

APPLICATION FOR AUTHORIZATION TO INJECT

APR 11 2001

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Texaco Exploration and Production Inc.
ADDRESS: P. O. Box 3109, Midland, Texas 79701
CONTACT PARTY: William O. Smith PHONE: 915-688-4453
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? X Yes No
If yes, give the Division order number authorizing the project: R-6857 /A , Dated 12-18-1981
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: William O. Smith TITLE: Production Engineer

SIGNATURE: W. O. Smith DATE: 3/26/2001

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: NVAWU C-108 dated 9/29/81

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Application for Waterflood Expansion

Unit Name: North Vacuum Abo West Unit, Lea County, New Mexico

III. Well Data:

A. The proposed conversions are active producers or recently shut-in producers from the Abo.

Well Locations:

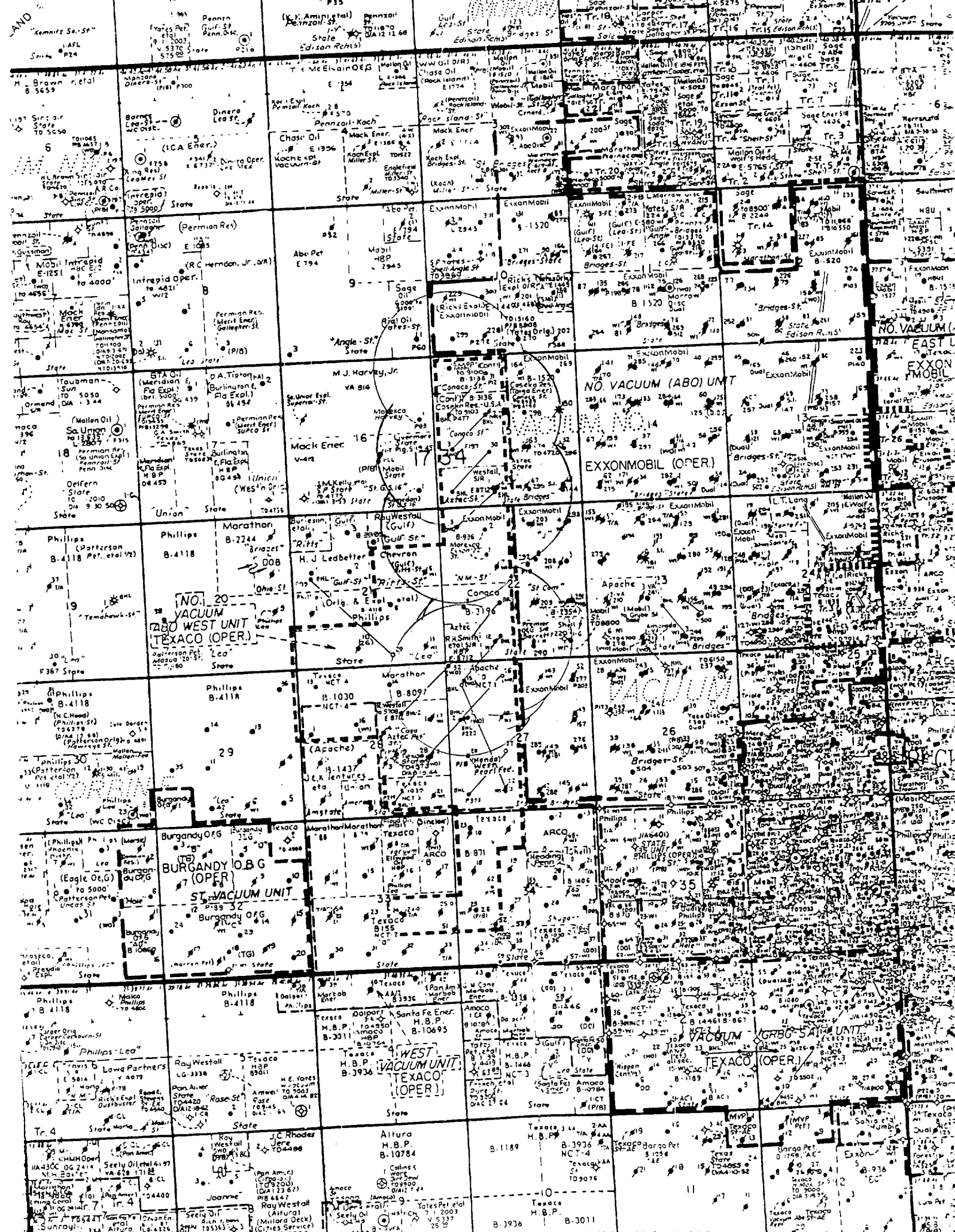
#1 – Unit Letter D, 460' FNL and 660' FWL, Section 15 - T17S – R34E
#3 – Unit Letter L, 1980' FSL and 660' FWL, Section 15 - T17S – R34E
#5 – Unit Letter D, 660' FNL and 660' FWL, Section 22 - T17S – R34E
#15 – Unit Letter D, 660' FNL and 660' FWL, Section 27 - T17S – R34E

The approximate locations of the laterals for these wells are indicated on the attached maps. The actual bottom hole locations for all these wells is attached and shown on the wellbore diagrams. The tubing will be 2 3/8", 4.7#, L-80, EUE Duolined down to the packer. The packer will be a Baker Lok-Set (or equivalent) set within 100 feet of the top perforation.

B. The injection formation will be the Abo in the North Vacuum Abo field. Well #1 will be injecting through perforations while the remaining wells will be injecting through open hole horizontal sections. The wells were originally drilled for production but recently their production has become uneconomical. There are no other perforations open in these wells. The next higher oil and gas zone in the area is the Vacuum Grayburg/San Andres from 4300' to 4800'. There are no oil or gas producing zones below the Abo formation.

- IV. This application is an amendment to NMOCD Order R-6857 dated December 18, 1981, which authorizes Texaco, Inc. to institute a waterflood project. NMOCD Order R-7399 dated November 18, 1981 authorizes the creation of the unit.
- V. See attached.
- VI. Attached is a tabulation of wells that penetrate the Abo formation. A notation in the far right hand column indicates if the data is attached in the form of a wellbore diagram or was submitted in a previous application.
- VII. The anticipated average daily rate shall be 500 barrels of water per day per well. The anticipated maximum daily rate shall be 1000 barrels of water per day per well. The injection system is a closed system. The proposed average and maximum injection pressure shall be 3400 psig. We expect to increase the pressure after performing step rate tests. The source of the water will be fresh water and water analysis was submitted with the original application.
- VIII. Submitted previously with original application mentioned (See IV).

- IX. Prior to the start of injection, each of the wells will be matrix stimulated with 25,000 gallons of 15% DAD acid using coiled tubing.
- X. Submitted previously with original application mentioned (See IV).
- XI. Submitted previously with original application mentioned (See IV).
- XII. Not Applicable
- XIII. Attached is a copy of certified letters and return receipts to each leasehold operator, landowner and surface leasee within ½ mile of the well locations. Also attached is a proof of publication for the advertisement placed in the Hobbs Daily News-Sun dated March 9, 2001.



