



Texaco Corp.

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OIL CONSERVATION
DIVISION

JAN 21 1992

January 21, 1992

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Gentlemen:

SUBJECT: EXPANSION OF PRESSURE MAINTENANCE PROJECT
VACUUM GRAYBURG SAN ANDRES UNIT (VGSAU)
VACUUM GRAYBURG SAN ANDRES POOL
LEA COUNTY, NM

We request administrative approval to convert three VGSAU wells to water injection. Order No. R-4442, dated November 1, 1972, authorized Texaco to operate the VGSAU pressure maintenance project within the subject pool.

The wells to be converted are the VGSAU Well No.'s 148, 149 & 150. Form C-108 and attachments are enclosed.

As required, copies of this application with attachments has been sent to the surface owners and offset operators.

Please contact Todd Lackey at (505) 393-7191 with questions.

Sincerely,

J. A. Head
Hobbs Area Manager

/wtl

Attachments

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: Texaco Exploration and Production Inc.

Address: P.O. Box 730, Hobbs, NM 88240

Contact party: James A. Head, Area Manager 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? ☒ yes ☐ no
If yes, give the Division order number authorizing the project R-4442.

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: James A. Head

Title: Area Manager

Signature: James A. Head

Date: 11/22/92

* 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.

See attached list of orders

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.

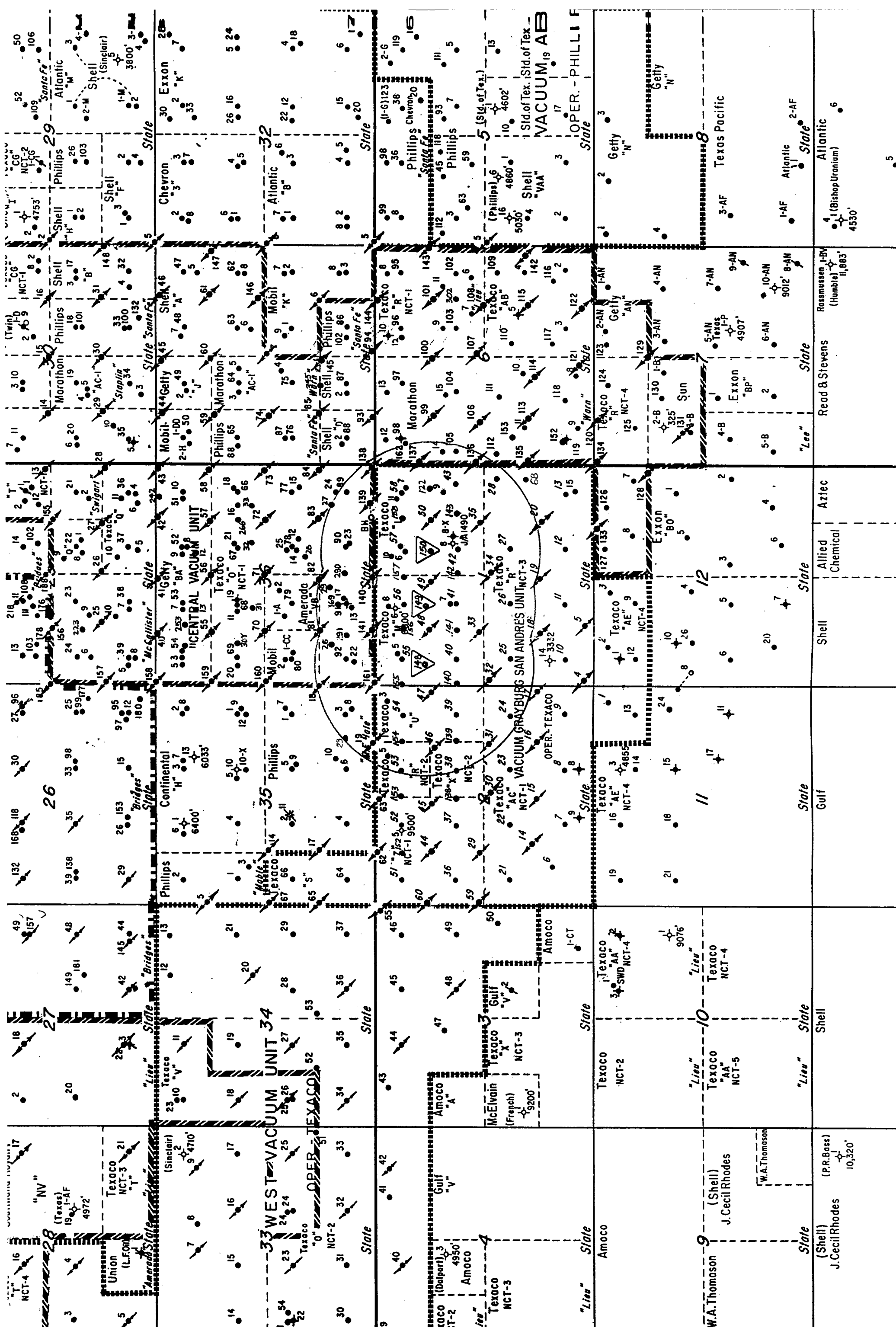
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

NEW MEXICO OIL CONSERVATION DIVISION - Form C-108, cont'd

Conversion of the following wells to water injection
Vacuum Grayburg San Andres Unit

No. 148 - Ltr D, 1330' FNL & 660' FWL, Sec 1, T18S, R34E
No. 149 - Ltr C, 1330' FNL & 1980' FWL, Sec 1, T18S, R34E
No. 150 - Ltr G, 1390' FNL & 1980' FEL, Sec 1, T18S, R34E

- III. See attached injection well data sheets.
- IV. Expansion of existing project Order No. R-4442.
- V. See attached map.
- VI. See attached well information and schematics.
- VII.
 - 1) Average injection rate - 500 BWPD
Maximum injection rate - 1500 BWPD
 - 2) Closed injection system
 - 3) Average injection pressure - 1300 psi (Avg in offset wells)
Initial maximum injection pressure - 800 psi (0.2 psi/ft)
Maximum injection pressure - 1800 psi (Possible after step-rate testing)
 - 4) Grayburg San Andres produced water and Ogallala fresh water for make-up. See attached analysis and compatibility test.
 - 5) N/A
- VIII. Previously submitted. See attached orders.
- IX. Wells will be stimulated with 15% NEFE HCL.
- X. All logs have been previously submitted to local OCD office.
- XI. Previously submitted. See attached orders. The water analysis for VGSAU Water Well No. 4 has been attached. This is a fresh water well that is used for make-up water. It is located approximately one mile to the SW of the proposed conversions.
- XII. N/A
- XIII. Copies of this application and attachments have been sent by certified mail to surface owners and offset operators (see attached). The legal notice and affidavit of publication in the Hobbs Daily News-Sun is also attached.



INJECTION WELL DATA SHEET

TEXACO EXPLORATION & PRODUCTION INC
OPERATOR

VACUUM GRAYBURG SAN ANDRES UNIT
LEASE

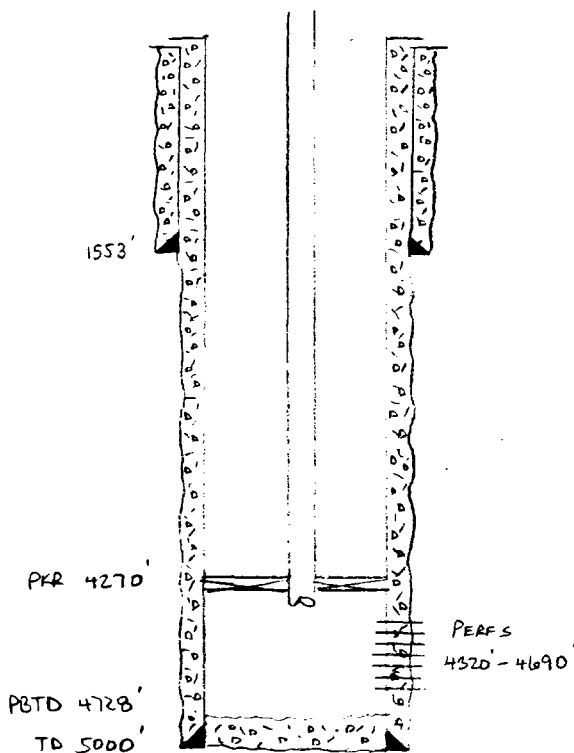
148 LTR D, 1330' FHL & 660' FWL
WELL NO. FOOTAGE LOCATION

1
SECTION

18S
TOWNSHIP

34E
RANGE

Schematic



Tabular Data

Surface Casing

Size 9 5/8 " Cemented with 1000 sx.

TOC SURFACE feet determined by 218 SX CIRCULATED

Hole size 12 1/4 "

Intermediate Casing

Size " Cemented with sx.

TOC feet determined by

Hole size "

Long string

Size 7 " Cemented with 1050 sx.

TOC SURFACE feet determined by 120 SX CIRCULATED

Hole size 8 3/4 "

Total depth 5000 '

Injection interval

4320 feet to 4690 feet
(perforated) or open-hole, indicate which)

Tubing size 2 3/8 " lined with CEMENT set in a
(material)

BAKER AD-1 packer at 4270 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation GRAYBURG SAN ANDRES

2. Name of Field or Pool (if applicable) VACUUM GRAYBURG SAN ANDRES

3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? OIL

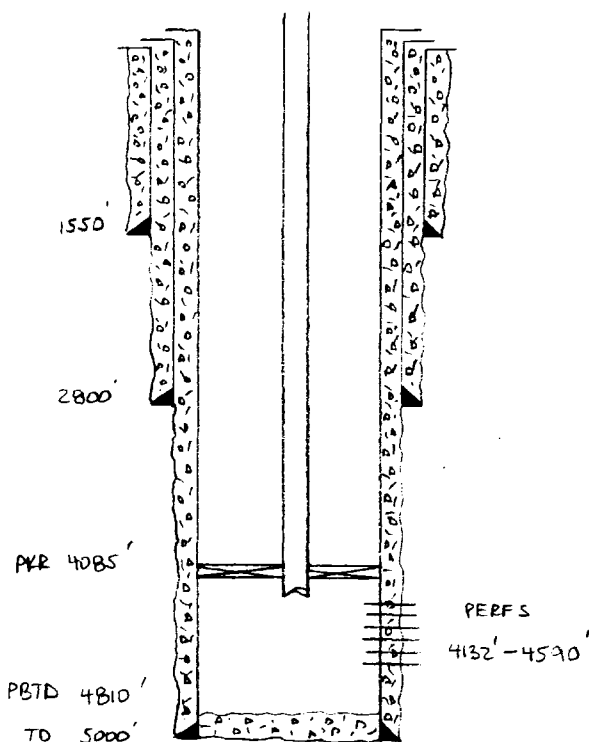
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

YATES - 2820' , T-RIVERS - 3134' , QUEEN - 3700'

INJECTION WELL DATA SHEET

TEXACO EXPLORATION & PRODUCTION INC.		VACUUM GRAYBURG SAN ANDRES UNIT	
OPERATOR		LEASE	
149	LTR C, 1330' FNL & 1980' FWL	1	18S 34E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE

SchematicTabular DataSurface Casing

Size 13 3/8 " Cemented with 1700 sx.
 TOC SURFACE feet determined by 200 SX CIRCULATED
 Hole size 17 1/2"

Intermediate Casing

Size 9 5/8 " Cemented with 1570 sx.
 TOC SURFACE feet determined by 245 SX CIRCULATED
 Hole size 12 1/4"

Long string

Size 7 " Cemented with 950 sx.
 TOC SURFACE feet determined by 135 SX CIRCULATED
 Hole size 8 3/4"
 Total depth 5000'

Injection interval

4132 feet to 4590 feet
 (perforated) or open-hole, indicate which)

Tubing size 2 3/8" lined with CEMENT set in a
 (material)
BAKER AD-1 packer at 4085 feet
 (brand and model)
 (or describe any other casing-tubing seal).

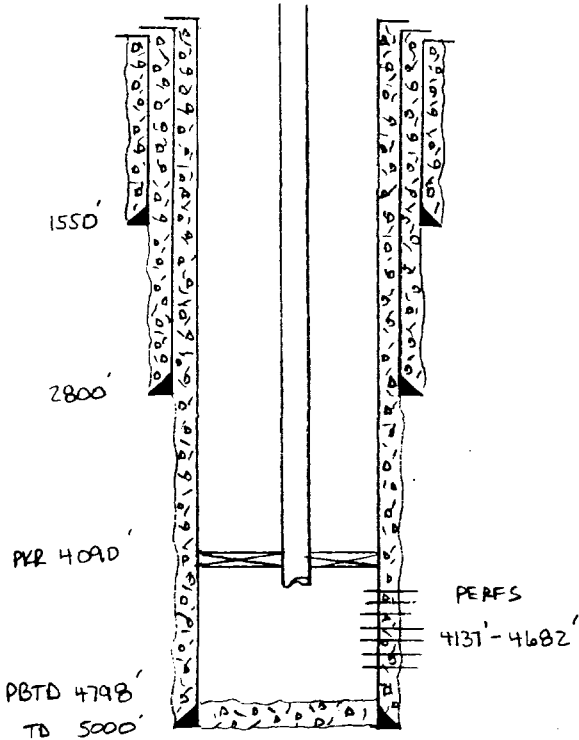
Other Data

- Name of the injection formation GRAYBURG SAN ANDRES
- Name of Field or Pool (if applicable) VACUUM GRAYBURG SAN ANDRES
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? OIL
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
YATES - 2803', 7-RIVERS - 3117', QUEEN - 3677',
GRAYBURG - 4002', SAN ANDRES - 4290'

INJECTION WELL DATA SHEET

TEXACO EXPLORATION & PRODUCTION INC.		VACUUM GRAYBURG SAN ANDRES UNIT	
OPERATOR		LEASE	
150	LTR G, 1390' FNL & 1980' FEL	1	18S 34E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE

Schematic



Tabular Data

Surface Casing

Size 13 3/8 " Cemented with 1700 sx.
 TOC SURFACE feet determined by 250 SX CIRCULATED
 Hole size 17 1/2"

Intermediate Casing

Size 9 5/8 " Cemented with 1570 sx.
 TOC SURFACE feet determined by 270 SX CIRCULATED
 Hole size 12 1/4"

Long string

Size 7 " Cemented with 850 sx.
 TOC SURFACE feet determined by 316 SX CIRCULATED
 Hole size 8 3/4"
 Total depth 5000'

Injection interval

4137 feet to 4682 feet
 (perforated) or open-hole, indicate which)

Tubing size 2 3/8" lined with CEMENT set in a
 (material)
BAKER AD-1 packer at 4090 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation GRAYBURG SAN ANDRES
- Name of Field or Pool (if applicable) VACUUM GRAYBURG SAN ANDRES
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? OIL
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

YATES - 2795' , 7-RIVERS - 3104' , QUEEN - 3664' ,

GRANDHILL - 2982' , SAN ANDRES - 4282'

WELLS WITHIN AREA OF REVIEW

PAGE 1

LEASE NAME	WELL NO.	WELL TYPE	COMPANY
=====	=====	=====	=====
VACUUM GRAYBURG SAN ANDRES UNIT	\ 24	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 25	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 26	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 27	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 28	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	31	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 32	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 33	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 34	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 35	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 38	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 39	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 40	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 41	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 42	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 43	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 46	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 47	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 48	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 49	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 50	INJ	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	53	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	54	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	55	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 56	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	57	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 58	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 122	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	139	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	140	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 141	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 142	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 143	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 154	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 155	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 156	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 157	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	\ 158	OIL	TEXACO

LEASE NAME	WELL NO.	WELL TYPE	COMPANY
=====	=====	=====	=====
CENTRAL VACUUM UNIT	~81	INJ	TEXACO
CENTRAL VACUUM UNIT	~82	INJ	TEXACO
CENTRAL VACUUM UNIT	~89	OIL	TEXACO
CENTRAL VACUUM UNIT	~90	OIL	TEXACO
CENTRAL VACUUM UNIT	~92	OIL	TEXACO
CENTRAL VACUUM UNIT	~105	OIL	TEXACO
CENTRAL VACUUM UNIT	~136	INJ	TEXACO
CENTRAL VACUUM UNIT	~137	INJ	TEXACO
CENTRAL VACUUM UNIT	~138	INJ	TEXACO
CENTRAL VACUUM UNIT	~139	INJ	TEXACO
CENTRAL VACUUM UNIT	~140	INJ	TEXACO
CENTRAL VACUUM UNIT	~141	INJ	TEXACO
CENTRAL VACUUM UNIT	~161	INJ	TEXACO
CENTRAL VACUUM UNIT	~162	OIL	TEXACO
CENTRAL VACUUM UNIT	~169	OIL	TEXACO
CENTRAL VACUUM UNIT	~290	OIL	TEXACO
CENTRAL VACUUM UNIT	~291	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~13	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~17	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~22	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~23	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~24	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~26	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~27	OIL	TEXACO
N.M. "O" STATE (NCT-1)	~29	OIL	TEXACO
N.M. "M" STATE	~5	OIL	TEXACO
N.M. "M" STATE	~7	OIL	TEXACO
N.M. "M" STATE	~8	OIL	TEXACO
N.M. "L" STATE	~6	OIL	TEXACO
N.M. "L" STATE	~7	OIL	TEXACO
N.M. "L" STATE	~9	OIL	TEXACO
N.M. "L" STATE	10	OIL	TEXACO
N.M. "L" STATE	~11	OIL	TEXACO
N.M. "U" STATE	~3	OIL	TEXACO
N.M. "R" STATE (NCT-2)	~5	OIL	TEXACO
WARN STATE AC-2	~14	OIL	MARATHON
M.E. HALE	~3	OIL	PHILLIPS
M.E. HALE	~8	OIL	PHILLIPS
M.E. HALE	~18	INJ	PHILLIPS
M.E. HALE	~19	INJ	PHILLIPS
M.E. HALE	~23	OIL	PHILLIPS

LEASE NAME	WELL NO.	WELL TYPE	COMPANY
=====	=====	=====	=====

WELLS WHICH HAVE BEEN PLUGGED:

CENTRAL VACUUM UNIT	91	P&A'd	TEXACO
CENTRAL VACUUM UNIT	98	P&A'd	TEXACO
N.M. "M" STATE	6	P&A'd	TEXACO
N.M. "L" STATE	8	P&A'd	TEXACO
N.M. "L" STATE	8-X	P&A'd	TEXACO
N.M. "R" STATE (NCT-3)	14	P&A'd	TEXACO

WELLS TO BE CONVERTED:

VACUUM GRAYBURG SAN ANDRES UNIT	148	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	149	OIL	TEXACO
VACUUM GRAYBURG SAN ANDRES UNIT	150	OIL	TEXACO

VACUUM GRAYBURG SAN ANDRES UNIT
NEW AND OLD WELL NAMES & NUMBERS

PAGE 1

VGSAU WELL NO.	OLD LEASE WELL NAME	OLD LEASE WELL NO.	STATUS	DATE CONVERTED
1	N.M. "AE" STATE (NCT-4)	23	P	
2	N.M. "AE" STATE (NCT-4)	22	P	
3	N.M. "AE" STATE (NCT-4)	2	P	
4	N.M. "R" STATE (NCT-3)	22	CI	6-16-82
5	N.M. "R" STATE (NCT-3)	23	CI	2-21-73
6	N.M. "AC" STATE (NCT-1)	10	P	
7	N.M. "AC" STATE (NCT-1)	7	P	
8	N.M. "AC" STATE (NCT-1)	5	P	
9	N.M. "AC" STATE (NCT-1)	4	P	
10	N.M. "R" STATE (NCT-3)	11	P	
11	N.M. "R" STATE (NCT-3)	10	P	
12	N.M. "R" STATE (NCT-3)	12	P	
13	N.M. "R" STATE (NCT-3)	13	P	
14	N.M. "AC" STATE (NCT-1)	13	CI	8-01-82
15	N.M. "AC" STATE (NCT-1)	14	CI	1-14-73
16	N.M. "AC" STATE (NCT-1)	15	CI	8-14-82
17	N.M. "AC" STATE (NCT-1)	16	CI	1-14-73
18	N.M. "R" STATE (NCT-3)	19	CI	5-19-83
19	N.M. "R" STATE (NCT-3)	20	CI	2-25-73
20	N.M. "R" STATE (NCT-3)	21	CI	4-16-83
21	N.M. "AC" STATE (NCT-1)	6	P	
22	N.M. "AC" STATE (NCT-1)	3	P	
23	N.M. "AC" STATE (NCT-1)	2	P	
24	N.M. "AC" STATE (NCT-1)	1	P	
25	N.M. "R" STATE (NCT-3)	9	P	
26	N.M. "R" STATE (NCT-3)	8	P	
27	N.M. "R" STATE (NCT-3)	7	P	
28	N.M. "R" STATE (NCT-3)	6	P	
29	N.M. "Z" STATE (NCT-1)	8	CI	1-14-73
30	N.M. "AC" STATE (NCT-1)	12	CI	9-04-82
31	N.M. "AC" STATE (NCT-1)	11	CI	1-14-73
32	N.M. "R" STATE (NCT-3)	18	CI	9-27-82
33	N.M. "M" STATE	11	CI	2-05-73
34	N.M. "R" STATE (NCT-3)	17	CI	5-22-83
35	N.M. "L" STATE	12	CI	1-01-81
36	N.M. "Z" STATE (NCT-1)	4	P	
37	N.M. "Z" STATE (NCT-1)	3	P	
38	N.M. "X" STATE (NCT-2)	3	P	
39	N.M. "U" STATE	2	P	
40	N.M. "M" STATE	4	P	
41	N.M. "M" STATE	1	P	
42	N.M. "L" STATE	1	P	
43	N.M. "L" STATE	3	P	
44	N.M. "Z" STATE (NCT-1)	7	CI	8-23-82

VGSAU WELL NO.	OLD LEASE WELL NAME	OLD LEASE WELL NO.	STATUS	DATE CONVERTED
45	N.M. "Z" STATE (NCT-1)	6	CI	4-05-73
46	N.M. "X" STATE (NCT-2)	4	CI	9-01-82
47	N.M. "U" STATE	4	CI	4-04-73
48	N.M. "M" STATE	10	CI	1-26-83
49	N.M. "M" STATE	12	CI	2-16-73
50	N.M. "L" STATE	11	CI	4-11-83
51	N.M. "Z" STATE (NCT-1)	1	P	
52	N.M. "Z" STATE (NCT-1)	2	P	
53	N.M. "R" STATE (NCT-2)	4	P	
54	N.M. "U" STATE	1	P	
55	N.M. "M" STATE	2	P	
56	N.M. "M" STATE	3	P	
57	N.M. "L" STATE	4	P	
58	N.M. "L" STATE	2	P	
59	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
60	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
62	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
63	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
64	N.M. "S" STATE	2	P	
65	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
66	N.M. "S" STATE	1	P	
67	VACUUM GRAYBURG SAN ANDRES UNIT		DI	
68	N.M. "R" STATE (NCT-3)	16	P	
122	VACUUM GRAYBURG SAN ANDRES UNIT		P	
138	VACUUM GRAYBURG SAN ANDRES UNIT		P	
139	VACUUM GRAYBURG SAN ANDRES UNIT		P	
140	VACUUM GRAYBURG SAN ANDRES UNIT		P	
141	VACUUM GRAYBURG SAN ANDRES UNIT		P	
142	VACUUM GRAYBURG SAN ANDRES UNIT		P	
143	VACUUM GRAYBURG SAN ANDRES UNIT		P	
148	VACUUM GRAYBURG SAN ANDRES UNIT		P	
149	VACUUM GRAYBURG SAN ANDRES UNIT		P	
150	VACUUM GRAYBURG SAN ANDRES UNIT		P	
152	VACUUM GRAYBURG SAN ANDRES UNIT		P	
153	VACUUM GRAYBURG SAN ANDRES UNIT		P	
154	VACUUM GRAYBURG SAN ANDRES UNIT		P	
155	VACUUM GRAYBURG SAN ANDRES UNIT		P	
156	VACUUM GRAYBURG SAN ANDRES UNIT		P	
157	VACUUM GRAYBURG SAN ANDRES UNIT		P	
158	VACUUM GRAYBURG SAN ANDRES UNIT		P	

CI - Converted to injection

DI - Drilled as injector

P - Producer

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.

Date : 01-07-1992

Location: VGSAU - FRESH WATER (on 01-07-1992)

WELL NO.4

Sample 1

Specific Gravity:

1.002

Total Dissolved Solids:

3311

pH:

6.70

IONIC STRENGTH:

0.057

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	6.80	136
Magnesium	(Mg ⁺²)	2.80	34.0
Sodium	(Na ⁺¹)	41.7	959
Iron (total)	(Fe ⁺²)	0.011	0.300
Barium	(Ba ⁺²)	0.092	6.30

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	13.8	842
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	0.833	40.0
Chloride	(Cl ⁻¹)	36.7	1300

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.07	-16
120°F	49°C	0.96	-16
130°F	54°C	1.1	-16
140°F	60°C	1.3	-16
160°F	71°C	1.7	-16
180°F	82°C	2.1	-16

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.

Date : 01-07-1992

Location: VGSAU - PRODUCED WATER (on 01-07-1992)

	Sample 1
Specific Gravity:	1.071
Total Dissolved Solids:	99419
pH:	7.10
IONIC STRENGTH:	1.832

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	124	2480
Magnesium	(Mg ⁺²)	68.0	826
Sodium	(Na ⁺¹)	1510	34800
Iron (total)	(Fe ⁺²)	0.014	0.400
Barium	(Ba ⁺²)	0.096	6.60
Manganese	(Mn ⁺²)	0.002	0.060

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	8.80	537
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	58.8	2830
Chloride	(Cl ⁻¹)	1640	58000

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.53	-17
120°F	49°C	1.4	-17
130°F	54°C	1.6	-17
140°F	60°C	1.8	-17
160°F	71°C	2.2	-13
180°F	82°C	2.6	-13

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.

Date : 01-07-1992

Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.064
Total Dissolved Solids:	89808
pH:	7.06
IONIC STRENGTH:	1.654

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	112	2250
Magnesium	(Mg ⁺²)	61.5	747
Sodium	(Na ⁺¹)	1360	31400
Iron (total)	(Fe ⁺²)	0.014	0.390
Barium	(Ba ⁺²)	0.096	6.57
Manganese	(Mn ⁺²)	0.002	0.054

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	9.30	567
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	53.0	2550
Chloride	(Cl ⁻¹)	1480	52300

DISSOLVED GASES		
Carbon Dioxide	(CO ₂)	0
Hydrogen Sulfide	(H ₂ S)	0
Oxygen	(O ₂)	0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.45	-22
120°F	49°C	1.3	-22
130°F	54°C	1.5	-22
140°F	60°C	1.7	-22
160°F	71°C	2.1	-18
180°F	82°C	2.5	-18

Comments:

COMPATIBILITY=

FRESH WATER= 10%

PRODUCED WATER = 90%

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.

Date : 01-07-1992

Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.054
Total Dissolved Solids:	75392
pH:	7.00
IONIC STRENGTH:	1.388

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	94.7	1890
Magnesium	(Mg ⁺²)	51.7	628
Sodium	(Na ⁺¹)	1140	26300
Iron (total)	(Fe ⁺²)	0.013	0.375
Barium	(Ba ⁺²)	0.095	6.52
Manganese	(Mn ⁺²)	0.002	0.045

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	10.1	613
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	44.3	2130
Chloride	(Cl ⁻¹)	1240	43800

DISSOLVED GASES		
Carbon Dioxide	(CO ₂)	0
Hydrogen Sulfide	(H ₂ S)	0
Oxygen	(O ₂)	0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.37	-29
120°F	49°C	1.3	-29
130°F	54°C	1.4	-29
140°F	60°C	1.6	-29
160°F	71°C	2.0	-25
180°F	82°C	2.4	-25

Comments:

COMPATIBILITY =

FRESH WATER = 25%

PRODUCED WATER = 75

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : TEXACO, INC.

Date : 01-07-1992

Location: VGSAU - PRODUCED & FRESH WATER COMPATIBILITY (on 01-07-1992)

	Sample 1
Specific Gravity:	1.037
Total Dissolved Solids:	51365
pH:	6.90
IONIC STRENGTH:	0.944

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	65.4	1310
Magnesium	(Mg ⁺²)	35.4	430
Sodium	(Na ⁺¹)	777	17900
Iron (total)	(Fe ⁺²)	0.013	0.350
Barium	(Ba ⁺²)	0.094	6.45
Manganese	(Mn ⁺²)	0.001	0.030

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	11.3	689
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	29.8	1430
Chloride	(Cl ⁻¹)	836	29700

DISSOLVED GASES		
Carbon Dioxide	(CO ₂)	0
Hydrogen Sulfide	(H ₂ S)	0
Oxygen	(O ₂)	0

SCALING INDEX (positive value indicates scale)

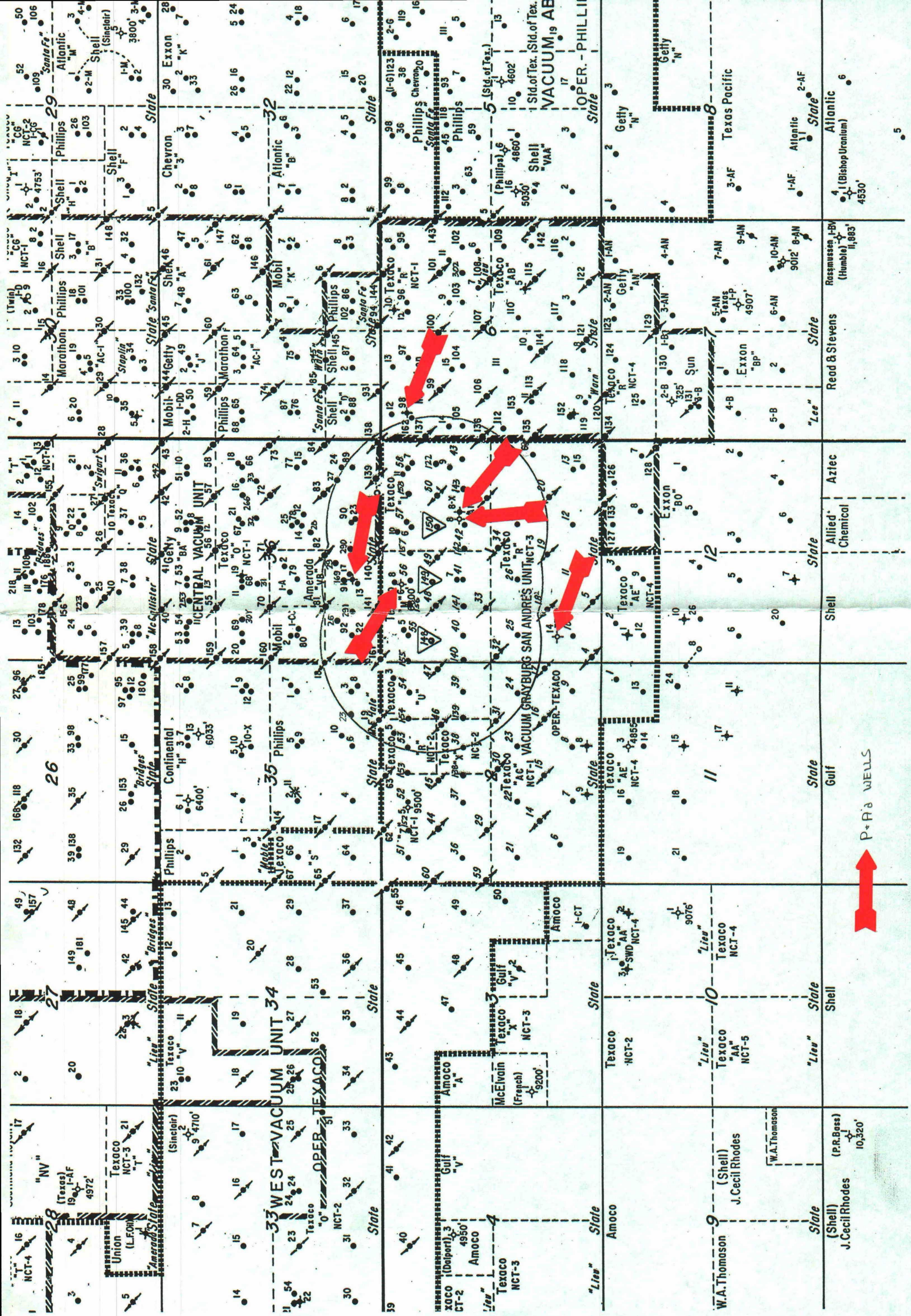
Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	0.11	-38
120°F	49°C	1.0	-38
130°F	54°C	1.2	-38
140°F	60°C	1.4	-38
160°F	71°C	1.8	-34
180°F	82°C	2.2	-34

Comments:

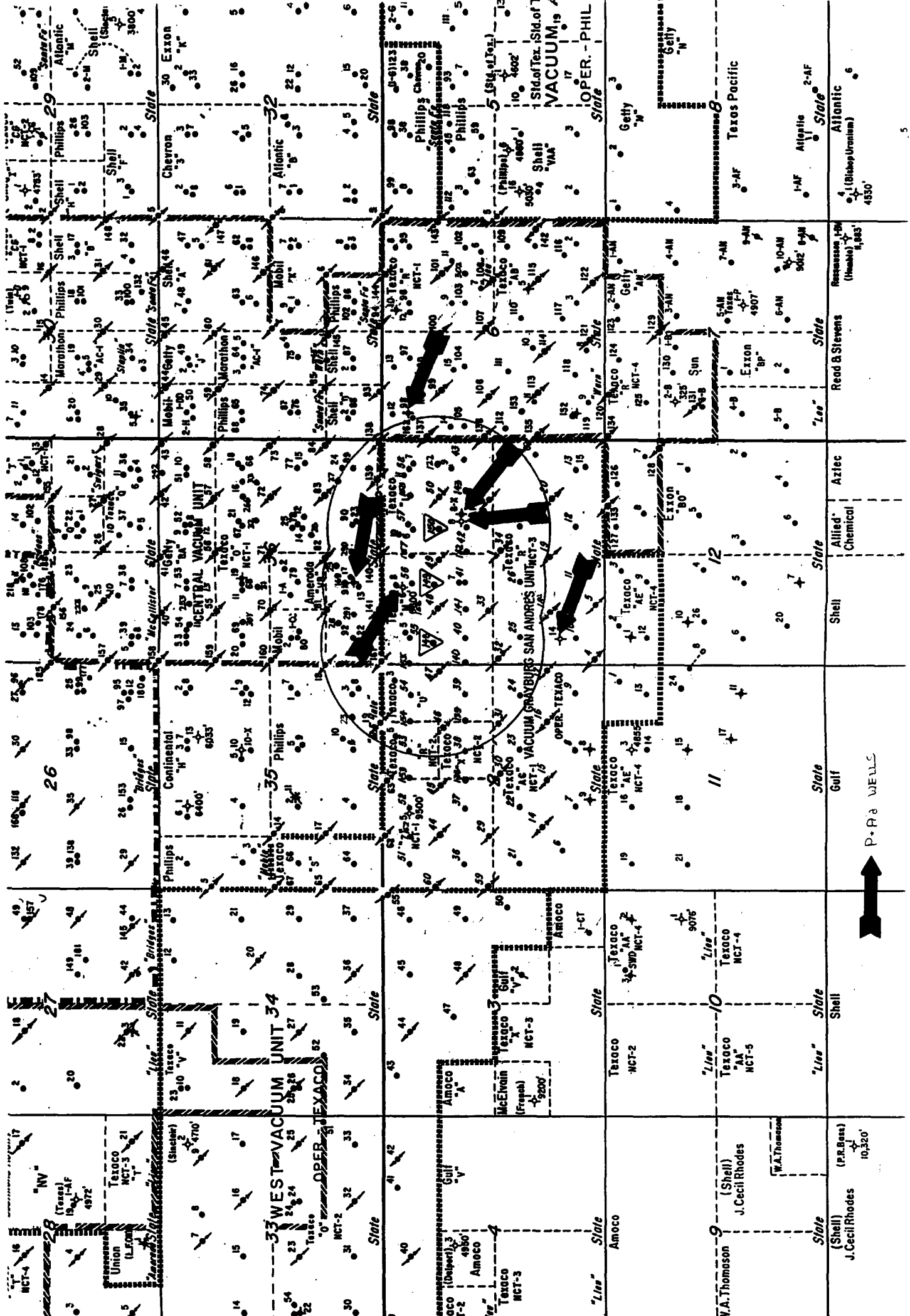
COMPATIBILITY =

FRESH WATER = 50%

PRODUCED WATER = 50%



RED ARROW POINTING UP



P-R-R WELLS

CENTRAL VACUUM UNIT #98

LTR D, 6660' FNL E 484' FWL

SECL6, T-18-S, R-35-E

P.A.D 12-19-90

GL 3986'

SPOT CMT FROM 600' TO SURF

SET CMT RET AT 1283.502 CIG LEAK
W/ 250 SX CMT.

10³/₄" SET AT 497'
IN 12¹/₂" hole w/ 225 SX CMT
CMT CIRC TO SURF

PERF 2 SQZ HOLES AT 793' CIRC CMT TO SURF

2⁷/₈" TBG CUT AT 1750'

2000'

2⁷/₈" CUT TBG

2950'

PLUG BACK WITH CUT TO 2950'
INSIDE AND OUTSIDE 2⁷/₈" CUT TBG

2⁷/₈" TBG CUT AT 4200'

6⁷/₈" OPEN HOLE

PLUG BACK
TO 4250'
W/ SAND

JUNK

TO 4710'

7" SET AT 4098'
IN 8³/₄" hole w/ 700 SX CMT
CALL CMT TOP 2000'

"NEW MEXICO" L' STATE # 8

LTR G, SE $\frac{1}{4}$, NE $\frac{1}{4}$

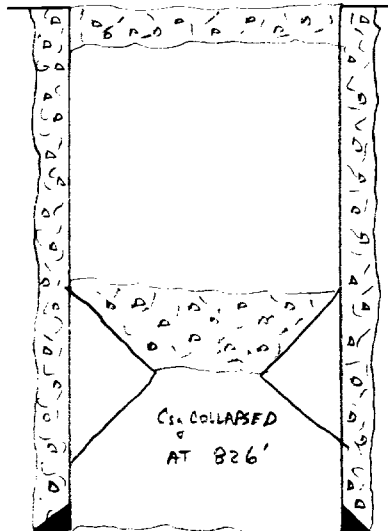
SEC 1, T-18-S, R-34-E

P.A'd 4-16-64

GL 3987'

Spot 25 sx plug from 44' - SURF

SPOT 50 SX PLUG FROM 826'-738'



11 3/4" 23.72[#] SET AT 1490'
IN 15" hole w/ 1000 SX CMT
CMT CIRC TO SURF

NEW MEXICO "L" STATE # B-X

LTR G, 1900' FNL & 1865' FEL

SEC 1, T-18-S, R-34-E

P+ Ad 5-2-81

DF 3998

SPOT CMT FROM 10' - SURF

SPOT 30 SX PLUG FROM 312' - 200'

PERF 502 HOLES AT 1402'. 502 w/
530 SX CMT. TO SURFACE

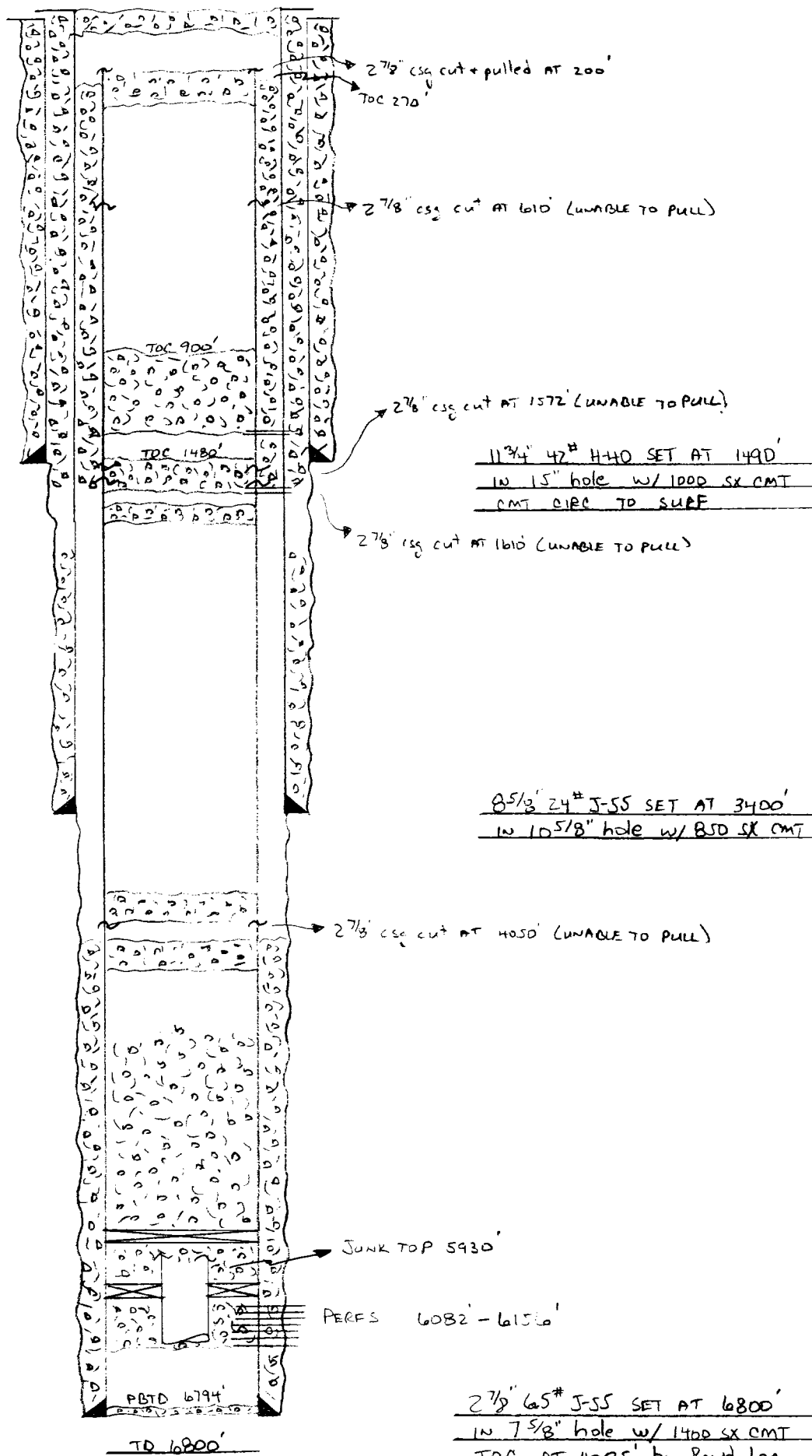
PERF 502 HOLES AT 1623'. 502 w/
50 SX CMT.

