5.2.95

671

March 14, 1995

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Attention: William J. LeMay

Re: Application for Expansion of Waterflood;
Order R-4019; R-4020; WFX-648; WFX-657
Texaco Exploration and Production Inc.
Cooper Jal Unit
Jalmat and Langlie Mattix Formations
T-24-S, R-36 & 37-E
Lea County, New Mexico

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests administrative approval for the conversion of four wells to downhole commingled injection, within the Cooper Jal Unit, Enhanced Oil Recovery Project. Of the four wells designated in this application, one will be converted from an existing downhole commingled producer to a downhole commingled injector. The remaining three wells will be modified from single injectors to downhole commingled injectors for the purpose of secondary recovery by water injection. This work will help maintain reservoir pressure and recover additional oil reserves that would otherwise be left in place.

Texaco E&P Inc. respectfully requests that the Cooper Jal Unit Waterflood Project covered by R-4019, R-4020, WFX-648 and WFX-657 be expanded to include the modification of the four wellbores to downhole commingled injection wells. Administrative approval, or a NMOCD sponsored hearing is requested so that the necessary operations can be advanced in a prudent manner. If you have any questions concerning the application, please contact me at (505) 397-0411.

Yours very truly,

Michael C. Alexander
Production Engineer

MCA/
Attachments
File
Chrono

cc: Jerry Sexton - NMOCD; Hobbs, New Mexico
Gary Gourley - BLM; Roswell, New Mexico

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [X] yes [ ] no

II. Operator: Texaco E & P Inc.

Address: P. O. Box 730 , Hobbs , New Mexico 88240

Contact party: Michael Alexander, Prod. Engineer Phone: (505) 393 - 7191

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? [XX] yes [ ] no
If yes, give the Division order number authorizing the project R-4019;R-4020;WFX-648; WFX-657.

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 geological data on the injection zone including appropriate lithologic detail, geological 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 source 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 source 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: Michael C. Alexander Title Production Engineer

Signature: Michael C Alexander Date: 4/13/95

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. R-4019, Aug. 19, 1970; R-4020, Aug. 19, 1970; WFX-648, Oct. 1, 1993; WFX-657, Feb. 21, 1994

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

4-13-95

NEW MEXICO OIL CONSERVATION DIVISION - Form C-108

III. INJECTION WELL DATA

Cooper Jal Unit : Jalmat & Langlie Mattix Pools

132 - Unit Letter I, 2310'FSL & 990'FEL, Section 24, T24S, R36E
143 - Unit Letter F, 2310'FNL & 1650'FWL, Section 25, T24S, R36E
153 - Unit Letter L, 1400'FSL & 280'FWL, Section 19, T24S, R37E
226 - Unit Letter A, 330'FNL & 330'FEL, Section 25, T24S, R36E

All pertinent data for each of the above proposed injection wells is included on the well schematic sheets in this application.

IV. COOPER JAL UNIT - AREA MAP

V. COOPER JAL UNIT - AREA OF REVIEW

A map of the subject area, Cooper Jal Unit, including all wells within a 2 mile radius is attached. Also attached is a map showing each of the subject well's 1/2 mile radius circle or area of review.

VI. TABULATION OF DATA ON WELLS WITHIN AREA OF REVIEW

The current Cooper Jal Unit waterflood was developed under NMOCD Order R-4019, Langlie Mattix Pool, and R-4020, Jalmat Pool, dated August 19, 1970. Since completion of the original hearing, 13 new wells have been completed to the subject horizon. Three of the new wells were completed by Reserve Oil & Gas Company, well numbers 151, 153 and 154. During 1993, Texaco drilled five new wells during 1993, numbers 401, 402, 403 ,404 and 405. And during 1994 Texaco drilled numbers 406, 407, 409, 413 & 419 as part of the enhanced recovery project on the Cooper Jal Unit.

The intent of this application is to seek approval, either through a NMOCD administrative approval, or through a New Mexico Oil Conservation Division sponsored hearing to modify the subject wells for injection. This application is pursuant to the continuation of an Enhanced Oil Recovery Project on the Cooper Jal Unit, which will enhance the recovery of additional reserves from the Jalmat and Langlie Mattix Pools.

To date the following wells within a half mile radius of the proposed injection wells on the Cooper Jal Unit have been plugged and abandoned :

T-24-S, R-36-E

Section 24 : well(s) : None
Section 25 : well(s) : CJU #144, Harrison #3, 25 'A' Unit #1
Section 26 : well(s) : C. D. Woolworth #'s 1, 2 & 5

VI. TABULATION OF DATA ON WELLS WITHIN AREA OF REVIEW (continued)

T-24-S, R-37-E

Section 19 : well(s) : None
Section 30 : well(s) : None

VII. PROPOSED OPERATION

The proposed average injection rate per well is 500 BWIPD (800 BWIPD for downhole commingled injectors) with a maximum anticipated rate of 600 BWIPD (1200 BWIPD for DHC injectors). Maximum pressure will not exceed 1500 psi plant operating pressure. The average wellhead injection pressure will not exceed 600 psi, on the two new injectors, until a step rate test establishes a higher limit. The system will be closed.

VIII. GEOLOGICAL DATA

Based on current geological and engineering data and a petrophysical rock-properties evaluation, there is no evidence of any natural or artificially created open faults within the unitized interval or above.

IX. PROPOSED STIMULATION PROGRAM

The subject wells will be stimulated using 2,000 to 8,000 gallons of 20% NEFE HCl acid. Rock salt blocks or ball sealers will be utilized during the jobs.