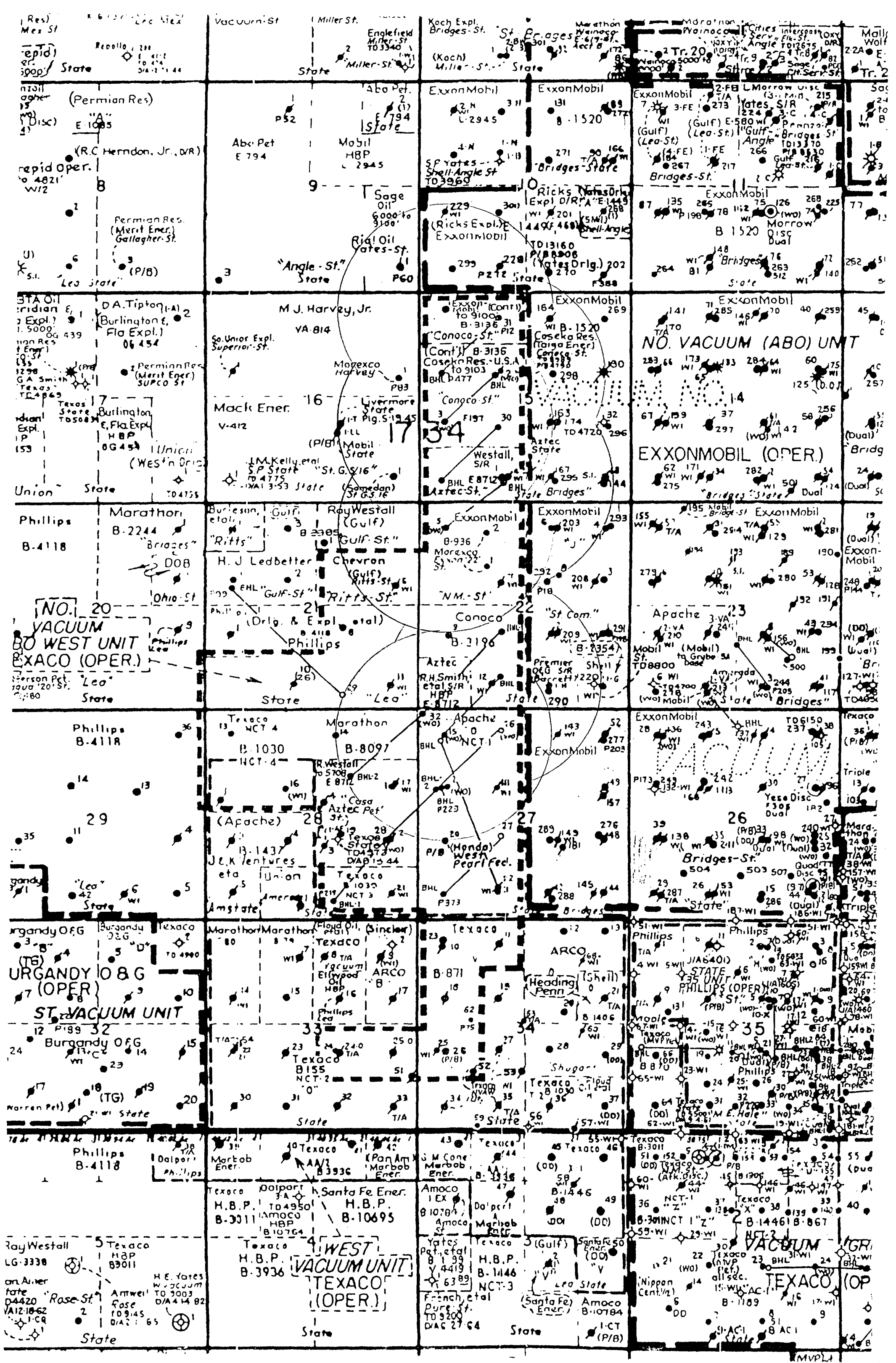
SECTION VI-NVAWU C-108 WELLS OF INTEREST

API	LEASE NAME	WELL OPERATOR NAME	Section		T	R	FIELD NAME		ST	CO	STATUS	LAST ACTI	P PROD	FØRILLER	TD	SPUD	DATCOMP	DATE	Note
30025341110000	HARVEY M J '16'	1 MOREXCO INC	16	17S	34E	2121	FNL	519	FEL	VACUUM	NORTH	NM	LEA	OIL		9050	19970911	19971021	2
30025256520000	NORTH VACUUM (ABO) WEST UNIT	1 TEXACO EXPL&PROD INC	15	17S	34E	460	FNL	660	FWL	VACUUM	NORTH	NM	LEA	OIL		9000	19770915	19771025	3
30025246790001	NORTH VACUUM (ABO) WEST UNIT	2 TEXACO EXPL&PROD INC	15	17S	34E	1980	FNL	1980	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		9000	19790522	19790716	1
30025244950100	NORTH VACUUM (ABO) WEST UNIT	3 TEXACO EXPL&PROD INC	15	17S	34E	1980	FSL	660	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		10511	19980314	19980529	3
30025237350000	NORTH VACUUM (ABO) WEST UNIT	4 TEXACO EXPL&PROD INC	15	17S	34E	660	FSL	2180	FWL	VACUUM	NORTH	NM	LEA	OIL		8984	19710324	19710422	1
30025241120100	NORTH VACUUM (ABO) WEST UNIT	5 TEXACO EXPL&PROD INC	22	17S	34E	660	FNL	660	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		10430	19980404	19980703	3
30025240260000	NORTH VACUUM (ABO) WEST UNIT	6 TEXACO EXPL&PROD INC	21	17S	34E	2080	FNL	560	FEL	VACUUM	NORTH	NM	LEA	OIL		8960	19720127	19720227	1
30025253110000	NORTH VACUUM (ABO) WEST UNIT	7 TEXACO EXPL&PROD INC	22	17S	34E	2020	FNL	1980	FWL	VACUUM	NORTH	NM	LEA	OIL		8900	19760803	19760811	1
30025240640000	NORTH VACUUM (ABO) WEST UNIT	9 TEXACO EXPL&PROD INC	22	17S	34E	1874	FSL	766	FWL	VACUUM	NORTH	NM	LEA	OIL		8933	19720325	19720422	1
30025240190000	NORTH VACUUM (ABO) WEST UNIT	11 TEXACO EXPL&PROD INC	21	17S	34E	660	FSL	660	FEL	VACUUM	NORTH	NM	LEA	OIL		9000	19720114	19720227	1
30025240320000	NORTH VACUUM (ABO) WEST UNIT	12 TEXACO EXPL&PROD INC	22	17S	34E	660	FSL	1880	FWL	VACUUM	NORTH	NM	LEA	OIL		8900	19720228	19720401	1
30025239440000	NORTH VACUUM (ABO) WEST UNIT	14 TEXACO EXPL&PROD INC	28	17S	34E	660	FNL	1980	FEL	VACUUM	NORTH	NM	LEA	OIL		8975	19711123	19711229	1
30025239050200	NORTH VACUUM (ABO) WEST UNIT	15 TEXACO EXPL&PROD INC	27	17S	34E	660	FNL	660	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		10303	19980201	19980223	3
30025238350000	NORTH VACUUM (ABO) WEST UNIT	17 TEXACO EXPL&PROD INC	28	17S	34E	1852	FNL	554	FEL	VACUUM	NORTH	NM	LEA	OIL		9000	19710809	19710909	1
30025238870001	NORTH VACUUM (ABO) WEST UNIT	18 TEXACO EXPL&PROD INC	27	17S	34E	1980	FNL	1980	FWL	VACUUM	NORTH	NM	LEA	W-INJW		8800	19841124	19841127	1
30025239150200	NORTH VACUUM (ABO) WEST UNIT	20 TEXACO EXPL&PROD INC	27	17S	34E	1980	FSL	660	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		10700	19971001	19971129	2
30025336370000	NORTH VACUUM (ABO) WEST UNIT	26 TEXACO EXPL&PROD INC	27	17S	34E	560	FNL	2080	FWL	VACUUM	NORTH	NM	LEA	OIL		10698	19961104	19970205	2
30025339280200	NORTH VACUUM (ABO) WEST UNIT	28 TEXACO EXPL&PROD INC	28	17S	34E	1980	FSL	760	FEL	VACUUM	NORTH	NM	LEA						2
30025346680000	NORTH VACUUM (ABO) WEST UNIT	29 TEXACO EXPL&PROD INC	21	17S	34E	365	FSL	1880	FEL	VACUUM	NORTH	NM	LEA	OIL		12423	19991106	20000118	2
30025339870000	NORTH VACUUM (ABO) WEST UNIT	30 TEXACO EXPL&PROD INC	15	17S	34E	1880	FSL	1980	FWL	VACUUM	NORTH	NM	LEA	OIL		10856	19970628	19970912	2
30025339880000	NORTH VACUUM (ABO) WEST UNIT	31 TEXACO EXPL&PROD INC	15	17S	34E	660	FNL	1980	FWL	VACUUM	NORTH	NM	LEA	OIL		10780	19970723	19971002	2
30025340940100	NORTH VACUUM (ABO) WEST UNIT	32 TEXACO EXPL&PROD INC	27	17S	34E	130	FNL	130	FWL	VACUUM	NORTH	NM	LEA	OIL-WO		11842	19980427	19980623	2
30025232880001	NORTH VACUUM ABO UNIT	130 ExxonMobil Corp	15	17S	34E	1980	FNL	660	FEL	VACUUM	NORTH	NM	LEA	GAS-WO		12612	19700101	19700901	1
30025235650000	NORTH VACUUM ABO UNIT	143 ExxonMobil Corp	27	17S	34E	660	FNL	1780	FEL	VACUUM	NORTH	NM	LEA	OIL		8745	19700831	19700927	1
30025235670000	NORTH VACUUM ABO UNIT	144 ExxonMobil Corp	15	17S	34E	460	FSL	660	FEL	VACUUM	NORTH	NM	LEA	OIL		8800	19700924	19701022	1
30025238210000	NORTH VACUUM ABO UNIT	164 ExxonMobil Corp	15	17S	34E	660	FNL	1980	FEL	VACUUM	NORTH	NM	LEA	OIL		8850	19710824	19710921	1
30025238200000	NORTH VACUUM ABO UNIT	163 ExxonMobil Corp	15	17S	34E	1980	FSL	1980	FEL	VACUUM	NORTH	NM	LEA	OIL		8850	19710809	19710905	1
30025236470002	NORTH VACUUM ABO UNIT	203 ExxonMobil Corp	22	17S	34E	660	FNL	1780	FEL	VACUUM	NORTH	NM	LEA	OIL-WO		8900	19810701	19810714	1
30025237770000	NORTH VACUUM ABO UNIT	209 ExxonMobil Corp	22	17S	34E	1980	FSL	1780	FEL	VACUUM	NORTH	NM	LEA	OIL		8800	19710525	19710621	1
30025247480000	NORTH VACUUM ABO UNIT	220 ExxonMobil Corp	22	17S	34E	660	FSL	860	FEL	VACUUM	NORTH	NM	LEA	W-I		8800	19740519	19740701	1
30025239650000	NORTH VACUUM ABO UNIT	228 ExxonMobil Corp	10	17S	34E	660	FSL	2000	FWL	VACUUM	NORTH	NM	LEA	OIL		8925	19780815	19701227	1
30025240900000	NORTH VACUUM ABO UNIT	229 ExxonMobil Corp	10	17S	34E	2000	FSL	660	FWL	VACUUM	NORTH	NM	LEA	OIL		8987	19770615	19720407	2
30025294340000	NORTH VACUUM ABO UNIT	290 ExxonMobil Corp	22	17S	34E	460	FSL	1980	FEL	VACUUM	NORTH	NM	LEA	OIL		8850	19860102	19860219	2
30025294360000	NORTH VACUUM ABO UNIT	292 ExxonMobil Corp	22	17S	34E	2090	FNL	2025	FEL	VACUUM	NORTH	NM	LEA	OIL		8850	19851214	19860211	2
30025295610000	NORTH VACUUM ABO UNIT	295 ExxonMobil Corp	15	17S	34E	530	FSL	1850	FEL	VACUUM	NORTH	NM	LEA	OIL		8900	19860305	19860513	2
30025296080000	NORTH VACUUM ABO UNIT	298 ExxonMobil Corp	15	17S	34E	2050	FNL	1900	FEL	VACUUM	NORTH	NM	LEA	OIL		8900	19860420	19860909	2
30025296090000	NORTH VACUUM ABO UNIT	299 ExxonMobil Corp	10	17S	34E	600	FSL	800	FWL	VACUUM	NORTH	NM	LEA	OIL		8950	19860205	19860425	2
30025240290000	STATE /LL/	1 ExxonMobil Corp	16	17S	34E	1780	FSL	1980	FEL	VACUUM	NORTH	NM	LEA	GAS		13429	19711204	19720429	2
30025281330000	STATE 'GS-16'	1 Mack Energy Corp.	16	17S	34E	660	FSL	660	FEL	VACA DRAW		NM	LEA	OIL		9000	19830129	19830406	2
30025251260000	YATES STATE	1 Saga Energy Inc.	9	17S	34E	660	FSL	460	FEL	VACUUM	NORTH	NM	LEA	OIL		9044	19760415	19751001	2

