

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF ANADARKO PRODUCTION COMPANY
FOR APPROVAL OF ITS ARTESIA STATE UNIT
AGREEMENT AND FOR AUTHORITY TO INSTALL
AND OPERATE A WATERFLOOD PROJECT IN
THE ARTESIA-QUEEN-GRAYBURG-SAN ANDRES
POOL, INCLUDING THE DRILLING OF SIX
INJECTION AND TWO PRODUCTION WELLS,
ALL AT UNORTHDOX WELL LOCATIONS WITHIN
THE BOUNDARIES OF SAID UNIT LOCATED IN
PORTIONS OF SECTIONS 13, 14, AND 23,
TOWNSHIP 18 SOUTH, RANGE 27 EAST,
N.M.P.M., AND FURTHER, FOR APPROVAL
OF ADMINISTRATIVE PRODECURES FOR EXPAN-
SION OF SAID WATERFLOOD PROJECT.

A P P L I C A T I O N

COMES NOW ANADARKO PRODUCTION COMPANY and applies to the Oil Conservation Commission of New Mexico for approval of its Unit Agreement for the Artesia State Unit, and for authority to install and operate a waterflood project in the Artesia-Queen-Grayburg-San Andres Pool, Eddy County, New Mexico, by the drilling of six water injection wells and two production wells all at unorthdox well locations within the boundaries of said unit and for procedures for Administrative Approval to expand said waterflood project; and in support thereof would show:

1. Applicant is the operator of the proposed Artesia State Unit which is composed entirely of state leases in which the applicant owns 100% of the working interest and which embraces lands described as follows:

SECRET MAILED
Date 10-18-74

Township 18 South, Range 27 East, N.M.P.M.

Section 14: E/2 E/2 and SW/4 SE/4
Section 13: W/2 W/2
Section 23: N/2 NE/4

all in Eddy County, New Mexico and containing 440 acres,
more or less

2. That the Unit Agreement has been given preliminary approval by the Commissioner of Public Lands.

3. That said Unit Agreement has been approved by sufficient owners of interest to assure its ultimate effectiveness.

4. That the said Unit is being formed for the purpose of conducting waterflood operations within the boundaries of the unit area in the above referenced pool.

5. That Applicant proposes to drill six wells for water injection into the Grayburg and San Andres formations and two production wells, all at unorthodox well locations within the Unit boundary as indicated by the plat and descriptions attached hereto as Exhibits "A" and "B", respectively, and incorporated by reference.

6. That applicant further requests that Administrative Procedures be authorized whereby modification or expansion of the unit including the drilling of additional injection and/or production wells at both orthodox and unorthodox well locations may be approved without further notice and hearing.

7. That the granting of this application will result in the prevention of waste and the protection of correlative rights.

WHEREFORE, applicant respectfully requests this matter be set for hearing before the Commission's duly appointed Examiner and that after notice and hearing, an order be entered approving the Unit Agreement, authorizing the installation and operation of a waterflood project, and establishing Administrative Procedures for expansion of said project as described above.

