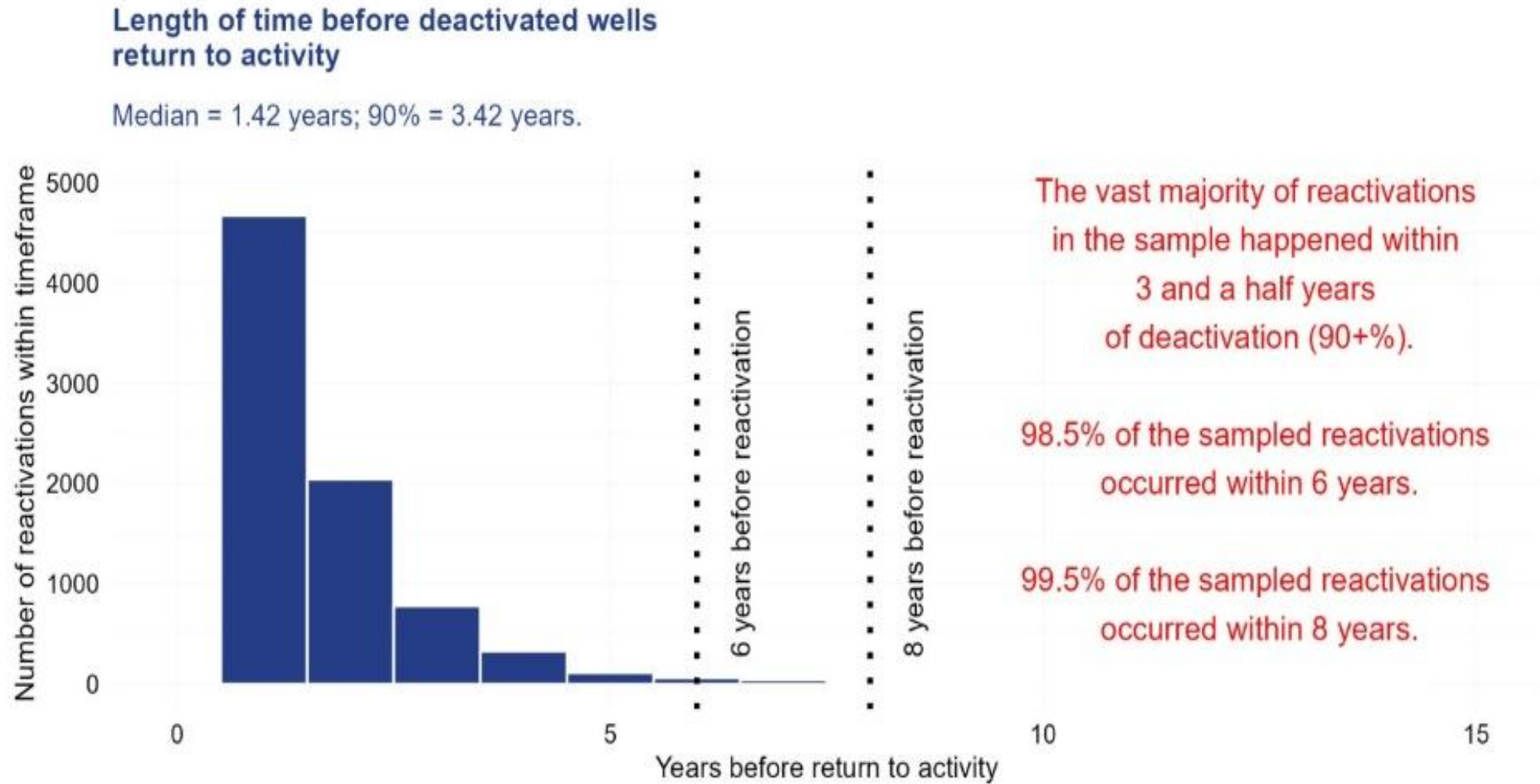
Producing wells in New Mexico with 12 months of reported volumes in 2024



19.15.25.12~~12~~13 **APPROVED TEMPORARY ABANDONMENT:**

A. The division may place a well in approved temporary abandonment for a period of up to five years upon a demonstration from the operator that the well will be used for beneficial use within the approved period of temporary abandonment. The operator's demonstration shall include an explanation why the well should be placed in temporary abandonment, how the well will be put to beneficial use in the future including supporting technical and economic data, a plan that describes the ultimate disposition of the well, the time frame for that disposition, and any other information the division determines appropriate, including a current and complete well bore diagram; geological evidence; geophysical data; well casing information; waste removal and disposition; production engineering; geophysical logs, e.g., cement bond logs, caliper logs, and casing inspection logs; and health, safety, and environmental information. If the division denies a request, the operator shall return the well to beneficial use under a plan the division approves or permanently plug and abandon the well and restore and remediate the location.

B. Prior to the expiration of an approved temporary abandonment, the operator shall return the well to beneficial use under a plan the division approves, permanently plug and abandon the well and restore and remediate the location, ~~or apply for a new approval to temporarily abandon the well~~ to the division to extend temporary abandonment status pursuant to the procedures for adjudicatory proceedings in 19.15.4 NMAC, except that in any such adjudicatory proceeding any interested person may intervene under 19.15.4.11.A NMAC. To continue in temporary abandonment, the operator must demonstrate to the division that the well will be returned to beneficial use within the requested period of temporary abandonment. The request shall include documentation demonstrating why the well should remain in temporary abandonment; documentation demonstrating why the well was not brought back to beneficial use or plugged and abandoned during the period of temporary abandonment; documentation demonstrating how the well will be put to beneficial use in the future and supporting technical and economic data; a plan that describes the ultimate disposition of the well, the time frame for that disposition; and a health and safety plan demonstrating the well's casing and cementing meet the requirements of Subsections B and C of Section 19.15.25.13 NMAC and the operator has adequate monitoring procedures in place to ensure such requirements will be met. An extended term shall not exceed two additional years, upon which time the operator shall return the well to beneficial use under a plan the division approves or permanently plug and abandon the well and restore and remediate the location.



Histogram of length of time inactive prior to return to activity, across sample of wells that reactivated following 12+ months of no production.

Based on analysis of production data from 2010-2024, for wells spudded prior to 2017.

Apps' Ex. 13

THOMAS ALEXANDER

**IN THE MATTER OF PROPOSED
AMENDMENTS TO 19.15.2, 19.15.5,
19.15.8, 19.15.9, AND 19.15.25 NMAC**

CASE NO. 24683

SUMMARY OF REBUTTAL TESTIMONY

19.15.2.7.B(7) “Beneficial purposes” or “beneficial use” means an oil or gas well that is being used in a productive or beneficial manner such as production, injection or monitoring, and does not include use of a well for speculative purposes.

PRESUMPTIONS OF NO BENEFICIAL USE:

A. For oil and gas production wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not produced for at least 90 days and has not produced at least 90 barrels of oil equivalent.

B. For injection or salt water disposal wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not injected at least 90 days and at least 100 barrels of fluid.

C. The rebuttable presumptions in this Section do not apply to wells that have been drilled but not completed for less than 18 months and wells that have been completed but have not produced for less than 18 months.

D. Within 30 calendar days after notice of a preliminary determination from the division that a well or wells are not being used for beneficial purposes, a well operator may submit an application for administrative review of such determination through the division's electronic permitting portal. The division shall issue a final determination based on the application, and information available in division records, and any information requested by the division. The final determination may be appealed pursuant to 19.15.4 NMAC. Applications shall to demonstrate beneficial use of a well or wells and the operator shall provide any information requested by the division. Such documentation may shall include:

(1) Documentation demonstrating that the well is reasonably projected to produce in paying quantities; and

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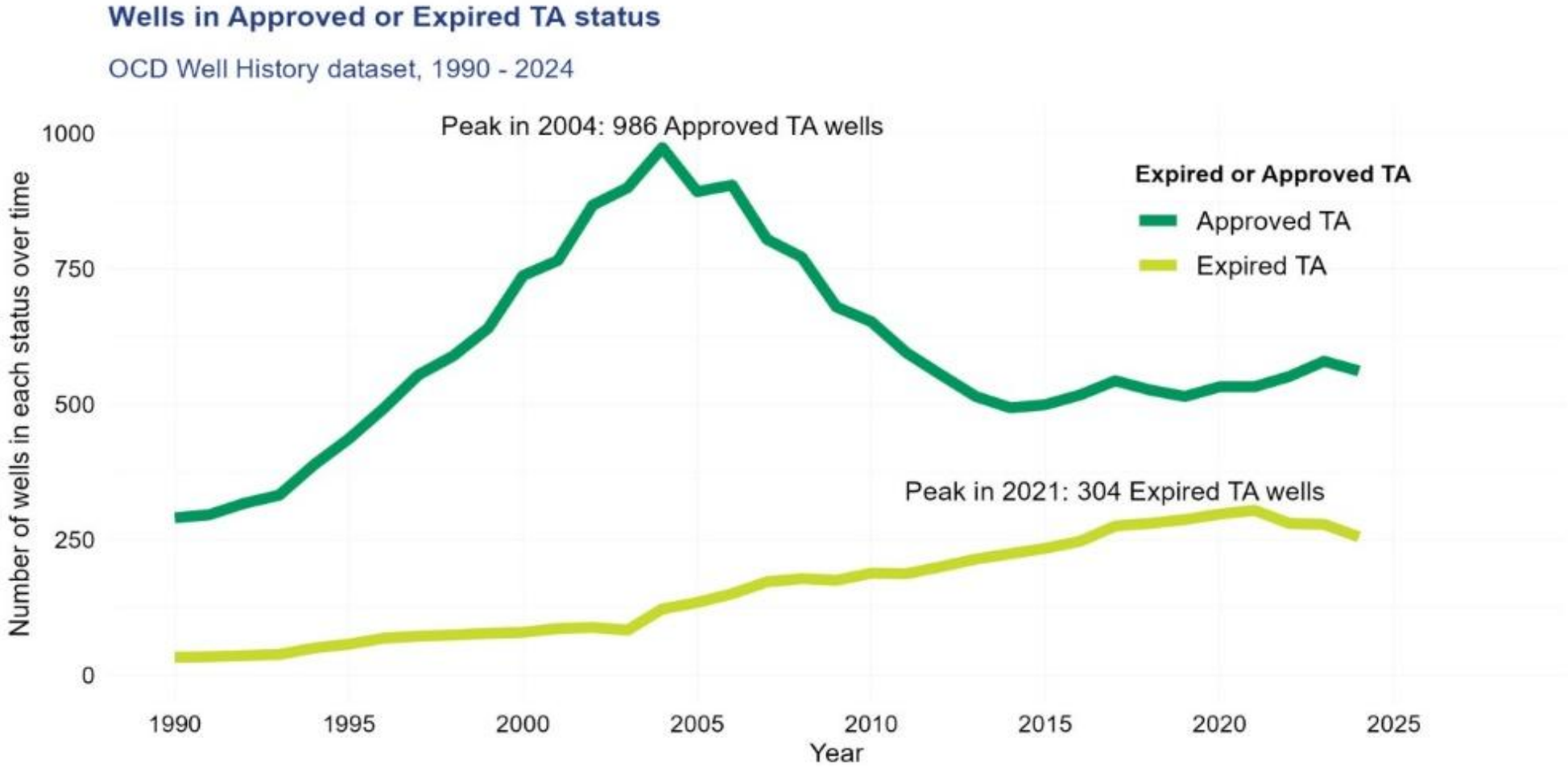
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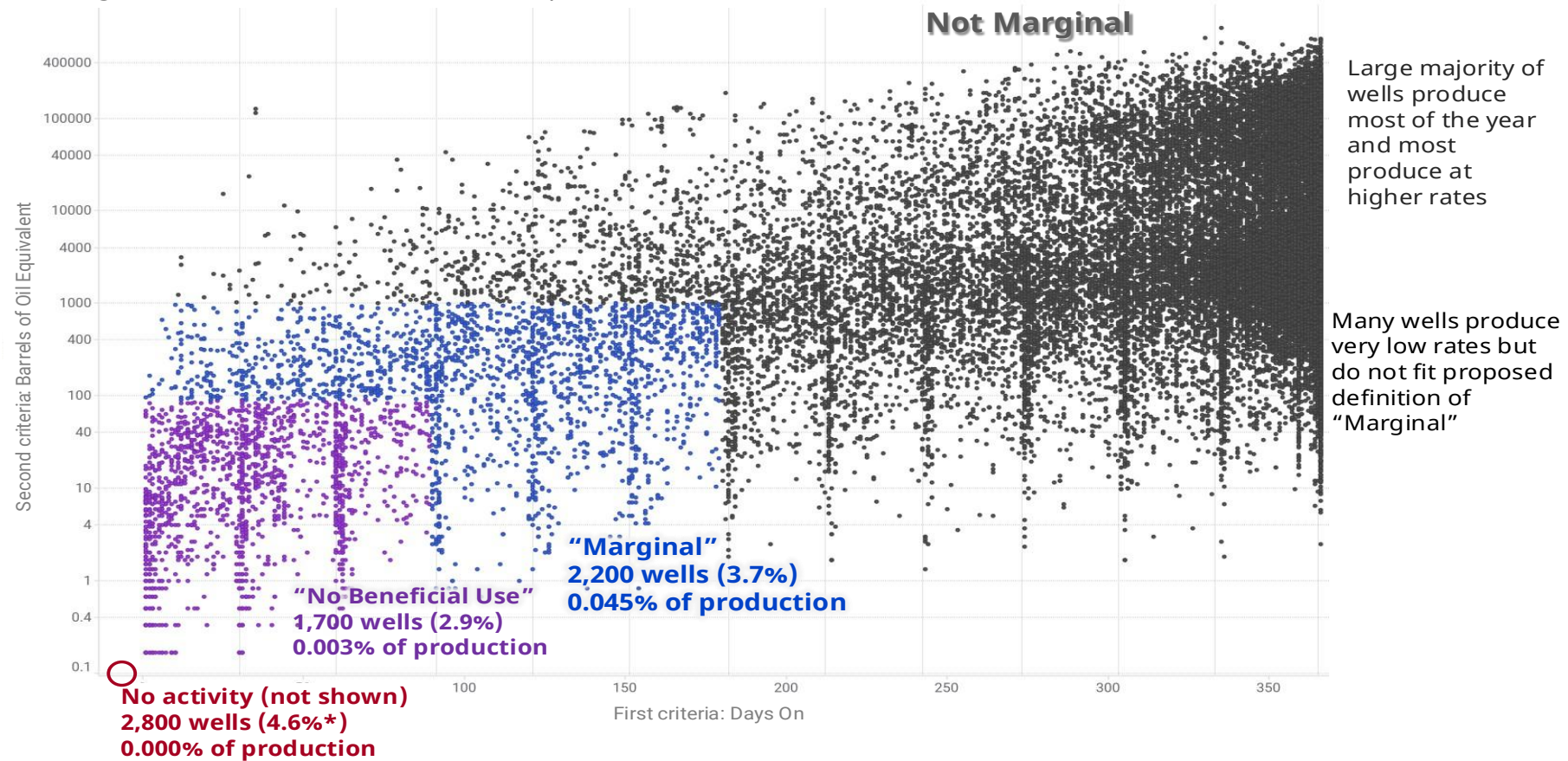
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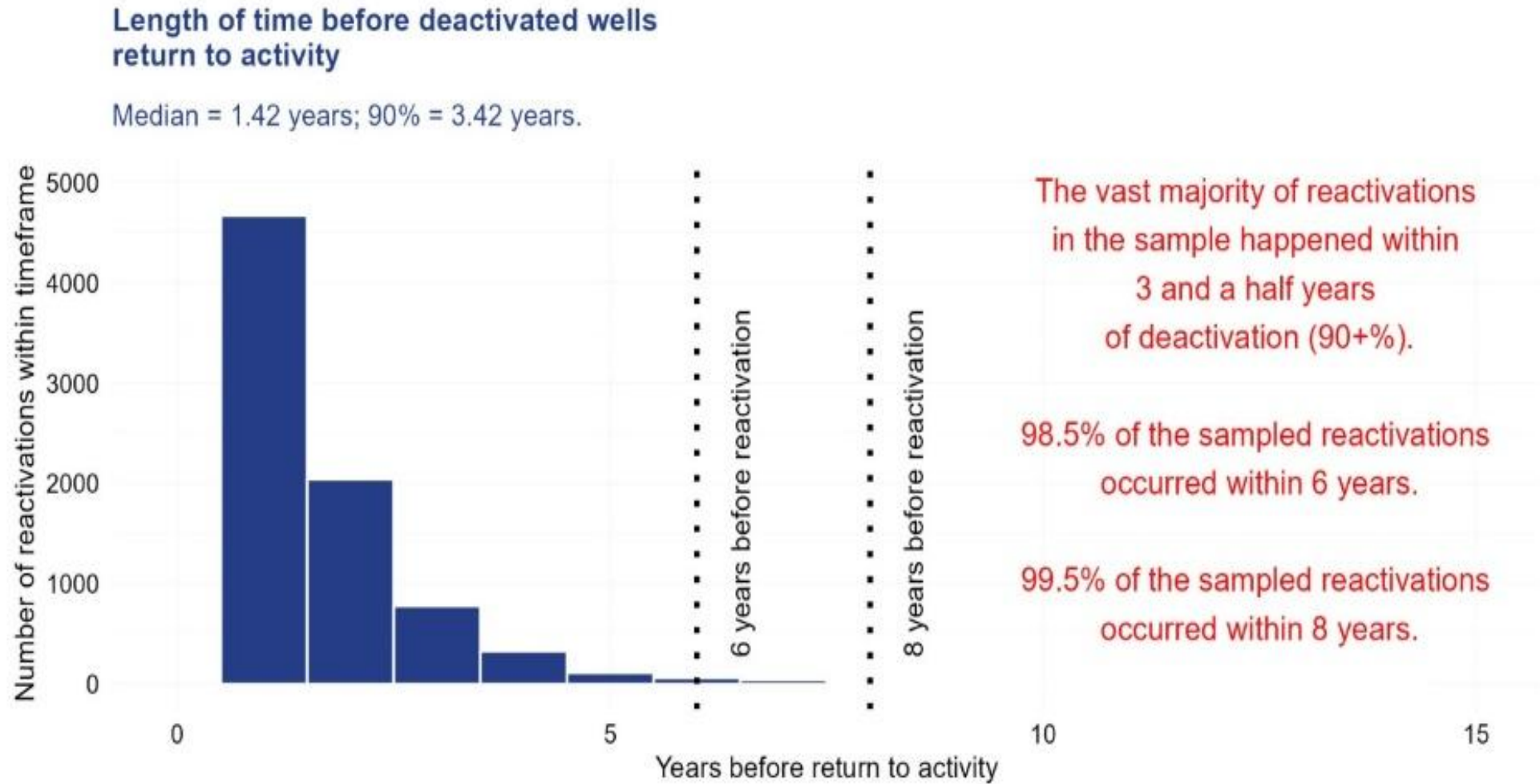
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Applicants' Witness Peter Morgan: Direct Testimony

19.15.5.9 COMPLIANCE:

A. An operator is in compliance with Subsection A of 19.15.5.9 NMAC if the operator:

- (1) currently meets the financial assurance requirements of 19.15.8 NMAC;
- (2) is not subject to a division or commission order, issued after notice and hearing, finding the operator to be in violation of an order requiring corrective action;
- (3) does not have a penalty assessment that is unpaid more than 30 days after issuance of the order assessing the penalty; and
- (4) currently meets the requirements of 19.15.25.8 NMAC; and ~~has no more than the following number of wells out of compliance with 19.15.25.8 NMAC that are not subject to an agreed compliance or final order setting a schedule for bringing the wells into compliance with 19.15.25.8 NMAC and imposing sanctions if the schedule is not met:~~
 - ~~(a) — two wells or fifty percent of the wells the operator operates, whichever is less, if the operator operates 100 wells or less;~~
 - ~~(b) — five wells if the operator operates between 101 and 500 wells;~~
 - ~~(c) — seven wells if the operator operates between 501 and 1000 wells; and~~
 - ~~(d) — 10 wells if the operator operates more than 1000 wells.~~
- (5) currently meets the requirements of 19.15.27.8.A NMAC.

19.15.8.9 CATEGORIES AND AMOUNTS OF FINANCIAL ASSURANCE FOR WELL PLUGGING:

A. Applicability. An operator who has drilled or acquired, is drilling or proposes to drill or acquire an oil, gas or injection or other service well within this state shall furnish a financial assurance acceptable to the division in accordance with 19.15.8.9 NMAC and in the form of an irrevocable letter of credit, plugging insurance policy or cash or surety bond running to the state of New Mexico conditioned that the well be plugged and abandoned and the location restored and remediated in compliance with commission rules, unless the well is covered by federally required financial assurance. The division shall not approve and the operator shall not proceed with any proposed drilling or acquisition until the operator has furnished the required financial assurance.

70-2-14. Requirement for financial assurance.

A. Each person, firm, corporation or association who operates any oil, gas or service well within the state shall, as a condition precedent to drilling or producing the well, furnish financial assurance in the form of an irrevocable letter of credit or a cash or surety bond or a well-specific plugging insurance policy pursuant to the provisions of this section to the oil conservation division of the energy, minerals and natural resources department running to the benefit of the state and conditioned that the well be plugged and abandoned in compliance with the rules of the oil conservation division. The oil conservation division shall establish categories of financial assurance after notice and hearing. Such categories shall include a blanket plugging financial assurance, which shall be set by rule in an amount not to exceed two hundred fifty thousand dollars (\$250,000), a blanket plugging financial assurance for temporarily abandoned status wells, which shall be set by rule at amounts greater than fifty thousand dollars (\$50,000), and **one-well plugging financial assurance in amounts determined sufficient to reasonably pay the cost of plugging the wells covered by the financial assurance.** In establishing categories of financial assurance, the oil conservation division shall consider the depth of the well involved, the length of time since the well was produced, the cost of plugging similar wells and such other factors as the oil conservation division deems relevant. The oil conservation division shall require a one-well financial assurance on any well that has been held in a temporarily abandoned status for more than two years or, at the election of the operator, may allow an operator to increase its blanket plugging financial assurance to cover wells held in temporarily abandoned status. All financial assurance shall remain in force until released by the oil conservation division. The oil conservation division shall release financial assurance when it is satisfied the conditions of the financial assurance have been fully performed.

(2) “Marginal well” means an oil or gas well that produced less than 180 days and less than 1,000 barrels of oil equivalent within a consecutive 12 month period.

D. Marginal wells and inactive wells. Notwithstanding the provisions in Subsection C(2) in this Section:

(1) As of the [effective date of amendments] a transferee operator shall provide a one well plugging financial assurance of \$150,000 for each marginal well prior to transfer.

(2) Beginning January 1, 2028, an operator shall provide a one well plugging financial assurance for each marginal well. Each operator with a marginal well or wells shall annually review the number of marginal wells registered to the operator and shall update the one well plugging financial assurance by May 1 of each year.

(3) An operator with 15 percent or more of their wells in marginal or inactive well status, or a combination thereof, shall provide a one well plugging financial assurance in the amount of \$150,000 for each well registered to the operator until the percentage of the operator's marginal and inactive wells is decreased below 15 percent.

(4) An operator may furnish all necessary one well plugging financial assurance in the form of a single instrument.

E.D. Inactive wells and wells in approved and expired temporarily abandoned status. An operator shall provide financial assurance for wells that are inactive and wells in approved and expired temporarily abandoned status, covered by Subsection A of 19.15.8.9 NMAC that have been in temporarily abandoned status for more than two years or for which the operator is seeking approved temporary abandonment pursuant to 19.15.25.13 NMAC in one of the following categories:

(1) a one well plugging financial assurance in the amount of \$150,000 per well; \$25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or

(2) a blanket plugging financial assurance equal to an average of \$150,000 per well covering all wells of the operator subject to Subsection E.D of 19.15.8.9 NMAC.:

- (e) — \$150,000 for one to five wells;
- (f) — \$300,000 for six to 10 wells;
- (g) — \$500,000 for 11 to 25 wells; and
- (h) — \$1,000,000 for more than 25 wells.

The number of idle wells in a state or province is a concern because of the potential for the wells to deteriorate over time or become orphans. An even more critical factor is the number of idle wells held by an individual operator, especially as a percentage of the operator's total wells that have been drilled but not plugged. A high percentage of idle wells may indicate an increased vulnerability of the state or province to the operator becoming insolvent and leaving orphan wells. States and provinces use various approaches to ensure operators actively manage their idle well inventories and plug wells with no future beneficial use.



E.D. **Inactive wells and wells in approved and expired temporarily abandoned status.** An operator shall provide financial assurance for wells that are inactive and wells in approved and expired temporarily abandoned status, covered by Subsection A of 19.15.8.9 NMAC that have been in temporarily abandoned status for more than two years or for which the operator is seeking approved temporary abandonment pursuant to 19.15.25.13 NMAC in one of the following categories:

(1) a one well plugging financial assurance in the amount of \$150,000 per well; \$25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or

(2) a blanket plugging financial assurance equal to an average of \$150,000 per well covering all wells of the operator subject to Subsection E.D of 19.15.8.9 NMAC.:

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Despite affecting small firms, the bond requirement yielded large environmental improvements because small producers caused a disproportionate share of environmental problems. The bond requirement reduced the number of orphan wells per lease among the smallest 80 percent of firms by 76 percent, decreasing the industry-wide orphan well rate by 65 percent.

Notably, the state's total output of oil and gas was essentially unaffected by the policy. This is because the firms affected by the policy accounted for a small fraction of production, and because most of the valuable production associated with exiting firms was reallocated to other producers instead of shutting down.

Drilling Like There's No Tomorrow: Bankruptcy, Insurance,
and Environmental Risk[†]

By JUDSON BOOMHOWER*

Plugging and restoration costs rise over time due to inflation and in some cases due to improved and more stringent regulatory requirements for materials and methods. States and provinces typically review and revise their financial assurance requirements periodically to account for these increases.



Altogether, the state's current and near-future liability for well plugging and site remediation is estimated at \$700 million to \$1.6 billion.



It is common for operators to transfer wells and associated facilities and pipelines to other companies. State and provincial regulators have a special concern with transfers of wells with declining production because of the increased risk that such wells may become orphans. Many states and provinces have implemented measures to reduce this risk by setting additional requirements for financial assurance and by evaluating corporate solvency and compliance history and the status and condition of the wells and associated facilities and pipelines before approving a transfer.



B. Prior to commencing operations, an operator shall provide to the division a certification by an authorized official officer, director, or partner that the new operator is not subject to any forfeiture demands from any state or federal agency, has not forfeited financial assurance to any state or federal agency, and does not have unresolved adjudicated orders or unresolved settlement agreements for any state or federal violations in compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the new operator does business; a disclosure of any officer, director, partner in the new operator or person with an interest in the new operator exceeding 25 percent, who is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC; and a disclosure whether the new operator is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC.

B.C. The division may deny registration as an operator if:

- (1) the applicant is not in compliance with Subsection A of 19.15.5.9 NMAC;
- (2) the applicant has forfeiture demands from any state or federal agency, has forfeited financial assurance to any state or federal agency, or has unresolved adjudicated orders or unresolved settlement agreements for any state or federal violation is out of compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the applicant does business;

B. The operator of record with the division and the new operator shall apply for a change of operator by jointly filing a form C-145 using the division's web-based online application. If the operator of record with the division is unavailable, the new operator shall apply to the division for approval of change of operator without a joint application. The **new** operator shall make such application in writing and provide documentary evidence of the applicant's right to assume operations; a certification by an authorized official officer, director, or partner of the new operator that the new operator is not subject to any forfeiture demands from any state or federal agency, has not forfeited financial assurance to any state or federal agency, and does not have unresolved adjudicated orders or unresolved settlement agreements for any state or federal violations in compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the new operator does business; a plugging and abandonment plan; a disclosure of any officer, director, partner in the new operator or person with an interest in the new operator exceeding 25 percent, who is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC; and a disclosure whether the new operator is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC. The new operator shall not commence operations until the division approves the application for change of operator. The plugging and abandonment plan shall be certified by an authorized representative officer, director, or partner of the new operator and shall demonstrate that the new operator has and will have the financial ability to meet the plugging and abandonment requirements of 19.15.25 NMAC for the well or wells to be transferred in light of all the operator's assets and liabilities. The division may request the operator to provide additional information including corporate credit rating, corporate financial statements, long-term liabilities, reserves and economics report, records of the operator's historical costs for decommissioning activities, estimate of the operator's decommissioning obligations, and history of inactive wells and returning wells to production.

E. No well, facility or site that is out of compliance with Subsection A of 19.15.5.9 NMAC, 19.15.29 NMAC, or 19.15.30 NMAC shall be transferred unless, prior to transfer, the current operator brings the associated well, facility or site into compliance or the new operator submits a schedule of compliance approved by the division.

Applicants' Witness Peter Morgan: Rebuttal Testimony

Notably, the state's total output of oil and gas was essentially unaffected by the policy. This is because the firms affected by the policy accounted for a small fraction of production, and because most of the valuable production associated with exiting firms was reallocated to other producers instead of shutting down.

Drilling Like There's No Tomorrow: Bankruptcy, Insurance,
and Environmental Risk[†]

By JUDSON BOOMHOWER*

70-2-14. Requirement for financial assurance.

A. Each person, firm, corporation or association who operates any oil, gas or service well within the state shall, as a condition precedent to drilling or producing the well, furnish financial assurance in the form of an irrevocable letter of credit or a cash or surety bond or a well-specific plugging insurance policy pursuant to the provisions of this section to the oil conservation division of the energy, minerals and natural resources department running to the benefit of the state and conditioned that the well be plugged and abandoned in compliance with the rules of the oil conservation division. The oil conservation division shall establish categories of financial assurance after notice and hearing. Such categories shall include a blanket plugging financial assurance, which shall be set by rule in an amount not to exceed two hundred fifty thousand dollars (\$250,000), a blanket plugging financial assurance for temporarily abandoned status wells, which shall be set by rule at amounts greater than fifty thousand dollars (\$50,000), and **one-well plugging financial assurance in amounts determined sufficient to reasonably pay the cost of plugging the wells covered by the financial assurance. In establishing categories of financial assurance, the oil conservation division shall consider the depth of the well involved, the length of time since the well was produced, the cost of plugging similar wells and such other factors as the oil conservation division deems relevant.** The oil conservation division shall require a one-well financial assurance on any well that has been held in a temporarily abandoned status for more than two years or, at the election of the operator, may allow an operator to increase its blanket plugging financial assurance to cover wells held in temporarily abandoned status. All financial assurance shall remain in force until released by the oil conservation division. The oil conservation division shall release financial assurance when it is satisfied the conditions of the financial assurance have been fully performed.

70-2-14. Requirement for financial assurance.

A. Each person, firm, corporation or association who operates any oil, gas or service well within the state shall, as a condition precedent to drilling or producing the well, furnish financial assurance in the form of an irrevocable letter of credit or a cash or surety bond or a well-specific plugging insurance policy pursuant to the provisions of this section to the oil conservation division of the energy, minerals and natural resources department running to the benefit of the state and conditioned that the well be plugged and abandoned in compliance with the rules of the oil conservation division. The oil conservation division **shall establish categories of financial assurance** after notice and hearing. Such categories shall include a **blanket plugging financial assurance, which shall be set by rule in an amount not to exceed two hundred fifty thousand dollars (\$250,000)**, a blanket plugging financial assurance for temporarily abandoned status wells, which shall be set by rule at amounts greater than fifty thousand dollars (\$50,000), and one-well plugging financial assurance in amounts determined sufficient to reasonably pay the cost of plugging the wells covered by the financial assurance. In establishing categories of financial assurance, the oil conservation division shall consider the depth of the well involved, the length of time since the well was produced, the cost of plugging similar wells and such other factors as the oil conservation division deems relevant. The oil conservation division shall require a one-well financial assurance on any well that has been held in a temporarily abandoned status for more than two years or, at the election of the operator, may allow an operator to increase its blanket plugging financial assurance to cover wells held in temporarily abandoned status. All financial assurance shall remain in force until released by the oil conservation division. The oil conservation division shall release financial assurance when it is satisfied the conditions of the financial assurance have been fully performed.

