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

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

CASE NO. 11242 Order No. R-10366

APPLICATION OF CONOCO INC. FOR DIRECTIONAL DRILLING AND AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 6 and May 4, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 12th day of May, 1995, 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, Conoco Inc., seeks authority to vertically drill its Savannah Well No. 1 from a surface location 660 feet from the North and East lines (Unit A) of Section 32, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, into the Undesignated North Dagger Draw-Upper Pennsylvanian Pool, kick off from the vertical at this depth and drill in a southwesterly direction into the Undesignated Cemetery-Morrow Gas Pool at an unorthodox bottomhole location within 100 feet of a point 1100 feet from the North and East lines (Unit A) of Section 32.

(3) The applicant proposes to dedicate the NE/4 and N/2 of Section 32 to the Savannah Well No. 1 in the Undesignated North Dagger Draw-Upper Pennsylvanian Pool and Undesignated Cemetery-Morrow Gas Pool, respectively, thereby forming standard 160 and 320-acre proration units for each respective pool.

(4) The proposed well is located within one mile of both the North Dagger Draw-Upper Pennsylvanian Pool and the Cemetery-Morrow Gas Pool. The North Dagger Draw-Upper Pennsylvanian Pool is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-4691, as amended, which require standard 160-acre spacing and proration units with wells to be located no closer than 660 feet from the outer boundary of the tract nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. The Cemetery-Morrow Gas Pool is governed by Statewide Rules and Regulations which require standard 320-acre gas spacing and proration units with wells to be located no closer than 1980 feet from the end boundary nor closer than 660 feet from the side boundary nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary.

(5) The proposed well is at a standard location for the North Dagger Draw-Upper Pennsylvanian Pool but at an unorthodox gas well location for the Cemetery-Morrow Gas Pool.

(6) The primary target in the Savannah Well No. 1 is the North Dagger Draw-Upper Pennsylvanian Pool.

(7) Applicant testified that due to the erratic nature of Morrow channel sands, it is common practice in this area for operators to drill a Cisco/Canyon development well to a depth sufficient to test the Morrow formation.

(8) According to applicant's evidence and testimony, the proposed directional drilling and unorthodox bottomhole gas well location are necessary for the following reasons:

- a) in terms of structural position and dolomite thickness, the proposed location for the Cisco/Canyon test represents the most favorable location within the NE/4 of Section 32;
- b) there have been two unsuccessful Morrow tests within the N/2 of Section 32. These Morrow tests were located in Units F and G;
- c) a well drilled to test the Morrow formation at the proposed unorthodox bottomhole location should encounter a greater amount of net sand within the targeted Morrow channel than a well drilled at a standard Morrow well location thereon, thereby increasing the likelihood of obtaining commercial gas production.

d) a single well drilled to test both the Cisco/Canyon and Morrow formations represents the most economic method of developing the North Dagger Draw-Upper Pennsylvanian Pool and testing the potentially productive Morrow formation.

(9) The affected offset operators in Sections 28 and 33, Yates Petroleum Corporation and Mewbourne Oil Company, respectively, did not appear at the hearing in opposition to the application.

(10) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.

(11) Approval of the proposed directional drilling and unorthodox bottomhole gas well location will afford the applicant the opportunity to produce its just and equitable share of the oil and gas in the affected pools, 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.

(12) The applicant should be required to determine the subsurface location of the kick-off point in the wellbore prior to directional drilling and should be required to conduct a directional survey during or upon completion of directional drilling operations in order to determine the bottomhole location.

(13) The applicant should be required to submit copies of the directional surveys conducted on the subject well to the Santa Fe and Artesia offices of the Division.

(14) The applicant should notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the subject well in order that these operations may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Conoco Inc., is hereby authorized to vertically drill its Savannah Well No. 1 from a surface location 660 feet from the North and East lines (Unit A) of Section 32, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, into the Undesignated North Dagger Draw-Upper Pennsylvanian Pool, kick off from the vertical at this depth and drill in a southwesterly direction into the Undesignated Cemetery-Morrow Gas Pool at an unorthodox bottomhole location within 100 feet of a point 1100 feet from the North and East lines (Unit A) of Section 32. (2) The NE/4 and N/2 of Section 32 shall be dedicated to the Savannah Well No. 1 in the Undesignated North Dagger Draw-Upper Pennsylvanian Pool and Undesignated Cemetery-Morrow Gas Pool, respectively, thereby forming standard 160 and 320-acre proration units for each respective pool.

(3) The applicant shall determine the subsurface location of the kick-off point in the wellbore prior to directional drilling and shall conduct a directional survey during or upon completion of directional drilling operations in order to determine the bottomhole location.

(4) The applicant shall submit copies of the directional surveys conducted on the subject well to the Santa Fe and Artesia offices of the Division.

(5) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the subject well in order that these operations may be witnessed.

(6) Jurisdiction is hereby 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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