Note 1 - Data Previously submitted with original C-108 date 9/29/81 for order R-6857

Note 2 - See attached wellbore diagram

Note 3 - Well of Interest (Proposed injector)



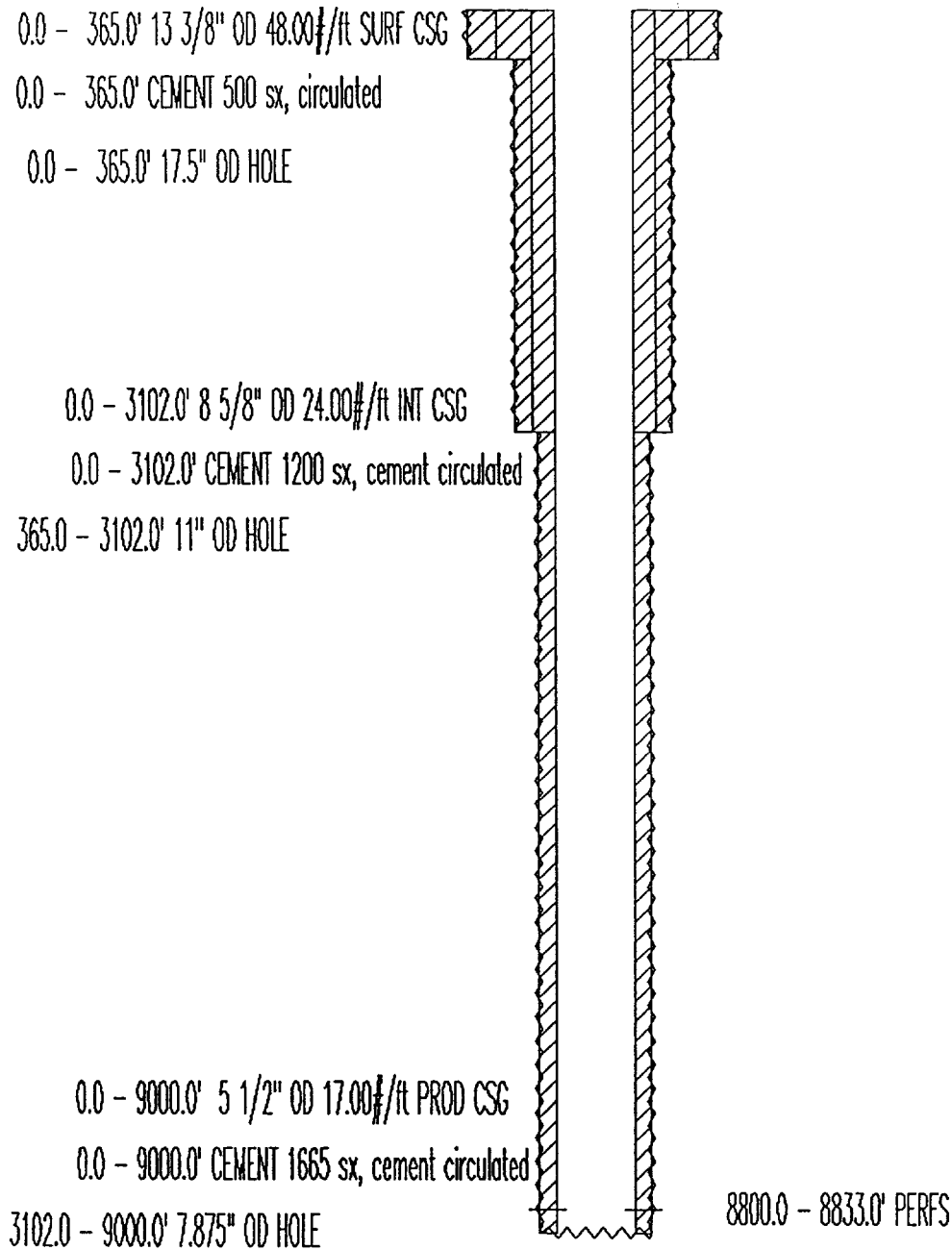
NMOCD C-108 APPLICATION:

Authorization to Inject/ Expansion of Existing Project

North Vacuum Abo West Unit, Lea County NM

PROPOSED NVAWU CONVERSION WELLS

TEXACO E&P INC.
NVAWU No. 1
API# 30 025 25652



460 FNL & 660 FNL
SEC 15, TWN 17S, RANGE 34E
ELEVATION: 4062' GR
COMPLETION DATE: 10-25-77
COMPLETION INTERVALS: 8,800' - 8,833' (ABO)
Former Mobil Oil Corp. - Conoco State No. 1

Texaco, Inc.
NVAWU #3
API #3002524495

Surface Loc. Unit L, 1980' FSL and 660' FWL
BHL Unit F, 3183' FSL and 1863' FWL
Section 36 - 17S - 34E
Lea County, New Mexico
Elevation: 4058' DF
Completion Date: 4/17/1998

309'

11 3/4", 42#, Casing - Circulated 250 sx of Cement

3120'

8 5/8", 32#, Casing - Cement with 400 sx

5 1/2" TOC @3150' (Temp.)