SPOT 6 SX PLUG FROM 1709' - 1616'

SPOT 6 SX PLUG FROM 4052' - 3952'

SPOT 6 SX PLUG FROM 4190' - 4090'

SET CMT RET AT 5792'. 502 w/
25 SX CMT. CAP W/ 50 SX CMT.



NEW MEXICO "R" STATE (NCT-3) # 14

SW 1/4, SW 1/4

SEC 1, T-13-S, R-34-E

P + Ad 8-12-59

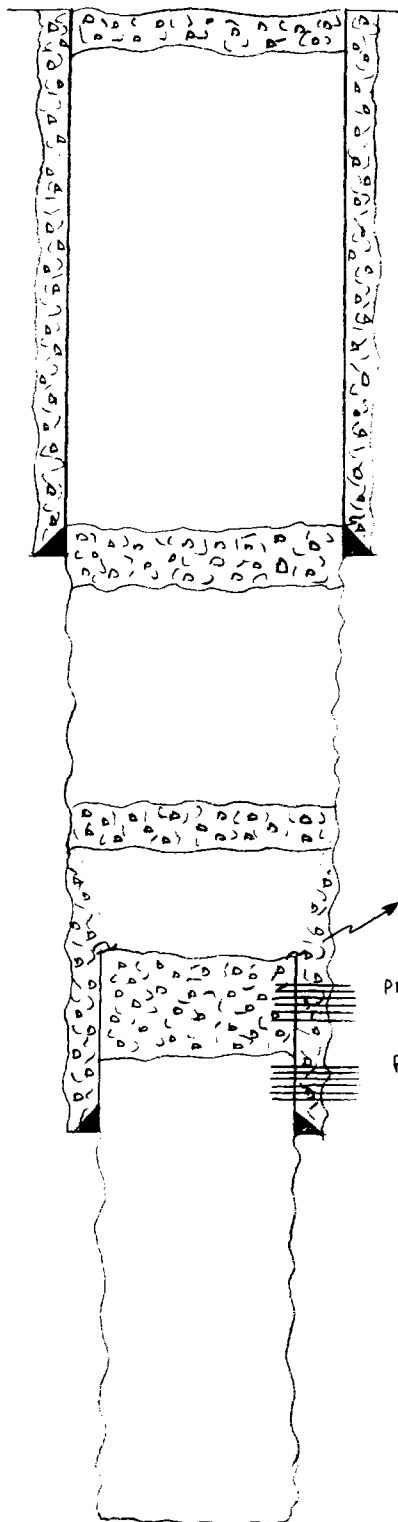
GL 4007'

SPOT 15 SX PLUG AT SURFACE

SPOT 30 SX PLUG FROM 1550'-1650'

SPOT 25 SX PLUG FROM 2450'-2550'

SPOT 25 SX PLUG FROM 2950'-3155'



8 5/8" 24# SET AT 1605'

IN 11" hole w/ 550 SX CMT
CMT CIRC TO SURF

4 1/2" CSG STUB 2940'

PERFS 3060'-3120'

PERFS 3160'-3300' (SQZ. W/ 100 SX CMT)

4 1/2" 11.6# SET AT 3332'

IN 7 7/8" hole w/ 150 SX CMT
TOC @ 2575' by Temp Survey.

TD 3902'

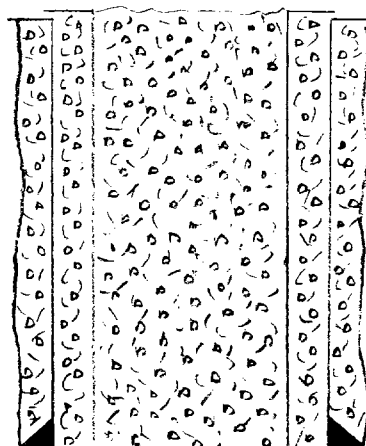
CENTRAL VACUUM UNIT # 91

LTR N, 660' FSL & 1980' FWL

SEC 36, T-17-S, R-34-E

P + Ad 8-9-91

GL 3991'



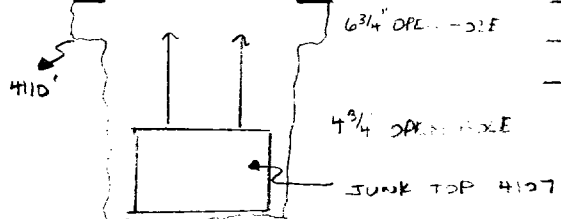
SQZ CSG LEAK WITH 1750 SX CMT
CIRC CMT INSIDE & OUTSIDE 5 1/2" CSG

SPOT 20 SX PLUG FROM 2817'-2617'

CIBP SET AT 4013' CAP W/ 25 SX CMT

7 5/8" 210.4# SET AT 1542'
IN 9 5/8" hole w/ 300 SX CMT
CMT CIRC TO SURF

5 1/2" 17# SET AT 4070'
IN 6 3/4" hole w/ 200 SX CMT
CMT TOP 2173' (60% Fill up)



TD 4710

NEW MEXICO "M" STATE #6

NE 1/4, NW 1/4

SEC 1, T18S, R-34E

1ST P.A'd 12-22-64 (REENTERED 6-76)

2ND P.A'd 10-22-80

DE 4006'

SPOT 50 SX PLUG FROM 100' TO SURF
(1964)

SPOT 50 SX PLUG AT SURFACE
(1980)

SPOT 125 SX PLUG FROM 1700' - 1400'
(1964)

SPOT 150 SX CMT AT 1395'
(1980)

1 1/4" 42* SET AT 1550'
IN 15' HOLE W/ 1050 SX CMT
CMT CIRC TO SURF

SPOT 200 SX CMT AT 2500'
(1964)

SPOT 300 SX CMT AT 2530'
(1980)

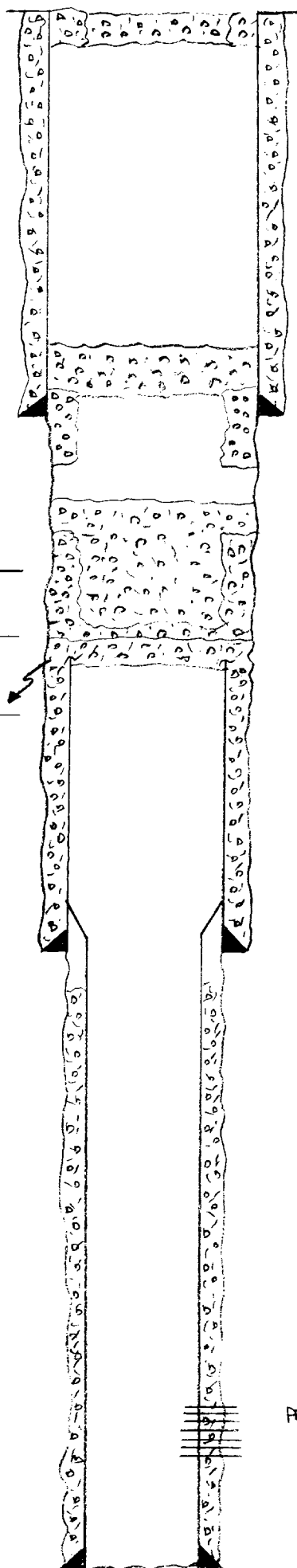
SPOT 25 SX CMT AT 2600'
(1964)

8 5/8" CG Failed, CUT & PULLED, TOP 2483'
(1964)

8 5/8" 24* SET AT 3400'
IN 11" HOLE W/ 350 SX CMT

PERFS 5954' - 6028'

4 1/2" 4.5* SET AT 6797' TO 3357'
IN 7 7/8" HOLE W/ 950 SX CMT
TOP 3820' BY Temp Survey



OFFSET OPERATORS WITHIN AREA OF REVIEW

<u>OPERATORS</u>	<u>LEASE</u>
Texaco Expl. & Prod. Inc. P. O. Box 730 Hobbs, New Mexico 88240	Vacuum Grayburg San Andres Unit
Texaco Expl. & Prod. Inc. P. O. Box 730 Hobbs, New Mexico 88240	Central Vacuum Unit
Phillips Petroleum Co. 4001 Penbrook Odessa, Texas 79762	M. E. Hale
Marathon Oil Company P. O. Box 552 Midland, Texas 79702	Warn State AC 2

SURFACE OWNERSHIP

T-18-S, R-34-E, NMPM

Section 1: N/2 NW/4

State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

Section 1: SW/4 NE/4, **SAVE AND EXCEPT** that part of a 22.57 acre tract as described in Patent dated 7/12/65 as recorded in Volume 6, Page 4 of the Patent Records of Lea County, New Mexico. (copy attached)

State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

Section 1: All that part of SW/4 NE/4 as described in Patent 6/4 described above.

Texaco Exploration & Production Inc.
1437 South Boulder
Tulsa, Oklahoma 74102

C. P. L. FORM 11

37835

State of New Mexico

No. 2925

PATENT FOR STATE LAND

STATE OF NEW MEXICO
COUNTY OF LEA
FILED

To All to Whom These Presents Shall Come, Greetings:

SEP 20 1965

Whereas, TEXACO, INC.,
of MIDLAND, State of TEXAS at 2:10 o'clock P. M.
and Recorded in Book _____
has S purchased from the
Page JANE RICE, County Clerk
By [Signature] Deputy

STATE OF NEW MEXICO

according to the provisions of law, the following described tract of land, viz: A tract of land located in the SE $\frac{1}{4}$ and the SW $\frac{1}{4}$ of Section 36, Township 17 South, Range 34 East of the NMPM; and in the NE $\frac{1}{4}$ and the NW $\frac{1}{4}$ of Section 1, Township 18 South, Range 34 East of the NMPM, Lea County, New Mexico, beginning at a point on the South line of said Section 36, North 89° 49' West, 578.4 feet from the Southeast corner of said Section 36 (a standard G.L.O. Rock corner, marked and in place); Thence North 0° 11' West 425 feet; Thence South, 89° 49' West, 1,161.6 feet; Thence South 0° 11' East, 825 feet; Thence South 88° 03' 50" East, 1,162.4 feet; Thence North 0° 11' West, 443 feet to the point and place of beginning describing 22.57 acres, more or less, according to Plat of Survey prepared by John W. Shearman, R.L.S. #1559, dated 11/12/63.

And whereas, the said TEXACO, INC.
has S paid to the STATE OF NEW MEXICO, through the State Land Office, the amount of Two Thousand Two Hundred Fifty Seven and No/100----- Dollars (\$ 2,257.00), the receipt whereof is hereby acknowledged in full.

Now, Therefore, Know Ye, that the STATE OF NEW MEXICO, by its Commissioner of Public Lands, its duly authorized officers according to law, does hereby
GRANT, BARGAIN, SELL and CONVEY
unto the said TEXACO, INC.
and to its successors
and assigns, the said tract of land above described, subject to valid, existing rights, easements, rights of way and reservations, and also subject to the right of the Commissioner of Public Lands, which is hereby expressly reserved, to renew and extend any existing water easements or leases, and the rents and revenue therefrom, if any, and in addition thereto reserving to the State of New Mexico all minerals of whatsoever kind, including oil and gas, in the lands so granted, and to it, or persons authorized by it, the right to prospect for, mine, produce and remove the same, and perform any and all acts necessary in connection therewith, upon compliance with the conditions and subject to the limitations of the laws of the State of New Mexico, such tract of land so conveyed being a portion of the lands granted to the State of New Mexico by the United States, pursuant to the Acts of Congress, approved June 21, 1898, and June 20, 1910 and May 28, 1928.

To Have and to Hold, the same, together with all the rights, privileges, immunities and appurtenances of whatsoever nature thereunto belonging or in anywise appertaining unto the said TEXACO, INC.
and to its successors
and assigns forever.

In Witness Whereof, the Commissioner of Public Lands of the State of New Mexico, has hereunto set his hand and affixed the official seal of the State Land Office, this 12th day of July A. D. 19 65

[Signature]
COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

37835





Texaco USA

PO Box 730
Hobbs NM 88240
505 393 7191

January 21, 1992

CERTIFIED MAIL

Phillips Petroleum Co.
4001 Penbrook
Odessa, Texas 79762

Gentlemen:

SUBJECT: FORM C-108 AND ATTACHMENTS
APPLICATION FOR AUTHORIZATION TO INJECT
VACUUM GRAYBURG SAN ANDRES UNIT, WELL NO'S 148, 149 & 150
SEC 1, T18S, R34E
LEA COUNTY, NM

It is our intent to convert the subject wells to water injection for expansion of our pressure maintenance project. The New Mexico Oil Conservation Division requires that the surface owners of the tracts on which proposed injectors are located and offset operators within 1/2 mile of the wells be furnished a copy of the application to inject.

Accordingly, attached is a copy of our application. Included are Form C-108, Application for Authorization to Inject, and attachments that were submitted to the State of New Mexico in support of the application.

Please contact Todd Lackey at (505) 393-7191 with questions.

Sincerely,

J. A. Head
Hobbs Area Manager

/wtl

Attachments



Texaco USA

PO Box 730
Hobbs NM 88240
505 393 7191

January 21, 1992

CERTIFIED MAIL

Marathon Oil Company
P.O. Box 552
Midland, TX 79702

Gentlemen:

SUBJECT: FORM C-108 AND ATTACHMENTS
APPLICATION FOR AUTHORIZATION TO INJECT
VACUUM GRAYBURG SAN ANDRES UNIT, WELL NO'S 148, 149 & 150
SEC 1, T18S, R34E
LEA COUNTY, NM

It is our intent to convert the subject wells to water injection for expansion of our pressure maintenance project. The New Mexico Oil Conservation Division requires that the surface owners of the tracts on which proposed injectors are located and offset operators within 1/2 mile of the wells be furnished a copy of the application to inject.

Accordingly, attached is a copy of our application. Included are Form C-108, Application for Authorization to Inject, and attachments that were submitted to the State of New Mexico in support of the application.

Please contact Todd Lackey at (505) 393-7191 with questions.

Sincerely,

J. A. Head
Hobbs Area Manager

/wtl

Attachments



Texaco USA

PO Box 730
Hobbs NM 88240
505 393 7191

January 21, 1992

CERTIFIED MAIL

State of New Mexico
P.O. Box 1148
Sante Fe, New Mexico 87504-1148

Gentlemen:

SUBJECT: FORM C-108 AND ATTACHMENTS
APPLICATION FOR AUTHORIZATION TO INJECT
VACUUM GRAYBURG SAN ANDRES UNIT, WELL NO'S 148, 149 & 150
SEC 1, T18S, R34E
LEA COUNTY, NM

It is our intent to convert the subject wells to water injection for expansion of our pressure maintenance project. The New Mexico Oil Conservation Division requires that the surface owners of the tracts on which proposed injectors are located and offset operators within 1/2 mile of the wells be furnished a copy of the application to inject.

Accordingly, attached is a copy of our application. Included are Form C-108, Application for Authorization to Inject, and attachments that were submitted to the State of New Mexico in support of the application.

Please contact Todd Lackey at (505) 393-7191 with questions.

Sincerely,

J. A. Head
Hobbs Area Manager

/wtl

Attachments



Texaco USA

PO Box 730
Hobbs NM 88240
505 393 7191

January 21, 1992

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

Gentlemen:

SUBJECT: EXPANSION OF PRESSURE MAINTENANCE PROJECT
VACUUM GRAYBURG SAN ANDRES UNIT (VGSAU)
VACUUM GRAYBURG SAN ANDRES POOL
LEA COUNTY, NM

We request administrative approval to convert three VGSAU wells to water injection. Order No. R-4442, dated November 1, 1972, authorized Texaco to operate the VGSAU pressure maintenance project within the subject pool.

The wells to be converted are the VGSAU Well No.'s 148, 149 & 150. Form C-108 and attachments are enclosed.

As required, copies of this application with attachments has been sent to the surface owners and offset operators.

Please contact Todd Lackey at (505) 393-7191 with questions.

Sincerely,

J. A. Head
Hobbs Area Manager

/wtl

Attachments

P 334 579 788

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	MARATHON OIL COMPANY
Street and No.	P.O. BOX 552
P.O., State and ZIP Code	MIDLAND, TEXAS 79702
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

U.S.G.P.O. 1989-234-555

PS Form 3800, June 1985

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 334 579 788

MAIL

P 334 579 790

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	PHILIPS PETROLEUM CO.
Street and No.	4001 PENNSAVER
P.O., State and ZIP Code	ODESSA, TEXAS 79762
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

U.S.G.P.O. 1989-234-555

PS Form 3800, June 1985

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 334 579 790

MAIL

P 334 579 789

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	STATE OF NEW MEXICO
Street and No.	P.O. BOX 1148
P.O., State and ZIP Code	SANTE FE, NM 87504-1148
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

U.S.G.P.O. 1989-234-555

PS Form 3800, June 1985

Fold at line over top of envelope to the right of the return address

CERTIFIED

P 334 579 789

MAIL

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

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 _____

One weeks.
Beginning with the issue dated

Dec. 22, 1991
and ending with the issue dated

Dec. 22, 1991

Kathi Bearden
General Manager
Sworn and subscribed to before

me this 23 day of

December, 1991

Marina Calvillo
Notary Public.

My Commission expires _____

July 22, 1995
(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
December 22, 1991

Notice is hereby given of the application of Texaco Producing Inc., Attention: James A. Head, Area Manager, P.O. Box 730, Hobbs, New Mexico, 88240, Telephone (805) 393-7191, to the New Mexico Oil Conservation Commission, Energy and Minerals Department, for approval of the following injection wells for the purpose of pressure maintenance.

Lease/Unit Name: Vacuum Grayburg San Andres Unit

Well Number(s) and Location(s):

148—	Unit Letter D,	1330	FNL & 660 FWL,	Section 1,	T18S,	R34E
149—	Unit Letter C,	1330	FNL & 1980 FWL,	Section 1,	T18S,	R34E
150—	Unit Letter G,	1390	FNL & 1980 FEL,	Section 1,	T18S,	R34E

The injection formation is Vacuum Grayburg San Andres at a depth of 4000 feet below the surface of the ground. Expected maximum injection rate is 1000 barrels per day, and expected maximum injection pressure is 1400 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2068, Santa Fe, New Mexico, 87501, within fifteen (15) days of this publication.

SUMMARY OF ORDER NUMBERS FOR TEXACO'S
VACUUM GRAYBURG-SAN ANDRES
PRESSURE MAINTENANCE PROJECT

R-4442	Nov. 1, 1972	Initiate secondary recovery
PMX-43	Jan. 31, 1973	Expansion
PMX-44	Jan. 31, 1973	Expansion
PMX-74	Jan. 8, 1979	Expansion
R-6094	Aug. 8, 1979	Remove the top unit allowable restriction
R-7010	May 26, 1982	Initiate tertiary recovery
R-7010-A	Jul. 30, 1982	Correction to R-7010
PMX-120	Nov. 2, 1982	Expansion

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4852
Order No. R-4442

APPLICATION OF TEXACO INC FOR A
PRESSURE MAINTENANCE PROJECT AND
SPECIAL RULES THEREFOR, LEA
COUNTY, NEW MEXICO.

*Rule
3
Amended by
R-6094*

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 1, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27th day of November, 1972, 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, Texaco Inc., seeks authority to institute a pressure maintenance project in its Vacuum Grayburg San Andres Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, by the injection of approximately 1,500 barrels of water per day into the Grayburg and San Andres formations through each of eight injection wells proposed to be drilled at unorthodox locations in Sections 1 and 2, Township 18 South, Range 34 East, NMPM.

(3) That the applicant also seeks authority to drill seven additional producing wells at unorthodox locations in said Sections 1 and 2.

(4) That the applicant further seeks the designation of a project area and the promulgation of rules for the project area, including provision for the assignment of top unit allowable to all wells in the project area, top unit allowable to each of the 15 additional injection and producing wells to be drilled in the project area, and an additional 75 percent of top unit allowable to be assigned to each well in the project area as a bonus allowable for the injection of water.

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Case No. 4852

Order No. R-4442

(5) That a pressure maintenance project area comprising all of the Vacuum Grayburg San Andres Unit Area, being all of Sections 1 and 2, the NE/4 NE/4 of Section 11, and the N/2 NW/4 of Section 12, all in Township 18 South, Range 34 East, is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That top unit allowable for the Vacuum Grayburg-San Andres Pool should be assigned to all wells in the project area upon initiation of substantial water injection, and each of the proposed 15 additional wells should also receive top unit allowable upon completion. That the project allowable should be the sum of the allowables assigned to the wells in the project area and should be permitted to be produced from any well in the project area, provided however, that any producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply should not be permitted to produce in excess of top unit allowable for the pool without a showing at public hearing that substantial response to water injection has occurred in said well.

(7) That approval of the proposed eight injection wells and seven producing wells, all at unorthodox locations, and the proposed pressure maintenance project, subject to the provisions of Finding No. (6) above, will not cause but will prevent waste and will protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc, is hereby authorized to operate a pressure maintenance project in its Vacuum Grayburg San Andres Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, to be designated the Texaco Vacuum Grayburg-San Andres Pressure Maintenance Project, by the injection of water into the Grayburg and San Andres formations through eight injection wells to be drilled at the following unorthodox locations in Township 18 South, Range 34 East, NMPM:

<u>LEASE NAME</u>	<u>WELL NO</u>	<u>LOCATION</u>	<u>SECTION</u>
New Mexico "M" State	11	2630' FNL & 1310' FWL	1
New Mexico "M" State	12	1330' FNL & 2630' FWL	1
New Mexico "AC" NCT-1 State	11	2630' FSL & 1330' FEL	2
New Mexico "AC" NCT-1 State	14	1400' FSL & 2550' FEL	2
New Mexico "AC" NCT-1 State	16	1400' FSL & 10' FEL	2
New Mexico "R" NCT-3 State	20	1310' FSL & 2630' FEL	1
New Mexico "R" NCT-3 State	23	100' FSL & 1420' FWL	1
New Mexico "Z" NCT-1 State	8	2630' FNL & 1310' FWL	2

(2) That the applicant is hereby authorized to drill seven additional producing wells in its Vacuum Grayburg San Andres

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Case No. 4852
Order No. R-4442

Pressure Maintenance Project at the following unorthodox locations in Township 18 South, Range 34 East, NMPM:

<u>LEASE NAME</u>	<u>WELL NO</u>	<u>LOCATION</u>	<u>SECTION</u>
New Mexico "M" State	10	1330' FNL & 1330' FWL	1
New Mexico "AC" NCT-1 State	12	2630' FSL & 2630' FWL	2
New Mexico "AC" NCT-1 State	15	1400' FSL & 1300' FEL	2
New Mexico "R" NCT-3 State	17	2630' FSL & 2630' FEL	1
New Mexico "R" NCT-3 State	18	2630' FSL & 10' FWL	1
New Mexico "R" NCT-3 State	19	1330' FSL & 1330' FWL	1
New Mexico "R" NCT-3 State	22	100' FSL & 100' FWL	1

(3) That Special Rules and Regulations governing the operation of the Texaco Vacuum Grayburg-San Andres Pressure Maintenance Project are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
TEXACO INC. VACUUM GRAYBURG-SAN ANDRES
PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Texaco Inc. Vacuum Grayburg-San Andres Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
Sections 1 and 2: All
Section 11: NE/4 NE/4
Section 12: N/2 NW/4

RULE 2. The allowable for the project area shall be known as the project allowable and shall be equal to top unit allowable for the Vacuum Grayburg-San Andres Pool times the number of wells in the project area completed in the Grayburg and/or San Andres formations for production from, or injection into, said formations.

RULE 3. The project allowable may be produced from any well or wells completed in the Vacuum Grayburg-San Andres Pool in the project area, provided however, that any well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall not be permitted to produce in excess of top unit

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Case No. 4852
Order No. R-4442

allowable for the Vacuum Grayburg-San Andres Pool until it has been established after notice and hearing that such well has experienced a substantial response to water injection.

RULE 4. Each producing well in the project area shall be subject to the limiting gas-oil ratio (2500 to one) for the Vacuum Grayburg-San Andres Pool.

RULE 5. Each month the project operator shall, by the 15th day of the month, submit to the Hobbs district office of the Commission a report for the previous month showing average daily water injection into each injection well, total water injected into each well, and total cumulative water injected into each well. The report shall also list each producing well, and average daily and total monthly production from same, together with a nomination of proposed daily allowable for each of said wells for the following month. The aforesaid report shall be filed in lieu of Form C-120 for the project.

RULE 6. The Commission shall, upon review of the report and after any adjustments deemed necessary in accordance with Rules 3 and 4 of these rules, assign an allowable to each of the various producing wells in the project area for the next succeeding month.

RULE 7. The conversion of producing wells to injection, or the drilling of additional wells for injection purposes shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the Project operator shall file application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following:

(1) A plat showing the location of proposed injection well, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth showing that the injection of water will be confined to the Grayburg and San Andres formations.

(3) A letter stating that all offset operators within one-half mile of the proposed injection well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed injection well, if within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

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Case No. 4852

Order No. R-4442

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

RULE 8. Additional producing wells may also be drilled at unorthodox locations anywhere within the project area not closer than 1320 feet of the outer boundaries of the project area. The Secretary-Director of the Commission shall have authority to grant permission to drill any well within the provisions of this rule without notice and hearing.

(4) That the effective date of the allowable provisions of this order shall be the date that actual water injection operations commence in a minimum of four of the eight authorized injection wells.

(5) 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
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

APPLICATION OF TEXACO INC. TO
EXPAND ITS VACUUM GRAYBURG-SAN ANDRES
PRESSURE MAINTENANCE PROJECT IN THE
VACUUM GRAYBURG - SAN ANDRES POOL IN
LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER PMX-43

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-4442, Texaco, Inc. has made application to the Commission on January 31, 1973, for permission to expand its Vacuum Grayburg-San Andres Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

NOW, on this 6th day of February, 1973, the Secretary-Director finds:

1. That application has been filed in due form.
2. That the proposed producing wells at unorthodox locations are eligible for approval under the terms of Order No. R-4442.
3. That the proposed expansion of the above-referenced pressure maintenance project will not cause waste nor impair correlative rights.
4. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., be and the same is hereby authorized to drill to the Grayburg-San Andres formation, the following described producing wells, to wit:

Well No. 14, 1500 feet FSL and 1500 feet FWL of Section 2,
Well No. 20, 1330 feet FSL and 1330 feet FEL of Section 1,
Well No. 44, 1330 feet FNL and 1330 feet FWL of Section 2,
Well No. 46, 1405 feet FNL and 1230 feet FEL of Section 2, and
Well No. 50, 1330 feet FNL and 1330 feet FEL of Section 1, all
in Township 18 South, Range 34 East, NMPM.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.
Secretary-Director

S E A L

APPLICATION OF TEXACO INC.
TO EXPAND ITS VACUUM GRAYBURG-
SAN ANDRES PRESSURE MAINTENANCE
PROJECT IN THE VACUUM GRAYBURG-
SAN ANDRES POOL IN LEA COUNTY,
NEW MEXICO.

ORDER NO. PMX-44

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-4442, Texaco Inc. has made application to the Commission on January 31, 1973, for permission to expand its Vacuum Grayburg-San Andres Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

NOW, on this 20th day of February, 1973, the Secretary-Director finds:

1. That application has been filed in due form.
2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
3. That no objection has been received within the waiting period as prescribed by Order No. R-4442.
4. That the proposed injection wells are eligible for water injection under the terms of Order No. R-4442.
5. That the proposed expansion of the above-referenced pressure maintenance project will not cause waste nor impair correlative rights.
6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., be and the same is hereby authorized to inject water into the Grayburg-San Andres formation through the following described wells for purposes of pressure maintenance, to wit:

Well No. 35 located 2630' FNL and 1330' FEL of Section 1,
Well No. 45 located 1310' FNL and 2530' FNL of Section 2, and
Well No. 47 located 1330' FNL and 10' FEL of Section 2, all
in Township 18 South, Range 34 East, NMPM.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.
Secretary-Director

S E A L

APPLICATION OF TEXACO, INC. TO
EXPAND ITS PRESSURE MAINTENANCE
PROJECT IN THE VACUUM GRAYBURG
SAN ANDRES POOL IN LEA COUNTY,
NEW MEXICO

ORDER PMX NO. 74

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-4442, Texaco, Inc. has made application to the Division on January 8, 1979, for permission to expand its Vacuum Grayburg-San Andres Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool in Lea County, New Mexico.

NOW, on this 29th day of January, 1979, the Division Director finds:

1. That application has been filed in due form.
2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
3. That no objection has been received within the waiting period as prescribed by Order No. R-4442.
4. That the proposed injection well is eligible for conversion to water injection under the terms of Order No. R-4442.
5. That the proposed expansion of the above referenced water flood project will not cause waste nor impair correlative rights.
6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco, Inc., be and the same is hereby authorized to inject water into the Grayburg and San Andres formations through plastic-lined tubing set in packers at approximately 50 feet above the uppermost perforations in the following described wells for purposes of secondary recovery, to wit:

Vacuum Grayburg San Andres Unit Well No. 59, located in Unit E, and Vacuum Grayburg San Andres Unit Well No. 60, located in Unit D; both in Section 2, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico.

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.

That 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.

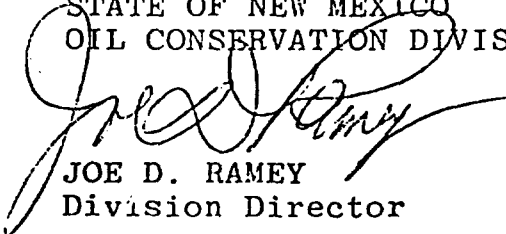
✓ That the injection wells or system shall be equipped with a pop-off valve or device which will limit the wellhead pressure to a maximum of 900 pounds per square inch; provided however that the Division Director may administratively authorize a pressure limitation in excess of the above upon the operator's establishing that such higher pressure will not result in fracturing of confining strata.

✓ That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said wells;

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Division Director

S E A L

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6614
Order No. R-6094

APPLICATION OF TEXACO INC. FOR
THE AMENDMENT OF ORDER NO. R-4442,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 8, 1979,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 10th day of September, 1979, the Division
Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.
- (2) That the applicant, Texaco Inc., seeks the amendment
of Order No. R-4442 to remove the top unit allowable restriction
from producing wells in the Vacuum Grayburg San Andres Unit
which are offset by "lease line" injection wells.
- (3) That the applicant is conducting a pressure maintenance
project in said Vacuum Grayburg San Andres Unit Area.
- (4) That lease line injection wells are in operation along
or around over 50 percent of the unit boundary.
- (5) That the top unit allowable restrictions for producing
wells along the border of said Vacuum Grayburg San Andres Unit
should be removed.

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Case No. 6614

Order No. R-6094

(6) That Rule 3 of the Special Rules and Regulations for the Texaco Inc. Vacuum Grayburg San Andres Pressure Maintenance Project as promulgated by Division Order No. R-4442 should be amended to read in its entirety as follows:

"RULE 3. That the project area allowable may be produced from any well within the project area in any proportion provided, however, that any proration unit situated on the boundary of the Vacuum Grayburg San Andres Unit which proration unit is not directly or diagonally offset by a San Andres injection well located either closer to the boundary of or outside the Vacuum Grayburg San Andres Unit shall not be permitted to produce in excess of 80 barrels of oil per day until it has been established after notice and hearing that such well has experienced a substantial response to water injection."

IT IS THEREFORE ORDERED:

(1) That effective September 1, 1979, Rule 3 of the Special Rules and Regulations for the Texaco Inc. Vacuum Grayburg San Andres Pressure Maintenance Project as promulgated by Division Order No. R-4442 is hereby amended to read in its entirety as follows:

"RULE 3. That the project area allowable may be produced from any well within the project area in any proportion provided, however, that any proration unit situated on the boundary of the Vacuum Grayburg San Andres Unit which proration unit is not directly or diagonally offset by a San Andres injection well located either closer to the boundary of or outside the Vacuum Grayburg San Andres Unit shall not be permitted to produce in excess of 80 barrels of oil per day until it has been established after notice and hearing that such well has experienced a substantial response to water injection."

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

S E A L
fd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7591
Order No. R-7010

APPLICATION OF TEXACO, INC. FOR
AMENDMENT OF DIVISION ORDER NO.
R-4442 AND APPROVAL OF A TERTIARY
OIL RECOVERY PROJECT UNDER THE CRUDE
OIL WINDFALL PROFITS TAX ACT OF 1980,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 26, 1982, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 30th day of June, 1982, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Texaco, Inc., seeks authority to convert its Vacuum Grayburg-San Andres pressure maintenance project to a polymer-augmented waterflood, and pursuant to Section 212.78 of the United States Department of Energy Regulations and Section 4993 of the Internal Revenue Code seeks certification of said project as a Qualified Tertiary Oil Recovery Project.

(3) That said pressure maintenance project lies within the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

(4) That said pool was discovered in May, 1929, by Socony Vacuum Oil Company, experienced substantial development thereafter with waterflooding being initiated during 1973.

(5) That Texaco, Inc., Vacuum Grayburg-San Andres Pressure Maintenance Project, consisting of approximately 1486 acres was

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Case No. 7591
Order No. R-7010

approved by said Division Order No. R-4442 on November 27, 1972 and water injection was commenced within said Project beginning in 1973.

(6) That the applicant now seeks approval for the installation of tertiary recovery polymer-augmented waterflood by the injection of polyacrylamide polymers into 25 project wells, and the designation of a qualifying tertiary recovery project area covering said pressure maintenance project.

(7) That the New Mexico Oil Conservation Division has been designated by the Governor of the State of New Mexico as the appropriate agency to approve Qualified Tertiary Recovery Projects in New Mexico for purpose of the Crude Oil Windfall Profits Tax Act of 1980.

(8) That the proposed Qualifying Tertiary Project Area (QTP Area) lies wholly within said Vacuum Grayburg-San Andres Pressure Maintenance Project in the Texaco Vacuum Grayburg San Andres Unit Area and consists of the following described acreage:

TOWNSHIP 17 SOUTH, RANGE 34, EAST, NMPM
Section 35: E/2 SW/4

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
Sections 1 and 2: All
Section 11: NE/4 NE/4
Section 12: N/2 NW/4

containing 1486 acres more or less.

(9) The proposed project is a tertiary recovery method described in Section 212.78(c) of the Department of Energy Regulations, and as defined in Section 4993(d)(1) of the Internal Revenue Code, and Section 150.4933-1(c).

(10) The proposed Tertiary Recovery Project is expected to result in the recovery of an additional 1,700,000 barrels of crude oil which the Division finds is more than an insignificant increase in the ultimate recovery of crude oil.

(11) The injection of polyacrylamide polymers will improve mobility ratio and vertical conformance, and the Texaco QTP Area project is designed, and will be operated, in accordance with sound engineering principles.

(12) The entire Vacuum Grayburg-San Andres Pressure Maintenance Project will be affected and it is adequately delineated.

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Case No. 7591

Order No. R-7010

(13) That the QTP Area tertiary recovery operations beginning date is after May, 1979, as scheduled polymer injection will begin during July, 1982.

(14) That past production from the Vacuum Grayburg-San Andres Pool underlying the Vacuum Grayburg-San Andres Unit Area is 33,440,000 barrels through June 30, 1982. Future recovery without the proposed tertiary recovery project is estimated to be 30,390,000 barrels of oil. With the proposed tertiary recovery project an additional 1,700,000 barrels of oil will be recovered resulting in a total production of 32,090,000 barrels of oil.

(15) The Vacuum Grayburg-San Andres Unit presently has thereon 46 producing wells, 13 injection wells and 3 shut-in production wells, and 1 water supply well. Twelve production wells will be converted to injection wells which will change the injection pattern from an inverted nine spot to a five spot with 40 acre injection patterns. In addition, lease line injections are also planned along the northwestern unit boundary. All injection wells located in the Vacuum Grayburg-San Andres Unit will receive polymer-augmented injection.

(16) The projected future expense for the proposed tertiary project is nine million six hundred forty thousand dollars (\$9,640,000) for the cost of the polymer and ninety thousand dollars (\$90,000) for polymer handling equipment.

(17) That the proposed tertiary recovery operations within said QTP Area meet all requirements of Section 4993 of the Internal Revenue Code.

(18) That the approval of this application will prevent waste, protect correlative rights and promote conservation, provided however, that the production limitation provisions of Rules 2 through 6 of Division Order No. R-4442, dated November 27, 1972, as amended by Division Order No. R-6094, dated September 1, 1979, should remain in effect.

IT IS THEREFORE ORDERED:

(1) That effective July 1, 1982, the Qualifying Tertiary Recovery Project Area, described in Finding No. (8) of this Order, being The Texaco Inc. Vacuum Grayburg-San Andres Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, is hereby approved as a Qualified Tertiary Recovery Project under the Crude Oil Windfall Profits Tax Act of 1980.

(2) That the applicant, Texaco Inc., is hereby authorized to inject water and polyacrylamide polymers into the approved

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Case No. 7591
Order No. R-7010

injection wells in this unit, and that Division Order No. R-44 dated November 27, 1972, is hereby amended to allow the injection of said polymers.

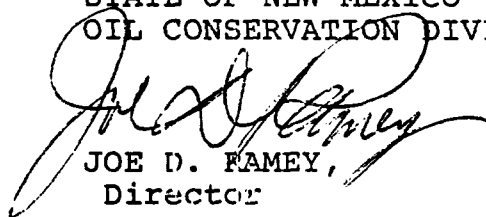
IT IS FURTHER ORDERED:

(1) That the production limitation provisions of Rules 2 through 6 of Division Order No. R-4442, as amended by Division Order No. R-6094, shall remain in full force and effect until further order of the Division.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY,
Director

S E A L

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

CASE NO. 7591
Order No. R-7010-A

APPLICATION OF TEXACO, INC. FOR
AMENDMENT OF DIVISION ORDER NO.
R-4442 AND APPROVAL OF A TERTIARY
OIL RECOVERY PROJECT UNDER THE CRUDE
OIL WINDFALL PROFITS TAX ACT OF 1980,
LEA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R-7010, dated June 30, 1982, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED:

(1) That Finding No. (8) on page 2 of Order No. R-7010 is hereby amended to read in its entirety as follows:

"(8) That the proposed Qualifying Tertiary Project Area (QTP Area) lies wholly within said Vacuum Grayburg-San Andres Pressure Maintenance Project in the Texaco Vacuum Grayburg San Andres Unit Area and consists of the following described acreage:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
Section 35: W/2 SW/4

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
Sections 1 and 2: All
Section 11: NE/4 NE/4
Section 12: N/2 NW/4

containing 1486 acres more or less."

(2) That the corrections set forth in this order be entered nunc pro tunc as of June 30, 1982.

DONE at Santa Fe, New Mexico, on this 30th day of November, 1982.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

S E A L
fd/

APPLICATION OF TEXACO INC. TO EXPAND ITS
PRESSURE MAINTENANCE PROJECT IN THE
VACUUM GRAYBURG-SAN ANDRES POOL IN
LEA COUNTY, NEW MEXICO

ORDER No. PMX-120

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-4442, Texaco Inc. has made application to the Division on November 2, 1982, for permission to expand its Vacuum Grayburg-San Andres Unit Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool in Lea County, New Mexico.

NOW, on this 17th day of November, 1982, the Division Director finds:

1. That application has been filed in due form.
2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
3. That no objection has been received within the waiting period as prescribed by Rule 701 B.
4. That the proposed injection well is eligible for conversion to water injection under the terms of Rule 701.
5. That the proposed expansion of the above referenced pressure maintenance project will not cause waste nor impair correlative rights.
6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc, be and the same is hereby authorized to inject water into Grayburg-San Andres formations through plastic-lined tubing set in a packer at approximately 50 feet above the top most perforations in the following described wells for purposes of pressure maintenance to wit:

- Vacuum Grayburg San Andres Unit Well No. 18, K-1-18S-34E;
- ✓Vacuum Grayburg San Andres Unit Well No. 62, C-2-18S-34E;
- ✓Vacuum Grayburg San Andres Unit Well No. 63, B-2-18S-34E;
- ✓Vacuum Grayburg San Andres Unit Well No. 65, M-35-17S-34E;
- ✓Vacuum Grayburg San Andres Unit Well No. 67, L-35-17S-34E;

all in Lea County, New Mexico.

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.

That 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.

That the injection wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to a maximum of 875 pounds per square inch; provided however that the Division Director may administratively authorize a pressure limitation in excess of the above upon the operator's establishing that such higher pressure will not result in fracturing of the confining strata.

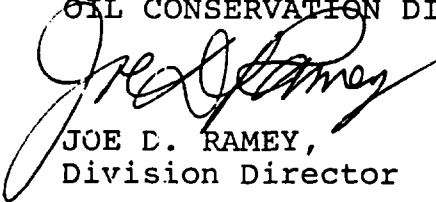
That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said wells.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said wells or the leakage of water from or around said wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

That the subject wells shall be governed by all provisions of Division Order No. R-4442 and Rules 702, 703, 704, 705 and 706 not inconsistent herewith.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JOE D. RAMEY,
Division Director

S E A L

Est. 1-3650

1 (117) from 604 (H) 6-31

AY - Livingston

RECOMMENDED REMEDIAL WORK

Date 7-23-81

Lease VACUUM GRAYBURG SAN ANDRES UNIT Well No. 35 (INT) TX. Work Int. 100%
 Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
 All depths measured from KB or 3994 ft. from ground level.
 TX. Comp. Date 3-27-73 @ T. D. 4800 I. P. Oil — Water 500 Gas — MCF
 GOR — Hrs 24 (INJECTION) Pump. E.D. Present T. D. 4788 Elevation 3994' DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM SAN ANDRES	4360	4737	PRESENT INJECTION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 3/8"	20#	K-55	357	300	12 1/4"	—	CMT. CIRC.
4 1/2"	9.5#	J-55	4800	650	7 7/8"	4360-4737	Cmt. Top AT 1030' BY CBL SQUEEZED 7-74 TO 510'

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before				Treatment			Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water
3-27-73	NEW WELL				ASIO	6000	4360	4737	INT	500
7-10-74	SQUEEZED CASING LEAK				CLASS H	300 SX @ 1039'			INT	30
10-14-74	30 BHPD			24	ACID	9000 GAS	4360	4737	INT	900
12-80	ATTEMPTED SQUEEZE JOB				AND	CASING COLLAPSED @ ~1000' OF DEPTH				

Remarks: THIS WELL HAS BEEN SHUT-IN SINCE DECEMBER, 1980. Approx. 45 psi flow on braden-head
 Present Allow (INT) INJECTION Accum. 1601,703 as of 7-1-81

T-1980
 Present Test: Oil — Water 720 BPD Gas — GOR — Hrs 24 INJECTION
 Choke Size 1 1/2" (SI) Pressure 0 Tbg Pressure 1950 psi

Reasons for Remedial Work: TO REPLACE THE COLLAPSED CASING DOWN TO 1100' : 50' Below the ORIGINAL CEMENT TOP AT 1050' AND THEREBY RETURN THIS WELL TO ACTIVE INJECTION STATUS.