ATTACHMENTS

A. SCHEMATICS OF SUBJECT WELLS

B. MAPS OF SUBJECT AREA

C. TABULATION OF WELLS IN UNIT AREA AND AREA OF REVIEW

D. WELLS NOT SUBMITTED IN PREVIOUS C-108 APPLICATIONS (UNIT OR CURRENT AREA OF REVIEW

E. NOTICES OF INTENT
- LEGAL PUBLISHED IN LOCAL PAPER
- OFFSET OPERATOR & LANDOWNER LETTER

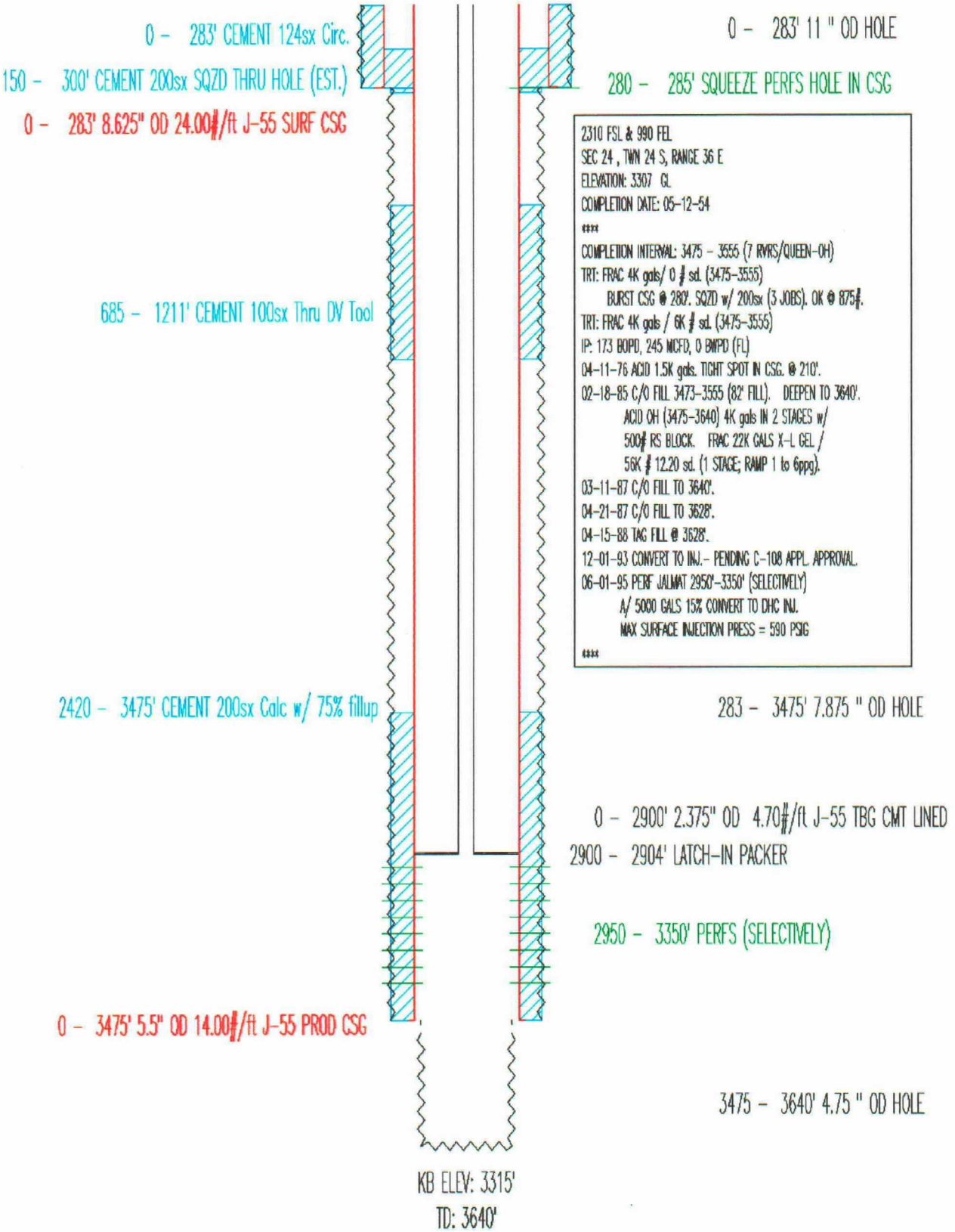
F. RECEIPTS FOR LETTERS TO OFFSET OPERATORS & LANDOWNERS

G. COPIES OF PREVIOUS ORDERS

A. SCHEMATICS OF SUBJECT WELLS

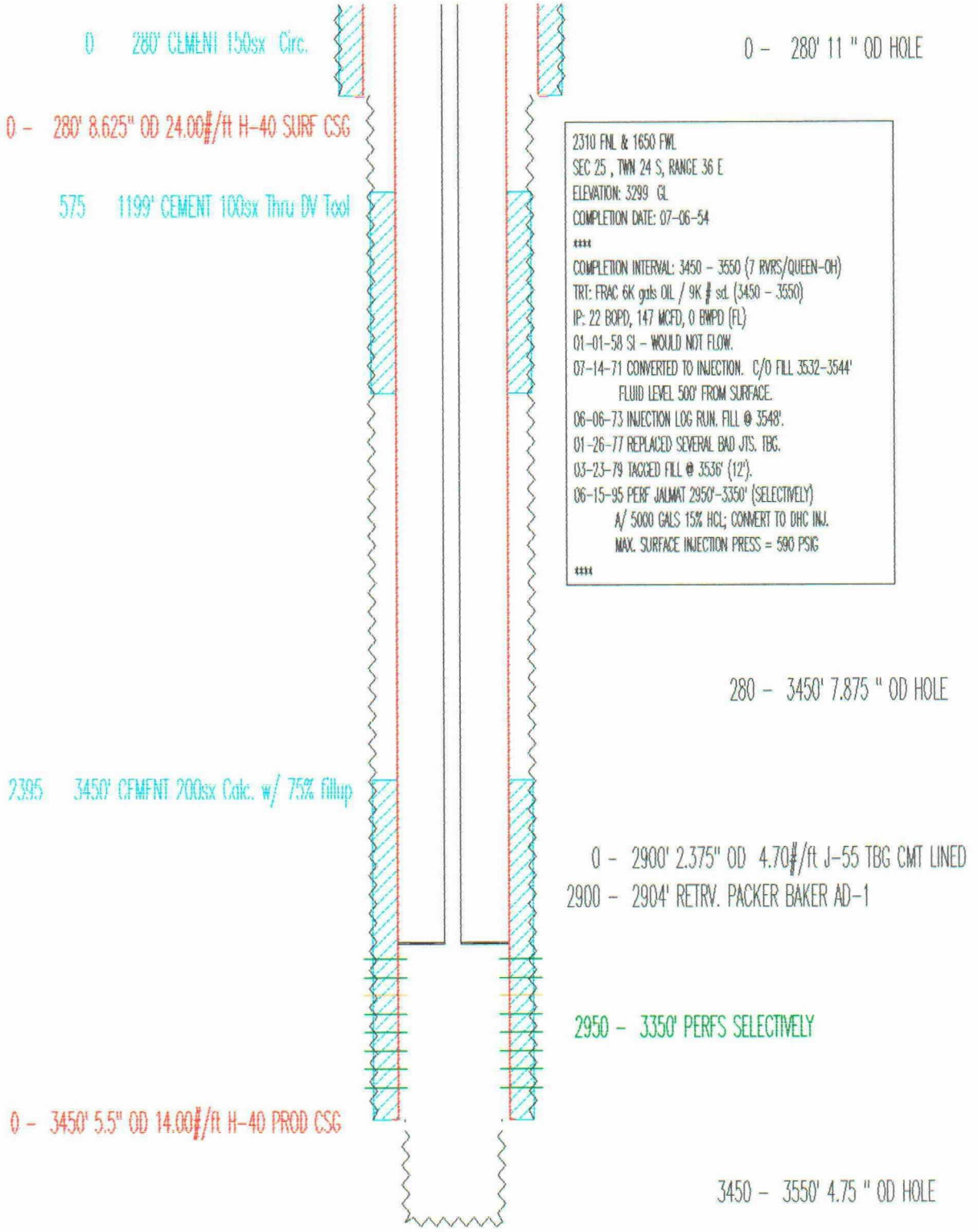
III. WELL DATA
PROPOSED DOWNHOLE
COMMINGLED INJECTOR

TEXACO E & P INC.
COOPER JAL UNIT NO. 132
API# 3002509639



III. WELL DATA
PROPOSED DOWNHOLE
COMMINGLED INJECTOR

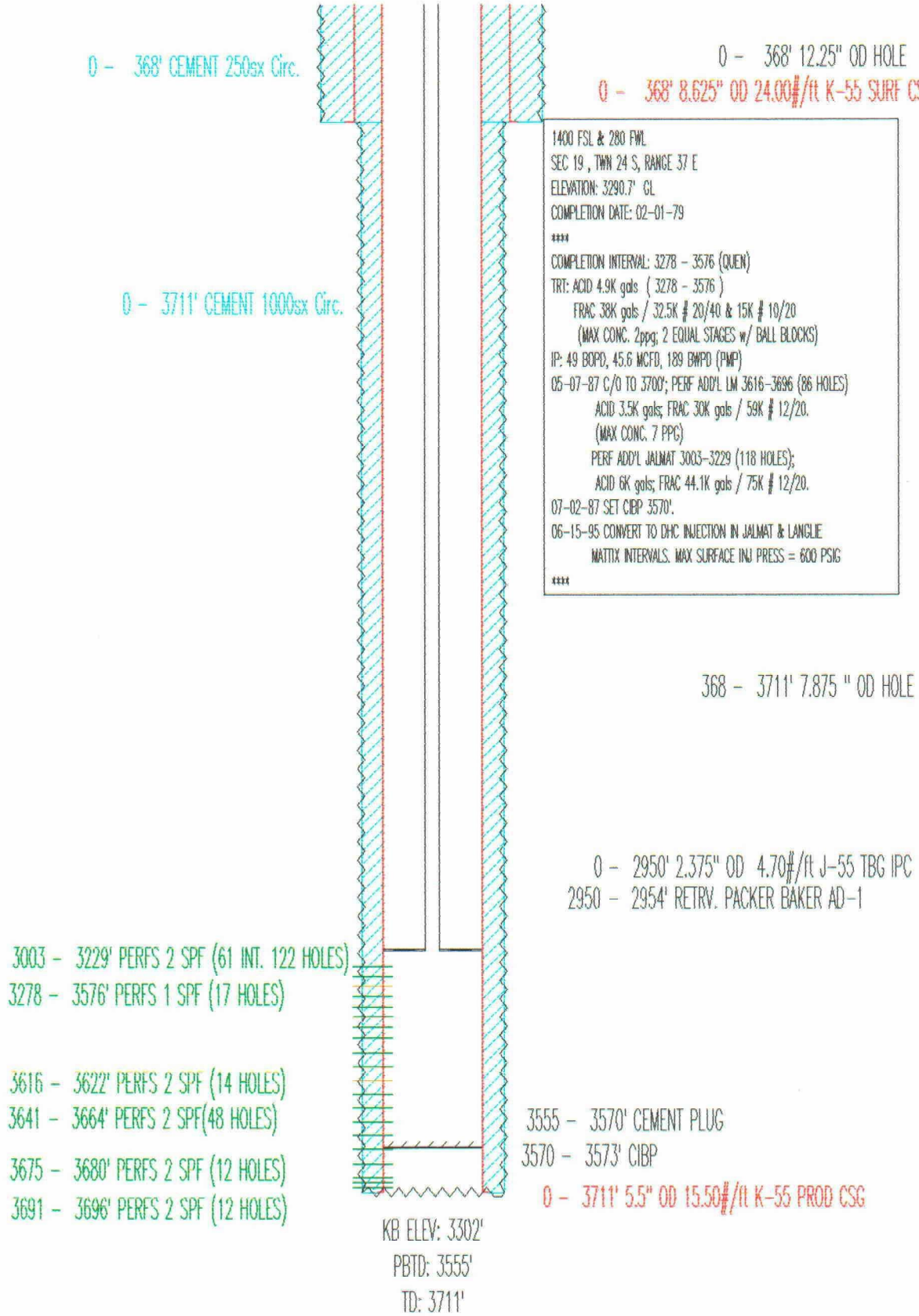
TEXACO E & P INC.
COOPER JAL UNIT NO. 143
API# 3002509658



2310 FNL & 1650 FWL
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3299 GL
COMPLETION DATE: 07-06-54
****
COMPLETION INTERVAL: 3450 - 3550 (7 RVRS/QUEEN-OH)
TRT: FRAC 6K gals OIL / 9K # sd. (3450 - 3550)
IP: 22 BOPD, 147 MCFD, 0 BWPD (FL)
01-01-58 SI - WOULD NOT FLOW.
07-14-71 CONVERTED TO INJECTION. C/O FILL 3532-3544'
FLUID LEVEL 500' FROM SURFACE.
06-06-73 INJECTION LOG RUN. FILL @ 3548'.
01-26-77 REPLACED SEVERAL BAD JTS. TBG.
03-23-79 TAGGED FILL @ 3536' (12').
06-15-95 PERF JALMAT 2950'-3350' (SELECTIVELY)
A/ 5000 GALS 15% HCL; CONVERT TO DHC INJ.
MAX. SURFACE INJECTION PRESS = 590 PSIG
****

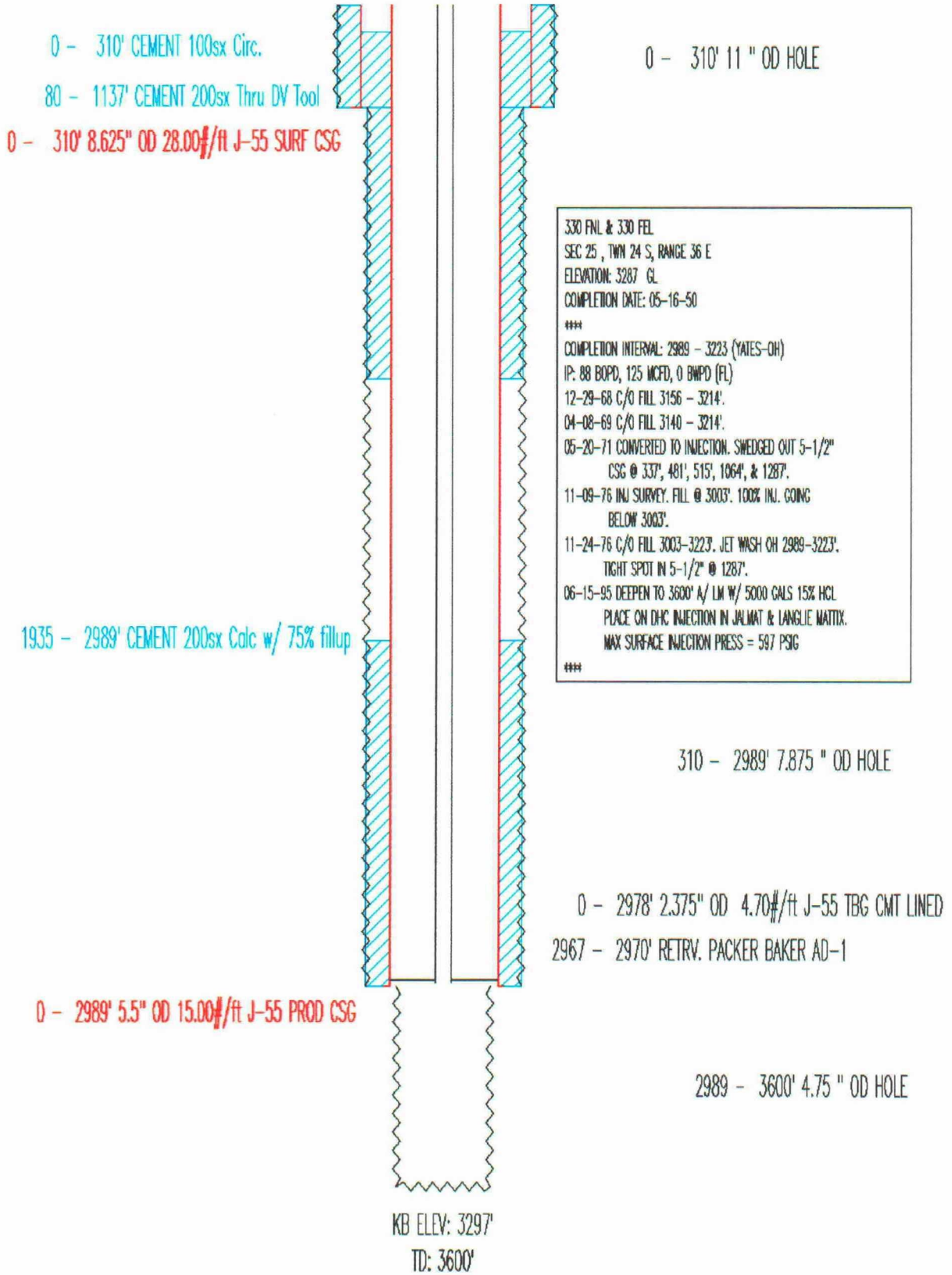
III. WELL DATA
PROPOSED DOWNHOLE
COMMINGLED INJECTOR

TEXACO E & P INC.
COOPER JAL UNIT NO. 153
API# 3002526128



III. WELL DATA
PROPOSED DOWNHOLE
COMMINGLED INJECTOR

TEXACO E & P INC.
COOPER JAL UNIT NO. 226
API# 3002509651



0 - 310' 11 " OD HOLE

330 FNL & 330 FEL
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3287 GL
COMPLETION DATE: 05-16-50
****
COMPLETION INTERVAL: 2989 - 3223 (YATES-OH)
IP: 88 BOPD, 125 MCFD, 0 BWPD (FL)
12-29-68 C/O FILL 3156 - 3214'.
04-08-69 C/O FILL 3140 - 3214'.
05-20-71 CONVERTED TO INJECTION. SWEDGED OUT 5-1/2" CSG @ 337', 481', 515', 1064', & 1287'.
11-09-76 INJ SURVEY. FILL @ 3003'. 100% INJ. GOING BELOW 3003'.
11-24-76 C/O FILL 3003-3223'. JET WASH OH 2989-3223'. TIGHT SPOT IN 5-1/2" @ 1287'.
06-15-95 DEEPEN TO 3600' A/ LM W/ 5000 GALS 15% HCL PLACE ON DHC INJECTION IN JALMAT & LANGLIE MATTIX. MAX SURFACE INJECTION PRESS = 597 PSIG
****