19.15.8.9 CATEGORIES AND AMOUNTS OF FINANCIAL ASSURANCE FOR WELL PLUGGING:

A. Applicability. An operator who has drilled or **acquired**, is drilling or proposes to drill or **acquire** an oil, gas or injection or other service well within this state shall furnish a financial assurance acceptable to the division in accordance with 19.15.8.9 NMAC and in the form of an irrevocable letter of credit, plugging insurance policy or cash or surety bond running to the state of New Mexico conditioned that the well be plugged and abandoned and the location restored and remediated in compliance with commission rules, unless the well is covered by federally required financial assurance. **The division shall not approve and the operator shall not proceed with any proposed drilling or acquisition until the operator has furnished the required financial assurance.**

G. On January 1, 2028 and on January 1 of each successive year, the division may adjust the financial assurance amounts provided by Subsections C(1), D, E and F of this Section by multiplying the financial assurance as of January 1, 2027 by a fraction, the numerator of which is the consumer price index ending in September of the previous year and the denominator of which is the consumer price index ending September 2026; provided that any financial assurance shall not be adjusted below the minimum amounts required in Subsections C(1), D, E and F of this Section as a result of a decrease in the consumer price index. By November 1, 2027 and by November 1 of each successive year, the division shall post on its website the financial assurance requirements in Subsection A through E of this Section for the next year. As used in this subsection, “consumer price index” means the consumer price index, not seasonally adjusted, for all urban consumers, United States city average for all items, or its successor index, as published by the United States department of labor for a 12 month period ending September 30.

B. Prior to commencing operations, an operator shall provide to the division a certification by an authorized official officer, director, or partner that the new operator is not subject to any forfeiture demands from any state or federal agency, has not forfeited financial assurance to any state or federal agency, and does not have unresolved adjudicated orders or unresolved settlement agreements for any state or federal violations in compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the new operator does business; a disclosure of any officer, director, partner in the new operator or person with an interest in the new operator exceeding 25 percent, who is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC; and a disclosure whether the new operator is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC.

B.C. The division may deny registration as an operator if:

- (1) the applicant is not in compliance with Subsection A of 19.15.5.9 NMAC;
- (2) the applicant has forfeiture demands from any state or federal agency, has forfeited financial assurance to any state or federal agency, or has unresolved adjudicated orders or unresolved settlement agreements for any state or federal violation is out of compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the applicant does business;

B. The operator of record with the division and the new operator shall apply for a change of operator by jointly filing a form C-145 using the division's web-based online application. If the operator of record with the division is unavailable, the new operator shall apply to the division for approval of change of operator without a joint application. The new operator shall make such application in writing and provide documentary evidence of the applicant's right to assume operations; a certification by an authorized official officer, director, or partner of the new operator that the new operator is not subject to any forfeiture demands from any state or federal agency, has not forfeited financial assurance to any state or federal agency, and does not have unresolved adjudicated orders or unresolved settlement agreements for any state or federal violations in compliance with federal and state oil and gas laws and regulations in any domestic jurisdiction each state in which the new operator does business; a plugging and abandonment plan; a disclosure of any officer, director, partner in the new operator or person with an interest in the new operator exceeding 25 percent, who is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC; and a disclosure whether the new operator is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC. The new operator shall not commence operations until the division approves the application for change of operator. The plugging and abandonment plan shall be certified by an authorized representative officer, director, or partner of the new operator and shall demonstrate that the new operator has and will have the financial ability to meet the plugging and abandonment requirements of 19.15.25 NMAC for the well or wells to be transferred in light of all the operator's assets and liabilities. The division may request the operator to provide additional information including corporate credit rating, corporate financial statements, long-term liabilities, reserves and economics report, records of the operator's historical costs for decommissioning activities, estimate of the operator's decommissioning obligations, and history of inactive wells and returning wells to production.

C. The director of the director's designee may deny a change of operator if:

(1) the new operator is not in compliance with Subsection A of 19.15.5.9 NMAC; or

~~(2) the new operator is acquiring wells, facilities or sites subject to a compliance order requiring remediation or abatement of contamination, or compliance with 19.15.25.8 NMAC, and the new operator has not entered into an agreed compliance order setting a schedule for compliance with the existing order.~~

(2) the new operator is out of compliance with federal and state oil and gas laws and regulations in each state in which the new operator does business;

(3) any officer, director, partner in the new operator or person with an interest in the new operator exceeding 25 percent, who is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC;

(4) the new operator is or was within the past five years an officer, director, partner, or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC;

(5) the applicant is a corporation, limited liability company, or limited partnership and is not registered or is not in good standing with the New Mexico secretary of state to do business in New Mexico; or

(6) the certification or disclosure requirements set forth in Subsection B of this Section disclose a substantial risk that the new operator would be unable to satisfy the plugging and abandonment requirements of 19.15.25 NMAC for the well or wells the new operator intends to take over.

Applicants' Witness Peter Morgan: Surrebuttal Testimony

Since Lexon issued the surety bonds at the center of this litigation, W&T has reported significant deterioration of its financial health. That development, coupled with numerous other industry-wide issues, including relevant court rulings, losses sustained across the industry, and reinsurance considerations, led Lexon to send a collateral demand notice to W&T on July 9, 2024. W&T's other sureties, who each have their own indemnity agreements with W&T, apparently observed the same financial trends and independently decided to demand collateral payment from W&T.

**LEXON'S PARTIAL MOTION TO DISMISS W&T'S
FIRST AMENDED COMPLAINT PURSUANT TO FED. R. CIV. P. 12(b)(6)**

EDF New Mexico Testimony Presentation

Adam Peltz

Direct Testimony

LFC – Comprehensive Overview of Orphan Wells in New Mexico

- **Goal:** assess the current scope of the problem
 - **Focus on:**
 - Environmental, health & safety impacts of orphan wells
 - Evaluate the adequacy of the state's regulatory framework to address current orphaned wells and prevent future orphaning
 - Create an estimation of the state's future liability from orphan wells
- **Important considerations:**
 - Currently, orphan wells will cost the state more than \$200 million
 - Future liability costs range from:
 - “Low” Evaluation = \$700 million
 - “High” Evaluation = \$1.6 billion
 - This is an unsustainable number for NM and its ~\$10B annual budget

LFC Recommendations – Comprehensive Overview of Orphan Wells in New Mexico

- LFC made several recommendations as part of this report, for the Legislature and the Energy, Minerals, and Natural Resources Department (EMNRD)
 - LFC regulatory recommendations accord with EDF's proposals -
 1. Importance of defining a category of low-producing wells for heightened scrutiny
 2. Operators of such wells secure individual well assurance rather than blanket bonds
 3. Regulatory oversight is needed for all well transfers
 - Additional recommendations relative to EMNRD and the legislature are included but are outside the scope of this rulemaking

LFC clearly recognizes the scope of the orphan well problem in NM – this rulemaking is critical to protect New Mexico's people, climate, and environment from orphan wells

History of Well Orphaning – New Mexico

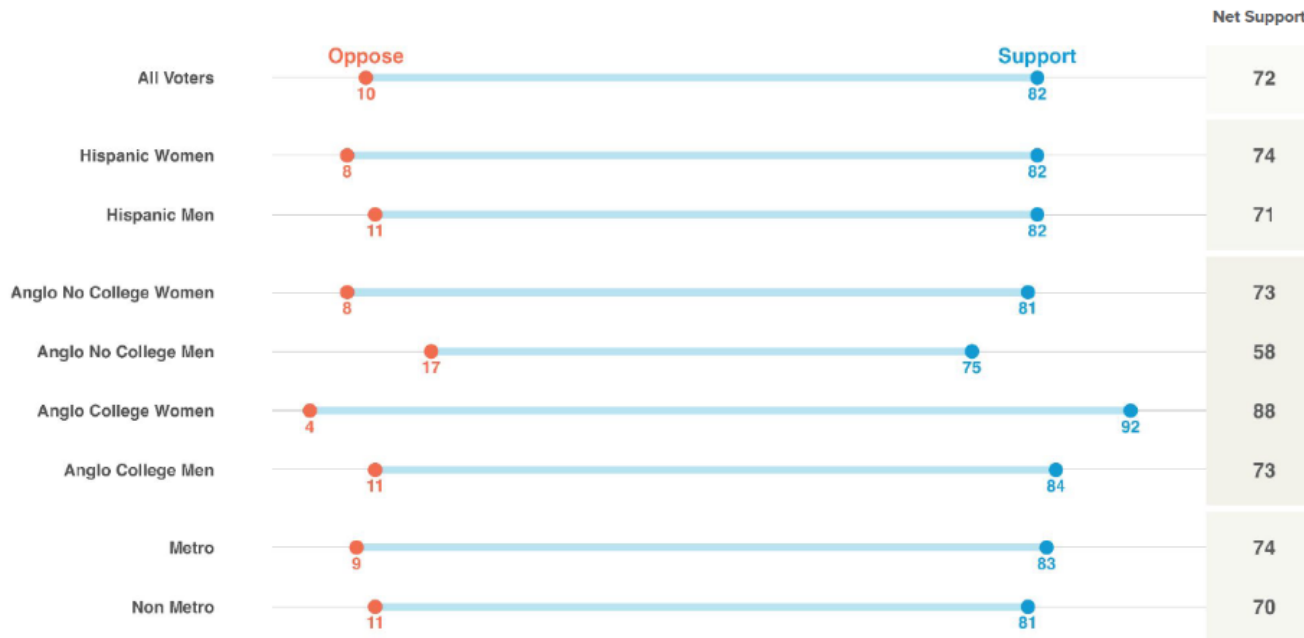
- **2021:** Money included in the IIJA (roughly \$4.7B) to plug wells, bringing national attention to the orphan well problem
- \$400+ million received by NM for well plugging, remediation & restoration
 - A total of \$3.8 billion is expected
- The Tribal Orphaned Wells Program sets money aside specifically for Tribes to plug, remediate & and restore wells and well sites on Tribal lands
- NM has been using federal money to plug wells over the past few years, but the problem continues to grow
 - ~**1,700**: State & private orphan wells eligible for plugging in 2022
 - ~**1,400** inactive wells to plug + an estimated **3,000** producing such a small quantity of oil and gas that they are at risk of being orphaned

History of U.S. Oil & Gas Development

- **1850's:** O&G production begins in Pennsylvania
 - In New Mexico by the early 1920's
- **1919:** The first plugging requirement is adopted by Texas by the RRC
 - New Mexico adopted its 1st plugging requirements in the 1930's
- **Over 4 Million:** Wells drilled in the U.S.
 - 1.5 million of these have been plugged by industry & states
 - ~ 1 million are active or idle
 - ~ 1.5 million improperly abandoned –*falling to the public to manage*
 - *Documented count of 141k, state UOW estimate up to 800k*

New Mexico Landscape Polling – Exhibit 58

Energy/Environment Do you support or oppose a requirement for oil and gas companies to seal and plug wells they have drilled once those wells are no longer producing energy?

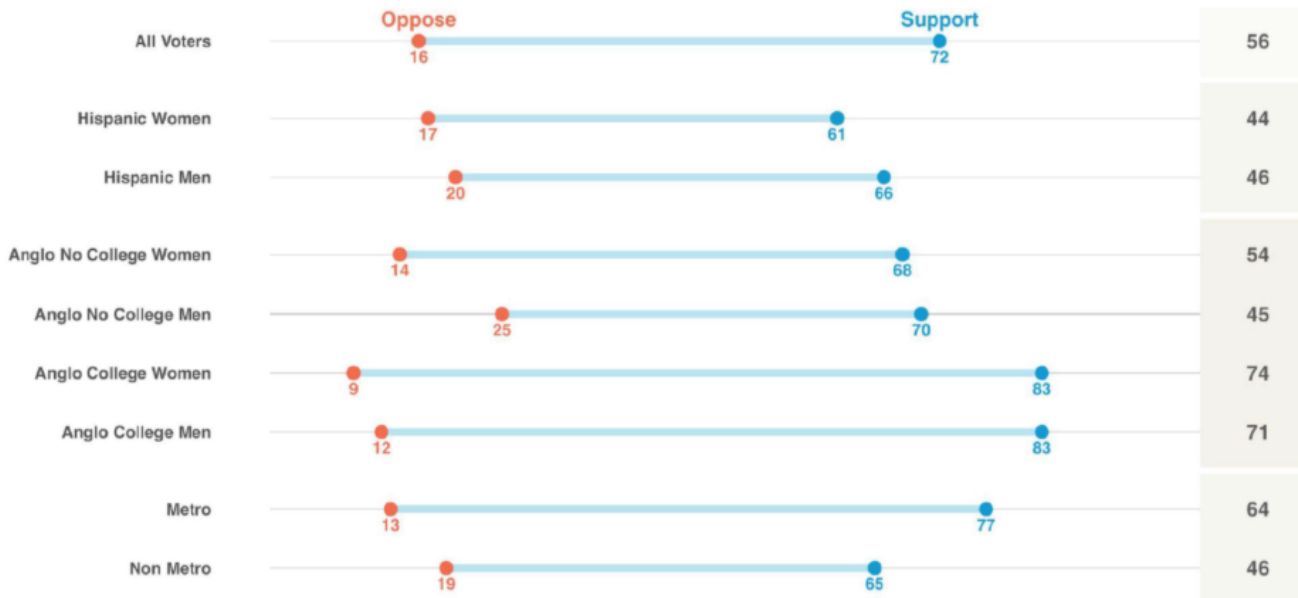


New Mexico Landscape Polling -- Exhibit 58

Energy/Environment Supporters argue that this measure would prevent taxpayers from bearing the cost of cleaning up inactive wells, which could amount to billions of dollars. Opponents contend that this requirement could force small mom and pop operators out of business. Now that you have read more, do you support or oppose a requirement for oil and gas companies to seal and plug wells they have drilled once those wells are no longer producing energy?



Net Support



Orphan Well Policy Reform – Across the States

- **Arkansas:** In 2018, the first state to adopt close-to full cost financial assurance for marginal wells on transfer
- **North Dakota & Wyoming:** Limit the number of idle wells on blanket bonds
- **Utah:** Rulemaking underway since 2021
- **Colorado:** Omnibus rulemaking in 2022
- **Louisiana:** Idle well rulemaking in 2023
- **California:** Legislative reforms in 2023
- **Texas & Oklahoma:** Legislative reforms in 2025

Exhibit 63

Projected bonding amount, by marginal/inactive well % groups

Estimated bonding required as a percent of each group's total potential P&A cost liability at \$163k per well, compared under existing and proposed rules

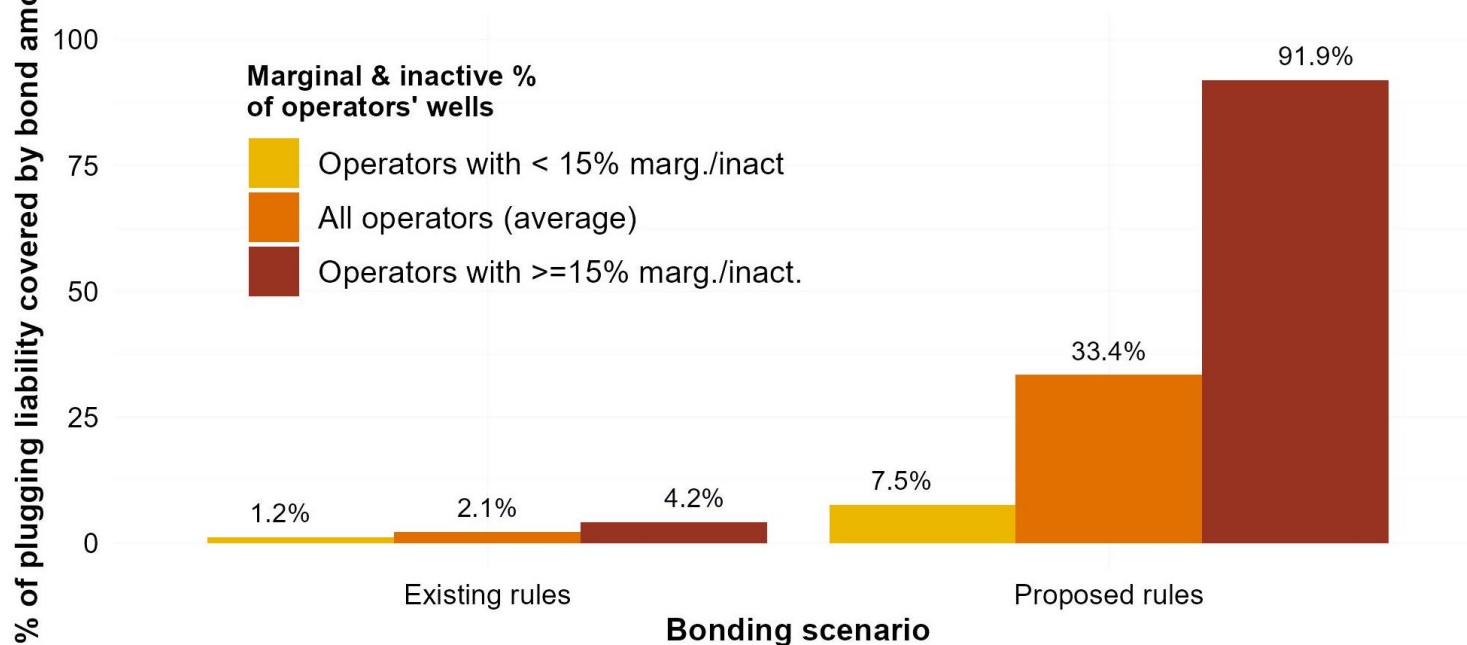


Exhibit 59

Production as reported from GO-TECH annual County Production Volume downloads (repackaging of OCD production data), 2010-2024, all counties

Vintages derived from SpudDates reported in OCD Well History dataset, current as of 7/11/25

New Mexico oil production, 2010-2024

Shaded by vintage of producing wells

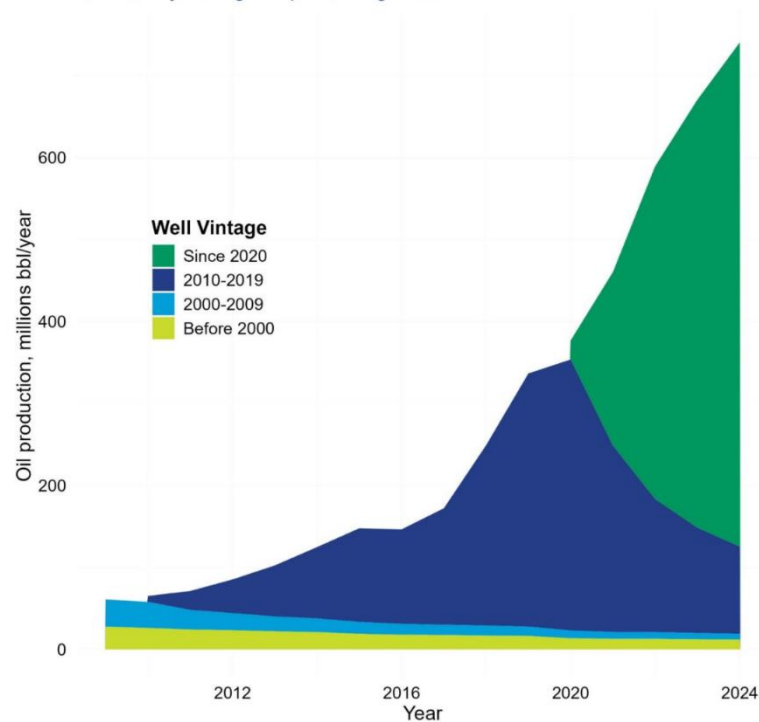


Exhibit 33

Production dominated by Permian horizontal and directional wells

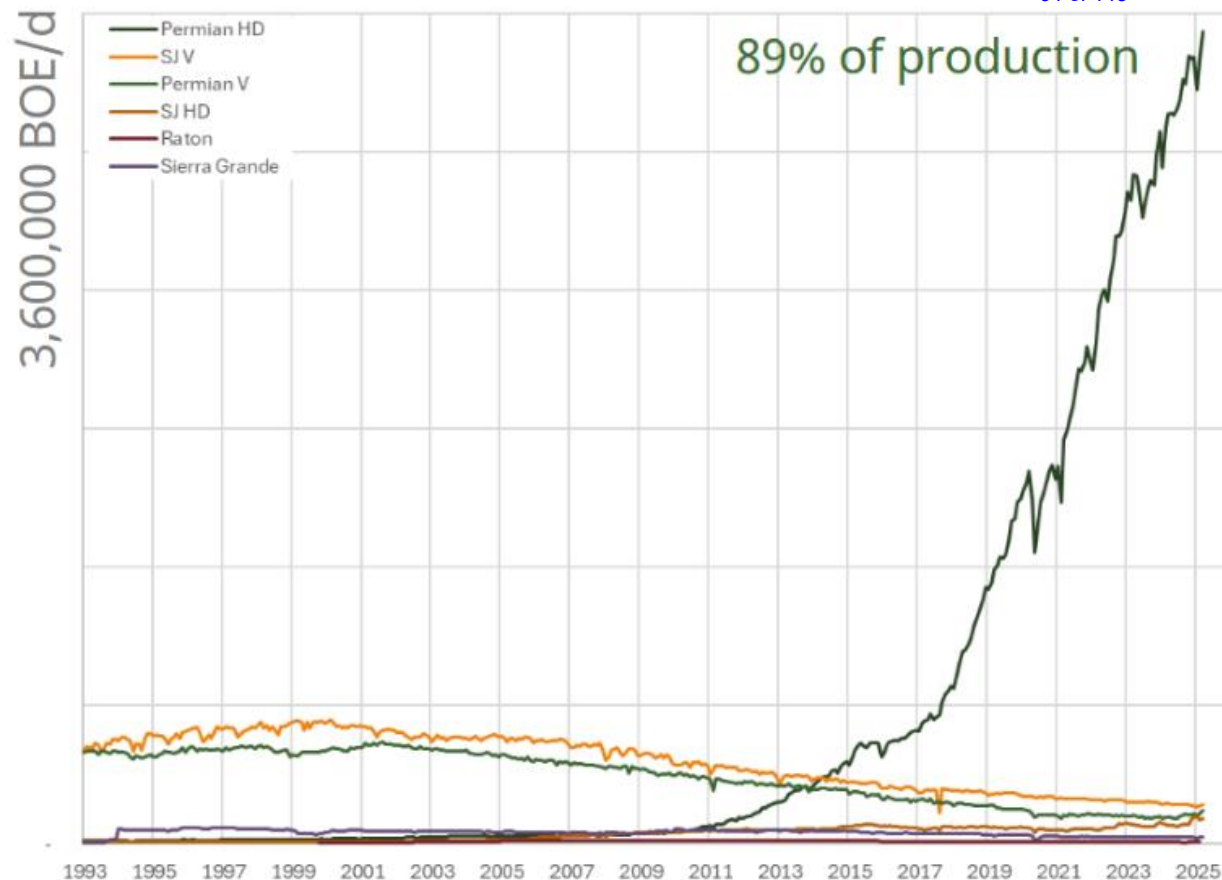


Exhibit 32

Subdivisions of unplugged wells in New Mexico

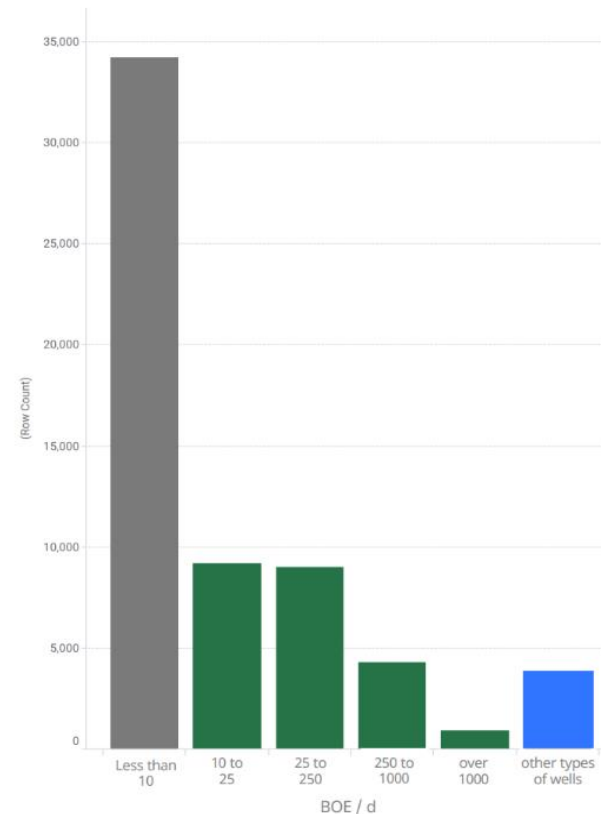
Unplugged wells by activity

BOE/d	Total	Types		% of Total
		Producers	Other	
less than 10	34,238	34,238	-	55%
10 to 25	9,187	9,187	-	15%
25 to 250	9,008	9,008	-	14%
250 to 1000	4,270	4,270	-	6.8%
over 1000	921	921	-	1.5%
Other	5,096	1,303	3,793	8%
Total	62,720			

Wells in not-active categories per OCD*

Aging**	Temp Abandon			
	Approved	Expired	Inactive	Orphan
0 to 1 yr	184	68	773	0
1 to 2 yrs	118	41		55
2 to 5 yrs	171	54	868	191
5 to 8 yrs	35	26	613	194
8 to 10 yrs	8	15	203	66
> 10 yrs	1	33	771	440
no data	40	0	-	2
Statewide	557	237	3,228	948

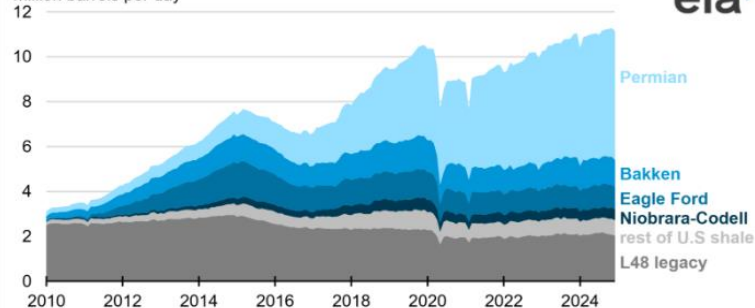
Production rate of unplugged wells, excluding DUCs



EIA Figures

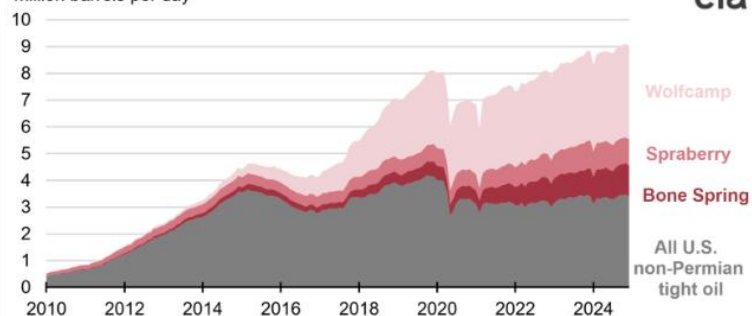
Monthly U.S. tight oil production by formation (2010–2024)

million barrels per day



Monthly Permian by play and non-Permian tight oil production (2010–2024)

million barrels per day



Monthly U.S. Permian and non-Permian tight oil production (2010–2024)

million barrels per day

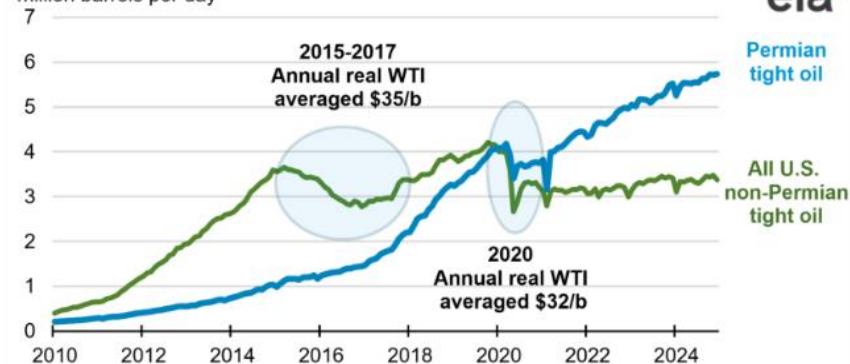


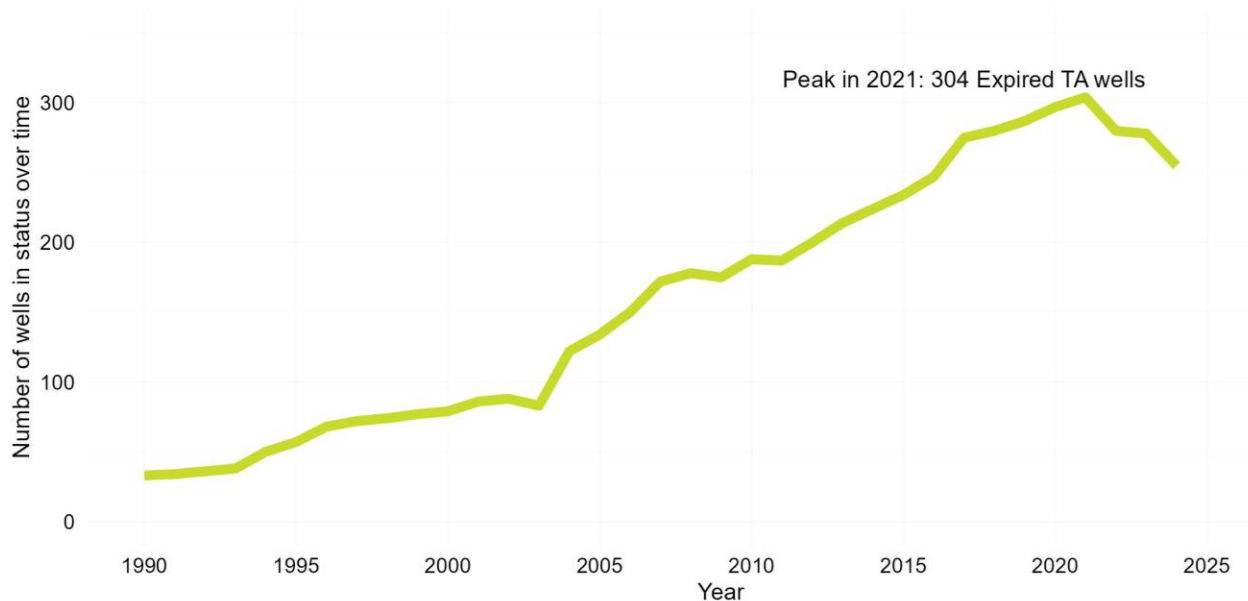
Exhibit 61

Wells in Expired TA
status over time

OCD Well History
dataset,
1990 – 2024.

