# 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. 12463 Order No. R-2917-C

## APPLICATION OF POGO PRODUCING COMPANY TO AMEND THE SPECIAL POOL RULES FOR THE MCMILLAN-MORROW GAS POOL, OR IN THE ALTERNATIVE FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

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

This case came on for hearing at 8:15 a.m. on July 27, 2000, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this Kuday of August, 2000, 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) The applicant, Pogo Producing Company ("Pogo"), seeks to amend the special pool rules for the McMillan-Morrow Gas Pool, Eddy County, New Mexico, to provide:

- (a) the option to drill a well on each quarter section within a standard 640-acre gas spacing and proration unit; and
- (b) well setback requirements such that wells shall be located no closer than 660 feet to a quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(3) In the alternative, the applicant seeks approval to drill its Davis "18" Well No. 1 at an unorthodox gas well location for the McMillan-Morrow Gas Pool 660 feet from the North and West lines (Unit D) of Section 18, Township 20 South, Range 27 East, NMPM, Eddy County, New Mexico.

(4) Harvey E. Yates Company, an operator within Section 7, Township 20 South, Range 27 East, NMPM, appeared at the hearing through legal counsel.

(5) The "Special Rules and Regulations for the McMillan-Morrow Gas Pool" as established by Division Order No. R-2917, as amended, dated June 8, 1965, currently require standard 640-acre gas spacing and proration units with wells to be located no closer than 1650 feet to the outer boundary of the section nor closer than 330 feet to any governmental quarter-quarter section line or subdivision inner boundary. In addition, the pool rules do not currently provide the option of drilling more than one well on a standard gas proration unit.

(6) The McMillan-Morrow Gas Pool currently comprises the following described area in Eddy County, New Mexico:

### TOWNSHIP 20 SOUTH, RANGE 26 EAST, NMPM

Section 13:	All
Section 24:	All
Section 23:	SE/4
Section 26:	N/2

### TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM

Section 7:	All
Section 18:	All
Section 19:	All

(7) By Order No. R-5829 issued in Case No. 6337 on October 6, 1978, the Division, upon application of Mark D. Wilson, limited the area subject to the "Special Rules and Regulations for the McMillan-Morrow Gas Pool" to a five section area comprising Sections 13 and 24, Township 20 South, Range 26 East, and Sections 7, 18 and 19, Township 20 South, Range 27 East.

(8) There are currently three active producing wells within the McMillan-Morrow Gas Pool, described as follows:

- (a) the Yates Drilling Company Pecos River Deep Unit Well No. 3 located 1980 feet from the North line and 660 feet from the East line (Unit H) of Section 13;
- (b) the Atasca Resources, Inc. State "19" Com Well No. 1 located 1650 feet from the North and West lines (Unit F) of Section 19; and
- (c) the newly drilled Pogo Davis "7" Well No. 1 located 660 feet from the South and West lines (Unit M) of Section 7.
- (9) The applicant presented geologic evidence that demonstrates:
  - (a) the "Singer" sand within the Middle Morrow section is the predominant producing interval within the McMillan-Morrow Gas Pool;
  - (b) the "Singer" sand traverses the McMillan-Morrow Gas Pool in a north-south direction and varies in thickness from 0-40 feet; and
  - (c) the approximate gas-water contact within the "Singer" reservoir occurs at a depth of approximately 7,100 feet. The majority of the McMillan-Morrow Gas Pool is at a structural position above the gas-water contact.
- (10) The applicant presented engineering evidence that demonstrates:
  - (a) its Davis "7" Well No. 1, which was recently drilled at an unorthodox gas well location in Section 7 (approved by Division Order No. R-11308 dated January 13, 2000) has been completed in the McMillan-Morrow Gas Pool at an initial producing rate of approximately 7.0 MMCFGPD. The well encountered a relatively high reservoir pressure of approximately 3,200 psi. Initial pressure for this gas reservoir was approximately 4,235 psi;

