OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

October 5, 1972

Mr. J. L. Hamilton
Anadarko Production Company
Two Greenway Plaza East
Suite 410
Houston, Texas 77046

Dear Mr. Hamilton:

Enclosed herewith please find Administrative Order WFX-379 authorizing conversion of three wells to water injection wells in the Langlie-Mattix Penrose Sand Unit Water Flood Project in the Langlie-Mattix Pool in Lea County, New Mexico.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: Oil Conservation Commission
Hobbs, New Mexico

APPLICATION OF ANADARKO PRODUCTION COMPANY TO EXPAND ITS LANGLIE-MATTIX PENROSE SAND UNIT WATER FLOOD PROJECT IN THE LANGLIE-MATTIX POOL IN LEA COUNTY, NEW MEXICO.

ORDER WFX NO. 379

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-4284, Anadarko Production Company has made application to the Commission on September 20, 1972, for permission to expand its Langlie-Mattix Penrose Sand Unit Water Flood Project in the Langlie-Mattix Pool, Lea County, New Mexico.

NOW, on this 5th day of October, 1972, the Secretary-Director finds:

1. That application has been filed in due form.

2. That satisfactory information has been provided that all offset operators have been duly notified of the application.

3. That no objection has been received within the waiting period as prescribed by Order No. R-4284.

4. That the proposed injection wells are eligible for conversion to water injection under the terms of Order No. R-4284.

5. That the proposed expansion of the above-referenced water flood project will not cause waste nor impair correlative rights.

6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Anadarko Production Company, be and the same is hereby authorized to inject water into the Penrose formation through the following described wells for purposes of secondary recovery, to wit:

Tract 3 Well No. 3 located in Unit B of Section 22,
Tract 5-A Well No. 1 located in Unit D of Section 22,
and Tract 7 Well No. 3 located in Unit B of Section 21,
all in Township 22 South, Range 37 East, NMPM.

PROVIDED HOWEVER, that the applicant shall inject water through tubing and under a packer set as close to the injection zone as is practicable.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.
Secretary-Director

S E A L

379

ANADARKO PRODUCTION COMPANY

GENERAL OFFICE
P. O. BOX 9317
FORT WORTH, TEXAS 76107

TWO GREENWAY PLAZA EAST, SUITE 410, HOUSTON, TEXAS 77046, (713) 626-7610

September 18, 1972

State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Langlie-Mattix Penrose Sand Unit
Langlie-Mattix Oil Pool
Lea County, New Mexico

Gentlemen:

Anadarko Production Company, as Unit Operator of the Langlie-Mattix Penrose Sand Unit, Langlie-Mattix Oil Pool, Lea County, New Mexico, hereby requests administrative approval, as previously authorized by OCC Order No. R-3247, to expand Unit waterflood development under the provisions of OCC Rule 701-E-5.

The proposed expansion of the waterflood development on the reference Unit includes the conversion of three (3) Unit wells to water injection. These three (3) wells are listed on the attached Table I with well location and pertinent well data.

The OCC Rule 701-E-5 requirement of the showing of oil production response to water injection operations prior to expansion of waterflood development was waived by OCC Order No. ~~R-3247.~~

Expansion of waterflood development under OCC Rule 701-E-5 also requires that the application be made in accordance with OCC Rule 701-B. In accordance with OCC Rule 701-B, the following data and information is enclosed:

(1) Plat of Unit Area showing location of proposed water injection wells.
(2) Well bore diagram of Langlie-Mattix Penrose Sand Unit No. 7-3 showing well's total depth, open hole producing intervals, casing and cementing program, proposed tubing and packer setting, and type and quantity of water to be injected. This well has been selected as typical of the three (3) existing Unit producing wells proposed for conversion to water injection.

(3) Driller's log of Langlie-Mattix Penrose Sand Unit Well No. 7-3 (no electrical surveys available).

This proposed expansion will complete waterflood development on the Unit for the secondary recovery of oil from the Penrose Sand reservoir.

Your approval at your earliest convenience will be appreciated.

Very truly yours,

ANADARKO PRODUCTION COMPANY

J. L. Hamilton by cs

J. L. Hamilton
Division Production Engineer

JLH/CWS/yim

Encl.

cc: USGS-Roswell
New Mexico Commission of Public Lands
Offset Operators - Gulf Oil Corp.
Continental Oil Co.

Table I
Langlie-Mattix Penrose Sand Unit
Langlie-Mattix Oil Pool
Lea County, New Mexico
Well Location and Data
Expansion Water Injection Wells

Well No.	Location T22S, R37E	Casing Record						Total Depth Feet	Open Hole Interval	Packer set @
		SURFACE			LONG STRING					
		Size(in.)	Depth (ft.)	Cement(sx)	Size(in.)	Depth(ft.)	Cement(sx)			
3-3	660' SNL, 1980' WEL Section 22	8-5/8" OD	1125'	150	7" OD	3383'	250	3688'	3383'-3688'	3335'
5A-1	660' SNL, 660' EWL Section 22	16" OD 8-5/8" OD	198' 1168' (top 200' pulled)	60 Unknown	7" OD	3400'	400	3712'	3400'-3712'	3337'
7-3	660' SNL, 1980' WEL Section 21	8-5/8" OD	1175'	100	7" OD	3354'	100	3615'	3354'-3615'	3302'

