

**Texaco Exploration and Production Inc.**Permian Business Unit

500 North Loraine Midland TX 79701 P O Box 3109 Midland TX 79702

December 6, 2000

State of New Mexico
Oil Conservation Division
New Mexico Department of
Energy, Minerals, and Natural Resources
2040 S. Pacheco Street
Santa Fe, New Mexico 87505

DEC - 8 2000

Re:

**EOR STATUS REPORT** 

Cooper Jal Unit Lea County, New Mexico

#### Gentlemen:

Texaco Exploration & Production Inc., as operator of the Cooper Jal Unit, submits its annual production report on the Cooper Jal Unit as required by Rule F1 of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects and Certification for the Recovered Oil Tax Rate" promulgated by Division Order No. R9708 on August 27, 1992. The project is still a viable EOR project as approved by Division Order No. R-9983 on October 6, 1993. The Positive Production Response Certification was granted by Division Order No. R-9983A on December 2, 1999.

Attached are production curves of oil, gas, and water production as well as water injection and average injection pressure. Also attached is a listing of wells in the project area (both producers and injectors) and their current status.

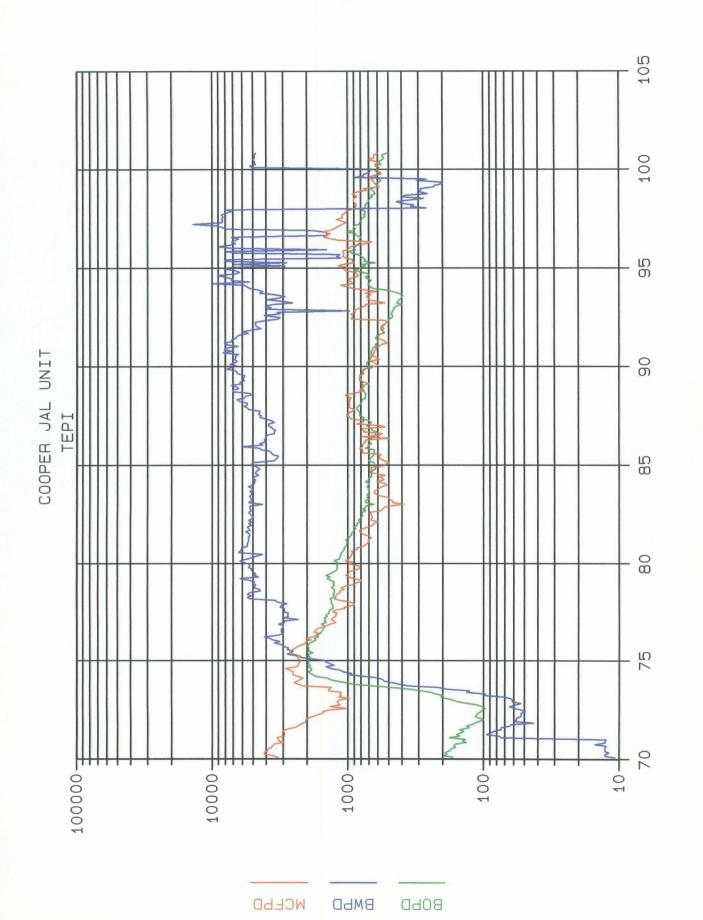
If any additional information is required, please contact me at (915) 688-2930.