Wells in Expired TA status over time

OCD Well History dataset, 1990 - 2024



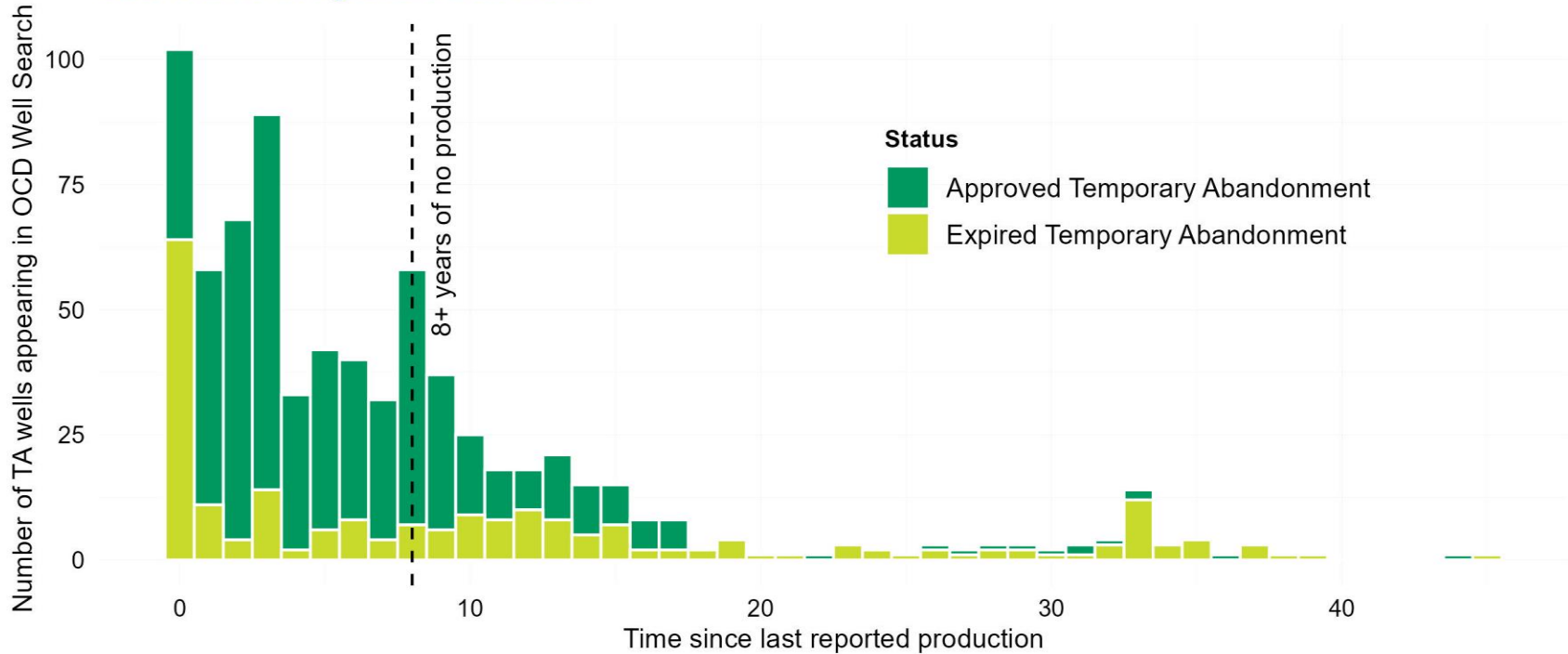
Wells reported in Expired TA status by OCD Well History dataset, current as of 7/11/25.

Temporary Abandonment status wells, by time since last production

68 of 145

Exhibit 62

OCD Well Permitting Search as of 7/3/25

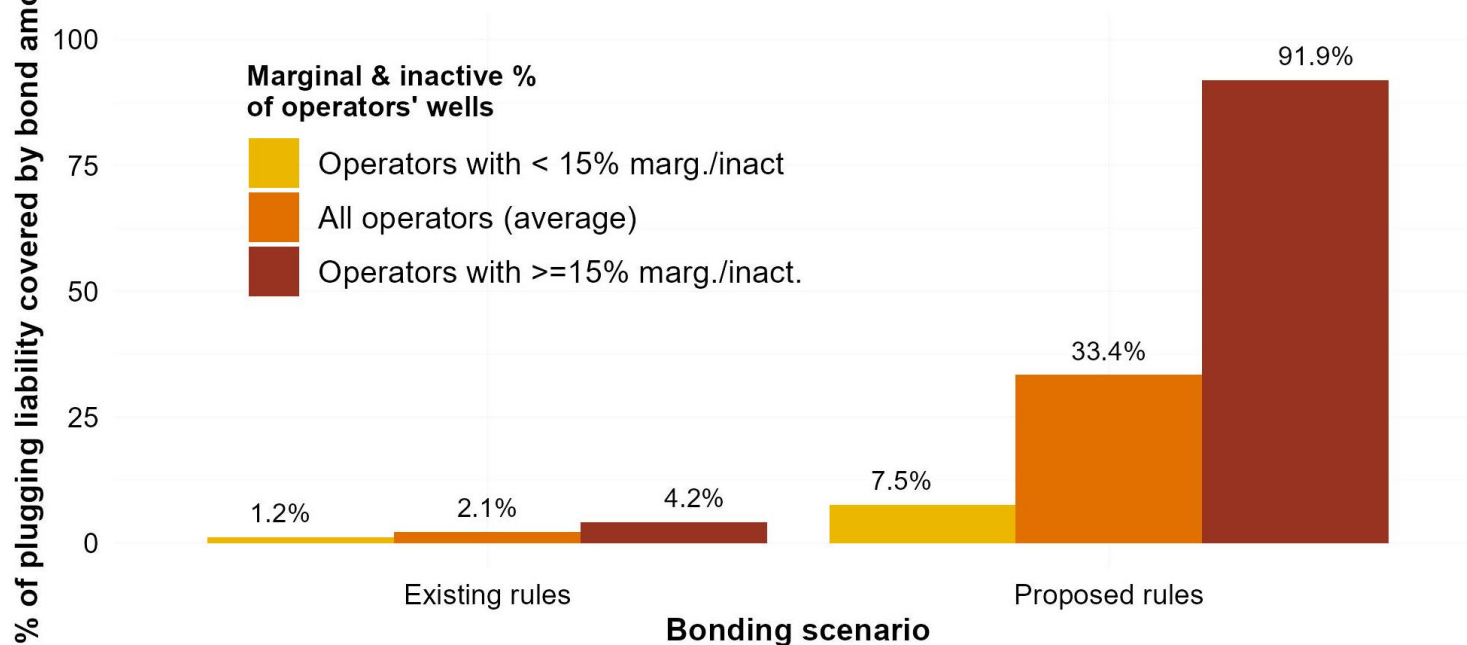


Data reflects wells included in 7/3/25 OCD Permitting Well Search results for wells in Approved or Expired TA status.

Exhibit 63

Projected bonding amount, by marginal/inactive well % groups

Estimated bonding required as a percent of each group's total potential P&A cost liability at \$163k per well, compared under existing and proposed rules



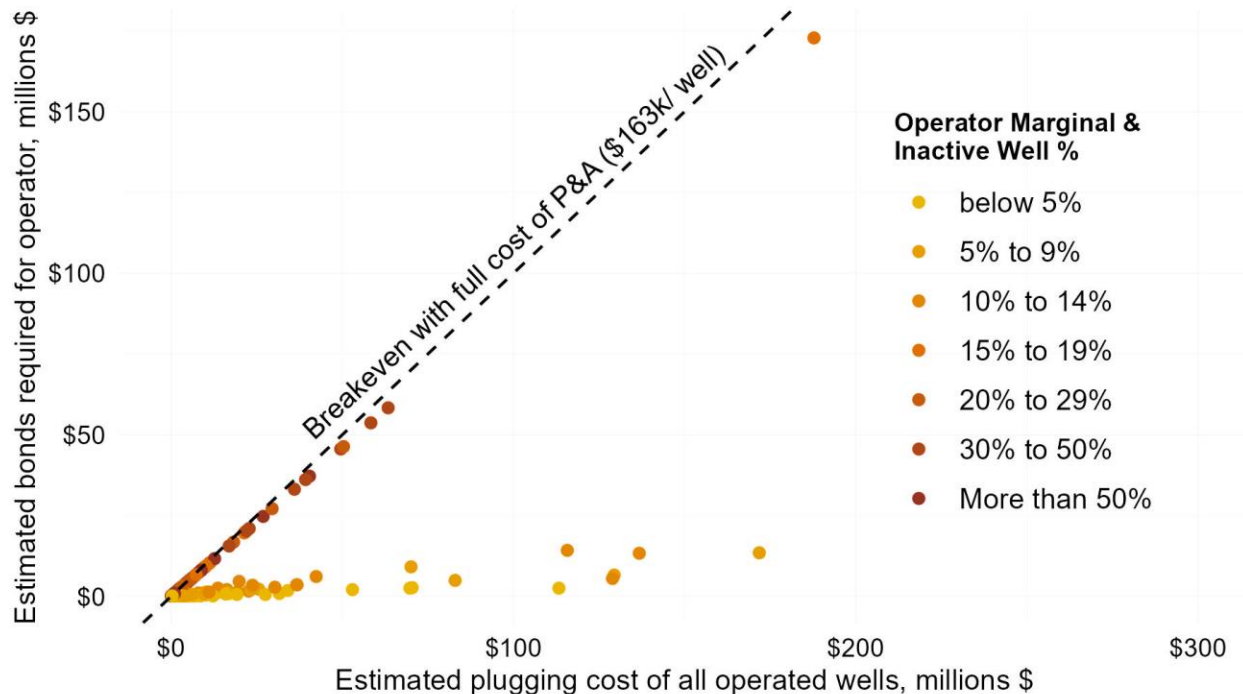
Proposed bonding amounts vs. potential plugging liability, by operator

Received by OCD: 10/15/2025

70 of 145

Estimated bonding amounts required for state and private wells

Exhibit 64



Proposed
bonding
amounts vs.
potential
plugging
liability, by
operator

Plot of firm-level bond amounts (Y axis) versus projected plugging liabilities at \$163k (X axis).
A line is plotted at $y=x$; operators below the line are underbonded relative to potential P&A liability.
Operator marginal & inactive well % based on all federal, state, and private lease-type wells;
bonding costs and liabilities based on operator's state and private wells only.

Exhibit 65

Table reflects reported oil and gas production volumes from all wells included in 2024 County Production volumes from UNM's GO-TECH data platform (oil in bbl and gas in mcf).

Gas volumes were converted to BOE using a conversion of 6 mcf/BOE.

Wells with incomplete 2024 data due to known Spud Date after January 1, 2024, or plugging date prior to January 1, 2025, were excluded from the search.

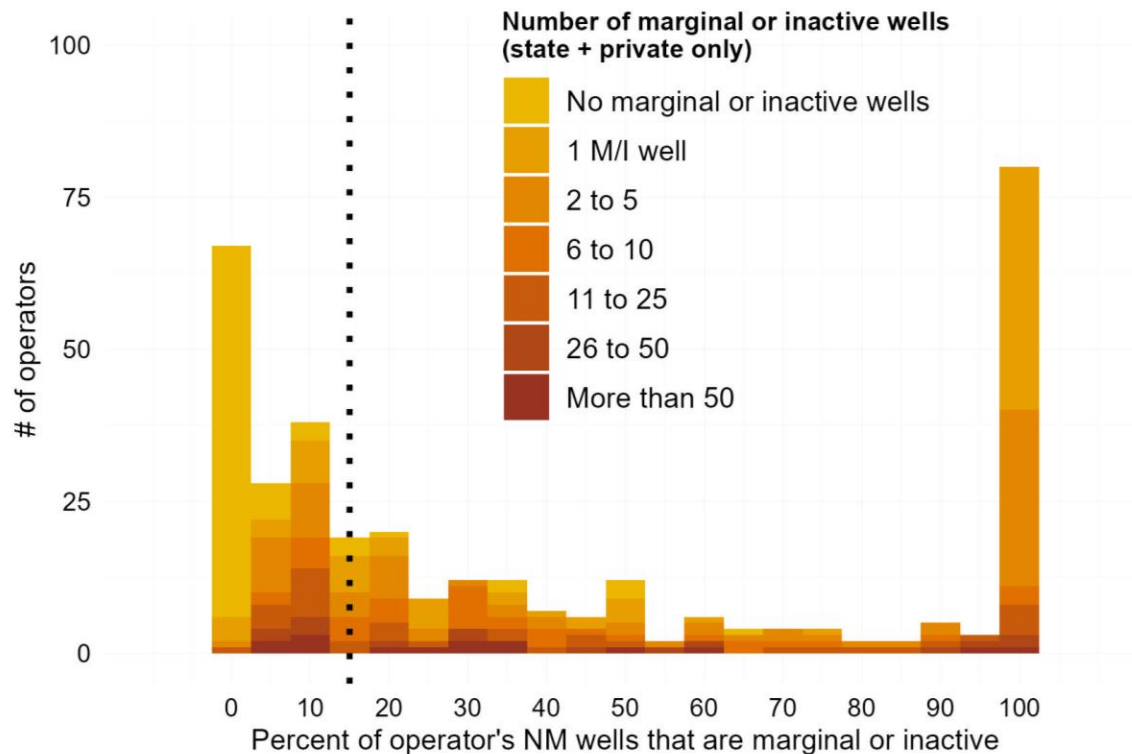
List of wells individually producing more than all marginal wells in 2024						
API10	BOE (2024)	Lease Type	Well Type	Spud Date	County Name	Property or Formation Description
3002552076	1035928.5	F	O	10/31/2023	Lea	
3001550185	955547.7	F	G	1/15/2023	Eddy	
3001548907	866426.7	F	O	4/4/2023	Eddy	
3001549343	849200	F	O	4/14/2023	Eddy	
3002551956	845298	F	O	10/7/2023	Lea	
3001549344	792154.7	F	G	4/15/2023	Eddy	
3001553715	788311.8	F	G	4/21/2023	NA	PURPLE SAGE; WOLFCAMP
3001550040	782295	F	G	3/9/2023	Eddy	PURPLE SAGE WOLFCAMP
3001550039	781872.2	F	G	12/12/2022	Eddy	
Additional wells producing more than 700,000 BOE in 2024						
3001550199	743302.8	F	G	1/15/2023	Eddy	
3001553645	734187.2	F	O	NA	Eddy	
3002552244	733837.7	F	O	1/19/2024	Lea	
3002552256	723975.2	F	O	1/20/2024	Lea	
3001549349	723123.8	F	O	4/19/2023	Eddy	
3001553646	721704.2	F	O	5/6/2023	Eddy	R-22701/COMPL. POOLING ENSP
3001554048	720804.5	F	O	8/11/2023	Eddy	BONE SPRING 2
3001550042	702638.8	F	G	3/9/2023	Eddy	
3002551265	701827.5	F	O	7/12/2023	Lea	
3001553644	700877.7	F	O	NA	Eddy	

Exhibit 66

Comparisons of operators by marginal and inactive well % group Based on activity categorization from GO-TECH production data; filtered to federal, state, and private lease type wells active for the entirety of 2024, except where noted otherwise.			
Marginal & Inactive Well % group	All operators	< 15% marginal or inactive	>= 15% marginal or inactive
Number of operators with state, private, and federal wells	420	160	260
% of total operators	100%	38%	62%
Number of operators with state and private wells	342	144	198
% of state and private well operators	100%	42%	58%
Total Wells (rounded to 10)	51270	36020	15250
Average wells / operator **	110	180	60
Total M/I wells **	7170	2200	4980
Average M/I wells / operator	15	11	18
Total revenues (2024), millions \$	\$21,040	\$17,277	\$3,763
Average revenues / operator, millions \$	\$44	\$84	\$14
Total revenues from marginal wells, thousands \$	\$22,825	\$9,315	\$13,511
Average revenues from marginal wells, thousands \$	\$49	\$46	\$51

Exhibit 67

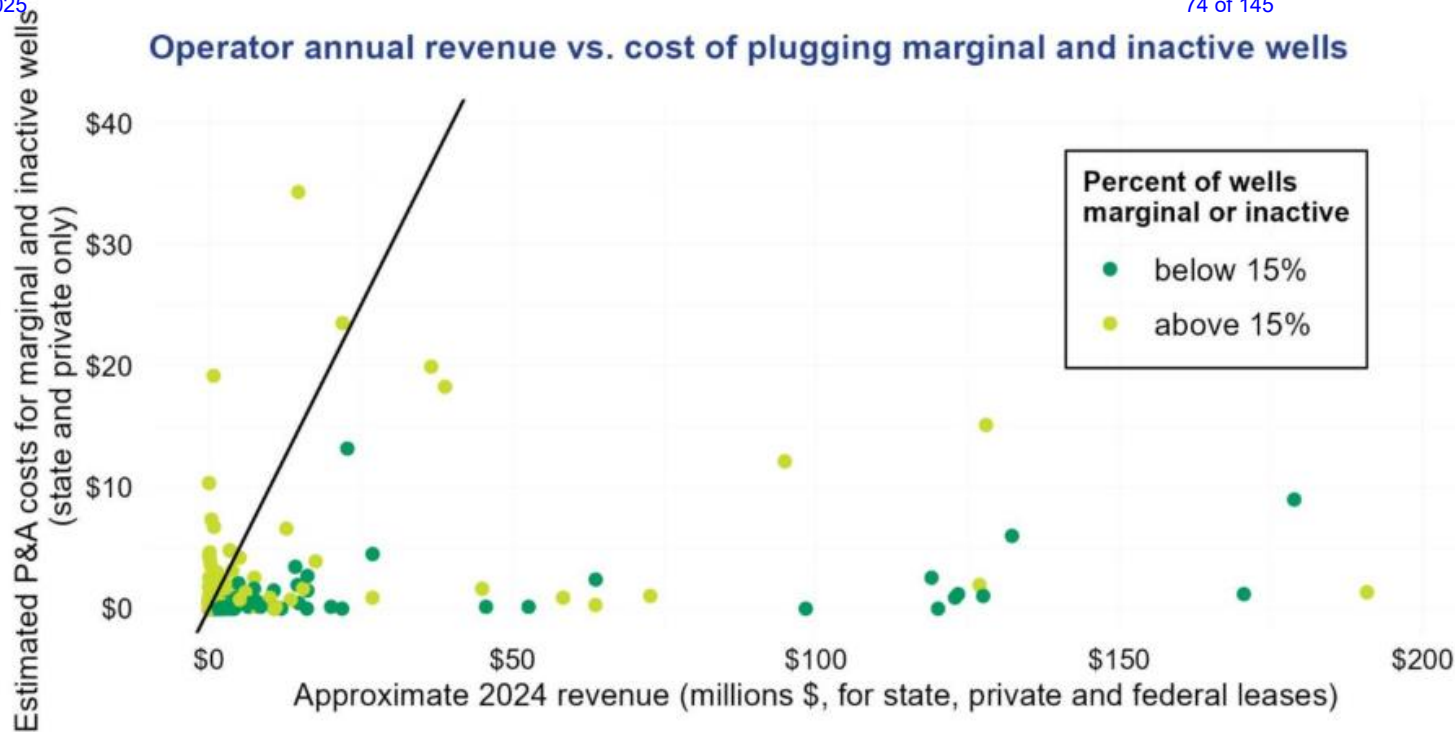
Operators by
percentage and
absolute count of
marginal or inactive
wells



Histogram of operators included in bonding amount projections (Apps' Ex. 63), by percentage of federal, state, and private wells marginal or inactive. Data excludes Active status wells with no production data available via UNM's GO-TECH County Production volumes.

Exhibit 68

Operator annual revenue vs. cost of plugging state and private marginal and inactive wells



Plot of firm-level plugging liability for operator's marginal and inactive wells (Y axis) versus estimated 2024 revenue, under existing rules (X axis). A line is plotted at $y=x$; operators below the line generated more 2024 revenue than the expected cost of plugging and abandonment of their state and private marginal and inactive wells. Companies with revenues above \$250 million excluded for legibility of remaining data.

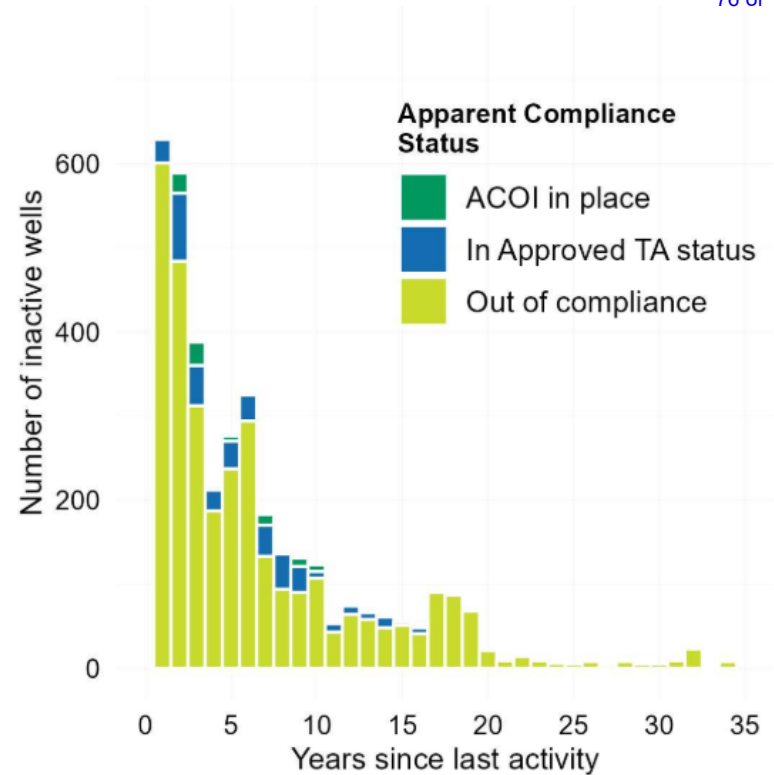
Exhibit 7

OCD INACTIVE WELL LIST (15+ months inactive) Listed wells and apparent compliance status 7/3/25				
<u>Well</u> Subset	No. of wells	% of total inactive wells	No. of associated operators	%
Total well count (from Inactive Well search output – appears to represent wells other than Plugged & Released, Cancelled, and Never Drilled statuses)	74,582	n/a	n/a	n/a
Total inactive wells (15+ months)	3,765	100%	350	100%
Total approved TA wells* on Inactive Well Search list	419	11%	89	25%
Total expired TA wells* on Inactive Well Search list	155	4%	67	19%
Total wells under ACOI** on Inactive Well Search list	99	3%	3	1%
Wells on Inactive Well Search list with unusual status (Drilled, New, or Plugged) - <i>excluded from total below</i>	13	< 0.5%	11	3%
Total inactive wells apparently out of compliance (without ACOI or non-expired TA status)***	3,234	86%	346	99%
*The approved and expired TA status wells listed on OCD Inactive Well Search is only a subset of all wells labeled by OCD as having TA status, per OCD's Well History datafiles, and per a July 3rd search of OCD's Well Permitting Search for all TA wells. ** ACOI (Inactive Well Agreed Compliance Order) coverage was determined by the difference between wells included on 2 back-to-back queries of OCD's Inactive Well Search for wells 15+ months inactive— one set to include ACOI wells and one set to exclude them. Wells absent from the "Exclude ACOI" version of the list are presumed to have a compliance order in place. *** Some wells with an ACOI are also listed in expired TA status, so this total is slightly less than the sum of the preceding rows.				

Exhibit 10

Inactive wells by
length of time
inactive

7/3/25 OCD Inactive
Well List



See full exhibit version for details of data development.

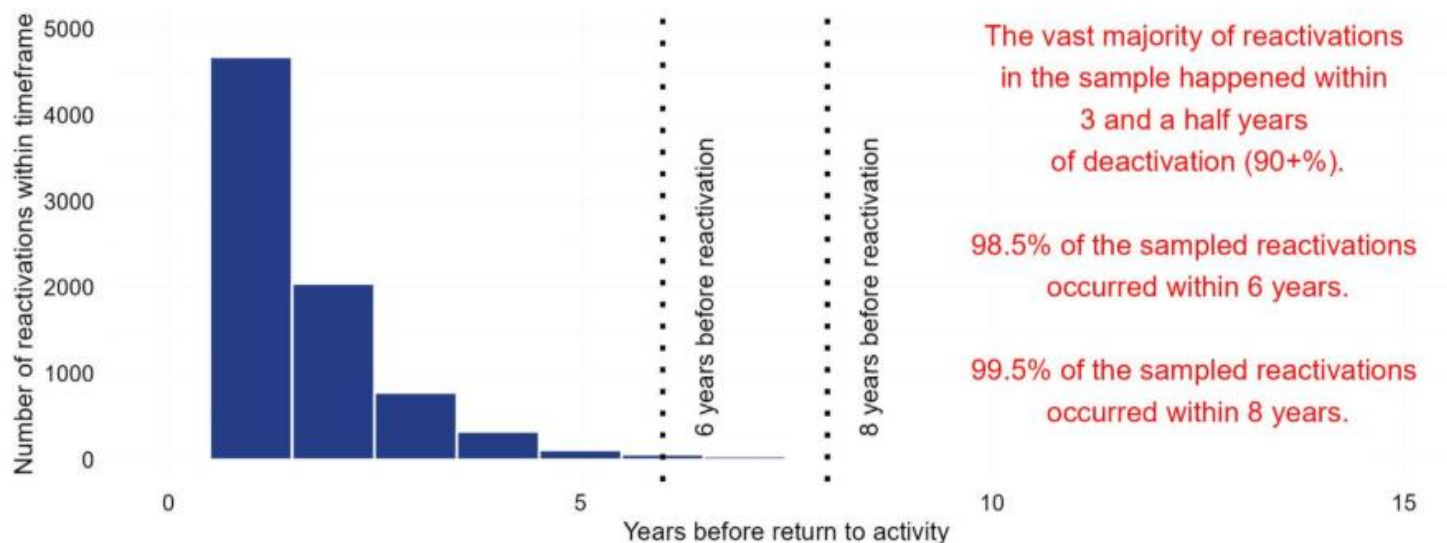
Exhibit 13

Received by OCD: 10/15/2025

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Length of time before deactivated wells return to activity

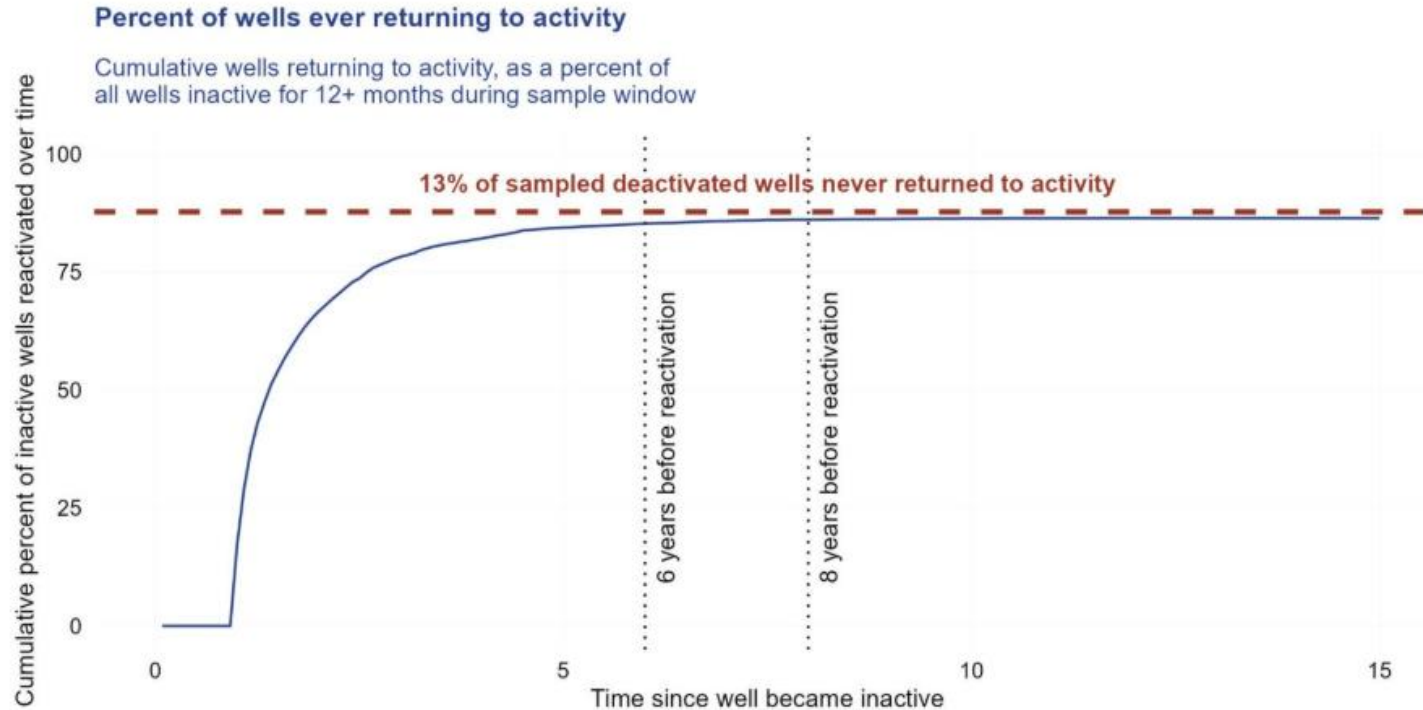
Median = 1.42 years; 90% = 3.42 years.



Histogram of length of time inactive prior to return to activity, across sample of wells that reactivated following 12+ months of no production.

Based on analysis of production data from 2010-2024, for wells spudded prior to 2017.

Exhibit 13

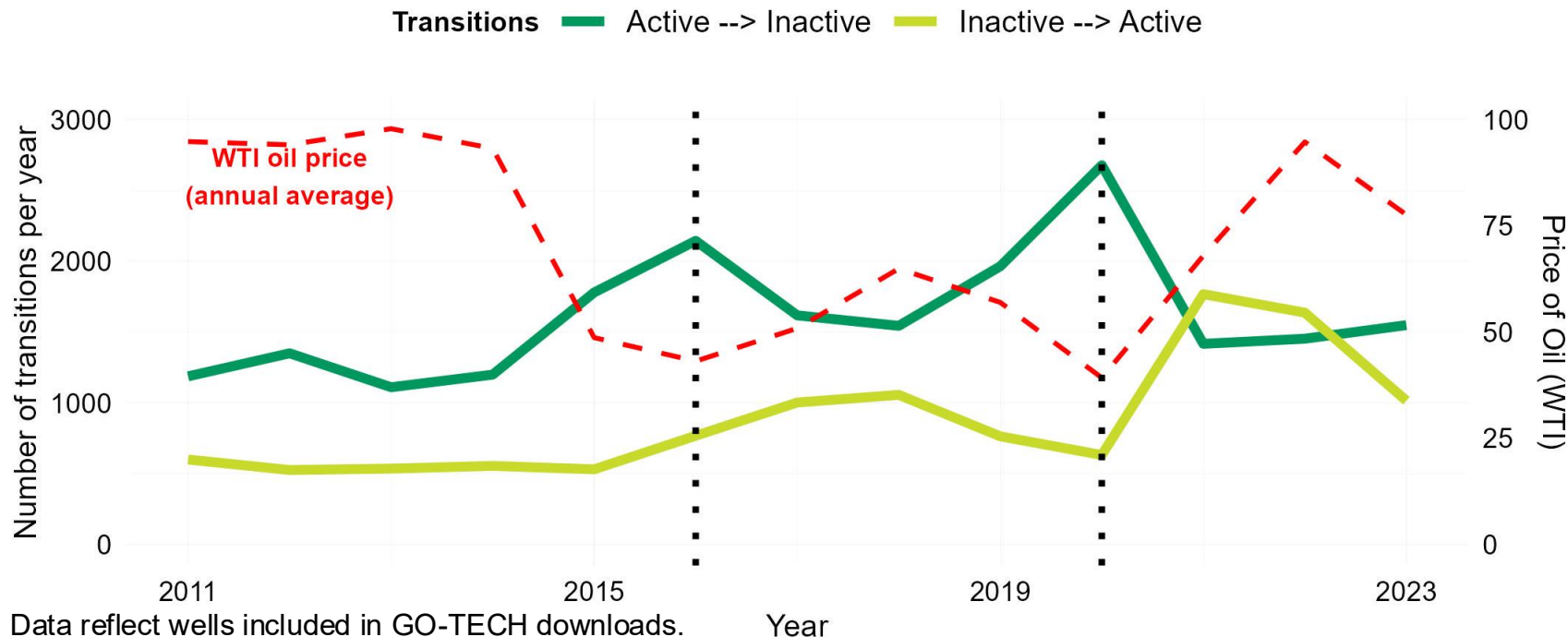


Based on analysis of production data from 2010-2024, for sample of wells spudded prior to 2017, beginning with first period of activity after 2010.