310 - 2989' 7.875 " OD HOLE

0 - 2978' 2.375" OD 4.70#/ft J-55 TBG CMT LINED
2967 - 2970' RETRV. PACKER BAKER AD-1

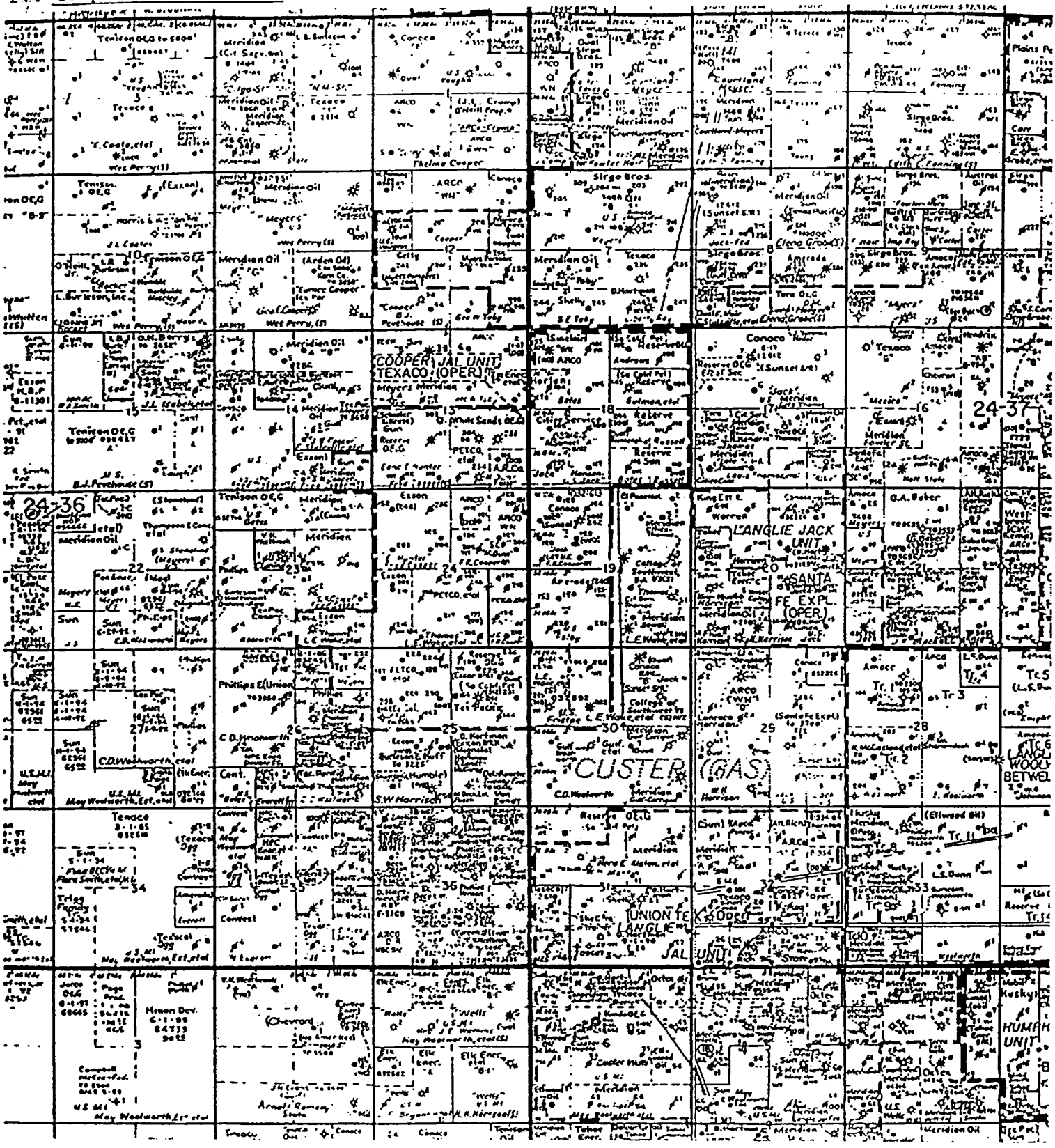
2989 - 3600' 4.75 " OD HOLE

B. MAPS OF SUBJECT AREA

COOPER JAL UNIT

JALMAT & LANGLIE MATTIX FIELDS

IV. Cooper Jal Unit Area

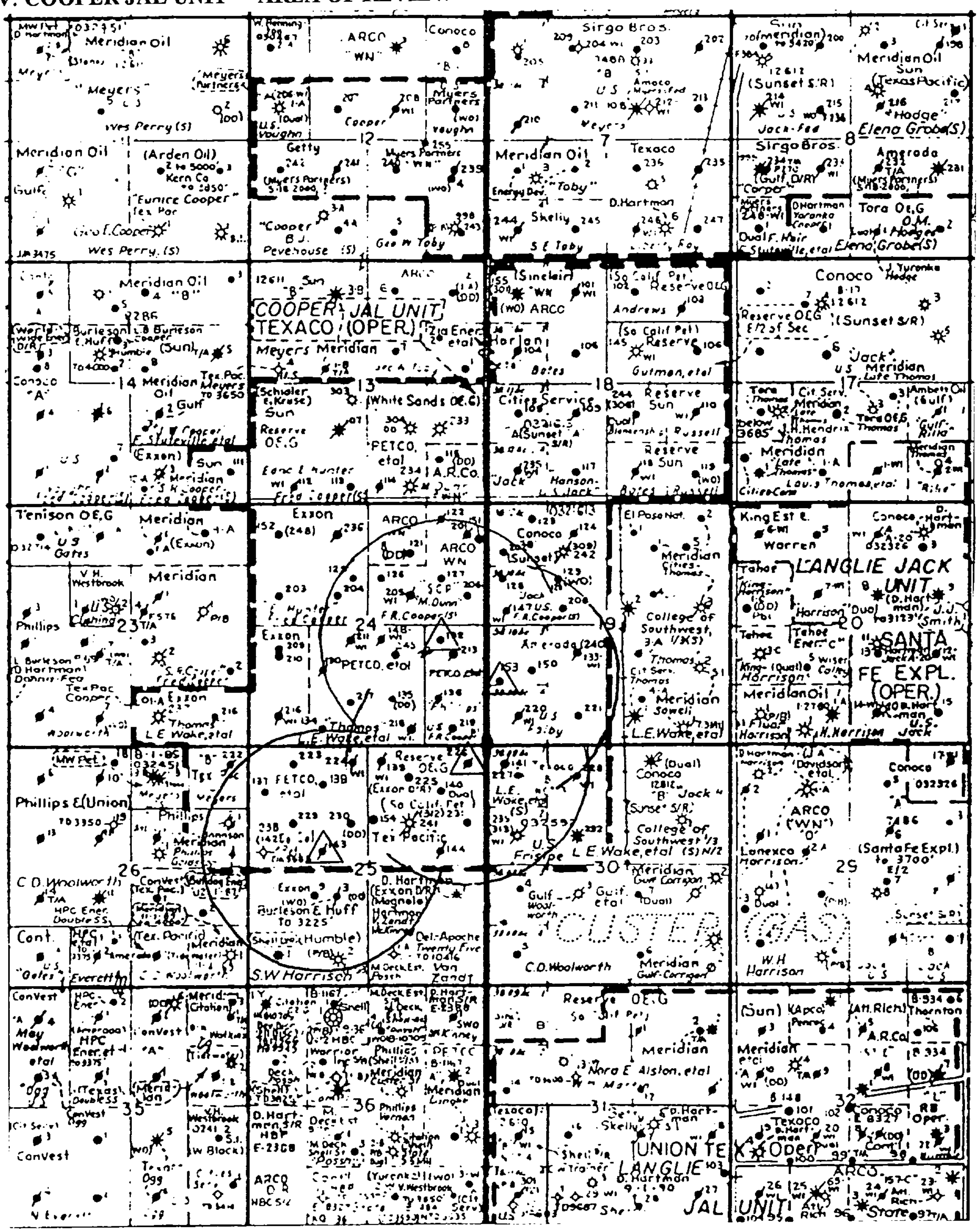


SCALE : 1" = 4400'

COOPER JAL UNIT

JALMAT AND LANGLIE MATTIX POOLS
LEA COUNTY , NEW MEXICO

V. COOPER JAL UNIT - AREA OF REVIEW



SCALE : 1" = 3450'

C. TABULATION OF WELLS IN UNIT AREA AND AREA OF REVIEW

COOPER JAL UNIT
TABULATION OF WELLS IN UNIT AND AREA OF REVIEW

WELL NAME	WELL NO.	CURRENT STATUS	CURRENT ZONE	TOWNSHIP	RANGE	SECTION	UNIT LETTER	TD	SCHEMATIC INCLUDED IN PREVIOUS APPLICATION
Myers 'B'	1	P & A	LM	T - 24 - S	R - 36 - E	13	F	3,686'	YES
Toby	7	PRODUCER	LM	T - 24 - S	R - 36 - E	13	G	3,850'	YES
Toby	2	PRODUCER	LM	T - 24 - S	R - 36 - E	13	H	3,800'	YES
Toby	1	PRODUCER	LMJM	T - 24 - S	R - 36 - E	13	H	3,615'	YES
Meridian	'A' No. 3	Notice of Intent, NEVER DRILLED		T - 24 - S	R - 37 - E	23	A		NA
S. R. Cooper	2	PRODUCER	LM	T - 24 - S	R - 36 - E	23	P	3,179'	YES
Van Zandt	**1**	**PRODUCER**	**LM**	**T - 24 - S**	**R - 36 - E**	**25**	**I**	**3,525'**	**NO**
Harrison	**3**	**P&A'd**	**LM**	**T - 24 - S**	**R - 36 - E**	**25**	**K**	**3,594'**	**NO**
S.W. Harrison	**9**	**PRODUCER**	**Devonian**	**T - 24 - S**	**R - 36 - E**	**25**	**K**	**10,800'**	**NO**
S.W. Harrison	**1**	**PRODUCER**	**JM**	**T - 24 - S**	**R - 36 - E**	**25**	**M**	**3,430'**	**NO**
Harrison	**2**	**PRODUCER**	**JM**	**T - 24 - S**	**R - 36 - E**	**25**	**N**	**3,620'**	**NO**
25 'A' Unit	**1**	**P&A'd**	**n/a**	**T - 24 - S**	**R - 36 - E**	**25**	**O**	**10,416'**	**NO**
Woolworth	**2**	**P&A'd**	**n/a**	**T - 24 - S**	**R - 36 - E**	**26**	**I**	**3,336'**	**NO**
C.D. Woolworth	1	P & A	JM	T - 24 - S	R - 36 - E	26	H	3,190'	YES
C.D. Woolworth	5	P & A	JMLM	T - 24 - S	R - 36 - E	26	A	3,504'	YES
Phillips-Goldstar	2	PRODUCER	JM	T - 24 - S	R - 36 - E	26	H	3,400'	YES
Thomas	1	PRODUCER	LM	T - 24 - S	R - 37 - E	19	B	3,725'	YES
J.J. Thomas	1	P & A	LM	T - 24 - S	R - 37 - E	19	B	3,676'	YES
Thomas	2	PRODUCER	JMLM	T - 24 - S	R - 37 - E	19	G	3680'	YES
Cities-Thomas	4	PRODUCER	LM	T - 24 - S	R - 37 - E	19	G	3,700'	YES
Cities-Thomas	3	PRODUCER	LM	T - 24 - S	R - 37 - E	19	H	3,700'	YES
A. Sowell	2	PRODUCER	LM	T - 24 - S	R - 37 - E	19	I	3,718'	YES
Thomas 'A'	3	PRODUCER	LM	T - 24 - S	R - 37 - E	19	J	3,750'	YES
Thomas 'A'	4	PRODUCER	LM	T - 24 - S	R - 37 - E	19	O	3,691'	YES
Thomas	1	P & A	LM	T - 24 - S	R - 37 - E	19	O	3,663'	YES
A. Sowell	1	PRODUCER	LM	T - 24 - S	R - 37 - E	19	P	3,700'	YES
Jack 'B'	2	PRODUCER	JMLM	T - 24 - S	R - 37 - E	30	B	3,650'	YES
C.D. Woolworth	**4**	**PRODUCER**	**LM**	**T - 24 - S**	**R - 37 - E**	**30**	**L**	**3,700'**	**NO**
CJU	101	INJECTOR	LM	T - 24 - S	R - 37 - E	18	C	3,572'	YES
CJU	102	PRODUCER	LM	T - 24 - S	R - 37 - E	18	B	3,580'	YES
CJU	103	INJECTOR	LM	T - 24 - S	R - 37 - E	18	A	3,589'	YES
CJU	104	INJECTOR	LM	T - 24 - S	R - 37 - E	18	E	3,655'	YES
CJU	105	PRODUCER	LM	T - 24 - S	R - 37 - E	18	F	3,733'	YES
CJU	106	PRODUCER	LM	T - 24 - S	R - 37 - E	18	H	3,587'	YES
CJU	107	PRODUCER	JM	T - 24 - S	R - 36 - E	13	K	3,611'	YES
CJU	108	PRODUCER	LMJM	T - 24 - S	R - 37 - E	18	L	3,640'	YES
CJU	109	INJECTOR	LM	T - 24 - S	R - 37 - E	18	K	3,638'	YES
CJU	110	INJECTOR	LM	T - 24 - S	R - 37 - E	18	I	3,587'	YES
CJU	111	PRODUCER	LM	T - 24 - S	R - 36 - E	14	P	3,595'	YES
CJU	112	INJECTOR	LM	T - 24 - S	R - 36 - E	13	M	3,617'	YES
CJU	113	PRODUCER	LM	T - 24 - S	R - 36 - E	13	N	3,615'	YES
CJU	114	INJECTOR	LM	T - 24 - S	R - 36 - E	13	O	3,540'	YES
CJU	115	PRODUCER	LMJM	T - 24 - S	R - 36 - E	13	P	3,668'	YES
CJU	116	INJECTOR	LMJM	T - 24 - S	R - 37 - E	18	M	3,641'	YES
CJU	117	PRODUCER	JM	T - 24 - S	R - 37 - E	18	N	3,648'	YES
CJU	118	INJECTOR	LM	T - 24 - S	R - 37 - E	18	O	3,628'	YES
CJU	119	PRODUCER	LM	T - 24 - S	R - 37 - E	18	P	3,597'	YES
CJU	120	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	C	3,604'	YES
CJU	121	PRODUCER	LMJM	T - 24 - S	R - 36 - E	24	B	3,560'	YES
CJU	122	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	A	3,552'	YES
CJU	123	PRODUCER	LMJM	T - 24 - S	R - 37 - E	19	D	3,650'	YES
B	124	INJECTOR	LM	T - 24 - S	R - 37 - E	19	C	3,530'	YES
CJU	125	PRODUCER	LMJM	T - 24 - S	R - 36 - E	24	F	3,655'	YES
CJU	126	PRODUCER	LMJM	T - 24 - S	R - 36 - E	24	G	3,560'	YES
CJU	127	PRODUCER	JM	T - 24 - S	R - 36 - E	24	H	3,541'	YES
CJU	128	PRODUCER	LMJM	T - 24 - S	R - 37 - E	19	E	3,675'	YES
CJU	129	PRODUCER	LMJM	T - 24 - S	R - 37 - E	19	F	3,670'	YES
CJU	130	PRODUCER	JM	T - 24 - S	R - 36 - E	24	K	3,550'	YES
CJU	132	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	I	3,640'	YES
CJU	133	INJECTOR	LMJM	T - 24 - S	R - 37 - E	19	K	3,680'	YES
CJU	134	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	N	3,570'	YES
CJU	135	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	O	3,650'	YES
CJU	136	PRODUCER	JM	T - 24 - S	R - 36 - E	24	P	3,540'	YES
CJU	137	TA'd	LM	T - 24 - S	R - 36 - E	25	D	3,560'	YES
CJU	138	PRODUCER	LMJM	T - 24 - S	R - 36 - E	25	C	3,635'	YES
CJU	139	PRODUCER	JM	T - 24 - S	R - 36 - E	25	B	3,545'	YES
CJU	140	PRODUCER	LMJM	T - 24 - S	R - 36 - E	25	A	3,615'	YES

