BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

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IN THE MATTER OF THE APPLICATION OF ANADARKO PRODUCTION COMPANY FOR AUTHORITY TO EXPAND AND COMPLETE WATERFLOOD DEVELOPMENT OF THE LANGLIE-MATTIX PENROSE SAND UNIT, LOCATED IN TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

APPLICATION

COMES NOW the Applicant and alleges that:

- 1. It is the Operator of the Langlie-Mattix Penrose Sand Unit located within Township 22 South, Range 37 East, N.M.P.M., Lea County, New Mexico, and as such Operator makes this application for authority to expand and complete development of waterflood operations within said Unit.
- 2. It seeks approval to complete waterflood development in said Unit in three stages, the first stage to be accomplished upon this Commission entering an order approving this application, the second and third stages to be accomplished at 12-month intervals on or about July 1, 1968 and July 1, 1969 respectively.
- 3. Wells to be converted to and drilled and completed as water injection wells in the Penrose Sand common source of supply in said Langlie-Mattix Penrose SandUnit in Township 22 South, Range 37 East, N.M.P.M., Lea County, New Mexico in said first stage are as follows:

			Unit Letter
Well Number	Location	Section	Designation
9-1	SE SE	20 V	P
13C-5	SE NW	27	F
13C-7-	NW NE	27	В
18-2~	NW SW	26	${f L}$
19-4 —	SE NE	27	H
22-1-	NW SW	27	${f L}$
24-4	NW SE	28	J
28-1	SE SW	28 🗸	N
28-4	NW SW-	28 🗸	${f L}$
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31-1	SE NE	32 🗸	H
32-2	NW N W -	33 V	D
33-1	SE NW	33	\mathbf{F}
35-3	NW NE	33	В
-38-1	NW NW	28 ·	D
39-1	SE SE	29	P
	A		

E for hearing 8 for adm approval

With the exception of Well No. 24-4, it is proposed that all of the above listed wells will be converted from producing wells to water injection wells in said Penrose Sand at an approximate depth of 3,550 feet below surface. It is proposed that Well No. 24-4 be permitted to be drilled and completed as a water injection well in said Penrose Sand at an unorthodox location 1,330 feet from the east line and 1,330 feet from the south line (Unit J) of the above described Section 28. The water to be injected into the Penrose Sand is non-potable received from Skelly Oil Company's Jal Water System to be injected at the approximate rate of 500 barrels per well per day.

- 4. It is requested that of the above listed wells, Well Nos. 13C-5, 13C-7, 18-2, 19-4, 22-1, 24-4, 33-1 and 35-3 be granted administrative approval for conversion to water injection wells pursuant to this Commission's Rule 701-E-5, because the direct or diagonally offsetting wells have experienced response to water injection. It is proposed that Well Nos. 9-1, 28-1, 28-4, 29-2, 31-1, 32-2, 38-1 and 39-1 be permitted to be converted to water injection wells to meet obligations to Humble Oil & Refining Company and Skelly Oil Company, the operators of adjoining waterflood units.
- 5. The proposed plan of development of the balance of said Langlie-Mattix Penrose Sand Unit in two stages (the second on or about July 1, 1968 and the third on or about July 1, 1969), is outlined on Exhibit "F" attached hereto and made a part hereof, and it is requested that this procedure be approved as to staging and that wells to be utilized for water injection purposes be administratively approved as each stage is developed.
- 6. This Commission, by its Order No. R-2617 originally authorized the creation of the Langlie-Mattix Penrose Sand Unit as a waterflood project, and the expansion and completion of waterflood development within said Unit is necessary to allow Applicant to prevent waste and promote the conservation of oil and gas.
- 7. Attached hereto and made a part hereof are the following Exhibits:
 - (a) Exhibit "A", a plat showing the location of the proposed first stage injection wells and all other wells within a two-mile radius.
 - (b) Exhibit "B", this Commission's Form C-116 (Gas-Oil Ratio Tests) executed by Applicant.
 - (c) Exhibit "C", a diagrammatic sketch showing casing and tubing data for the proposed injection wells.
 - (d) Exhibit "D", Casing and Cementing Record of wells to be converted to injection.
 - (f) Exhibit "F", a map of the Unit Area showing injection wells in each proposed stage of development.

WHEREFORE, Applicant prays:

1. That this matter be set down for hearing before the

- 2. That notice thereof be given as required by law;
- 3. That upon such hearing, this Commission enter an order authorizing the expansion and completion of said Langlie-Mattix Penrose Sand Unit and permit the requisite conversion of wells to injection wells and the drilling of the aforesaid well as a water injection well, and the injection of water into said Unit as herein set out.

ANADARKO PRODUCTION COMPANY

T. J. Guinan, Attorney

P. O. Box 9317

Fort Worth, Texas 76107

CERTIFICATE OF MAILING

STATE OF TEXAS) SS COUNTY OF TARRANT

T. J. Guinan, being first duly sworn, on oath deposes and states:

That he is attorney for Applicant herein and that, according to his best information and belief, the parties of interest and the addresses of such parties are as follows:

> The State of New Mexico State Engineer Office State Capitol

Skelly Oil Company P. O. Box 1650

Tulsa, Oklahoma 73101

Santa Fe, New Mexico 87501

Mobil Oil Company

Humble Oil and Refining Company Box 3128

Box 1600

Midland, Texas 79701

Houston, Texas 77001

That on May 3, 1967, a true and complete copy of the foregoing application, together with all exhibits, was mailed to such persons or firms at the addresses shown above, with postage thereon fully paid.