Petroleum Engineering Recommendations and Procedure:

- 1) RIG UP PULLING UNIT, REVERSE UNIT AND HIGH LIME MUD SYSTEM
- 2) RUN FREE POINT ON 4 1/2" - 9.5# CASING AND MECHANICALLY CUT AND RECOVER AS MUCH CASING AS POSSIBLE (NOTE 1976 BOND LOG)
- 3) CUT SEGMENTS OF THE 4 1/2" CASING (AS NECESSARY).
 WASH OVER EACH SEGMENT WITH 6 5/8" WASH PIPE AND RECOVER EACH SEGMENT WITH 4 1/2" CASING SPEAR (OR OVERSHOT WITH GRAPES)
 STABILIZE THE "RED BED" WHILE OPERATING WITH 9.5PPG LIME MUD. — CONT —
 CMT: H. H. Livingston

R. S. Lane P.E.
 District Petroleum Engineer

WWT 7-23-81
 Reviewed and Approved By:

Division
 Engineering
 Geological
 Gen'l. Supt.

	CASH	MOH	TOTAL	TEXACO
EXP. 1976	126650	19900	146350	146350
INV.	0	0	0	0
TOTAL	126650	19900	146350	146350

Approved
 Date

PROD. INCR (TX%)	56.1561
PAYOUT	5 MONTHS
P. W. I.	11.2

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LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease
State ☒ Fee ☐

5. State Oil & Gas Lease No.
B-1733-1

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection	7. Unit Agreement Name Vacuum Grayburg San Andres Unit
2. Name of Operator Texaco Inc.	8. Term of Lease (Years) Vacuum Grayburg San Andres Unit
3. Address of Operator P.O. Box 728, Hobbs, New Mexico 88240	9. Well No. 35
4. Location of Well UNIT LETTER G 2630 FEET FROM THE North LINE AND 1330 FEET FROM THE East LINE, SECTION 1 TOWNSHIP 18-S RANGE 34-E N.M.P.M.	10. Field and Pool, or WHdeat Vacuum Grayburg San Andres
15. Elevation (Show whether DF, RT, GR, etc.) 3988' (DF)	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER **Repair casing** ☒

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

1. Rigged up. Pull 881' (22 Jts) 4½"Csg. Install BOP.
2. Clean out to 903'. Recover addl. 129'Csg. Clean out. Ran 1040' 4½" 10.5# Csg.
3. Spot 10 sx. Cement plug from 4009'-3879'.
4. Spot 10 sx. Cement plug from 2786'-2656'.
5. Cement 4½"Csg w/350 sx. class 'H' cement containing 2% CaCl. Top of cement @ 800' by temperature survey. WOC. DOC. Tested 4½"Csg to 1000# for 30 minutes, 10:15-10:45 AM, 10-1-81.
6. Drill out plugs. Clean out.
7. Ran 2 3/8" OD plastic coated tbg w/pkr & set @ 4200'. Load Annulus w/inhibited water.
8. Return to injection 11-11-81.

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

SIGNED *Jerry Sinton* TITLE Asst. Dist. Mgr. DATE 11-12-81

APPROVED BY Jerry Sinton TITLE DATE NOV 16 1981

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OPERATOR	

MINERAL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-77

3a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-1733-1	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <u>Water Injection Well</u>		7. Unit Agreement Name <u>Vacuum Grayburg San Andres Unit</u>
2. Name of Operator <u>Texaco Inc.</u>		8. Farm or Lease Name <u>—</u>
3. Address of Operator <u>P. O. Box 728, Hobbs, NM 88240</u>		9. Well No. <u>35</u>
4. Location of well UNIT LETTER <u>G</u> <u>2630</u> FEET FROM THE <u>North</u> LINE AND <u>1330</u> FEET FROM THE <u>East</u> LINE, SECTION <u>1</u> TOWNSHIP <u>18S</u> RANGE <u>34E</u> RMPM.		10. Field and Pool, or WHDCat <u>Vacuum Grayburg San Andres</u>
15. Elevation (Show whether DF, RT, GR, etc.) <u>3988' DF</u>		12. County <u>Lea</u>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☒
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOB ☐
OTHER ☐
ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 1) MIRU PU. Installed BOP. TOH w/2 3/8" duolined tbg. & pkr.
- 2) TIH w/3 7/8" bit and clean out to 4744'.
- 3) TOH w/bit.
- 4) Perforated 4 1/2" csg at 4254-4338', 1 spf.
- 5) TIH w/pkr and 631' tailpipe. Set pkr at 3516'.
- 6) Acidize perfs 4254-4737 w/8000 gal. gelled 15% NEFE in 3 stages, 2/4000 lb rocksalt. Air 5.3 F
- 7) TOH w/pkr and workstring
- 8) TIH w/inj. pkr on 2 3/8" duoline tbg. Found leak in csg.
- 9) Set RBP at 4216'. Repaired leak in wellhead, Could not retrieve RBP. Cut over RBP and pushed to bottom. TOH w/shoe.
- 10) TIH w/inj pkr on 2 3/8" duoline tbg, circ. pkr fluid, set pkr at 4174', and tested csg to 500 psi for 30 min. OK.
- 11) Resumed injection. Rate 303 BPD at 1075 psi.

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

SIGNED J. W. Browning TITLE District Admin. Supervisor DATE 03/21/86

ORIGINAL SIGNED BY JERRY SEXTON

APPROVED BY DISTRICT 1 SUPERVISOR

TITLE

DATE

APR 2 - 1986

CONDITIONS OF APPROVAL, IF ANY:

Est. - 6-4420
IDC WO: This is the initial workover on the subject well under tertiary recovery injection operations which () or (will be) initiated in -21, 1982.

Form PD-88 (M)

RECOMMENDED REMEDIAL WORK

(116)

Case/Vacuum Grayburg, San Andres Unit Well No. 38 Date 9/15/86
Tool/Vacuum Grayburg, San Andres County Lea TX. Work Int. 1002-
All depths measured from KB or 11 ft. from ground level State New Mexico
X. Comp. Data 2-31-40 @ T. D. 4710 I. P. Oil 273 Water 0 Gas 214 MCF
GOR 783 Hrs 8 Pump. Flow. Present T. D. 4710 Elevation 4033 KB BT

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg, San Andres	4079	4710	Present Producing Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 7/8"	32	LW	1597	200	10		Cnt Circ. (observed)
5 1/2"	17	Sals	4079	200	6 3/4		Cnt top @ 2300' (ok. 607, All)
					4 3/4	open hole	4079-4710

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment		To	Production Test After			
	Oil	Water	GOR	Hrs		Amount	From		Oil	Water	GOR	Hrs
8-31-70	Initial Completion				Actual		4079	4710	273	0	783	2F
2-16-71	NA				152 NEA	500	4079	4710	66	0	-	24P
3-29-71	43	0	860	24P	Gas Frac	30/30	4079	4710	105	27	970	24P
2-23-80	48	0	222	24P	A/Frac	13,000/60/15	4079	4710	50	40	320	24P
12-7-81	77	46	-	24P	Brhd sg	750 sxs	1625	150				
					converter/A	500	4079	4710	173	32	870	24P

Remarks: This will be the first workover since the initiation of tertiary recovery.

Present Allow 148 Max. Allow. Unit Accum. Prod. 985,898 as of 4/86

Present Test: Oil 101 Water 2 Gas 33 GOR 326 Hrs 24 Pump. Eff.

Pumping equipment: Lufkin M-6400-30S-144, 1 3/4" pump, 9 spm, 128" stk, 215 BFPD capacity @ 80%
Choke Size Pressure Tag Pressure

Reasons for Remedial Work: It is recommended to cleanout junk in the hole and acidize the San Andres pay for a production increase of 40 BOPD, a payout of 5 months, a ICFROI of 1000% and a PWI of 5.22.

Petroleum Engineering Recommendations and Procedure:

- 1) Rig up, pull rods and pump, install BOP, tag TD, FOH.
- 2) If necessary, TIH with 4 3/4" bit and cleanout to top of junk. FOH.
- 3) Go in hole with a shoe and 60' of wash pipe, wash over fish, wash to TD of 4710'. Cut a 1' core and FOH. If fish is not recovered, TIH with 2 7/8" tubing overshot. Recover fish and pull out of hole.

viewed and Approved By:
District

Geological Asst. Supt. W. B. Lick
Supt.

Division

Engineering
Geological
Gen'l. Supt.

Approved
Date

	CASH	MOH	TOTAL	TEXACO
IMP-IDC	31,000	0	31,000	31,000
INV.	0	0	0	0
TOTAL	31,000	0	31,000	31,000

SAW 9/5/86
A. Y. 9-15-86

PROD. INCR (TX%)	40 (40)
PAYOUT	5 months
P. W. I.	5.22

RECOMMENDED REMEDIAL WORK

1-41, 1972 San 00-00 (01)

Date 6/12/87

Est. 7-4829 I-6

San Antonio Unit Well No. 39

TX. Work Int. 100%

San Antonio County 459

State New Mexico

measured from NE or 8 ft. from ground level.

Comp. Date 8-4-40 T. D. 4710 I. P. Oil 1236

Water 0 Gas 791 MCF

HD Hrs 24 Pump. Flow. Present T. D. 4710

Elevation 4014 DP

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg San Antonio	4090	4710	Present Completion Interval

CASINO AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 3/8	37	LW	1590	300	10	-	Cent. Circ. (observed)
5 1/2	17	Smis	4090	200	6 3/4	-	Calc top @ 2400' (60% fill)
					4 3/4	open hole	4090-4710

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
8-4-40	Initial Completion				Natural		4090	4710	1236	0	640	24F
3-15-68	0	0	-	24	Frac	30/30	4090	4710	74	9	1419	24P
4-11-78	124	31	1096	24	15% NEA	3000	4090	4710	118	65	1096	24P

Remarks: This will be the first workover since the initiation of tertiary recovery.

Recent Allow. 190 Max. Allow. Unit Accum. Prod. 1,215,593 as of 12/31/86

Recent Test: Oil 100 Water 23 Gas 50 GOR 507 Hrs 24 Pump. Flow.

Pumping equipment: Luffkin 640-305-144, 12 1/2" stk, 8SPM, 1 3/4" pmp, runtime 40%.

Reason for Remedial Work: It is recommended to cleanout and acidfrac with 15,000 gals of 15% X-Linked NEEF to obtain a production increase of 20 BOPD. This will yield a payout of 6 months, a PWE of 9.57 and a OCFOT of 754.9.

Problems Engineering Recommendations and Procedure:

- 1) RUPU, pull rods and pump, install BOP, POH w/ tubing.
- 2) RU reverse unit and cleanout to 4710' with 4 3/4" bit. Fill approx at 4660'. Spot 15 bbls of ammonium bicarbonate across open hole. STOR
- 3) Go in hole with 5 1/2" treating packer with 4 stands of tailpipe. Set packer at 4030'. Pump 1000 gals of 20% NEEF across open hole.

J. J. Sieman

District Petroleum Engineer

Reviewed and Approved By:

District
Geological
Asst. Supt.
Supt.

Division

Engineering
Geological
Gen'l. Supt.

Approved
Date

7-14-87

	CASH	MUN	TOTAL	TEARAD
SP-1DC	31,000	0	31,000	31,000
INV.	0	0	0	0
TOTAL	31,000	0	31,000	31,000

PROD. INCR (TX) 20 (20)
PAYOUT 6 months
P. W. L. 9.57 OCFOT 754.9

SCN 5-10-77

Don 6/10/87

PJL 6-12-87

6-12-87

operations which (were) or (will be) initiated in 7-21, 1982

RECOMMENDED REMEDIAL WORK

File no. (M) K-36

Drilling Norman - Bullock

Date 2/11/86

Lease Vacuum Grayburg San Andres Unit Well No. 40 TX. Work Int. 100 %
Pool Vacuum Grayburg San Andres County Lea State New Mexico
All depths measured from DF or 10 ft. from ground level.
TX. Comp. Date 7-3-40 T. D. 4710 I. P. Oil 52 Water 0 Gas 27 MCF
GOR 459 Hrs 5 Pump. Flow. Present T. D. 4710 Elevation 4008 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg San Andres	4676	4710	Present completion interval

CASINO AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 3/4"	28	NA	1559	300	10 3/4		cont. G.C. (observed)
5 1/2"	17	NA	4076	700	4 3/4		cont. Top @ 2110 / (ok. 607 ft. fill)
					4 3/4	4076-4710	open hole

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
7-3-40					Natural		4076	4710	58	0	459	5F
12-15-71	60	0	NA	24F	15% A	1000	"	"	82	0	630	24F
7-12-72	25	0	NA	24F	15% A	3000	4070	4710	24	7	2270	24F
11-13-72	30	1	NA	24F	LOF	20/10	4074	4710	127	5	2776	24F
4-23-74	47	12	NA	24F	Enisfrac	10/12.5	4076	4710	69	17	2379	24F
9-23-77	37		NA	24F	Alcoat	6000/2000	4076	4710	39	32		
11-30-78	64	0	572	24F	Edohead sp.	4000	4076	4710				
					15% MEA	3000	4076	4710	52	20	459	24F

Remarks: This will be the first workover since the initiation of tertiary recovery.

Present Allow. 161 Max. Allow. Unit Accum. Prod. 874,429 as of 12/85

Present Test: Oil 105 Water 18 Gas 37 GOR 382 Hrs 24 Pump. Flow.

pumping equipment: 1 3/4" pump, 9500, 84" STK, time 100%, capacity @ 2000-2100, eff 53%, 142 jts

Choke Size

Pressure

Tbg Pressure

Reasons for Remedial Work: It is recommended to cleanout and acidize the San Andres

pay in order to obtain a production increase of 30 BOPD. This will yield a payout of 5 months, a PWT of 4.93 and a ICFRST of 1000.

Petroleum Engineering Recommendations and Procedure:

- 1) RUP, full rods & pump, install BFA, PTH w/ tubing. If necessary cleanout to 4710. Set 10 barrels of scale converter SION.
- 2) Go in hole with 5 1/2" treating packer and 4 stands of tailpipe.
- 3) Set packer at 4000'. Switch back residue load backside and prepare to acidize.
- 4) Establish injection with water. Drop 500 lbs rock salt and 500 lbs

completed

J. J. Seeman
District Petroleum Engineer

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

W. B. White

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

	CASH	MOH	TOTAL	REMARKS
EXP. IDC	2000	0	2000	
INV.	0	0	0	
TOTAL	2000	0	2000	

2/11/86 4-8-11-86

and 1-1-86

PROD. INCR. (BOPD)	30
PAYOUT	4 months
P. W. I.	13.63

476
401/4723
HJC WO: This is the initial workover on the subject well under secondary recovery injection operations which (were) or (will be) initiated in 10/1/73, 1973.

OK-8-13-73

Est. # 4723

Form PD-40 (M)

RECOMMENDED REMEDIAL WORK

Lease VACUUM GB-SA UNIT Well No. 41 Date _____
Pool VACUUM GB-SAN ANDRES County LEA TX. Work. Int. 100%
All depths measured from KB or _____ ft. from ground level. State NEW MEXICO
TX. Comp. Date 1-16-38 @ T. D. 4550 I. P. Oil 193 Water 0 Gas — MCF
GOR 1660 Hrs. 7 Pump. Flow. Present T. D. 4710 Elevation 4003 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>SAN ANDRES</u>	<u>4450</u>	<u>4710</u>	<u>PRESENT COMPLETION INTERVAL</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>13"</u>	<u>40#</u>	<u>NA</u>	<u>260</u>	<u>250</u>	<u>16</u>	<u>NONE</u>	<u>CMT. CIRC.</u>
<u>9 5/8"</u>	<u>40#</u>	<u>NA</u>	<u>1554</u>	<u>350</u>	<u>12 1/4</u>	<u>NONE</u>	<u>CALC. CMT. TOP @ 539 @ 100% S&L</u>
<u>7"</u>	<u>24#</u>	<u>NA</u>	<u>4100</u>	<u>250</u>	<u>8 5/8</u>	<u>NONE</u>	<u>CALC. CMT. TOP @ 2713 @ 100% S&L</u>
<u>5 1/2"</u>	<u>17#</u>	<u>N-80</u>	<u>4445</u>	<u>25</u>	<u>6 1/4</u>	<u>NONE</u>	<u>LINER SET 4003-4445</u>
					<u>4 3/4</u>	<u>OPEN HOLE</u>	<u>4445 - 4710</u>

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
<u>1-16-38</u>	<u>INITIAL COMPLETION</u>				<u>NATURAL</u>		<u>4100</u>	<u>4710</u>	<u>193</u>	<u>0</u>	<u>1660</u>	<u>7(F)</u>
<u>2-27-54</u>	<u>50</u>	<u>0</u>	<u>5070</u>	<u>8(F)</u>	<u>SOI FORMATION PKR @ 4380</u>				<u>152</u>	<u>0</u>	<u>933</u>	<u>24(F)</u>
<u>12-21-71</u>	<u>40</u>	<u>0</u>	<u>—</u>	<u>24(F)</u>	<u>FRAC</u>	<u>39000</u>	<u>4100</u>	<u>4550</u>	<u>17</u>	<u>5</u>	<u>2140</u>	<u>24(F)</u>
<u>4-5-72</u>	<u>17</u>	<u>14</u>	<u>21,427</u>	<u>24(F)</u>	<u>SET LINER 4003-4445 DRILL TO 4710</u>				<u>93</u>	<u>2</u>	<u>860</u>	<u>24(F)</u>
<u>4-29-82</u>					<u>Repair Water Flow</u>	<u>425 SACKS @ 1565</u>						
						<u>75 SACKS @ 1400</u>						

Remarks:

Present Allow. UNIT Max. Allow. UNIT Accum. Prod. 549,574 as of 1-1-72
8-1-72

Present Test: Oil 51 Water 0 Gas — GOR — Hrs. 24 Pump. Flow:

Choke Size — Pressure — Tbg Pressure —

Reasons for Remedial Work: To INCREASE PRODUCTION BY 80 BOPD BY HYDRAULIC FRACTURING THE SUBJECT WELL. THIS WELL IS IN THE VICINITY OF WELLS THAT HAVE BEEN FRACTURED FOR SUBSTANTIAL PRODUCTION INCREASES (SEE ATTACHED TABULATION SHEET). THE SUBJECT WELL HAS NEVER BEEN FRACTURED AND BASED ON PREVIOUS RESULTS ON SIMILAR WELLS, FRACTURING THIS WELL WILL INCREASE PRODUCTION BY 80 BOPD. THIS WELL IS IN THE VACUUM (G-SA) PRESSURE MAINTENANCE PROJECT WHICH IS NOT CAPABLE OF PRODUCING TOP ALLOWABLE. THIS WORK-OVER WILL AID IN OBTAINING TOP ALLOWABLE PRODUCTION.

Petroleum Engineering Recommendations and Procedure:

- 1) RIG UP & PULL RODS, PUMP, AND TUBING.
- 2) RUN 3" FRACTURING & RTTS TOOL, SET RTTS INSIDE (5 1/2") LINER AT 4350.
- 3) FRAC OPEN HOLE WITH 30,000 GAL EMULSIFRAC * IN 3 STAGES AS FOLLOWS: a) 5000 GAL 15% NE, b) 2000 GAL EMULSIFRAC PAD, c) 1000 GAL EMULSIFRAC W/ 1 1/2" GAL 20-40 SD, d) 2000 GAL EMULSIFRAC W/ 1 1/2" GAL 20-40 SD, e) 3500 GAL EMULSIFRAC W/ 2" GAL 20-40 SD, f) 1500 GAL EMULSIFRAC W/ 2" GAL 10-20 SD, * FRAC FLUID TO BE 70% OIL + 30% KCl WTR. CONTAINING 25 LB/1000 GAL ADOMITE AQUA. PUMP 500 GAL EMULSIFRAC W/ 400# ROCK SALT BETWEEN STAGES. FLUSH W/ LEASE CRUDE.
- 4) SWAB TO CLEAN UP & PULL TUBING & PACKER.
- 5) RUN TUBING, RODS, & PUMP, & RETURN TO PRODUCTION

Frac Dowell

T.H. Hoover ECH
District Petroleum Engineer

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

Division

Engineering

Geological

Gen'l. Supt.

	CASH	MOH	TOTAL	TEXACO
<u>EXP. IDC</u>	<u>9100</u>	<u>0</u>	<u>9100</u>	<u>9100</u>
<u>INV.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Approved
Date

DMD - Buckeye

8-3757

Expense Type Workover

RECOMMENDED REMEDIAL WORK

(1167

Form PD-88 (H)
F-27

Lease VACUUM GRAYBURG SAN ANTONIO Unit Well No. 43 Date 4/26/88
Pool VACUUM GRAYBURG SAN ANTONIO County LEA TX. Work. Int. 100
All depths measured from KB or 11 ft. from ground level. State NM
TX. Comp. Date 11/4/39 @ T. D. 4710 I. P. Oil 261 Water 0 Gas 185 MCF
GOR 707 Hrs. 6F Pump. Flow. Present T. D. 4710 Elevation 3992 KB DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM GRAYBURG SAN ANTONIO	4090	4710	PRESENT PRODUCTION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 5/8	28.00	LW	1486	300	10	-	CMT CIRC (OBSERVED)
5 1/2	14.00	EW	4090	200	6 3/4	-	CMT TOP @ 2400 (60%)
					6 1/4	4090 - 4710	OPEN HOLE

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment		To	Production Test After			
	Oil	Water	GOR	Hrs		Amount	From		Oil	Water	GOR	Hrs
11/4/39	INITIAL	COMPLETION			NATURAL		4090	4710	261	0	707	6F
12/27/71	51	0	1371		ISONEA	1000	4090	4710	87	0	1575	24F
3/31/74	80	8	-		REDONDED SPS	400 SXS	2460	-	86	7	1955	24P
1/28/86	401	6	341		PEAM/ISONEA	12000	4100	4710	496	35	322	24P
5-11-88					Redon/Sps	400 SXS UNIT C	1505	CMT CIRC TO SURF				

Remarks: 12D H.P. CENTRILIFT HUGHES SUB. PUMP 23 M34
10 269
12 648
227 M34
Present Allow. 623 Max. Allow. UNIT Accum. Prod. 1,637,246 as of 12/1/87

Present Test: Oil 449 Water 19 Gas - GOR 366 Hrs 24 Pump. Flow. 3/22/88

Choke Size Pressure Tbg Pressure

Reasons for Remedial Work: NMOCD REQUIRED. WELL HAS WTR FLOW UP THE ANNULUS,

Petroleum Engineering Recommendations and Procedures:

- ① RIGUP PULLING UNIT. POH W/SUB AND TRG.
- ② TIH W/ CIBP. SET @ 100' ABOVE 5 1/2" CSG. CHOE, LOAD HOLE AND TEST CIBP, SPOT 25XS. SAND, POH.
- ③ PERF ~ 1505'-1510' W/ 1 (ONE) JET SHOT (NOT IN COLLAR).
- ④ TIH W/ PKR AND TRG, SET @ 1400', ATTEMPT TO CIRC. TO SURFACE THROUGH FLOW CHANNEL, AND/OR ESTB. PUMP-IN RATE. POH W/ PKR AND TRG.
- ⑤ TIH W/ CEMENT RETAINER SET @ 1400'.
- ⑥ PUMP 400 SXS. CLASS "C" W/ 290 C.C. AND 1500 GALS. FLO-CHEK IN THREE STAGES, CIRC. CEMENT TO SURFACE, SI SURFACE VALVE AND SQUEEZE LAST 200 SXS. DOWN CHANNEL.
- ⑦ DOC AND TEST, AND IF NECESSARY RESQUEEZE.
- ⑧ TIH W/ SUB PUMP AND RETURN TO PRODUCTION.

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

District Petroleum Engineer

WTL 4/26/88

Dmp 4/26/88

AP 4/26/88

4-29-88

DMD - Duckburg
IDC WO: This is the initial workover on the subject well.

operations which (were) or (will be) initiated in _____ for tertiary recovery injection

RECOMMENDED REMEDIAL WORK

Est. 9-4258

Less Vacuum Granular San Andres Unit Well No. 46 WIW TX. Work Int. 100%
Foot Vacuum Granular San Andres County Lea State New Mexico
All depths mentioned from KB or 11 ft. from ground level.
TK. Comp. Date 3/12/73 T.D. 4700 I.P. Oil 99 Water 7 Gas 226 MOF
GOR 2225 Hrs 24 Pump. H/W. Present T.D. 4728 PB Elevation 4019 KB BP

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone Top Base Remarks

Vacuum Granular San Andres 4219 4697 Present Injection Interval

CASING AND LINER RECORD

Size Weight Grade Set At Sacks Cement Hole Size Perft. Remarks

8 5/8 20 H-40 356 300 12 1/4 - cmt circ. (reserved)

5 1/2 14 K-55 4700 500 8 7/8 4319-4697 cmt top @ 4565 (60%)

COMPLETION AND REMEDIAL WORK RECORD

Date Production Test Before Oil Water GOR Hrs Type Treatment Amount From To Production Test After Oil Water GOR Hrs

3/12/73 Initial Completion 20% NEA 990 4319 4697 99 7 2225 24P

7/14/74 46 3 24 Frac 20/39 " " 129 7 1530 24P

9/11/82 52 24 875 24 Convert Eng. Above " " Inj 203 @ 0 PSI

Remarks: This will be the first workover since the initiation of tertiary recovery.

Present Allow. _____ Max. Allow. _____ Inj 571,115 6/88
_____ 864 PSI _____ Actual Prod. 229,564 as of 9/82

Present Test: Oil _____ Water _____ Inj 111 @ 700 PSI GOR _____ Hrs _____ Injection Pump. Press. _____

Reasons for Remedial Work: To increase injection into the subject well by 150 BWP and thereby reduce offset production decline from 19.9 to 16.3%. This will result in the recovery of 86 MB of additional reserves and

Petroleum Engineering Recommendations and Procedure:

- 1) RUPU, release packer, install BOP.
- 2) TOH w/ injection tubing and packer.
- 3) TIH w/ 4 3/8" bit and 2 7/8" workstring and cleanout to 4728' (PBD). POH
- 4) TIH w/ RBP and PKR. Set RBP at 4720'. Spot 450 gals 15% HFE across packer. Pull up and set PKR at 4565'.

Reviewed and Approved By:

District _____
Geological _____
Asst. Supt. _____
Supt. _____

Division

Engineering _____
Geological _____
Gen'l. Supt. _____

Approved _____
Date _____

	CASH	MOH	TOTAL	TXFEE
BWP-IDC	22.00		22.00	22.00
INV.	-		-	-
TOTAL	22.00		22.00	22.00

PROD. INCR (TX%)	WIW 1
PAYOUT	12 months
P.W.L.	22.16 (CFRSE 310.7)

SLI 1/3/84
P.W.L. 3/4/83

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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

WELL FILE

WELL API NO.
30-025-24364

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

OIL WELL ☐ GAS WELL ☐

OTHER Injection

2. Name of Operator

Texaco Producing Inc.

3. Address of Operator

P.O. Box 730

Hobbs, N.M.

4. Well Location

Unit Letter H : 1455 Feet From The North Line and 1230 Feet From The East Line

Section 2 Township 18S Range 34E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

4018 DF

7. Lease Name or Unit Agreement Name

Vacuum Grayburg San Andres Unit

8. Well No.

46

9. Pool name or Wildcat

Vacuum Grayburg San Andres

11.

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

REMEDIAL WORK ☒

ALTERING CASING ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☐

PULL OR ALTER CASING ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103. 6-25-90 thru 7-4-90

1. MIRV P.U. — Rel pkr — TOH w/inj tbg — TIH w/4.75 bit — c/o to 4788

2. Spot 450 gal. NA Perborate across perfs 4319 - 4697 TOH w/tbg

3. RV Rotary — perf csg. w/2 JSPI @ 4412, 16, 53, 60, 65, 4510. 13, 17, 38, 45, 90, 97, 4608, 26, 37, 42, 4730, 34, 49, 66, 69, 75, 79, 85. (24 int. 48 Holes)

4. STIH w/pkr set @ 3685 TP @ 4235

5. Acidized perfs 4519 - 4785 w/ 6000 gal 15% NEFE in 3 stages w/3000 lbs rock salt & 83 1.3 SG BS - Max 2700, Min 1500, AIR 4 BPM, TSIP 1400, 15 min 1050

6. Back flow well - TOH w/pkr laying down WS - TIH w/inj pkr & tbg set @ 4265 are pkr fld. Test 30 min to 500 psi. set to inj.

Prior 210 BWPD @ 1240 psi After 349 BWPD @ 1200 psi

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

SIGNATURE

Richard DeSoto

TITLE

Engineering Technician

DATE

7-28-90

TYPE OR PRINT NAME

Richard DeSoto

TELEPHONE NO.

(This space for State Use)

ORIGINAL SIGNED BY FIELD SECTION

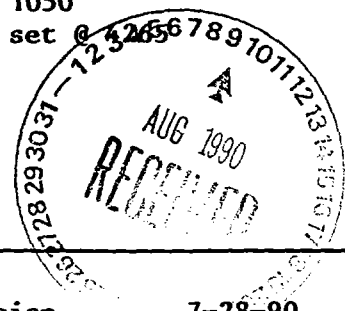
DISTRICT I, NEW MEXICO

APPROVED BY

TITLE

DATE

ADDITIONS OF APPROVAL, IF ANY:



AUG - 9 1990

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Form O-103
Revised 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. B-657-1	

1a. TYPE OF WELL	
OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>
DRY <input type="checkbox"/>	OTHER INJECTION
b. TYPE OF COMPLETION	
NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>
DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>
DIFF. RESVR. <input type="checkbox"/>	OTHER <input type="checkbox"/>

7. Unit Agreement Name Vacuum Grayburg
8. Farm or Lease Name San Andres Unit

2. Name of Operator TEXACO, INC.
3. Address of Operator P.O. Box 720, Hobbs, New Mexico 88240
4. Location of Well

9. Well No. 47
10. Field and Pool, or Wildcat Vacuum Grayburg San Andres

UNIT LETTER H	LOCATED 1330	FEET FROM THE North	LINE AND 10	FEET FROM
THE East	LINE OF SEC. 2	TWP. 10-S	RGE. 34-E	NMPM

12. County Leon

15. Date Spudded 3-24-73	16. Date T.D. Reached 4-1-73	17. Date Compl. (Ready to Prod.) 4-4-73	18. Elevations (DF, RKB, RT, GR, etc.) 4003' GR	19. Elev. Casinghead 4003
20. Total Depth 4300'	21. Plug Back T.D. 4700'	22. If Multiple Compl., How Many	23. Intervals Drilled By Rotary Tools	Cable Tools
24. Producing Interval(s), of this completion - Top, Bottom, Name				25. Was Directional Survey Made No
26. Type Electric and Other Logs Run OR-N				27. Was Well Cored No

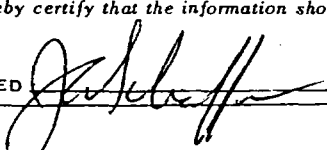
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
5/8"	20	355'	12 1/4"	300 SX	
4 1/2"	9.5	4000'	7 7/8"	500 SX	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	4,300'	4,300'

31. Perforation Record (Interval, size and number) 2 3/8" API 64501, 93, 44, 37, 10, 20, 31, 65, 75, 25, 4500, 15, 20, 34, 45, 62, 69, 75, 89, 94, 4520, 24, 32, 30, 59, 66, 77, 4700, 19, 29 & 4739'	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL 4,501-4,735 AMOUNT AND KIND MATERIAL USED 500 gal. 20% HCl
---	--

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By
35. List of Attachments	

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief Assistant District Superintendent		
SIGNED 	TITLE	DATE 4-5-73

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL FILE

WELL API NO. <u>30-025-24365</u>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-867-1
7. Lease Name or Unit Agreement Name Vacuum Grayburg San Andres Unit
8. Well No. 47
9. Pool name or Wildcat Vacuum Grayburg San Andres
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4003 GR

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Injection	2. Name of Operator Texaco Producing Inc.
3. Address of Operator P.O. Box 730 <u>Hobbs, NM</u>	4. Well Location Unit Letter <u>H</u> : <u>1330</u> Feet From The <u>North</u> Line and <u>10</u> Feet From The <u>East</u> Line Section <u>2</u> Township <u>18S</u> Range <u>34 54E</u> NMPM Lea County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4003 GR	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
OTHER: <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103. 6-12-90 thru 6-25-90
1. MIRV P.U. - back flow - NV BOP - TOH w/tbg & pkr - TIH w/ 3.875 bit, DC & WS, c/o to 4800'
 2. Spot 300 gal 4Z NA Perborate across perfs 4361 - 4739 TOH w/bit
 3. RV Rotary WL - perf guns found tight spot @ 1075'
 4. Swage csg @ 1075 - guns well not go - TIH w/pkr set @ 1500' - well head will not test - TOH
 5. TIH w/RBP set @ 1547 - repair wellhead - NV BOP - TIH w/tbg - TOH w/RBP
 6. RV WL - perf 4.5 csg w/2 JSPI @ 4403, 12, 20, 34, 46, 55, 96, 4512, 25, 50, 58, 81, 85, 4616, 46, 4712 (16 mt. 32 holes)
 7. Acidize perfs 4361 - 4739 w/6000 gal 15% NEFE in 3 stages w/3000 lbs rock salt & 46 1.1 SG BS Max 1800, Nin 800 AIR 4 BPM, ISIP 900 15min 650
 8. TOH w/pkr TIH w/inj pkr & tbg - circ hole w/pkr fld set pkr @ 4280 test csg to 500' for 30 min

Prior 314 BWPD @ 820 pdi After 521 BWPD @ 1320 psi

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

SIGNATURE Richard DeSoto TITLE Engineering Technician DATE 8-28-90

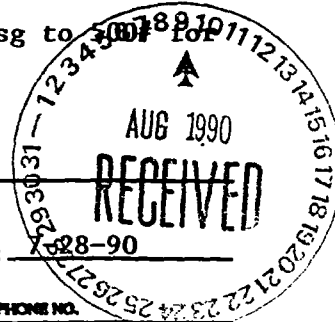
TYPE OR PRINT NAME Richard DeSoto

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



AUG - 9 1990

RECOMMENDED REMEDIAL WORK

Est #60080077

Date 10-15-90

Base Vacuum Grayburg San Andres Unit Well No. 48 WNW Tx. Work Int. 100%
 Pool Vacuum Grayburg San Andres Unit County Lea State New Mexico
 All depths measured from KB or 11 ft. from ground level.
 RX. Comp. Date 2-8-73 @ T.D. 4800 I.P. Oil 216 Water 11 Gas 495 M
 GOR 2296 Hrs. 24 Pump. Flow. Present T.D. 4788 PP Elevation 4005 KB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg San Andres	4280	4730	Present Injection Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 5/8	20	H-40	355	300	11 3/4	-	Cmt Circ. (observed)
5 1/2	14	K-55	4800	500	7 7/8	4280-4730*	

* Perfs (2 ISPF): 4280, 84, 93, 4301, 10, 14, 27, 33, 45, 50, 56, 67, 72, 89, 4402, 10, 38, 45, 75, 80, 90, 96
 4506, 26, 36, 42, 66, 74, 81, 4646, 59, 62, 78, 88, 4705, 13, 19, & 4730. (38 intervals)

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment			Production Test After				
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
2-8-73	Initial - Completion				20% NEFF	8000	4389	4730	216	11	2296	24 P
4-27-74	82	0	NA	24 P	Emulsifier	20/28	4389	4730	162	18	1987	24 P
1-26-83	Convert to Injection				15% NEFF	500	4389	4730	Inj.	800 BWPD	on Vac.	
8-23-87	Inj 240 @ 750 psi				15% Gelled NF	9000	4280	4730	Inj	562 BWPD @ 625 psi		

Remarks:

Present Allow Press. 875 Max. Allow Press. 895 Accum. Prod. 1,190,897 as of 7-90

Present Test: Inj 62 Water @ 875 Gas - GOR - Hrs. 24 Inj Pump. Flow

Choke Size _____ Pressure _____ Tbg Pressure _____

Reasons for Remedial Work: Clean-out and stimulate to increase water injection

Petroleum Engineering Recommendations and Procedure:

See Attached

District Petroleum Engineer

Reviewed and Approved By:

District
 Geological _____
 Asst. Dist. Mgr. _____
 Dist. Manager _____

Division
 Engineering _____
 Geological _____
 Gen'l. Supt. _____

Approved _____

Date _____

PROD. INC: TX. 1

	CASH	MOH	TOTAL	TEXACO
EXP	25,100			
INV.				

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
2-1080-1

1a. TYPE OF WELL
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Injection
b. TYPE OF COMPLETION
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐

2. Name of Operator
TEXACO Inc.
3. Address of Operator
P. O. Box 728, Hobbs, New Mexico 88240
4. Location of Well

7. Unit Agreement Name
Vacuum Grayburg San Andres Unit
8. Farm or Lease Name
Vacuum Grayburg San Andres Unit
9. Well No.
49
10. Field and Pool, or Wildcat
Vacuum Grayburg San Andres

UNIT LETTER F LOCATED 1390 FEET FROM THE North LINE AND 250 FEET FROM THE West LINE OF SEC. 1 TWP. 10-S RGE. 34-E NMPM
12. County
Lea

15. Date Spudded
2-3-73
16. Date T.D. Reached
2-11-73
17. Date Compl. (Ready to Prod.)
2-15-73
18. Elevations (DF, RKB, RT, GR, etc.)
3391' GR
19. Elev. Casinghead
3391'
20. Total Depth
4600'
21. Plug Back T.D.
4700'
22. If Multiple Compl., How Many
→
23. Intervals Drilled By
Rotary Tools
24. Producing Interval(s), of this completion — Top, Bottom, Name
4800'
25. Was Directional Survey Made
No

26. Type Electric and Other Logs Run
Compensated Neutron Log
27. Was Well Cored
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	20	350	12 1/4"	300 bx.	
4 1/2	9.5	4600	7 7/8"	552 bx.	

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 3/8	4323'	4323'

31. Perforation Record (Interval, size and number) **2 JSPI @ 4373, 93, 4402, 09, 41, 45, 55, 75, 89, 4502, 08, 16, 24, 30, 37, 44, 54, 73, 79, 89, 4600, 08, 24, 28, 77, 85, 93, 4700, 05, 18, & 4731.**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4373-4731	6000 gals. 20% NEA

33. PRODUCTION

Date First Production _____ Production Method (Flowing, gas lift, pumping — Size and type pump) _____ Well Status (Prod. or Shut-in) _____

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.) _____ Test Witnessed By _____

35. List of Attachments _____

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED *[Signature]* TITLE Asst. Dist. Supt. DATE 2-16-73

Vacuum Grayburg
SA Unit 11-3-2
(EXP)

49 11-29-76 8-5/8" @ 358
4-1/2" liner
@ 4373-4731

RU Well Units 11-29-76. Pld
inj tbg & pkr. Western Co.
ran E-Z Drill cnt rttr on
wireline set in 4-1/2" csg
@ 4175'. Perf 4-1/2" csg w/
spiral gun @ 4065-4067 (6
shots). Job comp 4:30 p.m.
11-29-76. Prep to run tbg &
pkr to tst perf.

No. of Days: Cash:
Est: 13 Est: \$22,000
Comm: 1 Comm: \$ 2,000

4800
4788
PB

Vacuum Grayburg
SA Unit 12-1/
(EXP)

49 11-29-76 8-5/8" @ 358
4-1/2" liner
@ 4373-4731

Set pkr 4035'. P/into perfs
4065-4067'. Would not break
dn. Pushed pkr dn 1 jt. Load
bkside. Spt 200 gals 15% HCl
acid. Pld up, set pkr @ 4035'.
Could not pump into perfs.
Moved bk dn, P/1 bbl. Pld
up, set pkr. P/into perfs.
Max press 2500#, broke bk to
1600#. P/1/2 BPM @ 1600#,
2 BPM @ 1900#. P/10 BFW.
ISIP 1600#, 15 min SIP 600#.
Load 74 BFW. Unseat pkr.
P/dn bkside. RU. S/31 bbls
fluid in 2 hrs.

No. of Days: Cash:
Est: 13 Est: \$22,000
Comm: 2 Comm: \$ 3,000

4800 4800
4788 4788
PB PB

Vacuum Grayburg
SA Unit 12-2
(EXP)

49 11-29-76 8-5/8" @ 358
4-1/2" liner
@ 4373-4731

S/2 hrs, 70 BFW. S/dry. FL
4030' FS. Prep to pull tbg
& pkr.

No. of Days: Cash:
Est: 13 Est: \$22,000
Comm: 3 Comm: \$ 4,000

4800 4800
4788 4788
PB PB

Vacuum Grayburg
SA Unit 12-3
(EXP)

49 11-29-76 8-5/8" @ 358
4-1/2" liner
@ 4373-4731

Pld tbg & pkr. Ran stinger
on tbg. Stung into rttr. Set
to inj.

No. of Days: Cash:
Est: 13 Est: \$22,000
Comm: 4 Comm: \$ 5,000

4800 4800
4788 4788
PB PB

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

Form C-103
Revised 10-1-78

3a. Indicate Type of Lease

State ☒ Fee ☐

5. State Oil & Gas Lease No.

B-1080-1

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER- Injection Well

2. Name of Operator

Texaco Inc.

3. Address of Operator

P. O. Box 728, Hobbs, NM 88240

4. Location of Well

UNIT LETTER F 1390 FEET FROM THE N LINE AND 2580 FEET FROM
THE West LINE, SECTION 2 / TOWNSHIP 18S RANGE 34E NMPM.

7. Unit Agreement Name
Vacuum Grayburg
San Andres Unit

8. Farm or Lease Name

9. Well No.

49

10. Field and Pool, or Wildcat

Vacuum Grayburg San
Andres

15. Elevation (Show whether DF, RT, GR, etc.)

3991 GR

12. County

Lea

16.