8646'-8873'

8646-8873-68
~~8704-8860-68~~
8704-
~~8704-~~

Horizontal Section 8704' - 10,511'

PBTD= 9003'

Original Vacuum Abo 8,836' - 8,860'

9,003'

TD 9,003'

5 1/2", 17#, Casing
Cemented with 1250 sacks

Texaco, Inc.
NVAWU #5
API #3002524495

30-025-24112

Surface Loc. Unit D, 660' FNL and 660' FWL
Section 22 - 17S - 34E
BHL, 552' FSL and 2055' FWL
Section 15 - 17S - 34E
Lea County, New Mexico
Elevation: 4048' GR
Completion Date: 5/9/1998

1690' 8 5/8", 24#, Casing - Cement with 575 sx

5650' - 5802' Sqz 2300 Sacks CMT, TOC @600' by TS

5 1/2" TOC @5900' (CBL)

Horizontal Section 8680' - 10,430'

8750' 5 1/2", 14-17#, Casing Cemented with 650 sacks

Original Vacuum Abo 8,820' - 8,910' (OH)

TD 8910'

8669' - 8852' TUD

Texaco, Inc.
NVAWU #15
API #3002523905

Surface Loc. Unit D, 660' FNL and 660' FWL
Section 27 - 17S - 34E
Lea County, New Mexico
Elevation: 4049' GR
Completion Date: 9/26/97

1650'

8 5/8", 24#, Casing - Cement with 550 sx

5 1/2" TOC Circulated to Surface

8500-8849

BHL , 1702' FNL and 439' FEL
Section 28 - 17S - 34E
Horizontal Section 8536' - 10,266'

NE Lateral
BHL , 540' FSL and 1769' FWL
Section 22 - 17S - 34E

Horizontal Section 8613' - 10,303'

8600-8792

8830'

5 1/2", 17#, Casing

Cemented with 2450 sacks

TD=8830'

NMOCD C-108 APPLICATION:

Authorization to Inject/ Expansion of Existing Project

North Vacuum Abo West Unit, Lea County NM

EXISTING NVAWU CONVERSION WELLS

&

1997 INFILL HORIZONTAL PRODUCING WELLS

Morexco, Inc.
M. J. Harvey 16 #1
API #3002534111

Unit H, 2121' FNL and 519' FEL
Section 16 - 17S - 34E
Lea County, New Mexico
Elevation: 4065' GR
Completion Date: 10/21/1997

401'

13 3/8", 48#, Casing - Circulated 358 sx of Cement

3150'

8 5/8", 32 & 34#, Casing - Circulated Cement with 950 sx

5 1/2" TOC @3110'

Vacuum Abo 8,875' - 8,905'

PBTD= 9003'

9,050'

TD 9,050'

5 1/2", 17#, Casing
Cemented with 1100 sacks

Texaco, Inc.
NVAWU #20
API #3002523915

Surface Loc. Unit L, 1980' FSL and 660' FWL
Section 27 - 17S - 34E
Lea County, New Mexico
Elevation: 4047' GR
Completion Date: 11/25/97

1650'

8 5/8", 32#, Casing - Cement with 800 sx

5 1/2" TOC @1648' (TS)

SW Lateral
BHL , 717' FSL and 592' FEL
Section 28 - 17S - 34E
Horizontal Section 8531' - 10,445'

NE Lateral
BHL , 3190' FSL and 2362' FWL
Section 27 - 17S - 34E
Horizontal Section 8598' - 10,424'

8830'

5 1/2", 17#, Casing

Cemented with 1600 sacks

TD=8830'

NVAWU #26
North Vacuum Abo Field
Lea County, New Mexico
Current Condition

11" Hole

8-5/8", 24#, WC-50 @ 1630'
Cemented w/ 500 sx "C" @ 13.5 ppg
150 sx "C" @ 14.8 ppg
Circulated 150 sx to pit

7-7/8" Hole

5-1/2", 17#, L80, LTC @ 8598'
Cemented w/1300 sx 35/65 Poz/H
100 sx "H"
Did not circulate cement.
Temp Survey TOC @ 2547'

KOP @ 8610'

TD @ 10,698' MD, 8,784' TVD, 1,880' vertical section
BHL: 1,337' South & 1,322' West of surface location.

4-3/4" hole

Texaco, Inc.
NVAWU #28
API #3002533926

Surface Loc. Unit I, 1980' FSL and 760' FEL
Section 28 - 17S - 34E
Lea County, New Mexico
Elevation: 4033' GR
Completion Date: 5/4/1999

1630'

8 5/8", 24#, Casing - Cement with 600 sx

5 1/2" TOC @1587' (TS)

NE Lateral
BHL , 731' FNL and 452' FWL
Section 27 - 17S - 34E
Horizontal Section 8552' - 10,342'

SW Lateral
BHL 544' FSL and 2084' FEL
Section 28 - 17S - 34E

Horizontal Section 8642' - 10,728'

8950'

5 1/2", 17#, Casing Cemented with 1700 sacks

TD=8950'

Texaco, Inc.
NVAWU #29
API #3002534668

Surface Loc. Unit O, 365' FSL and 1980' FEL
Section 21 - 17S - 34E
BHL , 2055' FNL and 918' FWL
Section 28 - 17S - 34E
Lea County, New Mexico
Elevation: 4057' GR
Completion Date: 1/6/2000

1620'

8 5/8", 24#, Casing - Cement with 600 sx

5 1/2" TOC @Surface' (Calc)

Horizontal Section 8714' - 12,423'

9000'

TD=9000'

5 1/2", 17#, Casing

Cemented with 1800 sacks

Texaco, Inc.
NVAWU #30
API #3002533987

Surface Loc. Unit K, 1880' FSL and 1980' FWL
Section 15 - 17S - 34E
BHL , 526' FSL and 491' FWL
Section 15 - 17S - 34E
Lea County, New Mexico
Elevation: 4047' GR
Completion Date: 9/13/97

1668'

8 5/8", 24#, Casing - Cement with 600 sx

5 1/2" TOC @Surface' (Circ)

Horizontal Section 8665' - 10,856'

8880'

5 1/2", 17#, Casing

Cemented with 1900 sacks

TD=8880'

Texaco, Inc.
NVAWU #31
API #3002533988

Surface Loc. Unit C, 660' FNL and 1980' FWL
Section 15 - 17S - 34E
BHL , 2079' FNL and 557' FWL
Section 15 - 17S - 34E
Lea County, New Mexico
Elevation: 4052' GR
Completion Date: 9/26/97

1660'

8 5/8", 24#, Casing - Cement with 600 sx

5 1/2" TOC @2218' (TS)

Horizontal Section 8604' - 10,780'

8880'

5 1/2", 17#, Casing

Cemented with 1400 sacks

TD=8880'

Texaco, Inc.
NVAWU #32
API #3002523915

Surface Loc. Unit D, 130' FNL and 130' FWL
Section 27 - 17S - 34E
Lea County, New Mexico
Elevation: 4050' GR
Completion Date: 5/20/1998

1630'

8 5/8", 24#, Casing - Cement with 600 sx

5 1/2" TOC @1841' (TS)

SW Lateral
BHL, 1687' FSL and 1658' FEL
Section 28 - 17S - 34E
Horizontal Section 8560' - 11,842'

NE Lateral
BHL, 2009' FSL and 2001' FWL
Section 22 - 17S - 34E

Horizontal Section 8646' - 11,420'

8945'

5 1/2", 17#, Casing Cemented with 2136 sacks

TD=8945'