Yours very truly,

Charles R. Wolle Project Engineer Hobbs Asset Team

Charles R. Wolle

CRW-NAG Attachments



YEARS

BMIPD

ISTINI

COOPER JAL UNIT

YEARS

Cooper Jal Unit Lea County, New Mexico					
			County, New Wiex	ilioo	
			Nov. 2000		Well Location
<u>API Number</u>	Well No.	<u>Type</u>	Active/Shut-in	Completion Date	<u>UL-S-T-R</u>
3002509558	107	Producer	SI	03/25/1952	K-13-24S-36E
3002509557	112	Injector	SI	01/19/1994	M-13-24S-36E
3002509496	113	Producer	SI	12/01/1951	N-13-24S-36E
3002509559	114	Injector	A	07/29/1971	O-13-24S-36E
3002509566	115	Producer	A	04/30/1950	P-13-24S-36E
3002511141	116	Injector	Α	09/23/1971	M-18-24S-37E
3002509631	120	Injector	Α	06/01/1994	C-24-24S-36E
3002509645	121	Producer	Α	1948	B-24-24S-36E
3002509638	122	Injector	A	02/25/1994	A-24-24S-36E
3002511150	123	Producer	SI	05/03/1952	D-19-24S-37E
3002511153	124	Injector	SI	07/22/1971	C-19-24S-37E
3002509632	125	Producer	Α	09/06/1954	F-24-24S-36E
3002509636	126	Injector	A	12/21/1993	G-24-24S-36E
3002509637	127	Producer	A	05/29/1954	H-24-24S-36E
3002511151	128	Producer	A	07/28/1954	E-19-24S-37E
3002511152	129	Producer	SI	09/11/1954	F-19-24S-37E
3002509643	130	Producer	Α	04/22/1954	K-24-24S-36E
3002509639	132	Injector	A	06/17/1995	I-24-24S-36E
3002500000	133	Injector	Α	04/21/1994	K-19-24S-37E
3002509644	134	Injector	A	02/28/1995	N-24-24S-36E
3002509641	135	Injector	Α	02/28/1995	O-24-24S-36E
3002509640	136	Producer	A	05/08/1954	P24-24S-36E
3002509657	138	Producer	A	07/01/1954	C-25-24S-36E
3002509661	139	Producer	Α	05/24/1954	B-25-24S-36E
3002509662	140	Producer	Α	06/13/1954	A-25-24S-36E
3002511292	141	Producer	Α	09/13/1955	D-30-24S-37E
3002509658	143	Injector	Α	07/14/1971	F-25-24S-36E
3002509560	146	Injector	A	06/21/1994	I-13-24S-37E
3002511166	147	Injector	A	05/09/1994	E-19-24S-37E
3002509642	148	Producer	SI	03/31/1954	J-24-24S-36E
3002511159	150	Producer	Α	12/22/1948	L-19-24S-37E
3002525682	151	Injector	SI	11/30/1993	A-24-24S-36E
3002509627	152	Producer	SI	01/10/1936	D-24-24S-36E
3002526128	153	Injector	A	10/27/1995	L-19-24S-37E
3002526284	154	Producer	A	05/13/1979	G-25-24S-36E
3002509628	201	Injector	A	09/21/1971	A-24-24S-36E
3002511148	202	Producer	A	05/28/1950	D-19-24S-37E
3002509630	203	Injector	Α	07/16/1971	E-24-24S-36E
3002509629	204	Producer	SI	10/03/1951	F-24-24S-36E
3002509620	205	Injector	A	03/09/1994	G-24-24S-36E
3002509621	206	Producer	SI	05/04/1950	H-24-24S-36E
3002511158	208	Producer	Α	05/10/1950	F-19-24S-37E
3002509635	209	Producer	SI	11/10/1954	L-24-24S-36E
3002509633	210	Producer	SI	05/18/1951	L-24-24S-36E
3002509787	211	Injector	A	03/10/1994	K-24-24S-36E
3002509611	215	Producer	A	06/23/1951	P-23-24S-36E
3002509634	216	Injector	A	06/28/1971	M-24-24S-36E
3002509626	217	Producer	Α	03/02/1950	N-24-24S-36E

	· · · · · · · · · · · · · · · · · · ·	Nov. 2000		Well Location	
API Number	Well No.	Type	Active/Shut-in	Completion Date	<u>UL-S-T-R</u>
3002509624	218	Injector	Α	12/01/1976	O-24-24S-36E
3002509622	219	Producer	A	12/24/1949	P-24-24S-36E
3002511162	220	Injector	Α	03/11/1994	M-19-24S-37E
3002511160	221	Producer	Α	09/15/1949	N-19-24S-37E
3002509671	222	Injector	SI	06/30/1971	A-26-24S-36E
3002509648	223	Producer	Α	12/05/1950	D-25-24S-36E
3002509646	224	Injector	Α	06/16/1971	C-25-24S-36E
3002509650	225	Producer	SI	01/08/1950	B-25-24S-36E
3002509651	226	Injector	SI	05/20/1971	A-25-24S-36E
3002511291	227	Producer	Α	07/09/1950	D-30-24S-37E
3002511290	228	Injector	Α	04/30/1974	C-30-24S-37E
3002509647	229	Producer	SI	08/30/1950	E-25-24S-36E
3002509649	230	Producer	SI	02/06/1951	F-25-24S-36E
3002509652	231	Producer	Α	04/05/1951	H-25-24S-36E
3002511289	232	Producer	SI	10/01/1949	F-30-24S-37E
3002509561	234	Injector	A	08/04/1971	O-13-24S-36E
3002509610	237	Injector	SI	09/16/1976	O-23-24S-36E
3002509659	238	Injector	Α	10/12/1971	E-25-24S-36E
3002511288	239	Injector	Α	05/04/1974	E-30-24S-37E
3002509653	241	Injector	Α	10/29/1975	G-25-24S-36E
3002511149	242	Injector	Α	11/04/1975	C-19-24S-37E
3002509625	245	Producer	Α	12/16/1949	J-24-24S-36E
3002509556	303	Producer	Α	04/04/1948	K-13-24S-36E
3002532268	401	Producer	А	01/21/1994	19-24S-37E
3002532292	402	Producer	A	02/06/1994	19-24S-37E
3002532286	403	Producer	SI	02/03/1994	19-24S-37E
3002532218	404	Producer	A	01/22/1994	24-24S-36E
3002532269	405	Producer	Α	01/07/1994	19-24S-37E
3002532568	406	Producer	A	10/01/1994	H-24-24S-36E
3002532569	407	Producer	Α	10/01/1994	J-24-24S-36E
3002532856	408	Producer	A	07/27/1995	P-13-24S-36E
3002532570	409	Producer	Α	10/01/1994	K-24-24S-36E
3002532857	410	Producer	SI	06/26/1995	F-24-24S-36E
3002532858	411	Producer	Α	08/26/1995	J-24-24S-36E
3002532892	412	Producer	A	08/03/1995	P-24-24S-36E
3002532969	413	Producer	А	08/14/1995	C-30-24S-37E
3002532571	414	Producer	Α	10/17/1994	24-24S-36E
3002532855	415	Producer	A	07/30/1995	D-25-24S-36E
3002532551	419	Producer	А	10/21/1994	P-13-24S-36E
3002533458	420	Producer	SI	08/19/1996	G-24-24S-36E
3002533459	421	Producer	Α	08/30/1996	24-24S-36E
3002533490	422	Producer	Α	09/10/1996	19-24S-37E



# NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

January 6, 2000

Department of Taxation and Revenue P.O. Box 630 Santa Fe, New Mexico 87509-0630

Attention: Mr. John Chavez, Secretary

Re:

Certification of a Positive Production Response

Texaco Exploration & Production Inc. Cooper Jal Jalmat and Cooper Jal Langmat

Waterflood Projects

Dear Secretary Chavez:

Enclosed is a copy of Division Order No. R-9983-A, which was issued on December 2, 1999. This document certifies that a positive production response has occurred within the Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects (all within the Cooper Jal Unit area), which are currently operated by Texaco Exploration & Production Inc. In addition, this positive production response has occurred within the five year time limit as described within the "New Mexico Enhanced Oil Recovery Act." The Division has determined that all waterflood wells within the certified area producing from the Jalmat or Langlie-Mattix Pool are eligible for the recovered oil tax rate. These wells are shown on Exhibit "A" to Order No. R-9983-A.

For your convenience, we have also enclosed a summary page showing all pertinent data. If additional information is required, please advise.

Sincerely.

Lori Wrotenbery

Director

LW/DRC

Xc:

Texaco Exploration & Production Inc.

c/o Mr. William F. Carr

Campbell, Carr, Berge & Sheridan, P.A.

# POSITIVE PRODUCTION RESPONSE DATA COOPER JAL JALMAT & COOPER JAL LANGMAT WATERFLOOD PROJECT

#### NAME OF PROJECT

Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Project (All within the Cooper Jal Unit Area)

## **OPERATOR**

Texaco Exploration & Production, Inc. P.O. Box 3109 Midland, Texas 79702

#### **Pools**

Jalmat & Langlie-Mattix Pools

#### OCD ORDER APPROVING WATERFLOOD PROJECT & DATE

R-9983 October 6, 1993

#### **PROJECT AREA**

## TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

Section 13:

S/2

Section 23: S/2 SE/4

Section 24:

All

Section 25:

N/2

Section 26:

NE/4 NE/4

#### TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18:

SW/4 SW/4

Section 19:

W/2

Section 30:

NW/4

#### DATE WATER INJECTION COMMENCED

October, 1993

#### DATE PROJECT WAS CERTIFIED TO TAXATION & REVENUE

February 2, 1994 (Effective Date: October 15, 1993)

# DATE POSITIVE PRODUCTION RESPONSE OCCURRED

October, 1993

# CURRENT NUMBER OF WELLS WITHIN PROJECT AREA

57 Producing Wells

# 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. 12154 ORDER NO. R-9983-A

APPLICATION OF TEXACO EXPLORATION & PRODUCTION, INC. FOR CERTIFICATION OF A POSITIVE PRODUCTION RESPONSE WITHIN THE COOPER JAL UNIT AREA, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

# BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 15, 1999 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this day of December, 1999, 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) By Order No. R-4018 entered in Case No. 4402 on August 25, 1970, the Division, upon the application of Reserve Oil and Gas Company ("Reserve"), approved the Cooper-Jal Unit Agreement for an area comprising the following described 2581 acres, more or less, of federal and fee lands in Lea County, New Mexico:

#### TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

	, · ·
Section 13:	S/2
Section 14:	SE/4 SE/4
Section 23:	S/2 SE/4
Section 24:	All
Section 25:	N/2
Section 26:	E/2 NE/4

# TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18: Section 19: All W/2

Section 30:

NW/4

By Orders No. R-4019 and R-4020 issued in Cases No. 4403 and 4404 on (3) August 25, 1970, the Division authorized Reserve to institute two separate waterflood projects within the above-described Cooper-Jal Unit Area: (i) one in the Langlie-Mattix-Queen-Grayburg-San Andres Pool designated the Cooper-Jal Langmat Waterflood Project; and (ii) the other in the Jalmat (Tansill-Yates-Seven Rivers) Gas Pool designated the Cooper-Jal Jalmat Waterflood Project. Initially, both projects utilized 80-acre five-spot injection patterns.