Shut-downs & Reactivations Annually, 2011-2023

Exhibit 69

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Data reflect wells included in GO-TECH downloads.

Deactivation was defined as a period of 12+ months of no reported production after known activity, while reactivation was a return to activity following a period of deactivation.

Black lines drawn at 2016 (Shale bust) and 2020 (COVID-19). Increased numbers of deactivations are seen in the year of each event, with a smaller increase in reactivations lagging after (correlated to rising prices.)

Exhibit 70

Table reflects wells returned by OCD Well Permitting Search for wells in approved or expired TA status as of July 3, 2025.

OCD WELL PERMITTING STATUS SEARCH All Temporary Abandonment status wells, by time in approved or expired status 7/3/25		
	No. of Wells	%
All Wells in any TA status, (7/3/25)	805	100%
5+ years in TA status	226	28%
8+ years in TA status	111	14%
10+ years in TA status	65	8%
15+ years in TA status	29	4%

Exhibit 71

Table reflects wells returned by OCD Well Permitting Search for wells in approved or expired TA status as of July 3, 2025.

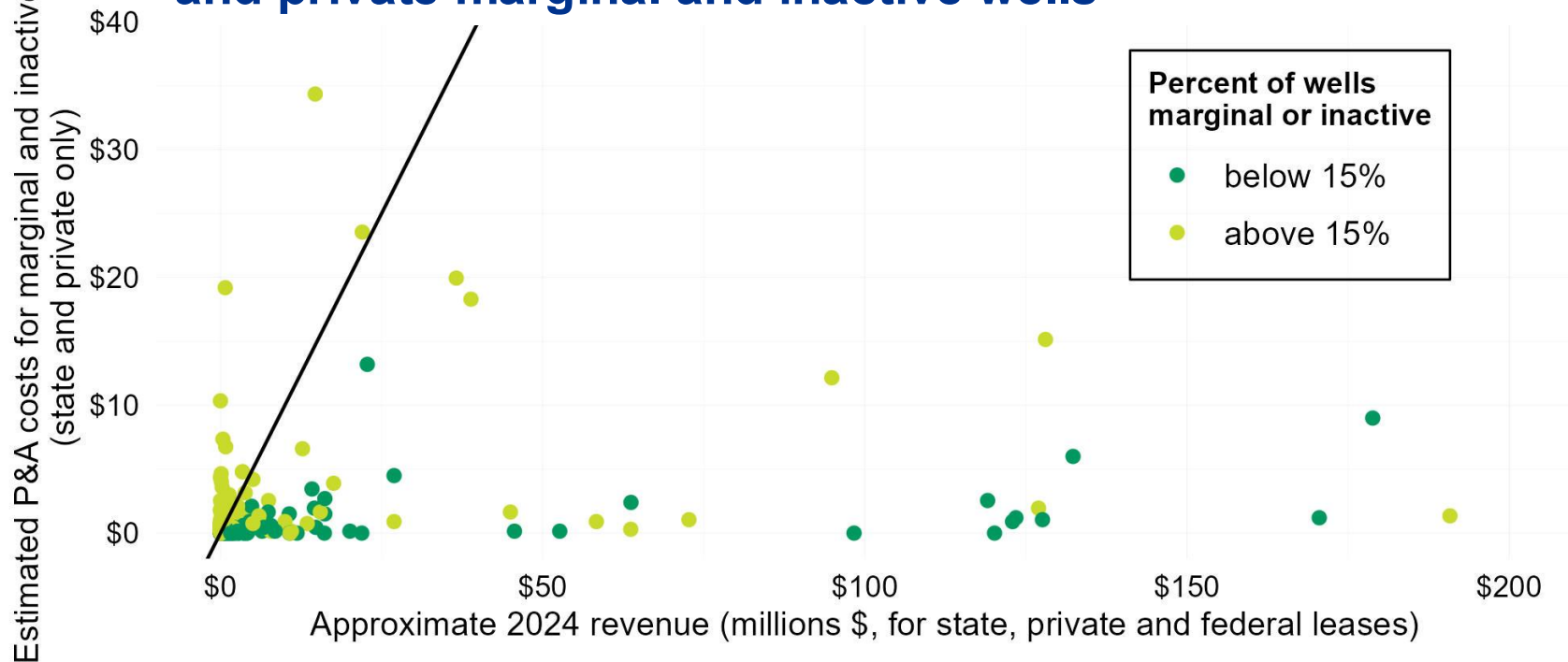
OCD WELL PERMITTING STATUS SEARCH All Temporary Abandonment status wells, by time since last production 7/3/25		
	No. of Wells	%
All Wells in any TA status, (7/3/25)	805	100%
2+ years since last prod.	569	71%
5+ years since last prod.	388	48%
8+ years since last prod.	267	33%
15+ years since last prod.	86	11%

Rebuttal Testimony

Exhibit 68: Operator annual revenue vs. cost of plugging state and private marginal and inactive wells

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Plot of firm-level plugging liability for operator's marginal and inactive wells (Y axis) versus estimated 2024 revenue, under existing rules (X axis).
A line is plotted at $y=x$; operators below the line generated more 2024 revenue than the expected cost of plugging and abandonment of their state and private marginal and inactive wells.
Companies with revenues above \$250 million excluded for legibility of remaining data.

Exhibit 84

Comparisons of Operator Revenues and Bonding Amounts, by Marginal and Inactive % and Well Count Groups

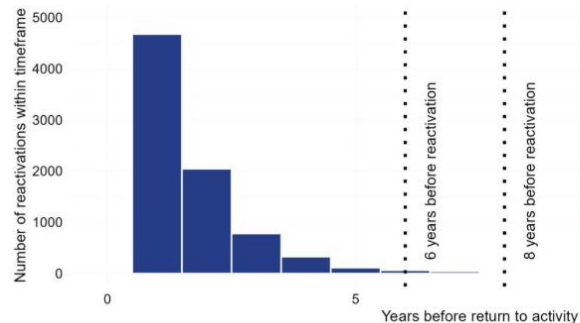
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Marginal and inactive wells as a fraction of total	Operator well count (inclusive of federal, state, and private wells)	Total operators in group	Total marginal and inactive state and private wells in group	Percentage of federal, state, and private wells identified as marginal or inactive	Total estimated 2024 revenue (inclusive of federal, state, and private wells) (millions USD)	Total estimated bonding liability for state and private wells (millions USD)	1% of total bonding liability, as a percentage of total 2024 revenue
above 15 %	1 to 50	160	641	55%	\$235	\$171	0.729%
	51 to 100	14	247	46%	\$147	\$85	0.577%
	101 to 500	21	1087	38%	\$956	\$420	0.440%
	Over 500	3	473	24%	\$662	\$272	0.411%
below 15 %	1 to 50	83	35	6%	\$519	\$18	0.034%
	51 to 100	17	48	7%	\$1,679	\$10	0.006%
	101 to 500	26	233	7%	\$12,532	\$39	0.003%
	Over 500	18	709	6%	\$35,637	\$109	0.003%
all operators (above + below 15%)	1 to 50	243	676	37%	\$754	\$189	0.25%
	51 to 100	31	295	24%	\$1,826	\$95	0.05%
	101 to 500	47	1320	22%	\$13,488	\$459	0.03%
	Over 500	21	1182	8%	\$36,298	\$381	0.01%

Exhibit 13

Length of time before deactivated wells return to activity

Median = 1.42 years; 90% = 3.42 years.



Histogram of length of time inactive prior to return to activity, across sample of wells that reactivated following 12+ months of no production.

Based on analysis of production data from 2010-2024, for wells spudded prior to 2017.

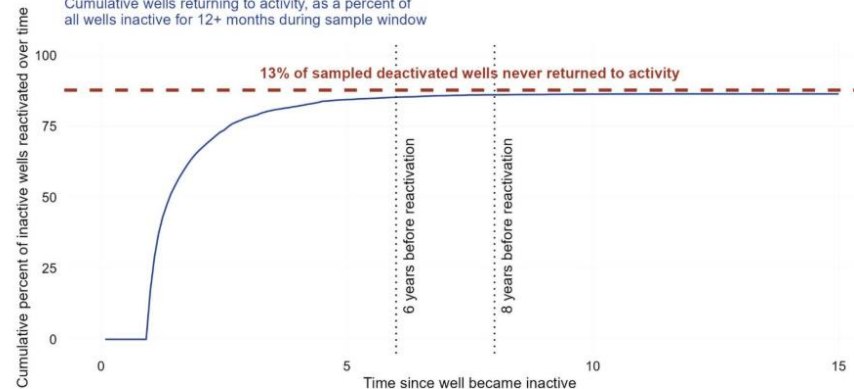
The vast majority of reactivations in the sample happened within 3 and a half years of deactivation (90+%).

98.5% of the sampled reactivations occurred within 6 years.

99.5% of the sampled reactivations occurred within 8 years.

Percent of wells ever returning to activity

Cumulative wells returning to activity, as a percent of all wells inactive for 12+ months during sample window



Based on analysis of production data from 2010-2024, for sample of wells spudded prior to 2017, beginning with first period of activity after 2010.

Thank you!

Testimony of Dwayne Purvis, P.E.

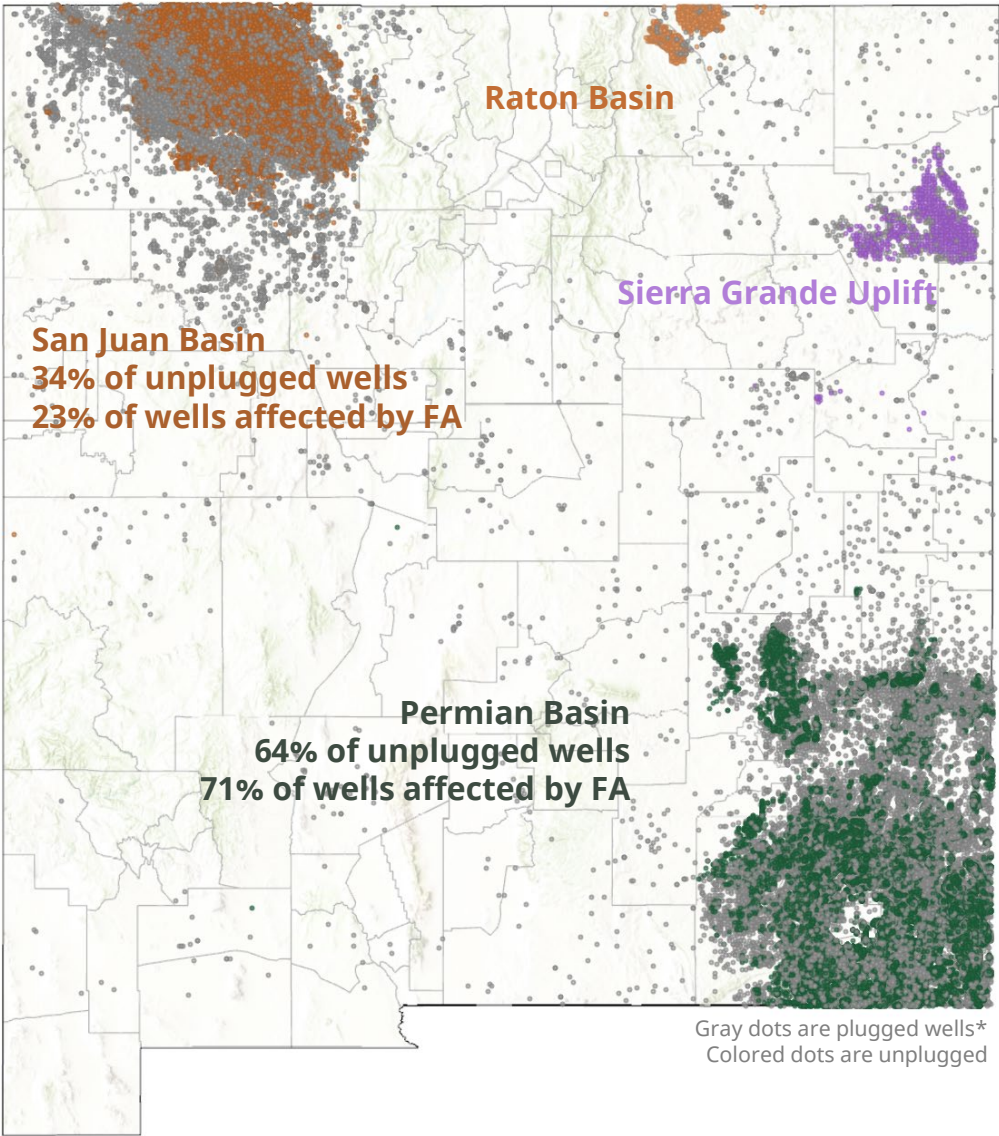


**PURVIS ENERGY
ADVISORS**

New Mexico Oil Conservation Commission
Rulemaking Hearing October 20, 2025

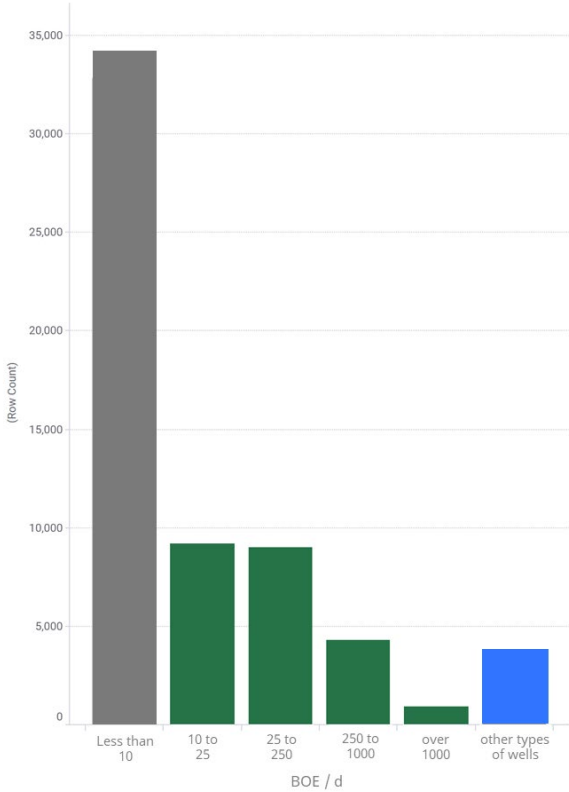
All jurisdictions. . .		Some jurisdictions. . .	
Downhole	Surface		Surface
Plugging	Removal	Remediation	Restoration
Salvage	Wells sites & Shared facilities		
	Salvage		
Contingency	Contingency Remediation		Contingency
Legacy	Legacy		Legacy

. . .plus midstream pipelines & plants



Basin	Plugged*	Unplugged		
		Total	active	not active
Permian	35,661	39,929	36,850	3,079
San Juan	12,941	21,219	20,370	849
Raton	116	861	837	24
Sierra Grande	643	711	698	13
Other	312	-	-	-
49,673		62,720	wells to be plugged	

Production rate of unplugged wells, excluding DUCs



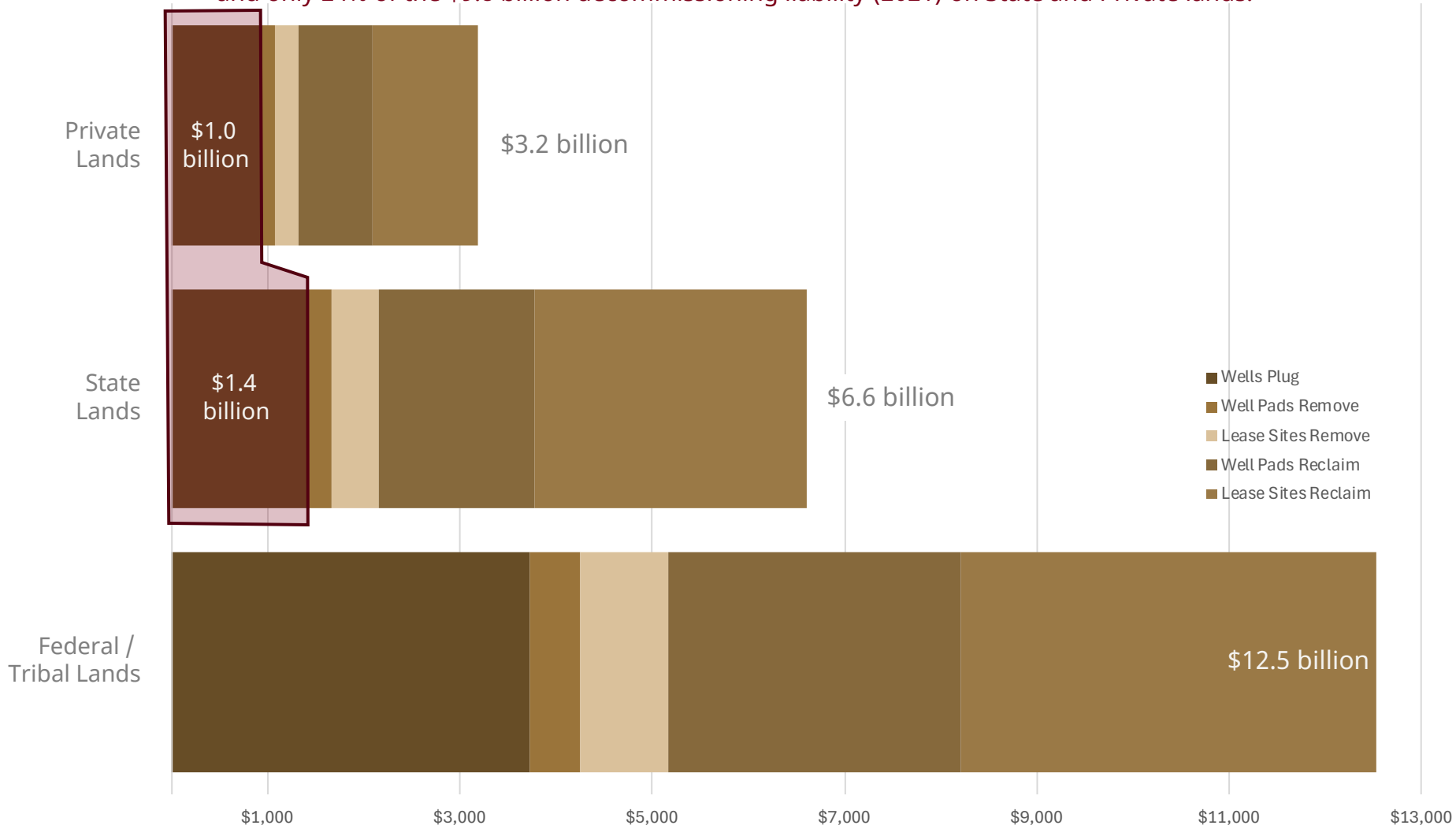
* Not all plugged wells are fully remediated.

Applicants' Exhibit 34: Total decommissioning and reclamation cost of upstream oil and gas operations in New Mexico after Vertex 2021 not adjusted for subsequent inflation.

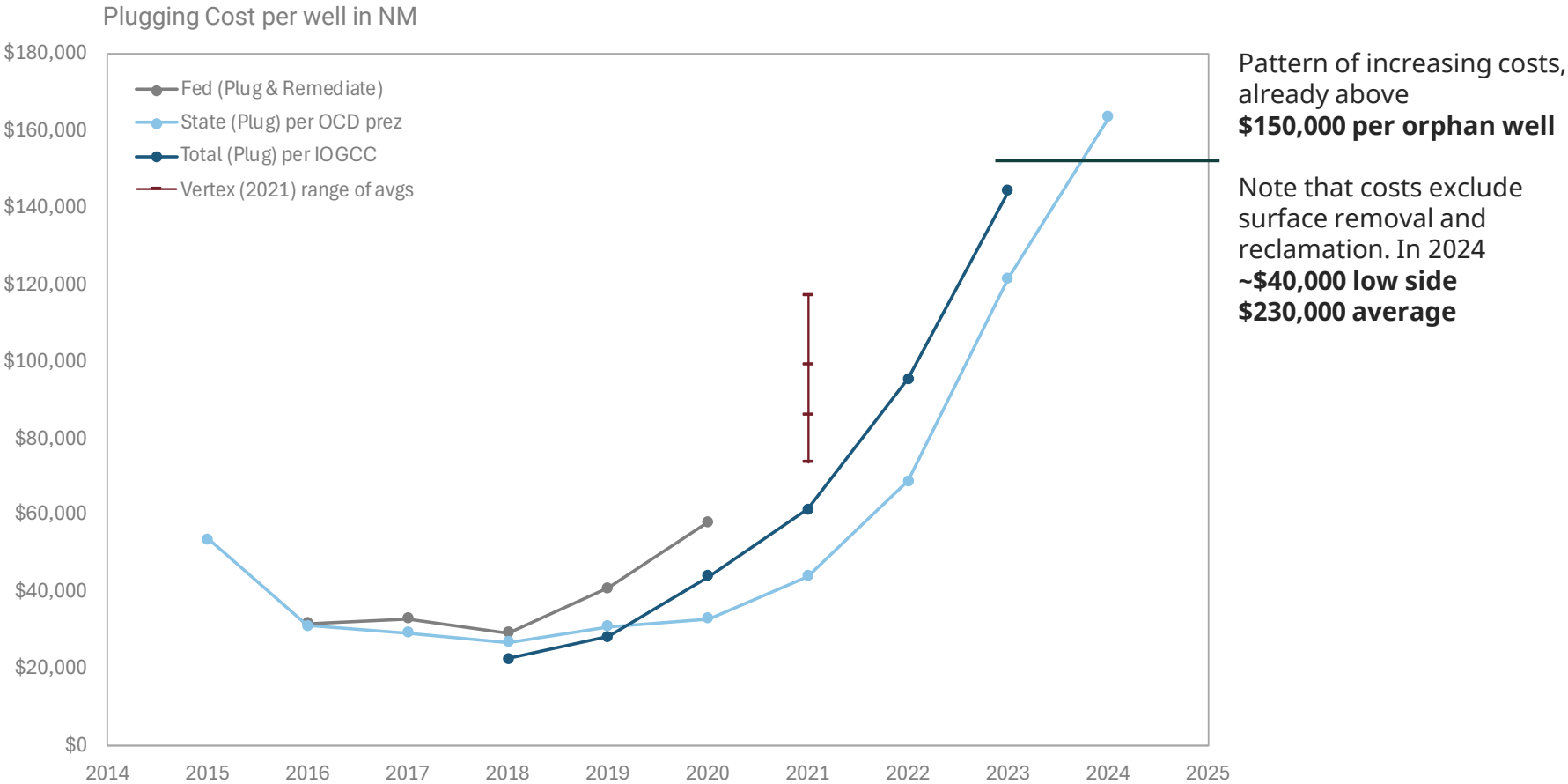
Received by EDO 02/19/2025

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Proposed financial assurance rules apply to only 11% of \$22.3 billion (2021) of upstream liability, and only 24% of the \$9.8 billion decommissioning liability (2021) on State and Private lands.



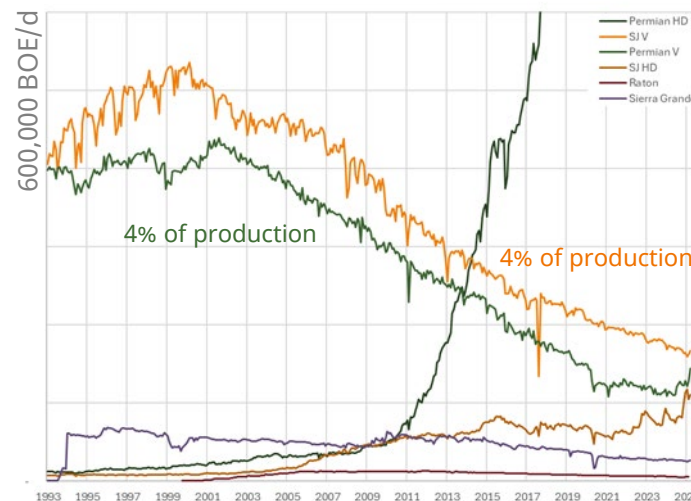
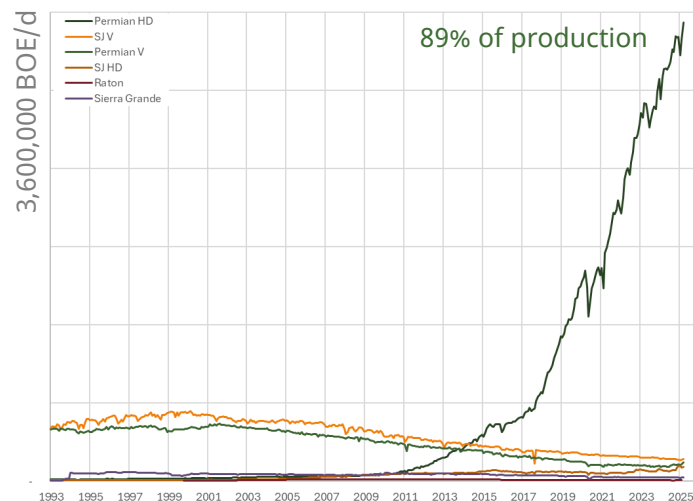
Note that the split between Private and Federal/Tribal land is assumed.
Note that the reclamation costs for Private and Federal/Tribal Lease Sites are extrapolated from State Lands



Applicants' Exhibit 33: History of daily production in New Mexico in six categories for major divisions among basins and types of wells shown on four vertical scales.

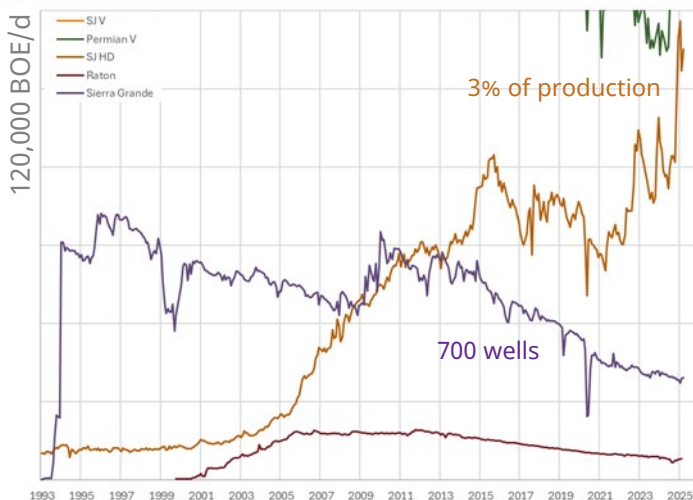
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Production dominated by Permian horizontal and directional wells

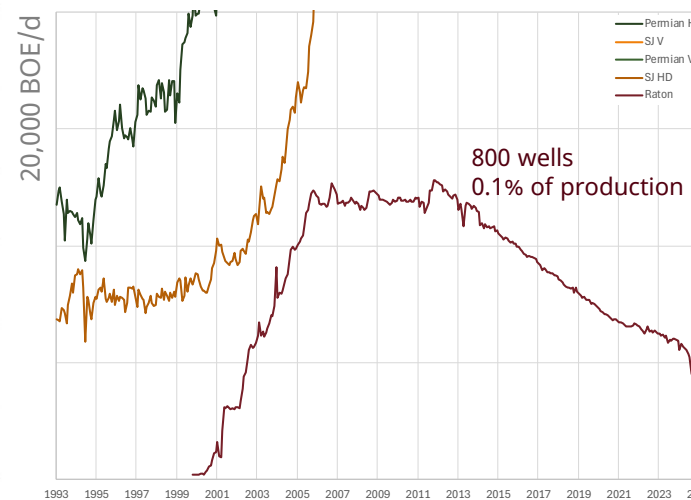


Vertical wells in San Juan and Permian have been declining more than 20 years

San Juan horizontal and directional increasing but small

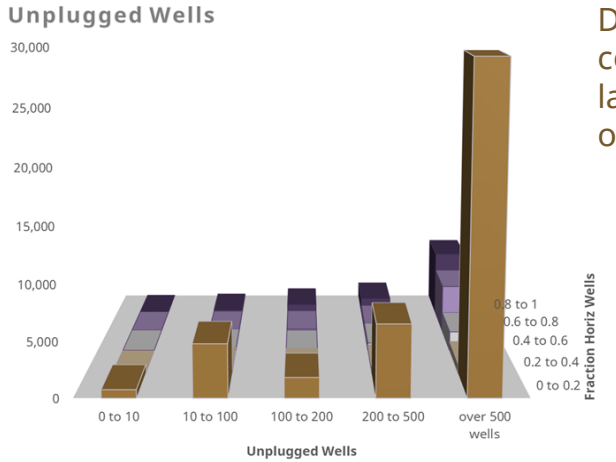
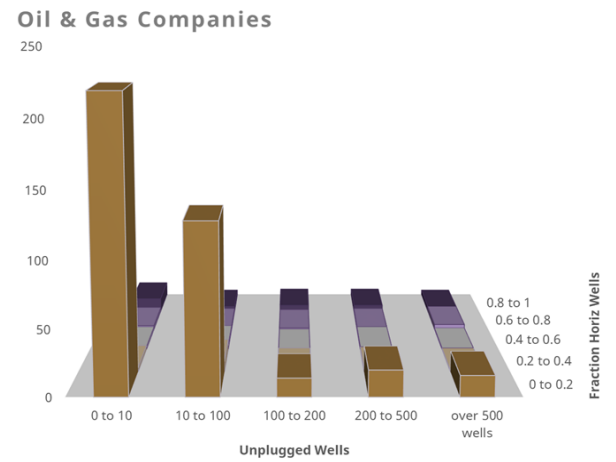


Sierra Grande CO2 supply is few wells and declining



Raton is few wells and declining

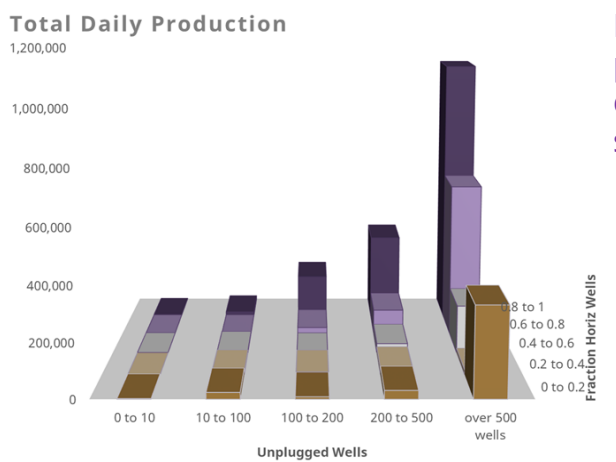
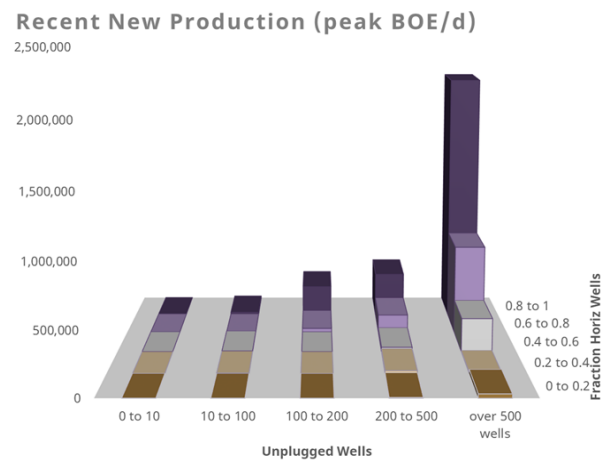
Among companies, 52% have fewer than 10 wells 83% have fewer than 100



Decommissioning concentrated in large companies of vertical wells

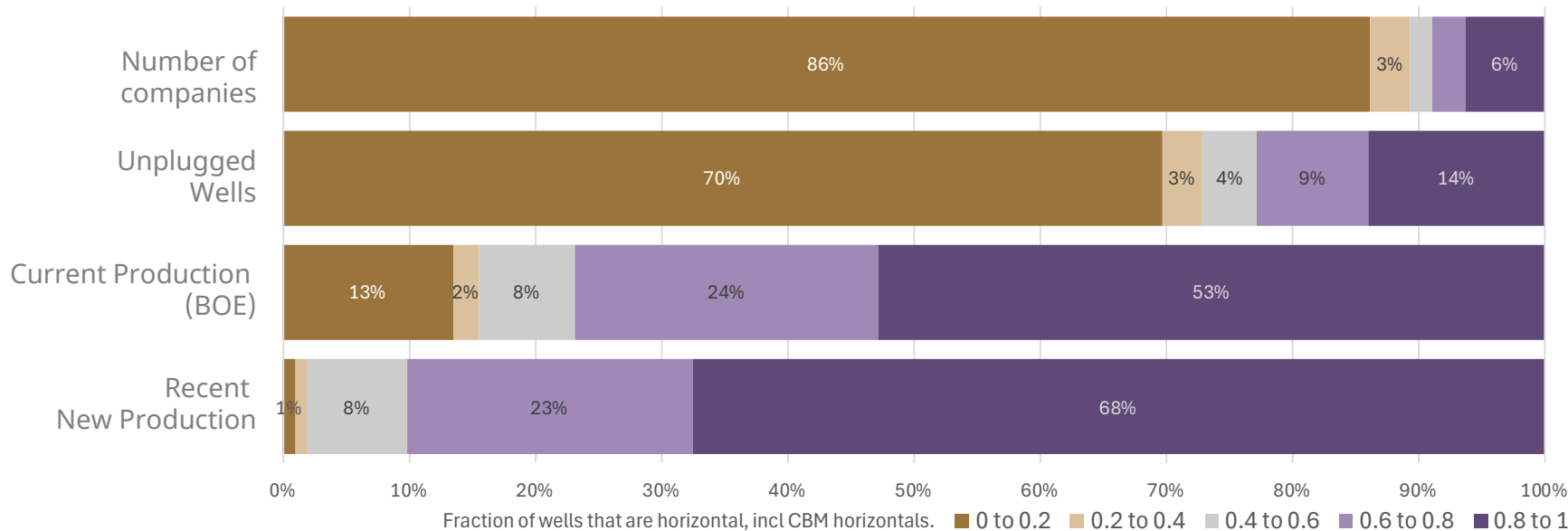
Large shale companies create most new production

99.8% of new production was horizontal Small companies contributed 0.05% of new production.