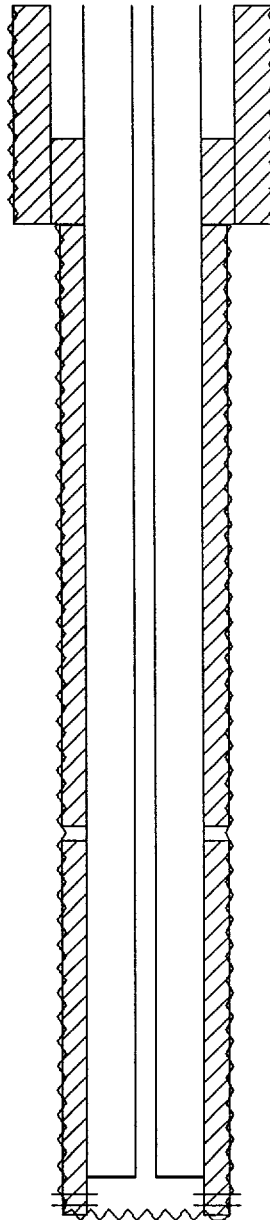
MOBIL PRODUCING
NORTH VACUUM ABO No. 229
API# 30-025-24090

L, 10

0.0 - 1635.0' 8 5/8" OD 24.00#/ft SURF CSG

0.0 - 1635.0' CEMENT 1100 SX, CIRCULATED

0.0 - 1635.0' 12.25" OD HOLE



1000.0 - 6097.0' CEMENT 1000 SX, TOC EST.

6097.0 - 6098.0' DV TOOL

0.0 - 8987.0' 5 1/2" OD 17.00#/ft PROD CSG

6200.0 - 8987.0' CEMENT 250 SX, CIRCULATED

1635.0 - 8987.0' 7.875" OD HOLE

0.0 - 8700.0' 2.875" OD TBG

8700.0 - 8710.0' RETRV. PACKER

8745.0 - 8924.0' PERFS

2000 FSL, 660 FWL
SEC 10, T-17SS, R-34E
ELEVATION: 4048' GR
COMPLETION DATE: 5-11-72
COMPLETION INTERVAL: 8,745' - 8,924' (ABO)
Former Shell State "WH" No. 4

MOBIL PRODUCING
NORTH VACUUM ABO UNIT No. 290
API# 30-025-29434

0.0 - 418.0' 13 3/8" OD 48.00#/ft SURF CSG
0.0 - 418.0' CEMENT 500 SX, CIRCULATED
0.0 - 418.0' 17 1/2" OD HOLE

0.0 - 5000.0' 9 5/8" OD 53.50#/ft PROD CSG
0.0 - 5000.0' CEMENT 3000 SX, CIRCULATED
418.0 - 5000.0' 12 1/4" OD HOLE

4212.0 - 8850.0' 5 1/2" OD 15.50#/ft LINER
4212.0 - 8850.0' CEMENT 950 SX, CIRC.
5000.0 - 8850.0' 7 7/8" OD HOLE

8604.0 - 8766.0' PERFS

460 FSL & 1980 FEL
SEC 22, T-17S, R-34E
ELEVATION: 4032' GR
COMPLETION DATE: 1-20-86
COMPLETION INTERVAL: 8604' - 8766' (ABO)

MOBIL PRODUCING
NORTH VACUUM ABO UNIT No. 292
API# 30-025-29436

0.0 - 430.0' 13 3/8" OD 48.00#/ft SURF CSG
0.0 - 430.0' CEMENT 500 SX, CIRCULATED
0.0 - 430.0' 17 1/2" OD HOLE

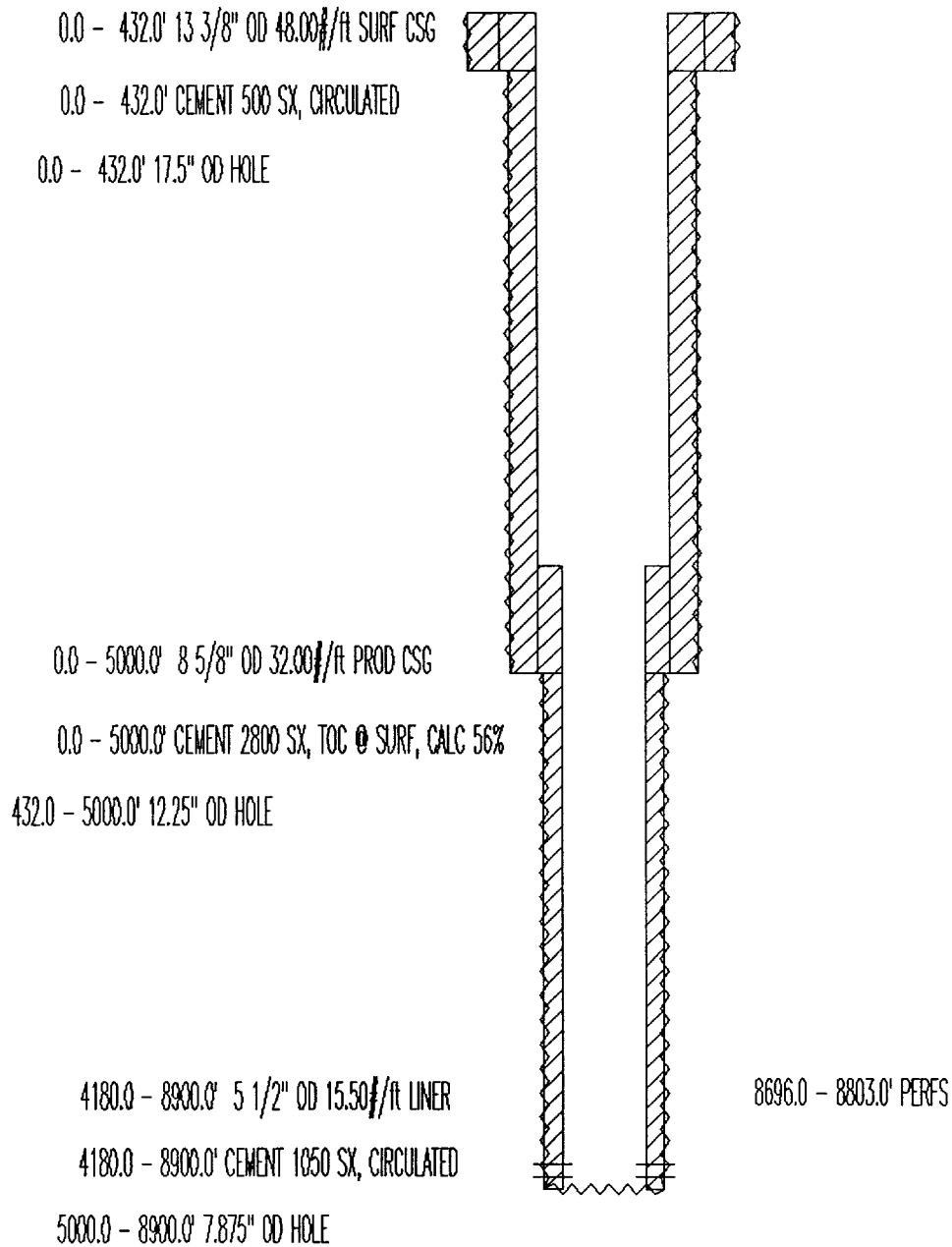
0.0 - 5000.0' 8 5/8" OD 32.00#/ft PROD CSG
0.0 - 5000.0' CEMENT 3020 SX, CIRCULATED
430.0 - 5000.0' 12 1/4" OD HOLE