By Order No. R-9983, issued in Case No. 10798 on October 6, 1993, the Division, upon application by Texaco Exploration and Production, Inc. ("Texaco"), the successor operator of the Cooper-Jal Unit Area, approved a portion of both waterflood projects as "Enhanced Oil Recovery ("EOR") Projects," pursuant to the "Enhanced Oil Recovery Act" (Sections 7-29A-1 through 7-29A-5 NMSA 1978). The EOR qualification area, hereinafter referred to as the "Project Area," comprises the following described acreage in Lea County, New Mexico, all within the Cooper-Jal Unit Area:

# TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

Section 13:

S/2

Section 23:

S/2 SE/4

Section 24: Section 25: All

N/2

Section 26:

NE/4 NE/4

# TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18:

SW/4 SW/4

Section 19:

W/2

Section 30:

NW/4

- (5) Subsequent to the issuance of Division Order No. R-9983, Texaco commenced implementing its planned change from the 80-acre five-spot injection pattern then active in both project areas to a single 40-acre five-spot injection pattern. To fully implement this change, Texaco added 15 water injection wells and 19 new producing wells.
- The Division certified the Project Area as a qualified secondary recovery project to the New Mexico Taxation and Revenue Department on October 15, 1993.

Although implementation of this project occurred in three separate phases, at the initiation of the 40-acre five-spot injection pattern in October 1993, Texaco requested that the project be treated as a single-phase project.

- (7) At this time Texaco seeks certification pursuant to Division Rule 30 of a positive production response within the above-described Project Area.
- (8) As of February 1999, the water injection rate within the Project Area was 190,142 barrels per month or approximately 6,791 barrels per day.

July 1

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- (9) The Project Area is now fully developed with 42 producing wells, 27 active injection wells, 15 shut-in producing wells and 6 shut-in injection wells.
- (10) The production data submitted as evidence in this case indicates that a positive production response occurred within the Project Area immediately after injection commenced in October 1993.
- (11) The application for certification of a positive production response was filed with the Division on October 5, 1998, within the five-year time limit set by Division Rule 30.
- (12) The producing wells shown in Exhibit "A" attached hereto should be eligible for the reduced tax rate set forth in Section 7-29-4 NMSA 1978.
  - (13) The applicant should be required to notify the Division:
    - (A) of the change in status of any of the producing wells shown on Exhibit "A";
    - (B) in the event new producing wells are drilled within the Project Area; and
    - (C) of changes in operations within the Project Area that may affect the certification and reduced tax rate.
- (14) Pursuant to the provisions of Division Rule 30, the Division Director should notify the Secretary of the New Mexico Taxation and Revenue Department of the certification granted herein.

# IT IS THEREFORE ORDERED THAT:

(1) Pursuant to Division Rule 30, the application of Texaco Exploration and Production Inc., for certification of a positive production response within the Project Area comprising the following described acreage in Lea County, New Mexico, all within the Cooper-Jal Unit Area, is hereby approved:

# TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

 Section 13:
 S/2

 Section 23:
 S/2 SE/4

 Section 24:
 All

 Section 25:
 N/2

Section 26: NE/4 NE/4

# TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18: SW/4 SW/4

Section 19: W/2
Section 30: NW/4

- (2) All producing Jalmat and Langlie-Mattix oil wells within the above-described Project Area, as shown on the attached Exhibit "A", shall be eligible for the recovered oil tax rate.
- (3) Pursuant to the provisions of Division Rule 30, the Division Director shall notify the Secretary of the New Mexico Taxation and Revenue Department of this certification.
  - (4) The operator of the Project Area shall notify the Division:
    - (A) of the change in status of any of the producing wells shown on Exhibit "A";
    - (B) in the event new producing wells are drilled within the Project Area; and
    - (C) of changes in operations within the Project Area which may affect the certification and reduced tax rate.
  - (5) Jurisdiction of this case is 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

LORI WROTENBERY

Director

SEAL

# Exhibit "A" Case No. 12154 Order No. R-9983-A

# Texaco Exploration and Production, Inc. Cooper-Jal Unit

# Enhanced Oil Recovery Poject Area

Langlie-Mattix-Queen-Grayburg-San Andres Pool and Jalmat (Tansill-Yates-Seven Rivers) Gas Pool Producing Wells, Lea County, New Mexico.