Most current production comes from large shale companies

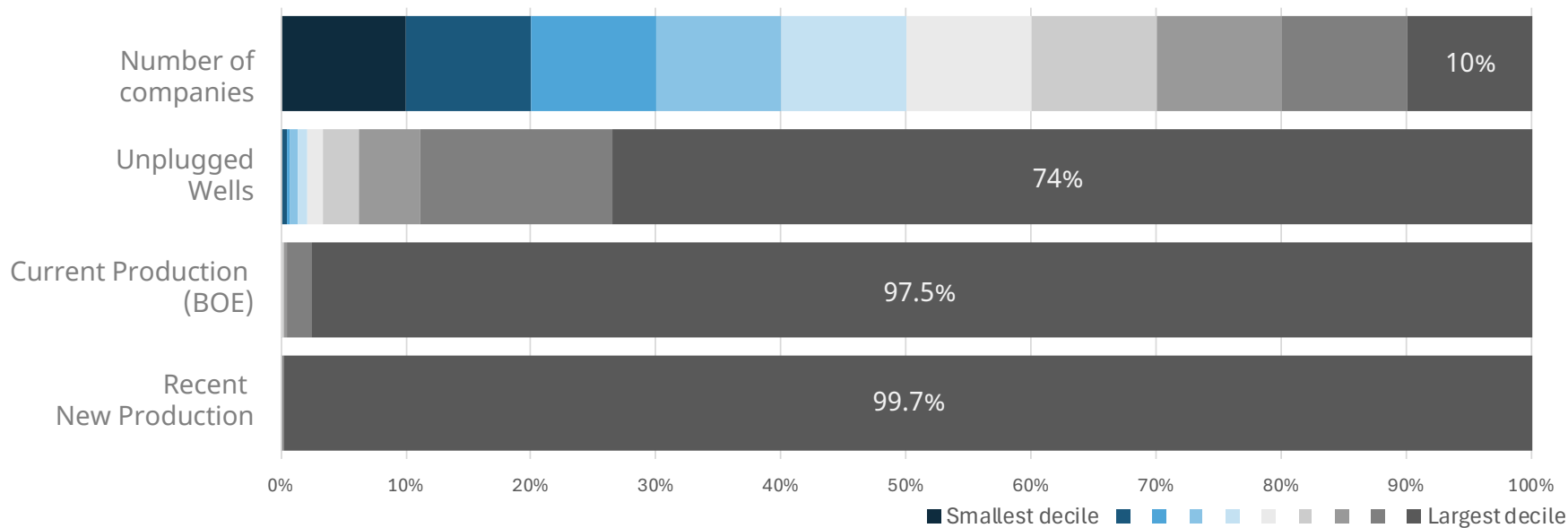
89% of companies focus on vertical wells, and they bear P&A responsibility for 73% of wells.
But they contribute only 16% of statewide production and **1.9% of recent production additions.**



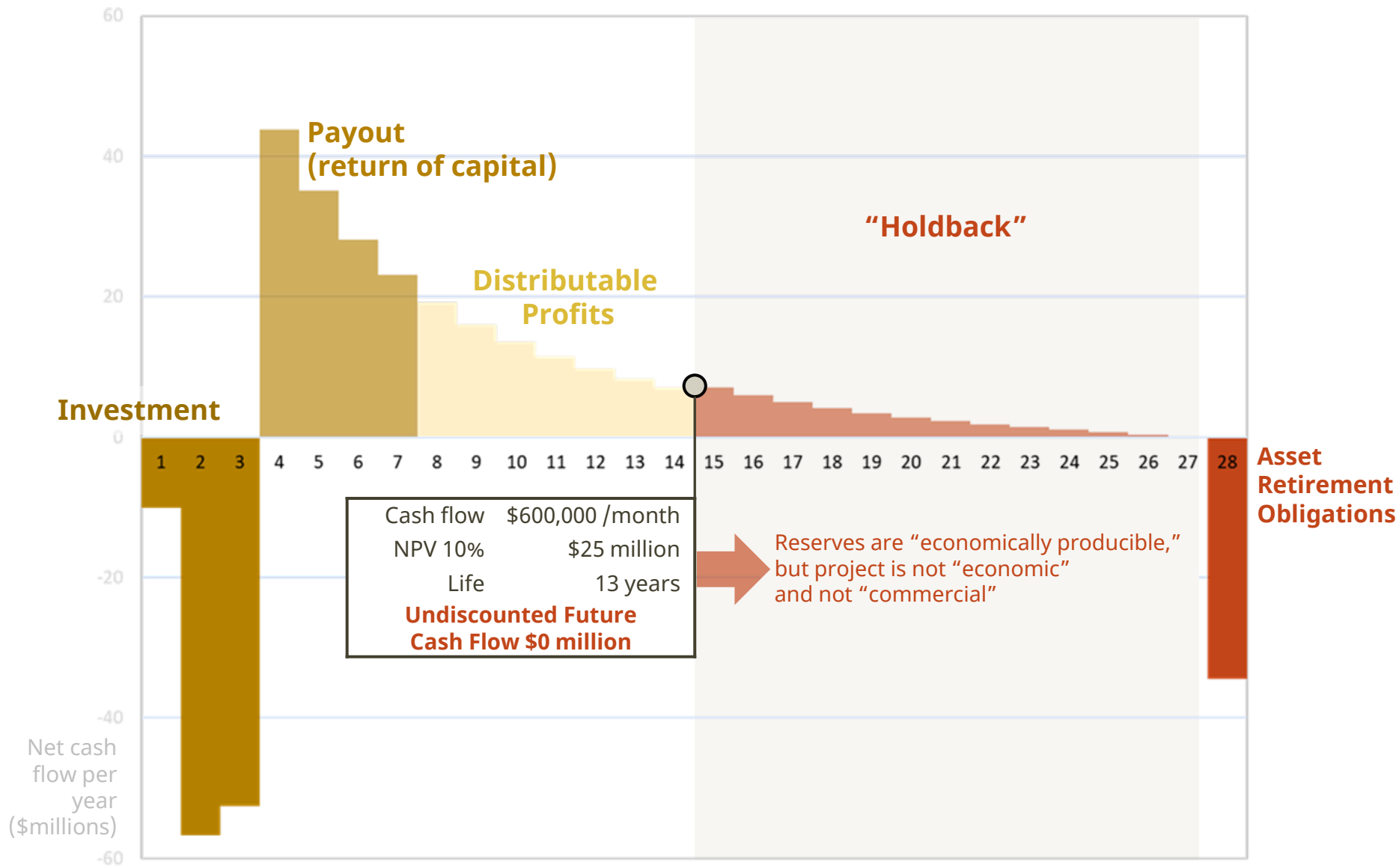
9% of companies focus on horizontal wells, and they operate 23% of wells.
But they contribute 77% of production and **90% of new production.**

The bottom 90% of companies are responsible for 26.5% of wells, but they contribute only 2.5% of current production and 0.3% of new production.

- 27 companies (6%) report zero production
- 183 companies (40%) report less than 10 BOE/d, total 0.02% of statewide volumes
- Smallest 85% of companies (391) produce 1.0% of statewide volumes



The top 10% of companies account for 97.5% of production and 99.7% of new production.



Proposed system of financial assurance and safeguards

Received by OCD: 10/15/2025

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Current Wells

Active		two-tier blanket bonds plus single-well bonds in defined cases	\$150,000 for single well \$250,000 for two or more wells
Individual wells	“Marginal”	extra by-well bond under newly defined conditions	< 180 days AND < 1000 BOE within consecutive 12-months determined once per year
	“No Beneficial Use”	action required under newly defined conditions can be appealed	< 90 days AND < 90 BOE within consecutive 12-months
	Inactive incl Temporarily Aband’d	extra by-well bond under already-defined conditions	determined as status changes
Portfolio concentration		by-well bond for all wells under newly defined condition	>15% Marginal and Inactive
Inflation adjustment		OCD discretion to increase by-well bond using formula	OCD discretion to increase once per year, based on CPI

Transfers

Track record	disclosure of compliance record of company and major owners	(not addressed)
Plugging plan	disclosure of current and on-going ability to pay for decommissioning	range of information corporate level present and future
Discretionary denial	option of OCD to deny transfer based on track record and plan	

Current Wells

Active

"Marginal"

"No Beneficial Use"

Inactive incl TA

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

19.15.8.9.C. Active wells. An operator shall provide financial assurance for wells that are covered by Subsection A of 19.15.8.9 NMAC and are not subject to Subsections D and E of 19.15.8.9 NMAC in one of the following categories:

(1) a one well plugging financial assurance in the amount of \$150,000 per well; ~~25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or~~

(2) a blanket plugging financial assurance in the amount of \$250,000 ~~following amounts~~ covering all the wells of the operator subject to Subsection C of 19.15.8.9 NMAC.:

- ~~(a) — \$50,000 for one to 10 wells;~~
- ~~(b) — \$75,000 for 11 to 50 wells;~~
- ~~(c) — \$125,000 for 51 to 100 wells; and~~
- ~~(d) — \$250,000 for more than 100 wells.~~

Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive and exp’d TA
Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

19.15.2.7.M(2) “Marginal well” means an oil or gas well that produced less than 180 days and less than 1,000 barrels of oil equivalent within a consecutive 12 month period.

19.15.8.9.D. Marginal wells and inactive wells. Notwithstanding the provisions in Subsection C(2) in this Section:

(1) As of the [effective date of amendments] a transferee operator shall provide a one well plugging financial assurance of \$150,000 for each marginal well prior to transfer.

(2) Beginning January 1, 2028, an operator shall provide a one well plugging financial assurance for each marginal well. Each operator with a marginal well or wells shall annually review the number of marginal wells registered to the operator and shall update the one well plugging financial assurance by May 1 of each year.

(3) An operator with 15 percent or more of their wells in marginal or inactive well status, or a combination thereof, shall provide a one well plugging financial assurance in the amount of \$150,000 for each well registered to the operator until the percentage of the operator’s marginal and inactive wells is decreased below 15 percent.

(4) An operator may furnish all necessary one well plugging financial assurance in the form of a single instrument.

Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive and exp'd TA

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

19.15.2.7.B(7) “Beneficial purposes” or “beneficial use” means an oil or gas well that is being used in a productive or beneficial manner such as production, injection or monitoring, and does not include use of a well for speculative purposes.

19.15.25.9 PRESUMPTIONS OF NO BENEFICIAL USE:

A. For oil and gas production wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not produced for at least 90 days and has not produced at least 90 barrels of oil equivalent.

B. For injection or salt water disposal wells, there is a rebuttable presumption that a well is not capable of beneficial use if, in a consecutive 12 month period, the well has not injected at least 90 days and at least 100 barrels of fluid.

C. The rebuttable presumptions in this Section do not apply to wells that have been drilled but not completed for less than 18 months and wells that have been completed but have not produced for less than 18 months.

...

Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive and exp’d

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

...

D. Within 30 calendar days after notice of a preliminary determination from the division that a well or wells are not being used for beneficial purposes, a well operator may submit an application for administrative review of such determination through the division’s electronic permitting portal. The division shall issue a final determination based on the application, and information available in division records, and any information requested by the division. The final determination may be appealed pursuant to 19.15.4 NMAC. Applications shall to demonstrate beneficial use of a well or wells and the operator shall provide any information requested by the division. Such documentation may shall include:

(1) Documentation demonstrating that the well is reasonably projected to produce in paying quantities; and

(2) Documentation demonstrating that the operator maintains adequate capitalization or reasonably projected revenue sufficient to meet all reasonably anticipated plugging and environmental liabilities of the well or wells and associated production facilities, not inclusive of any financial assurance associated with the well or wells; and

(3) Other relevant information requested by the division including a A plugging and abandonment plan as described in 19.15.9.9.B NMAC; and

(4) Other relevant information requested by the division.

Current Wells

Active

"Marginal"

"No Beneficial Use"

Inactive and exp'd TA

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

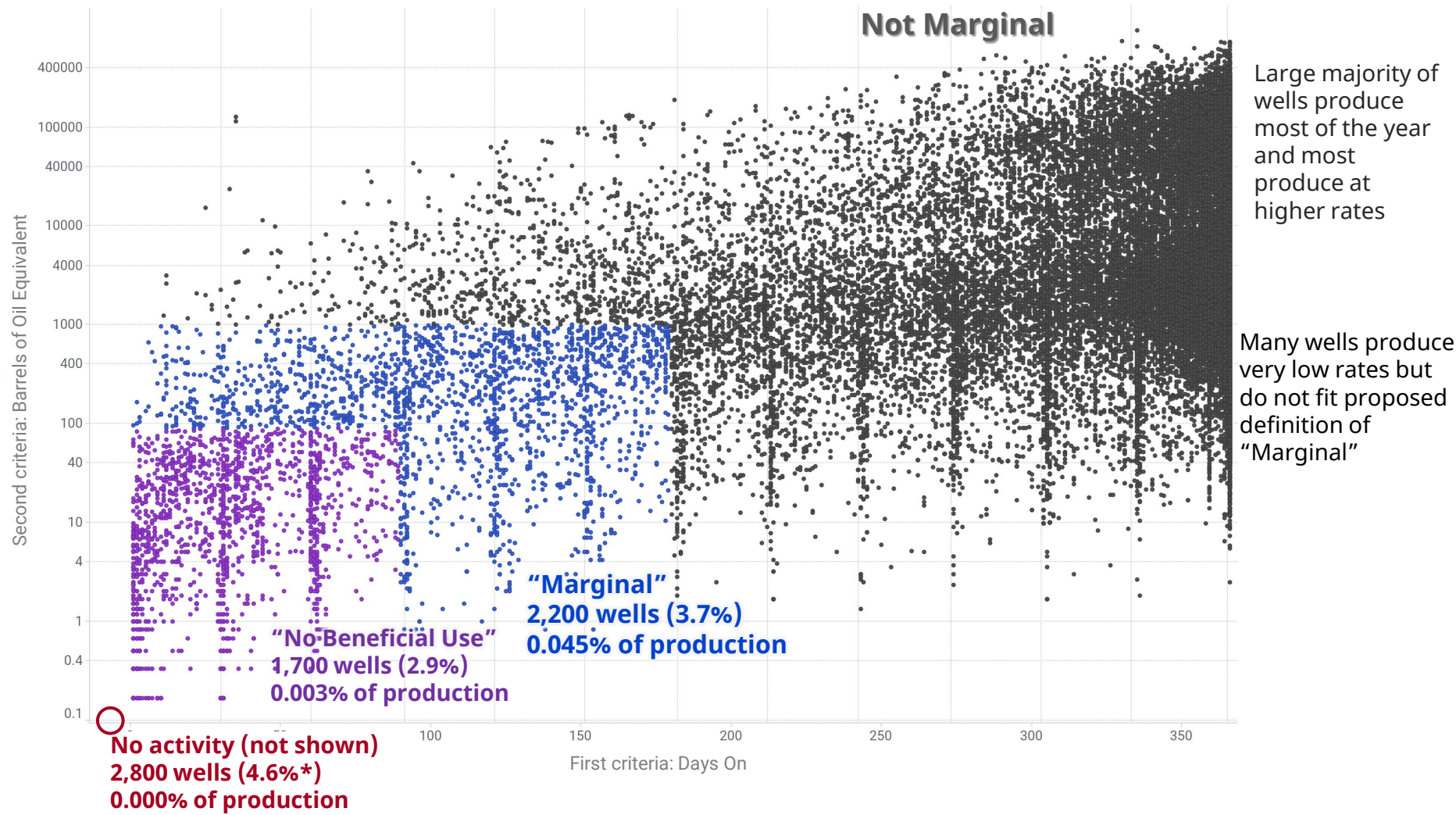
19.15.8.9.E.D. Inactive wells and wells in approved and expired temporarily abandoned status. An operator shall provide financial assurance for wells that are inactive and wells in approved and expired temporarily abandoned status, ~~covered by Subsection A of 19.15.8.9 NMAC that have been in temporarily abandoned status for more than two years,~~ or for which the operator is seeking approved temporary abandonment pursuant to 19.15.25.13 NMAC, in one of the following categories:

(1) a one well plugging financial assurance in the amount of \$150,000 per well; ~~\$25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or~~

(2) a blanket plugging financial assurance equal to an average of \$150,000 per well covering all wells of the operator subject to Subsection E.D of 19.15.8.9 NMAC.;

- ~~(a) \$150,000 for one to five wells;~~
- ~~(b) \$300,000 for six to 10 wells;~~
- ~~(c) \$500,000 for 11 to 25 wells; and~~
- ~~(d) \$1,000,000 for more than 25 wells.~~

Producing wells in New Mexico with 12 months of reported volumes in 2024



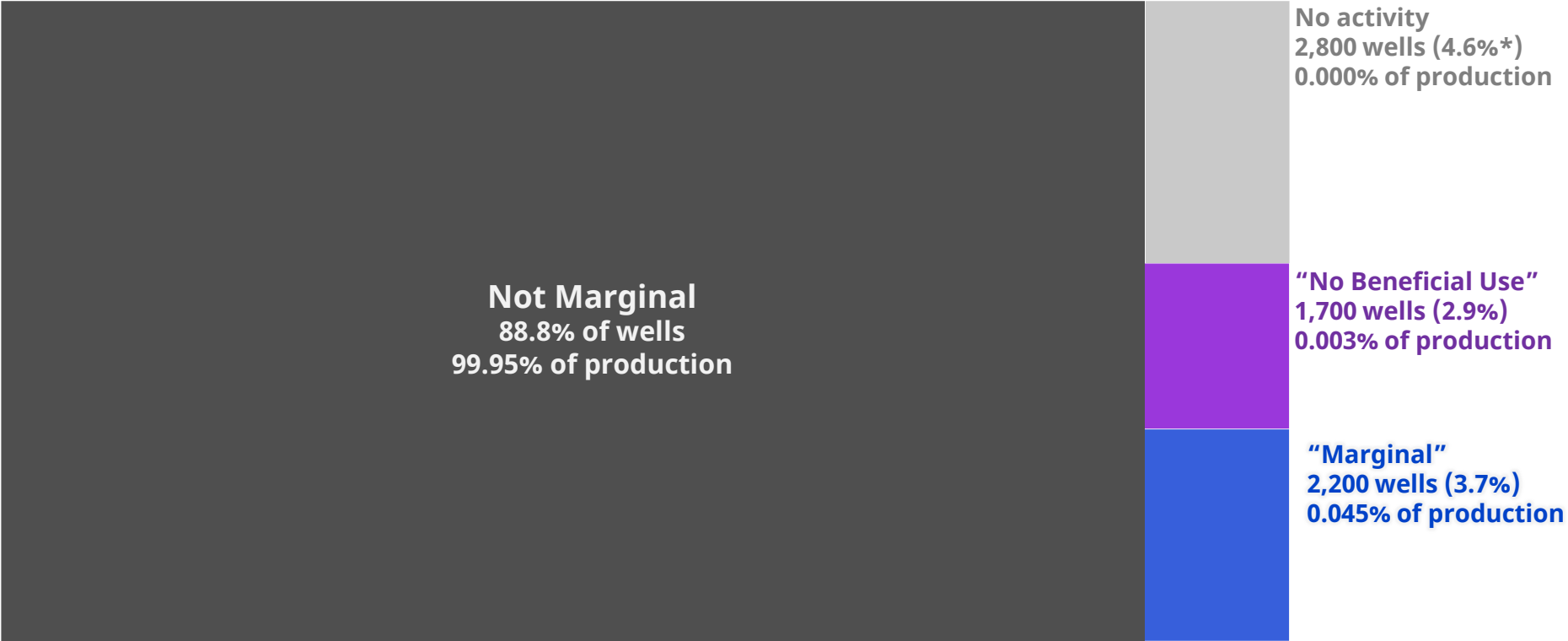
Applicants' Exhibit 41: Treemap of area representing numbers of wells in each category.

Received by OCD: 10/15/2025

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Unplugged wells*

Not Affected Affected by Rules

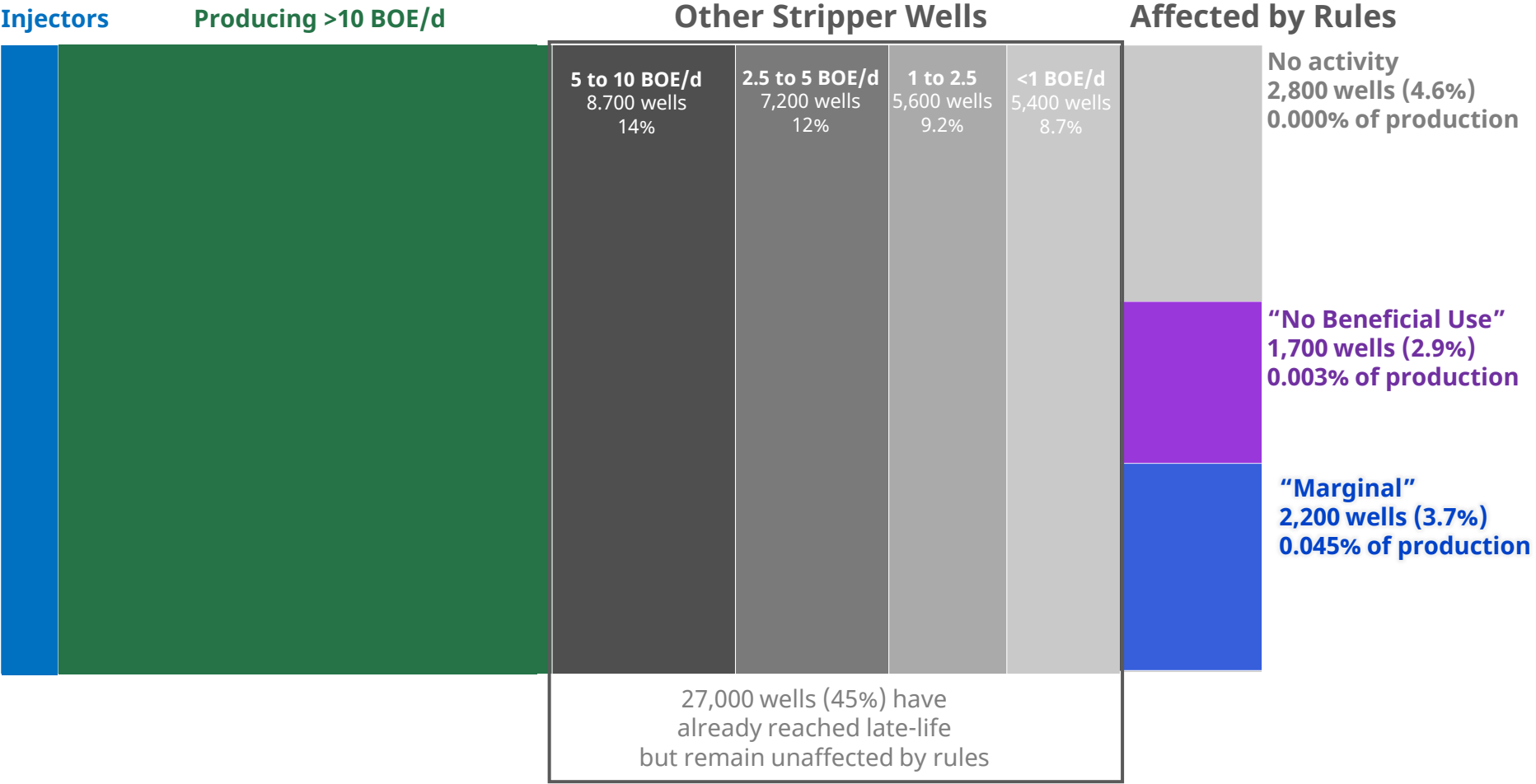


Applicants' Exhibit 42: Treemap of area representing numbers of wells in each category, with further detail on wells that do not qualify as "marginal."

Received by CDE on 5/15/25

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Unplugged wells*



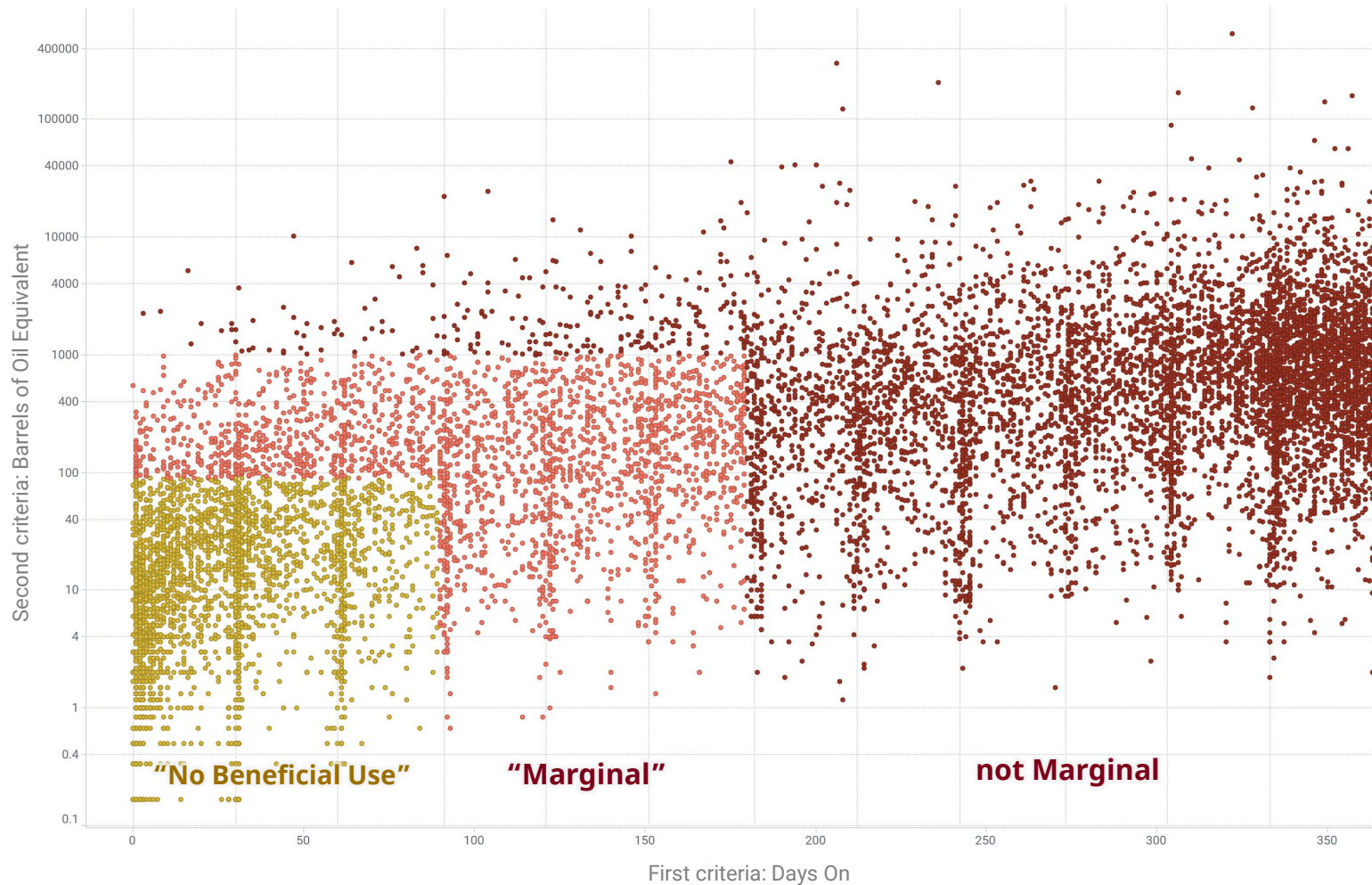
*Based on 60,536 wells including producers and injectors with less than 12 months of data but excluding wells in the process of drilling or completing or that serve other types of functions.