COOPER JAL UNIT
TABULATION OF WELLS IN UNIT AND AREA OF REVIEW

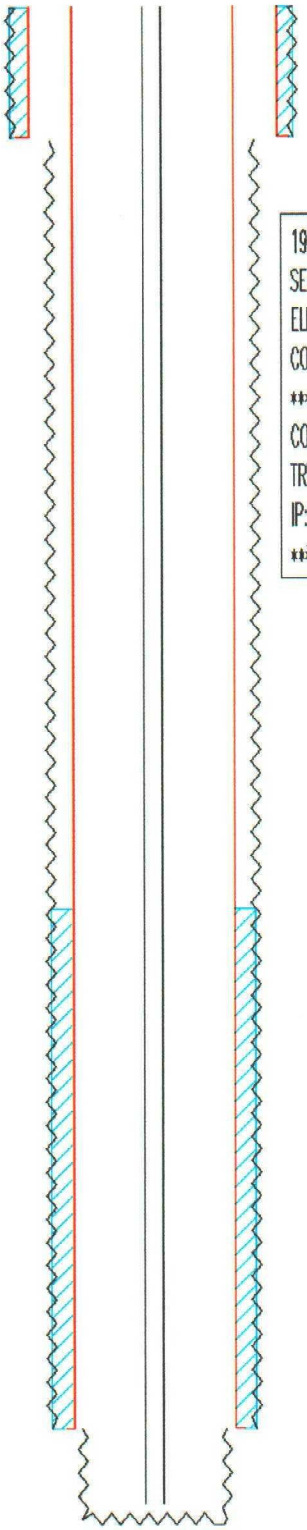
WELL NAME	WELL NO.	CURRENT STATUS	CURRENT ZONE	TOWNSHIP	RANGE	SECTION	UNIT LETTER	TD	SCHEMATIC INCLUDED IN PREVIOUS APPLICATION
CJU	141	PRODUCER	JM	T - 24 - S	R - 37 - E	30	D	3,535'	YES
CJU	143	INJECTOR	LMJM	T - 24 - S	R - 36 - E	25	F	3,550'	YES
CJU	144	PA	NONE	T - 24 - S	R - 36 - E	25	H	3,490'	YES
CJU	145/302	DUAL -INJ. / PROD	LM / JM	T - 24 - S	R - 37 - E	18	G	3,591'	YES
CJU	146	INJECTOR	LMJM	T - 24 - S	R - 36 - E	13	I	3,642'	YES
CJU	147	INJECTOR	LMJM	T - 24 - S	R - 37 - E	19	E	3,576'	YES
CJU	148	PRODUCER	LM	T - 24 - S	R - 36 - E	24	J	3,550'	YES
CJU	150	PRODUCER	LMJM	T - 24 - S	R - 37 - E	19	L	3,824'	YES
CJU	151	PRODUCER	LM	T - 24 - S	R - 36 - E	24	A	3,662'	YES
CJU	152	PRODUCER	LMJM	T - 24 - S	R - 36 - E	24	D	3,757'	YES
CJU	153	INJECTOR	LMJM	T - 24 - S	R - 37 - E	19	L	3,711'	YES
CJU	154	PRODUCER	LM	T - 24 - S	R - 36 - E	25	G	3,655'	YES
CJU	155/301	PRODUCER	LM	T - 24 - S	R - 37 - E	18	D	3,720'	YES
CJU	201	INJECTOR	JM	T - 24 - S	R - 36 - E	24	A	3,237'	YES
CJU	202	PRODUCER	JM	T - 24 - S	R - 37 - E	19	D	3,224'	YES
CJU	203	INJECTOR	JM	T - 24 - S	R - 36 - E	24	E	3,195'	YES
CJU	204	PRODUCER	JM	T - 24 - S	R - 36 - E	24	F	3,188'	YES
CJU	205	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	G	3,251'	YES
CJU	206	PRODUCER	JM	T - 24 - S	R - 36 - E	24	H	3,230'	YES
CJU	208	PRODUCER	JM	T - 24 - S	R - 37 - E	19	F	3,169'	YES
CJU	209	PRODUCER	LMJM	T - 24 - S	R - 36 - E	24	L	3,681'	YES
CJU	210	PRODUCER	JM	T - 24 - S	R - 36 - E	24	L	3,191'	YES
CJU	211	INJECTOR	LMJM	T - 24 - S	R - 36 - E	24	K	3,244'	YES
CJU	213	TA'd	JM	T - 24 - S	R - 36 - E	24	I	3,220'	YES
CJU	215	PRODUCER	JM	T - 24 - S	R - 36 - E	23	P	3,193'	YES
CJU	216	INJECTOR	JM	T - 24 - S	R - 36 - E	24	M	3,210'	YES
CJU	217	PRODUCER	JM	T - 24 - S	R - 36 - E	24	N	3,244'	YES
CJU	218	INJECTOR	JM	T - 24 - S	R - 36 - E	24	O	3,250'	YES
CJU	219	PRODUCER	JM	T - 24 - S	R - 36 - E	24	P	3,208'	YES
CJU	220	INJECTOR	LMJM	T - 24 - S	R - 37 - E	19	M	3,350'	YES
CJU	221	PRODUCER	LMJM	T - 24 - S	R - 37 - E	19	N	3,770'	YES
CJU	222	INJECTOR	JM	T - 24 - S	R - 36 - E	26	A	3,193'	YES
CJU	223	PRODUCER	JM	T - 24 - S	R - 36 - E	25	D	3,188'	YES
CJU	224	INJECTOR	JM	T - 24 - S	R - 36 - E	25	C	3,230'	YES
CJU	225	PRODUCER	JM	T - 24 - S	R - 36 - E	25	B	3,318'	YES
CJU	226	INJECTOR	LMJM	T - 24 - S	R - 36 - E	25	A	3,223'	YES
CJU	227	PRODUCER	JM	T - 24 - S	R - 37 - E	30	D	3,148'	YES
CJU	228	INJECTOR	JM	T - 24 - S	R - 37 - E	30	C	3,134'	YES
CJU	229	PRODUCER	JM	T - 24 - S	R - 36 - E	25	E	3,700'	YES
CJU	230	PRODUCER	JM	T - 24 - S	R - 36 - E	25	F	3,226'	YES
CJU	231	PRODUCER	JM	T - 24 - S	R - 36 - E	25	H	3,192'	YES
CJU	232	PRODUCER	JM	T - 24 - S	R - 37 - E	30	F	3,130'	YES
CJU	234	INJECTOR	JM	T - 24 - S	R - 36 - E	13	O	3,228'	YES
CJU	237	SI INJECTOR	JM	T - 24 - S	R - 36 - E	23	O	3,602'	YES
CJU	238	INJECTOR	JM	T - 24 - S	R - 36 - E	25	E	3,589'	YES
CJU	239	INJECTOR	JM	T - 24 - S	R - 37 - E	30	E	3,180'	YES
CJU	241	INJECTOR	JM	T - 24 - S	R - 36 - E	25	G	3,580'	YES
CJU	242	INJECTOR	JM	T - 24 - S	R - 37 - E	19	C	3,191'	YES
CJU	244	PRODUCER	LMJM	T - 24 - S	R - 37 - E	18	J	3,601'	YES
CJU	245	PRODUCER	JM	T - 24 - S	R - 36 - E	24	J	3,560'	YES
CJU	303	GAS	JM	T - 24 - S	R - 36 - E	13	K	3,165'	YES
CJU	304	TA'd	JM	T - 24 - S	R - 36 - E	13	J	3,211'	YES
CJU	401	PRODUCER	JMLM	T - 24 - S	R - 37 - E	19	K	3,750'	YES
CJU	402	PRODUCER	JMLM	T - 24 - S	R - 37 - E	19	K	3,750'	YES
CJU	403	PRODUCER	JMLM	T - 24 - S	R - 37 - E	19	D	3,750'	YES
CJU	404	PRODUCER	JMLM	T - 24 - S	R - 36 - E	24	B	3,750'	YES
CJU	405	PRODUCER	JMLM	T - 24 - S	R - 37 - E	19	N	3,750'	YES
CJU	**406**	**PRODUCER**	**JMLM**	**T - 24 - S**	**R - 36 - E**	**24**	**H**	**3,750'**	**NO**
CJU	**407**	**PRODUCER**	**JMLM**	**T - 24 - S**	**R - 36 - E**	**24**	**G**	**3,750'**	**NO**
CJU	**409**	**PRODUCER**	**JMLM**	**T - 24 - S**	**R - 36 - E**	**24**	**L**	**3,750'**	**NO**
CJU	**414**	**PRODUCER**	**JMLM**	**T - 24 - S**	**R - 36 - E**	**24**	**N**	**3,750'**	**NO**
CJU	**419**	**PRODUCER**	**JMLM**	**T - 24 - S**	**R - 36 - E**	**13**	**P**	**3,750'**	**NO**

D. WELLS NOT SUBMITTED IN PREVIOUS C-108 APPLICATIONS

(UNIT OR CURRENT AREA OF REVIEW)

DOYLE HARTMAN
VAN ZANDT NO. 1
API# 30-025-09656

0 - 301' CEMENT 200sx EST Circ.



0 - 301' 12.25" OD HOLE

0 - 301' 10.75" OD 42.00#/ft J-55 SURF CSG

1980 FSL & 660 FEL UNT LETTER I
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3279 GL
COMPLETION DATE: 12-29-77
****
COMPLETION INTERVAL: 3315 - 3525 (7 RIVERS/QUEEN OPENHOLE)
TRT : NOT REPORTED
IP: 33 BOPD, TSTM MCFD, 32 BWPD (PMP)
****

0 - 3488' 2.375" OD 4.70#/ft J-55 TBG

2100 - 3315' CEMENT 300sx TOC EST.

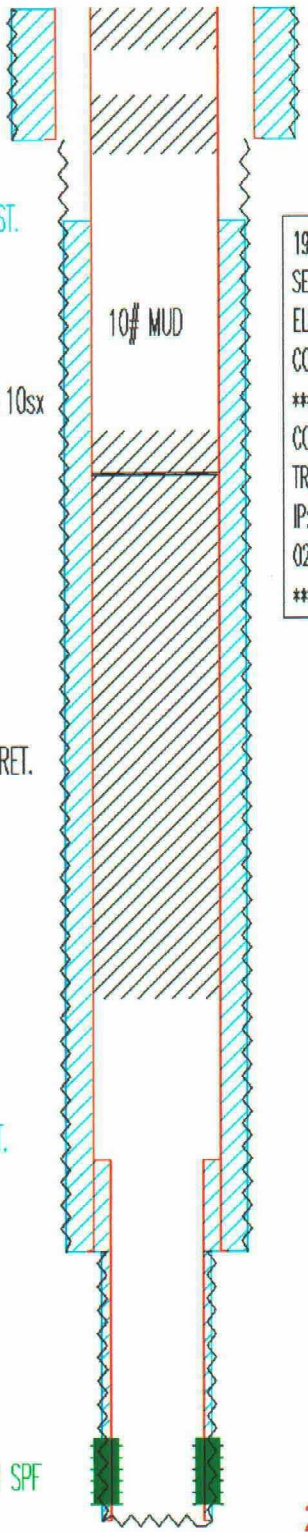
310 - 3315' 8.875" OD HOLE

0 - 3315' 7" OD 23.00#/ft J-55 PROD CSG

3315 - 3525' 6.25" OD HOLE

KB ELEV: 3279'
TD: 3525'

LEWIS BURLESON
HARRISON NO.3
API# 30-025-09655



0 - 96' CEMENT PLUG 10sx

0 - 309' CEMENT 150sx EST Circ.

205 - 340' CEMENT PLUG 15sx

500 - 2952' CEMENT 750sx TOC EST.

10# MUD

1000 - 1100' CEMENT PLUG 10sx

1100 - 1104' RETAINER

1104 - 2350' CEMENT PLUG 150sx SQZD BELOW RET.

2735 - 3594' CEMENT 35sx TOC EST.

3397 - 3554' ABANDONED PERFS 1 SPF

KB ELEV: 3297'

TD: 3594'

0 - 309' 12.25" OD HOLE

0 - 309' 8.625" OD 42.00#/ft J-55 SURF CSG

1980 FSL & 1980 FWL UNT LETTER K
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3297 GL
COMPLETION DATE: 06-23-79
****
COMPLETION INTERVAL: 3397 - 3554 (7 RIVERS/QUEEN)
TRT : A/ 15K gls; F/ 20K gals & 24K # SD.
IP: 84 BOPD, 156 MCFD, 8 BWPD (PMP)
02-17-92 P&A'd WELL.
****

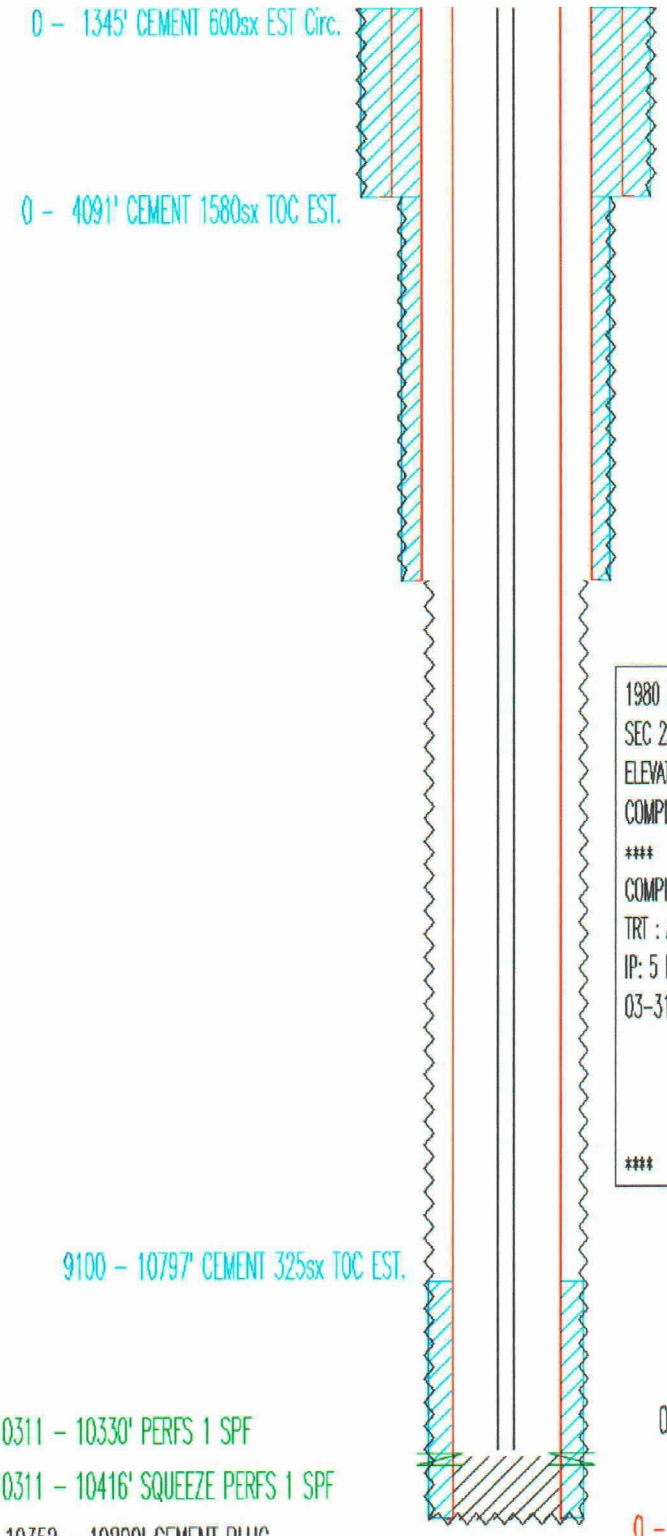
309 - 2952' 7.875" OD HOLE

0 - 2952' 5.5" OD 15.50#/ft J-55 INT CSG

2952 - 3594' 4.75" OD HOLE

2735 - 3594' 4" OD 11.60#/ft J-55 LINER

EXXON CORPORATION
S.W. HARRISON NO.9
API# 30-025-26436



0 - 1345' CEMENT 600sx EST Circ.