Cooper-Jal Unit Well Number	API Number	Footage Location	Unit	Section-Township Range
107	30-025-09558	1650' FSL & 1980' FWL	K	13-24S-36E
113	30-025-09496	330' FSL & 2310' FWL	N	13-24S-36E
115	30-025-09566	900' FSL & 990' FEL	P	13-24S-36E
121	30-025-09645	990' FNL & 1650' FEL	В	24-24S-36E
123	30-025-11150	330' FNL & 990' FWL	D	19-24S-37E
125	30-025-09632	1650' FNL & 2310' FWL	F	24-24S-36E
127	30-025-09637	1650' FNL & 990' FEL	Н	24-24S-36E
128	30-025-11151	1650' FNL & 330' FWL	Е	19-24S37E
129	30-025-11152	1650' FNL & 1587' FWL	F	19-24S-37E
130	30-025-09643	1650' FS & WL	K	24-24S-36E
136	30-025-09640	990' FS & EL	Р	24-24S-36E
138	30-025-09657	840' FNL & 1650' FWL	С	25-24S-36E
139	30-025-09661	330' FNL & 2310' FEL	В	25-24S-36E
140	30-025-09662	990' FN & EL	A	25-24S-36E
141	30-025-11292	330' FN & WL	D	30-24S37E
148	30-025-09642	2310' FS & EL	J	24-24S-36E
150	30-025-11159	1650' FSL & 990' FWL	L	19-24S-37E
152	30-025-09627	660' FN & WL	D	24-24S-36E
154	30-025-26284	1550' FNL & 2400' FEL	G	25-24S-36E
202	30-025-11148	990' FNL & 330' FWL	Ď	19-24S-37E
204	30-025-09629	1980' FN & WL	F	24-24S36E
206	30-025-09621	1980' FNL & 330' FEL	Н	24-24S-36E
208	30-025-11158	2310' FNL & 1650' FWL	F	19-24S-37E
209	30-025-09635	2080' FSL & 660' FWL	L	24-24S-36E
210	30-025-09633	1980' FSL & 660' FWL	L	24-24S-36E
215	30-025-09611	660' FS & EL	P	23-24S-36E
217	30-025-09626	990' FSL & 2310' FWL	N	24-24S-36E
219	30-025-09622	330' FSL & 660' FEL	P	24-24S-36E
221	30-025-11160	660' FSL & 1917' FWL	N	19-24S-37E
223,	30-025-09648	330' FNL & 990' FWL	D	25-24S-36E
225	30-025-09650	660' FNL & 1650' FEL	В	25-24S-36E
227	30-025-11291	660' FN & WL	D	30-24S-37E
229	30-025-09647	1650' FNL & 990' FWL	E	25-24S-36E
230	30-025-09649	1650' FNL & 2310' FWL	F	25-24S-36E
231	30-025-09652	1650' FNL & 330' FEL	. Н	25-24S-36E
232	30-025-11289	1980' FNL & 1917' FWL	F	30-24S-37E
245	30-025-09625	1980' FS & EL	J	24-24S-36E
303	30-025-09556	2310' FS & WL	K	13-24S-36E
401	30-025-32268	2400' FSL & 1130' FWL	L	19-24S-37E

Cooper-Jal Unit Well Number	API Number	Footage Location	Unit	Section-Township- Range
402	30-025-32292	2150' FSL & 50' FWL	L	19-24S-37E
403	30-025-32286	150' FNL & 100' FWL	D	19-24S-37E
404	30-025-32218	510' FNL & 2310' FEL	В	24-24S36E
405	30-025-32269	1055' FSL & 1385' FWL	N	19-24S-37E
406	30-025-32568	2522' FNL & 400' FEL	Н	24-24S-36E
407	30-025-32569	2540' FSL & 1640' FEL	J	24-24S-36E
408	30-025-32856	1250' FSL & 200' FEL	P	13-24S-36E
409	30-025-32570	2500' FSL & 1450' FWL	K	24-24S-36E
410	30-025-32857	1425' FNL & 1450' FWL	F	24-24S-36E
411	30-025-32858	1600' FSL & 1425' FEL	J	24-24S-36E
412	30-025-32892	980' FSL & 225' FEL	P	24-24S-36E
413	30-025-32969	1250' FNL & 1300' FWL	С	30-24S-37E
414	30-025-32571	330' FSL & 2550' FEL	0	24-24S-36E
415	30-025-32855	825' FNL & 330' FWL	D	25-24S36E
419	30-025-32551	330' FSL & 500' FEL	P	13-24S-36E
420	30-025-33458	2310' FN & EL	G	24-24S-36E
421	30-025-33459	1575' FSL & 2525' FEL	J	24-24S-36E
422	30-025-33490	125' FSL & 1275' FWL	N	19-24S-37E

.

#### STATE OF NEW MEXICO



#### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

February 2, 1994

Department of Taxation and Revenue P.O. Box 630 Santa Fe, NM 87509-0630

Attention: Dick Minzner, Secretary

RE: Certification of EOR Project

Texaco Exploration & Production, Inc.

Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects
(Cooper Jal Unit Area)

Dear Secretary Minzner:

Enclosed is a copy of the certification issued to Texaco Exploration & Production, Inc. for its Cooper Jal Jalmat and Cooper Jal Langmat Waterflood (Cooper Jal Unit Area) EOR project, certified by this Division on October 15, 1993, to be a qualified Enhanced Oil Recovery Project. If the operator applies for certification of positive production response within five years from that date, this project will be eligible for the *Recovered Oil Tax Rate* as provided in Laws of 1992, Chapter 38.

Only oil production from that portion of the lands identified in the certification which is actually developed for enhanced recovery will be eligible for the reduced tax rate. At the time positive production response is certified, we will identify for you the specific lands and wells within the project which qualify for the *Recovered Oil Tax Rate*.