Insert

Color Page/Photo

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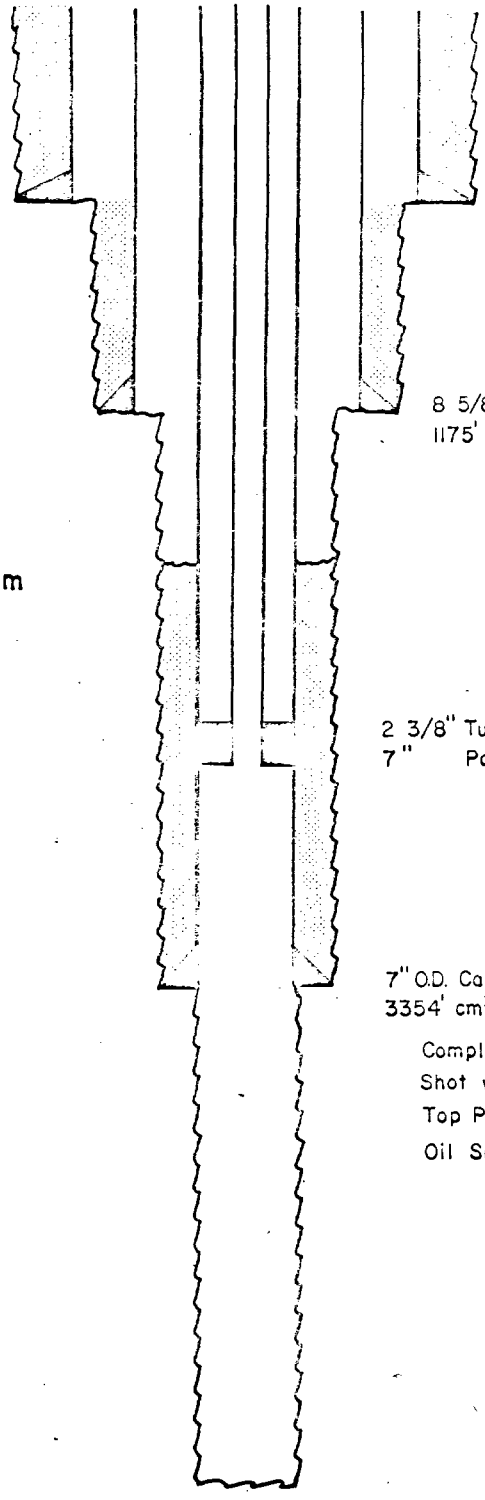

13 3/8" O.D. Casing at
240' cmt. w/250 sks.

8 5/8" O.D. Casing at
1175' cmt. w/100 sks.

2 3/8" Tubing at 3300'
7" Packer at 3302'

7" O.D. Casing at
3354' cmt. w/100 sks.

Completed in open hole 3354'-3615'
Shot w/300 qts. Nitro 3530'-3615'
Top Pay 3500'
Oil Sand 3500'-3607' - PENROSE SAND

Proposed Injection Rate:
500 B/D

Injection Water Source:
Nonpotable water purchased from Skelly Oil Company's Jal Water System

WELL LOCATION

L. M. P. S. U. 7-3
660' SNL & 1980' WEL
Sec. 21, T-22-S, R-37-E
Lea Co., New Mexico

ANADARKO PRODUCTION COMPANY

WELL BORE DIAGRAM

LANGLIE MATTIX PENROSE SAND UNIT

WELL NO. 7-3

LEA COUNTY, NEW MEXICO

DRILLERS LOG

Langlie-Mattix Penrose Sand Unit Well No. 7-3
660' SNL, 1980' WEL
Section 21, T22S, R37E, Lea County, New Mexico

FROM	TO	THICKNESS IN FEET	FORMATION
			Caliche
			Sand
			Sand (Water)
			Shale
			Sandy Shale
			Sand
			Shale
			Sandy Shale
			Sand
			Sandy Shale
			Red Bed & Red Rock
			Shale & Red Rock
			Sandy Shale
			Red Rock
			Sand
			Red Rock & Shale
			Sandy Shale
			Red Rock
			Sandy Shale
			Red Rock
			Anhydrite
			Salt
			Anhydrite
			Red Rock
			Red Rock & Anhydrite
			Salt & Red Rock
			Salt & Anhydrite
			Anhydrite
			Salt
			Salt & Anhydrite
			Salt & Potash
			Salt
			Anhydrite & Potash
			Salt
			Salt & Anhydrite
			Salt
			Salt & Anhydrite
			Anhydrite & Potash
			Salt
			Anhydrite
			Salt
			Salt & Anhydrite
			Salt, Potash & Anhydrite
			Salt & Potash
			Salt & Anhydrite
			Salt
			Salt & Anhydrite
			Anhydrite
			Lime
			Anhydrite
			Lime
			Brown Lime & Anhydrite
			Anhydrite
			Brown Lime & Anhydrite
			Lime
			Brown Lime & Anhydrite
			Lime
			Lime & Anhydrite
			Brown Lime
			Lime & Shale
			Lime & Anhydrite
			Lime
			Lime & Anhydrite
			Brown Lime
			Gray Lime — 3/4-Million gas 3500' to 3506', and increase in gas to 1+-million 3520' to 3535'
			Shale
			Lime (Gray)
			Sandy Lime (Show Oil)
			Lime (Gray) " "
			Lime (Gray)
			Sandy Lime (Show Oil)
			Lime (Gray)
			Sandy Lime
			Lime — Total Depth.

ILLEGIBLE