Applicants' Exhibit 43: Actual economic limit of production demonstrated by wells which ceased production between 2009 and 2023

Revised by PO 2025/2025

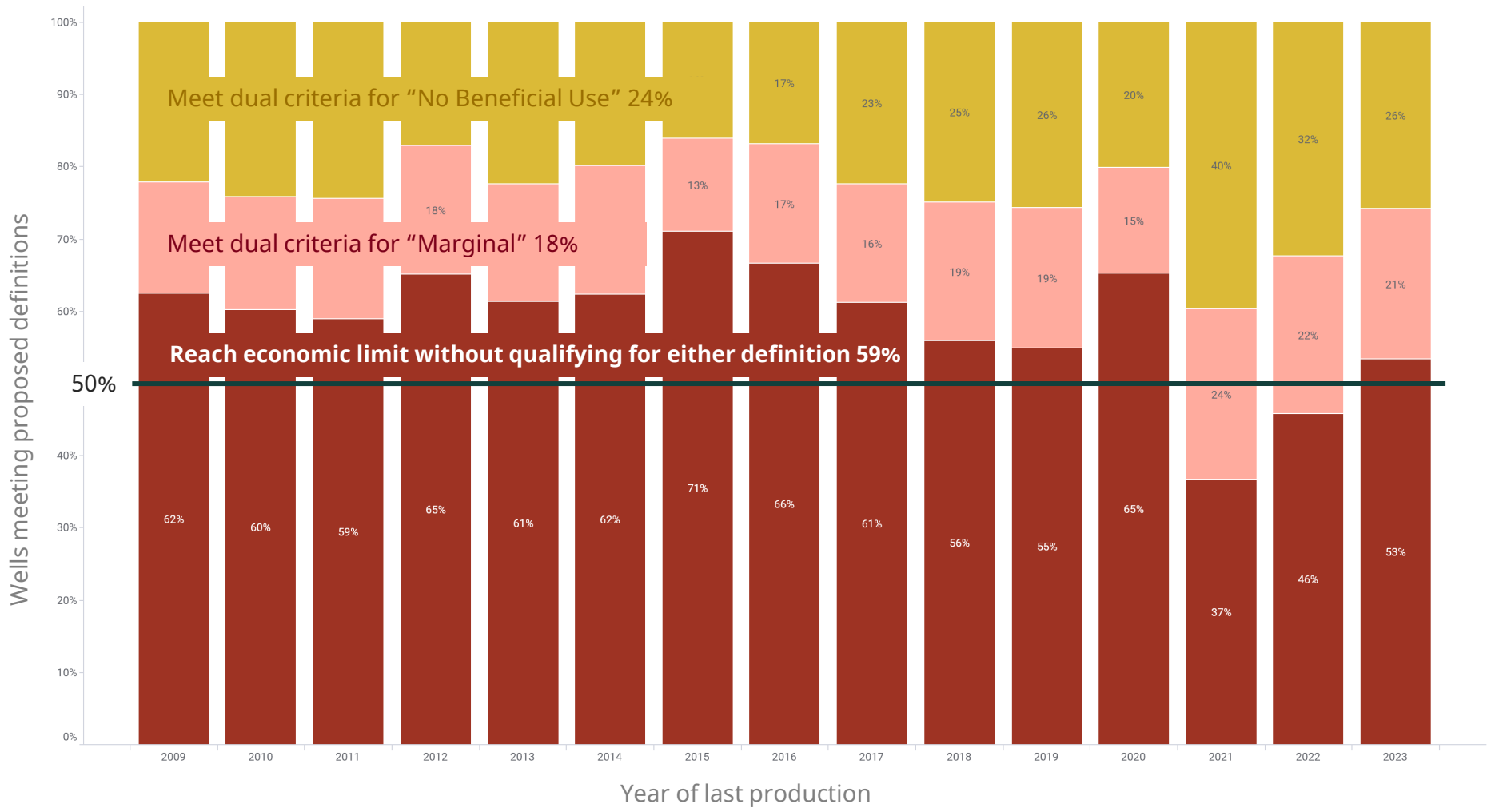
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Each dot represents the volume produced and days on for a single well that has ceased producing in the last 15 years



Majority of wells end production without qualifying as "Marginal" or "No Beneficial Use"

Applicants' Exhibit 44: Proportions of wells which qualified as “no beneficial use” and “marginal” at the point that production is known to have ceased.



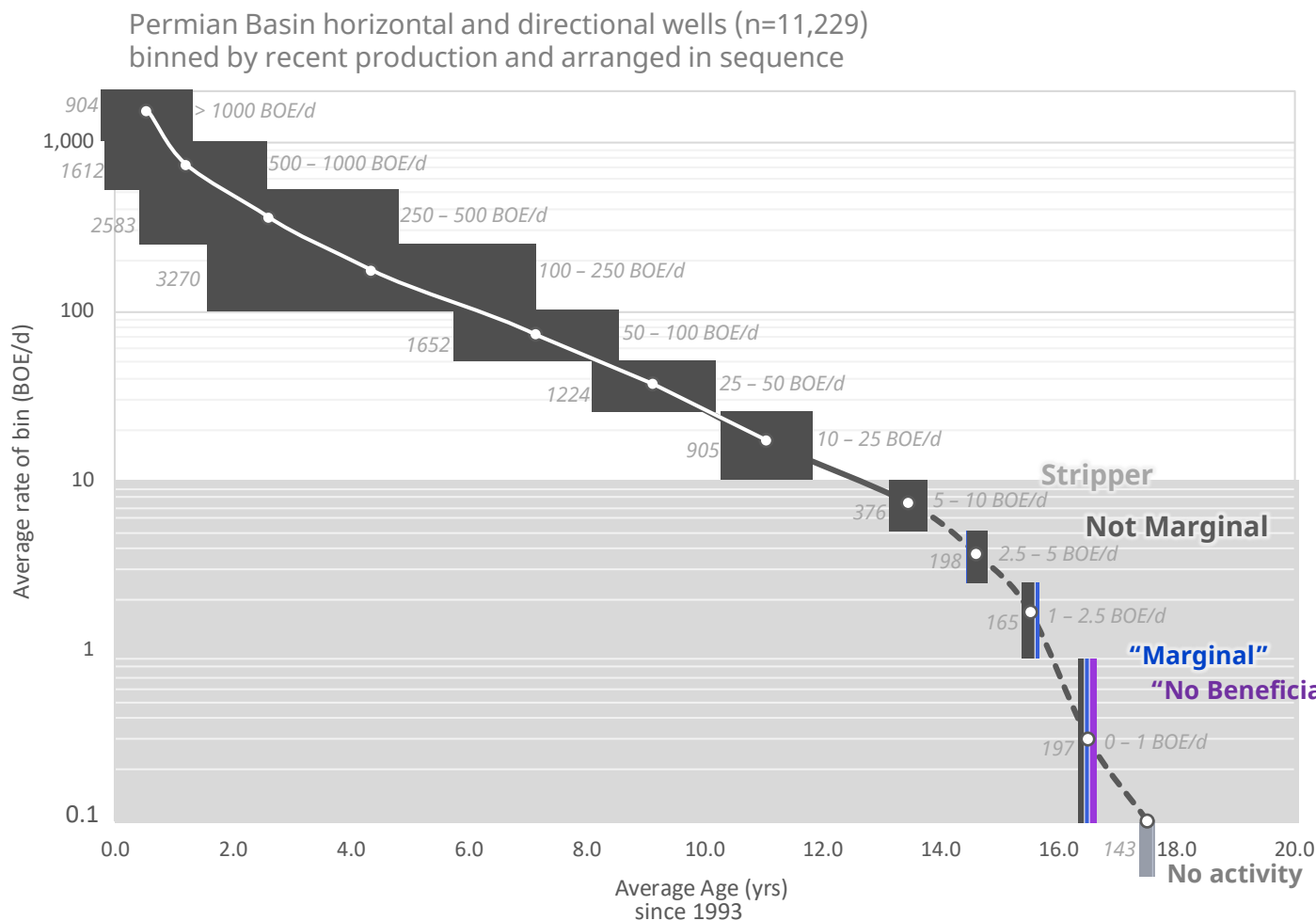
Applicants' Exhibit 45: Permian Basin horizontal and directional wells binned by daily production rate and positioned over average rate and average age for each bin.

Received by OPR: 01/19/2015

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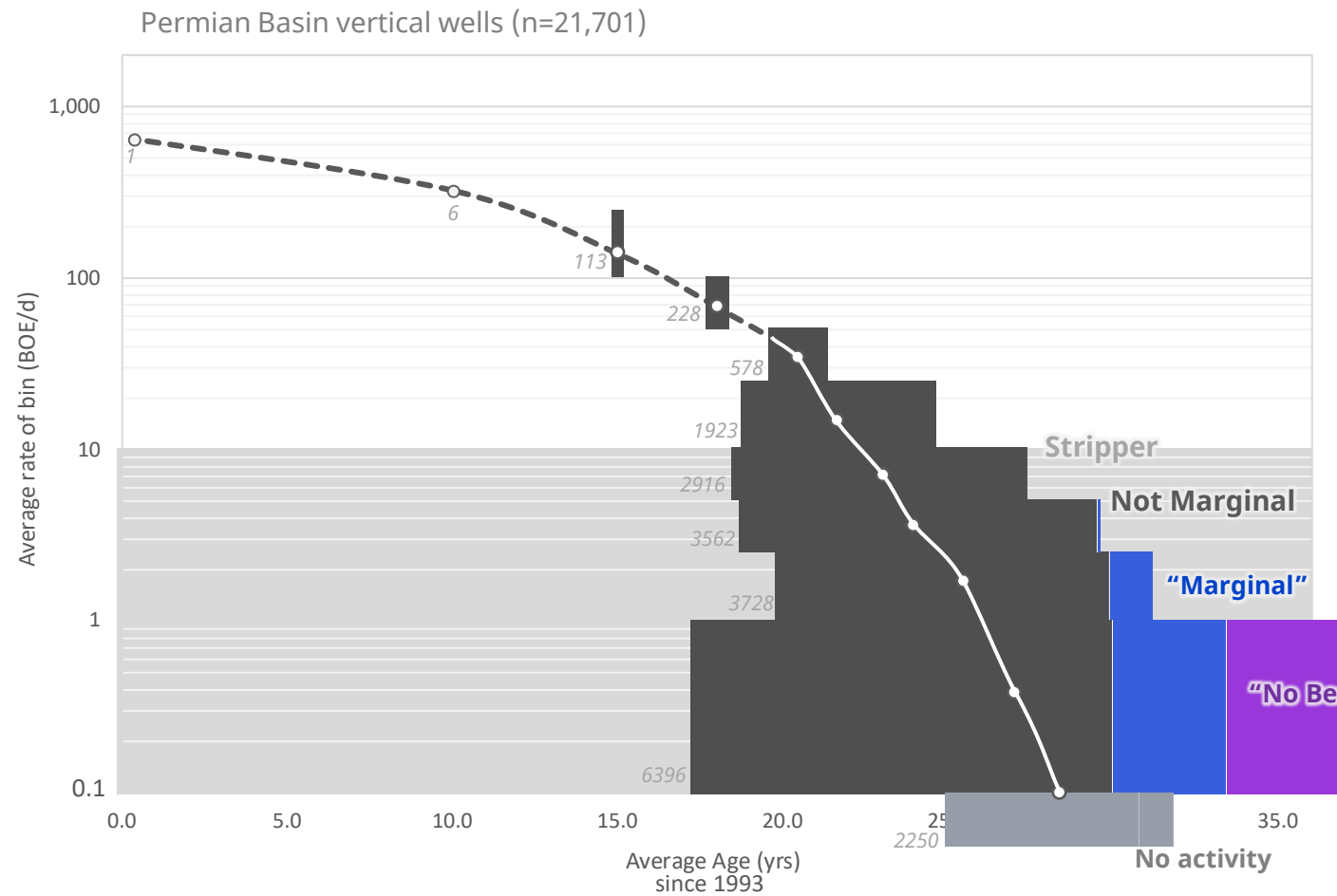
The path shows the sequence of binned well productivity vs average age in each bin, and the bars show the number of wells in each bin.

Most wells are less than 11 years old. The largest cohort is producing between 100 and 250 BOE/d



Note that average age was adjusted for segments shown with dashed lines in order to keep the average rates in sequence and without overlapping.

Applicants' Exhibit 46: Permian Basin vertical wells binned by daily production rate and positioned over average rate and average age for each bin.



Bars again show the stage of depletion along a depletion path.

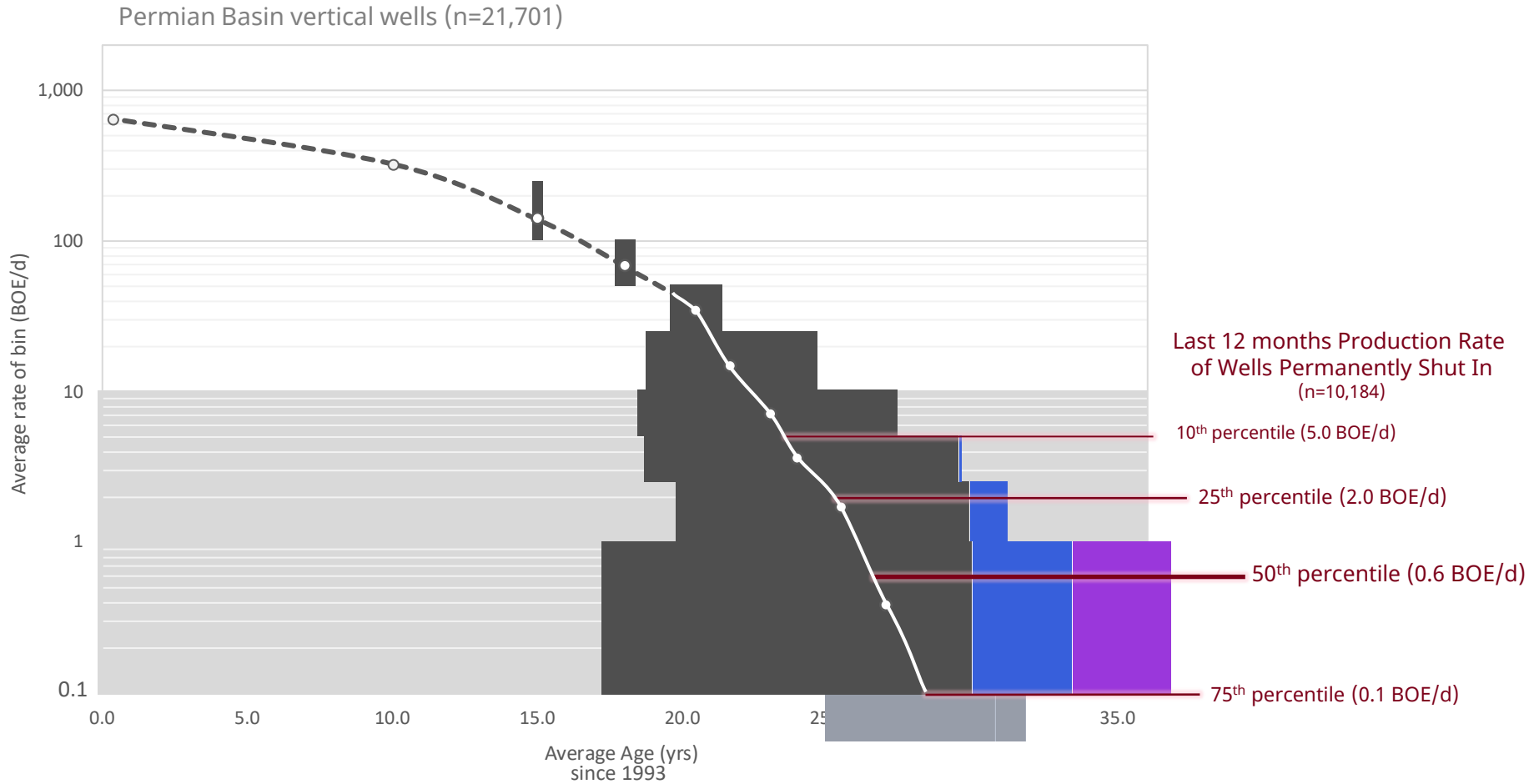
Though not many qualify as NBU or Marginal, vertical wells are systematically late in life. The large majority qualify as “stripper” wells, and the largest population produces less than 1 BOE/d.

Note that average age was adjusted for segments shown with dashed lines in order to keep the average rates in sequence.

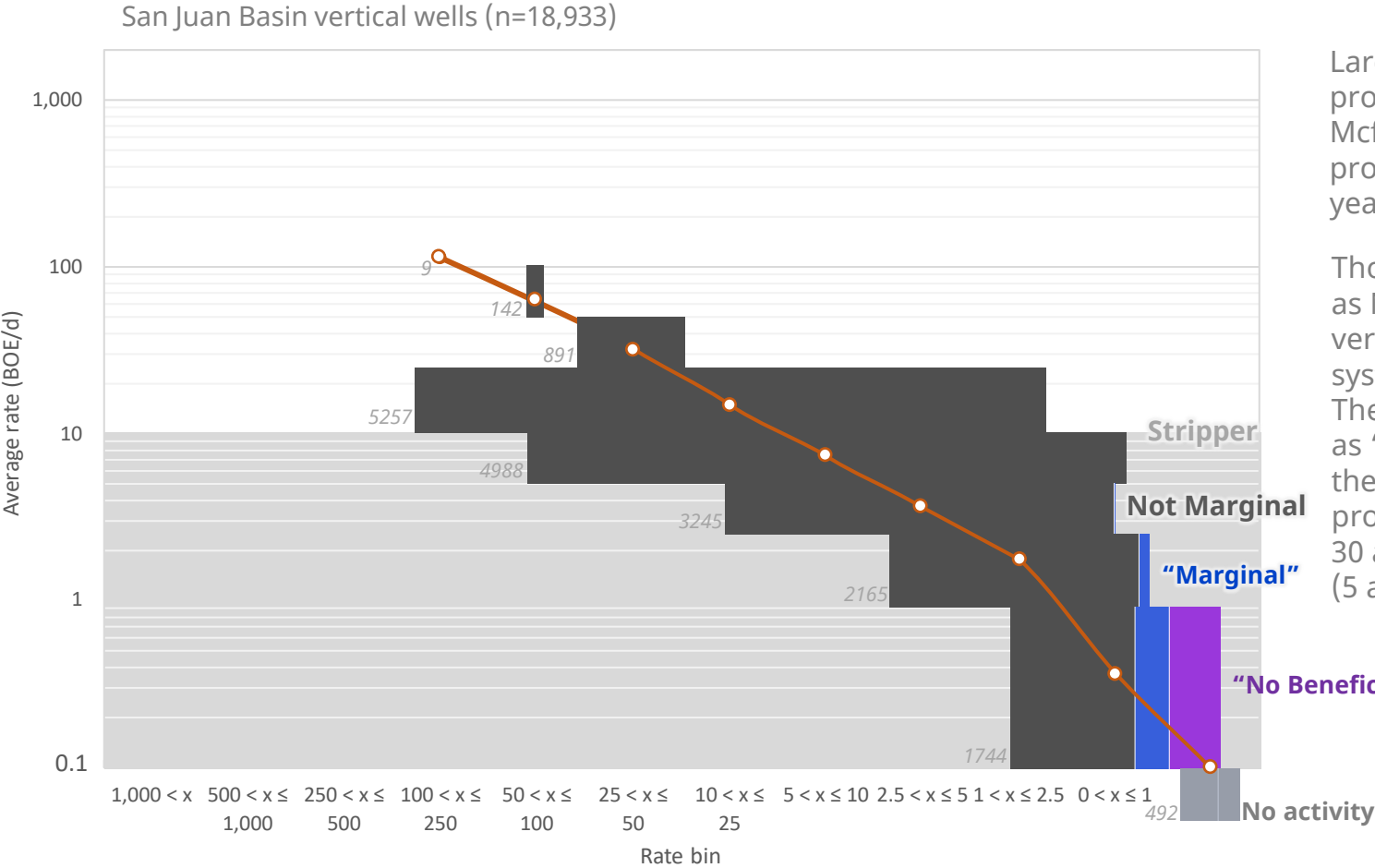
Applicants' Exhibit 47: Comparison of binned Permian Basin vertical wells to final rates of production demonstrated in the basin

received by the basin

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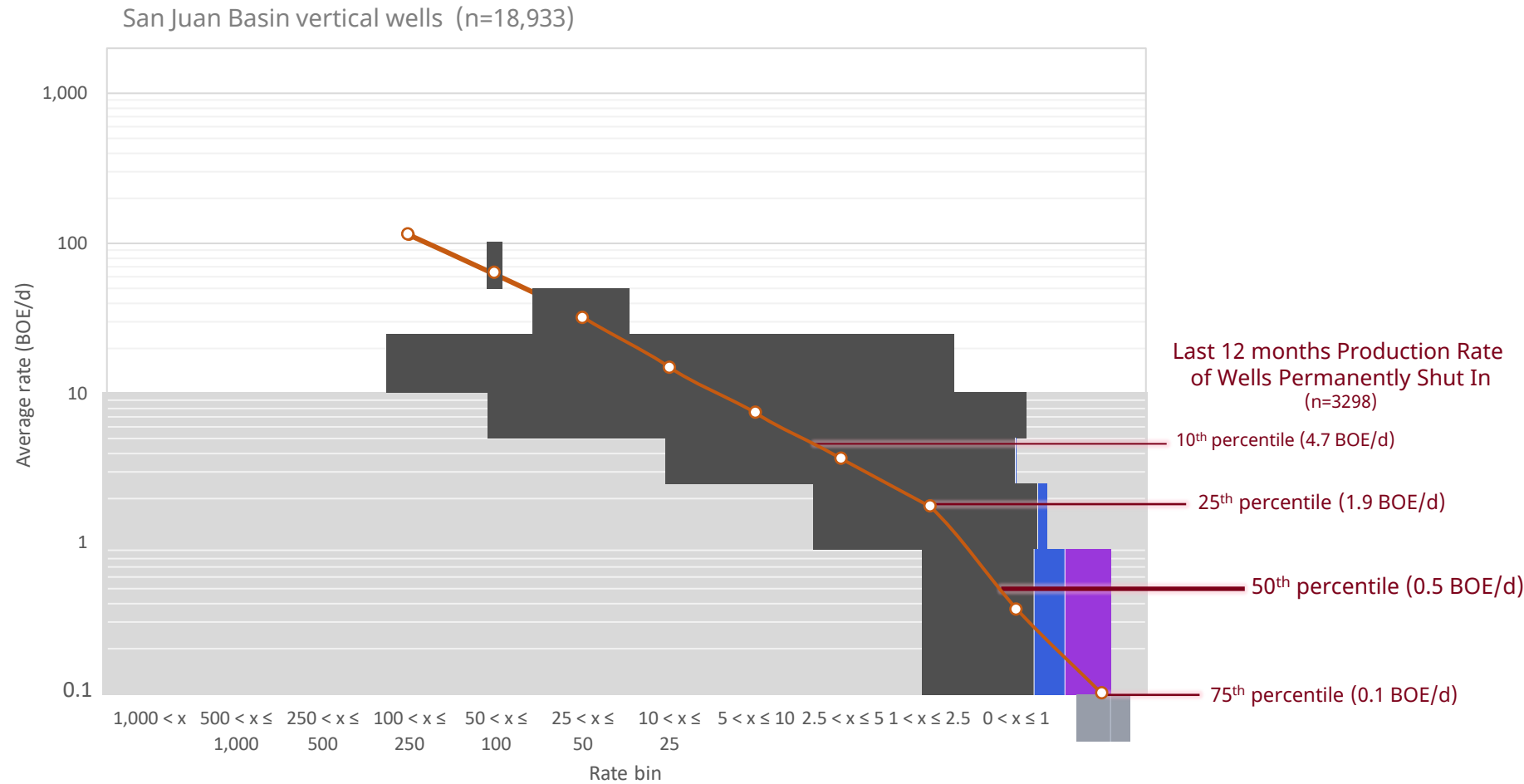
Note that average age was adjusted for segments shown with dashed lines in order to keep the average rates in sequence.



Applicants' Exhibit 50: Comparison of binned San Juan Basin vertical wells to final rates of production demonstrated in the basin

Received by DOE: Dec 2025

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Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive incl TA

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

19.15.8.9.D. Marginal wells and inactive wells.

Notwithstanding the provisions in Subsection C(2) in this Section:

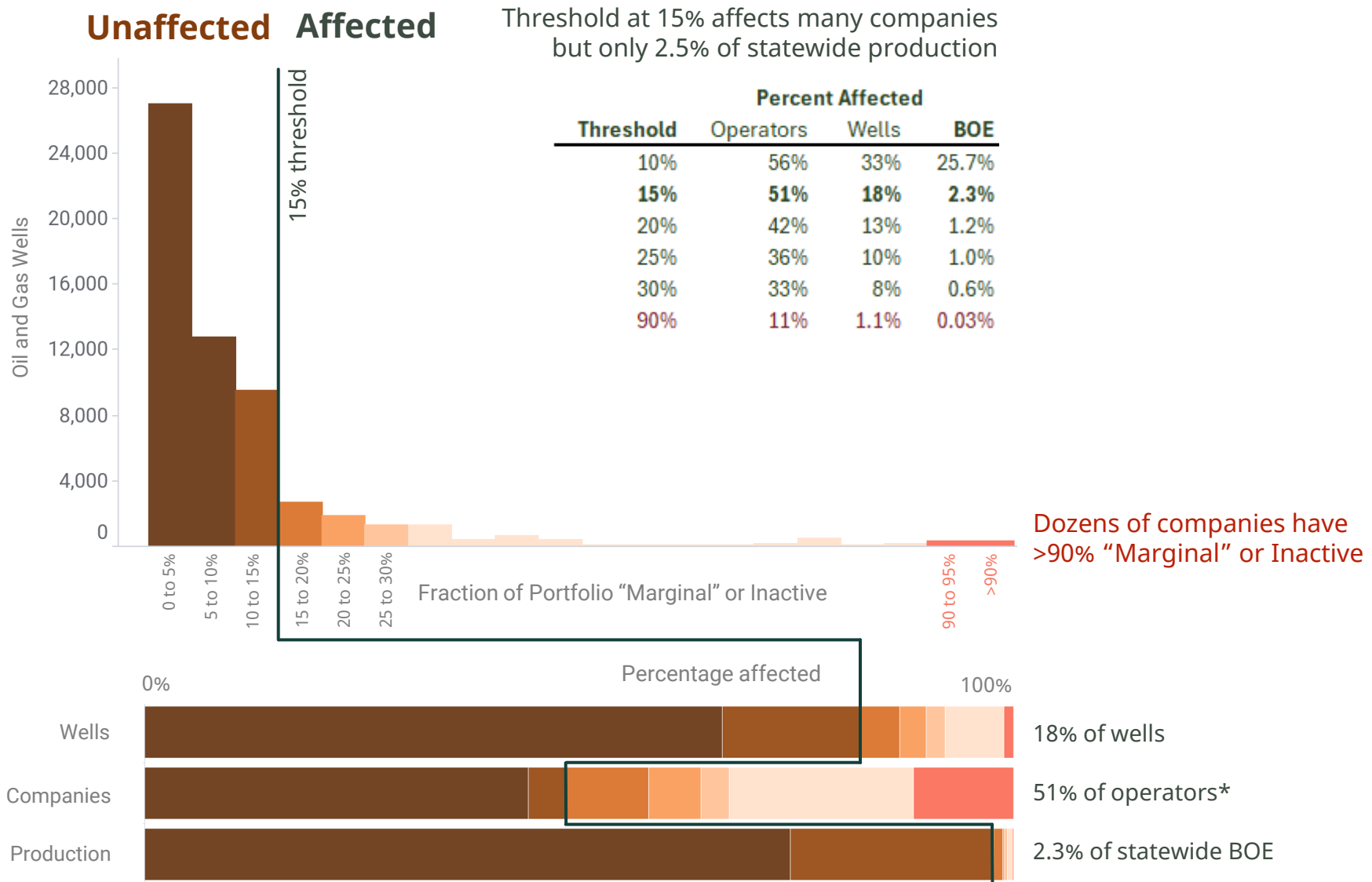
(1) As of the [effective date of amendments] a transferee operator shall provide a one well plugging financial assurance of \$150,000 for each marginal well prior to transfer.

(2) Beginning January 1, 2028, an operator shall provide a one well plugging financial assurance for each marginal well. Each operator with a marginal well or wells shall annually review the number of marginal wells registered to the operator and shall update the one well plugging financial assurance by May 1 of each year.

(3) An operator with over 15 percent or more of their wells in marginal or inactive well status, or a combination thereof, shall provide a one well plugging financial assurance in the amount of \$150,000 for each well registered to the operator until the percentage of the operator’s marginal and inactive wells is decreased below 15 percent.

(4) An operator may furnish all necessary one well plugging financial assurance in the form of a single instrument.

Applicants' Exhibit 52: Distribution of the concentration of marginal and inactive wells in oil and gas company portfolios and the combined size of portfolios above a range of thresholds.



*Note that this count is based on operators who reported production or injection during 2024 and does not include companies responsible for wells that did not report production or injection. It does include some interpretation of company names.

Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive and TA

Portfolio

Inflation adjustment

Transfers

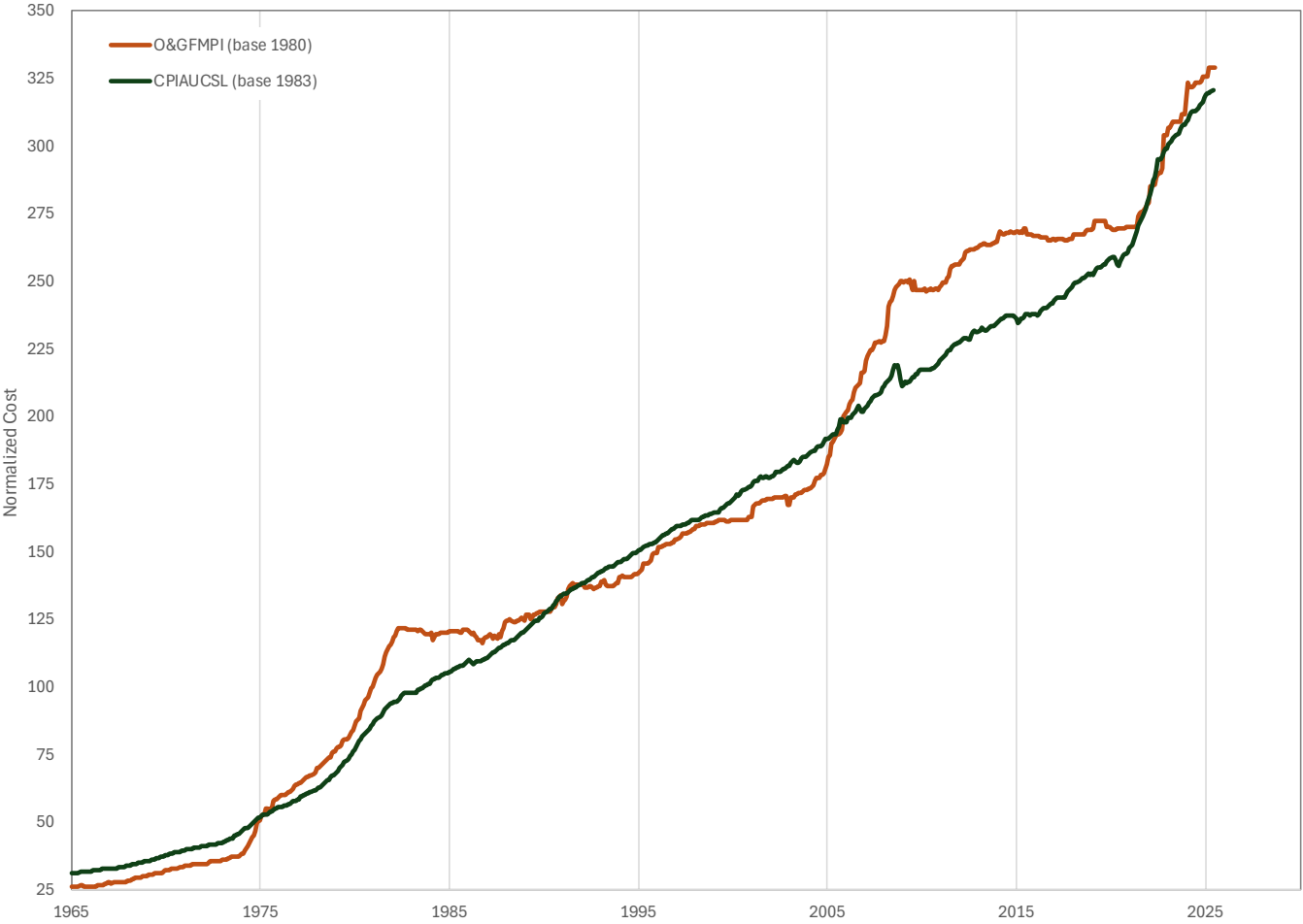
Track record

Plugging plan

Discretionary denial

19.15.8.9.G. On January 1, 2028 and on January 1 of each successive year, the division may adjust the financial assurance amounts provided by Subsections C(1), D, E, and F of this Section by multiplying the financial assurance as of January 1, 2027 by a fraction, the numerator of which is the consumer price index ending in September of the previous year and the denominator of which is the consumer price index ending September 2026; provided that any financial assurances shall not be adjusted below the minimum amounts required in Subsections C(1), D, E and F of this Section as a result of a decrease in the consumer price index. By November 1, 2027 and by November 1 of each successive year, the division shall post on its website the financial assurance requirements in Subsections A through E of this Section for the next year. As used in this section, "consumer price index" means the consumer price index, not seasonally adjusted, for all urban consumers, United States city average for all items, or its successor index, as published by the United States department of labor for a 12 month period ending September 30.