0 - 4091' CEMENT 1580sx TOC EST.

9100 - 10797' CEMENT 325sx TOC EST.

10311 - 10330' PERFS 1 SPF

10311 - 10416' SQUEEZE PERFS 1 SPF

10352 - 10800' CEMENT PLUG

KB ELEV: 3314'

TD: 10800'

0 - 1345' 14.75" OD HOLE

0 - 1345' 11.75" OD 48.00#/ft J-55 SURF CSG

1345 - 4091' 10.625" OD HOLE

0 - 4091' 8.625" OD 36.00#/ft J-55 INT CSG

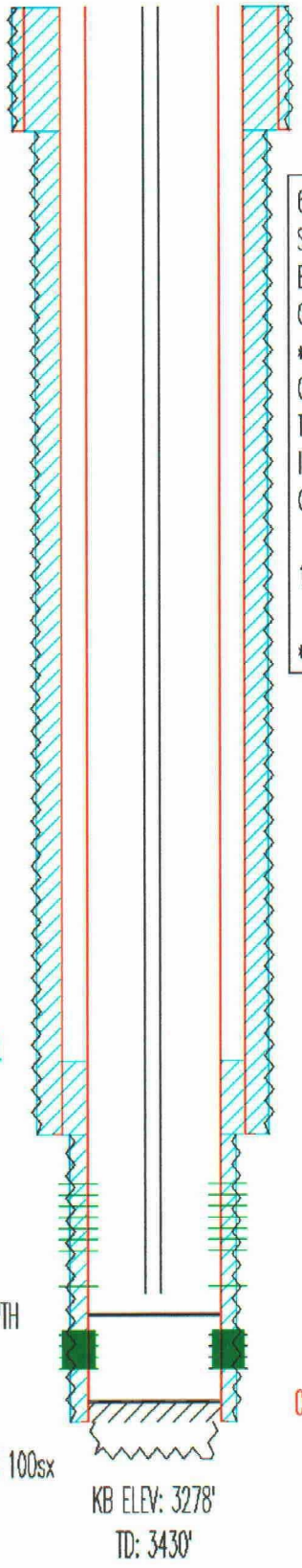
1980 FSL & 1470 FWL UNT LETTER K
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3314 GL
COMPLETION DATE: 01-21-80
****
COMPLETION INTERVAL: 10311 - 10416 (DEVONIAN)
TRT : A/ ?K gls
IP: 5 BOPD, 1.5 MMCFPD, 0 BWPD (F-2200# FTP; 16/64 CK)
03-31-81 RECOMPLETE TO UPPER DEVONIAN. SQZD PERFS.
DRILLED OUT CMT. PBTD 10352'.
RE-PERF 10111-315 & 10222-330 (2SPF,28 hls)
A/ 1.5K gals TEST 100 BO, 117 BW, 279 MCF (PMP)
****

4091 - 10800' 7.875" OD HOLE

0 - 10300' 2.375" OD 4.70#/ft L-80 TBG

0 - 10800' 5.5" OD 17.00#/ft J-55 PROD CSG

LEWIS BURLESON INC.
S.W. HARRISON NO. 1
API# 30-025-09654



0 - 294' CEMENT 200sx EST TOC

0 - 2673' CEMENT 785sx TOC EST.

2500 - 3355' CEMENT 125sx TOC EST.

2790 - 2950' PERFS

3025 - 3034' PERFS

3100 - 3104' CIBP EST. DEPTH

3140 - 3230' ABANDONED PERFS

3305 - 3309' RETAINER

3309 - 3355' CEMENT PLUG 100sx

KB ELEV: 3278'

TD: 3430'

0 - 294' 14.55" OD HOLE

0 - 294' 13.375" OD 42.00#/ft J-55 SURF CSG

660 FSL & 660 FWL UNT LETTER M
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3291 GL
COMPLETION DATE: 09-19-35
****
COMPLETION INTERVAL: 3400 - 3430 (7 RIVERS/QUEEN OPENHOLE)
TRT : NOT REPORTED
IP: NOT REPORTED
02-12-43 RECOMLETED TO JALMAT; SET CIBP, PER 3140-3230
JALMAT IP: 6.8 MMCFPD FTP 250# 1" CK.
10-19-83 REPORTED COMPLETION 2790-2950 & 3025-3034.
LOWER ZONE P&A'd.
****

294 - 2673' 12.25" OD HOLE

0 - 3050' 2.375" OD 4.70#/ft J-55 TBG

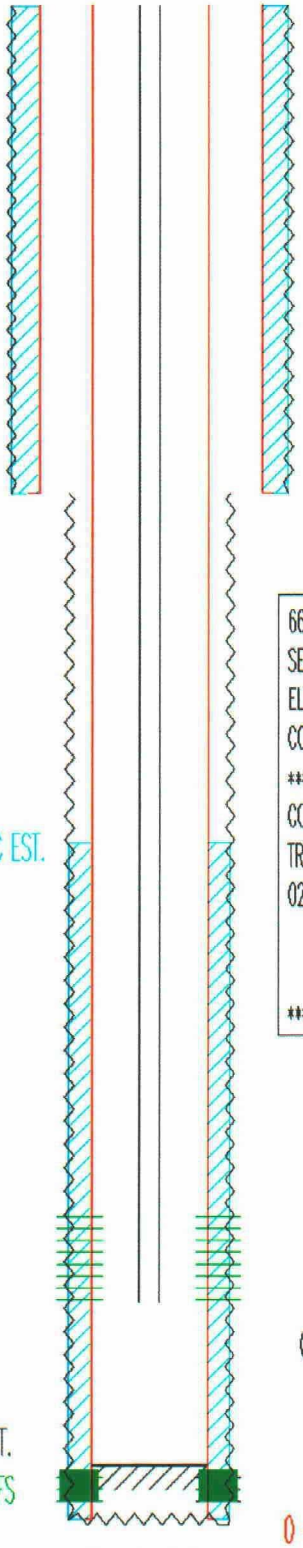
0 - 2673' 9.625" OD 32.00#/ft J-55 INT CSG

2673 - 3355' 8.75" OD HOLE

0 - 3355' 7" OD 23.00#/ft J-55 PROD CSG

3355 - 3430' 6.25" OD HOLE

LEWIS BURLESON INC.
S.W. HARRISON NO. 2
API# 30-025-25825



0 - 1165' CEMENT 550sx EST TOC

0 - 1165' 10.75" OD HOLE

0 - 1165' 8.6255" OD 24.00#/ft J-55 SURF CSG

660 FSL & 1980 FWL UNT LETTER N
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3281 GL
COMPLETION DATE: 02-08-78
****
COMPLETION INTERVAL: 3502 - 3578 (7 RIVERS/QUEEN)
TRT : A/ 1.25K gals IP: TRACE OF OIL. SI.
02-12-43 RECOMPLETED TO JALMAT; SET CIBP, PER 2895-3094
A/15K gals; F/50K gals FOAM W/ 50K# SD.
JALMAT IP: 0 BO, 15 BW 532 MCF FTP 295# 3/4" CK.
****

2000 - 3620' CEMENT 300sx TOC EST.

1165 - 3620' 6.25" OD HOLE

2895 - 3094' PERFS

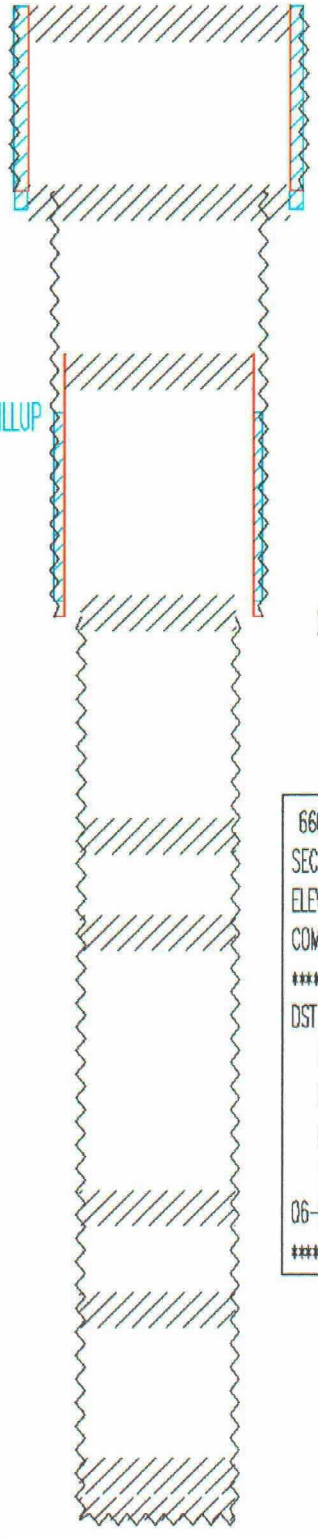
0 - 3100' 2.375" OD 4.70#/ft J-55 TBG

3490 - 3494' CIBP
3494 - 3550' CEMENT PLUG EST.
3502 - 3578' ABANDONED PERFS

0 - 3620' 4.5" OD 11.60#/ft J-55 PROD CSG

KB ELEV: 3281'
TD: 3620'

DELAWARE APACHE CORPORATION
25 "A" UNIT NO. 1
API# 30-025-21241



0 - 15' CEMENT PLUG 10sx

0 - 1345' CEMENT 600sx EST Circ.

1225 - 1300' CEMENT PLUG 25sx

2390 - 2460' CEMENT PLUG 25sx

2800 - 4091' CEMENT 450sx TOC EST. 80% FILLUP

4050 - 4238' CEMENT PLUG 50sx TOC EST.

5580 - 5730' CEMENT PLUG 50sx TOC EST.

6250 - 6400' CEMENT PLUG 50sx TOC EST.

8150 - 8300' CEMENT PLUG 50sx TOC EST.

8850 - 9000' CEMENT PLUG 50sx TOC EST.

9990 - 10140' CEMENT PLUG 50sx TOC EST.

10266 - 10416' CEMENT PLUG 50sx TOC EST.

KB ELEV: 3278'

TD: 10416'

0 - 1269' 14.75" OD HOLE

0 - 1269' 13.375" OD 48.00#/ft J-55 SURF CSG

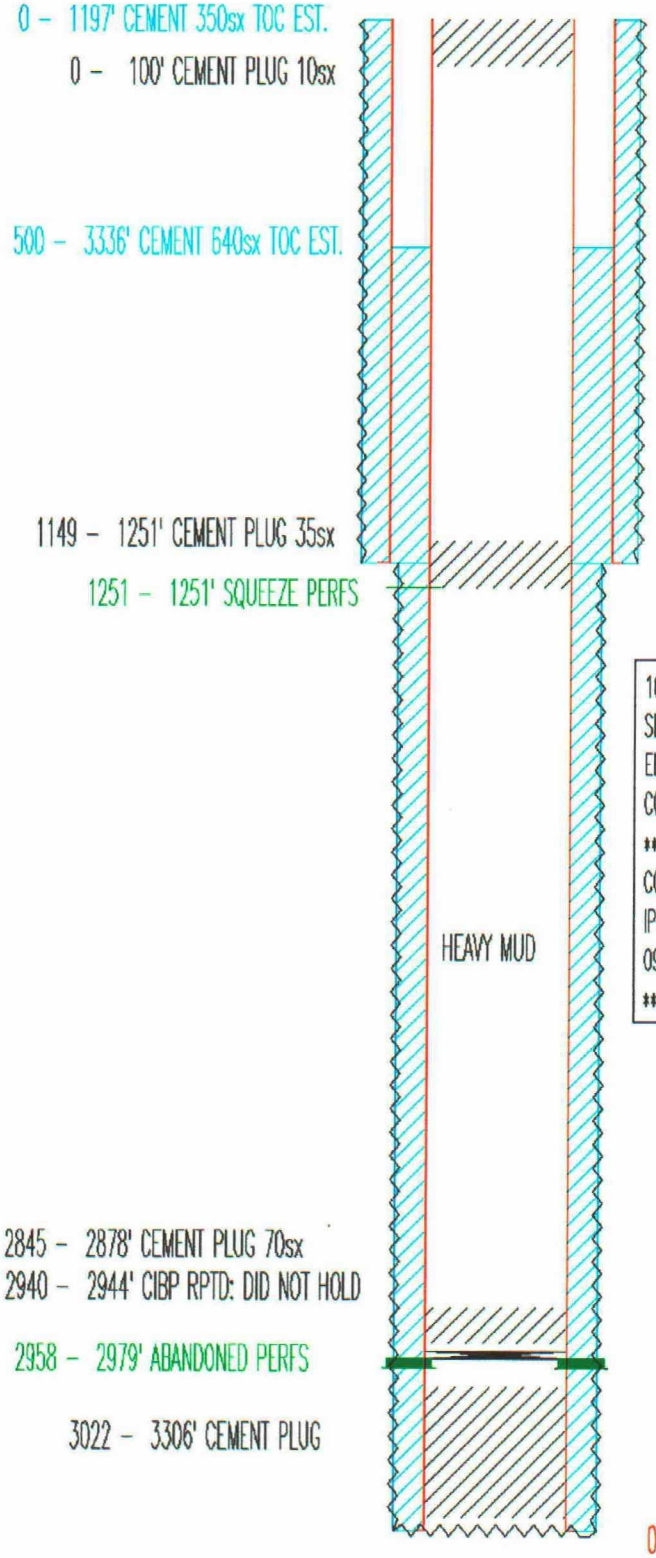
1269 - 4200' 10.625" OD HOLE

2390 - 4200' 9.625" OD 36.00#/ft J-55 INT CSG

4200 - 10416' 7.875" OD HOLE

660 FSL & 1980 FEL UNIT LETTER O
SEC 25 , TWN 24 S, RANGE 36 E
ELEVATION: 3278 GL
COMPLETION DATE: 06-21-65
****
DST INTERVAL: 10150 - 10416 (ELLENBURGER)
GTS IN 4 MINS @ 630 MCFPD thru 1/4" CK.
SFP 450# DECREASING TO 560 MCFPD @ END OF TEST, SFP AT END 450-400 PSIG; REC. 110' COND. + 600' MCFPD HGCM, 1HR SITP = 3204 PSIG.
06-24-65 P&A'd WELL.
****