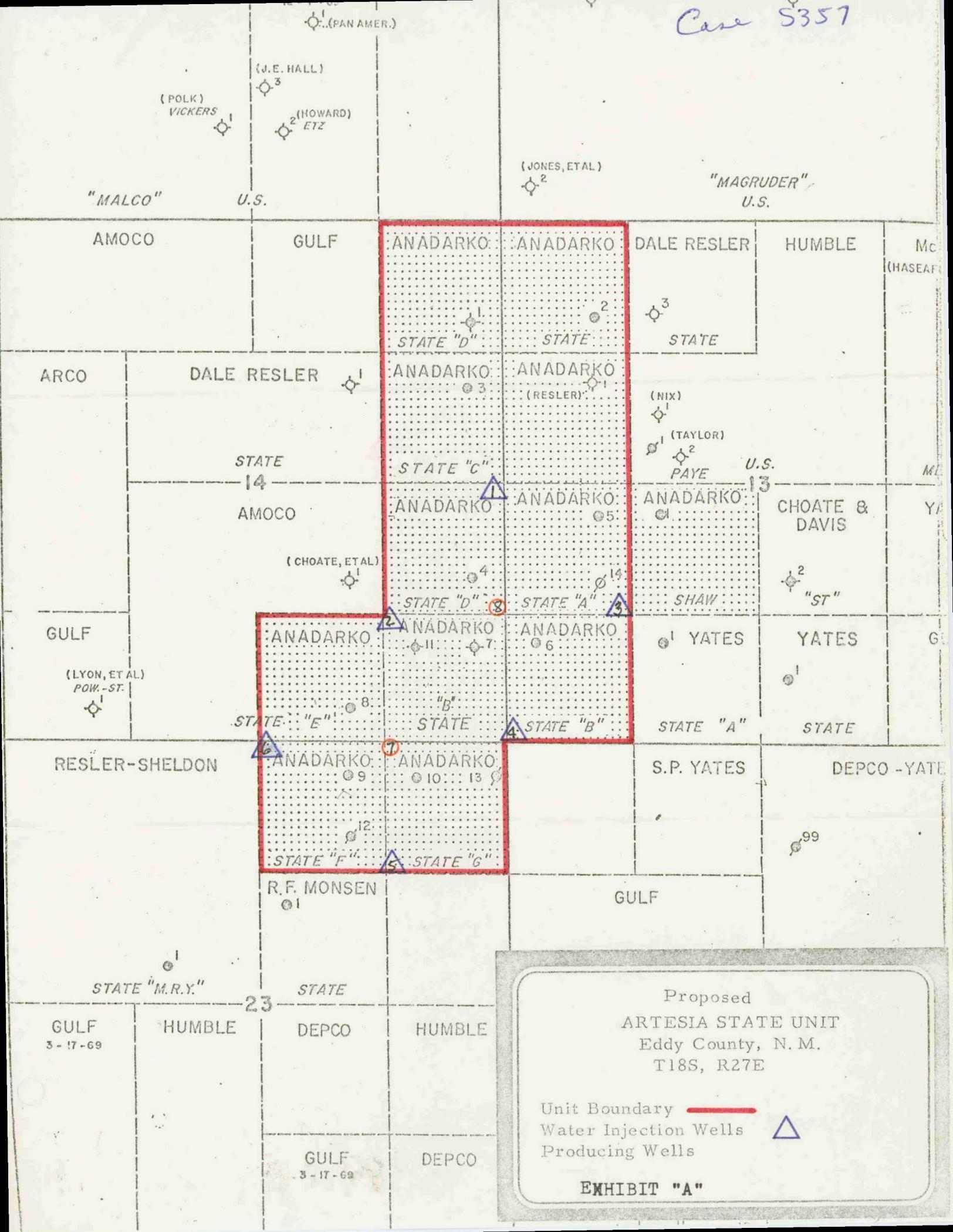
Respectfully submitted,

ANADARKO PRODUCTION COMPANY

By W. T. Kellahin

KELLAHIN & FOX
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT



Proposed
ARTESIA STATE UNIT
Eddy County, N. M.
T18S, R27E

Unit Boundary —
 Water Injection Wells △
 Producing Wells ○

EXHIBIT "A"

PROPOSED LOCATION OF NEW WELLS

Water Input Wells

- (1) 10' FEL & 2630' FSL Sec. 14, T18S-R27E ✓✓
- (2) 1310' FS&EL Sec. 14 ✓
- (3) 1310' FWL & 1330' FSL Sec. 13 ✓✓
- (4) 10' FS&WL Sec. 13 ✓
- (5) 1310' FN&EL Sec. 23 ✓
- (6) 10' FNL & 2630' FEL Sec. 23 ✓

Producing Wells

- (7) 10' FNL & 1310' FEL Sec. 23 ✓
- (8) 10' FEL & 1330' FSL Sec. 14 ✓

EXHIBIT "B"

CASE 5354: Application of Mark Production Company for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests of Pennsylvanian age or older underlying the S/2 of Section 9, Township 20 South, Range 25 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and West lines of said Section 9. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of the applicant as the operator of the well and a charge for risk involved in drilling said well.

CASE 5355: Application of Tesoro Petroleum Corporation for pool contraction and expansion, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Lone Pine-Dakota "D" Oil Pool by the deletion of the E/2 NW/4 of Section 8, Township 17 North, Range 8 West, McKinley County, New Mexico, and the expansion of the Hospah-Dakota Oil Pool by the addition of such lands.

