## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE No. 4681 Order No. R-4284

APPLICATION OF ANADARKO PRODUCTION COMPANY FOR A WATERFLOOD EXPANSION AND FOR DIREC-TIONAL DRILLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 15, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of March, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-4225, dated November 19, 1971, the applicant, Anadarko Production Company, was authorized to expand its Langlie-Mattix Penrose Sand Unit Waterflood Project by the injection of water through four additional wells at unorthodox locations in Township 22 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.
- (3) That the applicant now seeks authority to change the surface location of said four wells, to drill additional injection wells at unorthodox surface locations, and to directionally drill each of the seven wells.
- (4) That the surface locations of the seven proposed wells, all in Township 22 South, Range 37 East, NMPM, Lea County,

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#### New Mexico, would be:

Well No. 1-2, 1220 feet from the South line and 1220 feet from the West line of Section 14;

Well No. 8-5, 290 feet from the North line and 290 feet from the West line of Section 21;

Well No. 7-4, 55 feet from the North line and 2630 feet from the East line of Section 21;

Well No. 6-2, 55 feet from the North line and 90 feet from the East line of Section 21;

Well No. 5A-3, 55 feet from the North line and 2550 feet from the West line of Section 22;

Well No. 2-2, 980 feet from the North line and 1250 feet from the West line of Section 23;

Well No. 40-1, 1610 feet from the South line and 1220 feet from the West line of Section 23; and

each of the above wells would be directionally drilled and would be bottomed within a 50 x 100 foot rectangle in the extreme: NE corner of Unit M, Section 14; NW corner of Unit D, NW corner of Unit B, and NE corner of Unit A, Section 21; NE corner of Unit C, Section 22; East side of Unit D, and East side of Unit L, Section 23, respectively.

- (5) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (6) That the proposed expansion of the Langlie-Mattix Penrose Sand Unit Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (7) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 should not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

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(8) That Order No. R-4225 should be superseded.

#### IT IS THEREFORE ORDERED:

(1) That the applicant, Anadarko Production Company, is hereby authorized to expand its Langlie-Mattix Penrose Sand Unit Waterflood Project, Langlie-Mattix Pool, Lea County, New Mexico, by the injection of water into the Penrose Sand of the Queen formation through the following-described wells at unorthodox surface locations to be directionally drilled to bottom the wells as follows:

#### TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM LEA COUNTY, NEW MEXICO

# WELL NO. SURFACE LOCATION BOTTOM HOLE LOCATION 1-2 1220 feet from the South Within 50' x 100' rectangular

- 1-2 1220 feet from the South line and 1220 feet from the West line of Section 14.
- area described as follows: commencing at a point on the NE/corner of the SW/4 SW/4 of Section 14 proceed West 50', thence South 100', thence East 50', thence North 100' to point of beginning.
- 8-5 290 feet from the North line and 290 feet from the West line of Section 21.
- Within 50' x 100' rectangular area described as follows: commencing at a point on the NW/corner of Section 21 proceed East 50', thence South 100', thence West 50', thence North 100' to point of beginning.
- 7-4 55 feet from the North line and 2630 feet from the East line of Section 21.
- Within 50' x 100' rectangular area described as follows: commencing at a point on the NW/corner of the NE/4 of Section 21 proceed East 100', thence South 50', thence West 100', thence North 50' to point of beginning.

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(1) - Continued from Page 3 -

### WELL NO. SURFACE LOCATION BOTTOM HOLE LOCATION

6-2 55 feet from the North line and 90 feet from the East line of Section 21.

Within 50' x 100' rectangular area described as follows: commencing at a point on the NE/corner of Section 21 proceed West 100', thence South 50', thence East 100', thence North 50' to point of beginning.

- 5A-3 55 feet from the North line and 2550 feet from the West line of Section 22.
- within 50' x 100' rectangular area described as follows: commencing at a point on the NE/corner of the NW/4 of Section 22 proceed West 100', thence South 50', thence East 100', thence North 50' to point of beginning.
- 2-2 980 feet from the North line and 1250 feet from the West line of Section 23.
- Within 50' x 100' rectangular area described as follows: commencing at a point 900' from North line and 1320' from West line of Section 23 proceed West 50', thence South 100', thence East 50', thence North 100' to point of beginning.
- 40-1 1610 feet from the South line and 1220 feet from the West line of Section 23.
- Within 50' x 100' rectangular area described as follows: commencing at a point 1600' from South line and 1320' from West line of Section 23 proceed West 50', thence North 100', thence East 50', thence South 100' to point of beginning.
- (2) That a continuous multi-shot directional survey shall be made of each of the well bores from total depth to the surface

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with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward copies of the survey reports directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico, and that the operator shall notify the Commission's Hobbs District Office of the date and time surveys are to be commenced.

- (3) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.
- (4) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve such additional injection wells within said project area as may be necessary to complete an efficient injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

- (5) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (6) That Order No. R-4225, dated November 19, 1971, is hereby superseded.
- (7) That 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

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary