

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 9036
Order No. R-8389

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR A NON-STANDARD OIL
PRORATION UNIT AND UNORTHODOX
LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 19, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of February, 1987, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Phillips Petroleum Company, seeks approval of a 40-acre non-standard oil spacing and proration unit comprising the SE/4 SW/4 of Section 4, Township 17 South, Range 37 East, NMPM, Undesignated Shipp-Strawn Pool, Lea County, New Mexico, to be dedicated to the proposed Shipp State "A" Well No. 1 to be drilled at an unorthodox oil well location 330 feet from the South line and 2500 feet from the West line of said Section 4.

(3) The proposed well would be located within one mile of the outer boundary of the Shipp-Strawn Pool and would therefore be subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-8062, as amended, which provide for 80-acre well spacing units with wells to be located within 150 feet of the center of a governmental quarter-quarter section.

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(4) The applicant testified that due to the complex geology in the Strawn formation, consolidated net pay and porosity are two very important factors in determining a suitable well location within the Shipp-Strawn Pool.

(5) The applicant seeks to drill the Shipp State "A" Well No. 1 at said unorthodox location in order to encounter the Strawn formation with sufficient net pay and porosity to make a commercial well.

(6) At the time of the hearing, Exxon Corporation, Pennzoil Company, and Barbara Fasken, interest owners in the offset acreage, appeared and objected to the proposed unorthodox location.

(7) Additionally, all three interest owners requested that should the Division grant the applicant's request for an unorthodox location, a production penalty should be imposed on the proposed well in order to protect their acreage from being drained.

(8) The applicant presented as evidence a net pay isopach map of the Strawn formation in the area which was constructed using a porosity cutoff of 4 percent.

(9) The map shows that the zero net pay line traverses the proposed 40-acre unit in a Northeast to Southwest direction and that Strawn porosity exists to the east of this zero line.

(10) Tipperary Oil and Gas Corporation, the previous operator of the proposed 40-acre proration unit, drilled its Jons 4 State Well No. 1 at a standard location 560 feet from the South line and 1650 feet from the East line of said Section 4.

(11) Said well, which is located slightly east of the zero porosity line as defined by the applicant, was drill stem tested in the Strawn formation, recovered approximately 20 feet of gas cut mud, and was subsequently plugged and abandoned.

(12) The applicant testified that due to the close proximity that a standard well location would have to the Jons 4 State Well No. 1, it would be unlikely that a commercial well could be drilled at a standard location within the proposed proration unit.

(13) The applicant presented evidence that shows that the recoverable reserves underlying the proposed 40-acre proration unit totaled approximately 103,000 barrels of oil.

(14) The evidence presented indicates that the proposed unorthodox location is needed in order for the applicant to produce the oil underlying the proposed proration unit, thereby protecting its correlative rights and preventing waste.

(15) Approval of the unorthodox location without the institution of a production penalty would likely result in the violation of the correlative rights of the offset operators described in Finding Paragraph No. (6) above.

(16) To offset the advantage gained as a result of the unorthodox location, the production from the proposed Shipp State "A" Well No. 1 should be limited.

(17) The applicant proposed that the well should be assigned an allowable acreage factor of .50, to be assessed against an 80-acre oil allowable in the Shipp-Strawn Pool.

(18) The proposed penalty is based simply on the ratio of proposed dedicated acreage to standard acreage dedication for the pool, or 40/80.

(19) Exxon objected to the penalty proposed by the applicant and proposed that a penalty of 90.6 percent be assessed against an 80-acre oil allowable in the Shipp-Strawn Pool.

(20) The penalty proposed by Exxon is based solely on the amount of productive acreage within the proposed proration unit, which they believe to be 15 acres.

(21) The penalty proposed by Exxon is unreasonable in that they presented no evidence to refute the applicant's geologic interpretation of the Strawn formation in the area or to support their position that the tract contained only 15 productive acres.

(22) While the applicant testified that the entire proposed 40-acre proration unit would contribute to the production from the well, they based their volumetric calculation of oil in place underlying the 40-acre unit on the 30 acres lying to the east of the zero net pay line.

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(23) Although there is no conclusive evidence as to the amount of productive acreage underlying the proposed proration unit, the evidence presented by the applicant should be utilized in determining productive acreage within the proposed 40-acre proration unit as being the best information available at the present time.

(24) The Division should calculate a production penalty based upon the following factors:

A) The 30 productive acres underlying the proposed 40-acre proration unit.

B) The variation of the proposed unorthodox location from a standard location.

(25) The acreage factor for allowable purposes should be calculated as follows:

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| Acreage Factor = (30/80) or (100 - 72.5%) | |
| Productive Acreage Factor | Allowable Factor Based Upon Standard Location Variation |

whichever is less.

(26) Based upon the factors described above, the acreage factor to be used in assigning an oil allowable to the proposed well should equal .275.

(27) An allowable factor of 27.5 percent (.275) for the subject well will prevent waste and protect the correlative rights of the applicant as well as other operators in the pool and should be approved.

(28) Due to the close proximity that the proposed location bears to the outer boundary of the lease, the applicant should be required to run a directional survey on the well and report the results to the Santa Fe and Hobbs offices of the Division prior to the issuance of an allowable for the well.

IT IS THEREFORE ORDERED THAT:

(1) The application of Phillips Petroleum Company for an exception to the Special Rules and Regulations for the Shipp-Strawn Pool, as promulgated by Division Order No. R-8062, as amended, authorizing an unorthodox oil well location and a 40-acre non-standard oil spacing and

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proration unit, is hereby approved for its Shipp State "A" Well No. 1 located 330 feet from the South line and 2500 feet from the West line of Section 4, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) A 40-acre non-standard oil spacing and proration unit comprising the SE/4 SW/4 of said Section 4 is hereby established and dedicated to said well.

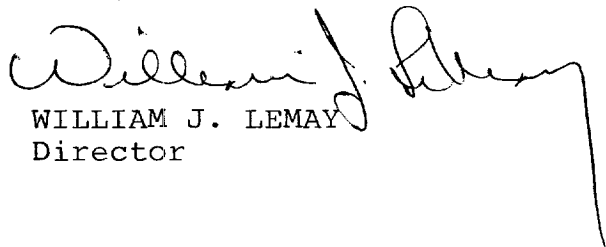
(3) The Shipp State "A" Well No. 1 is hereby assigned an acreage factor of .275 in the Strawn formation for purposes of assigning its oil allowable.

(4) The applicant is further ordered to run a directional survey on the proposed well from the surface to total depth and report the results to the Santa Fe and Hobbs offices of the Division.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

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