Sincerely,

William J. Lell Director

WJL/amg

**Enclosures** 

Docket No. 11-99

Page 2 of 4

CASE 12158: 0

Continued from April 1, 1999, Examiner Hearing

Application of Chi Energy, Inc. for an unorthodox gas well location or in the alternative for non-standard subsurface gas well location/producing area, Lea County, New Mexico. Applicant seeks approval to drill its —eenstone Federal Com. Well No. 1 as a straight hole from an unorthodox gas well location 480 feet from the South line and 1650 feet from the East line (Unit O) of Section 19. Township 20 South, Range 34 East, in order to test either the Undesignated West Lynch-Morrow Gas Pool or the Undesignated Quail Ridge-Morrow Gas Pool underlying the E/2 of Section 19, being a standard 320-acre gas spacing and proration unit. IN THE ALTERNATIVE, the applicant, in accordance with Division Rules 104.F and 111(C)2, seeks approval for a non-standard subsurface gas well location/producing area to be applicable to either the Undesignated West Lynch-Morrow Gas Pool or the Undesignated Quail Ridge-Morrow Gas Pool, for its proposed Greenstone Federal Com. Well No. 1 to be drilled from the above-described surface location to a proposed bottomhole location that is to be no closer than 760 feet to the South line of Section 19 nor closer than 990 feet to the western, boundary of the proposed 320-acre unit. The E/2 of Section 19 is located approximately eight miles east of the junction of U.S. Highway 62/180 and State Highway No. 176.

**CASE 12131:** 

Continued from March 4, 1999, Examiner Hearing.

Application of Santa Fe Energy Resources, Inc. for an unorthodox gas well location, Lea County, New Mexico. Applicant seeks approval to drill its Rio Blanco Federal Com. Well No. 2 at an unorthodox Morrow gas well location 660 feet from the South and West lines (Unit M) of Section 4, Township 23 South, Range 34 East, located approximately four miles west-northwest of the San Simon Sink. The S/2 of Section 4 is to be dedicated to the well in order to form a standard 320-acre gas spacing and proration unit in either the Undesignated North Bell Lake-Morrow Gas Pool or Undesignated Antelope Ridge-Morrow Gas Pool.

**CASE 12120**:

Continued from March 18, 1999, Examiner Hearing.

Application of Universal Resources Corporation for surface commingling, Rio Arriba and San Juan Counties, New Mexico. Applicant seeks an exception to Division Rules 303-A and 309-A to permit surface commingling of Alamito-Gallup and Lybrook-Gallup Pool production from the following Federal Leases NMNM6682, NMNM6681, NMNM16586, NMNM58878, NMNM10087, NMNM048989A, and State Lease: 00016172 and 00016174, covering parts of Sections 21, 22, 23, 27, 28, 31, 32, 34, Township 23 North, Range 7 West, NMPM, San Juan County, New Mexico; Section 2, Township 22 North, Range 8 West, and Section 36, Township 23 North, Range 8 West, Rio Arriba County, New Mexico. These leases are located approximately 50 miles southeast of Farmington, New Mexico.

CASE 12162:

Application of Marathon Oil Company to amend Order No. R-11112 to adopt an administrative procedure for adding and subtracting existing and future wells to the previously approved Buchanan tank battery within the Buchanan Centralized Facility. Eddy County, New Mexico. Applicant seeks the amendment of Order No. R-11112 to permit surface commingling, offlease measurement and storage of North Illinois Camp-Morrow Gas, Illinois Camp-Morrow Gas, North Turkey Track-Morrow Gas, Travis-Wolfcamp Gas, and Travis Upper Pennsylvanian Gas Pool production from its Walker "33" State Lease in the W/2 of Section 33, Township 18 South, Range 28 East with previously approved leases which shall be stored and measured at its centralized facility located in Unit I, Section 33, Township 18 South, Range 28 East. Applicant also seeks the adoption of an administrative procedure to add and subtract existing and future wells to this facility without the requirement of notice and hearing. This facility is located approximately 18 miles northeast of Carlsbad, New Mexico. IN THE ABSENCE OF OBJECTION THIS CASE WILL BE TAKEN UNDER ADVISEMENT.

**CASE 12135**:

Continued from March 18, 1999, Examiner Hearing.

Application of Marathon Oil Company for surface commingling, off-lease measurement and storage, Eddy County, New Mexico. Applicant seeks an exception to Division Rule 309-A and Rule 303-A and the amendment of Division Administrative Order PLC-140 to permit surface commingling, off-lease measurement and storage of Indian Basin Upper Pennsylvanian Gas Pool and Indian Basin-Upper Pennsylvanian Associated Pool production from its Indian Basin "32" State Lease in Section 32 with its Indian Hills Unit covering parts of Sections 20, 21, 28, 29 and 33, all in Township 21 South, Range 24 East which shall be stored and measured at its centralized facility located in Unit P, Section 19, Township 21 South, Range 24 East. This facility is located approximately 18 miles east of Carlsbad, New Mexico.

CASE 12154:

Continued from April 1, 1999, Examiner Hearing.

Application of Texaco Exploration & Production, Inc. for Certification of a Positive Production Response within the Cooper Jal Unit Area, Lea County, New Mexico. Applicant seeks certification by the Division that a positive production response to secondary recovery waterflood operations has occurred within its Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects, both located within the Cooper Jal Unit Area in portions of Township 24 South, Ranges 36 and 37 East. These projects were certified by the Division to be qualified Enhanced Oil Recovery Projects by Order No. R-9983 dated October 6, 1993. These projects are located approximately 6 miles northwest of Jal, New Mexico.