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐OTHER ☐PLUG AND ABANDON ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☒COMMENCE DRILLING OPNS. ☐CASING TEST AND CEMENT JOBS ☐OTHER ☐ALTERING CASING ☐PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 1) Rig up. Install BOP, pull packer & 2 3/8 tubing.
- 2) Cleanout to 4778 with 3 7/8" bit.
- 3) Perforated 4 1/2" csg w/1 JSPF from 4284-4360.
- 4) Acidized pers w/8000 gals 15% NEFE in 3 stages w/4000 lb rocksalt between stages. Max psi 2000, min 1200, air 5.5 BPM. ISIP 200.
- 5) TIH w/4 1/2 Baker loc set to 4153, load backside w/pkr fluid, set and tested to 500 lbs.
- 6) Return to inj. Rate 480 BPD @ 700 psi.

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

SIGNED JW BrowningTITLE District Admin. SupervisorDATE 03/07/86

ORIGINAL SIGNED BY JERRY SEXTON

DISTRICT 1 SUPERVISOR

TITLE

DATE

MAR 14 1986

CONDITIONS OF APPROVAL, IF ANY:

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U.S.G.S.		
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OPERATOR		

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Revised 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-1733-1	

1a. TYPE OF WELL	
OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>
b. TYPE OF COMPLETION	
NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>
DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>
DIFF. RESVR. <input type="checkbox"/>	OTHER <input type="checkbox"/>

7. Unit Agreement Name
Vacuum Grayburg
8. Form of Lease Name
San Andres Unit
9. Well No.
50
10. Field and Pool or Wildcat
Vacuum Grayburg
San Andres

2. Name of Operator
TEXACO Inc.

3. Address of Operator
P. O. Box 728 Hobbs, New Mexico 88240

4. Location of Well
UNIT LETTER G LOCATED 1330 FEET FROM THE North LINE AND 1330 FEET FROM
THE East LINE OF SEC. 1 TWP. 18-S RGE. 34-E INMPM

12. County
Lea

15. Date Spudded
2-19-73
16. Date T.D. Reached
3-4-73
17. Date Compl. (Ready to Prod.)
3-8-73
18. Elevations (DF, RKB, RT, GR, etc.)
3990' GR
19. Elev. Casinghead
3990'

20. Total Depth
4800'
21. Plug Back T.D.
4788'
22. If Multiple Compl., How Many
23. Intervals Drilled By
4800'
Rotary Tools
Cable Tools

24. Producing Interval(s) of this completion - Top, Bottom, Name
2 JSPI @ 4389, 94, 98, 4402, 28, 33, 40, 48, 73, 80, 94, 4503, 21, 25, 30, 36, 41, 47, 56, 63, 80, 92, 95, 4675, 82, 90, 4703, 33, & 4743'
25. Was Directional Survey Made
No

26. Type Electric and Other Logs Run
Compensated Neutron Log
27. Was Well Cored
Yes

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	20	354'	12 1/2"	300 BX.	
5 1/2"	14	4800	7 7/8"	500 BX.	

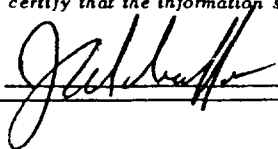
29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8"	4776'	

31. Perforation Record (Interval, size and number) 2 JSPI @ 4389, 94, 98, 4402, 28, 33, 40, 48, 73, 80, 94, 4503, 21, 25, 30, 36, 41, 47, 56, 63, 80, 92, 95, 4675, 82, 90, 4703, 33, & 4743'.			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
			DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
			4389-4743'	8000 gal. 20% NEA

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
3-8-73		Pumping				Prod.	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
3-12-73	24	-	213	213	495	13	2325
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
-	-	213	213	495	13	36	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)
Sold - TEXACO Inc.
Test Witnessed By
A. J. Gernandt

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.		
SIGNED 	TITLE Asst. Dist. Supt.	DATE 3-13-73

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-71

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
B-1733-1

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT --" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name Vacuum Grayburg San Andres Unit
2. Name of Operator TEXACO Inc.	8. Form or Lease Name Vacuum Grayburg San Andres Unit
3. Address of Operator P. O. Box 728, Hobbs, New Mexico 88240	9. Well No. 50
4. Location of Well UNIT LETTER G 1330 FEET FROM THE North LINE AND 1330 FEET FROM THE East LINE, SECTION 1 TOWNSHIP 18-S RANGE 34-E NMPM.	10. Field and Pool, or WHdcat Vacuum Grayburg San Andres
15. Elevation (Show whether DF, RT, GR, etc.) 3990' (GR)	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER ☒ Convert to Water Injection

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Rig up. Pulled rods & pump. Checked TD W/tubing.
2. Washed perfs. 4389'-4743' W/500 gals. 15% NE Acid. Flush well.
3. Pulled tubing.
4. Ran 2 3/8" OD plastic coated tubing W/pkr. Set pkr. @ 4344'.
5. Load Annulus W/inhibited water.
6. Convert to water injection, 4-11-83.

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

SIGNED Jerry Sexton TITLE Asst. Dist. Mgr. DATE 4-15-83

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APR 20 1983

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

L CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-103
Revised 10-1-78

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LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-1733	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- Injection Well	7. Unit Agreement Name Vacuum Grayburg San Andres Unit
2. Name of Operator Texaco Inc.	8. Farm or Lease Name
3. Address of Operator P. O. Box 728, Hobbs, NM	9. Well No. 50
4. Location of Well UNIT LETTER <u>G</u> , <u>1330</u> FEET FROM THE <u>N</u> LINE AND <u>1330</u> FEET FROM THE <u>East</u> LINE, SECTION <u>1</u> TOWNSHIP <u>18S</u> RANGE <u>34E</u> NMPM.	10. Field and Pool, or Wildcat Vacuum Grayburg San Andres
15. Elevation (Show whether DF, RT, GR, etc.) 4003' KB	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 1) Rig Up. Install BOP, pull packer and 2 3/8 tubing.
- 2) Cleanout to 4763' with 4 3/4 bit.
- 3) Perforated 5 1/2 casing w/1 JSPF from 4320-4358.
- 4) Acidized perms with 8000 gals 15% NEFE in three stages with 2500 lb rocksalt between stages. Max PSI 2100, min 1400. AIR 5.2 BPM, ISIP 1000.
- 5) TIH w/5 1/2 Baker loc set to 4270', load backside w/pkr fluid, set and tested to 500#.
- 6) Return to injection. Rate 336 BPD @ 250 psi.

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

SIGNED JW Browning TITLE District Admin. Supervisor DATE 03/06/86ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISORAPPROVED BY _____ TITLE _____ DATE MAR 14 1986

CONDITIONS OF APPROVAL, IF ANY:

operations which (were) or (will be) initiated in RECOMMENDED REMEDIAL WORK 7-21-1982 11/6 Est. 8-4873 C-40

Lease Vacuum Grayburg San Andres Unit Well No. 53 Tx. Work. Int. 100%
Pool Vacuum Grayburg San Andres County Lea State New Mexico
All depths measured from KB or 12 ft. from ground level.
Tx. Comp. Date 11/6/39 @ T. D. 4710 I. P. Oil 164 Water 0 Gas 124 MCF
GOR 754 Hrs 6 Pump Flow. Present T. D. 4710 Elevation 4023 KB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
<u>Vacuum Grayburg San Andres</u>	<u>4171</u>	<u>4710</u>	<u>Present Completion Interval</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>8 5/8"</u>	<u>28.0 #</u>	<u>LW</u>	<u>1596</u>	<u>300</u>	<u>NA</u>	<u>-</u>	<u>Cnt Circ (observed)</u>
<u>5 1/2"</u>	<u>17.0</u>	<u>SMCS</u>	<u>4171</u>	<u>250</u>	<u>6 3/4"</u>	<u>-</u>	<u>Cnt Top @ 2050 (60%)</u>
					<u>4 3/4"</u>	<u>Open Hole</u>	<u>4171-4710</u>

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
<u>11/6/39</u>	<u>Initial Completion</u>				<u>Natural</u>		<u>4171</u>	<u>4710</u>	<u>164</u>	<u>0</u>	<u>754</u>	<u>6F</u>
<u>3/3/71</u>	<u>35</u>	<u>0</u>	<u>-</u>	<u>24</u>	<u>Frac</u>	<u>30/30</u>	<u>4171</u>	<u>4710</u>	<u>61</u>	<u>0</u>	<u>1325</u>	<u>24P</u>
<u>11/18/72</u>	<u>33</u>	<u>0</u>	<u>-</u>	<u>24</u>	<u>LDF</u>	<u>30/30</u>	<u>4171</u>	<u>4710</u>	<u>103</u>	<u>5</u>	<u>1670</u>	<u>24P</u>
<u>12/10/80</u>	<u>80</u>	<u>56</u>	<u>988</u>	<u>24</u>	<u>Acidified Sgs</u>	<u>590 SLS</u>	<u>1621</u>	<u>-</u>	<u>135</u>	<u>57</u>	<u>988</u>	<u>24P</u>

Remarks: This will be the first workover since the initiation of tertiary recovery.

Present Allow 524 Max Allow. Unit Unit Accum. Prod. 13 MMBB as of 5/88

Present Test: Oil 164 Water 297 Gas 70 GOR 427 Hrs 24 Pump Flow.

Equipment: Lufkin M-6400-305-168, 2 1/4" pump, 168" stk, 9.2 SPM; 912 BPO @ 100% capacity.

Reasons for Remedial Work: It is recommended to cleanout, scale convert and acidize the subject well in order to increase production by 15 BOPD and reduce the decline rate from 58% to 24%. This will payout the investment in 4 months.

Petroleum Engineering Recommendations and Procedure:

- 1) Rig up pulling unit, install BOP, pull production equipment.
- 2) Go in hole with 4 3/4 bit, drill collars and 2 1/2" tubing. Clean out fill to 4710, circulate clean and pull out of hole.
- 3) Go in hole with 5 1/2" packer with 10 stands of tailpipe. Spot 600 gals of scale converter (116 ammonium bicarbonate mixed per gal of fresh).

Reviewed and Approved By:

District
Geological
Asst. Supt.
Supt.

SDN 9/21/88
PWN 9/22/88
DND 9/23/88
DND 9/23/88

District Petroleum Engineer

Division
Engineering
Geological
Gen'l. Supt.

Approved
Date 11-23-88

	CASH	MOH	TOTAL	TEXACO
<u>SEP-IDC</u>	<u>23,000</u>	<u>-</u>	<u>23,000</u>	<u>23,000</u>
<u>INV.</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>TOTAL</u>	<u>23,000</u>	<u>-</u>	<u>23,000</u>	<u>23,000</u>

<u>PROD. INCR (TX%)</u>	<u>15</u>	<u>(15)</u>
<u>PAYOUT</u>	<u>3 months</u>	
<u>PWI</u>	<u>39.97</u>	<u>DCFROI 1000. +</u>

RECOMMENDED REMEDIAL WORK

Date 11-13-90

Lease VACUUM GRAYBURG SAN ANDRES UNIT Well No. 51 TX. Work. Int. 100%
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from DT or 12 ft. from ground level.
TX. Comp. Date 11-16-38 @ T. D. 4710' I. P. Oil 103 Water 0 Gas 80.3 MCF
GOR 780 Hrs. 2 Pump. Flow Present T. D. 4710' Elevation 4013' DP

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
GRAYBURG SAN ANDRES	4091	4710	PRESENT COMPLETION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7 5/8	26.4	EW	1551	300	8 5/8		SMT CIRCULATED
5 1/2	17	SMKS	4091	200	6 7/8		SMT CALC @ 2500 (33% FILLUP)
					4 3/4	OPEN HOLE	4091'-4710'

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
11-16-38	INITIAL COMPLETION				NATURAL		4091	4710	103	0	780	2 F
7-10-72	55	0	610	24 P	15% NEA	3000	4362	4710	53	5	1625	24 P
7-21-77	23	14		24 P	15% NEA	4500	4091	4710	54	25	757M	24 P
6-7-79	34	64	610	24 P	15% NEA	5000	4360	4710				
					GEL FRAC	40/44	4360	4710	18	103	700	24 P
11-2-83	9	78	-	24 P	X-BLK 15%	8000	4091	4710	14	220	1100	24 P

Remarks:

Present Allow 4 Max. Allow Unit Accum. Prod. 810,672 as of 1-1-90
Present Test: Oil 4 Water 256 Gas GOR Hrs. 24 Pump. Flow

Choke Size Pressure Tbg Pressure

Reasons for Remedial Work: Clean out, Acidize & Scale Squeeze to increase oil production & slow oil decline.

Petroleum Engineering Recommendations and Procedure: See Attached

Reviewed and Approved By:
District Geological
Asst. Dist. Mgr.
Dist. Manager

District Petroleum Engineer
Division Engineering
Geological
Gen'l. Supt.

Approved
Date

	CASH	MOB	TOTAL	TEXACO
IDC				
INV.				
TOTAL				

PROD. INC:	TX. 1
PAYOUT	

RECOMMENDED REMEDIAL WORK

Form 10-50 (11)

Lease Vacuum Grayburg San Andres Unit Well No 55 Date 11-7-79
 Pool Vacuum Grayburg San Andres County Log Tx. Work. Int. 100%
 All depths measured from DF or 11 ft. from ground level.
 Tx. Comp. Date 11/7/39 T. D. 4710 I. P. Oil 103 Water 0 Gas 106 MCF
 GOR 1032 Hrs 6 Pump Flow. Present T. D. 4710 Elevation 4082 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
Vacuum Grayburg San Andres	4082	4710	Present Completion Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8 5/8	28.00	LW	1547	320	12	-	Cmt Circ. (no screen)
5 1/2	17.00	SMLS	4082	250	7 7/8	-	Cmt Circ. @ 2900 (602)
					6 1/4	Open Hole	4082-4710

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
11/7/39	Initial Completion				Natural		4082	4710	103	0	1032	6F
9/11/46	101	0	3430	24P	set pack	4200			165	0	944	21
10/19/62	102	0	1338	24	15% NEA	2000	4330	4710	NA	-	-	-
12/18/71	28	0	860	24	Free	20,000	4082	4710	151	41	1178	24P
12/15/80	260	85	635	24	bedside sp	700 sacks	1577	5000	341	105	635	24P
2/24/87	256	240	322	24	Remedial	8000	4082	4710	290	350	300	24P

Remarks:

Present Allow 348 Max Allow. unit Accum. Prod. 1,391,259 as of 11/82

Present Test: Oil 127 Water 232 Gas 38 GOR 300 Hrs 24 Pump Flow.

Pumping Equipment: ODI submersible, 152 R9 stage, 45 HP, capacity 740 GPD

Reasons for Remedial Work: It is recommended to cleanout and acidize with 8000 gals 15% NEFE gelled acid in order to achieve a 10 BOPD production increase and reduce the decline rate from 48% to 15%. This will payout in 4 months.

Petroleum Engineering Recommendations and Procedure:

- 1) RUPH, install BOP and pull tubing and submersible pump.
- 2) GIH w/ 4 3/4" bit, drill collars and workstring. Cleanout to 4710', POH.
- 3) GIH w/ 5 1/2" treating packer with 5 stands of tailpipe. Set packer at 4000'.
- 4) Load backside and prepare to acidize w/ 8000 gals 15% NEFE gelled

Reviewed and Approved By:
 District _____
 Geological _____
 Asst. Supt _____
 Supt. _____

SDN 5-2-89

District Petroleum Engineer

Division _____
 Engineering _____
 Geological _____
 Gen'l. Supt _____

Approved _____
 Date _____

	CASH	MOH	TOTAL	TEXACO
EXP- REC	23,000	0	23,000	23,000
INV.	-	-	-	-
TOTAL	23,000	0	23,000	23,000

PROD. INCR (TX%)	10	(10)
PAYOUT	4 months	
PWI	40.4	DCFROI 1000+

JWC

Lovington

557-4662

IDC WO: This is the _____ workover on the subject well under secondary recovery injection operations which (were) or (will be) initiated in _____, 1973.

RECOMMENDED REMEDIAL WORK

Lease VACUUM GRUBBING - SAN ANTONIO Well No. 56 Date 9-6-73
 Pool VACUUM GRUBBING - SAN ANTONIO County LEA State NEW MEXICO
 All depths measured from DF or 11 ft. from ground level.
 TX. Comp. Data 4-21-40 @ T. D. 4710 I. P. Oil 246 Water 0 Gas 325 MCF
 GOR 1321 Hrs. 6 Flow. Present T. D. 4710 Elevation 4009 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM GB - SAN ANTONIO	3068	4710	PRESENT - PRODUCING INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7 7/8"	26.4	LW	1521	300	5 5/8"		CMT CIRCULATED (OBSERVED)
5 1/2"	17.0	Smls	3963	200	6 3/4"		CMT TOP 2057' (CHL. @ 60' FUL)
					4 3/4"	0.11	3968 - 4710

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Treatment			Production Test After				
	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
4-21-40		INITIAL	COMPLETION		NATURAL		3968	4710	246	0	1321	6
9-28-72	60	0	—	24	NEA/15%	1000	3968	4710	91	4	1370	24

Remarks: No REMEDIAL WORK DONE SINCE UNITIZED WITH 15% UNIT ON 11/73.

Present Allow. 56 Max. Allow. 60 Accum. Prod. 62,100 as of 1-1-73

7-18-73
 Present Test: Oil 31 Water 24 Gas 45 MCF GOR 1370 Hrs. 24 Pump. ---

Cable Size --- Pressure --- Tbg Pressure ---

Reasons for Remedial Work: To INCREASE PRODUCTION 25% OF THE SUBJECT WELL BY ACIDIZING AND FRACTURE-STIMULATING THE SAN ANTONIO LAYER TO REMOVE EXISTING WELLBORE DAMAGE AND ENLARGE THE EFFECTIVE WELLBORE AREA. ANALYSIS OF THE PRODUCED WATER HAS SHOWN HIGH SULFATE AND CHLORIDE CONCENTRATIONS, AND CORRELATION WITH OREBIT PRODUCTION DROPS IN THE V.G.P.A. INDICATES THAT THIS (CONT'D)

Petroleum Engineering Recommendations and Procedure:

1. RIG UP PULLING UNIT, BULL PIGE AND PUMP JACKS. PULL TURNING CLEAN OUT TO TD (4710') AS NEEDED, USING A HYDROSTATIC BARREL.
2. RUN GR/CML FROM TD TO 2710', CONTINGENT ON RUN LENGTH OF WELLBORE. RUN CASPER LOG FROM TD TO CASING SHOE (3963').
3. RUN 2 3/8" TUBING WITH SPOT CONTROL VALVE & SPOT 4' OF 15% NEA/15% IN 320' GAS WATER ACROSS OPEN HOLE FROM TD (4710') TO 4375'. P.O.H. START-UP FOR 24 HRS.
4. PICK UP & RUN IN HOLES WITH 3 1/2" FRAC TUBING AND 15% NEA/15% PER. SWING BACK CONTINGENT LOAD & RESETTING. PER. HRS 15/11. SET DOWN TO 4375'.
5. ACIDIZE OPEN HOLE = 4375' TO 4710' WITH 3000 LBS 15% NEA IN 3 EQUAL STAGES. USE ROCK SALT AND LENSAR 100 MILES FOR DIVERGENT FLOW. PICKING SIZE OF CEMENT AS NEEDED. DISPERSE WITH 1000 GAL 2% KCL INTO PERFORATIONS. 3000 TO RECOVER LOSS.

SEE NOTE - PAGE 3

District Petroleum Engineer

Reviewed and Approved By:
 District

Division

AG

HOVINGTON

C-7-79

EST # 3745

Expense Type Workover

Comp. - 7-1-79

Form PO-44 (M)
D-12

RECOMMENDED REMEDIAL WORK

Lease VACUUM GRAYBURG - SAN ANDRES UNIT Well No. 57 Date 5-8-79
Pool VACUUM GRAYBURG - SAN ANDRES County LEA TX. Work. Int. 100%
All depths measured from or ft. from ground level. State NEW MEXICO
TX. Comp. Date 4-16-40 @ T. D. 4710 I. P. Oil 144 Water 0 Gas 79.7 MCF
GOR 554 Hrs. 6 Pump Flow. Present T. D. 4710 Elevation 4001 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>VACUUM GB - SAN ANDRES</u>	<u>4085</u>	<u>4710</u>	<u>PRESENT PRODUCING INTERVAL</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>8 5/8</u>	<u>28*</u>	<u>LW</u>	<u>1515</u>	<u>325</u>	<u>10</u>	<u>-</u>	<u>CMT CIRC. (OBSV.)</u>
<u>5 1/2</u>	<u>14"</u>	<u>WELDED</u>	<u>4085</u>	<u>200</u>	<u>6 3/4</u>	<u>-</u>	<u>CMT TOP 2175' (CALC @ 60%)</u>
					<u>4 3/4</u>	<u>OPEN HOLE</u>	<u>4085 - 4710</u>

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment		From	To	Production Test After			
	Oil	Water	GOR	Hrs		Amount				Oil	Water	GOR	Hrs
<u>4-16-40</u>	<u>~</u>	<u>INITIAL</u>	<u>COMPLETION</u>	<u>~</u>	<u>NATURAL</u>			<u>4085</u>	<u>4710</u>	<u>144</u>	<u>0</u>	<u>554</u>	<u>6 (F)</u>
<u>12-16-71</u>	<u>53</u>	<u>0</u>	<u>442</u>	<u>24 (P)</u>	<u>15% NEA</u>	<u>A/1000</u>		<u>4093</u>	<u>4710</u>	<u>83</u>	<u>0</u>	<u>1495</u>	<u>24 (P)</u>
<u>8-1-73</u>	<u>56</u>	<u>0</u>	<u>-</u>	<u>24 (P)</u>	<u>EMULSIFRAC</u>	<u>30/40</u>		<u>4354</u>	<u>4710</u>	<u>143</u>	<u>5</u>	<u>2330</u>	<u>24 (P)</u>
<u>6-10-85</u>	<u>190</u>	<u>232</u>	<u>380</u>	<u>24 (P)</u>	<u>underream</u>	<u>6 1/4"</u>		<u>4255</u>	<u>4693</u>				
					<u>15% Gelled Frac</u>	<u>15000 gals</u>		<u>4085</u>	<u>4710</u>				
					<u>Size 15/64 pack</u>	<u>750 sy</u>		<u>1200</u>		<u>232</u>	<u>325</u>	<u>380</u>	<u>24 (P)</u>

Remarks:

Present Allow. 65 Max. Allow. 80 Accum. Prod. 708,943 as of 1-1-79
5-3-79
Present Test: Oil 50 Water 95 Gas 18.6 GOR 320 Hrs 24 Pump.
Choke Size Pressure Tbg Pressure

Reasons for Remedial Work: TO INCREASE PRODUCTION 30 BOPD IN THE SUBJECT WELL AND RETURN THIS WELL TO TOP ALLOWABLE PRODUCTION BY ACIDIZING AND FRACTURE-STIMULATING THE SAN ANDRES PAY SECTION FROM 4240 - 4710. THIS WELL HAS BEEN A TOP ALLOWABLE WELL EVER SINCE IT WAS INCORPORATED INTO THE VGSA UNIT IN 1973. IT HAS EXPERIENCED
(CONT'D)

Petroleum Engineering Recommendations and Procedure:

1. RIG UP PULLING UNIT, PULL RODS AND PUMP, INSTALL B.O.P AND PULL 2 3/8" TBG. CLEAN OUT TO TD OF 4710' AS NEEDED WITH HYDROSTATIC BAILER AND 4 3/4" BIT.
2. RUN 2 3/8" TBG w/ SPOT CONTROL VALVE; SPOT 3 DRUMS SCALE CONVERTER IN 165 GAL WATER ACROSS THE OPEN HOLE FROM 4240 - 4710. SHUT-IN FOR 24 HRS.
3. SWAB BACK CONVERTER LOAD AND RESIDUE. P.O.H w/ 2 3/8" TBG.
4. PICK UP 3 1/2" FRAC TUBING AND OPEN HOLE PACKER. SET PACKER IN OPEN HOLE @ 4240 (ABOVE SAN ANDRES). LOAD ANNULUS w/ FRESH WATER AND PRESSURE TO 500 PSI.

(CONT'D)

TREAT: HALLIBURTON

D.S. SANCHEZ/SLWS
District Petroleum Engineer

Reviewed and Approved By:
District

Division

Geological
Asst. Supt.
Supt.

Engineering
Geological
Gen'l. Supt.

RECOMMENDED REMEDIAL WORK

Lease Vacuum Grayburg San Andres Unit Well No. 58 Date Jan 17 1990
 Pool Vacuum Grayburg San Andres County Lea Tx. Work Int. 100%
 All depths measured from DF or 11 ft. from ground level.
 TX. Comp. Date 11-14-38 @ T.D. 4710 I.P. Oil 239 Water 0 Gas 332 M
 GOR 1390 Hrs. 6 Pump. Flow. Present T.D. 4710 Elevation 3991

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Grayburg - San Andres -	4295	4710	Present Producing Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7 5/8"	26.4	SMLS	1507	300	9 5/8"	—	Cmt Circ. (Calc @ 60% Fill)
5 1/2"	17	SMLS	4087	200	6 3/4"	—	Cmt Top 2825 (Bond log)
					4 3/4"	OPEN Hole	Cmt squeeze 1515' to surface
					(May '85) → 6 1/4"	Under-ream	4087 - 4710'
							4250' - 4665'

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment		Production Test After					
Date	Oil	Water	GOR	Hrs	Type	Amount From	To	Oil	Water	GOR	Hrs	
11-14-38	Initial	Completion			Natural	4087	4710	239	0	1390	6 F	
7-17-69	Dead	Flowing			15% NEA	1000	4087	102	6	927	18 F	
5-23-80	170	10	1550	24P	20% NEA	10,000	4087	171	8	1763	24 P	
12-27-84	292	235	-	24P	15% NEA	1,000	4087	292	235	-	24 P	
5-6-85	292	280	-	24P	15% Gelled	15,000	4087	331	372	417	24 P	
7-23-87	175	325	-	24P	15% NEA	3000	4087	205	440	-	24 P	
2-18-90	104	324	-	24P	SAR (w/ leak)			71	502	-	24P	

Remarks:

Present Allow - Max. Allow Unit Accum. Prod. 1,707,701 as of 1-1-89

(1-4-90)
 Present Test: Oil 104 Water 397 Gas - GOR - Hrs. 24 Pump. Flow

Choke Size - Pressure - Tbg Pressure -

Reasons for Remedial Work: Repair casing leak & flow from salt section to the fresh water sands.

Petroleum Engineering Recommendations and Procedure:

see Page 2

District Petroleum Engineer

Reviewed and Approved By:

District
 Geological _____
 Asst. Dist. Mgr. _____
 Dist. Manager _____

Division
 Engineering _____
 Geological _____
 Gen'l. Supt. _____

Approved _____

Date _____

	CASH	MOH	TOTAL	TEXACO
IDC				
INV.				

PROD. INC: TX. &

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-105
Revised 1-1-89

WELL APINOL

30-025-30721

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
857948

7. Lease Name or Unit Agreement Name

VACUUM GRAYBURG SAN ANDRES UNIT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:

OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

1b. Type of Completion:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DEEP RESER ☐ OTHER ☐

2. Name of Operator

TEXACO PRODUCING INC.

8. Well No.

122

3. Address of Operator

P. O. Box 3109, Midland, Texas 79702

9. Pool name or Wildcat

VACUUM GRAYBURG SAN ANDRES

4. Well Location

Unit Letter H: 1336 Feet From The NORTH Line and 660 Feet From The EAST Line

Section 1 Township 18-S Range 34-E NMPM LEA County

10. Date Spudded

05-22-90

11. Date T.D. Reached

06-06-90

12. Date Compl. (Ready to Prod.)

06-20-90

13. Elevations (DF& RKB, RT, GR, etc.)

GR-3985, KB-3996

14. Elev. Casinghead

3985'

15. Total Depth

5000'

16. Plug Back T.D.

4985'

17. If Multiple Compl. How Many Zones?

18. Intervals Drilled By

Rotary Tools

Cable Tools

0-5000'

19. Producing Interval(s), of this completion - Top, Bottom, Name

4317' - 4728'; GRAYBURG-SAN ANDRES

20. Was Directional Survey Made

YES

21. Type Electric and Other Logs Run

GR-CNL-CCL

22. Was Well Cored

NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
18 5/8	87.5	400'	22	CL H 750 SX CIR. 25 SX	
13 3/8	48#	1546'	17 1/2	CL H 1500 SX CIR. 100 SX	
7	26	5000'	8 3/4	CL H 2200 SX CIR. 250 SX	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD	SIZE	DEPTH SET	PACKER SET
					2 7/8	4774'		

26. Perforation record (interval, size, and number)

4317-21,4333-50,4378-88,4404-10,4435-41,2 JSPF,82 HOLES. 4476-82,4486-92,4529-36,4554-64,4568-76, 4588-93,2 JSPF,84 HOLES. 4656-74,4678-99,4717-28,2 JSPF,100 HOLES.

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4317'- 4441'	ACID - 4200 GALS, 15% NEFE
4476'- 4593'	ACID - 4500 GALS, 15% NEFE
4656'- 4728'	ACID - 5000 GALS, 15% NEFE

28. PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
06-15-90		4 IN. SUB-PUMP				PROD.	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
07-01-90	24			73	61	922	835.6
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	
						38.6	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

SOLD

Test Witnessed By

KIRBY LOCKLAR

30. List Attachments

DEVIATION SURVEY

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

C. P. Basham

Printed Name

C.P. BASHAM

Title DRLG. SUPT.

Date 07-17-90

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO. 30-025-30755
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEB <input type="checkbox"/>
6. State Oil & Gas Lease No. 857948

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		17. Lease Name or Unit Agreement Name VACUUM GRAYBURG SAN ANDRES UNIT
b. Type of Completion: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESER. <input type="checkbox"/> OTHER ADD PERFS & TEST		
2. Name of Operator TEXACO PRODUCING INC.		8. Well No. 139
3. Address of Operator P. O. Box 3109, Midland, Texas 79702		9. Pool name or Wildcat VACUUM GRAYBURG SAN ANDRES
4. Well Location Unit Letter H : 1980 Feet From The NORTH Line and 1292 Feet From The EAST Line Section 2 Township 18-S Range 34-E NMPM LEA County		
10. Date Spudded 02-24-90	11. Date T.D. Reached 03-06-90	12. Date Compl. (Ready to Prod.) 07-26-90
13. Elevations (DF & RKB, RT, GR, etc.) GR-4006	14. Elev. Casinghead 4006'	
15. Total Depth 5000'	16. Plug Back T.D. 4900'	17. If Multiple Compl. How Many Zones?
18. Intervals Drilled By Rotary Tools 0-5000'		Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name GRAYBURG-SAN ANDRES 4347'-4806'		20. Was Directional Survey Made YES
21. Type Electric and Other Logs Run GR-DLL-MG-CAL, SDL-DSN-GR-CAL		22. Was Well Cored NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	36#	1570'	12 1/4	CL H 856 SX CIR. 15 SX	
7	26#	5000'	8 3/4	CL H 1200 SX CIR. 15 SX	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					2 7/8	4823'

26. Perforation record (interval, size, and number) 4347-4551, 4376-4378, 4382-4388, 4392-4400, 4408-4412, 4420-4424, 2 JSPF, 56 HOLES. 4446-61, 4482-4502, 4525-54, 2 JSPF, 128 HOLES. 4576-86, 4605-09, 4622-29, 4656-78, 2 JSPF, 86 HOLES. 4750-4806, 2 JSPF, 56 HOLES.	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 4347' - 4424' ACID - 2200 GALS, 15% NEFE 4446' - 4554' ACID - 5200 GALS, 15% NEFE 4576' - 4678' ACID - 3200 GALS, 15% NEFE
---	---

28. PRODUCTION							
Date First Production 07-21-90		Production Method (Flowing, gas lift, pumping - Size and type pump) PUMP - 2 1/2 X 1 3/4 X 24				Well Status (Prod. or Shut-in) PROD.	
Date of Test 07-30-90	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 330	Gas - MCF 46	Water - Bbl. 111	Gas - Oil Ratio 139
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 39.2	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD	Test Witnessed By MIKE LOVE
--	--------------------------------

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature C.P. Basham Printed Name C.P. BASHAM Title DRLG. SUPT. Date 07-31-90

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

JAH
Form C-104
Revised 1-1-89
See instructions
attached to page
RSP
RWB
KGC
DWD
RBP
KEH
LWJ
PAK
WTL
TAM
PLH
PDH
JDL
CPM
MGR
SDU
JY

Operator Texaco Producing Inc.		Well API No. 3002530756
Address P.O. Box 730, Hobbs, NM 88240		MAS FILE
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input checked="" type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	WELL FILE
Recompletion <input type="checkbox"/>		
Change in Operator <input type="checkbox"/>		
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 140	Pool Name, Including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter <u>H</u> : <u>1980</u> Feet From The <u>North</u> Line and <u>46</u> Feet From The <u>East</u> Line Section <u>2</u> Township <u>18-S</u> Range <u>34-E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240	
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1137, Eunice, NM 88231	
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2
	Twp. 18S	Rge. 34E
	Is gas actually connected? Yes	When? 04-03-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 03-08-90	Date Compl. Ready to Prod. 04-12-90		Total Depth 5000'		P.B.T.D. 4900'			
Elevations (DF, RKB, RT, GR, etc.) GR 4000' KB 4013'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4378'		Tubing Depth 4839'			
Perforations 4378-4724' (208 holes, 2 JSPF)		4754-4792' (38 holes, 2 JSPF)		Depth Casing Shoe				
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
12-1/4"	9-5/8"		1550'		800 sx C1 H Cir 95 sx			
8-3/4"	7"		5000'		1150 sx C1 H Cir 231 sx			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 04-03-90	Date of Test 04-22-90	Producing Method (Flow, pump, gas lift, etc.) Pump 2-1/2" X 1-3/4" X 22'	
Length of Test 24 hours	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 96	Water - Bbls. 256	Gas - MCF 88

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
R. B. DeSoto
Printed Name
R. B. DeSoto
Date
05-18-90
Engineer's Asst.
Title
(505) 393-7191
Telephone No.

OIL CONSERVATION DIVISION

MAY 22 1990

Date Approved

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

By

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Producing Inc.		Well API No. 30-025-30797
Address P.O. Box 730, Hobbs, NM 88240		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input checked="" type="checkbox"/>	Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 141	Pool Name, Including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter <u>E</u> : <u>1309</u> Feet From The <u>West</u> Line and <u>1980</u> Feet From The <u>North</u> Line Section <u>1</u> Township <u>18S</u> Range <u>34E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1137, Eunice, NM 88231					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 04-21-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 04-07-90	Date Compl. Ready to Prod. 06-16-90		Total Depth 6004'		P.B.T.D. 5030'			
Elevations (DF, RKB, RT, GR, etc.) GR 4000' KB 4013'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4258'		Tubing Depth 4759'			
Perforations 4258-4705'					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE 12-1/4"	CASING & TUBING SIZE 9-5/8"		DEPTH SET 1550'		SACKS CEMENT C1 H 910 sx Cir 5 sx			
8-3/4"	7"		6004'		C1 H 1100 sx T.S. 800'			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 04-21-90	Date of Test 06-24-90	Producing Method (Flow, pump, gas lift, etc.) Pumping 2-1/2" X 2" X 24'	
Length of Test 24 hrs	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 101	Water - Bbls. 398	Gas- MCF 38

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Richard DeSoto
R. B. DeSoto Engineering Technician
Printed Name
07-20-90 (505) 393-7191
Date Telephone No.

OIL CONSERVATION DIVISION

Date Approved JUL 25 1990

By ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Title _____

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

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- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-104
Revised 1-1-89
See Instructions
RSR at Bottom of Page
DDC _____ JWB _____
KGC _____ MLG _____
DMD _____ PLH _____
RBD _____ PDH _____
REH _____ JDL _____
LWJ _____ CPM _____
PAK _____ MGR _____
WTL _____ SDU _____
RTM _____ JY _____
TWM _____
SDN _____ HMC _____
LDR _____ CLN _____
RJR _____ PWA _____
MAS _____ RWB _____
FILE _____

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Producing Inc.		Well API No. 3002530843
Address P.O. Box 730, Hobbs, NM 88240		
Reason(s) for Filing (Check proper box) New Well <input checked="" type="checkbox"/> <input type="checkbox"/> Change in Transporter of: Recompletion <input type="checkbox"/> Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> Change in Operator <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>		<input type="checkbox"/> Other (Please explain) PDH
If change of operator give name and address of previous operator _____		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 142	Pool Name, including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter F : 2628 Feet From The West Line and 1980 Feet From The North Line Section 1 Township 18-S Range 34-E, NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 425, Lovington, NM 88260					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 09-24-90

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 09-06-90	Date Compl. Ready to Prod. 10-13-90		Total Depth 5000'		P.B.T.D. 4764'			
Elevations (DF, RKB, RT, GR, etc.) GR 3993', KR 4006'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4192'		Tubing Depth 4683'			
Perforations 4192-4690'					Depth Casing Shoe			

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8"	1550'	C1 H 1700 sx cir 309 sx
12-1/4"	9-5/8"	2800'	C1 H 1570 sx cir 485 sx
			DV Tool @ 1556'
8-3/4"	7"	5000'	C1 H 950 sx cir 102 sx

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 09-24-90	Date of Test 10-27-90	Producing Method (Flow, pump, gas lift, etc.) Sub pump
Length of Test 24 hrs.	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls. 30	Water - Bbls. 90

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MCF
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
Richard DeSoto
R. B. DeSoto Engineering Technician
Printed Name
10-30-90
Date
(505) 393-7191
Telephone No.

OIL CONSERVATION DIVISION

Date Approved
By
Title
Orig. Signed by
Paul Kautz
Geologist

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
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- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

**REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS**

WELL FILE

I.

Operator Texaco Producing Inc.	Well API No. 30-025-30844
Address P.O. Box 730, Hobbs, NM 88240	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 143	Pool Name, including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter <u>H</u> : <u>1250</u> Feet From The <u>East</u> Line and <u>1980</u> Feet From The <u>North</u> Line Section <u>1</u> Township <u>18-S</u> Range <u>34-E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 425, Lovington, NM 88260					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18-S	Rgs. 34-E	Is gas actually connected? Yes	When? 09-08-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 08-21-90	Date Compl. Ready to Prod. 09-14-90		Total Depth 5000'		P.B.T.D. 4790'			
Elevations (DF, RKB, RT, GR, etc.) GR 3983', KB 3996'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4208'		Tubing Depth 4694'			
Performances 4208-18, 4330-34, 48-50, 56-60, 74-76, 80-82, 84-86, 91-93, 4396-4400', 4404-06, 08-10 2JSPF-72 holes, 4429-34, 36-38, 46-48, 64-72, 92-96, 4501-06, 15-20, 30-32, 72-76, TUBING, CASING AND CEMENTING RECORD 4614-24' 2 JSPF-94 holes.					Depth Casing Shoe			
HOLE SIZE 17-1/2"	CASING & TUBING SIZE 13-3/8"		DEPTH SET 1560'		SACKS CEMENT C1 H 1700 sx Cir 180 sx			
12-1/4"	9-5/8"		2800'		C1 H 1570 sx Cir 510 sx			
8-3/4"	7"		5000'		DV Tool @ 1602' C1 H 900 sx Cir 30 sx			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 09-08-90	Date of Test 09-17-90	Producing Method (Flow, pump, gas lift, etc.) Sub Pump	
Length of Test 24 hrs	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 425	Water - Bbls. 132	Gas - MCF 15

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Richard DeSoto
Signature
R. B. DeSoto Engineering Technician
Printed Name
09-28-90 (505) 393-7191
Date Telephone No.

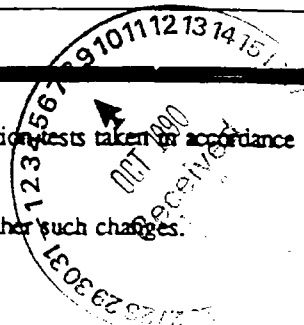
OIL CONSERVATION DIVISION

DATE 09 1990

Date Approved
By Drig. S. Paul Kautz
Geologist
Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- All sections of this form must be filled out for allowable on new and recompleted wells.
- Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- Separate Form C-104 must be filed for each pool in multiply completed wells.



OIL CONSERVATION DIVISION

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator <input checked="" type="checkbox"/> Texaco Producing Inc.	Well API No. 30-025-30801
Address P.O. Box 730, Hobbs, NM 88240	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 154	Pool Name, including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location				
Unit Letter B	660	Feet From The North	Line and 1331	Feet From The East
Section 2	Township 18S	Range 34E	NMPM,	Lea
County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1137, Eunice, NM 88231					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 05-09-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 04-27-90	Date Compl. Ready to Prod. 06-02-90	Total Depth 5000'		P.B.T.D. 4900'				
Elevations (DF, RKB, RT, GR, etc.) GR 4000' KB 4013'	Name of Producing Formation Grayburg San Andres	Top Oil/Gas Pay 4326'		Tubing Depth 4319'				
Performances SEE ATTACHMENT 4326-4807	Depth Casing Shoe							

TUBING, CASING AND CEMENTING RECORD			
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4"	9-5/8"	1550'	C1 H 1050 sx Cir 175 sx
8-3/4"	7"	5000'	C1 H 1050 sx Cir 200 sx
	2-7/8"	4319'	

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)			
Date First New Oil Run To Tank 05-09-90	Date of Test 06-06-90	Producing Method (Flow, pump, gas lift, etc.) REDA Sub Pump	
Length of Test 24 hrs	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 187	Water - Bbls. 476	Gas- MCF 79

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
R. B. DeSoto
Printed Name
06-20-90
Date
Engineering Technician
(505) 393-7191
Telephone No.

OIL CONSERVATION DIVISION

Date Approved JUN 22 1990

By ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
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DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Producing Inc.		Well API No. 30-025-30800
Address P.O. Box 730, Hobbs, NM 88240		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 155	Pool Name, Including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location				
Unit Letter A	: 660	Feet From The North	Line and 10	Feet From The East
Section 2	Township 18S	Range 34E	NMPM,	Lea County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
Texas New Mexico Pipe Line Co.	P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
Texaco Producing Inc.	P.O. Box 1137, Eunice, NM 88231					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 05-29-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 05-06-90	Date Compl. Ready to Prod. 06-24-90		Total Depth 5000'		P.B.T.D. 4650'			
Elevations (DF, RKB, RT, GR, etc.) GR 4019', KB 4032'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4268'		Tubing Depth 4428'			
Perforations 4268-4630'					Depth Casing Shoe			

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4"	9-5/8"	1550'	C1 H 1000 sx Cir 201 sx
8-3/4"	7"	5000'	C1 H 1125 sx Cir 175 sx
	2-7/8"	4428'	

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 05-29-90	Date of Test 06-28-90	Producing Method (Flow, pump, gas lift, etc.) Sub pump
Length of Test 24 hrs.	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls. 137	Water - Bbls. 241

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Richard DeSoto
Signature
R. B. DeSoto Engineering Technician
Printed Name
08-01-90 (505) 393-7191
Date Telephone No.

