

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:**

CASE NO. 12934

**APPLICATION OF THE OIL CONSERVATION
DIVISION FOR REPEAL OF RULE 402
(METHOD AND TIME OF SHUT-IN PRESSURE TESTS).**

ORDER NO. R-11861

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION:

THIS MATTER, a rulemaking proceeding, came before the Oil Conservation Commission (hereinafter referred to as "the Commission") during a public hearing on October 25, 2002 at Santa Fe, New Mexico, on application of the Oil Conservation Division (hereinafter referred to as "the Division"), and the Commission, having carefully considered the evidence, the pleadings and other materials submitted in support of the application, now, on this 22nd day of November, 2002,

FINDS,

1. Notice has been given of the application and the public hearing on this matter, and the Commission has jurisdiction of the parties and the subject matter herein.

2. The Division seeks repeal of Rule 402 of the rules and regulations of the Oil Conservation Division, 19.15.6.402NMAC (hereinafter referred to as "Rule 402"). Rule 402 presently requires an operator to conduct a shut-in pressure test of each natural gas well on an annual basis. The test must be made during the months of July, August, or September unless otherwise specified by special pool rules or special directive and reported on Form C-125 not later than October 15. The test is to be taken with a dead-weight gauge after a minimum shut-in period of twenty-four hours. If the shut-in period exceeds twenty-four hours, the length of time the well was actually shut-in must be reported to the Division on Form C-125. Rule 402 in its present form was enacted in 1963.

3. During the public hearing of this matter, the Division presented the testimony of Richard Ezeanyim, P.E. Mr. Ezeanyim is the Bureau Chief of the Engineering Bureau of the Division.

4. Mr. Ezeanyim testified that the collection of shut-in pressures on natural gas wells is no longer needed for any regulatory purpose. Mr. Ezeanyim testified that the information is of some use to operators, but can be obtained by conducting special tests if needed. Mr. Ezeanyim testified that several categorical exemptions to Rule 402 have been granted in Orders R-333-J and R-8170-N (1993) for a substantial number of natural gas wells in the northwest part of the State, and the lack of shut-in pressure tests from those wells has not impaired exploration or production.

5. Mr. Ezeanyim testified that the cost of conducting shut-in pressure tests is prohibitive. The cost of the test itself is not insubstantial, but Mr. Ezeanyim also pointed out that production is lost during such tests and the act of shutting-in a well can cause damage and in some cases may permanently impair production.

6. Rick Foppiano of Oxy-Permian, an oil and gas operator in the Permian Basin, also testified in favor of repeal of Rule 402. Mr. Foppiano is the chair of the Regulatory Practices Committee of the New Mexico Oil and Gas Association, and spoke also on behalf of that Committee. During his presentation, Mr. Foppiano noted that Ocean Energy and the Independent Petroleum Association of New Mexico support repeal of Rule 402.

7. Mr. Foppiano testified that the cost of complying with Rule 402 is prohibitive when balanced against the usefulness of the data obtained. He also pointed out the inequity in the present situation, where operators are required to perform the tests in the southeast part of the state but not in the northwest. Mr. Foppiano testified that few complaints had been voiced about the lack of pressure data in the northwest, and that itself demonstrates how little industry relies upon the data collected.

8. In a letter delivered to the Commission during the public comment period, Samson Resources Company agreed that Rule 402 should be repealed. Samson observed that a shut-in pressure test on a tight reservoir does not result in an accurate presentation of static reservoir pressure, and thus is of limited utility in conducting reservoir evaluation by the material balance method. Moreover, Samson pointed out that shutting-in a mature producing well may jeopardize the recovery of remaining reserves and in many cases a considerable effort is required to return the well to production because of protracted field personnel attention, blowing, soaping, swabbing and other activities.

9. In another letter delivered to the Commission during the public comment period, Merrion Oil & Gas commented that publicly available gas well shut-in pressure data can be valuable but the present requirement of an annual shut-in pressure test is unnecessary. Merrion pointed out that wells are frequently shut-in during the year for a variety of reasons and pressure data may be obtained during these periods without the need of an additional shut-in during specified months. Merrion recommended that the rule be amended to require operators to report shut-in pressure data whenever a well is shut-in for more than twenty-four hours.