4214.0 - 8850.0' 5 1/2" OD 15.50#/ft LINER
4214.0 - 8850.0' CEMENT 675 SX, CIRCULATED
5000.0 - 8850.0' 7 7/8" OD HOLE

8701.0 - 8752.0' PERFS

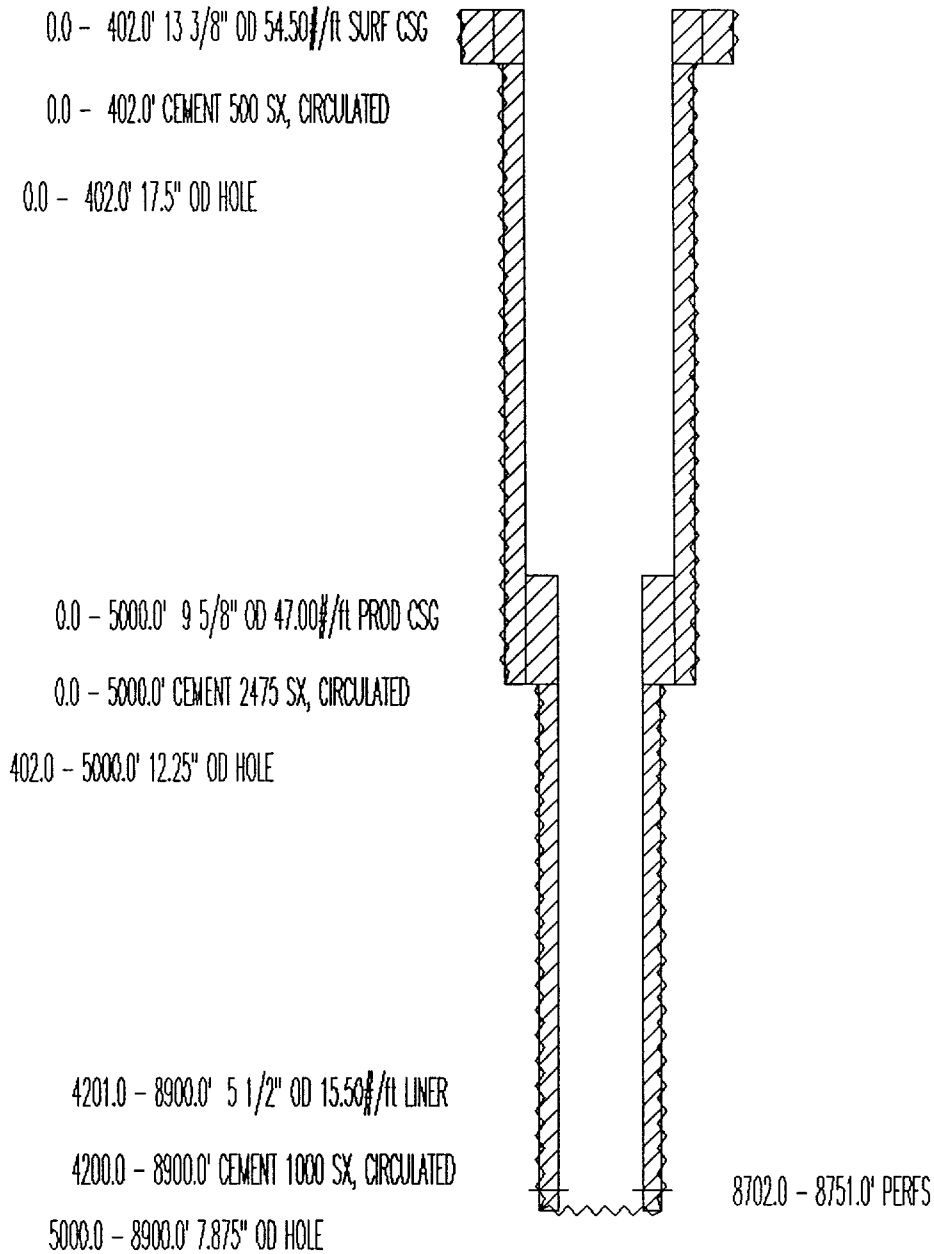
2090 FNL & 2025 FEL
SEC 22, T-17S, R-34E
ELEVATION: 4045' GR
COMPLETION DATE: 1-30-86
COMPLETION INTERVAL: 8701' - 8752' (ABO)

MOBIL PRODUCING
NORTH VACUUM ABO No. 295
API# 30-025-29561



530 FSL, 1850 FEL
SEC 15, T-17SS, R-34E
ELEVATION: 4050' GR
COMPLETION DATE: 5-01-86
COMPLETION INTERVAL: 8,696' - 8,803' (ABO)

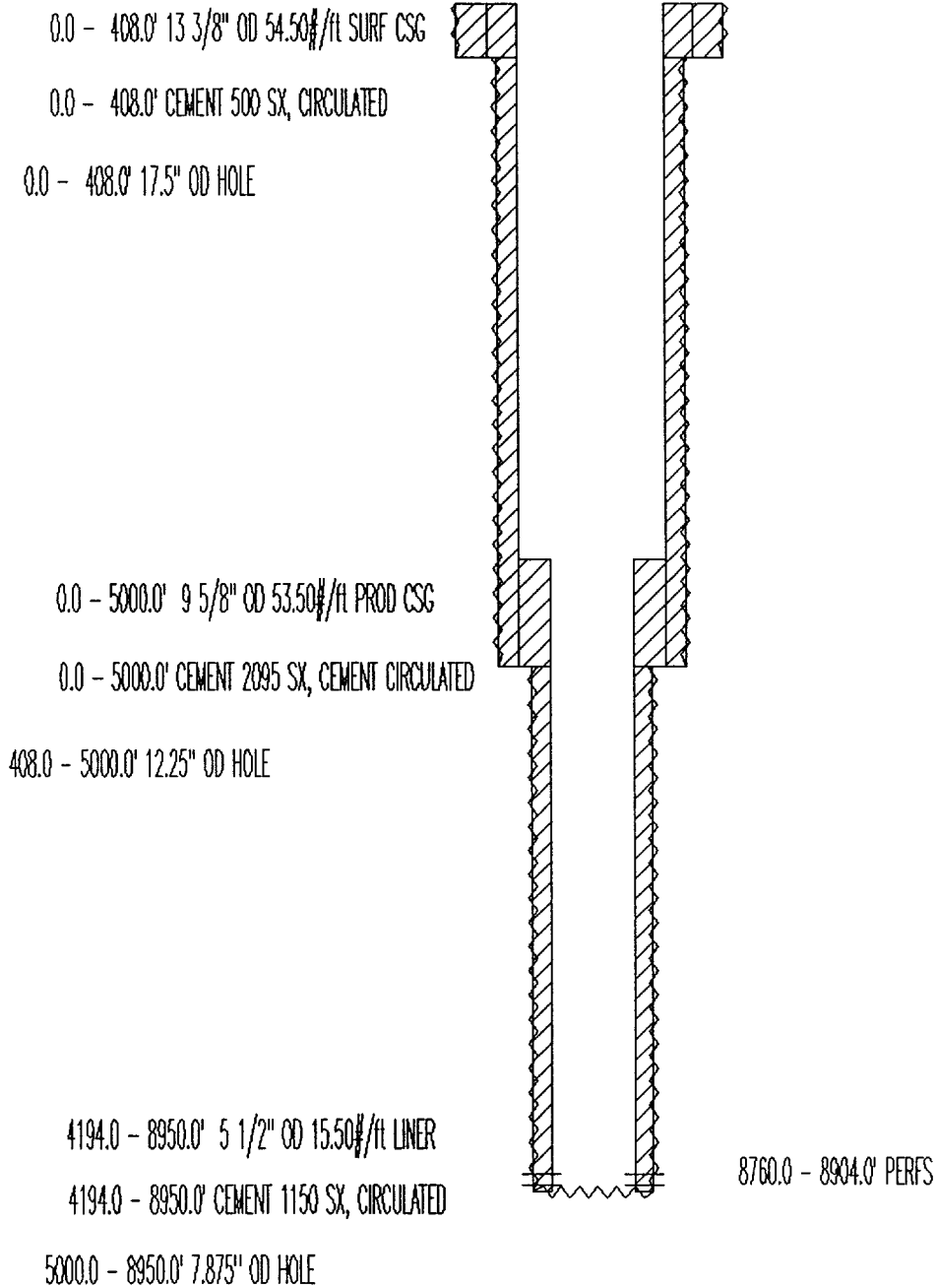
MOBIL PRODUCING
NORTH VACUUM ABO No. 298
API# 30-025-29608



2050 FNL, 1900 FEL
SEC 15, T-17SS, R-34E
ELEVATION: 4044' GR
COMPLETION DATE: 8-31-86
COMPLETION INTERVAL: 8,702' - 8,751' (ABO)

MOBIL PRODUCING
NORTH VACUUM ABO No. 299
API# 30-025-29609

m, 10



600 FSL, 800 FWL
SEC 10, T-17SS, R-34E
ELEVATION: 4058' GR
COMPLETION DATE: 6-11-86
COMPLETION INTERVAL: 8,760' - 8,904' (ABO)

P+A: 5-23-75

P+A.