Motetofili. Sec recordin Cuse 12154 and Order No. 12-9983-

#### STATE OF NEW MEXICO



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

December 6, 1993

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

Texaco Exploration & Production, Inc. Attention: Jim H. Ohlms P.O. Box 3109 Midland, TX 79702

# CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the New Mexico Enhanced Oil Recovery Act (Laws of 1992, Chapter 38). In order to qualify for the Recovered Oil Tax Rate, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT:

Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects

(Cooper Jal Unit Area)

OCD ORDER NO.

R-9983

OPERATOR:

Texaco Exploration & Production, Inc.

ADDRESS:

Attention: Jim H. Ohlms

P.O. Box 3109

Midland, TX 79702

CERTIFICATION DATE: October 15, 1993

# PROJECT AREA:

Township 24 South, Range 36 East, NMPM

Section 13: S/2

Section 23: S/2 SE/4

Section 24: All

Section 25: N/2

Section 26: **NE/4 NE/4**  Township 24 South, Range 37 East, NMPM

Section 18:

SW/4 SW/4

Section 19:

W/2

Section 30:

NW/4

APPROVED BY:

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

DIRECTOR

SEAL



Texaco Exploration and Production Inc. Attn: Jim H. Ohlms Post Office Box 3109 Midland, TX 79702 Case 12154

# CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a **secondary** project, pursuant to the provisions of the New Mexico *Enhanced Oil Recovery Act* (Laws of 1992, Chapter 38). In order to qualify for the *Recovered Oil Tax Rate*, you must apply for certification of positive production response within **five years** from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of Taxation and Revenue not later than the thirtieth day after termination.

NAME OF PROJECT:

Cooper Jal Jalmat and Cooper Jal

Langmat Waterflood Projects (Cooper Jal

Unit Area)

OCD ORDER NO.:

R-9983

OPERATOR:

Texaco Exploration and Production Inc.

ADDRESS:

Attn: Jim H. Ohlms

Post Office Box 3109 Midland, TX 79702

**CERTIFICATION DATE:** 

October 15, 1993

# EOR Project Certification Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects (Cooper Jal Unit Area)

# PROJECT AREA

# Township 24 South, Range 36 East, N.M.P.M.

Section 13: S/2

Section 23: S/2 SE/4

Section 24: All

Section 25: N/2

Section 26: NE/4 NE/4

# Township 24 South, Range 37 East, N.M.P.M.

Section 18: SW/4 SW/4

Section 19: W/2 Section 30: NW/4

**APPROVED** 

William J. LeMay Director

seal

# CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

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October 13, 1993



#### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

Re: Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects (Cooper Jal

Unit Area)

Certification to New Mexico Taxation and Revenue Division of qualified

"Enhanced Oil Recovery Project."

# Dear Mr. LeMay:

Division Order No. R-9983 entered on October 6, 1993 qualified Texaco Exploration and Production Inc.'s Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects, both located within Texaco's Cooper Jal Unit Area as an "Enhanced Oil Recovery Project" pursuant to the Enhanced Oil Recovery Act (Laws 1992, Chapter 38, Sections 1 through 5). Order Paragraph (1). This Order included water injection within Phases I, II and III provided that Phase I, II and Phase III areas within the project may be independently certified by the Division to the New Mexico Taxation and Revenue Department. Order Paragraph (2). It further provided that to be eligible for the EOR credit, Texaco should advise the Division when water injection commences into Phase I, II and Phase III of the project and at such time request that the Division certify Phase I, II and/or Phase III to the New Mexico Taxation and Revenue Department. Order Paragraph (3).

The purpose of this letter is to advise the Division that Texaco Exploration and Production Inc. plans to commence injection into Phase I of the Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects (Cooper Jal Unit Area) on October 15, 1993. Accordingly, Texaco requests that the Division certify Phase I to the New Mexico Taxation and Revenue Department as a qualified "Enhanced Oil Recovery Project" under the Enhanced Oil Recovery Act. Enclosed for this purpose is a draft of a Certification which includes the entire project area in Phase I of this waterflood project since the geographic area involved in these Phases overlap. Texaco understands that this Certification will start the five year period within which it must obtain a positive production response throughout the project area.

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources October 13, 1993 Page 2

Your attention to this request is appreciated.

Very truly yours,

WILLIAM F. CARR

ATTORNEY FOR TEXACO EXPLORATION AND PRODUCTION INC.

WFC:mlh Enclosure

cc: Jim H. Ohlms

# 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. 10798 Order No. R-9983

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. TO AUTHORIZE THE EXPANSION OF A PORTION OF ITS COOPER JAL UNIT WATERFLOOD PROJECT AND QUALIFY SAID EXPANSION FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE "NEW MEXICO ENHANCED OIL RECOVERY ACT", JALMAT AND LANGLIE-MATTIX POOLS, LEA COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 12, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of October, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) By Order Nos. R-4019 and R-4020 issued in Case Nos. 4403 and 4404 on August 25, 1970, the Division authorized Reserve Oil and Gas Company to institute a waterflood project within the Langlie-Mattix and Jalmat Pools, respectively, within its Cooper Jal Unit Area, comprising some 2,581 acres within portions of Township 24 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico.
- (3) Separate waterflood operations within the Cooper Jal Jalmat Waterflood Project and Cooper Jal Langmat Waterflood Project have been conducted utilizing 80-acre five spot injection patterns since 1970.