OIL CONSERVATION DIVISION

Date Approved AUG - 6 1990
By ORIGINAL SIGNATURE BY THE DIVISION
Title

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P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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

at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Producing Inc.	Well API No. 30-025-30851
Address P.O. Box 730, Hobbs, NM 88240	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 156	Pool Name, Including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter C : 660 Feet From The North Line and 1330 Feet From The West Line Section 1 Township 18S Range 34E, NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 425, Lovington, NM 88260					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 11/04/90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 20/09/90	Date Compl. Ready to Prod. 11/03/90	Total Depth 5000'		P.B.T.D. 4815'				
Elevations (DF, RKB, RT, GR, etc.) GR 3998', KB 4011'	Name of Producing Formation Vacuum Grayburg San Andres		Top Oil/Gas Pay 4226'		Tubing Depth 4188'			
Perforations 4226-4680'					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
17-1/2"	13-3/8"		1560'		C1 H 1700 sx Cir 359 sx			
12-1/4"	9-5/8"		2820'		C1 H 1570 sx Cir 310 sx			
					DV tool @ 1620'			
8-3/4"	7"		5000'		C1 H 900 sx Cir 100 sx			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 11-04-90	Date of Test 11-09-90	Producing Method (Flow, pump, gas lift, etc.) Sub pump
Length of Test 24	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls. 107	Water - Bbls. 695

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Choke Size
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Gravity of Condensate

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
R. B. DeSoto Engineering Technician
Printed Name
12-07-90 (505) 393-7191
Date Telephone No.

OIL CONSERVATION DIVISION

DEC 12 1990

Date approved

By

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Producing Inc.		Well API No. 30-025-30717
Address P.O. Box 730, Hobbs, NM 88240		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 157	Pool Name, including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter C : 710 Feet From The North Line and 2530 Feet From The West Line Section 1 Township 18-S Range 34-E , NMMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2528, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1137, Eunice, NM 88231					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 08-06-90

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 06-27-90	Date Compl. Ready to Prod. 08-11-90		Total Depth 5000'		P.B.T.D. 4990'			
Elevations (DF, RKB, RT, GR, etc.) GR 3993' KB 4006'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4178'		Tubing Depth 4880'			
Performances 4178-4258' 2 JSPF-62 holes, 4282-4348' 2 JSPF-60 holes, 4436-4680' 2 JSPF-52 holes					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
22"	18-5/8"		415'		C1 H 900 sx Cir 275 sx			
17-1/2"	13-3/8"		1545'		C1 H 1500 sx Cir 380 sx			
12-1/4"	9-5/8"		2800'		C1 H 1570 sx Cir 300 sx			
8-3/4"	7"		5000'		C1 H 800 sx TS @ 1510'			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 08-06-90	Date of Test 08-20-90	Producing Method (Flow, pump, gas lift, etc.) Sub Pump	
Length of Test 24 hours	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 32	Water - Bbls. 797	Gas- MCF 43

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

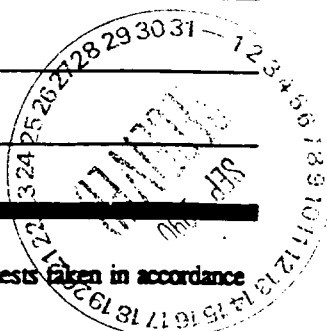
Signature Richard DeSoto	
Printed Name R. B. DeSoto	Title Engineering Technician
Date 09/07/90	Telephone No. (505) 393-7191

OIL CONSERVATION DIVISION
SEP 12 1990

Date Approved

By
Orig. Signed by
Paul Kautz
Geologist

Title



INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

OIL CONSERVATION DIVISION

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

I. Operator Texaco Producing Inc.		Well API No. 30-025-30718
Address P.O. Box 730, Hobbs, NM 88240		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Vacuum Grayburg San Andres Unit	Well No. 158	Pool Name, including Formation Vacuum Grayburg San Andres	Kind of Lease State, Federal or Fee	Lease No. 857948
Location Unit Letter <u>B</u> : <u>660</u> Feet From The <u>North</u> Line and <u>1330</u> Feet From The <u>East</u> Line Section <u>1</u> Township <u>18S</u> Range <u>34E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipe Line Co.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 2428, Hobbs, NM 88240					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Texaco Producing Inc.	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1137, Eunice, NM 88231					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 2	Twp. 18S	Rge. 34E	Is gas actually connected? Yes	When? 07-12-90
If this production is commingled with that from any other lease or pool, give commingling order number:						

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 06-11-90	Date Compl. Ready to Prod. 08-13-90		Total Depth 5000'		P.B.T.D. 4980'			
Elevations (DF, RKB, RT, GR, etc.) GR 3987', KB 3798'	Name of Producing Formation Grayburg San Andres		Top Oil/Gas Pay 4234'		Tubing Depth 4811'			
Perforations 4234-4556' 2 JSPF-264 holes, 4605-4796' 2 JSPF-168 holes					Depth Casing Shoe			

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
22"	18-5/8"	420'	C1 H 900 sx Cir 326 sx
17-1/2"	13-3/8"	1550'	C1 H 1500 sx Cir 150 sx
8-3/4"	7"	5000'	C1 H 2300 sx Cir 318 sx
	2-7/8"	4811'	

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 07-12-90	Date of Test 08-18-90	Producing Method (Flow, pump, gas lift, etc.) Reda Sub Pump	
Length of Test 24 hours	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls. 246	Water - Bbls. 1670	Gas- MCF 51

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (prior, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Richard DeSoto
R. B. DeSoto Engineering Technician
Printed Name 09/07/90 Title (505) 393-7191
Date 09/07/90 Telephone No. (505) 393-7191

OIL CONSERVATION DIVISION

SEP 12 1990

Date Approved _____
By _____ Orig. Signed by
Paul Kautz
Geologist,
Title _____

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State if 4 this Lease No.	B-2146

1a. TYPE OF WELL	OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection
b. TYPE OF COMPLETION	NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>

2. Name of Operator	TEXACO Inc.
3. Address of Operator	P. O. Box 728, Hobbs, New Mexico 88240
4. Location of Well	UNIT LETTER <u>L</u> LOCATED <u>1332</u> FEET FROM THE <u>South</u> LINE AND <u>1310</u> FEET FROM <u>West</u> LINE OF SEC. <u>36</u> TWP. <u>17-S</u> RGE. <u>34-E</u> NMPM <u>Lea</u> Co. <u>Grayburg</u> San Andres

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
3-3-79	3-18-79	4-5-79	3998' (GR)	3998'
20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	23. Intervals Drilled By
4800'	4741'		Rotary Tools 0-4800'	Cable Tools -0-

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
4322' - 4705' Grayburg San Andres	No

26. Type Electric and Other Logs Run	27. Was Well Cored
Gamma Ray - Compensated Neutron	No

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB. FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48#	355'	17 1/2"	400 SX	-0-
9 5/8"	32#	1500'	12 1/4"	800 SX	-0-
7"	23#	2763'	8 3/4"	650 SX	-0-
4 1/2"	10.5#	4800'	6 1/8"	800 SX	-0-

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8"	4267'	4267'

31. Perforation Record (Interval, size and number) Perf. 4 1/2" Csg w/2-JSPF @ 4322', 30, 44, 51, 60, 4416', 18, 90, 99, 4509, 18, 25, 74, 79, 91, 97, 4604, 10, 18, 24, 34, 42, 48, 59, 64, 70, 84, 90, 4700' & 4705'.	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	4322' - 4705'	7500 Gal. 15% NE Acid

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
WATER INJECTION WELL - NO POTENTIAL TEST							
Date of Test	Hours Tested	Choke Size	Production Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By

35. List of Attachments
Completed Shut-In Water Injection 4-5-79

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.		
SIGNED <u>J. A. Chaff</u>	TITLE Asst. Dist. Supt.	DATE 4-6-79

NO. OF COPIES RECEIVED
DISTRIBUTION
SANTA FE
FILE
U.S.G.S.
LAND OFFICE
OPERATOR

LOVINGTON

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form O-175
Revised 10-6-68

1. Name and Type of Lease
Type ☒ Lease ☐ Fee ☐
B-2146

12. TYPE OF WELL
OIL ☐ GAS ☐ CHY ☐ OTHER ☒ Water Injection
1. TYPE OF COMPLETION
REA ☒ WEL ☐ ADJ ☐ CEN ☐ DEEPEN ☐ PLUG ☐ BACK ☐ DIFF. ☐ REGRV. ☐ OTHER ☐

2. Unit Assignment Name
Central Vacuum Unit
Central Vacuum Unit
82

2. Name of Operator
TEXACO Inc.

3. Address of Operator
P. O. Box 728, Hobbs, New Mexico 88240

Vacuum Grayburg
San Andres

4. Location of Well
UNIT LETTER K LOCATED 1333 FEET FROM THE South LINE AND 2528 FEET FROM THE West LINE OF SEC. 36 TWP. 17-S RGE. 34-E NMPM

Lea

15. Date Spudded 1-29-79 16. Date T.D. Reached 2-12-79 17. Date Compl. (Ready to Prod.) 3-2-79 18. Elevations (DF, RKB, RT, GR, etc.) 3994' (GR) 19. Elev. Casinghead 3994'
20. Total Depth 4800' 21. Plug Back T.D. 4790' 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools 0-4800' Cable Tools -0--

24. Producing Interval(s), or this completion - Top, Bottom, Name 4340' - 4719' Grayburg San Andres 25. Was Directional Survey Made No

26. Type Electric and Other Logs Run Gamma Ray - Compensated Neutron 27. Was Well Cored No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB. FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.5#	351'	17 1/2"	400 SX.	-0-
9 5/8"	32#	1500'	12 1/4"	800 SX.	-0-
7"	20# & 23#	2760'	8 3/4"	450 SX.	-0-
4 1/2"	10.5#	4800'	6 1/8"	750 SX.	-0-

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 3/8"	4296'	4296'

31. Perforation Record (Interval, size and number) Perf. 4 1/2" CS w/2-JSPT @ 4340', 53, 58, 75, 79, 83, 87, 92, 37, 94, 4509, 08, 14, 20, 27, 41, 47, 50, 92, 97, 4602, 12, 18, 24, 32, 38, 42, 46, 50, 55, 60, 65, 73, 83, 88, 94, 97, 4713, & 4719'. (Also 4408')

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4340' - 4719'	9600 gal. 15% NE Acid

33. PRODUCTION

Date First Production: WATER INJECTION WELL - NO POTENTIAL TEST
Production Method (Flowing, gas lift, pumping - Size and type pump)
Well Status (Prod. or Shut-in)

Date of Test	Hours Tested	Choke Size	Flowing Pressure	Oil - BBL	Gas - MCF	Water - BBL	Gas - Oil Ratio

Flow Testing Pressure	Casing Pressure	Interval 24-Hour Flow	Oil - BBL	Gas - MCF	Water - BBL	Oil Gravities - All (Corr.)

34. Description of Logs (Sells, used for fact, control, etc.)

35. List of Attachments
COMPLETED AS SHUT-IN WATER INJECTION, 3-2-79

I, _____, hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.
SIGNED W. L. Cooper TITLE Asst. Dist. Supt. DATE 3-8-79

RECOMMENDED REMEDIAL WORK

Expense Type _____

Lease CENTRAL VACUUM UNIT Well No. 89 Date Jan. 10, 1991
 Pool VACUUM SAN ANDRES County LEA TX. Work. Int. 44,92314 %
 All depths measured from DF or 11 ft. from ground level State NEW MEXICO
 TX. Comp. Date 9-27-38 @ T. D. 4710 I. P. Oil 144 Water 0 Gas _____ MCF
 GOR 400 Hrs 3 Pump Flow. Present T. D. 4710 Elevation 3996 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM SAN ANDRES	4099	4710	PRODUCING INTERVAL (OPEN HOLE)

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7-5/8"	26.4		1537	300	9-7/8		CMT TOP N.A.
5-1/2"	17		4093	200	6-3/4		CMT TOP N.A.
					4 3/4	4099-4710	OPEN HOLE

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Hrs	Type	Treatment		From	To	Production Test After			
	Oil	Water	GOR				Amount				Oil	Water	GOR	Hrs
9-27-38	NEW	WELL				NATURAL			4099	4710	1152	0	400	24F
4-24-70	50	1		24 P		ACID 28% 1000 GAL.			4099	4710				
3-6-85	348	186		24 P		Under-ream + Acid								
"						15 % 15,000 Gel			4099	4710	767	560	486	24P

Remarks:

Present Allow _____ Max. Allow Unit Accum. Prod. 1,862,769 as of 1-1-90
 Present Test: Oil 87 Water 62.1 Gas _____ GOR _____ Hrs. 24 (Pump) Flow

Choke Size _____ Pressure _____ Tbg Pressure _____

Reasons for Remedial Work: To increase oil production on estimated 60 BOPD by acidizing. After treatment Scale squeeze to slow Production Decline.

Petroleum Engineering Recommendations and Procedure: See Attached

Reviewed and Approved By _____
 District _____
 Geological _____
 Asst. Dist. Mgr. _____
 Dist. Manager _____

District Petroleum Engineer

Division _____
 Engineering _____
 Geological _____
 Gen'l. Supt. _____

Approved _____
 Date _____

	CASH	MOB	TOTAL	TEXACO
IDC				
INV.				
TOTAL				

PROD. INC:	TX. 1
PAYOUT	

Dmd 1-10-91

RECOMMENDED REMEDIAL WORK

Form PO-90 (M)

Est # 60080092

Expense Type Workover

Date 12-26-90

Lease CENTRAL VACUUM UNIT Well No 90 Tx. Work. Int 44.92314
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from KB or 12 ft. from ground level.
Tx. Comp. Date 11-19-39 @ T. D. 4710' I. P. Oil 1168 Water 0 Gas 566 MCF
GOR 485 Hrs 24 Pump Flow. Present T. D. 4710' Elevation 3991'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	4093'	4710'	PRESENT COMPLETION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7 5/8"	26.4#		1548'	280 SX	9 5/8"		CEMENT CIRCULATED
5 1/2"	17#		4093'	200 SX	6 3/4"		CEMENT TOP 2200'
					6 1/4"	4093'-4710'	OPEN HOLE

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment			Production Test After				
Date	Oil	Water	GOR	Hrs	Type	Amount	From To	Oil	Water	GOR	Hrs	
11-19-39	INITIAL	COMPLETION			NATURAL		4093' 4710'	1168	0	485	24F	
12-20-71	40	0		24P	BW FRAC	30/45	4093' 4710'	93	11	1275	24P	
04-18-85	447	148		24P	15%ACID	15,000GALS	4093' 4710'	680	567	350	24P	
02-11-88	210	450		24P	15%ACID	10,000GALS	4093' 4710'	481	901	431	24P	

Remarks: _____

Present Allow _____ Max Allow. UNIT _____ Accum. Prod. 2,165,000 as of 12-01-90

Present Test: Oil 117 Water 413 Gas 54 GOR _____ Hrs 24 Pump Flow. _____

Reasons for Remedial Work: It is recommended that the subject well be acidized, cleaned out, and scale squeezed in order to lower the injection withdrawal ratio and decline rate in production. Since 1988, the well has been on a 48% decline rate, while the majority of the field is

Petroleum Engineering Recommendations and Procedure:

See attached page _____

Reviewed and Approved By:
Engineer _____
Production Foreman _____
Area Engineer _____

Area Manager

Division _____
Approved _____
Date _____

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	()
PAYOUT	
PWI	DCFROI

Date 10-22-91

Lease CENTRAL VACUUM UNIT Well No 92 Tx. Work. Int 44.92314
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from DF or 10 ft. from ground level.
Tx. Comp. Date 10-04-36 @ T. D. 4710' I. P. Oil 192 Water 0 Gas MCF
GOR 715 Hrs 4 Pump Flow. Present T. D. 4710' Elevation 4001'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	4096'	4267'	OPEN HOLE

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
7 5/8"	26.4#	LW	1540'	300	8 5/8"		CMT CIRCULATED
5 1/2"	17#	SMLS	4096'	200	6 3/4"		CMT TOP @ 2200 60% FILL
					4 3/4"	4096'-4267'	OPEN HOLE
					6 1/4"	4267'-4710'	OPEN HOLE

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
10-04-38	INITIAL	COMPLETION			NATURAL		4096'	4710'	192	0	715	4
12-16-71	50	0		24	15% NEA	1000 GALS	4115'	4710'	82	0	1610	24
10-11-74	34	0		24	FRAC	42000#	4090'	4710'	87	122	2380	24
04-22-85	379	303		24	UNDER- REAM	12000 GALS	4096'	4710'	482	675	435	24

Remarks: Present Allow Max Allow. UNIT Accum. Prod. 1,479,000 as of 03-01-91Present Test: Oil 61 Water 937 Gas 42 GOR Hrs 24 Pump Flow.

Reasons for Remedial Work: To increase production 64 BOPD, we recommend that the subject well
be acidized and scale squeezed.

The well is currently producing 61 BOPD and declining at a rate of 24%. Offset well No. 169

Petroleum Engineering Recommendations and Procedure:

see attached page

Area Manager

Reviewed and Approved By:

Engineer Production Foreman Area Engineer Division Approved Date

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	(<u> </u>)
PAYOUT	
PWI	DCFROI

Date 08-31-90

CENTRAL VACUUM UNIT Well No 105 Tx. Work. Int 44.92314
GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from KB or 12 ft. from ground level.
Tx. Comp. Date 09-12-39 @ T. D. 4650' I. P. Oil 1440 Water 0 Gas 700 MCF
GOR 486 Hrs 24 Pump Flow. Present T. D. 4705' Elevation 3942'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	4105'	4705'	PRESENT COMPLETION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
9 5/8"	19.5#		498'	200 SX	11"		CEMENT TOP CIRC.
5 1/2"	17#		4105'	800 SX	8 1/4"	OPEN HOLE	CEMENT TOP CIRC.

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment			Production Test After				
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
09-12-39	INITIAL	COMPLETION			NATURAL		4105'	4650'	1440	0	486	24F
06-04-81	150	12	502	24P	15%NEFT	12,000gals	4105'	4705'	241	97	502	24P
03-04-87	209	244	394	24P	15%NEFT	10,000gals	4105'	4705'	212	313	394	24P

Remarks:

Present Allow _____ Max Allow. UNIT _____ Accum. Prod. 1,537,000 as of 8-13-90

Present Test: Oil 134 Water 297 Gas 58 GOR _____ Hrs 24 Pump Flow. _____

Reasons for Remedial Work: In order to increase production in the subject well, it is recommended that the well be cleaned out, acidized, and scale squeezed. Scale deposition has caused production to decline 70 BOPD and 100 BWPD since November 1989.

Petroleum Engineering Recommendations and Procedure:

See attached page

Reviewed and Approved By:

Engineer _____
Production Foreman _____
Area Engineer _____

Area Manager

Division

Approved

Date

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	()
PAYOUT	
PWT	DCFROI

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NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105
Revised 11-1-78

5a. Indicate Type of Lease
State ☒ Fee ☐

5. State Oil & Gas Lease No.
B-1113-1

1a. TYPE OF WELL
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Water Injection

b. TYPE OF COMPLETION
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐

7. Unit Agreement Name
Central Vacuum Unit

8. Farm or Lease Name
Central Vacuum Unit

2. Name of Operator
Texaco Inc.

3. Address of Operator
P. O. Box 728, Hobbs, New Mexico 88240

9. Well No.
136

10. Field and Pool, or Wildcat
Vacuum Grayburg-San Andres

4. Location of Well
UNIT LETTER E LOCATED 2450 FEET FROM THE North LINE AND 40 FEET FROM
THE West LINE OF SEC. 6 TWP. 18-S RGE. 35-E NMPM.

12. County
Lea

15. Date Spudded 10-24-78 16. Date T.D. Reached 11-6-78 17. Date Compl. (Ready to Prod.) 12-19-78 18. Elevations (DF, RKB, RT, GR, etc.) 3979' (GR) 19. Elev. Casinghead 3979'

20. Total Depth 4800' 21. Plug Back T.D. 4772' 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools 0-4800' Cable Tools -0-

24. Producing Interval(s), of this completion - Top, Bottom, Name
4362' - 4700' Grayburg San Andres

25. Was Directional Survey Made
NO

26. Type Electric and Other Logs Run
Gamma Ray- Compensated Neutron

27. Was Well Cored
NO

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.5#	365'	17 1/2"	400 SX	-0-
9 5/8"	32#	1450'	12 1/4"	800 SX	-0-
7"	23#	2775'	8 3/4"	650 SX	-0-
4 1/2"	10.5#	4800'	7 7/8"	600 SX	-0-

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8"	4335'	4335'

31. Perforation Record (Interval, size and number) Perfs. 4 1/2" CSG
2-JSPF @ 4362', 63', 64', 66', 68', 79', 82', 90', 4472', thru 4478', 83', 90', 4522' thru 4527', 42', 49', 52', 63', 73', 75', 84', 86', 90', 92', 4610' thru 4616', 34', 40', 43', 53', 67', 73', 82', 87', 92', 96', & 4700'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL 4362'-4700' AMOUNT AND KIND MATERIAL USED 7900 gal 15% NE acid

33. PRODUCTION
Date First Production Production Method (Flowing, gas lift, pumping - Size and type pump) WATER INJECTION WELL - NO POTENTIAL TEST Well Status (Prod. or Shut-in)

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.) Test Witnessed By

35. List of Attachments
Well Completed Shut-In Water Injection, 12-19-78

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED

[Signature]

TITLE

Asst. Dist. Supt.

DATE

1-8-79

EST # 60080027

Date 4-12-90

Case Central Vacuum Unit Well No. 137 WJW Tx. Work Int. 44.92314 %
ool Vacuum Grayburg San Andres County Lea State New Mexico
11 depths measured from KB or 12 ft. from ground level.
X. Comp. Date 12-27-78 @ T.D. 4800 I.P. Oil Water Gas MCF
OR Hrs. Pump. Flow. Present T.D. 4752 Elevation 3997' DP

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg San Andres	4330'	4698'	Present Completion Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
13 3/8"	54.5#	K-55	377'	400	17 1/2"	—	Cement Circulated
9 5/8"	32#	K-55	1450'	800	12 1/4"	—	Cement Circulated
7"	23#	K-55	2735'	650	8 3/4"	—	Cement Circulated
4 1/2"	10.5#	K-55	4800'	600	6 1/8"	4330'-4698'	TOC @ 200' (Temp. Survey)
2 3/8" PC	4.7#		PKr @ 4245'				

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment			Production Test After				
Date	Oil	Water	GOR	Hrs	Type	Amount	From To	Oil	Water	GOR	Hrs	
12-27-78					15% NEA	8800	4330 4698					
8-4-83					Bleach	525						
					15% NEFE	525	4330 4698					
4-10-84					15% NEFE	3150	4330 4698					
Perfs:	2 ISPF @	4330, 46, 50, 62, 72, 82, 4409,	22, 30, 36, 53, 4500, 10,	16, 23, 32, 36, 43, 54								
		4558, 65, 73, 86, 90, 94, 4402,	05, 30, 38, 46, 50, 57,	65, 68, 72, 77, 82, 90, 98								
		(39 Intervals)										

Remarks: Current Injection 900 BWPD @ 860 psi
Present Allow — Max. Allow — Accum. ^{Inj} Prod. 3,479,212 as of 12-89
Present Test: Oil — Water — Gas — GOR — Hrs. — Pump. Flow.

Choke Size — Pressure — Tbg Pressure —

Reasons for Remedial Work: Repair Packer / Tubing Leak and clean out well,
Stimulate to increase injection.

Petroleum Engineering Recommendations and Procedure:

See Attached

District Petroleum Engineer

Reviewed and Approved By:

District
Geological
Asst. Dist. Mgr.
Dist. Manager

Division
Engineering
Geological
Gen'l. Supt.

Approved
Date

	CASH	MOH	TOTAL	TEXACO
EXP	19,900	.	19,900	8,940
INV.				
TOTAL				

PROD. INC:	TX. %
PAYOUT	
P.W.I.	

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NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105
Revised 11-1-76

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Free <input type="checkbox"/>
5. State Oil & Gas Lease No.
B-155

1a. TYPE OF WELL	OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <u>Water Injection</u>	7. Unit Agreement Name
b. TYPE OF COMPLETION	NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER	8. Farm or Lease Name

2. Name of Operator	Texaco Inc.	9. Well No.
3. Address of Operator	P. O. Box 728, Hobbs, New Mexico 88240	138
4. Location of Well		San Andres

UNIT LETTER <u>P</u>	LOCATED <u>10</u>	FEET FROM THE <u>South</u>	LINE AND <u>70</u>	FEET FROM	12. County
THE <u>East</u>	LINE OF SEC. <u>36</u>	TWP. <u>17-S</u>	RGE. <u>34-E</u>	NMPM	Lea

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RAB, RT, GR, etc.)	19. Elev. Casinghead
11-28-78	12-13-78	12-30-78	3986' (GR)	3986'
20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools
4800'	4776'			0-4800'

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
4276'-4724' Grayburg San Andres	NO

26. Type Electric and Other Logs Run	27. Was Well Cored
Gamma Ray- Compensated Neutron	NO

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.5#	362'	17 1/8"	400 SX	-0-
9 5/8"	32.3#	1450'	12 1/8"	800 SX	-0-
7"	20# & 23#	2762'	8 3/4"	600 SX	-0-
4 1/2"	10.5#	4800'	7 7/8"	600 SX	-0-

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 3/8"	4211'	4211'

31. Perforation Record (Interval, size and number) Perf. 4 1/2" csg w/2-JSPF @ 4276', 90', 4308', 13', 18', 33', 45', 54', 58', 66', 74', 80', 86', 4402', 07', 39', 85', 92', 4500', 08', 16', 22', 27', 32', 39', 44', 50', 56', 73', 92', 4600', 08', 16', 24', 32', 38', 44', 50', 56', 60', 72', 86', 94', 4704'	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
	DEPTH INTERVAL
	4276'-4724'
	AMOUNT AND KIND MATERIAL USED
	9200 gal 15% NE Acid

33. 12', & 4724'.	PRODUCTION	
Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
	WATER INJECTION WELL - NO POTENTIAL TEST	

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By

35. List of Attachments
Well completed Shut - In Water Injection, 12-30-78

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED

[Signature]

TITLE

Asst. Dist. Supt.

DATE

1-8-79

RECOMMENDED REMEDIAL WORK

Date

7-7-87

Lease Central Vacuum Unit Well No. 139 Tx. Work Int. 100 %
 Pool Vacuum Grayburg San Andres County Lea State New Mexico
 All depths measured from KB or 12 ft. from ground level.
 TX. Comp. Date 2-17-79 @ T.D. 4844 I.P. Oil WIW Water Gas NCI
 GOR Hrs. Pump. Flow. Present T.D. 4790' PSTD Elevation 3986 GR D

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Grayburg San Andres	4263	4730	Present injection interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
13 3/8"	54.5#	K55	350'	400	17 1/4"	—	Cmt. Circulated
9 5/8"	32	K55	1518	800	12 1/4"	—	Cmt. Circulated
7"	23	K55	2743	650	8 3/4"	—	Cmt. Circulated
4 1/2"	10.5	K55	4844	750	6 1/8"	4263 - 4730	Cmt. Circulated

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before						Treatment		Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From To	Oil	Water	GOR	Hrs
2-17-79	Initial Completion				15% NE	9500 gal.	4263 4730	Shut in	WIW		

First Workover since initiation of tertiary recovery => IDC

Remarks:

Present Allow — Max. Allow — Accum. ^{INT.} Prod. 3,447,809 as of 6-1-87

Present Test: Oil — Water — Gas — GOR — Hrs. — Pump. Flow —
 Present Injection: 713 BWPD @ 850 psi

Choke Size — Pressure — Tbg Pressure —

Reasons for Remedial Work: To increase injection an estimated 200 BWPD by cleaning out and acidizing. This increase in injection is expected to result in a 23 BOPD increase in offset production. The subject well was

Petroleum Engineering Recommendations and Procedure:

1. Rig up pulling unit. Unseat pkr. Install BOP.
2. TOH w/ 4 1/2" pkr and 2 3/8" dualined tbg.

District Petroleum Engineer

Reviewed and Approved By:

District

Geological Asst. Dist. Mgr. Dist. Manager

Division

Engineering Geological Gen'l. Supt. Approved Date

	CASH	MOH	TOTAL	TEXACO
IDC	21,000	0	21,000	21,000
INV.	0	0	0	0
TOTAL	21,000	0	21,000	21,000

LM 7-1-87

PROD. INC: 23 BOPD TX. 1

PAYOUT 4 mos.

P.N.I. 12.88 DCFROI 1000.

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NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105
Revised 11-1-66

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-155	

1a. TYPE OF WELL	
OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>
DRY <input type="checkbox"/>	OTHER <u>Water Injection</u>
b. TYPE OF COMPLETION	
NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>
DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>
DIFF. RESVR. <input type="checkbox"/>	OTHER <input type="checkbox"/>

7. Unit Agreement Name
Central Vacuum Unit
8. Farm or Lease Name
Central Vacuum Unit

2. Name of Operator
TEXACO Inc.

9. Well No.
140

3. Address of Operator
P. O. Box 728 - Hobbs, New Mexico 88240

10. Field unit Pool, or Wildcat
Vacuum Grayburg San Andres

4. Location of Well
UNIT LETTER <u>N</u> LOCATED <u>10</u> FEET FROM THE <u>South</u> LINE AND <u>2571</u> FEET FROM

12. County
Lea

THE <u>West</u> LINE OF SEC. <u>36</u> TWP. <u>17S</u> RGE. <u>34E</u> NMPM

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
12-15-78	1-2-79	2-7-79	3988' (GR)	3988'

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
4800'	4784'		→	0-4800'	-0-

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
4260-4702' Grayburg San Andres	No

26. Type Electric and Other Logs Run	27. Was Well Cored
Gamma Ray Compensated Neutron	No

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	365'	17-1/4"	400 SX	-0-
9-5/8"	32.3#	1450'	12-1/4"	800 SX	-0-
7"	23#	2740'	8-3/4"	650 SX	-0-
4-1/2"	10.5#	4800'	7-7/8"	750 SX	-0-

29. LINER RECORD				30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					2-3/8"	4228'
						4228'

31. Perforation Record (Interval, size and number) Perf 4-1/2" csg w/	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
2 JSPF @ 4260,63,66,73,82,86,4304,09,18,24,30,36,94,98,4453,56,69,76,83,89,93,4504,08,12,22,28,35,40,76,81,94,99,4610,14,19,30,34,42,48,53,60,67,77,84,91,96, & 4702'	DEPTH INTERVAL
	AMOUNT AND KIND MATERIAL USED
	4260-4702 13,300 gals. 15% NE Acid

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
Water Injection Well		No Potential Test					
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas-Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By

35. List of Attachments
Well completed Shut-In Water Injection 2-7-79

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED <u>M. L. Carter</u>	TITLE <u>Asst. Dist. Supt.</u>	DATE <u>2-9-79</u>
----------------------------	--------------------------------	--------------------

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OPERATOR	

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 12-1-78

3a. Indicate Type of Lease

State ☒ Fee ☐

5. State Oil & Gas Lease No.

B-155

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE APPLICATION FOR PERMIT - FORM C-1011 FOR SUCH PROPOSALS.)

OIL WELL ☐ GAS WELL ☐ OTHER

Water Injection

7. Unit Agreement Name

Central Vacuum Unit

8. Farm or Lease Name

Name of Operator

TEXACO Inc.

Address of Operator

P. O. Box 728, Hobbs, New Mexico 88240

9. Well No.

141

Location of Well

UNIT LETTER M 10 FEET FROM THE South LINE AND 1310 FEET FROM

THE West LINE, SECTION 36 TOWNSHIP 17-S RANGE 34-E NMPM.

10. Field and Pool, or Wildcat
Vacuum Grayburg
San Andres

15. Elevation (Show whether DF, RT, GR, etc.)

3992' (GR)

12. County

Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☒
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

REMEDIAL WORK ☐
COMMENCE DRILLING OPS. ☐
CASING TEST AND CEMENT JOB ☐

ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

OTHER ☐

OTHER ☐

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Rig up & pull pkr.
2. Spot 250 gals of bleach across perfs shot csg.
3. Perferte W/2 JSPF 4360-4724 (23 int. 46 Holes).
4. Acidize perfs W/15% Acid in 3 stages W/1000# R.S. between stages. Flush W/75 bbls of fresh water.
5. Set pkr. @ 4300'. Load annulus W/inhibited fresh water & return to inj.

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

SIGNED W.B. Galt TITLE Dist. Opr. Mgr. DATE 3-14-85

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT SUPERVISOR

MAR 18 1985

APPROVED BY _____ TITLE _____ DATE _____

NOTATIONS OF APPROVAL, IF ANY:

IDC WO: This workover will result in the recovery of new identifiable production and reserves that will otherwise be recovered by the present completions.

RECOMMENDED REMEDIAL WORK

(117)

Form PD-20 (M)

D-25
24

Lease Central Vacuum Unit Well No. 141 WJW Date 1-11-85
Pool Vacuum Grayburg San Andres County Lea TX. Work Int. 36,27108
All depths measured from K.B. or 12 ft. from ground level. State New Mexico
TX. Comp. Date 1-12-79 T. D. 4800 I. P. Oil WTW Water - Gas - MCF
GOR - Hrs - Pump. Flow. Present T. D. 4776 PG Elevation 4003 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>Vacuum Grayburg San Andres</u>	<u>4360</u>	<u>4724</u>	<u>Present Injection Interval</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>13 3/8</u>	<u>54.5</u>	<u>K-55</u>	<u>361</u>	<u>400</u>	<u>17 1/2</u>		<u>Cnd Crc. (observed)</u>
<u>9 5/8</u>	<u>32.3</u>	<u>H-40</u>	<u>1416</u>	<u>800</u>	<u>12 1/4</u>		<u>Cnd Crc. (observed)</u>
<u>7</u>	<u>22</u>	<u>K-55</u>	<u>2765</u>	<u>650</u>	<u>8 3/4</u>		<u>Cnd Crc. (observed)</u>
<u>4 1/2</u>	<u>12.5</u>	<u>J-55</u>	<u>4800</u>	<u>750</u>	<u>6 1/8</u>	<u>4360-4724 *</u>	<u>Cnd Top @ 2200' (temp. surge)</u>

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
1-12-79	New Well				152, 151A	2000	4360	4724	Water Injection well			
7-26-83	NA				Acid	500	4360	4724	NA			
5-7-81	NA				152, 151A	2000	4360	4724	NA			

* Perfs (2 JSPI): 4360, 66, 72, 4448, 52, 4526, 34, 40, 46, 57, 4616, 46, 50, 65, 70, 78, 84, 96, 4700, 08, 14, 20, 24 (23 Int. 16 holes)

Remarks: This will be the first workover since the initiation of tertiary recovery.

Present Allow. Max. Allow. Press 272 psi Accum. Prod. 2,547,875 as of 10.84

Present Test: Oil Press. 80 psi Water 88 BWPB Gas - GOR - Hrs - Pump. Flow.

Choke Size Pressure Tbg Pressure

Reasons for Remedial Work: It is recommended to cleanout, repair to increase perforations density, and stimulate the San Andres Pay, to achieve an increase in injections of 350 GWPB. The increased injections will yield a 20 BOPD combined production.

Petroleum Engineering Recommendations and Procedure:

- 1) Move in, Rig up pulling unit, install E&F, release packer, POH.
- 2) FTH with workstring and bit, tag bottom and if necessary cleanout to TL (4776'). Spot 250 gals of bleach across perfs, shut casing and squeeze on additional 250 gals. POH.
- 3) Perform the following intervals with 2 JSPI: 4360, 66, 72, 4448, 52, 4526, 34, 40, 46, 57

SEN 1-11-85
DWH 1-12-85
C. H. C. 1-25-85
J. J. 2-14-85

Reviewed and Approved By:
District
Geological
Asst. Supt. W.B. L...
Supt.

J. J. Seaman
District Petroleum Engineer
Division
Engineering
Geological
Gen'l. Supt.

Approved
Date

	26,500	0	26,500	9,600
	0	0	0	0
20,000	26,500	0	26,500	9,600

20.17
10 minutes
228

DMD - Buckeye

IDC WO: This is the initial workover on the subject well on tertiary recovery injection operations which (were) or (will be) initiated in 5-1, 1983

RECOMMENDED REMEDIAL WORK

Est. 8-4648 Form PO-90 (117)

Lease Central Vacuum Unit Well No. 161 Date 3-24-88
Pool Vacuum Grayburg San Andres County Lea Tx. Work Int. 61.230785
All depths measured from KB or 10 ft. from ground level.
TX. Comp. Date 1-11-83 @ T.D. 4800 I.P. Oil — Water — Gas — M
GOR — Hrs. — Pump. Flow. Present T.D. 4730' PSTD Elevation 4045 SR

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>Grayburg San Andres</u>	<u>4391</u>	<u>4727</u>	<u>Present Injection Interval</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>16"</u>	<u>65#</u>	<u>H40</u>	<u>374'</u>	<u>550</u>	<u>20"</u>	<u>—</u>	<u>Cement Circulated</u>
<u>11 3/4</u>	<u>42</u>	<u>H40</u>	<u>1550</u>	<u>750</u>	<u>15</u>	<u>—</u>	<u>Cement Circulated</u>
<u>5 1/2</u>	<u>17</u>	<u>J55</u>	<u>4800</u>	<u>2000</u>	<u>7 7/8</u>	<u>4391-4727</u>	<u>Cement Circulated</u>

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before				Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From To	Oil	Water	GOR	Hrs
<u>1-11-83</u>	<u>Initial</u>	<u>Completion</u>			<u>15% HCl</u>	<u>12,250 gal</u>	<u>4391</u> <u>4727</u>	<u>51</u>	<u>—</u>	<u>—</u>	<u>—</u>
Remarks: Perfs: <u>4391, 93, 96, 4400, 11, 16, 21, 23, 26, 28, 32, 40, 44, 89, 92, 94, 96, 97, 4545, 47, 51, 56, 63, 65, 70, 77, 80, 86, 90, 94, 96, 4601, 04, 15, 33, 57, 60, 68, 76, 83, 91, 96, 98, 4700, 02, 07, 10, 12, 18, 22, 27(2.</u>											
Present Allow <u>—</u> Max. Allow <u>—</u> Accum. <u>Prod.</u> <u>1,233,908</u> <u>INJ</u> as of <u>3-1-88</u>											
Present Test: Oil <u>—</u> Water <u>—</u> Gas <u>—</u> GOR <u>—</u> Hrs. <u>—</u> Pump. Flo <u>—</u>											
Present Injection: <u>402 BWPD @ 875 psi (max Press allowed = 878 psi)</u>											

Choke Size — Pressure — Tbg Pressure —

Reasons for Remedial Work: To increase injectivity into the subject well an estimated 350 BWPD by cleaning out, treating with chlorine dioxide (ClO₂), and acidizing.

This increase in injection is predicted to result in an offset response of Petroleum Engineering Recommendations and Procedure:

1. Rig up pulling unit. Unset pkr. Install BOP.
2. TOH w/ inj. pkr on 2 3/8" dualine tbg.

J. J. Seeman
District Petroleum Engineer

Reviewed and Approved By:

District
Geological —
Asst. Dist. Mgr. —
Dist. Manager —

Division
Engineering —
Geological —
Gen'l. Supt. —

Approved J. J. Seeman
Date 3-31-88

	CASH	MOH	TOTAL	TEXACO
<u>IDC</u>	<u>20,800</u>	<u>0</u>	<u>20,800</u>	<u>12,736</u>
<u>INV.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>TOTAL</u>	<u>20,800</u>	<u>0</u>	<u>20,800</u>	<u>12,736</u>

Lm 3-18-88

OFFSET	PROD. INC:	27 BOPD TX.	14
PAYOUT	4 mos	@ \$15.75 / BO	
P.W.I.	15.22	DCFROI	1000.

RECOMMENDED REMEDIAL WORK

Date 11-13-90

Lease CENTRAL VACUUM UNIT Well No 162 Tx. Work. Int 44.92314
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from KB or 15 ft. from ground level.
Tx. Comp. Date 08-19-83 @ T. D. 4800' I. P. Oil 24 Water 978 Gas MCF
GOR TSIM Hrs 24 Pump Flow. Present T. D. PB 4595' Elevation 3998'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	4329'	4700'	INITIAL PRODUCING INTERVAL
GRAYBURG SAN ANDRES	4329'	4586'	PAST PRODUCING INTERVAL
GRAYBURG SAN ANDRES	4329' 4287'	4586'	PRESENT PRODUCING INTERVAL
GRAYBURG SAN ANDRES	4247'	4690'	PROPOSED PRODUCING INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
16"	65#	H-40	350'	650	20"		CEMENT CIRCULATED
11 3/4"	42#	H-40	1482'	1000	14 3/4"		CEMENT CIRCULATED
8 5/8"	32#	J-55	2732'	1050	11"		CEMENT CIRCULATED
5 1/2"	15.5#	J-55	4787'	900	7 7/8"	4329'-4586'	CEMENT TOP AT 900'

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
08-19-83	INITIAL	COMPLETION			15%NEFE	14,000GALS	4329'	4700'	24	978	TSIM	24P
04-02-85	46	131		24P	15%NEFE	10,000GALS	4329'	4586'	61	232	433	24P

Remarks:

Present Allow Max Allow. UNIT Accum. Prod. 140,000 as of 10-1-90


Present Test: Oil 43 Water 246 Gas 6 GOR Hrs 24 Pump Flow.

Reasons for Remedial Work: In order to increase production in the subject well, it is recommended that the well be cleaned out, acidized, scale squeezed, and additionally perforated. The subject well was drilled in 1983 as a replacement well for CVU no. 98 which was producing 278

Petroleum Engineering Recommendations and Procedure:

See attached page

Reviewed and Approved By:
Engineer
Production Foreman
Area Engineer


Area Manager
Division
Approved
Date

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	()
PAYOUT	
PWI	DCFROI

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240DISTRICT II
P.O. Drawer DD, Artesia, NM 88210DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO.