CASE 5356: Application of Anadarko Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Artesia State Unit Area comprising 440 acres, more or less, of State lands in Township 18 South, Range 27 East, Eddy County, New Mexico.

CASE 5357: Application of Anadarko Production Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its Artesia State Unit, Artesia Pool, by the injection of water into the Grayburg and San Andres formations at the following six unorthodox locations in Township 18 South, Range 27 East, Eddy County, New Mexico: Section 13, 1330 feet from the South line and 1310 feet from the West line, and 10 feet from the South and West lines; Section 14, 2630 feet from the South line and 10 feet from the East line and 1310 feet from the South and East lines; Section 23, 1310 feet from the North and East lines and 10 feet from the North line and 2630 feet from the East line. Further to drill two producing wells at unorthodox locations 10 feet from the North line and 1310 feet from the East line of Section 23 and 1330 feet from the South line and 10 feet from the East line of Section 14. Applicant further seeks an administrative procedure whereby the project may be expanded by the drilling of additional injection and producing wells at orthodox and unorthodox locations without further notice and hearing.

CASE 5358: Application of Continental Oil Company for simultaneous dedication and unorthodox gas well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order approving the simultaneous dedication of a standard 640-acre gas proration unit comprising all of Section 26, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to four wells, being the Lynn B-1 Well No. 1, in Unit J and Lynn B-1 Wells Nos. 3, 4, and 16, at unorthodox locations in Units C, M, and A, respectively, of said Section 26.

Dockets Nos. 31-74 and 32-74 are tentatively set for hearing on November 13 and November 26, 1974. Application for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 30, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 5349: Application of Corinne Grace for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Bond Draw Unit Area comprising 5123 acres, more or less, of Federal, State, and Fee lands in Township 24 South, Range 27 East, Eddy County, New Mexico.

CASE 5350: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Sullivan DZ Com Well No. 1, to be drilled 990 feet from the North line and 660 feet from the West line of Section 8, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 8 to be dedicated to the well.

CASE 5351: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Ferguson DY Com Well No. 1 to be drilled 1980 feet from the North line and 660 feet from the East line of Section 7, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 7 to be dedicated to the well.

CASE 5352: Application of David Fasken for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests of Pennsylvanian age or older underlying the S/2 of Section 2, Township 18 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 990 feet from the South line and 1650 feet from the East line of said Section 2. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of the applicant as operator of the well and a charge for the risk involved in drilling said well.

CASE 5353: Application of Cities Service Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Government-Z Com Well No. 1, located in Unit K of Section 23, Township 20 South, Range 28 East, Eddy County, New Mexico, in such a manner as to produce oil from the Wolfcamp formation through tubing and gas from the Morrow formation through the casing-tubing annulus by means of a cross-over assembly.

CASE 5359: Application of Continental Oil Company for simultaneous dedication and unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a 320-acre non-standard gas proration unit comprising the N/2 of Section 1, Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to its Vaughn B-1 Wells Nos. 1 and 6, located at unorthodox locations in Units H and E, respectively, of said Section 1.

CASE 5360: Application of Continental Oil Company for two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the two following non-standard gas proration units in the irregular Section 4, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico:

A 480-acre unit comprising all of Lots 1, 2 and 3, 6 through 11, and 14, 15, and 16 of said Section 4 to be dedicated to the Meyer B-4 Well No. 14, located in Unit G;

A 240-acre unit comprising the SE/4 and E/2 SW/4 of said Section 4 to be dedicated to the Meyer B-4 Well No. 4, located in Unit S.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

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CASE NO. 5357

APPLICATION OF ANADARKO PRODUCTION
COMPANY FOR A WATERFLOOD PROJECT,
EDDY COUNTY, NEW MEXICO

Order No. R-4907

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[Handwritten notes: this is 157' as per the 157' well - not correct - sufficient MHI]

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 30, 1974
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of November, 1974, 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 the applicant, Anadarko Production Company, seeks
authority to institute a waterflood project in the Artesia State
Unit Area, Artesia Pool, by the injection of water into the *Queen*,
Grayburg, and San Andres formations through six injection wells at
unorthodox locations in Township 18 South, Range 27 East, NMPM,
Eddy County, New Mexico, as follows:

1	Section 13:	1330 feet from the South line and 1310 feet from the West line;
2		10 feet from the South line and 10 feet from the West line;
3	Section 14:	2630 feet from the South line and 10 feet from the East line;
4		1310 feet from the South line and 1310 feet from the East line;
5		
6	Section 23:	1310 feet from the North line and 1310 feet from the East line; and
7		10 feet from the North line and 2630 feet from the East line.