10. In another letter delivered to the Commission during the public comment period, Marbob Energy Corporation agreed that the Rule 402 should be repealed in its entirety. Marbob commented that surface pressure data is not accurate enough to be used for reservoir engineering. Marbob notes that a calculation of the bottom hole pressure simply on the basis of a shut-in pressure test might be inaccurate because of condensate or water accumulation inside the well bore. Marbob notes the only accurate way to collect reliable data is to conduct a bottom hole pressure test, but that such data is collected only when it is needed, not on an annual basis.

11. In another letter delivered to the Commission during the public comment period, ExxonMobil Corporation supported the repeal of Rule 402. ExxonMobil noted that it had collected ample information on its wells and any additional information collected as a result of the shut-in pressure tests required by Rule 402 is of minimal value compared to the value of the lost production resulting from the test. ExxonMobil commented that it would support a requirement that pressure observations be filed after a period of shut-in for other reasons; such a requirement would reduce the frequency of testing and give operators flexibility in scheduling the test.

12. In an electronic mail delivered to Mr. Ezeanyim, Conoco Inc. briefly supported repeal of Rule 402, and commented that requiring tests every three years in southeastern New Mexico might provide a viable alternative approach.

13. Order No. R-8170-N and R-333-J (a single order that bears two order numbers), issued in 1993, exempts certain marginal wells in four pools in the San Juan Basin from annual shut-in pressure tests. Wells are exempted from annual shut-in pressure tests based on the production history and the pool and formation involved. No analogous order is in force for pools in southeastern New Mexico or for wells in the northwest that are not marginal.

14. It appears, for the reasons stated by Mr. Ezeanyim, Mr. Foppiano, Samson Resources Company, Marbob Energy Corporation, ExxonMobil Corporation and Conoco Inc. that little justification exists for continuation of the requirement of an annual shut-in

pressure test. The test is of limited regulatory use to the Division and it seems, from the testimony and comments received, that the data is of limited use to industry.

15. The information collected by an annual shut-in pressure test can be of some utility in conducting reservoir engineering. While a surface pressure reading provides a limited amount of information about reservoir conditions, it does not provide the best information of downhole conditions, given the tight reservoirs often encountered in this state.

16. The cost of the annual test is not insubstantial. Not only is the test itself expensive, but the lost production and the cost to restore a well to production once it has been shut-in for twenty-four hours can be substantial.

17. The shut-in pressure test can cause permanent damage to marginal wells that are becoming more common in some reservoirs. It is an unacceptable risk to require these wells to endure an annual shut-in so that information can be collected that is not used.

18. Given the potential for permanent damage to a well from the required annual test, the limited utility to the Division or to industry of the information gathered during the test, and the cost and the associated lost production, it is apparent that present Rule 402 threatens waste and should be repealed forthwith.

19. The suggestion of Merrion and ExxonMobil that the rule be amended to provide for reporting of shut-in pressure information when a well is shut-in for another purpose should not be adopted for reasons stated herein. The suggestion of Conoco Inc. that the rule be amended to require a test every three years should not be adopted for the same reasons. Collecting and reporting data that seems to be of such little value should not be required; if an operator needs reservoir pressure information, the operator may perform a shut-in pressure test or a bottom hole pressure test to gather the necessary data. If, after the experience of a few years, operators feel that publicly available data should be collected, a subsequent rulemaking may be convened to address the suggestions of Merrion, ExxonMobil and Conoco Inc.

IT IS THEREFORE ORDERED, AS FOLLOWS:

1. Rule 402 of the Oil Conservation Commission, presently codified at 19.15.6.402 NMAC, shall be and hereby is repealed, effective as of the date of publication of a notice of repeal in the New Mexico Register. Staff is instructed to forthwith seek publication of a notice of repeal in the Register.

2. Jurisdiction of this matter is retained for entry of such further orders as may be necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**

LORI WROTENBERY, CHAIR

JAMI BAILEY, MEMBER

ROBERT LEE, MEMBER

SEAL