## 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. 12556 ORDER NO. R-11139-A

# APPLICATION OF CONOCO INC. TO AMEND DIVISION ORDER NO. R-11139, RIO ARRIBA COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on December 7, 2000, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 12th day of February, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

## FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) By Order No. R-11139 entered in Case No. 12122 on February 18, 1999, the Division authorized Conoco Inc. ("Conoco") to conduct an 80-acre pilot infill drilling program within its San Juan 28-7 Unit, located in portions of Townships 27 & 28 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, by drilling six wells, located at standard and non-standard gas well locations, within six existing Basin-Dakota Gas Pool gas proration units ("GPU's").

(3) Division Order No. R-11139 further stipulated that the pilot infill drilling program be limited to the initial six wells.

(4) The applicant, Conoco, seeks:

(a) to expand the pilot infill drilling program by drilling the following-described additional nine wells, eight of which are located at non-standard well locations for the Basin-Dakota Gas Pool: Well Name

Well Location

Standard Well Location

San Juan 28-7 Unit No. 189M

700' FNL & 1255' FWL, Unit D, 35-T28N-R7W

Unorthodox Well Locations

San Juan 28-7 Unit No. 131E San Juan 28-7 Unit No. 225F San Juan 28-7 Unit No. 190F	2305' FSL & 2485' FWL, Unit K, 34-T28N-R7W 740' FNL & 2170' FEL, Unit B, 34-T28N-R7W 250' FSL & 2300' FEL, Unit O, 27-T28N-R7W
	(Bottomhole Location)
San Juan 28-7 Unit No. 189F	2460' FNL & 2280' FEL, Unit G, 35-T28N-R7W
San Juan 28-7 Unit No. 133G	2170' FSL & 320' FWL, Unit L, 35-T28N-R7W
San Juan 28-7 Unit No. 133F	295' FSL & 2390' FEL, Unit O, 35-T28N-R7W
San Juan 28-7 Unit No. 130E	2200' FNL & 1900' FWL, Unit F, 2-T27N-R7W
San Juan 28-7 Unit No. 181F	2200' FSL & 1400' FWL, Unit K, 3-T27N-R7W

- (b) authorization to expand the pilot infill drilling project by drilling additional infill wells within the San Juan 28-7 Unit at orthodox and unorthodox locations provided that: i) no more than two wells shall be drilled on each quarter section within a standard 320-acre GPU; and ii) such wells are located no closer than 660 feet to the outer boundary of the San Juan 28-7 Unit nor closer than 10 feet to any outer boundary of the quarter section on which the well is located;
- (c) to establish a ½-mile "buffer zone" within the outer boundary of the San Juan 28-7 Unit within which standard well density for the Basin-Dakota Gas Pool shall apply in order to protect the correlative rights of offset operators; and
- (d) to include within the "buffer zone" nonparticipating unit acreage within the Dakota formation comprising all of Sections 18 and 21, Township 27 North, Range 7 West.

(5) Burlington Resources Oil & Gas Company and the United States Bureau of Land Management appeared at the hearing generally in support of the application.

(6) The applicant presented various data obtained from the drilling of the six initial infill wells. The results were summarized by Conoco as follows:

- (a) pressure data was acquired in each well by layer;
- (b) differential depletion was observed. Modest depletion was observed in the "Two Wells" and "Upper Cubero" layers and little depletion was observed in the "Lower Cubero" layer;
- (c) production results were generally encouraging;
- (d) logs/core data suggest reservoir heterogeneity; and
- (e) the data acquired was utilized to refine the initial reservoir model.

(7) Conoco testified that the objective of the proposed expansion is to acquire additional data to further calibrate the reservoir model.

(8) The proposed unorthodox gas well locations are necessitated by a combination of topographic, engineering and geologic factors.

(9) Conoco provided notice in this case to all working interest owners within the San Juan 28-7 Unit.

(10) No interest owner appeared at the hearing in opposition to the application.

(11) The geologic and engineering evidence presented demonstrate that the proposed expansion of the pilot infill drilling project within the San Juan 28-7 Unit will allow the applicant the opportunity to gather additional geologic and engineering data to determine proper well density in this portion of the Basin-Dakota Gas Pool, will allow the recovery of additional gas reserves from the San Juan 28-7 Unit area that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(12) During the process of drilling, completing and producing the wells, Conoco should acquire additional geologic and engineering data that may be necessary to ultimately determine the proper well density in this portion of the Basin-Dakota Gas Pool.

(13) Further expansion of the pilot project by drilling additional infill wells at orthodox or unorthodox gas well locations may be approved by the Division Director only after notice and hearing.

(14) A <sup>1</sup>/<sub>2</sub>-mile "buffer zone" should be established within the outer boundary of the San Juan 28-7 Unit area. In addition, this "buffer zone" should include all of Sections 18 and 21, Township 27 North, Range 7 West. Within the "buffer zone," standard well density for the Basin-Dakota Gas Pool should apply.

#### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Conoco Inc., is hereby authorized to expand its pilot infill drilling program within the San Juan 28-7 Unit, located in portions of Townships 27 & 28 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, by drilling the following-described additional nine wells, eight of which are located at non-standard well locations for the Basin-Dakota Gas Pool, also hereby approved:

Well Name

Well Location

Standard Well Location

San Juan 28-7 Unit No. 189M

700' FNL & 1255' FWL, Unit D, 35-T28N-R7W

Unorthodox Well Locations

San Juan 28-7 Unit No. 131E San Juan 28-7 Unit No. 225F San Juan 28-7 Unit No. 190F	2305' FSL & 2485' FWL, Unit K, 34-T28N-R7W 740' FNL & 2170' FEL, Unit B, 34-T28N-R7W 250' FSL & 2300' FEL, Unit O, 27-T28N-R7W
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San Juan 28-7 Unit No. 181F	2200' FSL & 1400' FWL, Unit K, 3-T27N-R7W

(2) A  $\frac{1}{2}$ -mile "buffer zone" is hereby established within the outer boundary of the San Juan 28-7 Unit area. In addition, this "buffer zone" shall include all of Sections 18 and 21, Township 27 North, Range 7 West. Within the "buffer zone," standard well density for the Basin-Dakota Gas Pool shall apply.

(3) Further expansion of the pilot project by drilling additional infill wells at orthodox or unorthodox gas well locations may be approved by the Division Director only after notice and hearing.

(4) During the process of drilling, completing and producing the wells, Conoco shall acquire additional geologic and engineering data that may be necessary to ultimately determine the proper well density in this portion of the Basin-Dakota Gas Pool.

(5) 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

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