STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION COMMISSION

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

> CASE NO. 8758 <u>DE NOVO</u> Order No. R-8162-A

APPLICATION OF MONSANTO COMPANY FOR AN UNORTHODOX GAS WELL LOCATION AND DUAL COMPLETION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 9, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of May , 1986, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Monsanto Company, seeks approval of an unorthodox gas well location for a well to be drilled 330 feet from the South and West lines of Section 36, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, to be dually completed in the Indian Basin-Upper Pennsylvanian and Indian Basin-Morrow Gas Pools, all of said Section 36 to be dedicated in both zones to said well.

(3) This matter came on for hearing at 8 a.m. on November 21, 1985, at Santa Fe, New Mexico, before Oil Conservation Division Examiner, Michael E. Stogner and, pursuant to his hearing, Order No. R-8162 was issued on February 21, 1986, which granted Monsanto's application but imposed a 67 percent penalty factor to offset the advantage gained over offset operators as a result of the unorthodox location.

(4) On March 13, 1986, application for Hearing \underline{De} <u>Novo</u> was made by Monsanto and the matter was set for hearing before the Commission.

(5) The matter came on for hearing <u>de novo</u> on April 9, 1986.

(6) Both the Indian Basin-Upper Pennslyvanian Gas Pool and the Indian Basin-Morrow Gas Pool are governed by Special Pool Rules which provide for 640-acre gas well spacing with wells to be located no closer than 1650 feet from the outer boundary of the section and no closer than 330 feet to any governmental quarter-quarter section line or inner boundary.

(7) Both of said pools are prorated gas pools with acreage being the only factor used in determining the allocation of allowable to non-marginal wells.

(8) The proposed well is to be drilled on the same 640-acre proration unit currently dedicated to applicant's Lowe State Gas Com Well No. 1 located 1995 feet from the North line and 1712 feet from the West line of said Section 36.

(9) The Lowe State Well No. 1 has "watered out" in the upper Pennsylvanian Zone, is no longer capable of commercial production from either zone, and has been shut-in since May 1985.

(10) At the time of the hearing, Amoco Production Company, owner and operator of a well in Section 35, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, immediately offsetting this unit to the west, appeared and objected to the proposed unorthodox location.

(11) The State Land Office is the owner of royalty under said Section 36 and, as such, intervened on behalf of the applicant in this case.

(12) Both the applicant and the Land Office presented testimony relative to the original gas in place under said Section 36 and various of the surrounding proration units.

(13) Both the applicant and the Land Office proposed that the new well in Section 36 be permitted to produce a volume of gas equal to an amount derived by subtracting the production from the Lowe State Well No. 1 from the calculated original gas in place under such Section without restriction.

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(14) Such proposal would result in the imposition of two allowable formulas in the same pool, one based on acreage and one based on calculated original gas in place.

(15) No party presented evidence as to the actual volumes of gas now remaining under said Section 36 and nearby proration units or the pool as a whole nor the impact of implementing a second proration formula in this pool at this time and such proposal should therefore be rejected.

(16) The geological evidence presented in the case establishes that while a portion of the proration unit dedicated to said Lowe State Well No. 1 has watered out in the Upper Pennsylvanian Zone, a substantial number of productive acres remain in the southern and western portions of the unit.

(17) The applicant presented geologic testimony which, when examined, indicates that there remain 378 productive acres in the Upper Pennsylvanian Zone under said Section 36.

(18) Amoco presented engineering testimony designed to show that no more than 233 acres remain productive within said interval in said Section.

(19) The expert testimony presented on this issue by either party did not conclusively establish the exact number of productive acres in the interval in question but did establish both upper and lower limits to such number.

(20) In the absence of conclusive evidence, the Commission should use a figure for the productive acres remaining in said section half way between the limits testified to or 306 productive acres.

(21) The nature of the Indian Basin-Upper Pennsylvanian reservoir, including its structure and water encroachment from the north and east in the vicinity of Section 36, is such that if the proposed well is assigned a 306-acre allowable (a 0.48 acreage factor) in that pool, such well can be produced, even at its extreme unorthodox location, without violation of correlative rights.

(22) A well at said unorthodox location is necessary in order for the owners of interests in said Section 36 within the Indian Basin-Upper Pennsylvanian interval to recover their share of the gas from said pool, thereby protecting their correlative rights.

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> (23) No evidence was presented at the hearing which would show the nature or extent of any Morrow gas zones which might be encountered by the well at the proposed unorthodox location.

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(24) In the absence of such evidence and to offset the advantage gained over offset operators as a result of the unorthodox location in the Indian Basin-Morrow Gas Pool, a production limitation factor should be determined for the Morrow Zone production as set out in Findings Nos. (8), (9), (11) and (12) in Order No. R-8162 (See also Findings Nos. (12) through (23) of Order No. R-8025-A), and the resultant well should be assigned an acreage factor of 0.36 in such pool.

(25) Nothing herein should be considered to prohibit the applicant from seeking an amendment of this factor based upon presentation of data derived from drilling, completion, or production of this well in the Morrow formation.

(26) The proposed method of dual completion is appropriate and adequate and should be approved.

(27) Approval of the subject application subject to the above provisions and limitations will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Monsanto Oil Company for an unorthodox gas well location for the Upper Pennsylvanian and Morrow formations is hereby approved to be located at a point 330 feet from the South and West lines of Section 36, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian and Indian Basin-Morrow Gas Pools, Eddy County, New Mexico.

(2) All of said Section 36 shall be dedicated to the above-described well.

(3) The above described well is hereby assigned acreage factors of 0.48 and 0.36 in the Upper Pennsylvanian and Morrow formations respectively.

(4) The aforesaid acreage factors shall be used in calculating the well's monthly allowable in the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Morrow Gas Pool.

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> (5) The applicant is further authorized to complete said well as a dual completion from said pools with production through parallel strings of tubing with separation of the intervals by means of packers set at approximately 7280 feet and 9170 feet.

> (6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member

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Chairman and Secretary

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