CONVEST ENERGY CORPORTATION
WOOLWORTH NO. 2
API# 30-025-25876



0 - 1197' 10.75" OD HOLE

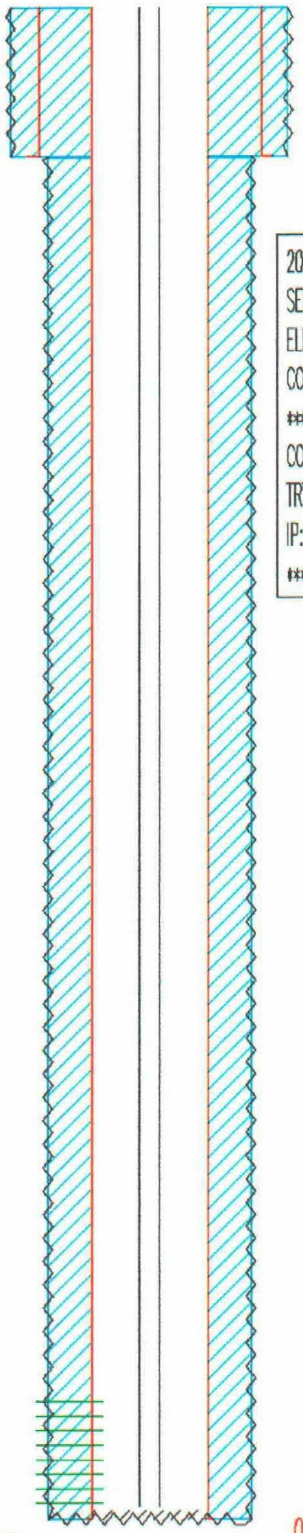
0 - 1197' 8.625" OD 28.00#/ft J-55 SURF CSG

1650 FNL & 990' FEL UNT. LETTER I
SEC 26 , TWN 24 S, RANGE 36 E
ELEVATION: 3306 DF
COMPLETION DATE: UNKNOWN
****
COMPLETION INTERVAL: 2958 - 2979 (YATES/7 RVRS-OH)
IP: UNKNOWN
09-30-92 P&A'd WELL
****

1197 - 3336' 7.875" OD HOLE

0 - 3336' 5.5" OD 15.50#/ft J-55 PROD CSG

ARCH PETROLEUM IN.PORTATION
C.D. WOOLWORTH NO. 4
API# 30-025-25464



0 - 365' CEMENT 300sx CIRC.

0 - 365' 10.75" OD HOLE

0 - 365' 8.625" OD 28.00#/ft J-55 SURF CSG

2080 FSL & 760' FWL UNT. LETTER L
SEC 30 , TWN 24 S, RANGE 37 E
ELEVATION: 3265 GL
COMPLETION DATE: 04-10-77
****
COMPLETION INTERVAL: 3414 - 3662 (7 RVRS/QUEEN)
TRT: A/3.6K gals 15%; F/49K gals GEL WTR W/ 1 TO 3 PPG SD.
IP: 48 BO, 81 BW , TSTM MCF (PMP)
****

0 - 3700' CEMENT 1100sx CIRC.

365 - 3700' 7.875" OD HOLE

0 - 3670' 2.375" OD 4.70#/ft J-55 TBG

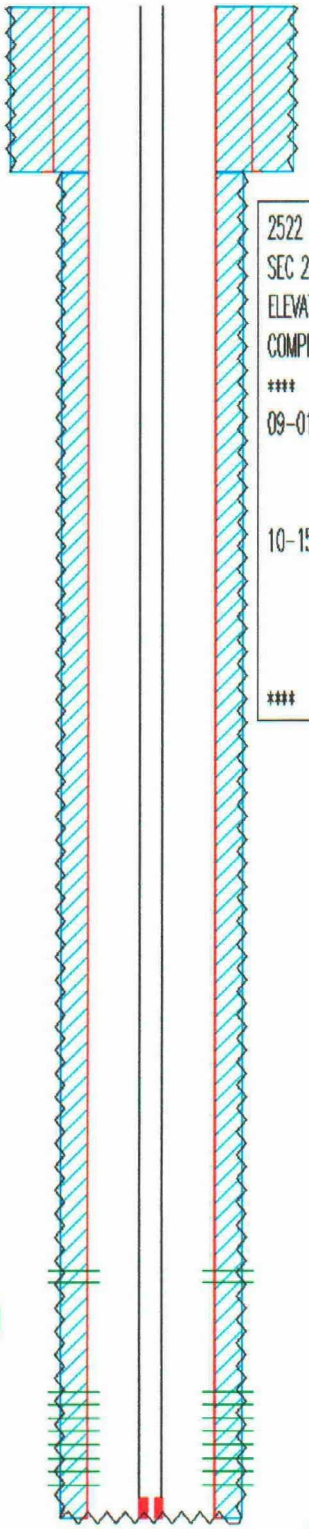
3414 - 3662' PERFS

0 - 3700' 4.5" OD 11.60#/ft J-55 PROD CSG

3680 - 3700' CEMENT PLUG

KB ELEV: 3265'
TD: 3700'

TEXACO E & P INC.
COOPER JAL UNIT NO. 406
API# 3002532568



0 - 410' CEMENT 250sx Circ.

0 - 3750' CEMENT 950sx CIRC.

3132 - 3163' PERFS (4 SPF,124 holes)

3435 - 3668' PERFS (2 SPF,50 holes)

KB ELEV: 3313'
TD: 3750'

0 - 410' 12.25" OD HOLE

0 - 410' 8.625" OD 24.00#/ft WC-50 SURF CSG

2522 FNL & 400 FEL, UNT. LETTER H
SEC 24 , TWN 24 S, RANGE 36 E
ELEVATION: 3303 GL
COMPLETION DATE: 10-28-94
****
09-01-94 COMPLETION INTERVAL: 3435 - 3668 (7 RVRS/QUEEN)
FRAC 29K gals 30# XL-GEL/ 76K # 16/30 BRADY sd. &
30K # 16/30 RCS. PLACE ON PMP TEST.
10-15-94 SET BP. PERF JALMAT (3132-3163 4 SPF 124 holes)
FRAC JALMAT W/ 43K GALS 30# XL-GEL, 180K # 12/20
BRADY SD. & 40K # 12/20 RCS.
DHC'd IP: 36 BOPD, 338 BWPD, 58 MCFPD (PMP)
****

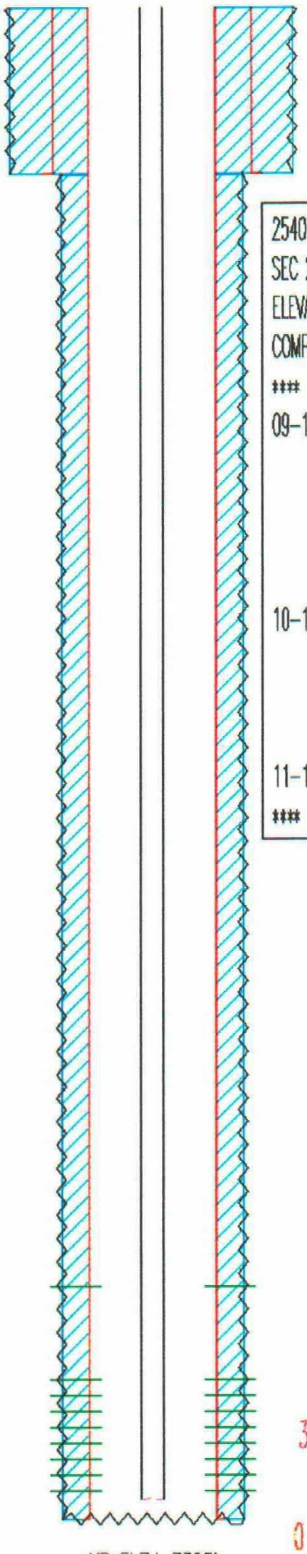
410 - 3750' 7.875 " OD HOLE

0 - 3700' 2.875" OD 6.40#/ft WC-50 TBG

3700 - 3701' SEATING NIPPLE

0 - 3750' 5.5" OD 15.50#/ft WC-50 PROD CSG

TEXACO E & P INC.
COOPER JAL UNIT NO. 407
API# 3002532569



0 - 410' CEMENT 250sx Circ.

0 - 410' 12.25" OD HOLE

0 - 410' 8.625" OD 24.00#/ft WC-50 SURF CSG

2540 FSL & 1640 FEL, UNT. LETTER J
SEC 24 , TWN 24 S, RANGE 36 E
ELEVATION: 3314 GL
COMPLETION DATE: 10-01-94
****
09-15-94 COMPLETION INTERVAL: 3400 - 3678 (7 RVRS/QUEEN)
(3400-04,20-26,44-46,73-82,3503-11,23-38,3611-16,
3649-54 & 3670-78 2 spf, 124 holes)
FRAC 29K gals 30# XL-GEL/ 106K # 16/30 BRADY sd. &
30K # 16/30 RCS. PLACE ON PMP TEST. SI w/ RBP.
10-15-94 SET BP. PERF JALMAT (3144-3172 4 SPF 112 holes)
FRAC JALMAT W/ 43K GALS 30# XL-GEL, 180K # 12/20
BRADY SD. & 40K # 12/20 RCS.
JALMAT ONLY IP: 80 BOPD, 149 BWPD, 79 MCFPD (PMP)
11-19-94 DHC'd JM & LM.
****

0 - 3750' CEMENT 950sx CIRC.

410 - 3750' 7.875 " OD HOLE

3144 - 3172' PERFS (4 SPF,112 holes)

3400 - 3678' PERFS (2 SPF,124 holes)

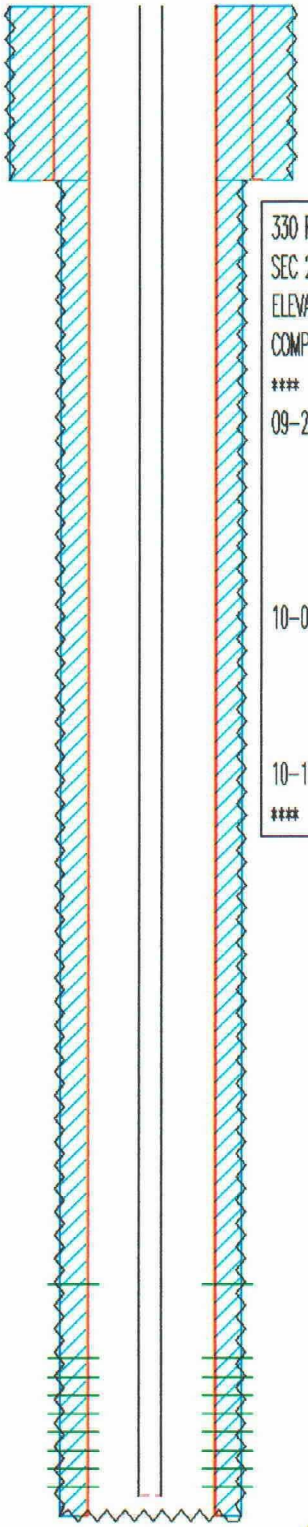
0 - 3700' 2.875" OD 6.40#/ft WC-50 TBG

3700 - 3701' SEATING NIPPLE

0 - 3750' 5.5" OD 15.50#/ft WC-50 PROD CSG

KB ELEV: 3325'
TD: 3750'

TEXACO E & P INC.
COOPER JAL UNIT NO. 414
API# 3002532571



0 - 430' CEMENT 250sx Circ.

0 - 3750' CEMENT 890sx CIRC.