FIELD	Vacuum (G-SA)	OPERATOR	Mobil Oil Corp	DATE	5-21-76
LEASE	State "LL"	WELL No	1	LOCATION	J. Sec 16, T17S, R34E

Set P & A Marker
Spot 10 sx Cement To Surf.

13 3/8 " casing set at 360 ' with 400 sx of cl. H cement
Hole size 17 1/2 " Cement Circ

Spot 50 sx Cement - 110' Plug
1777' - 1767'

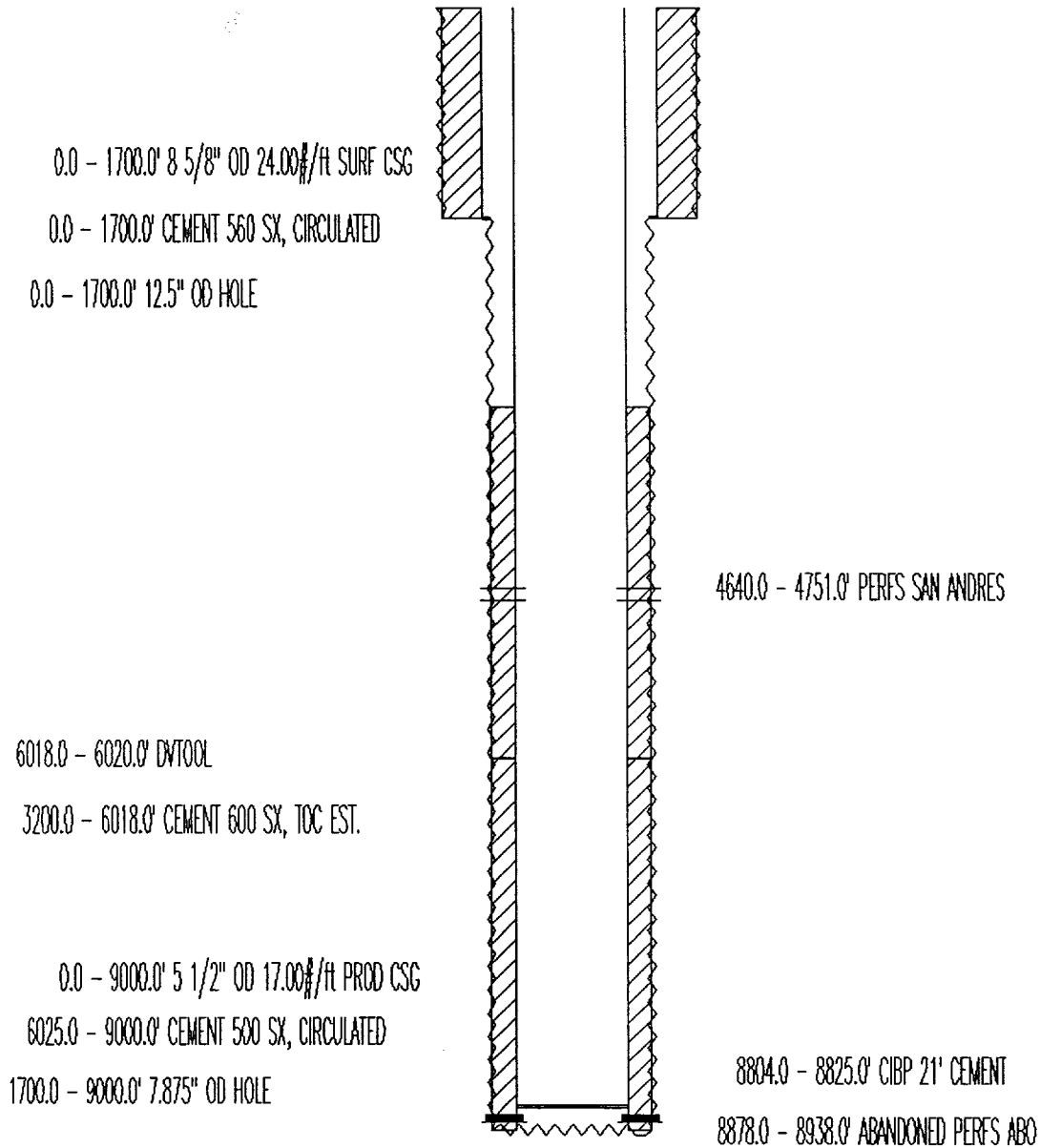
Cement Cap - 20 sx
CIBP - 4750'
San Andres Perf - 4771' - 4781'
4787' Liner top

25/8 " casing set at 5000 ' with 2900 sx of cl. C cement
Hole size 12 1/4 " Cement Circ

Cement Cap PBTD 8859'
CIBP - ~~8859~~ 8900'
Abo Perf. 8927' - 8943'
Cement Cap PBTD 12980'
CIBP - 13000'
Morrow Perf. 13144' - 13334'

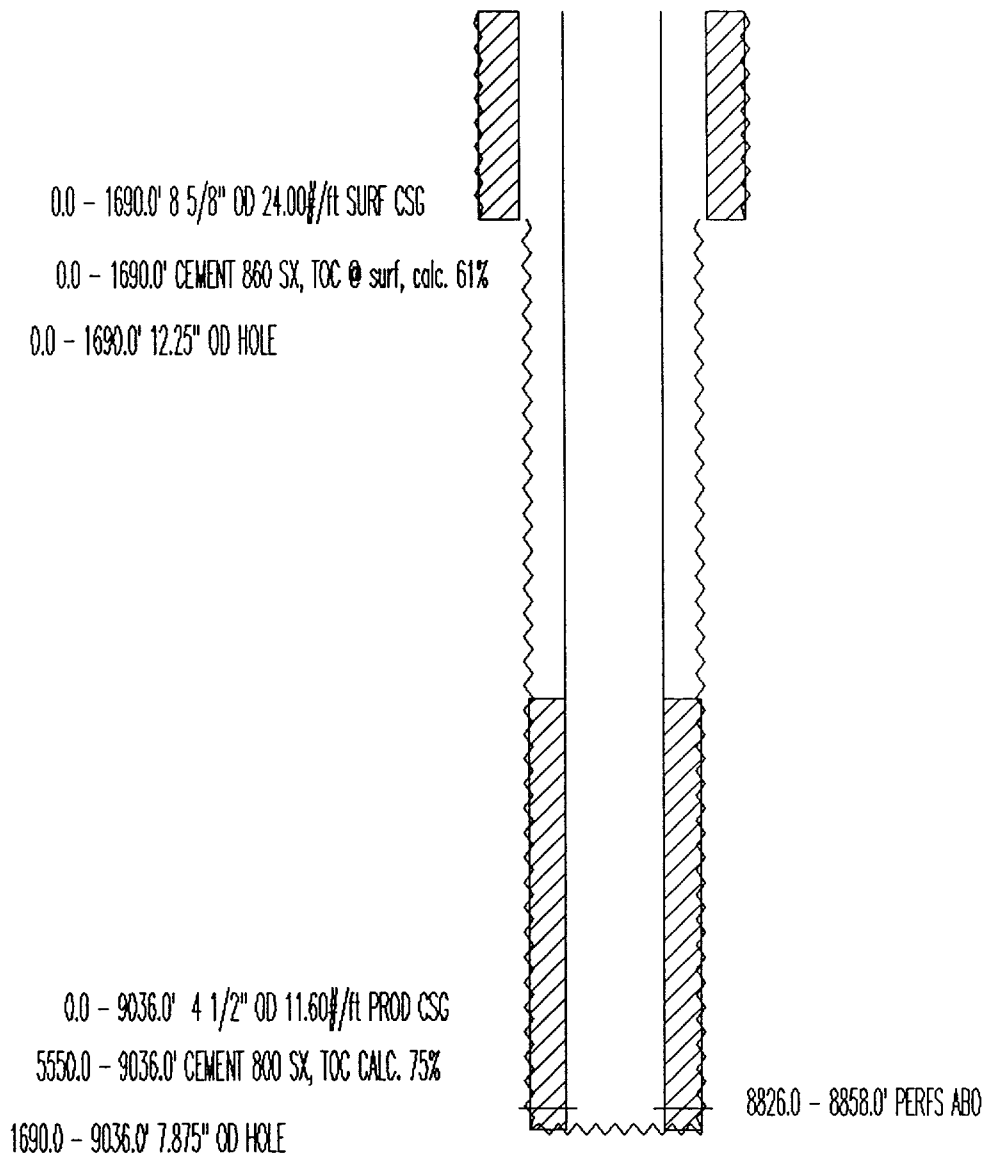
7 " liner set at 13427 ' with 1800 sx of cement
Total Depth 13429 ' Hole size 8 3/4 " Cement Circ.
PBTD 13352