30-025-28182

5. Indicate Type of Lease

STATE ☒FEE ☐

6. State Oil & Gas Lease No.

B-1113-1

7. Lease Name or Unit Agreement Name

Central Vacuum Unit

8. Well No.

162

9. Pool name or Wildcat

Vacuum Grayburg San Andres

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

OIL

WELL ☒

GAS

WELL ☐OTHER ☐

2. Name of Operator

Expl. Prod.
Texaco Producing Inc.

3. Address of Operator

P.O. Box 730, Hobbs, NM 88240

4. Well Location

Unit Letter D : 760 Feet From The North Line and 484 Feet From The West LineSection 6 Township 18-S Range 35-E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

3984' GR

11.

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐CHANGE PLANS ☐PULL OR ALTER CASING ☐OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☒ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐PLUG AND ABANDONMENT ☐CASING TEST AND CEMENT JOB ☐OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

02/19/91 thru 04/11/90

- 1) MIRU PU. TOH w/prod equip. TIH w/bit & DC to 4300'. D/O to 4700'.
- 2) TOH. Perf 5.5 csg w/2JSPF 4247-4690'. 44 Intervals.
- 3) TIH w/5.5 pkr. Spt 100 gals 15% NEFE. A/well w/2500 gals 15% NEFE, 600# RS, 25 BS's in 2 stgs.
- 4) A/w/7400 gals 15% NEFE, 5000# RS, 125 BS's in 4 stgs.
- 5) Scl sqz well w/3 drums Unichem TH783.
- 6) TOH w/pkr. Ret to prod.

Test Prior - 43 BOPD, 296 BWPD. Test After - 45 BOPD, 782 BWPD

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

SIGNATURE

Richard DeSoto

TITLE

Engineering Technician

DATE

06/21/91

TYPE OR PRINT NAME

R. B. DeSoto

TELEPHONE NO. 393-7191

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

JUL 12 1991

Date 04-09-91

Lease CENTRAL VACUUM UNIT Well No 169 Tx. Work. Int 44.92314
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from KB or 12 ft. from ground level.
Tx. Comp. Date 12-10-86 @ T. D. 4710' I. P. Oil 1394 Water 350 Gas 473 MCF
GOR 339 Hrs 24 Pump Flow. Present T. D. 4710' Elevation 3993'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	4276	4710'	OPEN HOLE

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
20"	94#	K-55	354'	1000	24"		CMT CIRCULATED
13 3/8"	54.5#	J-55	1525'	1550	17 1/2"		CMT CIRCULATED
9 5/8"	36#	K-55	2742'	1600	12 1/4"		CMT CIRCULATED
7"	23#	J-55	4276'	750	8 1/2"		CMT CIRCULATED

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
12-10-86	INITIAL	COMPLETION			15%NEFE	4000 GALS	4276'	4710'	1394	350	339	24
11-02-87	239	495		24	15%NEFE	10000 GALS	4276'	4710'	691	740	392	24

Remarks:

Present Allow _____ Max Allow. UNIT _____ Accum. Prod. 422,000 as of 02-01-91

Present Test: Oil 85 Water 775 Gas 36 GOR _____ Hrs 24 Pump Flow.

Reasons for Remedial Work: To increase oil production 85 BOPD, it is recommended that the
subject well be acidized and cleaned out. The well produces 85 BOPD and is on a 25% decline.

Several wells in the unit have recently been cleaned out resulting in a 60-100 Bbl increase.

Petroleum Engineering Recommendations and Procedure:

SEE ATTACHED PAGE

Area Manager

Reviewed and Approved By: _____
Engineer _____
Production Foreman _____
Area Engineer _____

Division _____
Approved _____
Date _____

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	()
PAYOUT	
PWI	DCFROI

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

OIL CONSERVATION DIVISION

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator Texaco Exploration and Production Inc.	Well API No. 30-025-31197
Address P.O. Box 730 Hobbs, New Mexico 88240	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Central Vacuum Unit	Well No. 290	Pool Name, Including Formation Vacuum Grayburg San Andres	Kind of Lease <input checked="" type="checkbox"/> State <input type="checkbox"/> Federal or Fee	Lease No. B-155
Location Unit Letter <u>N</u> : <u>670</u> Feet From The <u>South</u> Line and <u>2630</u> Feet From The <u>West</u> Line Section <u>36</u> Township <u>17S</u> Range <u>34E</u> , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil or Condensate <input type="checkbox"/> Mobil Pipe Line Company <input checked="" type="checkbox"/> Texas New Mexico Pipeline	Address (Give address to which approved copy of this form is to be sent) P.O. Box 900 Dallas, Texas 75221 P.O. Box 2528 Hobbs, New Mexico 88240	
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Phillips Petroleum Company <input checked="" type="checkbox"/> Texaco Exploration and Production Inc.	Address (Give address to which approved copy of this form is to be sent) 4001 Penbrook Odessa, Texas 79762 West Star Route Box 425 Lovington, N.M. 88260	
If well produces oil or liquids, give location of tanks.	Unit <u>E</u> Sec. <u>31</u> Twp. <u>17S</u> Rge. <u>35E</u>	Is gas actually connected? <u>Yes</u> When? <u>07-23-91</u>

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well <input checked="" type="checkbox"/>	Gas Well	New Well <input checked="" type="checkbox"/>	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded 05-29-91	Date Compl. Ready to Prod. 07-23-91	Total Depth 4850	P.B.T.D. 4750					
Elevations (DF, RKB, RT, GR, etc.) GR-3994, KB-4009	Name of Producing Formation San Andres	Top Oil/Gas Pay 4285	Tubing Depth 4224					
Performances 4285-94, 4304, 4309, 4314-18, 4321, 4332, 4338 w/2 JSPF, 36 holes 4390-95, 4434-36, 4444-47, 4452-54, 4462 w/2 JSPF, 26 holes, 4573, 4593, 4605-11, 4622, 4643, 4652, 4656-60, 4669-74, 4677-79 w/2 JSPF, 46 holes			Depth Casing Shoe 4850					
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
17 1/2	13 3/8		1550		1400 SX (circ)			
12 1/2	9 5/8		2800		1450 SX (circ)			
8 3/4	7		4850		D.V. Tool @ 1584 850 SX (circ)			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank 07-06-91	Date of Test 07-29-91	Producing Method (Flow, pump, gas lift, etc.) Submersible Pump	
Length of Test 24 hours	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test 757 GOR	Oil - Bbls. 136	Water - Bbls. 1019	Gas- MCF 103

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
M.C. Duncan
Printed Name
8-12-91
Date
Engineer's Assistant
Title
393-7191
Telephone No.

OIL CONSERVATION DIVISION

Date Approved

By

Title

Orig. Signed by
Paul Kautz
Geologist

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-105
Revised 1-1-89

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.
30-025-31195

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B-155

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER _____
b. Type of Completion:
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER _____

7. Lease Name or Unit Agreement Name
CENTRAL VACUUM UNIT

2. Name of Operator
TEXACO EXPLORATION & PRODUCTION INC.

8. Well No.
291

3. Address of Operator
P. O. Box 3109, Midland, Texas 79702

9. Pool name or Wildcat
VACUUM GRAYBURG SAN ANDRES

4. Well Location

Unit Letter N : 660 Feet From The SOUTH Line and 1330 Feet From The WEST Line

Section 36 Township 17-SOUTH Range 34-EAST NMPM LEA

10. Date Spudded 06-19-91 11. Date T.D. Reached 06-29-91 12. Date Compl. (Ready to Prod.) 07-26-91 13. Elevations (DF & RKB, RT, GR, etc.) GR-3999', KB-4014' 14. Elev. Casinghead 3999'

15. Total Depth 4850' 16. Plug Back T.D. 4750' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools 0 - 4850'

19. Producing Interval(s), of this completion - Top, Bottom, Name
4301' - 4675': SAN ANDRES

20. Was Directional Survey Made
YES

21. Type Electric and Other Logs Run
GR-DLL-MSFL-CAL, GR-SDL-DSN, GR-SONIC

22. Was Well Corroded
NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48 & 54.5#	1538'	17 1/2	1400 SX, CIRC 100 SX	
9 5/8	36#	2800'	12 1/4	1450 SX, CIRC 400 SX	
				D. V. TOOL @ 1612'	
7	26#	4850'	8 3/4	850 SX, CIRC 40 SX	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD	SIZE	DEPTH SET	PACKER SET
					2 7/8	4183'	4093'	

26. Perforation record (interval, size, and number)
4301' - 4415': 66 HOLES 4456' - 4560': 110 HOLES
4584' - 4675': 62 HOLES

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4301' - 4415'	ACID-3200 GAL 15% NEFE
4456' - 4560'	ACID-5600 GAL 15% NEFE
4584' - 4675'	ACID-3200 GAL 15% NEFE

28. PRODUCTION

Date First Production 07-18-91		Production Method (Flowing, gas lift, pumping - Size and type pump) SUBMERSIBLE PUMP				Well Status (Prod. or Shut-in) PRODUCING	
Date of Test 07-30-91	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 120	Gas - MCF 58	Water - Bbl. 1500	Gas - Oil Ratio 483
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 38.6	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
SOLD

Test Witnessed By
KIRBY LOCKLAR

30. List Attachments
DEVIATION SURVEY

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature C. P. Basham / SDH Printed Name C. P. BASHAM Title DRLG. OPNS. MGR. Date 08-01-91

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "O" STATE (NCT-1) Well No. 13 Date OCTOBER 6, 1987
 Pool VACUUM GLORIETA County LEA TX. Work. Int. 100.00%
 All depths measured from KB or 11 ft. from ground level. State NEW MEXICO
 TX. Comp. Date 2-18-63 @ T. D. 6853 I. P. Oil 126 Water 0 Gas 92 MCF
 GOR 730 Hrs. 6 Pump. Flow. Present T. D. 6818 PBD Elevation 4008 KB BF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM GLORIETA	5907	6131	PRESENT PRODUCING INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
11-3/4	42#/FT	N.A.	1550'	900 SX	15"	NONE	CEMENT CIRCULATED
8-5/8	24	N.A.	3374'	500 SX	11"	NONE	CEMENT CIRCULATED
2-7/8	6.4	N.A.	6852'	1200 SX	7-7/8"	6247-6477 (SQZD)	TOC @ 3240' - BOND LOG
2-7/8	6.4	N.A.	6850'			5907-6131	

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
2-18-63	INITIAL				LSTNEA	1500	5916	6017	126	0	730	6(F)
2-25-63	INITIAL				LSTNEA	2000	6460	6477	0	94	0	9(S)
2-27-63	SECOND				15% LSTNE	1500	6304	6387	0	113	0	7(S)
3-8-63	THIRD				ACETIC ACID	500	6246	6271	0	99	0	10(S)
4-21-71	36	4	N.A.	24(F)	20% NE	3000	5916	6017	127	6	1375	24(F)
1-8-81	34	7	1176	24(P)	SQZ ANNULUS	700 SX	1575	SURFACE	3	1	1176	24(P)
3-22-82	12	15	1196	24(P)	20% NEFE	3500	5907	6131	132	52	1176	24(P)

PERFORATIONS: 1 JSPI AT 5916, 27, 48, 65, 5992, 6017. 2 JSPI AT 5907, 62, 78, 83, 87, 90, 95, 97, 6008, 11,

Remarks: 6014, 21, 41, 50, 54, 56, 60, 70, 85, 87, 89, 91, 6108, 13, 31.

Present Allow. 29 BOPD Max. Allow. 107 BOPD Accum. Prod. 501,851 Bbl as of 9-1-87

TEST DATE 9-22-87

Present Test: Oil 24 Water 10 Gas 192 GOR 8000 Hrs. 24 Pump. Flow.

Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO INCREASE SUBJECT WELL PRODUCTION 15 BOPD BY TREATING THE EXISTING PERFORATIONS WITH 40 GALLONS OF XYLENE AND 6000 GALLONS OF 20% NEFE YL ACID. THIS WORK IS RECOMMENDED FOR THE FOLLOWING REASONS:

- 1) THE SUBJECT WELL, CURRENTLY PUMPING 24 BOPD, IS SURROUNDED ON THREE SIDES BY OFFSETS PRODUCING 56 TO 96 BOPD (FIGURES 1,4). THE SUBJECT WELL'S DRAINAGE

Petroleum Engineering Recommendations and Procedure:

1. MIRU PULLING UNIT. PULL RODS AND PUMP. INSTALL BOP. PULL 2-1/16" TUBING.
2. GO IN Y-STRING WITH 2-5/16" BIT ON 1-5/8" WORKSTRING. CLEAN OUT, IF NECESSARY, TO 6150'.
3. PULL UP TO 6121'. SPOT ACROSS PERFORATIONS A MIXTURE OF 40 GALLONS OF XYLENE AND 40 GALLONS OF 20% NEFE HCl. SQUEEZE MIXTURE INTO PERFS. POH.
4. SWAB CASING.
5. TIE WITH 2-1/2" PACKER ON WORKSTRING. SET PACKER AT 5700'.

MAS 10-1-87

DMD 10-5-87

CL 10-10-87

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

District Petroleum Engineer

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

	CASH	MOH	TOTAL	REMARKS
EXP. INC.	20,100	0	20,100	20,100
INV.	0	0	0	0
TOTAL	20,100	0	20,100	20,100

PROD. INCR (TX%)	15 (15)
PAYOUT	4 MONTHS
P.W.I. 1000 / 1000	1000

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "C" STATE (NCT-1) Well No. 17 Date FEBRUARY 24, 1987
 Pool VACUUM WOLFCAMP/DEVONIAN County LEA TX. Work Int. 100.00%
 All depths measured from KB or 12 ft. from ground level. State NEW MEXICO
 TX. Comp. Date 6-22-63 @ T. D. 12082 I. P. OIL 101, 222^W, 301^W Water 5*, 0^W, 0^W Gas 112*, 201^W, 555^W MCF
 GOR 1102, 907^W, 1845^W Hrs. 24 Pump (Flow) Present T. D. PBTD 11875' Elevation 4009 KB BS

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
ABO NORTH	9097	9224	TESTED NONPRODUCTIVE 3-20-64
WOLFCAMP*	9962	10029	PRESENTLY PRODUCING INTERVAL
UPPER PENNSYLVANIAN**	10130	10140	TR-O 4-6-69
DEVONIAN***	11934	11942	TR-O 6-6-69

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
16 5/16-3/8	65.848	H-40	1612	1200	20	NONE	CEMENT CIRCULATED
11-3/4-2 5/8	36	H-40	4750	1700	12-1/4	NONE	EST. CMT. TOP @ 1500'
3-1/2	9.2	J-55, N-80	12082	1325	8-3/4	9962-10004	CMT. TOP 1625' BY SURVEY
2-7/8	6.4	J-55, N-80	10964		8-3/4	CMT. FILLED TO 9358'	
2-7/8	6.4	J-55, N-80	10975		8-3/4	RETAINER @ 10070'	

COMPLETION AND REMEDIAL WORK RECORD

	Date	Production Test Before				Type	Treatment			Production Test After			
		Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
X	6-22-63	INITIAL	COMPLETION			PERF. ACID	2750	9962	10004	101	5	1109	24(F)
Y	6-18-63	INITIAL	COMPLETION			PERF. ACID	900	10130	10140	222	0	907	24(F)
Z	6-3-63	INITIAL	COMPLETION			PERF. ACID	2200	11980	11990	301	0	1845	24(F)
Y	3-20-64	PB WLFCA TEST ABO, ACID PENN				PB, PERF. ACID	3200, 4000	5097-9224/	10130-40	0	2	N.A.	2(S) ABO
X	5-5-64	NO PROD. - ABO COLLAPSED Y STRING				PERF. ACID	1000	10130	10140	314	22	1796	24(F)
Z	7-10-64	78	19	727	24(F)	PB, PERF. ACID	500	11934	11942	286	1	820	24(F)
X	3-19-69	8	3	1040	24(F)	ACID, SQZ	6000	10130	10140	31	3	314	24(P)
Z	4-5-69	0	70	(DEVONIAN) 24(P)		PB, PERF. ACID	3250	9962	10029	48	0	TSTM	24(P)
Z	4-8-69	0.9	0	80,000	24(P)	ACID	3000	9962	10029	5	4	TSTM	24(P)
Remarks: PUMPING EQUIP: C456-304-144 UNIT, RODS: 113-70, 285 3/4", PUMP: 2" x 1 1/4" x 20 x 24" SET @ 5950'. FLUID LEVEL N/A (2785" ANNUAL DRIFT CLEARANCE)													
Present Allow WC-3.1, DEV-O Max. Allow WC-355, DEV-295 Accum. Prod. WC-101,805 BO DEV-144,107 BO as of 1-1-86													

Present Test: Oil 2 Water 0 Gas 13 GOR 6833 Hrs. 24 Pump Flow.
 TEST DATE: 1-25-87

Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO INCREASE SUBJECT WELL PRODUCTION 25 BOPD BY CEMENT-SQUEEZING THE CURRENTLY-PRODUCING WOLFCAMP ZONE, REOPENING THE DEVONIAN PAY, AND TREATING WITH 5040 GALLONS OF CROSSLINKED POLYMER. THIS WORK IS RECOMMENDED BECAUSE:

(1) THE PRODUCING WOLFCAMP ZONE HAS REACHED ITS ECONOMIC LIMIT OF 2 BOPD. A RECOMPLETION ATTEMPT IS NOT WARRANTED, BASED ON THE POOR RESULTS OF THE MARCH, 1984 TREATMENT. ADDITIONAL POSSIBLE WOLFCAMP PAY (FIG.3) APPEARS TOO TIGHT TO JUSTIFY A RECOMPLETION ATTEMPT.

Petroleum Engineering Recommendations and Procedure: (ALL IN 2 STRING)

- 1) MIRU. PULL RODS, PUMP. INSTALL BOP. PULL 2-3/8" ATLAS BRADFORD TUBING.
- 2) TIH WITH 3-1/2" CEMENT RETAINER ON 2-1/16" WORKSTRING. SET RETAINER AT 9860'.
- 3) SQUEEZE WOLFCAMP PERFORATIONS AT 9962-10029' WITH 100 SK CLASS "H" CEMENT CONTAINING 3 LB/SK GILSONITE, 1/4 LB/SK FLOCELE. FLUSH WITH 18 1/2 BBLs FRESH WATER. STING OUT OF RETAINER, REVERSE CIRCULATE, AND POH.
- 4) TIH WITH 2-7/8" BIT AND 6 DRILL COLLARS ON 1.66" WORKSTRING. DRILL OUT RETAINER AND CEMENT TO 10,050'. PULL UP TO 9900' AND PRESSURE TEST CASING TO 500 PSI.
- 5) LOWER BIT TO 11875' PBTD. DRILL OUT 25' OF CEMENT AND CIBP. PUSH CIBP TO 11960' PBTD.
- 6) DRILL OUT RBP AT 11960'. PUSH TO BOTTOM (PBTD 12,052'). POH.

MAS 2-5-87

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

DMD 2/17/87

	CASH	MOH	TOTAL	TEXACO
EXP. (IDC)	32500	0	32500	32500
INV.	0	0	0	0
TOTAL	32500	0	32500	32500

District Petroleum Engineer

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

PROD. INCR (TX%)	25 (25)
PAYOUT	1.1 YEARS
P. W. I.	4.39 / DCFROI: 146.5

IDC WO: This workover will result in the recovery of new identifiable production and reserves that will not otherwise be recovered by the present completions.

RECOMMENDED REMEDIAL WORK

(116) Form PG-60 (H)
C-33

Lease NEW MEXICO "O" STATE (NCT-1) Well No. 22 Date 2-28-83
Pool VACUUM GLORIETA County LEA TX. Work Int 100%
All depths measured from KB or 11 ft. from ground level. State NEW MEXICO
TX. Comp. Date 12-3-63 @ T. D. 6800 I. P. Oil 202 Water 0 Gas 137 MCF
GOR 677 Hrs 12 Pump Flow Present T. D. 6030 PB Elevation 4010 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Y-VACUUM GLORIETA	5861	6012	PRESENT INTERVAL (GAS LIFT)
Z-VACUUM BLINEBRY	6726	6735	PLUGGED @ 6604 W/CIBP 9-14-77 (ASD)
Y-Vacuum Glorieta	5861	6120	Proposed Completion Interval

CASINO AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
1 3/4	42	H-40	1549	1100	15"	NONE	CEMENT CIRCULATED
Y - 2 7/8	6.4	J-55	6794	1400	7 7/8"	5861-6012	CEMENT TO SURFACE BY
Z - 2 7/8	6.4	J-55	6799			6726-6735	BRADENHEAD SQUEEZE

COMPLETION AND REMEDIAL WORK RECORD (Y-string)

Date	Production Test Before					Treatment			Production Test After			
	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
12-3-63	NEW WELL				ACID	1500	5929	5941	202	0	677	12 (F)
2-12-71	1	0	-	24 (F)	28% ACID	3000	5929	6012				
					15% ACID	500	5929	6012	54	4	1620	24 (F)
8-24-72	2	0	-	24 (F)	20% ACID	4000	6053	6067	0	49	-	TRO
10-76	0	0	-		CMT SQUEEZE	100 SX	6053	6067				
					ACID	7000	5861	6012	6	19	12000	24 GAS LIFT

Remarks: Note: Cement Retainer @ 6030' in Y-string. Present perfs: 31, 38, 40, 50, 60, 64, 76, 81, 93, 6030, 6012, 5861, 5729.

Present Allow 1 Max. Allow 107 Accum. Prod 149,950 as of 1-1-83

CLASSIFIED SI 9-80

Present Test: Oil 0 Water 0 Gas 0 GOR - Hrs - Pump Flow -

Choke Size - Pressure - Tbg Pressure -

Reasons for Remedial Work: TO RETURN THIS WELL TO A PRODUCTION OF

30 BOPD BY PERFORATING ADDITIONAL PAY LOWER IN THE GLORIETA, ACIDIZING

THE ENTIRE PRODUCTION INTERVAL AND pumping from the abandoned Elinebry

Petroleum Engineering Recommendations and Procedures: String using the Glorieta string to vent gas.

- 1) RIG UP PULLING UNIT, INSTALL B.O.P. ON GLORIETA Y-STRING.
- 2) RIG UP REVERSE UNIT, GIH WITH A WORKSTRING AND A 2 5/16 BIT.

DRILL OUT CEMENT RETAINER AT 6030' AND CEMENT TO 6170' (New PSTD 6170' Y-string)

- 3) PUMP 50 GALS XYLENE TO PERFS. SI 6 HOURS. PUMP 1 DRUM

(TRETOLITE SP-196 OR EQUIV.) SCALE CONVERTER TO THE PERFS.

SI 24 HOURS.

DOW 3-1-83

SPS 2-28-83

Reviewed and Approved By:

District 11-3-1-83

Geological

Asst. Supt.

Supt.

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

Economics include

\$67,700 for

pumping equipment

30 (30) BOPD

11 MONTHS

P.W.L. 5.62

Expense Type Workover

Est. 1-3524
(116) Run Post (H)
D-3

RECOMMENDED REPAIR WORK

Lease NEW MEXICO 0" (NCT-1) Well No. 23 Date 1-17-81
 Pool VACUUM GLORIETA County LEA State NEW MEXICO
 All depths measured from KB or 12 ft. from ground level.
 TX. Comp. Date 1-28-83 @ T. D. 6800 I. P. OIL Y-198 Water Y-15 Gas 90 MCF
 GOR Y-454 Hrs Y-12 Flow, Present T. D. Z-6490 Elevation 4001 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>VACUUM GLORIETA</u>	<u>5926</u>	<u>6149</u>	<u>PRESENTLY PRODUCING ZONE</u>
<u>VACUUM BLINEBRY</u>	<u>6722</u>	<u>6749</u>	<u>ABANDONED W/CIBP @ 6500 -> 9-72</u>

CASINO AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Part.	Remarks
<u>11 3/4</u>	<u>42</u>	<u>H-40</u>	<u>1520</u>	<u>1000</u>	<u>15"</u>	<u>NONE</u>	<u>CMT CIRCLED</u>
<u>8 5/8</u>	<u>32 1/2</u>	<u>J-55</u>	<u>3300</u>	<u>600</u>	<u>10 5/8</u>	<u>NONE</u>	<u>CMT TOP @ 2300 CALC @ 33% FILL..</u>
<u>2 1/8</u>	<u>6.4</u>	<u>J-55</u>	<u>6794</u>	<u>1000</u>	<u>7 1/8</u>	<u>5926-6149</u>	<u>CMT TOP @ 3300 BY</u>
<u>2 1/8</u>	<u>6.4</u>	<u>J-55</u>	<u>6787</u>			<u>6722-6749</u>	<u>CMT BOND LOG</u>

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
11-30-63	NEW WELL				ACID	2500	5926-	5941	198	15	454	12F
11-6-72	53	0	-	24P	20%	4000	5926	- 6038	129	8	1765	24P
4-78	53	5	524	24P	15%	2000	6066	- 6149	(NEW PERFS)			
					VENTED FROM 6140 - 6150							
			Z-STRING		NOW PUMPS GLORIETA OIL				103	2	1524	24P
					FROM PERFS AT 5926 6149							

Remarks: NMOCD REQUIREDPresent Allow. 105 Max. Allow. 107 Accum. Prod. 431,131 as of 1-1-80Present Test: Oil 107 Water 0 Gas 2 GOR 19 Hrs 17 Pump. Hrs.Choke Size --- Pressure --- Tbg Pressure ---

Reasons for Remedial Work:

TO CORRECT A SURFACE SALTWATER FLOW FROM THE 8 5/8" - 11 3/4"
BRADENHEAD AND THEREBY COMPLY WITH NMOCD RULES ON ISOLATING THE SALADO FM
(SEE EXHIBITS). ECONOMICS ARE BASED ON LOSING ALL CURRENT PRODUCTION.

Petroleum Engineering Recommendations and Procedure:

- RIG UP PULLING UNIT, PULL RODS AND PUMP FROM "Z" STRING,
INSTALL BOP, PULL TUBING.
- SET A RBP IN THE "Z" STRING AT 5000' WITH A WIRELINE
AND LOAD WITH 2% KCL WATER.
- GO IN THE "Y" STRING WITH A 2 1/8" WORKSTRING AND RBP.
SET THE RBP @ 5000' AND DUMP 20' 8-12 MESH SAND ON TOP. POH.
TEST THE "Y" STRING TO 1000 PSL FOR 30 MINUTES.
- RIG UP WIRELINE. GO IN WITH ORIENTED GUN (USE MCCULLOUGH
Wireline: McCullough
CMT: Halliburton
(CONT)

District Petroleum Engineer

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

PROD. INCR. INDEX 107 (107)
PAYOUT 24 MONTHS

	CASH	MOH	TOTAL	STANDARD
EXP.	<u>30000</u>	<u>0</u>	<u>30000</u>	<u>30000</u>
INV.	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	<u>30000</u>	<u>0</u>	<u>30000</u>	<u>30000</u>

UT 1-12-81

TLT

WJ 1-12-81

PCJ 1-13-81

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

Form C-103
Revised 10-1-7

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
B-155

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name -
2. Name of Operator TEXACO Inc.	8. Farm or Lease Name N.M. '0" St. NCT-1
3. Address of Operator P. O. Box 728, Hobbs, New Mexico 88240	9. Well No. 23
4. Location of well UNIT LETTER 0 660 FEET FROM THE South LINE AND 1900 FEET FROM THE East LINE, SECTION 36 TOWNSHIP 17-S RANGE 34-E N.M.P.M.	10. Field and Pool, or Wildcat Vacuum Glorieta
15. Elevation (Show whether OF, KI, GR, etc.) 3990' (GR)	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOBS ☐
OTHER Repair Water Flow ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Rigged up. Pull rods & pump from Glorieta string. Install BOP. Pull tubing.
2. Set RBP in Blinbry string @ 4000' & test csg. Tested OK.
3. Set RBP in Glorieta string @ 4000' & test csg. Tested OK. Spot 20' on both plugs.
4. Perforate 2 7/8" Glorieta string & 8 5/8" csg w/2-shots @ 1545'.
5. Cement 11 3/4" x 8 5/8" csg annulus w/400 Sx. Class 'H' cement & 100 Sx. Class 'H' cement containing 2% CaCl. Cement circulated. Squeeze w/add'l 200 Sx. Class 'H' cement containing 2% CaCl. WOC. DOC. Test. Tested OK. Pull RBPs.
6. Install pumping equipment. Test & place on production. Compl. 6-22-81

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

SIGNED Jerry Seaton TITLE Asst. Dist. Mgr. DATE 6-25-81
Orly. Signed By
Jerry Seaton
APPROVED BY Dist. L. Supv. TITLE _____ DATE JUN 26 1981
CONDITIONS OF APPROVAL, IF ANY:

Est. #3723
(116) Form 10-40 (H)
6-31.

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "O" STATE NCT-1 Well No. 24 Date 10-14-80
Pool VACUUM ABO NORTH, GLORIETA, WOLFCAMP County LEA TX. Work. Int. 100%
All depths measured from KB or 12 ft. from ground level. State NEW MEXICO
TX. Comp. Date 6-10-64 @ T. D. 10,300 I. P. Oil 247 Water 0 Gas 24.7 MCF
GOR 100 Hrs. 9 Pump. Flow. Present T. D. 10,210 Elevation 3114' DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
X→ ABO NORTH	9133	9263	CLASSIFIED TR-O
Z→ GLORIETA	5942	5954	PRESENT PRODUCING INTERVAL (OLD PENN ZONE)
Y→ WOLFCAMP	10042	10062	CLASSIFIED TR-O (HAS 1" TBG AND STUCK ROSE)

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
13 3/8"	54.5 + 48	SW. NEW	1534	1200	17 1/2"	NONE	CEMENT CIRCULATED
9 5/8"	36	H-40	4418	1700	12 1/4"	NONE	
X→ 7 1/2"	6.5	J-55	10229			9133-9263	
Z→ 2 7/8"	6.5	J-55	10294	2400	8 5/8"	5942-5954	CMT TO PC 2800' BY TEMP SURVEY
Y→ 2 7/8"	6.5	J-55	10300			10042-10062	

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
Z→ 6-10-64	NEW WELL	(PENN)	LSTNE	3000	10206	10212	SQUEEZED W/15 SX CMT					
Z→ 7-4-64		(GLOR)	LSTNE	500	5942	5954	247	0	100	9F		
Y→ 5-10-64	NEW WELL	(W.C.)	LSTNE	2000	10042	10062	85	1	1110	24F		
X→ 7-3-64	NEW WELL	(ABO NORTH)	LSTNE	7500	9133	9263	94	26	950	24(SWAB)		
(W.C.) 5-21-68	22	8	109	24P	28% NE	6000	10042	10062	116	0	520	24P
Z→ 4-11-70	20	2	2718	24P	15% NEA	3000	5242	5254	101	4	1432	24F
Z→ 4-11-71	35	0	1410	24F	28%	3000	5242	5254	54	4	1050	24F
Z→ 8-1-72	53	0	3000	24F	REFILL 15%	4500	5242	6102	43	8	1750	24P
X→ Remedy	20	0	279	24F	28%	5000	9133	9263	15	44	289	24GL

Present Allow Z→ 11 Max. Allow 107 Accum. Prod. 178215 as of 1-1-80

Present Test: Oil Z→ 16 Water 5 Gas 108 GOR 6750 Hrs 24 Pump. Flow.

Choke Size _____ Pressure _____ Tbg Pressure _____

Reasons for Remedial Work:

TO CORRECT SURFACE SALTWATER FLOWS ON THE 9 5/8" - 13 3/8" BRADENHEAD AND THE 2 7/8" - 9 5/8" ANNULUS BY BRADENHEAD SQUEEZING THE SUBJECT WELL.

~(CONT)~

Petroleum Engineering Recommendations and Procedure:

- RIG UP PULLING UNIT. PULL RODS AND PUMP. INSTALL BOP. PULL THE 2 1/8" TUBING FROM THE GLORIETA STRINGS. RUN 2 7/8" RBPS ON WIRELINE + SET IN THE "X" + "Z" Casing strings @ 3000'. Pressure test both strings to 1000 psi for 30 minutes.
- NIPPLE UP PUMP TRUCK TO THE 9 5/8" - 13 3/8" ANNULUS AND ESTABLISH INJECTION. RIG UP WIRELINE AND RUN A BASE GR-TEMP. LOG FROM SURFACE TO TOP OF CMT AT 2800' KB.

~(CONT)~

CMT: Halliburton
WIRELINE: M.C. Callough
Reviewed and Approved By: _____
District _____

R. L. Lane
District Petroleum Engineer

Division _____
Engineering _____
Geological _____
Gen'l. Supt. _____

WOT 10-15-80
ACT

	CASH	MOH	TOTAL	TEXACO
EXP. 1980	4/000	-	4/000	4/000
INV.	-	-	-	0

Approved _____
Date _____
PROD. INCR (TXCO) 16 (1/6)
PAYOUT 5 Mo.

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 3002520946
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-155
7. Lease Name or Unit Agreement Name New Mexico "O" State (NCT-1)
8. Well No. 24
9. Pool name or Wildcat Vacuum Glorieta, Wolfcamp, Abo No.

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	
2. Name of Operator Texaco Producing Inc.	
3. Address of Operator P.O. Box 730, Hobbs, NM 88240	
4. Well Location Unit Letter <u>P</u> : <u>860</u> Feet From The <u>South</u> Line and <u>660</u> Feet From The <u>East</u> Line Section <u>36</u> Township <u>17-S</u> Range <u>34-E</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3994' (DF)	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data			
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:		
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: TRO three (3) well bores <input checked="" type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

01/24/90 - 01/26/90

- 1) MIRU PU. TOH laying dn rods & pmp. Installed BOP.
- 2) RU Rotary. X string (Abo North) Ran 2.75 gauge ring to 6291'.
Y string (Wolfcamp) String of 1" Kobe tbg.
Z string (Glorieta) Ran 2.75 gauge ring to 5190'. Set CIBP @ 5150'.
Capped w/30' cmt.
- 3) TOH w/2-1/16" tbg. RD PU.

Status - TR-0.

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

SIGNATURE J. A. Head TITLE Area Manager DATE 02/21/90
TYPE OR PRINT NAME J. A. Head TELEPHONE NO. (505) 393-7191

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

FEB 27 1990

Date 10-24-90

Lease N.M. "O" State (NCT-1) Well No 26 Tx. Work. Int 100%
Pool Vacuum Glorieta County Lea State New Mexico
All depths measured from KB for 16 ft. from ground level.
Tx. Comp. Date 8-26-87 @ T. D. 6180 I. P. Oil 20 Water 256 Gas 35 MCF
GOR 1751 Hrs 24 Pump Present T. D. 6020 Elevation 4014' KB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
Glorieta & Upper Paddock	5796	5999	Present Completion Interval
Upper Paddock Paddock	5955	5970	Proposed Completion Interval
Middle & Lower Paddock	6046	6142	Unsuccessful Completion Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
16	65	H-40	415	590	20		Cement Circulated
11 3/4	42	H-40	1520	1200	14 3/4		Cement Circulated
8 5/8	32	S80, J55	4850	1550	11		Cement Circulated
5 1/2	15.5	J-55	6180	800	7 7/8	See Remarks	Cement Circulated

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment				Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
8-87	Initial	Completion			P/15%	2700 g.	6114	6142	20	256	1751	24 P
9-87	Recomplete	Uphole			P/15%	2500 g.	6046	6098	17	252	TSIM	24 P
9-87	Recomplete	Uphole			P/15%	8500 g.	5907	5999	404	58	646	24 P
4-88	12	20		24 P	P/15%	4500 g.	5796	5894	55	0	1778	24 P

Remarks: Perfs 2 JSPF: 5907-31,38-54,75-83,89-92,96-99; w/o 5796-5804,17-20,74-94 (186 holes)
Abandoned Perfs: 6046,48,80,82,84,90,96,98,6114,16,20,26,28,32,33,40,42

Present Allow 63 BOPD Max Allow. 107 BOPD Accum. Prod. 35 MBO as of 10-89

Present Test: Oil 63 Water 2 Gas 145 GOR 2300 Hrs 24 Pump.

Reasons for Remedial Work: To increase production by 28 BOPD by perforating additional Upper Paddock pay and removing CaSO4 scale from the Upper Paddock. By perforating 15' of additional pay, 20 MBO of additional reserves will be recovered. Based upon the predicted increase, this workover will payout in 2 months. Continued on Page 2.

Petroleum Engineering Recommendations and Procedure: See Page 3.


Area Manager

Reviewed and Approved By:
Engineer KGC 10-24-90
Production Foreman
Area Engineer

Division
Approved
Date

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%) 28 BOPD (28 BOPD)
PAYOUT 2 months
PWI 17.07 DCFROI 1000+

DISTRICT I
P.O. Box 1930, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-29919
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. 41487

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Lease Name or Unit Agreement Name New Mexico "O" State NCT-1
2. Name of Operator Texaco Producing Inc.	8. Well No. 26
3. Address of Operator P.O. Box 730, Hobbs, NM 88240	9. Pool name or Wildcat Vacuum Glorieta
4. Well Location Unit Letter <u>M</u> : <u>990</u> Feet From The <u>South</u> Line and <u>990</u> Feet From The <u>West</u> Line Section <u>36</u> Township <u>17S</u> Range <u>34E</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

02/04/91 - 02/11/91

- 1) MIRU PU. NU BOP. TOH w/prod equip. TIH w/bit & DC to 5800'.
- 2) C/O to TD 6142'. TOH w/bit.
- 3) Perf 5.5" csg w/2 JSPF @ 5955-70'. 16 Int/32 Hles
- 4) TIH w/pkr to 6142'. Spt 600 gals ammonium bicarbonate acr perfs 3907-6142'. PSA 5400'.
- 5) Ld csg. A/perfs 5907-6142' w/5000 gals 15% NEFE w/165 gals mutual solvent 2000# RS, 100 BS's. Max P-130#. Min P-0#. AIR 3.7 BPM. ISIP-Vac TOH w/pkr
- 6) TIH w/prod equip. Ret to prod.

Prior - 63 BOPD, 2 BWPD. After - 75 BOPD, 13 BWPD.

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

SIGNATURE Richard DeSoto TITLE Engineering Technician DATE 03/28/91

TYPE OR PRINT NAME R. B. DeSoto TELEPHONE NO. 393-7191

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE APR 04 1991

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.O.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-155	

10. TYPE OF WELL	
OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>
11. TYPE OF COMPLETION	
NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>

7. Unit Agreement Name
8. Farm or Lease Name
N.M. 'O' State Nct-
9. Well No.
27
10. Field and Pool, or Wildcat
Vacuum Glorieta

2. Name of Operator	
Texaco Producing Inc.	
3. Address of Operator	
P.O. Box 728, Hobbs, New Mexico 88240	

4. Location of Well	
UNIT LETTER <u>P</u>	LOCATED <u>990</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM
THE <u>East</u> LINE OF SEC. <u>36</u> TWP. <u>17-S</u> RGE. <u>34-E</u> NMPL	

12. County
Lea

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
11-6-87	11-23-87	12-9-87	4004' KB	3988'
20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools
6290'	6239'		0-6290'	Cable Tools

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
6118' - 6217' Glorieta	No

26. Type Electric and Other Logs Run	27. Was Well Cored
Gamma Ray - Resistivity - Sonic - Density - Neutron - Cement Bond Log	No

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
16"	75*	405'	20"	600 sx	
11-3/4"	42*	1547'	14-3/4"	1200 sx	
8-5/8"	32*	4840'	10-5/8"	1400 sx	
5-1/2"	15.5*	6290'	7-7/8"	950 sx	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8	6228'	

31. Perforation Record (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.										
2 JSPF at 6118-25 6179-81 6210-17 Total 19 intervals, 38 shots	<table border="1"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td>6118-6217</td> <td>2500 gals 15% NEFE acid</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	6118-6217	2500 gals 15% NEFE acid						
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED										
6118-6217	2500 gals 15% NEFE acid										

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
12-9-87		Pumping				Producing	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
12-21-87	24	Pumping		70	68	316	971
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
			70	68	316	38.6	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By
Sold - Texaco Inc.	Wayne Minchew

35. List of Attachments
Deviation Survey

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED A. Gernandt A. Gernandt TITLE Area Superintendent DATE 12-22-87

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED	
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SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.
B-155

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator Texaco Producing Inc.	8. Farm or Lease Name N.M. "O" State NCT-1
3. Address of Operator P.O. Box 728, Hobbs, New Mexico 88240	9. Well No. 27
4. Location of Well UNIT LETTER <u>P</u> <u>990</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE, SECTION <u>36</u> TOWNSHIP <u>17-S</u> RANGE <u>34-E</u> N.M.P.M.	10. Field and Pool, or Whdcat Vacuum Glorieta
11. Elevation (Show whether DF, RT, GR, etc.) 3988 GR	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPER. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1603.

1. MIRU. Pull rods, pump. Install BOP. Pull tubing.
2. Set RBP @ 6059'. Spot 200 gals 10% acetic acid at 5792'-5992'.
3. Perforate Glorieta 2 JSPF at 5936'-5954', 5960'-5992' (Total 52 intervals, 104 shots).
4. Acidize with 7500 gallons 15% NEFE, 500 SCF Nitrogen, and 150 ball sealers. AIR 7.5 BPM, Max TP 3000, ISIP 400.
5. Run production equipment. On 24 hour OPT 2-2-88, pumped 52 BO, 2 BW, GOR 3865, gravity 37.7 from Glorieta perforations 5936'-5992'.
Not potentialized at this date

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

SIGNED A. Gernandt 393-4031 TITLE Area Superintendent DATE 5-24-88

ORIGINAL SIGNED BY JERRY SEXTON

APPROVED BY DISTRICT 1 SUPERVISOR TITLE DATE MAY 27 1988

CONDITIONS OF APPROVAL, IF ANY:

that will not otherwise be recovered by the present completion. Estimated production and reserves

RECOMMENDED REMEDIAL WORK

Form PO-90 (M)

Est # 60-4931

Lease N.M. "O" State (NCT-1) Well No 29 Tx. Work. Int. 100%
Pool Vacuum Glorieta County Lea State New Mexico
All depths measured from KB or 15 ft. from ground level.
Tx. Comp. Date 5-4-89 @ T. D. 6270 I. P. Oil 198 Water 10 Gas 202 MCF
GOR 1020 Hrs 24 Pump Present T. D. 6180 PBTD Elevation 3984 GL

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
Glorieta and Upper Paddock	5791	5970	Proposed Completion Interval
Lower Paddock	6103	6132	Present Completion Interval

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
16"	75	K-55	425	700	20"		Cement Circulated
11 3/4"	42	H-40	1571	1250	14 3/4"		Cement Circulated
8 5/8"	32	S80,J55	4843	1850	10 5/8"		Cement Circulated
5 1/2"	15.5	J-55	6270	900	7 7/8"	6103-32	Cement Circulated

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
5-89	Initial	Completion			P/15%	2500 g.	6103	6132	198	10	1020	24P

Remarks: Perfs, 2 JSPF @ 6103-12, 15-16, 23-25, and 30-32 (Total 36 shots)

Present Allow 58 BOPD Max Allow. 107 Accum. Prod. 31,388 BO as of 6/90

Present Test: Oil 58 Water 11 Gas 105 GOR 1823 Hrs 24 Pump

Reasons for Remedial Work: To increase production by 17 BOPD and 31 MCFPD by perforating 98' of additional Glorieta and Paddock pay and acidizing all perforations. Total production from this proration unit is 90 BOPD, which is 17 BOPD below the top allowable of 107 BOPD. By completing 98' of additional pay, 57 MBO and 104 MMCF of additional reserves will be recovered. Based upon the predicted increase, this workover will payout in 4 months. Continued on Page 2.