Comparison of Consumer Price Index and Oilfield Equipment Price Index



Current Wells

Active

“Marginal”

“No Beneficial Use”

Inactive and TA

Portfolio

Inflation adjustment

Transfers

Track record

Plugging plan

Discretionary denial

19.15.9.9.B. . . . The new operator shall not commence operations until the division approves the application for change of operator. The plugging and abandonment plan shall be certified by an authorized representative officer, director, or partner of the new operator and shall demonstrate that the new operator has and will have the financial ability to meet the plugging and abandonment requirements of 19.15.25 NMAC for the well or wells to be transferred in light of all the operator’s assets and liabilities. The division may request the operator to provide additional information including corporate credit rating, corporate financial statements, long-term liabilities, reserves and economics report, records of the operator’s historical costs for decommissioning activities, estimate of the operator’s decommissioning obligations, and history of inactive wells and returning wells to production.

REBUTTAL TESTIMONY

Change from prior practice and other states

e.g. Arthur at 31 and 49, McGowen at 92 and 109-111, Mitchell at 4

How changes are implemented

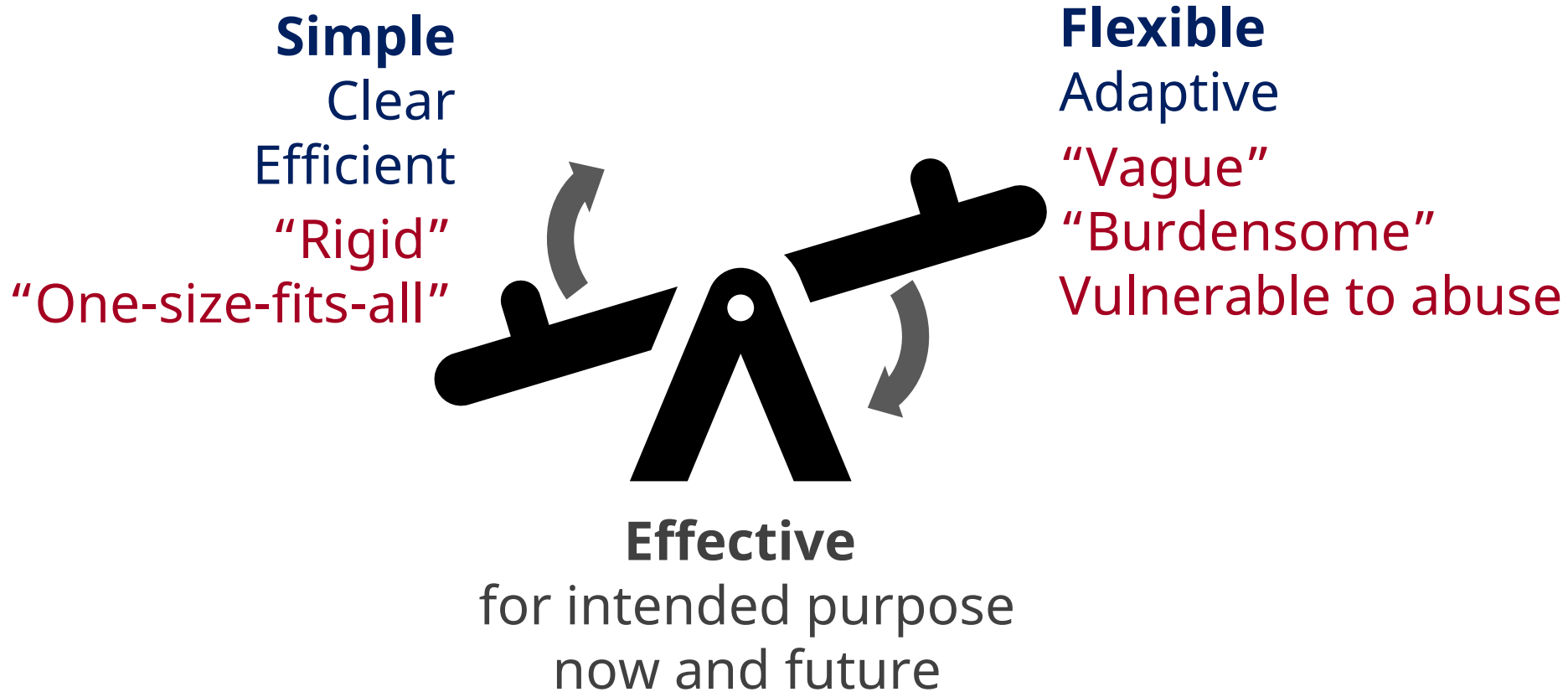
e.g. Arthur at 4, Felix at 2, Arscott at 23, McGowen at 132, Emmerick at 7

Cost to industry (and indirectly to the public)

e.g. Gilstrap 3, Sharpe at 7, Harvard at 9, Arthur at 38, Arscott at 13

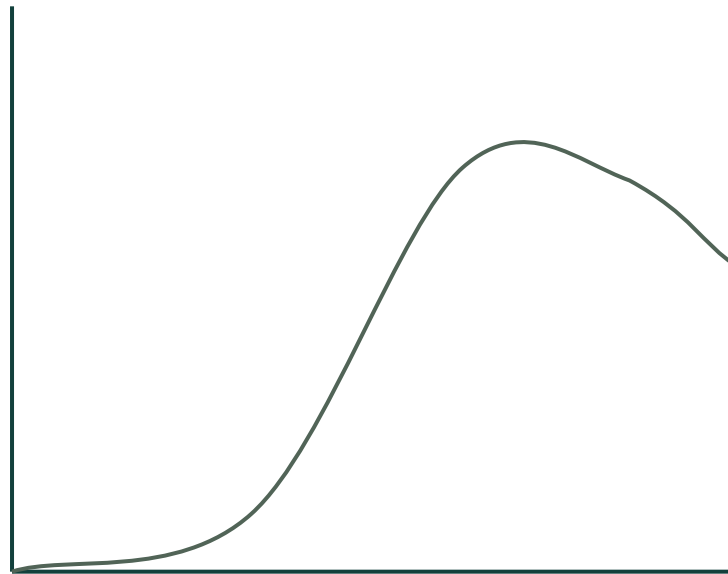
But not the benefit to the state

Balance of considerations in writing policy



Net Benefit for greatest public good

Costs
to public
direct and
indirect



Benefits
to public
direct and
indirect

First source of understanding optimization is analog experience

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Researcher	Jurisdiction	Findings
Dachis, 2017 (cited by Arscott at 2)	Alberta	<i>[O]nce a well enters the inactive phase, the province should require companies to hold insurance to cover the cost of cleaning up the well.</i>
Boomhower, 2019 (cited by Arscott at 2)	Texas	<i>About 5 percent of firms, especially small firms and firms with poor environmental records, left the industry. Production was reallocated from small to large producers. Very low-producing projects, which were most likely to have been socially inefficient after considering environmental costs, were shut down. However, the overall rate of oil and gas production in the industry was unaffected.</i> <i>A back-of-the-envelope comparison of the value of avoided environmental damages and compliance costs suggests that the policy yielded substantial welfare gains.</i> <i>[I]t seems likely that somewhat higher bond requirements could yield further benefits given that Texas' requirements are still below potential damages.</i>
Harleman, 2018	Pennsylvania	<i>Increasing bonds to match the best estimates of reclamation costs is likely to create a socially desirable outcome. . . . In the majority of plausible scenarios, these benefits outweigh the wages and royalties paid to state residents that would be forgone if operators respond to increased bonds by drilling fewer wells.</i>

First source of understanding optimization is analog experience

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Researcher	Jurisdiction	Findings
Muehlenbachs, 2015 and 2017	Alberta	<i>This article demonstrates that in designing policies to decommission oil and gas wells, unnecessary weight has been placed on not jeopardizing production.</i> <i>The paper summarized here demonstrates that policies for plugging and abandoning oil and gas wells in Alberta are biased towards inexpensive potential restart rather than environmental protection or remediation.</i>
Davis, 2015	U.S.	<i>[I]n theory, negotiating bond amounts on a well-by-well basis could lead to more efficient bond amounts, in practice it adds to the overall economic cost of bonding requirements because it causes the diversion of resources to non-productive uses, such as negotiating with regulators over bond amounts.</i>

First source of understanding optimization is analog experience

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Researcher	Jurisdiction	Findings
Lange & Redlinger, 2018	North Dakota	<i>In discussing the rule changes, the president of the North Dakota Petroleum Council stated “They are the most onerous regulatory changes we’ve ever seen,” and considered North Dakota’s regulations “now overly burdensome and among the most stringent and costly in the nation.”</i> <i>Results find no statistical change in the pace of drilling wells after the ND regulations came into effect. This result is consistent across multiple specifications, including different bandwidths and functional forms of the data. Production of oil did not on average decline with the imposition of the ND regulations, however the distribution of production amongst firms did change.</i> <i>The reduction in production for small operators in ND after the regulation went in effect, relative to production in MT, is about 0.5%. The reduction in production from small operators seems to be coming from operator exit.</i> <i>Taken together, these results imply that. . .the regulation had little, if any, impact on drilling and production. . . .</i>

Alternative Models

e.g. Bradley at 5, Gilstrap at 7, McGowen at 14

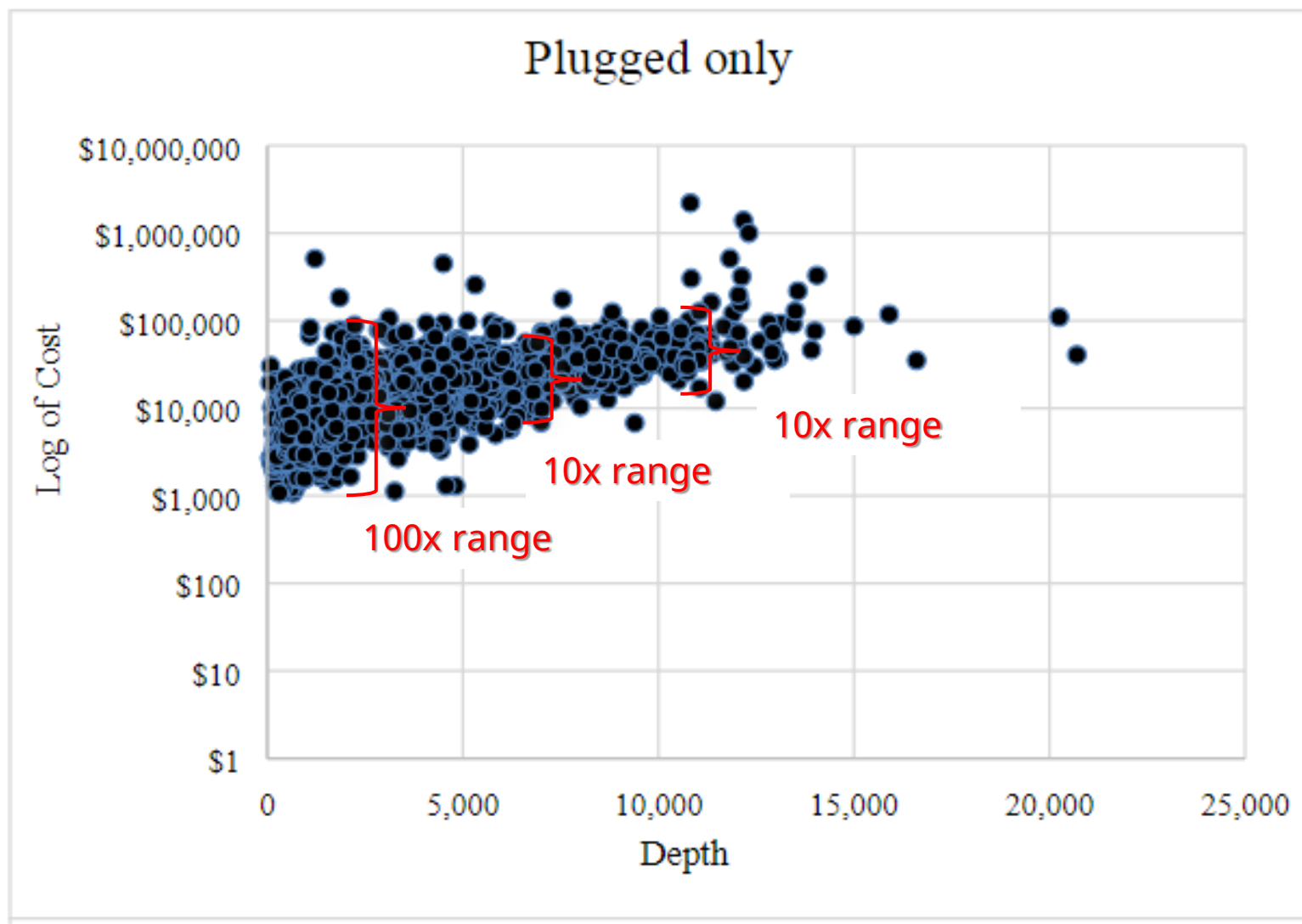
“Risk-based” variations and available data

e.g. Felix at 15, Arthur at 4, McGowen at 9, Arscott at 4, Andrews at 2, Sharpe at 5

“Typical” or “median” costs

e.g. Felix at 22, Arthur at 29, McGowen 78 and 80, Arscott at 4

Applicants' Exhibit 78: Figure S2 of Raimi 2021 showing the relationship of the logarithmic of plugging-only cost against the depth of the wells in a sample across five states with brackets to show ranges of 10x and 100x.

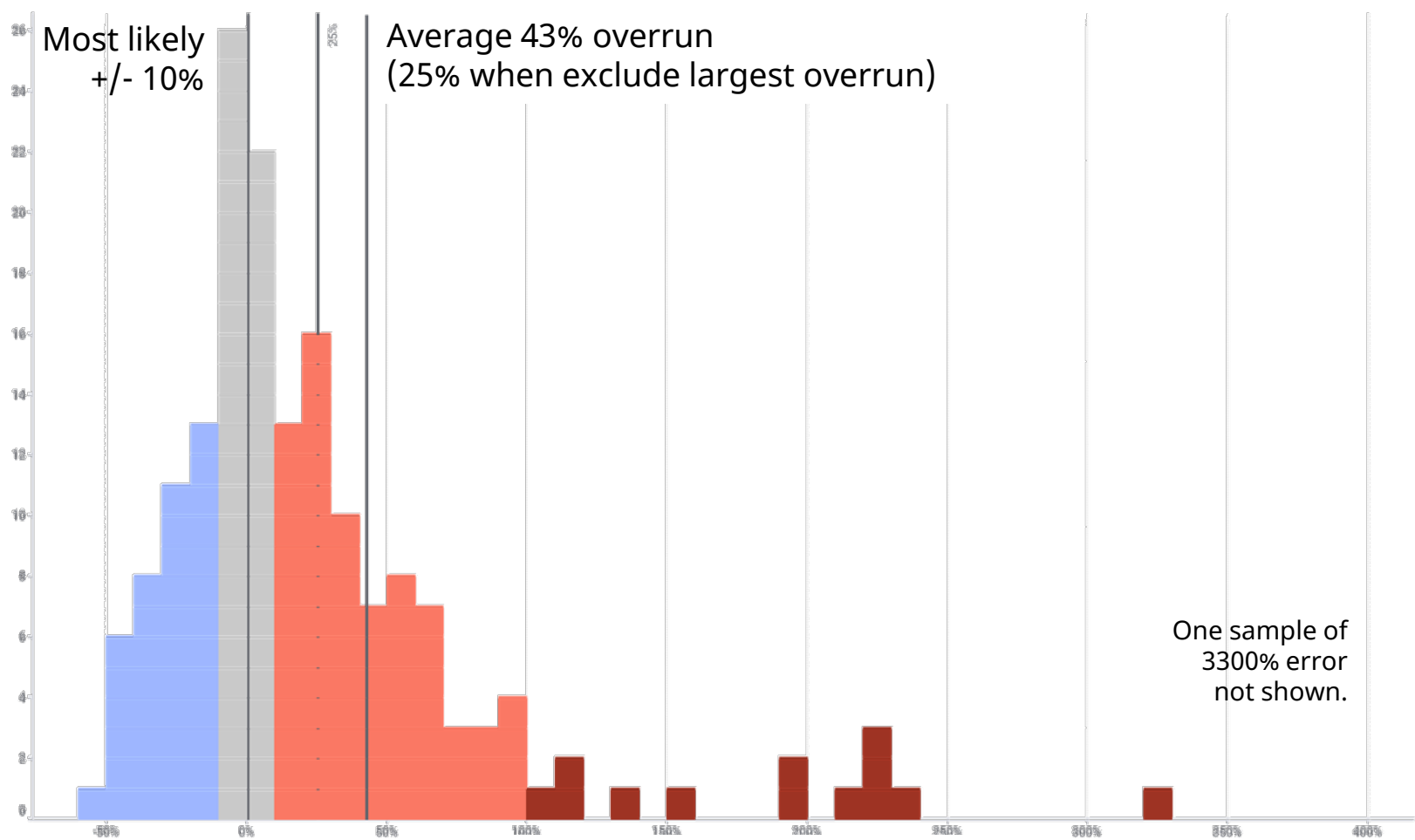


Applicants' Exhibit 77: Variance of actual downhole plugging costs to estimates shows long high-side tail.

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Percent difference of actual plugging costs compared to estimate



e.g. Felix at 22, Arthur at 29, McGowen 78 and 80, Arscott at 4

Master Orphan List from OCD. Sample size 182, excludes variation estimates that were made in large groups,

Reduction of working capital
and reduced reinvestment

e.g. Gilstrap at 6 to 7

Fewer transfers

e.g. McGowen at 95 to 99

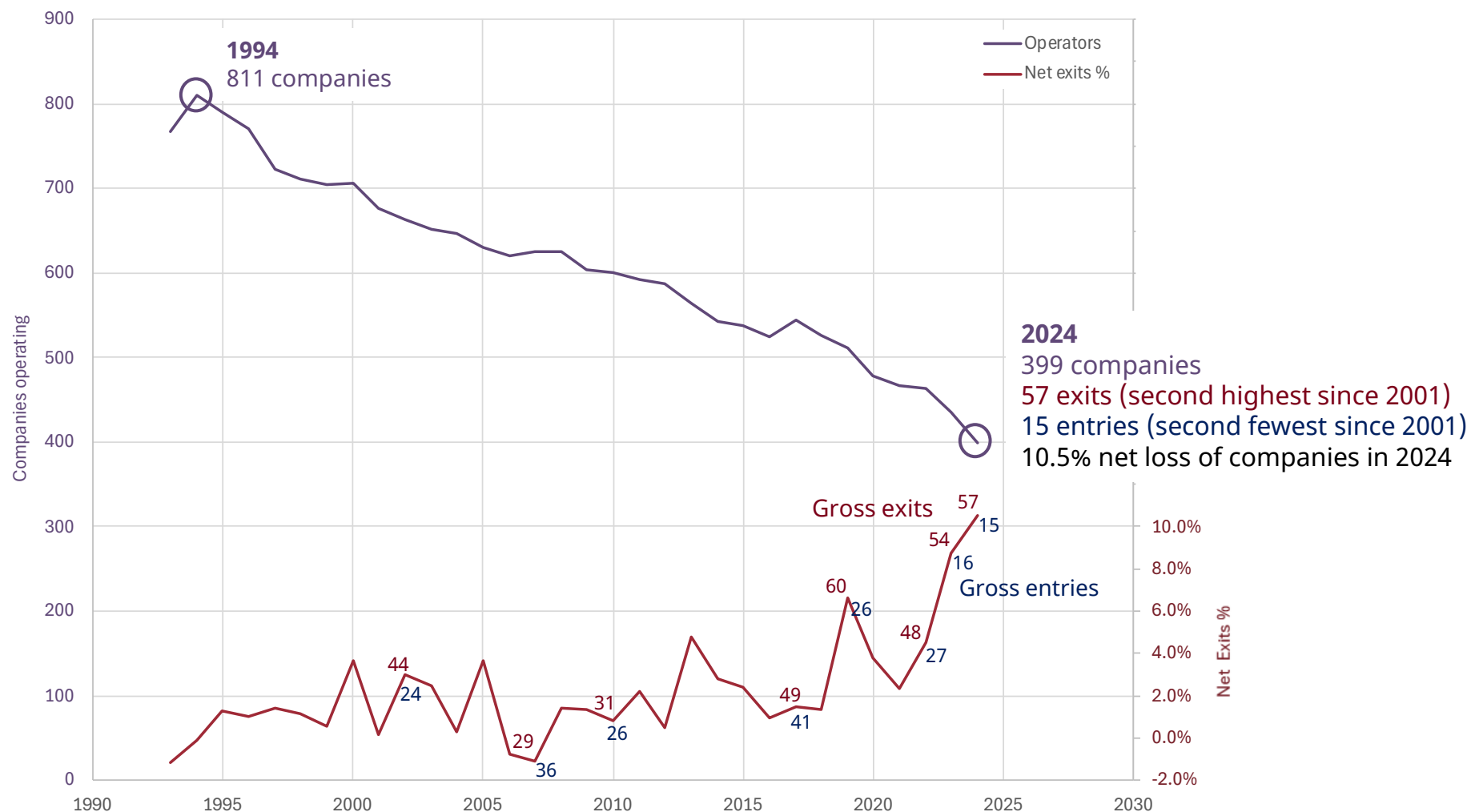
Less innovation

e.g. McGowen at 99 to 108

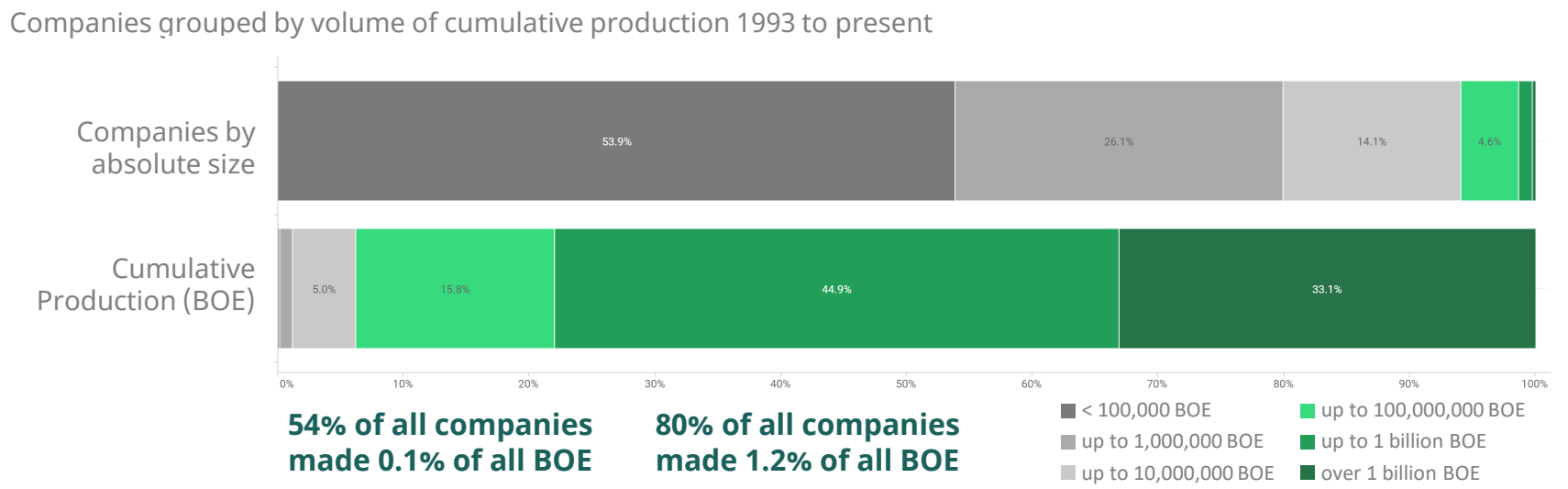
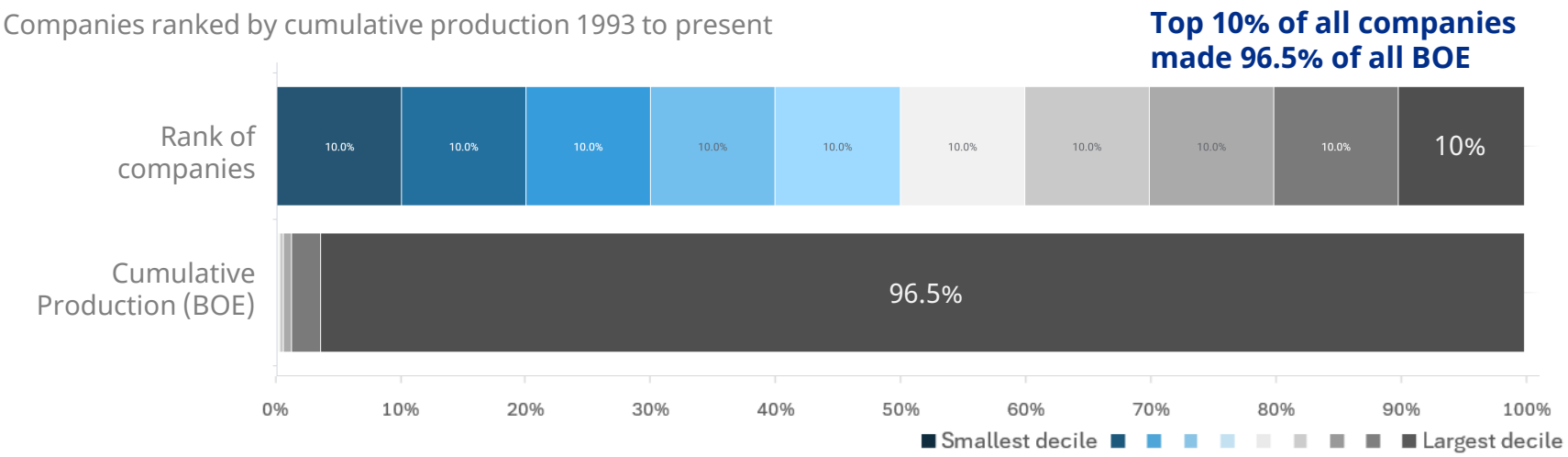
Fewer companies in the state

e.g. Arthur at 27 to 28

Applicants' Exhibit 80: Number of operators active in the state on long-term decline and accelerating in recent years.



Applicants' Exhibit 79: Proportion of cumulative oil and gas production 1993 to present contributed by companies of various sizes. Researched by Purvis Energy Advisors 130 of 145



—Range of project maturity evaluated with best (P50) estimate—

Categories

Categories	Reserves	On Production	
		Approved	
		Justified	"commercially viable" with "no known contingencies" "firm intention to proceed with development within a reasonable time-frame"
	Contingent Resources	Pending	" project activities are ongoing to [justification]. . .in the foreseeable future"
		On Hold	"project activities are on hold and/or where justification. . .may be subject to significant delay "
		Unclarified	"project activities are under evaluation and where justification. . .is unknown based on available information." "requires appraisal or study and should not be maintained without a plan for future evaluation"
		Not Viable	" no current plans to develop or to acquire additional data"
	Prospective Resources	Prospect	"sufficiently well defined to represent a viable [testing] target "
		Lead	" poorly defined and requires more data acquisition and/or evaluation to be classified as a Prospect"
		Play	"trend of potential prospects , but which requires more data acquisition and/or evaluation to define specific Leads or Prospects"

Range of thresholds for delay

SURREBUTTAL TESTIMONY

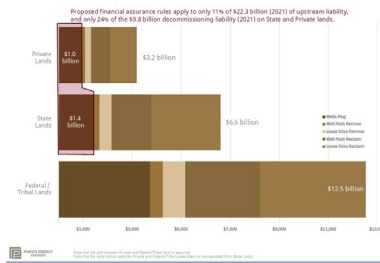
Applicants' Exhibit 30: Scope of decommissioning activities necessary for upstream oil and gas operations.

All jurisdictions ...		Some jurisdictions ...
Downhole	Surface	Surface
Plugging	Removal	Restoration
Salvage	Wells sites & Shared facilities	
	Salvage	
Contingency	Contingency Remediation	Contingency
Legacy	Legacy	Legacy

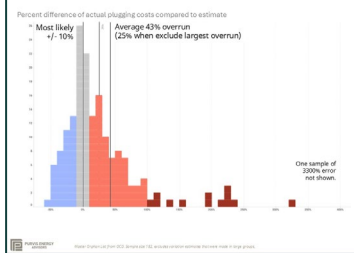
... plus midstream pipelines & plants

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20th March 2025

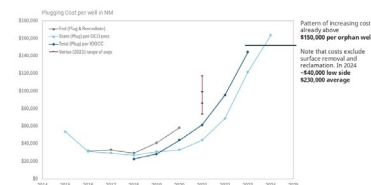
Applicants' Exhibit 34: Total decommissioning and reclamation cost of upstream oil and gas operations in New Mexico after Vertex 2021 not adjusted for subsequent inflation.

Purvis Energy
APPENDIX
20th March 2025

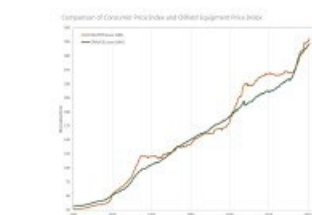
Applicants' Exhibit 77: Variance of actual downhole plugging costs to estimates shows long high-side tail.

Purvis Energy
APPENDIX
20th March 2025

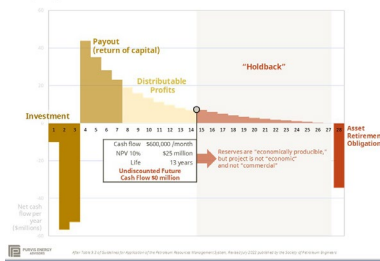
Applicants' Exhibit 39: Historical costs of downhole plugging for orphan wells in New Mexico.

Purvis Energy
APPENDIX
20th March 2025

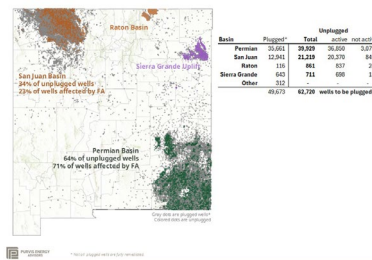
Applicants' Exhibit 33: Historical inflation of oil field costs compared to consumer prices.

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APPENDIX
20th March 2025

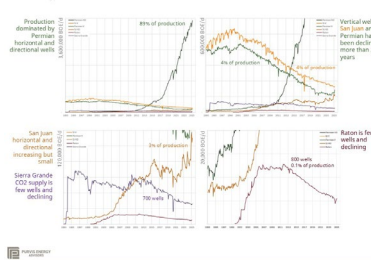
Applicants' Exhibit 38: Schematic of cash flow for a hypothetical oil and gas project to demonstrate the economic concepts of payout and holdback.

Purvis Energy
APPENDIX
20th March 2025

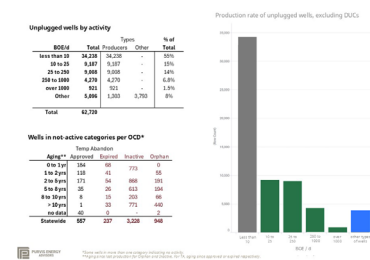
Applicants' Exhibit 31: Plugged and unplugged wells in New Mexico as of June 2025.