3146 - 3174' PERFS (2 SPF,112 holes) JM

3357 - 3677' PERFS (2 SPF,88 holes) LM

KB ELEV: 3324'

TD: 3750'

0 - 430' 12.25" OD HOLE

0 - 430' 8.625" OD 24.00#/ft WC-50 SURF CSG

330 FSL & 2550 FEL, UNT. LETTER O
SEC 24 , TWN 24 S, RANGE 36 E
ELEVATION: 3312 GL
COMPLETION DATE: 09-25-94
****
09-25-94 COMPLETION INTERVAL: 3357 - 3677 (7 RVRS/QUEEN)
(3357-62,3479-87,3507-13,27-39,3610-17 &
3671-77 2 spf, 88 holes)
FRAC 29K gals 30# XL-GEL/ 106K # 16/30 BRADY sd. &
30K # 16/30 RCS. PLACE ON PMP TEST. SI w/ RBP.
10-01-94 PERF JALMAT 3146-3174 (4 SPF, 112 holes)
FRAC JALMAT W/ 43K GALS 30# XL-GEL, 180K # 12/20
BRADY SD. & 40K # 12/20 RCS.
JALMAT ONLY 52 BO, 54 BW 321 MCF (PMP)
10-17-94 DHC'd JM & LM. 55 BO, 105 BW, 240 MCFPD (PMP)
****

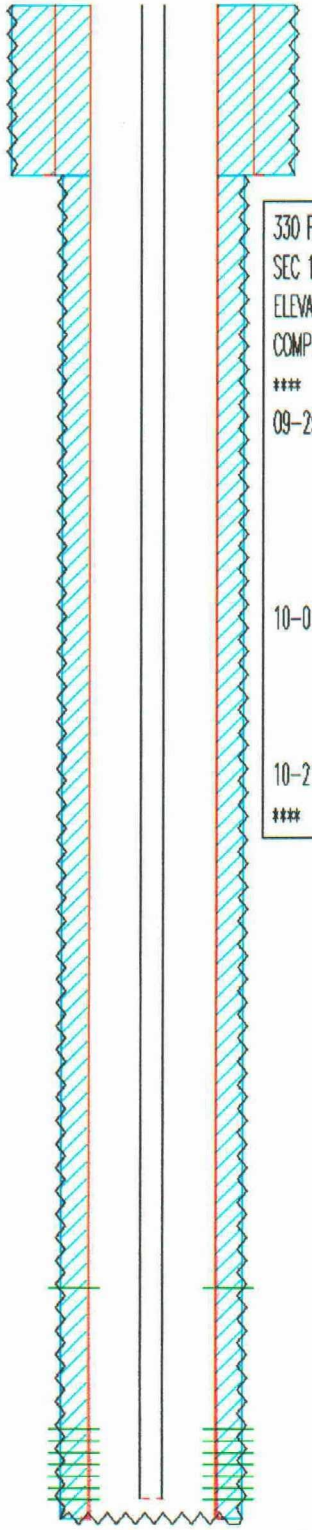
430 - 3750' 7.875 " OD HOLE

0 - 3700' 2.875" OD 6.40#/ft WC-50 TBG

3700 - 3701' SEATING NIPPLE

0 - 3750' 5.5" OD 15.50#/ft WC-50 PROD CSG

TEXACO E & P INC.
COOPER JAL UNIT NO. 419
API# 3002532551



0 - 420' CEMENT 250sx Circ.

0 - 420' 12.25" OD HOLE

0 - 420' 8.625" OD 24.00#/ft WC-50 SURF CSG

330 FSL & 500 FEL, UNT. LETTER P
SEC 13 , TWN 24 S, RANGE 36 E
ELEVATION: 3315' GL
COMPLETION DATE: 10-03-94
****
09-25-94 COMPLETION INTERVAL: 3501 - 3703 (7 RVRS/QUEEN)
(3501-08,20-30,72-75,3605-12,42-45 &
3698-3703 2 spf, 70 holes)
FRAC 29K gals 30# XL-GEL/ 106K # 16/30 BRADY sd. &
30K # 16/30 RCS. PLACE ON PMP TEST. SI w/ RBP.
10-01-94 PERF JALMAT 3158-3180 (4 SPF, 88 holes)
FRAC JALMAT W/ 43K GALS 30# XL-GEL, 180K # 12/20
BRADY SD. & 40K # 12/20 RCS.
JALMAT ONLY 71 BO, 89 BW 62 MCF (PMP)
10-21-94 DHC'd JM & LM. 80 BO, 77 BW, 127 MCFPD (PMP)
****

0 - 3750' CEMENT 930sx CIRC.

420 - 3750' 7.875 " OD HOLE

3158 - 3180' PERFS (2 SPF,88 holes) JM

0 - 3700' 2.875" OD 6.40#/ft WC-50 TBG

3700 - 3701' SEATING NIPPLE

3501 - 3703' PERFS (2 SPF,70 holes) LM

0 - 3750' 5.5" OD 15.50#/ft WC-50 PROD CSG

KB ELEV: 3327'
TD: 3750'

E. NOTICES OF INTENT
- LEGAL PUBLISHED IN LOCAL PAPER
- OFFSET OPERATOR & LANDOWNER LETTER

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

of the Hobbs Daily News-Sun, a daily 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, 1995
and ending with the issue dated

March 9, 1995

Kathi Bearden
General Manager
Sword and subscribed to before

me this 10th day of

March, 1995

Marilyn A. Griffin
Notary Public.

My Commission expires
March 24, 1998
(Seal)

This Newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for

LEGAL NOTICE
March 9, 1995

Notice is hereby given of the application of Texaco Exploration & Production Inc., (Attention: Terry L. Frazier, Area Manager, P.O. Box 730, Hobbs, New Mexico, 88240, Telephone (505) 393-7191), to the New Mexico Oil Conservation Commission, Energy and Minerals Department, for approval of the following wells to be converted to water injection for the purpose of secondary oil recovery.

Lease/Unit Name: COOPER JAL UNIT

Texaco E & P Inc. plans to convert to injection and downhole commingle injection in both intervals (using a single string of tubing) the Jalmat (Tansill/Yates/7 Rivers) and the Langlie Mattix (7 Rivers/Queen/Grayburg) formations within the following well (s) :

Well Number (s) and Location (s) :

153 - Unit Letter L, 1400'FSL & 280'FWL, Section 19, T24S, R37E

Texaco E & P Inc. plans to add the Jalmat (Tansill/Yates/7 Rivers) interval to the current Langlie Mattix (7 Rivers/Queen/Grayburg) injection interval and downhole commingle injection in both intervals (using a single string of tubing) within the following well (s) :

Well number (s) and Location (s) :

132 - Unit Letter I, 2310'FSL & 990'FEL, Section 24, T24S, R36E

143 - Unit Letter F, 2310'FNL & 1650'FWL, Section 25, T24S, R36E

Texaco E & P Inc. plans to add the Langlie Mattix (7 Rivers/Queen/Grayburg) interval to the current Jalmat (Tansill/Yates/7 Rivers) injection interval and downhole commingle injection in both intervals (using a single string of tubing) within the following well (s) :

Well Number (s) and Location (s) :

226 - Unit Letter A, 330'FNL & 330'FEL, Section 25, T24S, R36E

The injection formations are Jalmat (Tansill/Yates/Seven Rivers) and Langlie Mattix (Seven Rivers/Queen/Grayburg) at a depth from 2950 feet to 3696 feet below the surface of the ground. Expected maximum injection rate is 1000 barrels per day and expected maximum injection pressure is 600 pounds per square inch. This work is part of an ongoing development project. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days of this publication.

April 13, 1995

COPY

OFFSET OPERATORS AND LANDOWNERS :

RE: COOPER JAL UNIT
NOTIFICATION OF WATERFLOOD MODIFICATION
JALMAT AND LANGLIE MATTIX FIELDS
LEA COUNTY, NEW MEXICO

This letter is to notify you that Texaco Exploration & Production Inc. is amending NMOCD order no. R-4019 , order no. R-4020, order no. WFX-648 and order no. WFX-657 on the Cooper Jal Unit in Lea County, New Mexico to include the following four injection wells :

132 - Unit Letter I, 2310'FSL & 990'FEL, Section 24, T24S, R36E
143 - Unit Letter F, 2310'FNL & 1650'FWL, Section 25, T24S, R36E
153 - Unit Letter L, 1400'FSL & 280'FWL, Section 19, T24S, R37E
226 - Unit Letter A, 330'FNL & 330'FEL, Section 25, T24S, R36E

The first two wells listed will be conversions from current single completion Langlie Mattix injectors to downhole commingled Jalmat and Langlie Mattix injectors. These two wells will have the Jalmat interval added to the current completion. The third well listed will be a conversion from a downhole commingled producer, in the Jalmat and Langlie Mattix intervals, to a downhole commingled injector, in said intervals. The fourth well will be deepened from a single completion Jalmat injector, to a downhole commingled Jalmat & Langlie Mattix injector. The purpose of this application is for secondary recovery by water injection into the Jalmat and Langlie Mattix intervals between approximately 2,950' and 3,711'. Maximum injection pressure will be 600 psig (or 0.2 psig/ft) until a step-rate establishes a higher limit. Anticipated maximum injection rate is approximately 600 BWIPD (1,200 BWIPD for downhole commingled injectors).

Attached are maps showing the locations of the above wells and a copy of a wellbore schematic for each well. Also included is a copy of the legal notice published in the local county paper.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days of receipt of this letter.

Sincerely,

Michael C. Alexander
Production Engineer

Attachments
File
Chrono

D. COPIES OF PREVIOUS ORDERS

JALMAT POOL
(Cooper-Jal Unit Area)
Lea County, New Mexico

Order No. R-4020, Authorizing Reserve Oil and Gas Company to Institute a Waterflood Project in the Cooper-Jal Unit Area, Jalmat Pool, Lea County, New Mexico, August 25, 1970.

Application of Reserve Oil and Gas Company for a Waterflood Project, Lea County, New Mexico.

CASE NO. 4404
Order No. R-4020

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9:30 a.m. on August 19, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of August, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Reserve Oil and Gas Company, seeks authority to institute a waterflood project in the Cooper-Jal Unit Area, Jalmat Pool, by the injection of water into the Tansill, Yates, and Upper and Middle Seven Rivers formations through 23 injection wells in Township 24 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico.

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

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Reserve Oil and Gas Company, is hereby authorized to institute a waterflood project in the Cooper-Jal Unit Area, Jalmat Pool, by the injection of water into the Tansill, Yates, and Upper and Middle Seven Rivers formations through the following-described 23 wells in Lea County, New Mexico:

Operator, Lease	Well No.	Unit	Section	Township	Range
Amerada					
Falby	3	K	19	24S	37E
	(a dual completion)				
	4	M	19	24S	37E
Cities Service					
Jack "A" Federal	1	M	18	24S	37E
	(a dual completion)				
Continental					
Jack Federal 19	1	E	19	24S	37E
	(a dual completion)				
	4	C	19	24S	37E
Humble					
Hunter	3	E	24	24S	36E
	4	C	24	24S	36E
	(a dual completion)				
Thomas	1	O	23	24S	36E
	3	M	24	24S	36E
Petroleum Corporation of Texas					
M. Dunn	1	O	13	24S	36E
	2	I	13	24S	36E
Harrison	1	C	25	24S	36E
	7	E	25	24S	36E
Phillips	2	I	24	24S	36E
Thomas	1	O	24	24S	36E
	4	K	24	24S	36E
Reserve Oil and Gas Company					
Van Zandt	2	A	25	24S	36E
	4	G	25	24S	36E
Atlantic Richfield Company					
Dunn SCP	1	G	24	24S	36E
	3	A	24	24S	36E
Texaco					
Fristoe "B"	1	E	30	24S	37E
	3	C	30	24S	37E
Texas Pacific					
Myers "B" Federal	1	A	26	24S	36E

(2) That the subject waterflood project is hereby designated the Reserve Cooper Jal Jalmat Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

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

LANGLIE-MATTIX POOL
(Cooper-Jal Unit Area)
Lea County, New Mexico

Order No. R-4019, Authorizing Reserve Oil and Gas Company to Institute a Waterflood Project in the Cooper-Jal Unit Area, Langlie-Mattix Pool, Lea County, New Mexico, August 25, 1970.

Application of Reserve Oil and Gas Company for a Waterflood Project, Lea County, New Mexico.

CASE NO. 4403
Order No. R-4019

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9:30 a.m. on August 19, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of August, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Reserve Oil and Gas Company, seeks authority to institute a waterflood project in the Cooper-Jal Unit Area, Langlie-Mattix Pool, by the injection of water into the Lower Seven Rivers and Queen formations through 26 injection wells in Township 24 South, Ranges 36 and 37 East, NMPM, Lea County, New Mexico.

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

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Reserve Oil and Gas Company, is hereby authorized to institute a waterflood project in the Cooper-Jal Unit Area, Langlie-Mattix Pool, by the injection of water into the Lower Seven Rivers and Queen formations through the following-described 26 wells in Lea County, New Mexico:

Operator Lease	Well No.	Unit	Section	Township	Range
Amerada					
Falby	3	K	19	24S	37E
	(a dual completion)				
Cities Service					
Hansen-Jack	1	K	18	24S	37E
Jack "A" Federal	1	M	18	24S	37E
	(a dual completion)				
Continental Oil Company					
Jack Federal 19	1	E	19	24S	37E
	(a dual completion)				
	8	C	19	24S	37E
Harlan					
Bates	1	E	18	24S	37E
Humble					
E. Hunter	4	C	24	24S	36E
	(a dual completion)				
Petroleum Corporation of Texas					
M. Dunn	2	I	13	24S	36E
	(a dual completion)				
	4	O	13	24S	36E
Harrison	6	F	25	24S	36E
	8	D	25	24S	36E
Phillips	4	P	24	24S	36E
Thomas	6	J	24	24S	36E
	7	K	24	24S	36E
Reserve Oil and Gas Company					
Andrews	2	A	18	24S	37E
Hunter	3	M	13	24S	36E
	5	K	13	24S	36E
Gutman	1	G	18	24S	37E
	(a dual completion)				
Russell "A"	1	I	18	24S	37E
Van Zandt	5	B	25	24S	36E
	7	H	25	24S	36E
Atlantic Richfield Company					
Bates	1	C	18	24S	37E
Dunn SCP	5	H	24	24S	36E
	6	A	24	24S	36E
Texaco					
Fristoe "B"	5	D	30	24S	37E
Texas Pacific					
Bates	1	O	18	24S	37E

(2) That the subject waterflood project is hereby designated the Reserve Cooper Jal Langmat Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

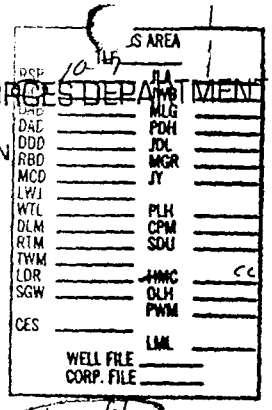
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

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

ADMINISTRATIVE ORDER NO. WFX-648

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION, INC. TO EXPAND ITS COOPER JAL UNIT WATERFLOOD PROJECT IN THE LANGLIE MATTIX AND JALMAT POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-4019, and R-4020 Texaco Exploration and Production, Inc. has made application to the Division on July 2, 1993 for permission to expand its Cooper Jal Unit Waterflood Project in the Langlie Mattix and Jalmat Pools in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection well is eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced Cooper Jal Unit Waterflood Project will not cause waste nor impair correlative rights.