Petroleum Engineering Recommendations and Procedure: See Page 3.

Reviewed and Approved By:
Engineer KGC 10-24-90
Production Foreman _____
Area Engineer _____

Ja Hear
Area Manager
Division _____
Approved _____
Date _____

	CASH	MOH	TOTAL	TEXACO
IDC	32,000	--	32,000	32,000
INV.	--	--	--	--
TOTAL	32,000	--	32,000	32,000

PROD. INCR (TX%)	17 BOPD (17 BOPD)
PAYOUT	4 months
PWI	17.43
DCFROI	1000+%

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL FILE

WELL API NO. 30-025-30476
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-155
7. Lease Name or Unit Agreement Name New Mexico "O" State NCT-1
8. Well No. 29
9. Pool name or Wildcat Vacuum Glorieta
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3984' GR

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. Name of Operator Texaco Producing Inc.
3. Address of Operator P.O. Box 730, Hobbs, NM 88240	4. Well Location Unit Letter N : 990 Feet From The South Line and 2310 Feet From The West Line Section 36 Township 17-S Range 34-E NMPM Lea County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3984' GR	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

02/11/91 thru 02/17/91

- 1) MIRU PU. TOH w/prod equip. TIH w/bit & bailer. C/O to 6180' PBTD. TOH.
- 2) Perf csg w/2 JSPI @ 5791-98,5813-27,5878-90,5909-70'. (98 Int/196 Hles)
- 3) TIH w/RBP & pkr. Set BP @ 6164'. PSA 6030'.
- 4) A/perfs 6103-32' w/160 gals 15% NEFE w/1 drum TW425 & 60 1.3 BS's. Max P-0#. Min P-0#. AIR 2.2 BPM. ISIP-Vac.
- 5) Set BP @ 6030'. Pkr @ 5709'. A/perfs w/10,000 gals 15% NEFE, 200 1.3 BS's. 400# RS. Max P-1350#. Min P-0#. AIR 3.2 BPM. ISIP-Vac.
- 6) TIH w/prod equip. Returned to prod.

Prior - 58 BOPD, 11 BWPD. After - 243 BOPD, 0 BWPD.

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

SIGNATURE Richard DeSoto TITLE Engineering Technician DATE 04/15/91

TYPE OR PRINT NAME R. B. DeSoto TELEPHONE NO. 393-7191

(This space for State Use)

Orig. Signed by
Paul Kautz
Geologist

APPROVED BY _____ TITLE _____ DATE APR 19 1991

CONDITIONS OF APPROVAL, IF ANY:

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "M" STATE Well No. 5 Date APRIL 19, 1988
Pool VACUUM GLORIETA/WOLFCAMP County LEA TX. Work Int. 100.00 %
All depths measured from KB or 12 ft. from ground level. GLOR WC GLOR WC
TX. Comp. Date 11-17-63 T. D. 12215 I. P. Oil 40/284 Water 160/20 Gas 10.9/186 MCF
GOR 273/656 Hrs. 24 SWAB Pump. Flow. Present T. D. 10191 PBTD Elevation 4011 KB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

	Name or Type of Zone	Top	Base	Remarks
②	GLORIETA	6044	6046	ASD - HELD FOR SECONDARY RECOVERY 5-22-68
②	GLORIETA	6126	6169	PROPOSED PERFORATIONS
①	WOLFCAMP	9337	9960	SHUT IN - PUMP STUCK 4-4-88

CASING AND LINER RECORD

	Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
	16"/13-3/8"	63/54.5	H40/J55	1504	1150 SX	20/17-1/2	NONE	TAPERED STRING. CMT CIRC.
	9-5/8"	36	H40	4788	1700 SX	12-3/4	NONE	TOP OF CEMENT AT SURFACE
①	2-7/8	6.4	J55	10191	2250 SX	8-3/4	9337-9960	CEMENT CIRCULATED
②	2-7/8	6.4	J55	10215			6044-6046	
③	2-7/8	6.4	J55	9473			NONE OPEN	

COMPLETION AND REMEDIAL WORK RECORD

	Date	Production Test Before				Type	Treatment		From	To	Production Test After			
		Oil	Water	GOR	Hrs		Amount				Oil	Water	GOR	Hrs
①	11-17-63	INITIAL	WOLFCAMP	COMPLETION		ACID	1500		9938	9960	284	20	656	24(S)
②	11-17-63	ABO	COMPLETION	ATTEMPT		ACID	13000		9068	9310	SQZD	150 SX	CMT.	ASD 11-17-63
③	11-17-63	INITIAL	GLORIETA	COMPLETION		ACID	4500		6076	6094	40	160	273	24(S)
①,2	11-20-65	130	0	N.A.	24(P)	COMINGLED *1	AND *2 STRINGS AT 9700-9701							
②,3	3-21-68	0	67	N.A.	24(P)	SQZD 6076-94	PERF. ACID	1500 GALS	AT	6044-46	0	150	SHOW	9(S) ASD
①	6-22-68	15	2	325	24(P)	15% ACID	6000		9938	9960	147	22	610	24(P)
	9-30-80	2	10	6050	24(P)	BRDNHD SQZ	650 SX		SURF	2100	8	0	2125	24(P)
①	6-11-87	2	3	2667	24(P)	PERF. 15% NEFE	5000		9337	9960	16	17	1800	24(P)

Remarks:

WOLFCAMP/ GLORIETA

Present Allow. 7/0 Max. Allow. 355/107 Accum. Prod. 139130/76187 as of 12-1-87

Present Test: Oil 7 Water 10 Gas 9.8 GOR 1400 Hrs 24 Pump Oper.
WOLFCAMP TEST DATE 2-8-88

Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO RESTORE SUBJECT WELL GLORIETA PRODUCTION TO 15 BOPD BY SQUEEZING EXISTING PERFORATIONS AT 6044'-46' WITH 50 SACKS OF CLASS 'H' CEMENT, PERFORATING NEW GLORIETA PAY AT 6126'-6169', AND ACIDIZING WITH 4000 GALLONS OF 15% NEFE HCl. THE PROPOSED PERFORATIONS WILL OPEN 13 NET FEET OF BEHIND-PIPE PAY WHICH EXHIBITS AN AVERAGE SONIC LOG POROSITY OF 11.6 PERCENT AND AN AVERAGE

Petroleum Engineering Recommendations and Procedure:

- RIG UP HALLIBURTON ON NO. 2 STRING. LOAD HOLE AND ESTABLISH PUMP-IN RATE OF 2 BPM WITH FRESH WATER. PUMP 50 SACKS OF CLASS "H" NEAT CEMENT. FLUSH WITH 35 BBLs FRESH WATER. SHUT IN WELL 72 HOURS.
- MIRU PULLING UNIT ON NO. 2 STRING. INSTALL BOP. TIH WITH 2-5/16" MILL ON 1-5/8" WORKSTRING. DRILL OUT CEMENT TO TOP OF CIBP AT 6100'. TEST CASING TO 500 PSI. DRILL OUT CIBP AT 6100'. PUSH TO BELOW 6210'. POH.
- RIG UP WIRELINE TRUCK. SET CIBP IN NO. 2 STRING @ 6210'. DUMP BAIL 10 GALS 15% DOUBLE-INHIBITED ACETIC ACID AT 6128'-6169'. TIH WITH 1-9/16" ELECTROMAGNETIC ORIENTATION GUN AND GR-CCL. PERFORATE 1 SPI AT 6160, 6162, 6164, 6166, 6169 (5 SHOTS TOTAL).

MAS 4-18-88
Pwm 4-19-88
DMO 4-19-88
4/19/88

Reviewed and Approved By:

District
Geological _____
Asst. Supt. _____
Supt. _____

District Petroleum Engineer

Division
Engineering _____
Geological _____
Gen'l. Supt. _____

Approved _____
Date _____

	CASH	MOH	TOTAL	TEXACO
EXP (IDC)	39000	0	39000	39000
INV.	0	0	0	0
TOTAL	39000	0	39000	39000

PROD. INCR (TX%)	15.15
PAYOUT	9 MONTHS
P.W.I. 5.12 / DCFROI	268.9

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "M" STATE Well No. 7 Date JULY 22, 1987
Pool VACUUM WOLFCAMP County LEA TX. Work. Int. 100.00%
All depths measured from KB or 17 ft. from ground level State NEW MEXICO
TX. Comp. Date 10-11-63 @ T. D. 12220 I. P. Oil 178 Water 8 Gas 68.4 MCF
GOR 384 Hrs 24 Pump Flow Present T. D. PETD 10220 Elevation 4011 KB DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
GLORIETA	6016	6028	ASD (HELD FOR SECONDARY RECOVERY) 6-23-64
BLINEBRY	6283	6392	PROPOSED NEW PERFORATIONS
TUBB	7145	7585	PROPOSED NEW PERFORATIONS
WOLFCAMP	9967	10043	SI-O 8-21-86

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
16, 13-3/8	65.48, 54.5	H40, J55	1513'	1100 SX	20, 17-1/2	-	CEMENT CIRCULATED
11-3/4, 9-5/8	47.36, 40	H40, J55	4805'	2550 SX	12-1/4	-	TOC @ 200' BY TEMP SURVEY
2-7/8	6.4	J55, N80	10232'	2087 SX	8-3/4	9967-10043	TOC @ 1730' BY TEMP SURVEY
2-7/8	6.4	J55, N80	10198'			9937	
2-7/8	6.4	J55	7937'			6016-6028	

COMPLETION AND REMEDIAL WORK RECORD

	Production Test Before					Treatment			Production Test After				
	Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
①	10-11-63	INITIAL	WOLFCAMP	COMPLETION		15% ACID	10500	9967	10043	178	8	384	24(F)
③	4-8-64	ATTEMPT	GLORIETA	COMPLETION		15% ACID	13500	6016	6028	0	4 BLW	0	12(S)
①	12-10-68	3	21	427	24(P)	28% ACID	6000	9967	10043	121	16	720	24(P)
①②	10-76	5	0	700	24(F)	CAMEL @ 20' STIMES @ 9937, INSTALL PLUNGER LIFT				40	0	N.A.	24(PL)
	9-16-80	4	8	N.A.	18(PL)	BRDNHD SQZ, 850 SX		200'	1800'	13	7	11200	24(PL)

INSTALLED SUCKER ROD LIFT IN WOLFCAMP (#1) STRING ON 5-1-84. SHUT IN 8-21-86.

Remarks: NO ARTIFICIAL LIFT EQUIPMENT REMAINING ON LOCATION OR IN WELLBORE.

Present Allow. 0 Max. Allow. 355 Accum. Prod. 153,675 PD as of 1-1-87

Present Test: Oil 2 Water 2 Gas 2.3 GOR 1145 Hrs 24 Pump Flow.

WOLFCAMP TEST DATE: 7-31-86

Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO RETURN THE SUBJECT SHUT-IN WELL TO PRODUCTION OF 25 BOPD BY COMPLETING THE WELL'S NO. 2 STRING IN THE BLINEBRY/TUBB AT 6283'-7585' AND ACIDIZING WITH 7500 GALLONS OF 15% NEFE HCl. THE WELL'S WOLFCAMP COMPLETION (NO. 1 STRING, FIGURE 1) IS PRESSURE DEPLETED AND IS NOT EXPECTED TO BE RETURNED TO GAS LIFT, THEREBY FREEING THE NO. 2 STRING FOR RECOMPLETION. 158 TOTAL NET

Petroleum Engineering Recommendations and Procedure:

- 1. MIRU WIRELINE TRUCK AND MASTPOLE. INSTALL BOP, LUBRICATOR.
- 2. RUN 2-1/4" GAUGE RING AND JUNK BASKET IN NO. 2 STRING TO BELOW 7800'. POH. SET 2-1/2" GIBP IN NO. 2 STRING AT 7800'. LOAD AND PRESSURE TEST NO. 2 STRING TO 3000 PSI.
- 3. GO IN NO. 2 STRING WITH 2" ORIENTED PERFORATING GUN AND GAMMA RAY DETECTOR. PERFORATE TUBB 1 SPI AT 7145-48, 50-52, 63-65; 7530-33, 41-47, 67, 70, 73-76, 7581-85 (32 INTERVALS, 32 SHOTS TOTAL).
- 4. MIRU PULLING UNIT. TIH WITH 2-1/2" PACKER ON 1.66" WORKSTRING TO 7500'. BREAK DOWN PERFORATIONS AT 7530-85' WITH 1000 GALS 15% NEFE HCl. FLUSH WITH 15 BBLs FRESH WATER. POH WITH PACKER AND TUBING.

MAS 7-16-87

DMD 7-20-87

92 7-20-87

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

District Petroleum Engineer

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

	CASH	MOH	TOTAL	TEXACO
EXP-IDC	48000	0	48000	48000
INV.	0	0	0	0
TOTAL	48000	0	48000	48000

PROD. INCR (TX%)	35 (35)
PAYOUT	8 MONTHS
P. W. I.	5.04 / DCFROI 282.1

RECOMMENDED REMEDIAL WORK

Lease State of N.M. "M" Well No. 8 Date 3-5-87
 Pool Vacuum Glorieta County Lea TX. Work. Int. 100%
 All depths measured from KB or 12 ft. from ground level. State New Mexico
 TX. Comp. Date 2-25-85 T. D. 6250 I. P. Oil 358 Water 0 Gas 226 MCP
 GOR 630 Hrs 24 Pump. Flow. Present T. D. 6216 PB Elevation 4007 KB DB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
<u>Vacuum Glorieta</u>	<u>5962</u>	<u>6092</u>	<u>Present Completion Interval</u>
<u>Vacuum Grayburg San Andres</u>	<u>4300</u>	<u>4680</u>	<u>Proposed Completion Interval</u>

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
<u>10 3/4</u>	<u>28.5</u>	<u>SW</u>	<u>1485</u>	<u>1200</u>	<u>15</u>	<u>-</u>	<u>Cmt. Circ. (observed)</u>
<u>7 7/8</u>	<u>26.4</u>	<u>J-55</u>	<u>3400</u>	<u>800</u>	<u>9 7/8</u>	<u>-</u>	<u>Cmt. top @ 1835 (temp survey)</u>
<u>4 1/2 liner</u>	<u>9.5</u>	<u>J-55</u>	<u>3342-6248</u>	<u>600</u>	<u>6 3/4</u>	<u>5962-6092</u>	<u>Cmt. Circ. to top of liner (obs)</u>
<u>* 5962, 5969, 6076, 6079, 6087, 6092</u>				<u>(LISPE)</u>			

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment		To	Production Test After			
	Oil	Water	GOR	Hrs		Amount	From		Oil	Water	GOR	Hrs
<u>2-25-85</u>	<u>Initial Completion</u>				<u>15% NEA</u>	<u>5000</u>	<u>5962</u>	<u>6092</u>	<u>358</u>	<u>0</u>	<u>630</u>	<u>24F</u>
<u>1-20-72</u>	<u>56</u>	<u>24</u>	<u>810</u>	<u>24P</u>	<u>15% NEA</u>	<u>4000</u>	<u>5962</u>	<u>6092</u>	<u>72</u>	<u>43</u>	<u>1476</u>	<u>24P</u>
<u>10-21-80</u>	<u>23</u>	<u>42</u>	<u>278</u>	<u>24P</u>	<u>Brndhd sgs</u>	<u>650</u>	<u>surf</u>	<u>1800</u>				
					<u>15% NEFF</u>	<u>6000</u>	<u>5962</u>	<u>6092</u>	<u>41</u>	<u>30</u>	<u>684</u>	<u>24P</u>

Remarks: _____

Present Allow. 14 Max. Allow. 107 Accum. Prod. 363,836 as of 10/1/86

Present Test: Oil 8 Water 32 Gas 7 GOR 1071 Hrs 24 Pump. Flow. _____

Pumping Equip. on location: American 320-213-120, 2 3/8" tubing, 76 design rod string.

Reasons for Remedial Work: It is recommended to abandon the glorieta formation and recomplate into the San Andres. This will increase production 100 BOPD, and payout the investment cost in 1 month with a P.W.I. of 59.55 and OCFROI of 1000%.

Petroleum Engineering Recommendations and Procedure:

- DRUPU, pull rods and pump, install GOR and pull tubing.
- Fig up wireline truck and run a gauge ring for 4 1/2", 9.5# casing to 5950'. Run in hole with a CIBP and set at 5900'. Run a dump bailer and dump 30' of cement on top of CIBP.
- Run a casing gun and perforate the following intervals: 4300, 4340, 4410

Reviewed and Approved By:

District _____
 Geological _____
 Asst. Supt. _____
 Supt. _____

District Petroleum Engineer

Division _____
 Engineering _____
 Geological _____
 Gen'l. Supt. _____

Approved _____
Date _____

	CASH	MOH	TOTAL	TEXACO
<u>EXP. WDC</u>	<u>26,000</u>	<u>0</u>	<u>26,000</u>	<u>26,000</u>
<u>INV.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>TOTAL</u>	<u>26,000</u>	<u>0</u>	<u>26,000</u>	<u>26,000</u>

PROD. INCR (1X%)	<u>100 (100%)</u>
PAYOUT	<u>1 month</u>
P. W. I.	<u>59.55 OCFROI 1000%</u>

SON 3/5/87
 PWR 3/6/87
 DMH 3/5/87

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "L" STATE Well No. 6 Date MARCH 1, 1988
 Pool VACUUM WOLFCAMP / GLORIETA County LEA TX. Work. Int. 100.00%
 State NEW MEXICO
 All depths measured from KB or 12 ft. from ground level.
 TX. Comp. Date 11-15-63 T. D. 12255 I. P. Oil 134 / 268 Water 70 / 40 Gas 63 / 67 MCF
 GOR 472 / 252 Hrs 24 SWAB / 24 Pump (Flow) Present T. D. PSTD 11145 Elevation 4005 KB

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

	Name or Type of Zone	Top	Base	Remarks
X	GLORIETA	5961	6152	PROPOSED ADDITIONAL PERFORATIONS
X	GLORIETA	6041	6103	PRESENT PRODUCING INTERVAL
Y	WOLFCAMP	9939	9946	PRESENT PRODUCING INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
13-3/8	54.5	H40	1510	1200	17-1/2	NONE	CEMENT CIRCULATED
9-5/8	36.40	H40, J55	4800	1700	12-1/4	NONE	TOC @ APPROX 2730'
2-7/8	6.5	J55	11300	1600	8-3/4	6041-6103	TOC @ SURFACE (SQZD 12-17-80)
2-7/8	6.5	J55	10567			9939-9946	
2-7/8	6.5	J55	11318			P & A	

COMPLETION AND REMEDIAL WORK RECORD

	Production Test Before					Treatment			Production Test After				
	Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
Y	11-15-63	INITIAL	WOLFCAMP COMPLETION			ACID	3000	9939	9964	134	70	472	24(S)
X	11-17-63	INITIAL	GLORIETA COMPLETION			ACID	500	6103	6105	268	40	252	24(F)
Y	7-6-68	3	11	329	24(P)	ACID	6000	9939	9964	143	0	540	24(P)
X	1-19-71	20	4	1255	24(P)	PERF. ACID	2000	6041	6105	56	46	527	24(P)
Z	12-17-80	96	32 (TOTAL)		24(P)	PERF. SQZ	1,70 SX CMT	1535	SURF	97	12 (TOTAL)		24(P)

GLORIETA PERFORATIONS: 2 JSPP @ 6041-48, 1 JSPP @ 6103-05 (19 SHOTS TOTAL)

Remarks: GLORIETA LIFT EQUIPMENT: C228D-240-86 UNIT, 30 HP MOTOR, 2 1/2" TUBING, 66 ROD STRING, 1 1/2 x 1 1/4 x 16 RWBC RMP

Present Allow 51 BOPD Max. Allow. 108 BOPD Accum. Prod. 485,522.80 as of 10-31-87 (GLORIETA)

GLORIETA TEST DATE 1-20-88

Present Test: Oil 24 Water 36 Gas 19.2 GOR 800 Hrs 24 (Pump) Flow.

Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO INCREASE SUBJECT WELL PRODUCTION 20 BOPD BY PERFORATING ADDITIONAL GLORIETA PAY AT 5961'-6152' AND ACIDIZING WITH 4000 GALLONS OF 15% NEFE HCL. THIS WORK IS RECOMMENDED FOR THE FOLLOWING REASONS:

1) THE PROSPECTIVE PAY IS PRESENTLY OPEN IN OFFSET WELLS "L" STATE NO. 7 AND "O" STATE NO. 23, WHICH ARE PRODUCING 25-240% MORE OIL THAN THE SUBJECT WELL (FIG. 2).

Petroleum Engineering Recommendations and Procedure:

1. MIRU ON GLORIETA (X) STRING. PULL RODS, PUMP, INSTALL BDP. PULL 2-1/16" PRODUCTION TUBING.
2. GO IN X-STRING WITH 2-5/16" BIT AND 1.66" WORKSTRING TO 6200'. PULL UP AND SPOT 84 GALLONS 15% DOUBLE-INHIBITED ACETIC ACID AT 5806'-6152'. POH.
3. GO IN X-STRING WITH 1-9/16" ELECTROMAGNETIC ORIENTATION PERFORATING GUN AND COLLAR LOCATOR. TIE INTO 1971 COLLAR LOG. PERFORATE 2 JSPI AT 5961-63, 6005-07, 6012-18, 6146-52' (TOTAL 20 INTERVALS, 40 SHOTS).

MAS 2-24-88 011-2-29-88

PWD 2-24-88

DMD 2-25-88

Reviewed and Approved By:

District

Geological

Asst. Supt.

Supt.

District Petroleum Engineer

Division

Engineering

Geological

Gen'l Supt.

Approved

Date

	CASH	MOH	TOTAL	TEXACO
EXP (IDC)	21800	0	21800	21800
INV.	0	0	0	0
TOTAL	21800	0	21800	21800

PROD. INCR (TX%) 20 (20)

PAYOUT 4 MONTHS

P. W. I. 13.8 / DCFR01 1000

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION
P. O. BOX 2688
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-77

1a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
B-1733

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO REEPLY OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	7. Unit Agreement Name
2. Name of Operator ✓ Mexaco Producing Inc.	8. Farm or Lease Name New Mexico "L" State
3. Address of Operator P.O. Box 728, Hobbs, New Mexico 88240	9. Well No. 6
4. Location of Well UNIT LETTER <u>B</u> <u>770</u> FEET FROM THE <u>North</u> <u>LINE</u> AND <u>2090</u> FEET FROM THE <u>East</u> <u>LINE</u> , SECTION <u>1</u> TOWNSHIP <u>18-S</u> RANGE <u>34-E</u> <u>60PM</u> .	10. Field and Pool, or Wildcat Vacuum Glorieta
11. Elevation (Show whether DF, RT, GR, etc.) 4005' (DF)	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐
OTHER ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐
OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☒
COMMENCE DRILLING OPER. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER ☐
ALTERING CASING ☐
PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 103.

1. MIRU. Pull rods, pump. Install BOP.
2. TIH with 2-1/16" tubing to 6152'. Spnt 250 gals 15% acetic acid. POH.
3. Perforate Glorieta 2 JSF at 5961-63, 6005-07, 6012-18, 6146-52' (40 shots total).
4. Set packer at 5806'. Acidize Glorieta perforations 5961'-6152' with 4000 gals 15% NEFE, 200 lbs naphthalene flakes, and 200 lbs rock salt in five stages. AIR 3.3 BPM, Maximum TP 2250*, 1SIP vacuum.
5. Pull packer. Set 2-1/16" production tubing at 6152'. Run rods, pump. On 24 hour OPT 5-5-88, pumped 42 BO, 62 BW, GOR 310, gravity 38.6 from Vacuum Glorieta perforations 5961'-6152'.

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

393-4031

SIGNED A. Gernandt A. Gernandt TITLE Area Superintendent DATE 5-10-88

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE MAY 12 1988

CONDITIONS OF APPROVAL, IF ANY:

RECOMMENDED REMEDIAL WORK

Lease New Mexico 'L' State Well No. 7 Date March 26, 1980
Pool Vacuum Glorieta County Lea TX. Work Int. 100%
State New Mexico
All depths measured from KB or 10.5 ft. from ground level
TX. Comp. Date 3-26-64 @ T. D. 6750 I. P. Oil 129 Water 0 Gas 60.0 MCF
GOR 465 Hrs 10 Pump. Flow. Present T. D. 6720 P8TD Elevation 3991 DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
Vacuum Glorieta	5978	5988	Original Producing Interval (1964) *
Vacuum Glorieta	6004	6074	Recompletion: Additional Interval (1971) **

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
11 3/4"	42*	H-40	1510	1000	15"		Cement Circulated (Observed)
8 5/8"	24*	J-55	3350	350	10 3/8"		Cement Top @ 2040' (Calc. @ 60%)
2 7/8"	6.4*	J-55	6750	1400	7 7/8"	5978-6024	Cement Top @ 860' (Bond Log)

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before Oil Water GOR Hrs	Type	Treatment Amount From To	Production Test After Oil Water GOR Hrs
3-26-64	Initial Completion	15% LSTINE	500 5978 5988	129 0 465 10 (F)
6-10-69	23 0 N/A 24 (P)	28% LSTINE	500 5978 5988	34 0 N/A 24 (P)
3-22-71	35 2 18740 24 (P)	PERF - 28%	3000 5978 6024	184 8 1670 22 (F)
12-20-75	15 0 N/A 24 F	15% NEA	3000 5978 6024	75 0 9983 24 (F)

Remarks: * 5978-5988 2 JSPF (1964)
** 6004, 06, 10, 12, 16, 6024 1 JSPI (1971)

Present Allow. 8 Max. Allow. 107 Accum. Prod. 221,780 as of 9-1-79

Present Test: Oil 6 Water 0 Gas 83.2 MCF GOR 13870 Hrs 24 PLUNGER-LIFT

Choke Size _____ Pressure _____ Tbg Pressure _____

Reasons for Remedial Work:

The NMOCED has required Texaco to shut off the waterflows in the braden-head of this well. The recommended remedial work will satisfy their request and event any cancelling of allowables.

Petroleum Engineering Recommendations and Procedure:

1. Rig up Pulling Unit; install B.O.P.; pull plunger-lift valve.
2. R.I.H. with 2 1/16" tubing and 2 7/8" RBP. Set RBP above casing perfs @ \pm 5900'. P.O.H. with 2 1/16" tubing. Dump 10' of sand on top of RBP.
3. Rig up wireline and run base GR/Temp Log from surface to base of sgl/t (2700'). Load 2 7/8" casing with fresh water and pressure up to 500 psi. Pressure up 8 5/8"-2 7/8" annulus to 1000 psi.* Nipple up pump truck to 11 3/4"-8 5/8"

Wireline: CRC
CMT: Halliburton

—cont'd—

R.S. Lane

District Petroleum Engineer

Reviewed and Approved By:

District
Geological _____
Asst. Supt. _____
Supt. _____

Division
Engineering _____
Geological _____
Gen'l. Supt. _____

Approved
Date _____

	CASH	MOH	TOTAL	TEXACO
EXP. 680	46000	-0-	46000	46000
INV. 76-80	-0-	-0-	-0-	-0-

PROD. INCR (TXCO)	-1-	1
PAYOUT - Reversed		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

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FILE	
U.S.O.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-1733 - 1	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator Texaco Inc.		8. Farm or Lease Name New Mexico "L" State
3. Address of Operator P.O. Box 728, Hobbs, NM 88240		9. Well No. 7
4. Location of Well UNIT LETTER <u>A</u> <u>760</u> FEET FROM THE <u>North</u> LINE AND <u>560</u> FEET FROM THE <u>East</u> LINE, SECTION <u>1</u> TOWNSHIP <u>18-S</u> RANGE <u>34-E</u> NMPM.		10. Field and Pool, or WHdcat Vacuum Glorieta
15. Elevation (Show whether DF, RT, GR, etc.) 3991' (DF)		12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
		OTHER <u>Addl. Glorieta perfs.</u> <input checked="" type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Rigged up. Pull rods, pump and tubing.
2. Set pkr. @ 5900'. Spot 500 gals. (50/50) 15% Acid & 50% Xylene on perfs. 5978'-6024'. Kill well. Pull pkr.
3. Perforate 2-7/8" csg w/2 JSPF @ 6030,32,45,48,50,52,65,70,72,82,88,90,96,98,6100,02,10,12,14,16,31,33 & 6134'.
4. Set pkr @ 5761'. Acidize perfs 5978'-6134' w/9900 gals. 20% SG Acid using 600# (50/50) Rock Salt & Benzoic Acid Flakes. Flushed w/38 bbls. KCl water.
5. Install pumping equipment. Test well & return to production.

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

SIGNED Jaschke TITLE Asst. Dist. Mgr. DATE 5-15-81

APPROVED BY [Signature] TITLE [Signature] DATE MAY 20 1981

CONDITIONS OF APPROVAL, IF ANY:

IDC WO: This work will result in the recovery of new identifiable production and reserves that will not otherwise be recovered by the present completions.

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "L" STATE (NCT-1) Well No. 9 Date NOVEMBER 11, 1986
Pool VACUUM GLORIETA County LEA TX. Work. Int. 100.00%
All depths measured from KB or 13 ft. from ground level State NEW MEXICO
TX. Comp. Date 11-12-84 @ T. D. 6850 I. P. Oil 90 Water 0 Gas 43.6 MCF
GOR 484 Hrs 12 Pump (Flow) Present T. D. 6840 PBD Elevation 3995 KB 88

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM GLORIETA	6053	6067	PRESENT COMPLETED INTERVAL
VACUUM GLORIETA	6053	6207	PROPOSED COMPLETION INTERVAL

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
8-5/8	24*/FT	N.A.	1462'	650 SX	11"	NONE	CEMENT CIRCULATED
2-7/8	6.5*/FT	J-55	6849'	900 SX	7-5/8"	6053-6067	BOND LOG CMT TOP 3264'

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before Oil Water GOR Hrs	Type	Treatment Amount From To	Production Test After Oil Water GOR Hrs
11-12-84	INITIAL COMPLETION	ACID	1500 6053 6067	90 0 484 12(F)

PERFORATIONS: 1 JSPI @ 6053, 6057, 6061, 6067'
Remarks: PUMPING EQUIPMENT: 228D-246-86 UNIT, 40 HP MOTOR, 66 ROD STRING, 2 1/2" TUBING, 1 1/2 x 1 1/4 x 24" PUMP N @ 6024'.

Present Allow 14 BOPD Max Allow 51 BOPD Accum. Prod. 465,982 as of 7-1-86

Present Test: Oil 16 Water 70 Gas 12 GOR 795 Hrs 24 Pump Flow.

TEST DATE 10-7-86

Choke Size Pressure Tbg Pressure

Reasons for Remedial Work: TO INCREASE SUBJECT WELL PRODUCTION 20 BOPD BY LOGGING THE PROSPECTIVE PAY ZONE WITH A THERMAL NEUTRON DECAY TOOL, PERFORATING ADDITIONAL PAY AT 6072-6207', AND ACIDIZING WITH 4000 GALLONS OF 15% NEFE HCL. THIS WORK IS RECOMMENDED FOR THE FOLLOWING REASONS:

1) THE SUBJECT WELLBORE CONTAINS 88 GROSS FEET OF POTENTIAL BEHIND-PIPE PAY AT 6072-6119' AND 6166-6207' (SEE FIGURE 3). THESE ZONES ARE PRESENTLY BEING

Petroleum Engineering Recommendations and Procedure:

1. MOVE IN, RIG UP. PULL RODS, PUMP. INSTALL BOP'S. PULL 2-1 1/16" IS PRODUCTION TUBING.
2. GO IN HOLE WITH 2-1/4" BIT ON 1-1/2" WORKSTRING TO 6750'. POH.
3. LOAD HOLE WITH PRODUCED GLORIETA WATER (RETAIN SAMPLE FOR RESISTIVITY ANALYSIS). LOG Cased Hole @ 6750-5750' WITH THERMAL NEUTRON DECAY TOOL (1-1 1/16" C.D.). RECOMMENDED LOGGING SPEED 900 FT/HOUR. POH.
4. LOAD HOLE WITH PRODUCED WATER. GO IN HOLE WITH 2" RETRIEVABLE LOGGING GUN AND PERFORATE GLORIETA 2 SPI AT (TENTATIVE): 6072, 77, 87, 92, 96, 99, 6113-19, 6166-69, 6190, 94, 6206-07 (21 INTERVALS TOTAL). POH.
5. GO IN HOLE WITH 2-7/8" PACKER ON WORKSTRING TO 6130'. SET PACKER AND LOAD ANNULUS.

Reviewed and Approved By:
District

Geological
Asst. Supt.
Supt.

Division

Engineering
Geological
Gen'l. Supt.

Approved
Date

District Petroleum Engineer

	CASH	MOH	TOTAL	TEXACO
EXP-DC	24900	0	24900	24900
INV.	0	0	0	0
TOTAL	24900	0	24900	24900

PROD. INCR (TX%)	20.00
PAYOUT	7 MONTHS
P.W.I.	2.37 / 1000000

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-71

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

3a. Indicate Type of Lease
State ☒ Fee ☐

5. State Oil & Gas Lease No.
B-1733-1

SUNDRY NOTICES AND REPORTS ON WELLS
DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-	7. Unit Agreement Name
2. Name of Operator Texaco Producing Inc.	8. Form or Lease Name New Mexico "L" State
3. Address of Operator P.O. Box 728, Hobbs, New Mexico 88240	9. Well No. 9
4. Location of Well UNIT LETTER <u>H</u> , <u>1660</u> FEET FROM THE <u>North</u> LINE AND <u>660</u> FEET FROM THE <u>East</u> LINE. ECTION <u>1</u> TOWNSHIP <u>18-S</u> RANGE <u>34-E</u> NMPM.	10. Field and Pool, or Wildcat Vacuum Glorieta
15. Elevation (Show whether DF, RT, GR, etc.) 3995' KB	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUS AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. MIRU. Pull rods and pump. Install BOP. Pull tubing.
2. Fish tubing anchor.
3. Log cased hole at 6748'-4748' with TMD-GR tool.
4. Perforate Glorieta 2 JSPF at 6001, 03, 05, 07, 09, 11, 13, 15, 17, 72, 77, 87, 92, 96, 6099, 6190, 94, 6206, 07 (Total 19 intervals, 38 shots).
5. Acidize Glorieta perforations 6001-6207' with 4500 gallons 15% NEFE and 440 pounds rock salt in four stages. AIR 4 BPM, Max TP 1400*, ISIP 0.
6. Run production equipment. On 24 hour OPT 12-22-87, pumped 22 BO, 94 BW, GOR 327, gravity 38.6 from Glorieta perforations 6001'-6207'.

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

SIGNED A. Germandt 393-4031 TITLE Area Superintendent DATE 12-29-87

ORIGINAL SIGNED BY JERRY SEXTON

DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE DEC 30 1987

CONDITIONS OF APPROVAL, IF ANY:

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-105
Revised 1-1-89

WELL API NO.

30-025-31132

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

B-1733-1

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. Type of Completion:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DEPT RESVR ☐ OTHER ☐

2. Name of Operator
TEXACO PRODUCING INC.

7. Lease Name or Unit Agreement Name
NEW MEXICO-L-STATE

3. Address of Operator
P. O. Box 3109, Midland, Texas 79702

8. Well No.
10

4. Well Location

Unit Letter B : 280 Feet From The NORTH Line and 2080 Feet From The EAST Line

Section 1 Township 18-SOUTH Range 34-EAST NMPM LEA County

10. Date Spudded 04-18-91 11. Date T.D. Reached 05-03-91 12. Date Compl. (Ready to Prod.) 05-21-91 13. Elevations (DF & RKB, RT, GR, etc.) GR-3993', KB-4008' 14. Elev. Casinghead 3993'

15. Total Depth 6300' 16. Plug Back T.D. 6200' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools 0-6300' Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name 6017' - 6132'; GLORIETA 20. Was Directional Survey Made YES

21. Type Electric and Other Logs Run GR-MSFL-DLL-CAL, GR-LDT-CNL, GR-SONIC 22. Was Well Cored NO

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4	42#	1550'	14 3/4	1400 SX, CIRC. 300 SX.	
8 5/8	32#	3000'	11	1050 SX, CIRC. 130 SX.	
				D.V. TOOL @ 1583'	
5 1/2	15.5#	6300'	7 7/8	1375 SX, CIRC. 264 SX	
				D.V. TOOL @ 5018'	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD	SIZE	DEPTH SET	PACKER SET
						2 7/8	6162'	

26. Perforation record (interval, size, and number)
6017-19', 6023-27', 6056-60', 6064-67', 52 HOLES
6083-86', 6094-96', 6102-04', 6109-14', 6120-24',
6128-32', 80 HOLES

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
6017' - 6067'	ACID - 3200 GAL 15% NEFE
6083' - 6132'	ACID - 3200 GAL 15% NEFE

28. PRODUCTION

Date First Production 05-15-91		Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING, 2.5 X 1.5 X 24				Well Status (Prod. or Shut-in) PRODUCING	
Date of Test 05-29-91	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 102	Gas - MCF 45	Water - Bbl. 98	Gas - Oil Ratio 441
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 29.8	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
SOLD

Test Witnessed By
RANDY LOCKLAR

30. List Attachments
DEVIATION SURVEY

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

C. P. Basham / SDH

Printed Name

C. P. BASHAM

Title DRLG. OPNS. MGR.

Date 06-05-91

Habbes And Manage

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL FILE

WELL API NO.
30-025-31131

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B-1733-1

7. Lease Name or Unit Agreement Name
NEW MEXICO-L-STATE

8. Well No.
11

9. Pool name or Wildcat
VACUUM GLORIETA

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. Type of Completion:
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER ☐

2. Name of Operator
TEXACO E & P INC.

3. Address of Operator
P. O. Box 3109. Midland, Texas 79702

4. Well Location
Unit Letter A : 604 Feet From The NORTH Line and 856 Feet From The EAST Line
Section 1 Township 18-SOUTH Range 34-EAST NMPM LEA County

10. Date Spudded 03-28-91 11. Date T.D. Reached 04-15-91 12. Date Compl. (Ready to Prod.) 06-11-91 13. Elevations (DFA RKB, RT, GR, etc.) GR-3986', KB-4001' 14. Elev. Casinghead 3986'

15. Total Depth 6300' 16. Plug Back T.D. 6250' 17. If Multiple Compl. How Many Zones? 18. Intervals Drilled By Rotary Tools 0-6300' Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name 5956' - 6192'; GLORIETA 20. Was Directional Survey Made YES

21. Type Electric and Other Logs Run GR-MSFL-DLL-CAL, GR-LDT-CNL, GR-SONIC 22. Was Well Cored NO

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4	42#	1550'	14 3/4	1400 SX, CIRC. 300 SX.	
8 5/8	32#	3000'	11	1050 SX, CIRC. 315 SX.	
				D.V. TOOL @ 1565'	
5 1/2	15.5#	6300'	7 7/8	1375 SX, CIRC. 90 SX	
				D.V. TOOL @ 4983'	

LINER RECORD				TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					2 7/8	6198'

26. Perforation record (interval, size, and number) SEE ATTACHED SUNDRY NOTICE		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED		
5956' - 5970'	ACID - 2200 GAL 15% NEFE		
5984' - 6092'	ACID - 4700 GAL 15% NEFE		
6145' - 6192'	ACID - 4200 GAL 15% NEFE		

PRODUCTION

28. Date First Production 05-08-91		Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING, 2.5 X 1.5 X 24			Well Status (Prod. or Shut in) PRODUCING	
Date of Test 06-28-91	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl. 58	Gas - MCF 100	Water - Bbl. 286
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Comp) 32.5

29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD Test Witnessed By D. E. WEIBORN

30. List Attachments
DEVIATION SURVEY, SUNDRY NOTICE

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature C. P. Basham / SDH Printed Name C. P. BASHAM Title DRLG. OPNS. MGR. Date 07-12-91

IDC WO: This workover will result in the recovery of new identifiable production and reserves that will not otherwise be recovered by the present completions.

Form PD-88 (M)

RECOMMENDED REMEDIAL WORK

Lease NEW MEXICO "U" STATE Well No. 3 Date JULY 10, 1987
Pool VACUUM GLORIETA County LEA TX. Work. Int. 100.00 %
All depths measured from KB or 14 ft. from ground level. State NEW MEXICO
TX. Comp. Date 10-9-64 @ T. D. 6850 I. P. Oil 59 Water 8 Gas 91.5 MCF
GOR 1550 Hrs. 24 (SWAB) Pump. Flow. Present T. D. 6817 PSTD Elevation 4017 KB DF

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
VACUUM GLORIETA	6011	6033	ASD - HELD FOR SECONDARY RECOVERY 8-2-68
VACUUM GLORIETA	5922	6003	PROPOSED ADDITIONAL PERFORATIONS

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
11-3/4"	42#/FT	H-40	1550'	1000 SX	15"	NONE	CEMENT CIRCULATED
2-7/8"	6.5#/FT	J-55	6850'	1400 SX	7-7/8"	6011'-6033'	TOC @ 2640' (BOND LOG)

COMPLETION AND REMEDIAL WORK RECORD

Date	Production Test Before				Type	Treatment			Production Test After			
	Oil	Water	GOR	Hrs		Amount	From	To	Oil	Water	GOR	Hrs
10-9-64	INITIAL	COMPLETION			15% ACID	500	6011	6033	59	8	1550	24(S)
7-13-65	8	0	1715	24(P)	15% ACID	2000	6011	6033	18	0	1800	24(P)
8-2-68	0.8	0	3625	24(P)								

EXISTING PERFORATIONS: 2 SPI AT 6011, 14, 19, 26, 30, 33 (TOTAL 12 SHOTS)

Remarks: NO ARTIFICIAL LIFT EQUIPMENT ON LOCATION/IN WELLCORE

Present Allow. 0 Max. Allow. 50 Accum. Prod. 26,493 BO as of 8-2-68

Present Test: Oil 0.8 Water 0 Gas 2.9 GOR 3625 Hrs 24 Pump Flow.
TEST DATE 8-2-68
Choke Size N.A. Pressure N.A. Tbg Pressure N.A.