SAMEDAN OIL CORPORATION
STATE "GS" 16 No. 1
API# 30-025-XXXXX



660 FSL, 660 FEL
SEC 16, T-17S, R-34E
ELEVATION: 4087' GR
COMPLETION DATE: 3-23-83
COMPLETION INTERVAL: 4,640' - 4,751' (San Andres)
8,878' - 8,938' (Abo)

SAGE ENERGY
YATES STATE No. 1
API# 30-025-25126



660 FSL, 460 FEL
SEC 9, T-17S, R-34E
ELEVATION: 4066' GR
COMPLETION DATE: 12-01-75
COMPLETION INTERVAL: 8,826' - 8,858' (ABO)
Former K.K. Amini Yates State #1

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
newspaper published at
Hobbs, New Mexico, do solemnly
swear that the clipping attached
hereto was published once a
week in the regular and entire
issue of said paper, and not a
supplement thereof for a period.

of 1
_____ weeks.

Beginning with the issue dated
March 9 2001
and ending with the issue dated

March 9 2001



Publisher

Sworn and subscribed to before

me this 9th day of

March 2001


Notary Public.

My Commission expires
October 18, 2004
(Seal)

This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

LEGAL NOTICE

March 9, 2001

Notice is hereby given of the application of Texaco Exploration and Production, Inc., Attention: William Smith, Production Engineer, P.O. Box 3109, Midland, Texas, 79701, Telephone: 915-688-4453, to the New Mexico Oil Conservation Division, Energy, Mineral and Natural Resources Department, for approval to convert four wells from production to water injection for the purpose of waterflood expansion.

Unit Name: North Vacuum Abo West Unit, Lea County,
New Mexico.

Well Numbers and Locations:

- #1 - Unit Letter D, 460' FNL and 660' FWL,
Section 15 - T17S -R34E
- #3 - Unit Letter L, 1980' FSL and 660' FWL,
Section 15 - T17S -R34E
- #5 - Unit Letter D, 660' FNL and 660' FWL,
Section 22 - T17S -R34E
- #15 - Unit Letter D, 660' FNL and 660' FWL
Section 27 - T17S -R34E

The injection formation is North Vacuum Abo at a depth of 8700 feet below the surface of the ground. The expected maximum injection rate is 1000 barrels of water per day per well. The expected maximum initial injection pressure is 3400 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico, 87504, within fifteen (15) days of this publication.

#17997

02104895000

02545512

Texaco Exploration and Product
P.O. Box 3109
MIDLAND, TX 79702-3109

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

OBO, Inc.
P. O. Box 2577
Hialeah, FL 33012

2. Article Number (Copy from service label)

7000 0520 0024 4316 0820

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature X *[Signature]* ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes ☐ NoIf YES, enter delivery address below: ☐ Yes ☐ No3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Sage Energy Company, Operator
P. O. Box 3068
Midland, TX 79702

2. Article Number (Copy from service label)

7000 0520 0024 4316 0738

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature X *[Signature]* ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes ☐ NoIf YES, enter delivery address below: ☐ Yes ☐ No3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705

2. Article Number (Copy from service label)

7000 0520 0024 4316 0769

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature X *[Signature]* ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes ☐ NoIf YES, enter delivery address below: ☐ Yes ☐ No3. Service Type ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Marathon Oil Company
Attn: Joint Interest Supv.
P. O. Box 552
Midland, TX 79702

2. Article Number (Copy from service label)

7000 0520 0024 4316 0707

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) *M. Williams* B. Date of Delivery **MAR 27 2001**
C. Signature *X M. Williams* ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mack C. Chase, Trustee of the Mack C. Chase
Marilyn C. Chase Trust u/t/a/ dated 11/21/82
P. O. Box 1767
Artesia, NM 88211

2. Article Number (Copy from service label)

7000 0520 0024 4316 0806

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) *Sylvia Hensley* B. Date of Delivery **3-27-01**
C. Signature *X Sylvia Hensley* ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Estate of Martin Yates, III
Est. of Lillie M. Yates, Est. of Peggy A. Yates
John Yates
Sharbro Oil Ltd. Co.
105 South 4th St.
Artesia, NM 88210

2. Article Number (Copy from service label)

7000 0520 0024 4316 0783

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) **PATTI CARLILE** B. Date of Delivery **03-27-01**
C. Signature *X Patti Carlile* ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Roy Pearce, Jr. Trust
Land Leasee
1717 S. Jackson
Pecos, TX 79772

2. Article Number (Copy from service label)

7000 0520 0024 4316 07141

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

- A. Received by (Please Print Clearly) *Myra S. Griffin* B. Date of Delivery *3-29-01*
- C. Signature *[Signature]* ☐ Agent ☐ Addressee
- D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

ExxonMobil Corporation
Joint Interest
P. O. Box 4707
Houston, TX 77210-4707

2. Article Number (Copy from service label)

7000 0520 0024 4316 0691

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

- A. Received by (Please Print Clearly) *MAR 29 2001* B. Date of Delivery *MAR 29 2001*
- C. Signature *X GEE* ☐ Agent ☐ Addressee
- D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Headington Penn Corporation
7557 Rambler Road, Suite 1150
Dallas, TX 75231

2. Article Number (Copy from service label)

7000 0520 0024 4316 0844

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

- A. Received by (Please Print Clearly) *Cheri Shane* B. Date of Delivery *3/28/01*
- C. Signature *X Cheri Shane* ☐ Agent ☐ Addressee
- D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Oxy USA Inc.
P. O. Box 50250
Midland, TX 79710

2. Article Number (Copy from service label)

7000 0520 0024 4316 0813

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

ARNIE HERGEN 3-28-01

C. Signature

X Arnie Hergen ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Apache Corporation
2000 Post Oak Blvd., Suite 100
Houston, TX 77056-4400

2. Article Number (Copy from service label)

7000 0520 0024 4316 0752

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

Craig Blanton 3-28-01

C. Signature

X Craig Blanton ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Atlantic Richfield Company
C/o BP Amoco
P. O. Box 3092
Houston, TX 77253

2. Article Number (Copy from service label)

7000 0520 0024 4316 0837

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

7-02-01 APR 12 2001

C. Signature

X Eker ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Eidson Ranch Inc.
Land Leasee
Box 1286
Lovington, NM 88260

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

X

Eidson Ranch
Betty Kuhn

☐ Agent

☐ Addressee

D. Is delivery address different from item 1? ☒ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number (Copy from service label)

7000 0520 0024 4316 0721

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Recipient's Name (Please Print Clearly) (To be completed by mailer)
Morexco, Inc
 Street, Apt. No.; or PO Box No.
P.O. Box 1591
 City, State, ZIP+ 4
Roswell NM 88202
 PS Form 3800, February 2000 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Recipient's Name (Please Print Clearly) (To be completed by mailer)
MJ Harvey Jr.
 Street, Apt. No.; or PO Box No.
12700 Hillcrest Dr.
 City, State, ZIP+ 4
Dallas, TX 75230
 PS Form 3800, February 2000 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Recipient
 Street, Apt.
 City, State,
NM State Land Office
3830 N. Grimes - C
Hobbs, New Mexico 88240
 PS Form 3800, February 2000 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Recipient's Name (Please Print Clearly) (To be completed by mailer)
Morexco Inc.
 Street, Apt. No.; or PO Box No.
P. O. Box 481 1591
 City, State, ZIP+ 4
Artesia, NM 88211
 PS Form 3800, February 2000 See Reverse for Instructions

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Recipient's Name (Please Print Clearly) (To be completed by mailer)
M. J. Harvey, Jr.
 Street, Apt. No.; or PO Box No.
P. O. Box 12705
 City, State, ZIP+ 4
Dallas, TX 75225
 PS Form 3800, February 2000 See Reverse for Instructions

No return receipt.
 Called and they had received the document on 4/5/00.