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APPENDIX
20th March 2025

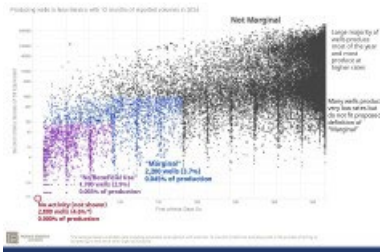
Applicants' Exhibit 33: History of daily production in New Mexico in six categories for major divisions among basins and types of wells shown on four vertical scales.

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20th March 2025

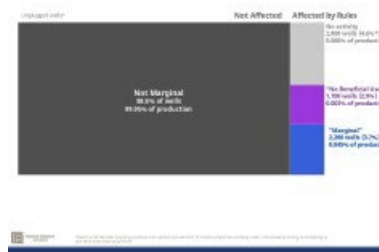
Applicants' Exhibit 22: Subdivisions of unplugged wells in New Mexico.

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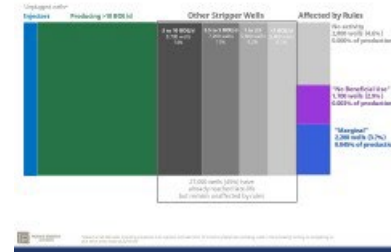
Applicants' Exhibit 40: Production in days of activity of wells in New Mexico during 2024.



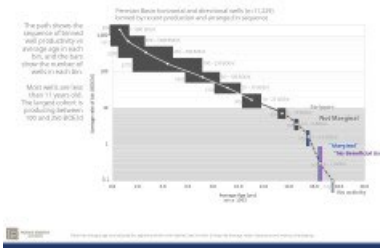
Applicants' Exhibit 41: Treemap of area representing numbers of wells in each category.



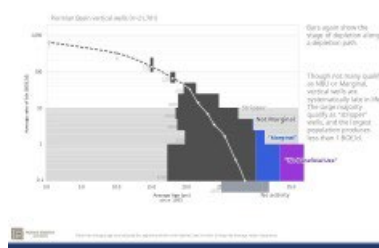
Applicants' Exhibit 42: Treemap of area representing numbers of wells in each category, with further detail on wells that do not qualify as "marginal".



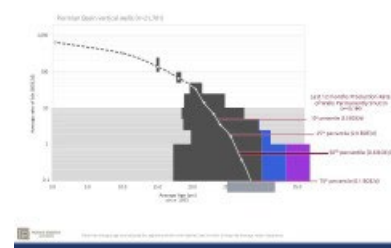
Applicants' Exhibit 43: Pre-main basin horizontal and deviated wells located by daily production rate and positioned over average rate and average age for each bin.



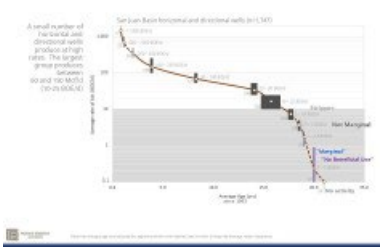
Applicants' Exhibit 44: Pre-main basin vertical wells located by daily production rate and positioned over average rate and average age for each bin.



Applicants' Exhibit 45: Comparison of forward Pre-main basin vertical wells to final rates of production demonstrated in the basin.



Applicants' Exhibit 46: San Juan Basin horizontal and deviated wells located by daily production rate and positioned over average rate and average age for each bin.



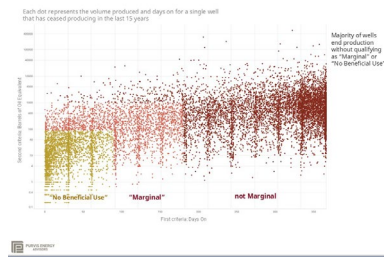
Applicants' Exhibit 47: San Juan Basin vertical wells located by daily production rate and positioned over average rate and average age for each bin.



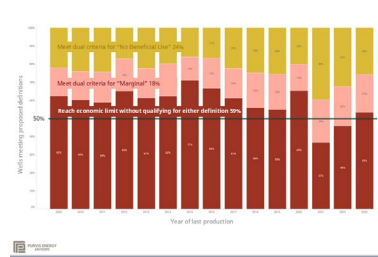
Applicants' Exhibit 48: Comparison of forward San Juan Basin vertical wells to final rates of production demonstrated in the basin.

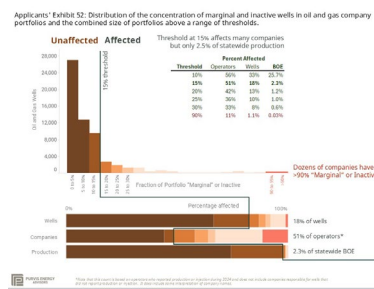
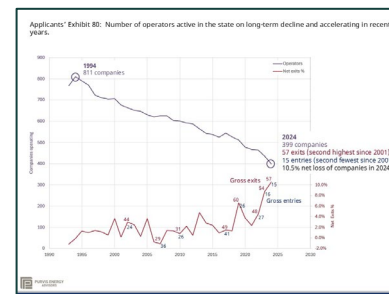
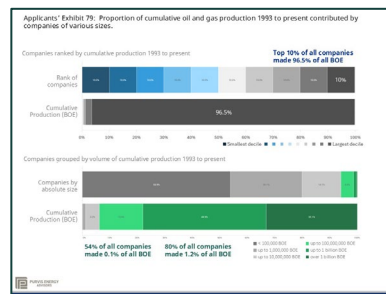
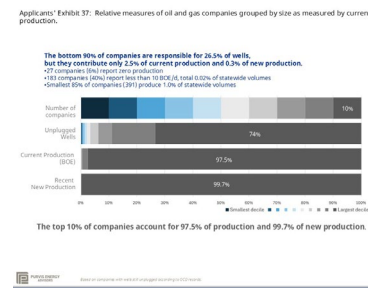
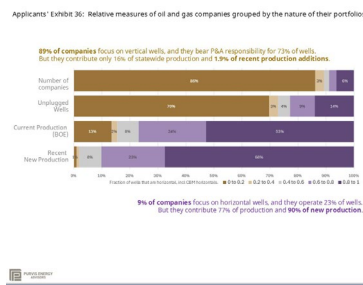
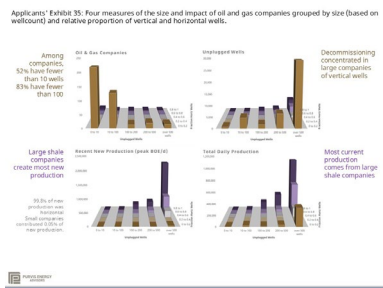
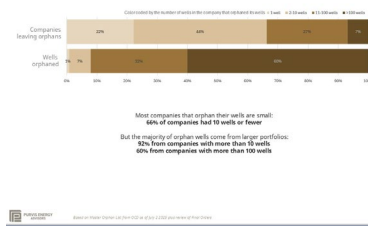


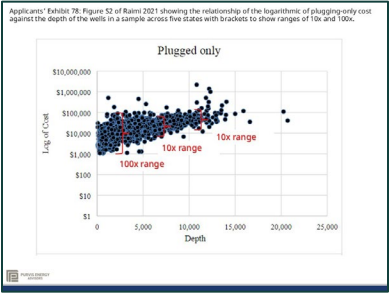
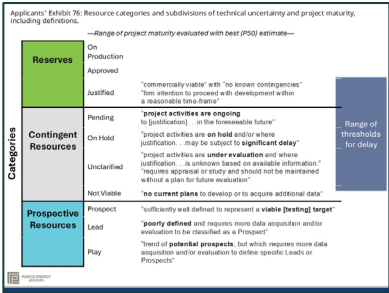
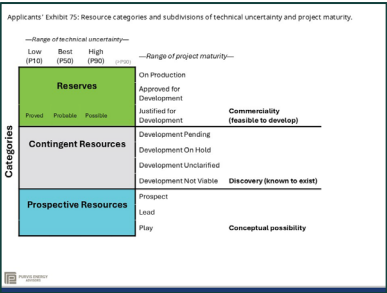
Applicants' Exhibit 43: Actual economic limit of production demonstrated by wells which ceased production between 2009 and 2023.



Applicants' Exhibit 44: Proportions of wells which qualified as "no beneficial use" and "marginal" at the point that production is known to have ceased.





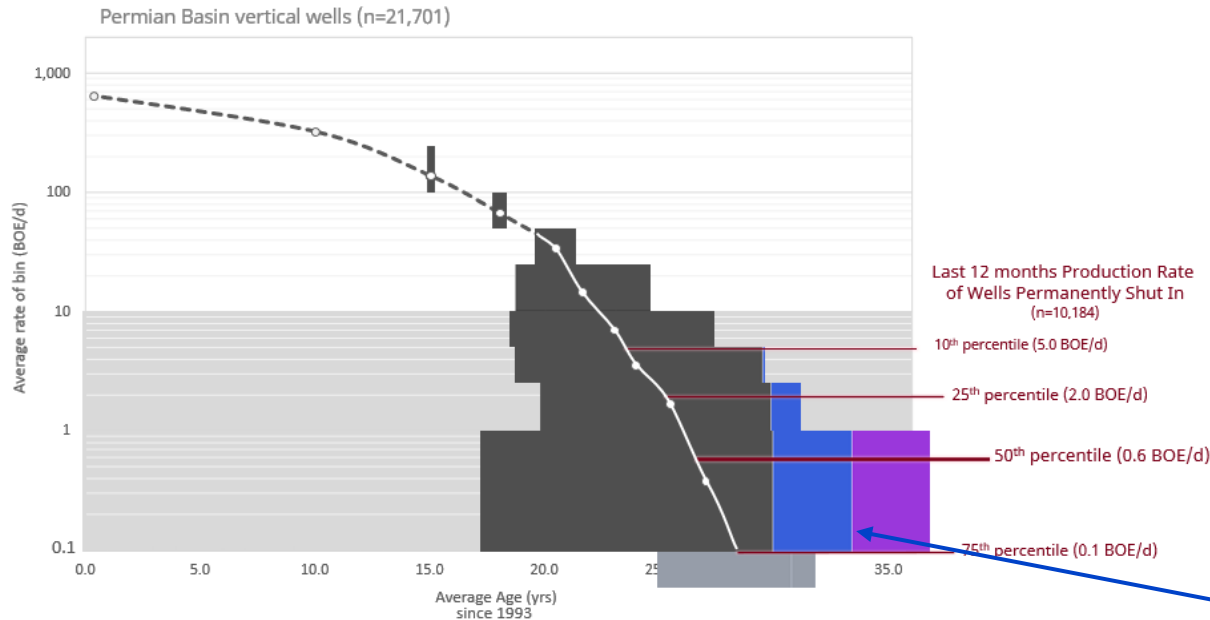


Conflation of defined terms with general meaning

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Applicants' Exhibit 47: Comparison of binned Permian Basin vertical wells to final rates of production demonstrated in the basin.



“marginal” in general use refers to thin profit margins

defined “Marginal” refers to a small subset of wells affected by proposal



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Note that average age was adjusted for segments shown with dashed lines in order to keep the average rates in sequence.



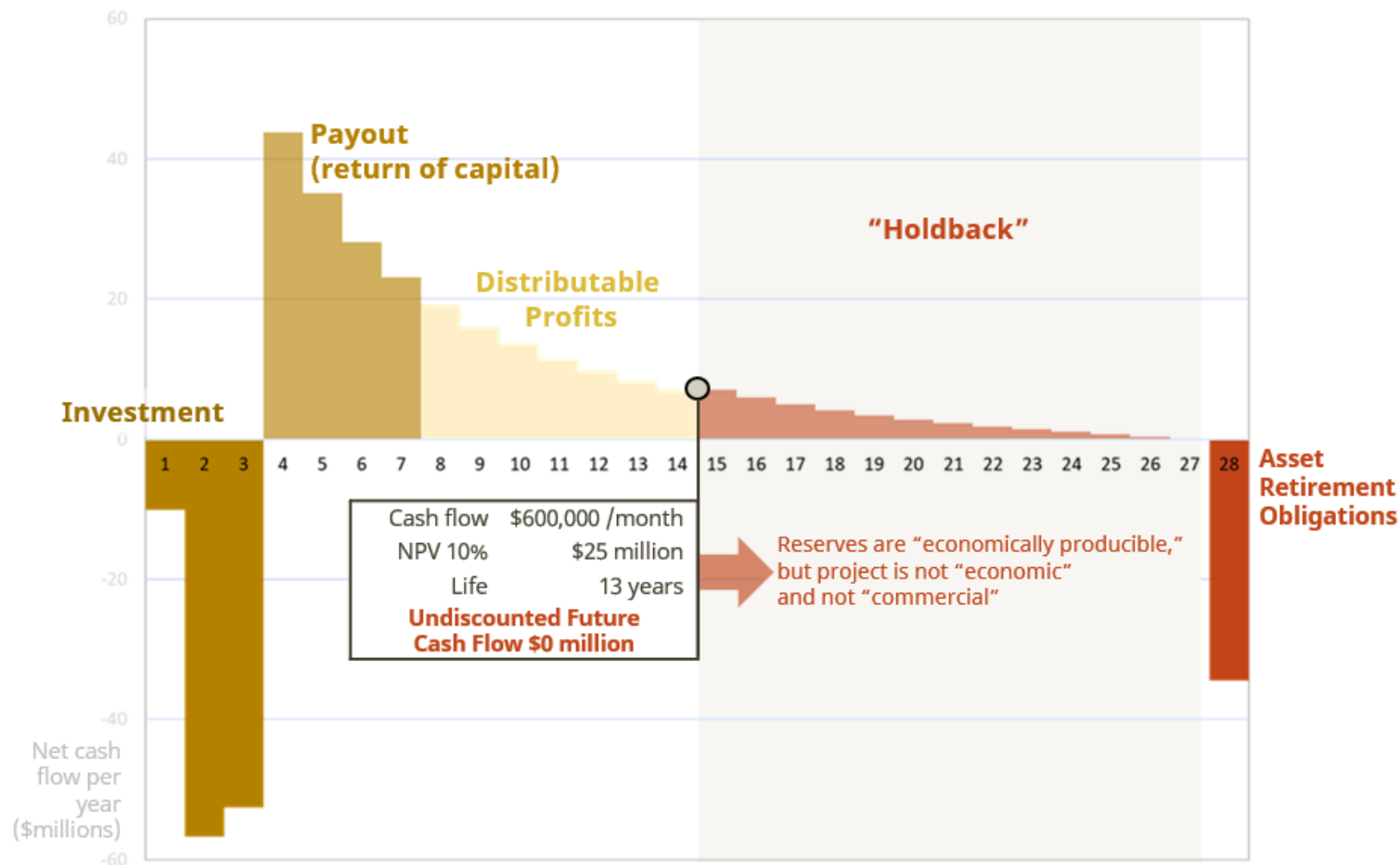
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Significance and Application of Holdback

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Applicants' Exhibit 38: Schematic of cash flow for a hypothetical oil and gas project to demonstrate the economic concepts of payout and holdback.



IS NOT

Fair market value

Prescribed strategy

IS NOT

Used in the
proposed rules

IS NOT IS

Fair market value Yardstick to characterize the cash flow

Prescribed strategy Planning tool

IS NOT IS

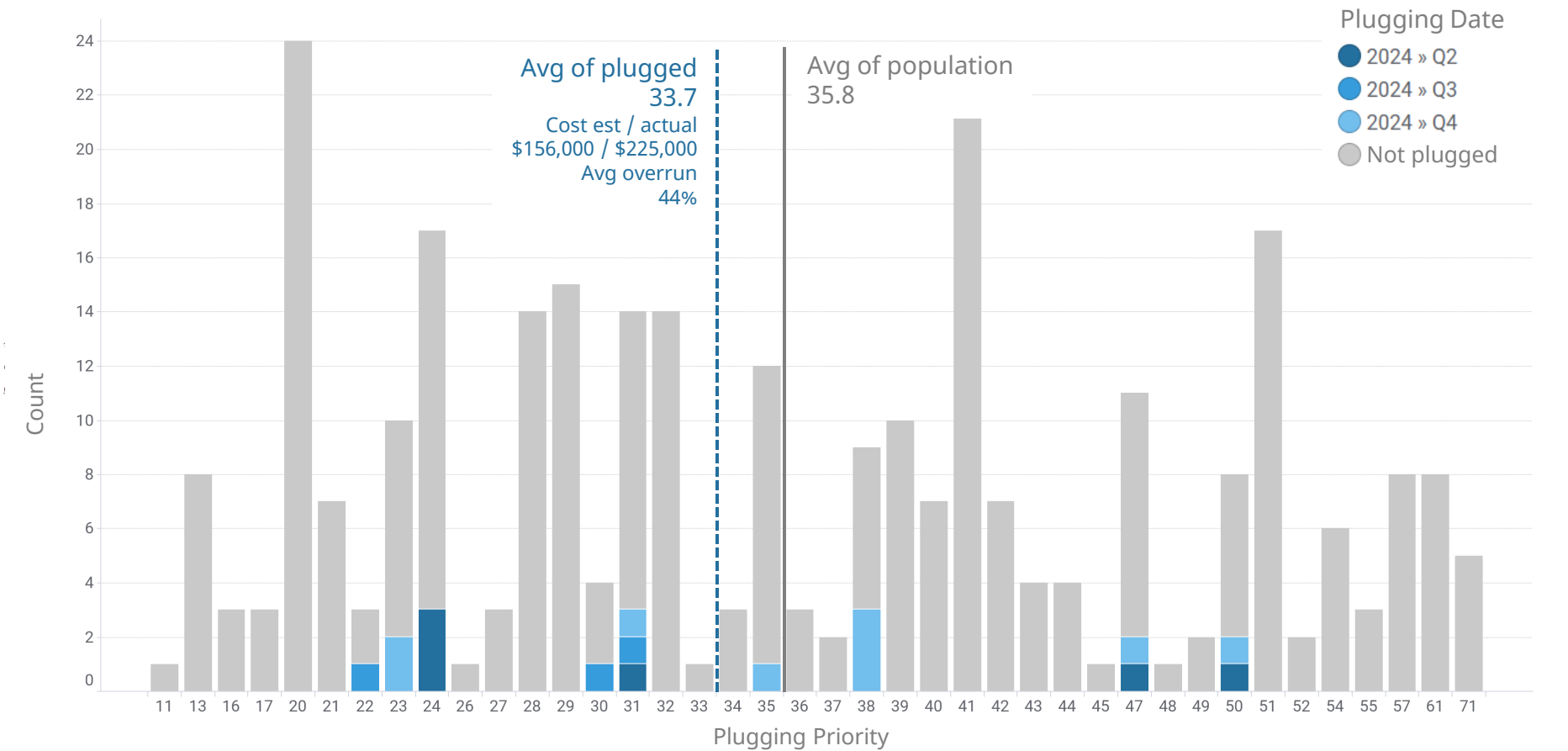
Used in the proposed rules Consistent with PRMS
Presented through Society of Petroleum Engineers

- Distinguished Lecture tour
- Journal of Petroleum Technology
- SPE LIVE webinar

Other professional societies and conferences

In sum, OCD prioritizes plugging and remediation activities first by first ranking wells that pose a possible risk of harm to public health and the environment, and secondly according to plugging schedules that maximize administrative efficiency and provide for plugging of all eligible wells in given area.

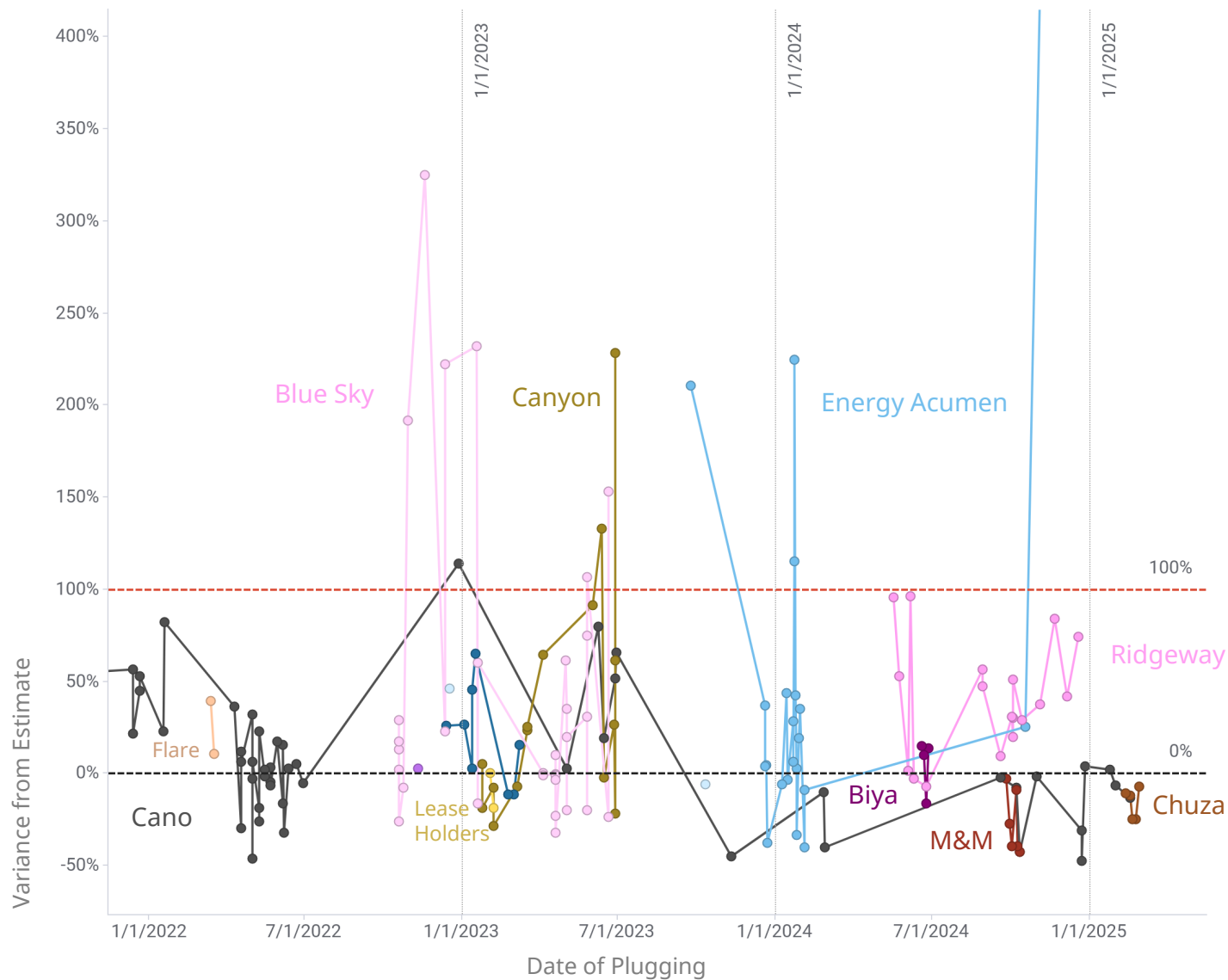
- active or historic leaks, known or suspected well integrity issues, lack of well control at the surface,*
- proximity to occupied structures, agricultural areas, water supply wells, threatened or endangered species*
- possible presence of H2S or NORM, the age of the well, elevated downhole pressures,*



Applicants' Exhibit 87: Variance of actual to estimated versus time for recently plugged orphan wells.

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Historical and Indirect Significance of Small Operators

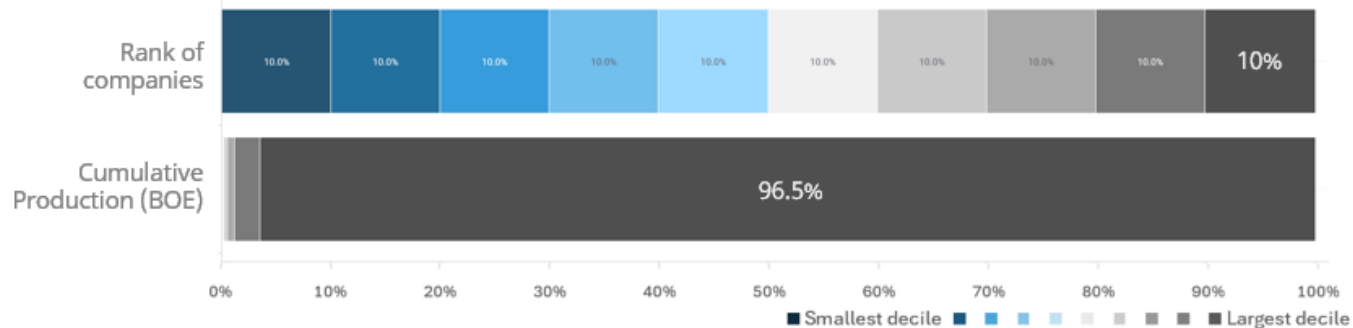
Received by OGD: 10/15/2025

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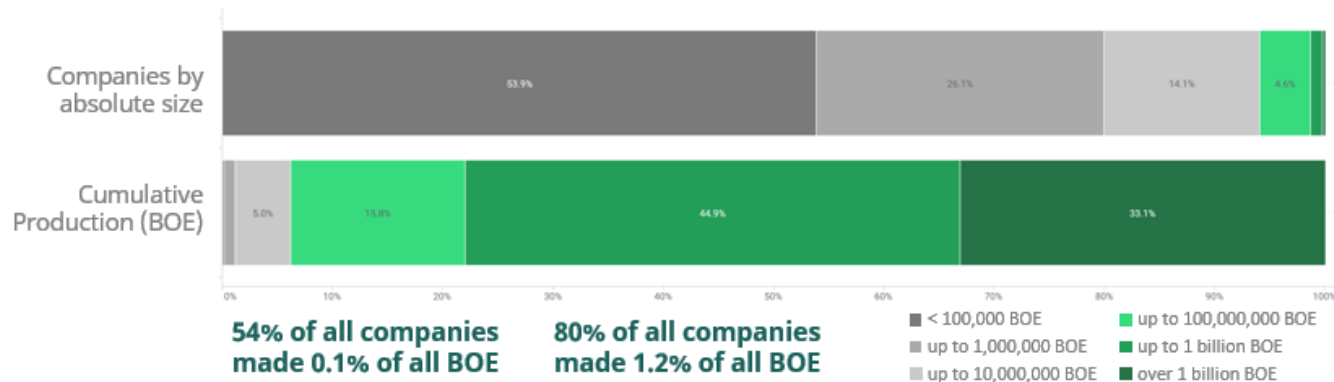
Applicants' Exhibit 79: Proportion of cumulative oil and gas production 1993 to present contributed by companies of various sizes.

Companies ranked by cumulative production 1993 to present

**Top 10% of all companies
made 96.5% of all BOE**

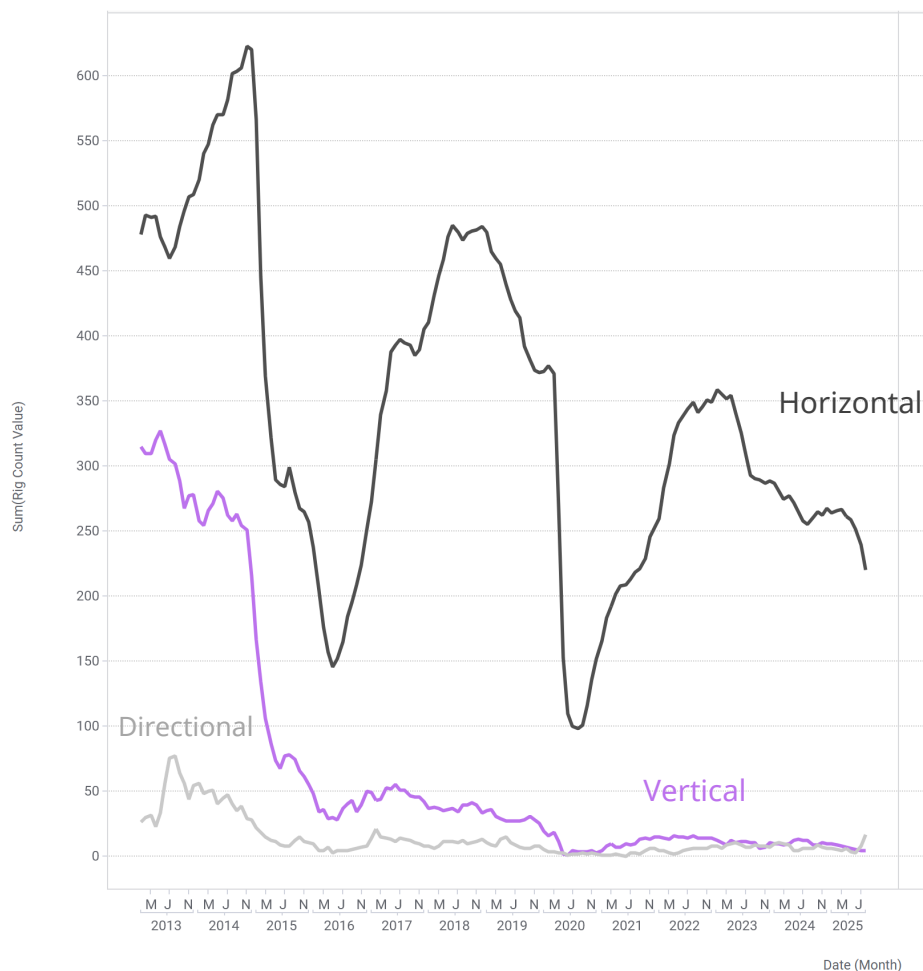


Companies grouped by volume of cumulative production 1993 to present

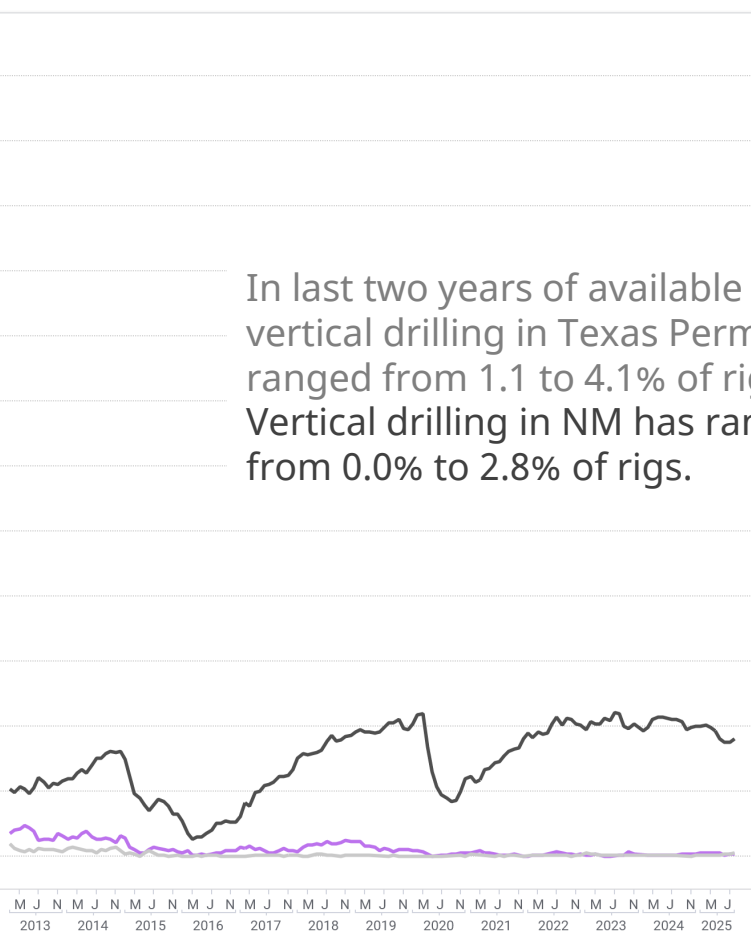


Significance of vertical wells in the Permian Basin

Permian in Texas



Permian in New Mexico



In last two years of available data, vertical drilling in Texas Permian has ranged from 1.1 to 4.1% of rig activity. Vertical drilling in NM has ranged from 0.0% to 2.8% of rigs.

END OF SLIDES