- (b) Section 7 has previously been tested and developed in the McMillan-Morrow Gas Pool by the: (i) Harvey E. Yates Company Hondo Singer "A" Well No. 1 located in Unit P; and (ii) Harvey E. Yates Company Singer Davis Well No. 1 located in Unit K. These wells cumulatively produced approximately 161 MMCFG from the Morrow formation;
- (c) the drainage areas for the three existing producing wells are as follows:

# Well Name Drainage Area

Pecos River Deep Unit No. 3	72 acres
State "19" Com No. 1	234 acres
Davis "7" No. 1	90 acres; and

(d) the overall average drainage area for all wells that have produced from the McMillan-Morrow Gas Pool is approximately 144 acres.

(11) A portion of the McMillan-Morrow Gas Pool comprising the SE/4 of Section 23 and the N/2 of Section 26, Township 20 South, Range 26 East, NMPM, is governed by Division Rule 104.C. which requires standard 320-acre gas spacing and proration units with wells to be located no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. In addition, Rule 104.C. also provides the option to drill a second well on a standard 320-acre proration unit within the quarter section not containing the initial well.

(12) The geologic and engineering evidence presented demonstrates that approval of infill drilling within the McMillan-Morrow Gas Pool will provide the operators in the pool the opportunity to recover additional gas reserves, which may otherwise not be recovered by the existing wells, thereby preventing waste.

(13) The applicant's proposal to allow up to four wells per section is supported by its geologic and engineering evidence, and is consistent with current Division rules governing Morrow gas development in Southeast New Mexico. (14) The proposed well setback requirements will allow for greater flexibility in locating infill gas wells.

(15) The applicant notified all operators and interest owners within the area affected by this application, as described in Finding No. (7). No operator or interest owner appeared at the hearing in opposition to the application.

(16) Approval of the application is in the best interest of conservation, prevention of waste and protection of correlative rights.

## IT IS THEREFORE ORDERED THAT:

(1) The application of Pogo Producing Company to amend the "Special Rules and Regulations for the McMillan-Morrow Gas Pool," located in all or portions of Sections 13, 23, 24 and 26, Township 20 South, Range 26 East, and Sections 7, 18 and 19, Township 20 South, Range 27 East, NMPM, Eddy County, New Mexico, is hereby approved.

(2) The "Special Rules and Regulations for the McMillan-Morrow Gas Pool." are hereby amended to read in their entirety as follows:

## SPECIAL RULES AND REGULATIONS FOR THE McMILLAN-MORROW GAS POOL

**RULE 1**. Each well completed or recompleted in the McMillan-Morrow Gas Pool within Sections 13 and 24, Township 20 South, Range 26 East, and Sections 7, 18 and 19, Township 20 South, Range 27 East, NMPM, shall be spaced, drilled, operated and produced in accordance with the special rules and regulations set forth herein.

**RULE 2**. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section, provided, however, up to four wells may be drilled on a standard 640-acre proration unit. Each infill well shall be drilled in a quarter section that does not contain a well.

**RULE 3.** The Director may grant an exception to Rule (2) for non-standard spacing units after notice and opportunity for hearing when an application has been filed and the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U.S. Public Land Survey or the following facts exist:

- i) the non-standard spacing unit consists of quarterquarter sections or lots joined by a common side; and
- ii) the non-standard unit lies wholly within a single governmental section.

Applications for administrative approval of non-standard spacing units shall be filed in accordance with the procedure set forth in Division Rule 104.D.(2).

**RULE 4**. Each initial and infill well shall be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

**RULE 5**. The Director may grant an exception to the requirements of Rule (4) after notice and opportunity for hearing when the exception is necessary to prevent waste and protect correlative rights.

Applications for administrative approval of unorthodox well locations shall be filed in accordance with the procedure set forth in Division Rule 104.F.

(3) 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

Director

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