Subscribed and sworn to before me this 3, day of

Virginia L. King Notary Public

My Commission Expires:

6-1-67

Revised 1-1-65

Operator Anadarko Production Company	any		Pool	1	lie-N	Langlie-Mattix				County	L	Pa				
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Langlie-Mattix Penrose Sand Unit																
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No well will be assigned an allowable greater than the amount of oil produced on the official test.

increased allowables when authorized by the Commission. During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

EXHIBIT "B"

Langlie-Mattix Penrose Sand Unit

Lea County, New Mexico Production History Wells Responding to Water Injection

is true and complete to the best of my knowledge and belief. I hereby certify that the above information

C. W. Stumhoffer

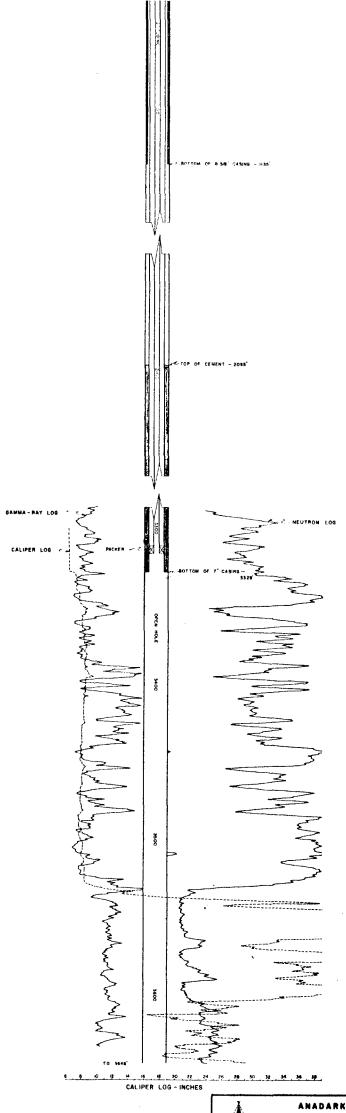
C. W. Samk

(Signature)

Superintendent Secondary Recovery (Title) Div.

May 3, 1967

(Date)



AMADARKO PRODUCTION COMPANY

EXHIBIT "C"
TYPICAL
OPEN HOLE COMPLETION
WATER INJECTION WELL

LANGLIE MATTIX PENROSE SAND UNIT LEA COUNTY, NEW MEXICO

ANADARKO PRODUCTION COMPANY
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO
CASING AND CEMENTING RECORD
OF WELLS TO BE CONVERTED TO INJECTION

TRACT NO. & WELL NO.	DATE OF COMPLETION	SUR SIZE	SURFACE CASING DEPTH	NG SX. CMT.	H	LONG STRING CASING DEPTH SX.	SX. CMT.
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130-5	8-31-37	9 5/8	1123	250	7	3399	200
130-7	3-29-39	16	114	65	7	3433	200
18-2	5-27-39	8 5/8	1135	100	7	3349	175
19-4	10-5-38	10 8 5/8	95 1140	75 150	7	3360	150
22-1	10-12-37	8 5/8	1167	500	7	3378	150
28-1	5-23-39	15½	135	100	7	3412	150
28-4	11-23-39	15½	114	100	7	3419	150
29-2	7-27-40	16	119	100	7	3424	150
31-1	11-25-56	9 '5/8	251	200	σ	3400	350
32-2	7-12-41	15	121	125	7	3402	150
33-1	2-12-39	15½	132	100	7	3395	150
35-3	5-25-40	15%	128	50	7	3395	200
38-1	7-25-57	8 5/8	1160	600	43	3725	300
39-1	8-30-40	10 3/4))		•		

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SAND UNIT
LEA COUNTY, NEW MEXICO PRODUCTION COMPANY FL000 NO. 36 ANADAREO

PROPOSED EXPANSION
Langie - Mathix Penrose Sand Unit
LEA COUNTY, NEW MEXICO
Showing
Proposed Compile to Waterflood Development

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Present Injection Wells

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Stage I - Injection Wells 7-1-67

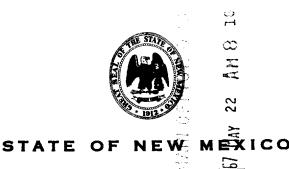
EXHIBIT "A"

PROPOSED EXPANSION

Langlie-Mattix Penrose Sand Unit

Lea County, New Mexico

Showing
Unit and Surrounding Area



STATE ENGINEER OFFICE

S. E. REYNOLDS

No. 19, 1957

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, NEW MEXICO 87501

Ar. A. L. Ponter, Jr. Secretary-Director Oil Conservation Commission Santa Fe, New Mexico

Dear lw. Porter:

Reference is made to the application of Anadarko Production Company which seeks to expand their waterflood project in the Langlie-Mattix Penrose Sand Unit which was granted under Oil Conservation Commission Order No. R-2517.

Since Exhibit C is not legible, except for the identification, and does not purport to represent actual completion of any specific vell, it is of no value in determining whether protection will be accomplished. However, I assume that the Commission will ascertain that there will be no loss or commingling of fluids or gases if the application is approved.

FEI/ma

cc-T. J. Guinar

F. H. Hennighausen

Yours truly,

S. E. Reynolds State Engineer

Frank E. Irbv

Chief

Water Rights Div.