- (4) The applicant, Texaco Exploration and Production Inc. (Texaco), being the successor operator of the Cooper Jal Unit, seeks an order pursuant to the Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects and Certification for the Recovered Oil Tax Rate, as promulgated by Division Order No. R-9708, qualifying a portion of its Cooper Jal Jalmat Waterflood Project and Cooper Jal Langmat Waterflood Project, Lea County, New Mexico, for the recovered oil tax rate pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (5) The area proposed to be included within the EOR qualification area, hereinafter referred to as the "Project Area", is described as follows:

# TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

Section 13: S/2

Section 23: S/2 SE/4

Section 24: All Section 25: N/2

Section 26: NE/4 NE/4

## TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18: SW/4 SW/4

Section 19: W/2 Section 30: NW/4

- (6) Within the proposed Project Area, the applicant proposes to conduct waterflood operations on 40-acre five spot injection patterns within both the Langlie-Mattix and Jalmat Pools. Such action will require that the applicant drill and equip thirteen new producing wells, convert six producing wells to injection, convert six injection wells to producing wells, and convert eighteen injection wells to dual injection.
- (7) Texaco requests certification of the Project Area on the contention that it has or will expand the use of enhanced oil recovery technology and will increase the size of the geographic and geologic area being flooded representing a unique area of activity.
- (8) Geologic evidence indicates that the Jalmat Pool comprises the Tansill, Yates and the upper 250 feet of the Seven Rivers formation. The Langlie-Mattix Pool comprises the remaining portion of the Seven Rivers and all of the Queen formation.
- (9) Geologic evidence further indicates that within the Yates and Seven Rivers formations there are numerous distinct producing sand intervals which are vertically segregated by non-porous dolomite or carbonate sections. In addition, the geologic evidence shows that the producing intervals are generally continuous across the unit; however, the thickness, uniformity, porosity and permeability may vary significantly resulting in areas of lateral discontinuity.

- (10) Geologic variations as described above generally indicate that the 80-acre five spot injection pattern previously utilized within the Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects may have been too large and likely resulted in substantial volumes of oil being left unrecovered.
- (11) Reducing the waterflood pattern by opening new intervals in existing wells and by drilling additional wells will add new zones to these projects, improve the sweep efficiency of both projects, increase their size, and extend the project into new geographic areas of activity, thereby recovering reserves that without this modification would never be produced.
- (12) By Order No. WFX-648 dated September 27, 1993, the Division authorized the applicant to expand its Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects by converting nine wells to injection in the Jalmat and/or Langlie Mattix Pools.
- (13) According to applicant's engineering evidence and testimony, the proposed expansion of the subject waterflood projects should result in the recovery of an additional 3.2 million barrels of oil from the Cooper Jal Unit Area.
- (14) The proposed expansion of the Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects will occur in three phases, and, according to testimony, the activity within each phase will overlap to some extent. Phase I is to be implemented in late 1993, Phase II in 1994 and Phase III in 1995.
- (15) The capital costs for implementing Phases I, II, and III are projected to be \$3.472, \$2.860 and \$2.470 million dollars, respectively.
- (16) The evidence presented demonstrates that the proposed waterflood expansions meet all criteria for EOR qualification.
- (17) The application should be approved and the EOR Projects should be governed by the provisions of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.
- (18) To assure that data is available to demonstrate that wells in each phase of these project expansions are experiencing a positive production response to this modification, the applicant should conduct sufficient tests on each zone in each producing well to establish an adequate base line against which any subsequent production response can be measured.

- (19) The qualified Project Area should initially comprise the area described in Finding No. (5) above, provided however, the Phase I, II and III areas within the Project Area may be independently certified by the Division to the New Mexico Taxation and Revenue Department.
- (20) To be eligible for the EOR credit, the operator should advise the Division when water injection commences within Phase I, II and III and at such time, request the Division certify such phases or areas to the New Mexico Taxation and Revenue Department.
- (21) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

## IT IS THEREFORE ORDERED THAT:

- (1) The application of Texaco Exploration and Production Inc. to qualify a portion of its Cooper Jal Jalmat and Cooper Jal Langmat Waterflood Projects, both located within the applicant's Cooper Jal Unit Area, as "Enhanced Oil Recovery Projects" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5), is hereby approved.
- (2) The certified Project Area shall include the following described lands in Lea County, New Mexico, provided however, the Phase I, II and III areas within the Project Area may be independently certified by the Division to the New Mexico Taxation and Revenue Department:

# TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM

Section 13: S/2

Section 23: S/2 SE/4

Section 24: All

Section 25: N/2

Section 26: NE/4 NE/4

# TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM

Section 18: SW/4 SW/4

Section 19: W/2 Section 30: NW/4

- (3) The operator shall advise the Division when water injection commences within Phase I, II and III and, at such time, request the Division certify such phases or areas to the New Mexico Taxation and Revenue Department.
- (4) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.
- (5) The subject EOR projects shall be governed by the provisions of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.
- (6) Jurisdiction of this cause 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

WILLIAM J. LEMAY Director

SEAL