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Texaco Exploration and Production, Inc., be and the same is hereby authorized to inject water into the Tansill, Yates, Seven Rivers and Queen formations at approximately 2980 feet to approximately 3650 feet through 2 3/8-inch or 2 7/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described wells for purposes of secondary recovery. Two wells, the Cooper Jal Unit Nos. 112 and 122, are existing Langlie Mattix completions and by this order will be dually completed into the Jalmat Pool. Three wells, the Cooper Jal Unit Nos. 205, 211 and 220, are existing Jalmat completions and will be dually completed into the Langlie Mattix Pool. Two wells, the Cooper Jal Unit Nos. 116 and 126, will be new dual completions into both pools. Two wells, the Cooper Jal Unit Nos. 132 and 151, will be completed through the Langlie Mattix Pool only. These wells are further described on Exhibits "A-1" through "A-4" attached hereto.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

* Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than .2 psi/ft. of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Tansill, Yates, Seven Rivers and Queen formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well shall be governed by all provisions of Division Order No. R-4019 and R-4020, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on this 1st day of October, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs

EXHIBIT "A-3"
DIVISION ORDER NO. WFX-648
COOPER JAL UNIT WATERFLOOD
APPROVED INJECTION WELLS - NEW DUAL COMPLETIONS - JALMAT AND LANGLIE MATTIX POOLS

Well Name	*Well No.*	*Location*	*Unit*	*S-T-R*	*Injection Interval*	*Packer Depth*	*Tubing Size*	*Injection Pressure*
Cooper Jal Unit	116	660' FSL & 660' FWL	M	18-24S-37E	2980' to 3641'	2949'	2 3/8"	596 psig
Cooper Jal Unit	126	1650' FNL & 2310' FEL	G	24-24S-36E	3022' to 3560'	2979'	2 3/8"	604 psig

EXHIBIT "A-4"
DIVISION ORDER NO. WFX-648
COOPER JAL UNIT WATERFLOOD
APPROVED INJECTION WELLS - LANGLIE MATTIX POOL ONLY

Well Name	*Well No.*	*Location*	*Unit*	*S-T-R*	*Injection Interval*	*Packer Depth*	*Tubing Size*	*Injection Pressure*
Cooper Jal Unit	132	2310' FSL & 990' FEL	I	24-24S-36E	3475' to 3640'	3454'	2 3/8"	691 psig
Cooper Jal Unit	151	771' FNL & 170' FEL	A	24-24S-36E	3296' to 3608'	3254'	2 7/8"	659 psig

EXHIBIT "A-1"
DIVISION ORDER NO. WFX-648
COOPER JAL UNIT WATERFLOOD
APPROVED INJECTION WELLS - EXISTING LANGLIE MATTIX - ADDING JALMAT POOL

Well Name	*Well No.*	*Location*	*Unit*	*S-T-R*	*Injection Interval*	*Packer Depth*	*Tubing Size*	*Injection Pressure*
Cooper Jal Unit	112	330' FSL & 990' FWL	M	13-24S-36E	3030' to 3617'	2979'	2 3/8"	606 psig
Cooper Jal Unit	122	330' FNL & 990' FEL	A	24-24S-36E	3000' to 3552'	2954'	2 3/8"	600 psig

EXHIBIT "A-2"
DIVISION ORDER NO. WFX-648
COOPER JAL UNIT WATERFLOOD
APPROVED INJECTION WELLS - EXISTING JALMAT - ADDING LANGLIE MATTIX POOL

Well Name	*Well No.*	*Location*	*Unit*	*S-T-R*	*Injection Interval*	*Packer Depth*	*Tubing Size*	*Injection Pressure*
Cooper Jal Unit	205	1980' FNL & 1650' FEL	G	24-24S-36E	3000' to 3650'	2954'	2 3/8"	600 psig
Cooper Jal Unit	211	2310' FSL & 2310' FWL	K	24-24S-36E	3020' to 3650'	2954'	2 3/8"	604 psig
Cooper Jal Unit	220	660' FSL & 628' FWL	M	19-24S-37E	2986' to 3650'	2886'	2 3/8"	597 psig

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 17, 1994

Texaco Exploration & Production Inc.
P. O. Box 730
Hobbs, New Mexico 88241-0730

Attention: Michael C. Alexander

Dear Mr. Alexander:

Reference is made to your application dated January 20, 1994, to convert four wells within the Cooper Jal Unit from dually completed injection wells in the Langlie-Mattix and Jalmat Pools to downhole commingled injection wells in said pools. It is our understanding that these wells were previously approved for injection as dually completed wells by Division Order Nos. R-4019 and R-4020.

It appears that the subject wells qualify for such modification pursuant to Division Rules and Regulations.

You are hereby authorized to convert the following described wells to downhole commingled injection wells in the Langlie-Mattix and Jalmat Pools within the Cooper Jal Unit Waterflood Projects:

CJU No. 120/236	Unit C, Section 24, T-24S, R-36E
CJU No. 133/240	Unit K, Section 19, T-24S, R-37E
CJU No. 146/233	Unit I, Section 13, T-24S, R-36E
CJU No. 147/207	Unit E, Section 19, T-24S, R-37E

Injection into the CJU Well No. 120/236 shall be into the interval from approximately 3,011 feet to 3,516 feet through 2 3/8 inch plastic lined tubing installed in a packer set at 2,975 feet.

Injection into the CJU Well No. 133/240 shall be into the interval from approximately 3,060 feet to 3,680 feet through 2 3/8 inch plastic lined tubing installed in a packer set at 3,000 feet.

Injection into the CJU Well No. 146/233 shall be into the interval from approximately 3,008 feet to 3,628 feet through 2 3/8 inch cement lined tubing installed in a packer set at 2,915 feet.

Injection into the CJU Well No. 147/207 shall be into the

interval from approximately 3,006 feet to 3,576 feet through 2 3/8 inch cement lined tubing installed in a packer set at 2,943 feet.

Prior to commencing downhole injection operations, the applicant shall pressure test the casing in each of the wells from the surface to the packer setting depth to assure the integrity of such casing. The applicant shall notify the supervisor of the Division's Hobbs district office of the date and time of installation of injection equipment and of the conductance of the mechanical integrity pressure tests in order that they may be witnessed.

The subject wells shall be governed by all provisions contained within Division Order Nos. R-4019 and R-4020.

Sincerely,

William J. LeMay
Director

xc: OCD-Hobbs
File-Case Nos. 4403, 4404

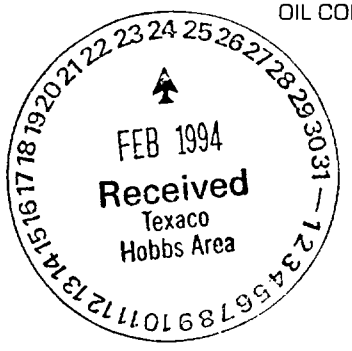
STATE OF NEW MEXICO

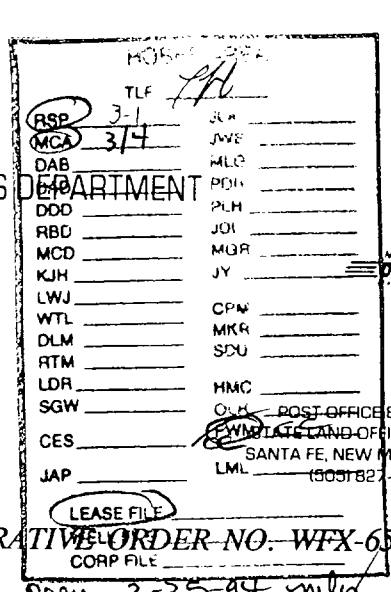
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY





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

DRUG FREE

ADMINISTRATIVE ORDER NO. WFX-657

Copy 2-25-94 mlg

APPLICATION OF TEXACO EXPLORATION & PRODUCTION, INC. TO EXPAND ITS WATERFLOOD PROJECT IN THE LANGLIE-MATTIX AND JALMAT POOLS IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order Nos. R-4019 and R-4020, Texaco Exploration & Production, Inc. has made application to the Division on January 24, 1994 for permission to expand its Cooper Jal Unit Waterflood Project in the Langlie-Mattix and Jalmat Pools in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced waterflood projects will not cause waste nor impair correlative rights.

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Texaco Exploration & Production, Inc., be and the same is hereby authorized to inject water into the Tansill, Yates, Seven Rivers and Queen formations through the gross interval from approximately 3019 feet to approximately 3650 feet through 2 3/8-inch

cement-lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the wells shown on Exhibit "A" attached hereto for the purpose of secondary recovery to wit. The subject wells are hereby further authorized to be utilized as downhole commingled injection wells in the Langlie-Mattix and Jalmat Pools.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the wells, the casing in each well shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus in each well shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than that shown on Exhibit "A".

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Tansill, Yates, Seven Rivers and Queen formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order Nos. R-4019 and R-4020, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on this 21st day of February, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs

EXHIBIT "A"
DIVISION ORDER NO. WFX-657
TEXACO EXPLORATION & PRODUCTION, INC.
COOPER JAL UNIT WATERFLOOD PROJECT
APPROVED INJECTION WELLS
DOWNHOLE COMMINGLED LANGLIE-MATTIX & JALMAT

Well Name	*Well No.*	*Location*	*Unit*	*S-T-R*	*Injection Interval*	*Packer Depth*	*Tubing Size*	*Injection Pressure (PSIG)*
Cooper Jal Unit	134	330' FSL - 1650' FWL	N	24-24S-36E	3031' - 3570'	2975'	2 3/8"	606
Cooper Jal Unit	135	990' FSL - 1980' FEL	O	24-24S-36E	3019' - 3650'	2975'	2 3/8"	604

F. RECEIPTS FOR LETTERS TO OFFSET OPERATORS & LANDOWNERS

Z 106 611 815

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
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Sent to	Conoco Inc.
Street and No.	10 Desta Dr, Ste 100W
P.O. State and ZIP Code	Midland, TX 79702
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 814

Receipt for Certified Mail
No Insurance Coverage Provided
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Sent to	Chevron USA Inc.
Street and No.	P.O. Box 1150
P.O. State and ZIP Code	Midland Texas 79702
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
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PS Form 3800, March 1993

Z 106 611 821

Receipt for Certified Mail
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Sent to	Meridian Oil Inc.
Street and No.	P.O. Box 51810
P.O. State and ZIP Code	Midland, Texas 79710
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 809

Receipt for Certified Mail
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Sent to	Zia Energy, Inc.
Street and No.	P.O. Box 2219
P.O. State and ZIP Code	Hobbs, N.M. 88240
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 812

Receipt for Certified Mail
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(See Reverse)

Sent to	Exxon Company USA
Street and No.	P.O. Box 1600
P.O. State and ZIP Code	Midland, Texas 79702
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 816

Receipt for Certified Mail
No Insurance Coverage Provided
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(See Reverse)

Sent to	Trustees - Jal
Street and No.	Public Library Fund
P.O. State and ZIP Code	P.O. Box 178
	Jal, N.M. 88252
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 819

Receipt for Certified Mail
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Sent to	OXY USA Inc.
Street and No.	P.O. Box 50250
P.O. State and ZIP Code	Midland, Texas 79702
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 818

Receipt for Certified Mail
No Insurance Coverage Provided
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Sent to	Doyle Hartman
Street and No.	P.O. Box 10426
P.O., State and ZIP Code	Midland, Texas 79702
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 820

Receipt for Certified Mail
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Sent to	Fred B. Cooper
Street and No.	RR#1, Box141
P.O. State and ZIP Code	Blossom, TX 75416
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 811

Receipt for Certified Mail
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Sent to	Arch Petroleum Inc.
Street and No.	777 Taylor St. Penthouse H-A
P.O., State and ZIP Code	Ft. Worth Club Tower Ft. Worth, Texas 76106
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 810

Receipt for Certified Mail
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Sent to	Convest Energy Corp.
Street and No.	2401 Fountain View Dr. Suite 700
P.O. State and ZIP Code	Houston, Texas 77057
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 817

Receipt for Certified Mail
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Sent to	Lewis B. Burleson, Inc.
Street and No.	P.O. Box 2479
P.O. State and ZIP Code	Midland, Texas 79702
Postage	$1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form 3800, March 1993

Z 106 611 813

Receipt for Certified Mail

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Sent to	Phillips Petroleum Co.
Street and No.	4001 Penbrook
P.O. State and ZIP Code	Odessa, Texas 79762
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 3.47
Postmark or Date	

PS Form **3800**, March 1993

Z 106 611 822

Receipt for Certified Mail

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Sent to	Energy Development Corp.
Street and No.	1000 Louisiana, Ste 2900
P.O. State and ZIP Code	Houston, TX 77002
Postage	$ 1.47
Certified Fee	1.10
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.10
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$3.67
Postmark or Date	

PS Form **3800**, March 1993

G. COPIES OF PREVIOUS ORDERS