1 (3) That the wells in the project area are in an advanced
2 state of depletion and should properly be classified as "stripper"
3 wells.

4 (4) That the proposed waterflood project should result in
5 the recovery of otherwise unrecoverable oil, thereby preventing
6 waste.

7 (5) That the applicant seeks approval for the unorthodox
8 location of two producing wells located as follows:

9 TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM

10 Section 14: 1330 feet from the South line and
 10 feet from the East line; ~~and~~

11 Section 23: 10 feet from the North line and
12 1310 feet from the East line.

13 (6) That the operator should take all steps necessary to
14 ensure that the injected water enters only the proposed injection
15 interval and is not permitted to escape to other formations or
16 onto the surface from injection, production, or plugged and
17 abandoned wells.

18 (7) That applicant further seeks an administrative proce-
19 dure whereby the project may be expanded by the drilling of
20 additional injection and producing wells at orthodox and unortho-
21 dox locations without further notice and hearing.

22 (8) That the subject application should be approved and
23 the project should be governed by the provisions of Rules 701,
24 702, and 703 of the Commission Rules and Regulations.

25 IT IS THEREFORE ORDERED:

26 (1) That the applicant, Anadarko Production Company, is
27 hereby authorized to institute a waterflood project in the
28 Artesia State Unit Area, Artesia Pool, by the injection of water
29 into the ^{Queen,} Grayburg, and San Andres formations through the following
30 described wells at unorthodox locations in Township 18 South,
31 Range 27 East, NMPM, Eddy County, New Mexico:
32

Section 13: 1330 feet from the South line and
1310 feet from the West line;
1 10 feet from the South line and
2 10 feet from the West line;
Section 14: 2630 feet from the South line and
3 10 feet from the East line;
4 1310 feet from the South line and
5 1310 feet from the East line;
Section 23: 1310 feet from the North line and
6 1310 feet from the East line; ~~and~~
7 10 feet from the North line and
2630 feet from the East line.

*See
under*

internally coated ² (B) That injection into each of said wells shall be through ~~cement-lined~~ tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; ~~or in the case of open hole completions, as near as practicable to the casing~~ ~~straps~~ that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

³ (A) That the operator shall immediately notify the supervisor of the Commission's Artesia district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

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(4) That the subject waterflood project is hereby designated the Anadarko Production Company Artesia State Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(5) That the applicant is hereby authorized to drill two producing wells at the following unorthodox locations:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM
Section 14: 1330 feet from the South line and
10 feet from the East line; ~~and~~
Section 23: 10 feet from the North line and
1310 feet from the East line.

⁶ (7) The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the Artesia State Unit Area as may be necessary to complete an

1 efficient production and injection pattern, provided said wells
2 are drilled no closer than 660 feet to the outer boundary of
3 said unit nor closer than 10 feet to any quarter-quarter
4 section or subdivision inner boundary. To obtain such approval,
5 the project operator shall file proper application with the
6 Commission, which application, if it seeks authorization to
7 convert additional wells to injection or to drill additional
8 production or injection wells shall include the following:

- 9 (a) A plat showing the location of proposed well,
10 all wells within the project area, and offset
11 operators, locating wells which offset the
12 project area.
- 13 (b) A schematic drawing of the proposed well which
14 fully describes the casing, tubing, perforated
15 interval, and depth.
- 16 (c) A letter stating that all offset operators
17 to the proposed well have been furnished a
18 complete copy of the application and the
19 date of notification.

20 The Secretary-Director may approve the proposed well
21 if, within 20 days after receiving the application, no objection
22 to the proposal is received. The Secretary-Director may grant
23 immediate approval, provided waivers of objection are received
24 from all offset operators.

25 (7) That monthly progress reports of the waterflood project
26 herein authorized shall be submitted to the Commission in accor-
27 dance with Rules 704 and 1120 of the Commission Rules and Regula-
28 tions.

29 (8) That jurisdiction of this cause is retained for the
30 entry of such further orders as the Commission may deem necessary.

31 DONE at Santa Fe, New Mexico, on the day and year herein-
32 above designated.