Reasons for Remedial Work: TO RESTORE SUBJECT WELL PRODUCTION TO 12 BOPD BY PERFORATING ADDITIONAL GLORIETA/PADDOCK PAY AT 5922'-6003' AND ACIDIZING WITH 5500 GALLONS 15% NEFE HCL. THE SUBJECT WELL IS LOCATED ON THE SOUTHWESTERN EDGE OF THE VACUUM GLORIETA/PADDOCK POOL (FIGS. 1, 2), WHICH IS PLANNED TO BE UNITIZED FOR SECONDARY RECOVERY. RESTORATION OF THE WELL TO ACTIVE STATUS WILL

Petroleum Engineering Recommendations and Procedure:

- MIRU. INSTALL BOP. TIH WITH 2-5/16" BIT ON 1.66" WORKSTRING TO 6300'. POH. LOAD HOLE.
- TIH WITH 1-11/16" PERFORATING GUN AND COLLAR LOCATOR. PERFORATE 2 SPI AT 5922, 5928, 30, 32, 35, 48, 58, 67, 68, 72, 75, 81, 5992, 6003 (14 INTERVALS, 28 SHOTS TOTAL).
- TIH WITH 2-1/2" PACKER ON 1.66" WORKSTRING TO 5000'. TEST BACKSIDE TO 2500 PSI. POH.
- ACIDIZE DOWN 2-7/8" CASING WITH 5500 GALLONS OF 15% NEFE AND 1500 LBS. ROCK SALT. PUMP IN 4 STAGES, AT 4 BPM AND 2500 PSI MAXIMUM TREATING PRESSURE, AS FOLLOWS:

MAS 6-1-87
P.W.L. 6-2-87
DMP 6-3-87
A.S. 6-3-87

Reviewed and Approved By:

District

Geological _____
Asst. Supt. _____
Supt. _____

District Petroleum Engineer

Division

Engineering _____
Geological _____
Gen'l. Supt. _____

Approved
Date _____

	CASH	MOH	TOTAL	TEXACO
EXP. IDC	17200	0	17200	17200
INV.	0	0	0	0
TOTAL	17200	0	17200	17200

PROD. INCR. (TX%)	12 1/2
PAYOUT	1.1 YEARS
P.W.L. 5.24/DCFROI	155.5

Date 11-25-91

Lease NM "R" STATE NCT-2 Well No 5 Tx. Work. Int 100%
Pool VACUUM GRAYBURG SAN ANDRES County LEA State NEW MEXICO
All depths measured from KB or 11 ft. from ground level.
Tx. Comp. Date 05-13-65 @ T. D. 6250' I. P. Oil 7 Water 15 Gas MCF
GOR TSIM Hrs 22 Pump Flow. Present T. D. PBTD 5984' Elevation 4011'

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Bottom	Remarks
GRAYBURG SAN ANDRES	5020'	5480'	PRESENT PERFORATED INTERVAL
UNDESIGNATED LOWER SAN ANDRES	5926'	5946'	PRESENT PERFORATED INTERVAL
GLORIETA	6052'	6182'	ABANDONED GLORIETA ZONE

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
10 3/4"	25.52#		1550'	800	15"		CEMENT CIRCULATED
2 7/8"	6.5#	J-55	6248'	1000	6 3/8"	5020'-5946'	CMT TOP @ 2650' (CBL)

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before					Treatment			Production Test After				
Date	Oil	Water	GOR	Hrs	Type	Amount	From	To	Oil	Water	GOR	Hrs
05-13-65	NEW	WELL			ACID	4400 GALS	6052'	6061'	DRY	ZONE		
					ACID	2400 GALS	6052'	6106'	DRY	ZONE		
					ACID	2000 GALS	6178'	6182'	DRY	ZONE		
	SET	CIBP @	6000'		ACID	8000 GALS	5926'	5946'	7	15	TSIM	22
03-1-77	ASD	HELD	FOR	SWD	ACID	6000 GALS	5020'	5946'	SWD			

Remarks:

Present Allow 0 Max Allow. Accum. Prod. 297 as of 10-16-91

Present Test: Oil Water Gas GOR Hrs Pump Flow.

SHUT-IN SWD WELL

Reasons for Remedial Work:

Petroleum Engineering Recommendations and Procedure:

Reviewed and Approved By:
Engineer
Production Foreman
Area Engineer

Area Manager
Division
Approved
Date

	CASH	MOH	TOTAL	TEXACO
EXP				
INV.				
TOTAL				

PROD. INCR (TX%)	()
PAYOUT	
PWI	DCFROI

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FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
N. M. 384	

1a. TYPE OF WELL										7. Unit Agreement Name	
OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>										7. Unit Agreement Name	
b. TYPE OF COMPLETION										8. Farm or Lease Name	
NEW <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>										State War. A/C 2	
2. Name of Operator										9. Well No.	
Marathon Oil Company										14	
3. Address of Operator										10. Field and Pool, or Wildcat	
Box 220 Hobbs, New Mexico										Vacuum Glorieta	
4. Location of Well										12. County	
UNIT LETTER <u>E</u> LOCATED <u>1660</u> FEET FROM THE <u>North</u> LINE AND <u>380</u> FEET FROM										Lea	
THE <u>West</u> LINE OF SEC. <u>6</u> TWP. <u>18</u> S. RGE. <u>35</u> E. NMPM											
15. Date Spudded		16. Date T.D. Reached		17. Date Compl. (Ready to Prod.)		18. Elevations (DF, RKB, RT, GR, etc.)		19. Elev. Casinghead			
12-20-64		1-9-65		1-14-65		3981' RKB		3969'			
20. Total Depth		21. Plug Back T.D.		22. If Multiple Compl., How Many		23. Intervals Drilled By		23. Intervals Drilled By			
6250'		6220'				Rotary Tools		Cable Tools			
						0 - 6250'					
24. Producing Interval(s), of this completion - Top, Bottom, Name										25. Was Directional Survey Made	
6012 - 6023' Glorieta										yes	
26. Type Electric and Other Logs Run										27. Was Well Cored	
Gamma Ray Sonic; Caliper; Microlaterolog; Laterolog and Moveable Plot Oil										no	
28. CASING RECORD (Report all strings set in well)											
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
8-5/8"		24		1502'		12-1/4"		* 1000 sacks		None	
5-1/2"		15.5		6248'		7-7/8"		** 1280 sacks		None	
* w/ 2% gal, 2% OC & 1/4# Flocele per sack. ** 1/4# Flocele w/ 880 sx & 2% gal w/ 400 sx.											
29. LINER RECORD						30. TUBING RECORD					
SIZE		TOP		BOTTOM		SACKS CEMENT		SCREEN		PACKER SET	
		None								5824'	
31. Perforation Record (Interval, size and number)						32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
6012 - 8014' and 6021 - 6023' w/ 2 JSPT						DEPTH INTERVAL 6012 - 6023' AMOUNT AND KIND MATERIAL USED 1000 gal. Spearhead acid					
33. PRODUCTION											
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)						Well Status (Prod. or Shut-in)			
1-14-65		Flowing						Producing			
Date of Test		Hours Tested		Choke Size		Prod'n. For Test Period		Oil - Bbl.		Gas - MCF	
1-14-65		7-1/2		16/64"				56.19		28	
Flow Tubing Press.		Casing Pressure		Calculated 24-Hour Rate		Oil - Bbl.		Gas - MCF		Water - Bbl.	
160		Packer				179.81		88		None	
34. Disposition of Gas (Sold, used for fuel, vented, etc.)										Test Witnessed By	
Sold										J. L. Frank	
35. List of Attachments											
Gamma Ray Sonic											
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.											
SIGNED <u>Albert Mechler, Jr.</u>				TITLE <u>Ass't. Supt.</u>				DATE <u>1-29-65</u>			

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NEW MEXICO OIL CONSERVATION COMMISSION

1970
Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease

State ☒ Fee ☐

5. State Oil & Gas Lease No.

NM 384

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT --" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator Marathon Oil Company	8. Farm or Lease Name Warn State A/C 2
3. Address of Operator P.O. Box 220, Hobbs, New Mexico 88240	9. Well No. 14
4. Location of Well UNIT LETTER <u>E</u> , <u>1660</u> FEET FROM THE <u>North</u> LINE AND <u>380</u> FEET FROM THE <u>West</u> LINE, SECTION <u>6</u> TOWNSHIP <u>18S</u> RANGE <u>35E</u> NMPM.	10. Field and Pool, or Wildcat Vacuum Glorieta
15. Elevation (Show whether DF, RT, GR, etc.) 3981' RKB	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

TEMPORARILY ABANDON ☐

PULL OR ALTER CASING ☐

OTHER ☐

PLUG AND ABANDON ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

COMMENCE DRILLING OPNS. ☐

CASING TEST AND CEMENT JOB ☐

OTHER Reperf. and treat Glorieta zone ☒

ALTERING CASING ☐

PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

TD 6250', PBD 6220'. Pulled sucker rods and downhole pump; installed blow-out preventers, then pulled tubing and anchor. Ran Wellex collar log and then perforated upper section of Glorieta from 5951' to 5961' with one jet shot per foot (11 holes). Set Halliburton bridge plug at 5990', and RTTS tool at 5985'; tested BP to 2000#; held O.K. Released RTTS tool, and reset at 5860'. Loaded casing with 50-50 brine, breaking down perforations at 5951' to 5961' at 4200#. Treated perforations with 2000 gallons 15% spear-head acid, using 15 RCN ball sealers, maximum pressure 3950#, minimum pressure 1900#, average rate 3.3 BPM. ISIP 1800#; after 5 minutes 1300#.

New potential test on 2-27-70, flowed 110 BO, 20 BW in 24 hrs., 120# TP, on 24/64" choke, GOR 671:1.

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

SIGNED JW Younger

TITLE Acting Area Supt.

DATE 2-28-70

APPROVED BY Leslie A. Clement

TITLE Oil & Gas

DATE 2-28-70

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. NM 384	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT - " (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <input type="checkbox"/>		7. Unit Agreement Name -
2. Name of Operator Marathon Oil Company		8. Farm or Lease Name Warn State A/C 2
3. Address of Operator P.O. Box 2409, Hobbs, New Mexico 88240		9. Well No. 14
4. Location of Well UNIT LETTER <u>E</u> , <u>1660</u> FEET FROM THE <u>North</u> LINE AND <u>380</u> FEET FROM THE <u>West</u> LINE, SECTION <u>6</u> TOWNSHIP <u>18S</u> RANGE <u>35E</u> NMPM.		10. Field and Pool, or Wildcat Vacuum Glorieta
15. Elevation (Show whether DF, RT, GR, etc.) 3981' KDB		12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> OTHER <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> REMEDIAL WORK <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Selectively perf. & treat additional Glorieta interval.

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

TD 6250', PBTD 6220'. Perforated 5-1/2" casing in Glorieta zone from 6036-42, 6045-6060, 6062-6064, 6070-6072, 6079-6085, 6103-6111, 6114-6117, and 6119-6123' w/l JSPF (54 holes). Treated perforations 6012-6123' with 5000 gals. 20% acid and 95 - 7/8" ball sealers.

Pumped 148 Bbls. oil and trace water in 24 hrs. Prior to workover well was producing 12 BOPD.

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

SIGNED <u>[Signature]</u>	TITLE <u>Area Superintendent</u>	DATE <u>8-30-73</u>
Original Signed by Joe D. Ramey Dist. I, Supv.		
APPROVED BY _____	TITLE _____	DATE <u>SEP 1 1973</u>
CONDITIONS OF APPROVAL, IF ANY:		

SIZE OF HOLE	SIZE OF CASING	WHERE TAPED	DATE OR CEMENT	TIME DOWN	TIME UP	TIME IN HOLE	TIME OUT HOLE
1-3/4"	1-5/8"	100'	100'	100'	100'	100'	100'
1-3/4"	1-5/8"	100'	100'	100'	100'	100'	100'

PLUGS AND ADAPTERS

Heaving plug—Material _____ Depth Set _____
 Adapters—Material _____ Size _____

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT
1500 gal.	Dowell	1500 gal.	1500 gal.	1-10-30	4000 - 4500	4000

Results of shooting or chemical treatment: After acidizing, pumped out all lead and acid into pits in 7 hours and well started flowing. Produced 1/2 bbl. fresh oil, no water in 3 hours. Gas was not measured. 1-4-30 flowed 1/2 bbl. in 3 hrs. 2/10/30 flowed on 2" tubing. Gas measured 20,000 MCF daily.

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

Rotary tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet.
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet.

Put to producing: January 4, 1930.
 The production of the first 24 hours was _____ barrels of fluid of which _____ % was oil, _____ % emulsion; _____ % water; and _____ % sediment. Gravity, Be _____.
 If gas well, cu. ft. per 24 hours _____; gasoline per 1,000 cu. ft. of gas _____.
 Rock pressure, lbs. per sq. in. _____.

EMPLOYEES
 Driller _____
 Drilling _____

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this _____ day of _____, 1930, at _____, Texas.

day of _____, 1930. Name _____

Position: District Chief Clerk

Representing: Phillips Petroleum Company
 Company or Operator

Address: Drawer 811, Odessa, Texas

Notary Public
 My Commission expires 6-1-37

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-103
Revised 10-1-77

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API NO. 30-025-02221

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.
B-2317

SUNDRY NOTICES AND REPORTS ON WELLS

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT TO DRILL" (FORM C-101) FOR SUCH PROPOSALS.

OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	Unorthodox location approved per NMOCD Order NSL-1734	7. Unit Agreement Name
Name of Operator	Phillips Petroleum Company	8. Farm or Lease Name
Address of Operator	Rm. 401, 4001 Penbrook St., Odessa, Tx. 79762	9. Well No.
Location of Well	UNIT LETTER <u>P</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>660</u> FEET FROM THE <u>East</u> LINE, SECTION <u>35</u> TOWNSHIP <u>17-S</u> RANGE <u>34-E</u> NMPM.	10. Field and Pool, or Wildcat
		Vacuum Gb/SA
	15. Elevation (Show whether DF, RT, CR, etc.) 4088.2' GR	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
WILL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/> (Repaired csg leak)	OTHER <input type="checkbox"/>

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 4-2-85: MI & RU DDU. COOH w/rods & pmp. Installed BOP. COOH w/ 2-7/8" tbgs. Ran SLM PBTD 4542'. WIH w/tbg, RBP & PKR. Set RBP @ 4000', pkr @ 3950', tst'd RBP to 1000#, OK. Leak isolated @ 2630±'. Press'd csg to 1500#, leaking 250# per min.
- 4-3-85: WIH w/pkr to 3300', tst'd pkr, tbgs & csg to 1000#, OK. Reset pkr @ 2600'. Pmpd into hole in 7" csg @ approx. 3 gals per min @ 1700#. COOH w/pkr. Perf'd w/4" OD gun 4JSPF @ 2645'. WIH w/pkr & set @ 1000'. Tried to pmp into perms @ 2645', est pmp in rate of 2BPM @ 300#. COOH w/tbg & pkr.
- 4-4-85: Set cmt retainer @ 2560'. Sqz'd perms @ 2645'. Pmpd 500 sx Halliburton lite followed by 500 sx Class C w/2% CaCl. Cmt did not circ. Closed surface valve & sqz'd 10.5 bbls Class C to 800#. Rev 20 sx cmt.
- 4-5-85: Tagged cmt @ 2550'. Drld out cmt & retainer to 2650'. Tst'd csg to 500#, held 30 min, OK. COOH w/tbg bit & collars. Salt water flow from surface continued @ approx. 1/2 BPM.
- 4-6-85: WIH w/4" csg gun, perf'd 4 JSPF @ 1495'. WIH w/7" ret & set @ 1400'. Sqz'd 250 sx Class C cmt w/2% CaCl. Rev out 26 sx.
- 4-7- &
- 4-8-85: Crew Off
- 4-9-85: Drld to 1500'. Tst'd csg to 500#, OK. COOH w/tbg, bit & collars. WIH w/tbg & RBP tool. Circ sand off of RBP. COOH w/RBP.
- 4-10-85: WIH w/2-7/8" tbgs & anchor. Ran 2-1/2" X 2" X 24' pmp.

See Reverse Side

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

W. J. Mueller TITLE DATE May 22, 1985

915/367-1257 (McMurray)

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

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OPERATOR	

API No. 30-025-02221

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. B-2317	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		7. Unit Agreement Name
2. Name of Operator Phillips Petroleum Company		8. Farm or Lease Name M. E. Hale
3. Address of Operator Room 401, 4001 Penbrook St., Odessa, TX 79762		9. Well No. 3
4. Location of Well UNIT LETTER <u>P</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>660</u> FEET FROM <u>East</u> LINE, SECTION <u>35</u> TOWNSHIP <u>17-S</u> RANGE <u>34-E</u> NMPM.		10. Field and Pool, or Wildcat Vacuum GB/SA
15. Elevation (Show whether DF, RT, GR, etc.) 4088.2 GR		12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	
		Treat for salt precipitation & scale; <input checked="" type="checkbox"/>	
		deepen and acidize	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

8-5-85 MI, RU double derrick unit. COOH w/rods & tbg.
8-6-85 Tagged bottom @ 4554', drilled out to 4580'.
8-7-85 Clean out to 4677'. Drilled out to 4721'. Spotted 1000 gals. 10% Xylene/90% - 15% NEFE HCl acid mixture containing dispersant and corrosion inhibitor across open hole section from 4099'-4721'. Swabbed 3 hrs, recovered 55 bbls. wtr & acid Xylene mixture. Loaded tbg/csg annulus w/FW to test to 500 psi. Acidized open hole from 4099'-4721' w/2000 gals. 15% NEFE HCl acid. WIH w/2 7/8" tbg, set @ 4601'. Ran 2 1/2"x2"x22' pump.
8-14-85 Pumped 16 hrs, no gauge on production.
8-15-85 Pumped 24 hrs, 138 BO, 163 BW, 55 MCFG.
8-16-85 Pumped 24 hrs, 100 BO, 130 BW, 53 MCFG.
8-17-85 Pumped 24 hrs, 66 BO, 114 BW, 61 MCFG.
8-18-85 Pumping - no gauge on production.
8-19-85 Pumped 24 hrs. No gauge on production.
8-20-85 Pumped 24 hrs. No gauge on production.
8-21-85 Pumped 24 hrs. 87 BO, 84 BW, 53 MCFG.
Workover complete. Drop from report.

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

SIGNED W.J. Mueller TITLE Sr. Engineering Specialist DATE 8-26-85
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT 1 SUPERVISOR
APPROVED BY _____ TITLE _____ DATE _____

AUG 30 1985

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PRORATION OFFICE	GAS
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

(Form C-104)
Revised 7/1/57

REQUEST FOR (OIL) - ~~(GAS)~~ ALLOWABLE

HOBBS OFFICE
New Well
APR 16 10 23 AM '64
Reception

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Hobbs, New Mexico

April 15, 1964

(Place)

(Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Phillips Petroleum Company

M. E. Hale

, Well No. 8, in SE 1/4 SE 1/4,

(Company or Operator)

(Lease)

P

Sec. 35

T. 17S

R. 34E

NMPM.

Undesignated

Pool

Unit Letter

Lea

County. Date Spudded 1-27-64

Date Drilling Completed 3-11-64

Please indicate location:

Elevation 4008' GL Total Depth 10400' PBD 9993'

Top Oil/Gas Pay 9546' Name of Prod. Form. Wolfcamp

PRODUCING INTERVAL -

Perforations 9546 - 9604'

Open Hole Depth Casing Shoe Depth Tubing 9510'

OIL WELL TEST -

Natural Prod. Test: None prior to acid treatments Choke Size

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used): 86 bbls, oil, 9 bbls water in 24 hrs, 0 min. Size 1/4"

GAS WELL TEST -

Natural Prod. Test: MCF/Day; Hours flowed Choke Size

Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: MCF/Day; Hours flowed

Choke Size Method of Testing:

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): Total 4500 gallons; two stages

Casing Tubing Date first new Press. 5200 oil run to tanks April 13, 1964

Oil Transporter The Permian Corporation

Gas Transporter Phillips Petroleum Company

Remarks:

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

Approved: APR 13 1964, 19.

Phillips Petroleum Company

(Company or Operator)

By: (Signature)

Title Office Manager

Name Send Communications regarding well to: Phillips Petroleum Company

OIL CONSERVATION COMMISSION

By: (Signature)

Title

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	GAS
PRORATION OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

(Form C-104)
Revised 7/1/57

Santa Fe, New Mexico

REQUEST FOR (OIL) - (GAS) ALLOWABLE

DISTRICT OFFICE O. C. C.

New Well

APR 21 10 47 AM '64

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Hobbs, New Mexico

April 20, 1964

(Place)

(Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Phillips Petroleum Company

M. E. Hale

Well No. 8

in SE

1/4

SE

1/4

(Company or Operator)

(Lease)

P

Sec. 35

T. 17S

R. 34E

NMPM.

Undesignated

(Vac. Glo.) Pool

Unit Letter

Lea

County. Date Spudded 1-27-64

Date Drilling Completed 3-11-64

Please indicate location:

Elevation 4008' GL

Total Depth 10400'

PBTD 9993'

Top Oil/Gas Pay 5873

Name of Prod. Form. Glorieta

PRODUCING INTERVAL -

6069 - 6079'

Perforations

Open Hole

Depth

Casing Shoe

Depth

Tubing

6078'

OIL WELL TEST -

Natural Prod. Test: None bbls. oil, bbls water in hrs, min. Choke Size

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used): 60 bbls. oil, 72 bbls water in 24 hrs, 0 min. Choke Size Pumping

GAS WELL TEST -

Natural Prod. Test: MCF/Day; Hours flowed Choke Size

Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: MCF/Day; Hours flowed

Choke Size Method of Testing:

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): Acidized with 500 gallons acid

Casing Press. Tubing Press. 3850 Date first new oil run to tanks April 16, 1964

Oil Transporter The Permian Corporation

Gas Transporter Phillips Petroleum Co.

Remarks:

Dual completion Order MC-1473

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

Approved: 1964, 19.

Phillips Petroleum Company

(Company or Operator)

By: (Signature)

Office Manager

Title: Send Communications regarding well to:

Name: Phillips Petroleum Co.

Box 2130 - Hobbs, N.M.

OIL CONSERVATION COMMISSION

By: (Signature)

Title: (Signature)

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OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. B-2317	

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <input type="checkbox"/>		7. Unit Agreement Name ---
2. Name of Operator Phillips Petroleum Company		8. Farm or Lease Name M. E. Hale
3. Address of Operator Room B-2, Phillips Bldg., Odessa, Texas 79760		9. Well No. 8
4. Location of Well UNIT LETTER P 560 FEET FROM THE east LINE AND 660 FEET FROM THE south LINE, SECTION 35 TOWNSHIP 17-S RANGE 34-E NMPM.		10. Field and Pool, or Wildcat Vacuum Wolfcamp
15. Elevation (Show whether DF, RT, GR, etc.) 4008' Gr.		12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

Set Howco cement retainer in 4-1/2" csg at 9289'. Tested tbq w/2000#, OK. Displaced csg and tbq w/122 BW, tested csg w/2000#, OK. Howco introduced 200 sx Class "H" cmt, squeezed 165 sx below retainer and left 35 sx in casing above retainer. Max press 1400#, holding pressure 800#. Raised tbq to 8810', spotted 30 bbls mud laden fluid. Raised tbq to 6831', Howco spotted 50 sx Class "H" cmt. Raised tbq to 6031', reversed 4 sx cement and circulated hole clean. TOC at 6040'. Wolfcamp zone and perforations 9546-9945' permanently abandoned.

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

SIGNED <u><i>[Signature]</i></u>	TITLE Reservoir Engineer	DATE 7-8-71
APPROVED BY <u><i>[Signature]</i></u>	TITLE SUPERVISOR DISTRICT	DATE JUL 12 1971
CONDITIONS OF APPROVAL, IF ANY:		

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**NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Form C-105
Revised 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. B-2317	

1a. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>						7. Unit Agreement Name ---	
b. TYPE OF COMPLETION NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> DIFF. RESVR. <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>						8. Farm or Lease Name M. E. Hale	
2. Name of Operator Phillips Petroleum Company						9. Well No. 8	
3. Address of Operator Room 711, Phillips Building, Odessa, Texas 79761						10. Field and Pool, or Wildcat Vacuum Grayburg/San Andres	
4. Location of Well UNIT LETTER <u>P</u> LOCATED <u>560</u> FEET FROM THE <u>east</u> LINE AND <u>660</u> FEET FROM THE <u>south</u> LINE OF SEC. <u>35</u> TWP. <u>17-S</u> RGE. <u>34-E</u> NMPM						12. County Lea	
15. Date Spudded 10-12-72		16. Date T.D. Reached 10-13-72		17. Date Compl. (Ready to Prod.) 10-13-72		18. Elevations (DF, RKB, RT, GR, etc.) 4008' Gr.	
20. Total Depth 10,500' (csg. seat)		21. Plug Back T.D. 5010'		22. If Multiple Compl., How Many *Two (2)		23. Intervals Drilled By Rotary Tools 0-10500'	
24. Producing Interval(s), of this completion - Top, Bottom, Name Grayburg/San Andres - top 3895' bottom 5670'						25. Was Directional Survey Made no	
26. Type Electric and Other Logs Run GR Acoustic, Focused and Minifocused caliper, Gamma Ray Neutron						27. Was Well Cored no	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
13-3/8"	48#	320'	17-1/2"	350sx, circulated		---	
9-5/8"	32#	3520'	12-1/4"	400 sx, Temp survey TOC @ 2500'		---	
**4-1/2"	10.5#, 11.6#	10359'	8-3/4"x7-7/8"	(372sx reg w/20%DD, 340 sx Sloset)		---	
2-7/8"	6.5#	6428'		(235sx Incor40%DD&250sx reg. Temp)		---	
29. LINER RECORD				30. TUBING RECORD (Surv. TOC 2200)			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
---	---	---	---	---	---	---	---
31. Perforation Record (Interval, size and number) 4639-49', 10', 2 holes/ft w/3/16" jet 4660-70', 10', 2 holes/ft w/3/16" jet Total 20', 40 holes.				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL 4639-4670' AMOUNT AND KIND MATERIAL USED 500 gals 28%			
33. PRODUCTION Date First Production 10-14-72 Production Method (Flowing, gas lift, pumping - Size and type pump) Insert pump 2-1/2"x1-1/16"x12' Well Status (Prod. or Shut-in) Producing							
Date of Test 11-1-72	Hours Tested 24	Choke Size ---	Prod'n. For Test Period ---	Oil - Bbl. 81	Gas - MCF 79.2	Water - Bbl. 20	Gas - Oil Ratio 978
Flow Tubing Press. ---	Casing Pressure ---	Calculated 24-Hour Rate ---	Oil - Bbl. ---	Gas - MCF ---	Water - Bbl. ---	Oil Gravity - API (Corr.) 37.2	
34. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold						Test Witnessed By E. T. Millhollon	
35. List of Attachments ---							
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief. * Dual casing string dual completion. 2-7/8" string PB to 5010' on 6-30-71, Temp abandoned.							

AMENDED REPORT - Corrects our report of July 26, 1978

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
2. Name of Operator Phillips Petroleum Company		5. State Oil & Gas Lease No. B-2317
3. Address of Operator 4001 Penbrook, Room 401, Odessa, Texas 79762		7. Unit Agreement Name _____
4. Location of Well UNIT LETTER P 660 FEET FROM THE South LINE AND 560 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 17-S RANGE 34-E NMPM.		8. Farm or Lease Name M. E. Hale
15. Elevation (Show whether DF, RT, GR, etc.) 4021' RKB		9. Well No. 8
		10. Field and Pool, or Wildcat Vacuum (Gb/San Andres)
		12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	
OTHER <u>and add perforations</u> <input type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

(7-11-78) RU Well Units, COOH w/all rods & tbg.

(7-12-78) Set BP on WL @ 5100' pulled out of rope socket, left rope socket, collar locator and setting tool in hole. Ran overshot on tbg, tstd plug 1000#, OK. Dowell spotted 500 gal 10% acetic acid on btm. Caught & rec all fish.

(7-13-78) Western Co. Ran GR correlation TD to 3500'. Ran radioactive tool in 2-7/8". Perf with orienting gun 4 1/2" csg 4542-50', 8', 16 holes, 4560-4574', 14', 28 holes.

(7-14-78) Ran 2-3/8" tbg set w/Baker Model R pkr set 4522'. Swbd 6 hrs, 18 BW, 0 BO, swbd dry.

(7-15-78) Dowell trtd csg perfs 4552-4585' dn tbg w/2600 gal MSR-100 w/20% HCl acid, inj 1 ball sealer/bbl, 62 balls. Flsh w/25 BW 1 gal F-75 surfacant. Max 2500#, min 1200#, 5 min vac, 2 BPM. 62 BAW, 25 BW to rec. Swbd 7 hrs, 25 BFW, 36 BAW, 26 BL to rec.

(7-16-78) SD 24 hrs, crew off

(7-17-78) Swbd 6 hrs, rec 26 BAW, all load recovered, 12 BO, FL 3900' from sur. Unseated pkr, COOH. Ran 2-3/8" tbg open ended, SN @ 4520', conn wellhead.

(7-18-78) Swbd 7 hrs, 58 BLW, swbd dry. Ran BHP gauge in 4 1/2" & 2-7/8" csg strings.

(7-19-78) Pld BHP gauges from 4 1/2" & 2-7/8" csg. BHP in 4 1/2" csg 459# & 490# in 2-7/8" csg. Ran 1 1/2" tbg in 2-7/8" csg, set open end @ 4670, seat nipple 4669'. Ran 7/8", 3/4", and 5/8" rods in 2-3/8" tbg w/2" x 1 1/4" x 16' pmp, seated pmp @ 4521'. (OVER)

BOP: Series 900, 3000# WP, one set blind rams, one set pipe rams, manually operated

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

SIGNED W. J. Mueller TITLE Engineering Advisor DATE July 27, 1978
 APPROVED BY Jerry Keaton DATE JUL 31 1978
 CONDITIONS OF APPROVAL Dist. J. Supv.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-7

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API #30-025-20780

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-2317	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL <input checked="" type="checkbox"/> WELL GAS <input type="checkbox"/> WELL OTHER- <input type="checkbox"/>		7. Unit Agreement Name
Name of Operator		8. Farm or Lease Name
Phillips Petroleum Company		M. E. Hale
Address of Operator		9. Well No.
Room 401, 4001 Penbrook, Odessa, TX 79762		8
Location of Well		10. Field and Pool, or Wildcat
UNIT LETTER <u>P</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>560</u> FEET FROM		Vacuum (GB/SA)
THE <u>East</u> LINE, SECTION <u>35</u> TOWNSHIP <u>17-S</u> RANGE <u>34-E</u> NMPM.		
15. Elevation (Show whether DF, RT, GR, etc.)		12. County
4021' RKB 4008' GI		Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER <u>Add SA perfs and acidize</u>	

11. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 10-24-83 Monument WSU COOH LD rods & pump from both tubing strings. Set BOP on 2-7/8" casing. COOH LD 1-1/2" tubing.
- 10-25-83 Tom Hansen perfd 4 1/2" casing w/3 1/8" casing guns @4 JSPF on spiral phasing: 4360'-4370' (10'-40 shots); 4374'-4406', (32'-128 shots) 4417'-4431' (14'-56 shots); 4434'-4438' (4'-16 shots) 4482'-4494' (12'-48 shots) Total of 288 shots. WIH w/4 1/2" REP & packer on 2-3/8" tubing to 4630'. Set BP.
- 10-26-83 Swabbed 4 hrs. to clean up perfs, FL @2000' rec. 48 BO; FL would not drop below 2000' Western Co. attempted to load 2 7/8" casing w/FW, could not load. Set packer @4520' in 4 1/2" casing. Spotted 740 gals. of 15% Nefe HCL w/scale inhibitor & LST agent to end at tubing. Closed circ. valve, pumped 28 bbls acid, casing communicated. Reset packer @4820'. Loaded annulus. Pumped 13,324 gal acid in/1 RCN 7/8" ball sealer per 45 gals, total 290 balls. Flushed w/900 gals FW. AIR 5 BPM, max press 1600#, avg. 1500# ISDP vacuum. Down 2". Unset packer, flushed 4-1/2" annulus w/75 BFW. Flushed 2-7/8" casing w/30 BFW. Ran packer w/tubing set @4320' in 30,000# compression. Swabbed 2 hrs., 40 BLW. (See reverse side)

BGP Equip. Series 900, 3000# WP, double w/one set pipe rams, one set blind rams, manually operate

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

SIGNED [Signature] W. J. Mueller TITLE Sr. Engineering Specialist DATE November 28, 1983

ORIGINAL SIGNED BY EDDIE SEAY

APPROVED BY OIL & GAS INSPECTOR TITLE DATE NOV 30 1983

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG
API #30-025-28061

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5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Free <input type="checkbox"/>

5. State Oil & Gas Lease No.

B-2317

7. Unit Agreement Name

8. Farm or Lease Name

M. E. Hale

9. Well No.

18

10. Field and Pool, or Wildcat

Vacuum Grayburg
San Andres

12. County

Lea

1a. TYPE OF WELL

OIL WELL ☐GAS WELL ☐DRY ☐

Order R-7103

OTHER Water Injection

b. TYPE OF COMPLETION

NEW WELL ☒WORK OVER ☐DEEPEN ☐PLUG BACK ☐DIFF. RESVR. ☐

OTHER

2. Name of Operator

Phillips Petroleum Company

3. Address of Operator

Room 401, 4001 Penbrook Street, Odessa, Texas 79762

4. Location of Well

UNIT LETTER I LOCATED 1410 FEET FROM THE south LINE AND 10 FEET FROMTHE east LINE OF SEC. 35 TWP. 17-S RCE. 34-E NMPM

15. Date Spudded

2-1-83

16. Date T.D. Reached

2-25-83

17. Date Compl. (Ready to Prod.)

30-30-83

18. Elevations (DF, RKB, RT, GR, etc.)

4003.8 GR, 4013 DF

19. Elev. Casinghead

--

20. Total Depth

4803'

21. Plug Back T.D.

4754'

22. If Multiple Compl., How Many

23. Intervals Drilled By

Rotary Tools

X

Cable Tools

24. Producing Interval(s), of this completion - Top, Bottom, Name

Grayburg/San Andres - Top 4015'; Bottom 4803'

25. Was Directional Survey Made

No

26. Type Electric and Other Logs Run

CNL-LDT-GR/Cal, DLL-RXO-GR, Dual Induction, SFL, BHC Sonic, Corr

27. Was Well Cored

Yes--Report attached

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#, K-55	1551'	17-1/2"	1600 sx Class "C" 2% CaCl ₂	1/4#/sx Flocele
				Circd 170 sx.	
8-5/8"	32#, K-55	3190'	11"	250 sx Cl C, 800 sx Cl H w/2% CaCl ₂	Circd
5-1/2"	15.5#, K-55	4813'	7-7/8"	85 sx TLW, 300 sx Class C	Circd 52 sx.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	4245'	4242'
	N	0	N	E	Plastic Lined		Baker AD-1

31. Perforation Record (Interval, size and number)

Perfd 5-1/2" csg w/1 JSPF

Zone 1: 4320'-4385'; 4434'-4442'

Zone 2: 4504'-4532'; 4538'-4547'

Zone 3: 4588'-4606'; 4610'-4654'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4320'-4654'	350 gals acid
4588'-4654'	53 BA, 183 BW w/1 BS per 150 gals acid
4434'-4442'	800 gals acid w/1 BS/100 gals acid

13. PRODUCTION

Date First Production

*Water Injection

Production Method (Flowing, gas lift, pumping - Size and type pump)

Well Status (Prod. or Shut-in)

Injecting

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
--	--	--	--	--	--	--	--
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
--	--	--	--	--	--	--	--

4. Disposition of Gas (Sold, used for fuel, vented, etc.)

Not applicable

Test Witnessed By

--

5. List of Attachments

Logs furnished direct by logging company

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-105
Revised 10-1-78

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

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WELL COMPLETION OR RECOMPLETION REPORT AND LOG
API # 30-025-28062

3a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
B-2317

1a. TYPE OF WELL
b. TYPE OF COMPLETION
OIL WELL ☐ GAS WELL ☐ DRY ☐ Order R-7103
OTHER water injection
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name
8. Farm or Lease Name
M. E. Hale
9. Well No.
19

2. Name of Operator
Phillips Petroleum Company
3. Address of Operator
Room 401, 4001 Penbrook Street, Odessa, Texas 79762

10. Field and Pool, or Wildcat
Vacuum Grayburg
San Andres

4. Location of Well
UNIT LETTER P LOCATED 10 FEET FROM THE South LINE AND 1210 FEET FROM
THE east LINE OF SEC. 35 TWP. 17-S RGE. 34-E NMPM

12. County
Lea

15. Date Spudded 3-20-82 16. Date T.D. Reached 4-1-83 17. Date Compl. (Ready to Prod.) 6-2-83 18. Elevations (DF, RKB, RT, GR, etc.) 4010 GR. 19. Elev. Casinghead

20. Total Depth 4800' 21. Plug Back T.D. 4728' 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools Cable Tools X

24. Producing Interval(s), of this completion - Top, Bottom, Name
Grayburg/San Andres - top 4061': bottom 4800'
25. Was Directional Survey Made No

26. Type Electric and Other Logs Run
Dresser Atlas: BHC Sonic, GR/Cal, DLL/RXO/GR Cal, Corr.
27. Was Well Cored No

28. CASING RECORD (Report all strings set in well)
Casing Size Weight lb./ft. Depth Set Hole Size Cementing Record Amount Pulled
13-3/8" 54.5 1570' 17-1/2" 1650 sx class "C" w/2% CaCl
Circd 150 sx cmt to surface
5-1/2" 15.5# 4800' 7-7/8" 1300 sx TLW w/10% DD, 3#/sx Gilsonite
12#/sx salt to 1/4#/sx Flocele, 400 sx class "C" w/6#/sx salt, 3#/sx Gilsonite Circd 200 sx

29. LINER RECORD 30. TUBING RECORD
Size Top Bottom Sacks Cement Screen Size Depth Set Packer Set
N - 0 - N E Plastic coated Baker AD-1.

31. Perforation Record (Interval, size and number)
CPI perfd 5-1/2" csg w/1JSPF as follows:
4367'-4377' 4540'-4610' 4644'-4652'
4384'-4454' 4616'-4622' 4658'-4710'
4466'-4477' 4633'-4638'
4494'-4502' 240'-240 holes
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
Depth Interval Amount and Kind Material Used
4367'-4710' Spd 1000 gals 15% NeHCL,
750 gals acid pmpd 14,150 gals acid w/1
ball sealer every 100 gals, total 146 balls.

33. PRODUCTION
Date First Production Production Method (Flowing, gas lift, pumping - Size and type pump) Well Status (Prod. or Shut-in)
*Water Injection
Date of Test Hours Tested Choke Size Prod'n. For Test Period Oil - Bbl. Gas - MCF Water - Bbl. Gas - Oil Ratio
Flow Tubing Press. Casing Pressure Calculated 24-Hour Rate Oil - Bbl. Gas - MCF Water - Bbl. Oil Gravity - API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.) Test Witnessed By

35. List of Attachments
Logs furnished direct by logging company

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

W. J. Mueller

Senior Engineering Specialist

July 20, 1983

Submit to Appropriate
District Office
State Leases - 6 copies
Fee Leases - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-106
Revised 1-1-80

WELL AM NO. 30-025-30617
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-2317

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		7. Lease Name or Unit Agreement Name M. E. Hale
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DEEP RESERVE <input type="checkbox"/> OTHER _____		
2. Name of Operator Phillips Petroleum Company		8. Well No. 23
3. Address of Operator 4001 Penbrook Street, Odessa, Texas 79762		9. Pool name or Wildcat Vacuum Grayburg/San Andres
4. Well Location Unit Letter <u>P</u> : <u>620</u> Feet From The <u>south</u> Line and <u>1250</u> Feet From The <u>east</u> Line Section <u>35</u> Township <u>17-S</u> Range <u>34-E</u> NMPM Lea County		
10. Date Spudded 6-19-89	11. Date T.D. Reached 7-02-89	12. Date Compl. (Ready to Prod.) perf'd 9-05-89
13. Elevations (DF & RKB, RT, GR, etc.) 4011.4'GR, 4019.5'RKB		14. Elev. Casinghead --
15. Total Depth 4800'	16. Plug Back T.D. 4640'	17. If Multiple Compl. How Many Zones?
18. Intervals Drilled By Rotary Tools 0-4800 Cable Tools		
19. Producing Interval(s), of this completion - Top, Bottom, Name 4390'- 4566' Grayburg/San Andres		20. Was Directional Survey Made No
21. Type Electric and Other Logs Run DLL-MSFL-GR/Cal; CNL-LDT-GR/Cal; CNL-GR/Cal		22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5# J-55	1567'	17-12"	1500 sx "C", 2% CaCl	Circ 600 sx
5-1/2"	14# J-55	4800'	7-7/8"	1600 sx "C" 35/65 Poz	
				+ 400 sx "C" Neat.	
				Circ 382 sx	

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	SN @ 4616'	

26. Perforation record (interval, size, and number) Perf'd 5-1/2" csg w/4" OD csg gun 4 SPF on spiral phasing from: 4390'-4396'; 4403'-4408'; 4414'-4421'; 4432'-4437'; 4509'-4514'; 4560'-4566'				27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
				DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
				4389-4632'	10,500 gals 15% NEFE HCL
				4389-4632'	Sqzd w/120 sx Premium Plus
				4560-4593'	Sqzd w/100 sx Premium Plus

28. PRODUCTION 4390-4566' 1200 gals 15% NEFE HCL							
Date First Production 10-05-89		Production Method (Flowing, gas lift, pumping - Size and type pump) 2 1/2" x 1 1/2" x 24' pump				Well Status (Prod. or Shut-in) producing	
Date of Test 10-07-89	Hours Tested 24	Choke Size	Prod'n For Test Period	Oil - Bbl 11	Gas - MCF .8	Water - Bbl 126	Gas - Oil Ratio 70
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - (Corr.) 38	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold	Test Witnessed By D. G. Williamson
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30. List Attachments Logs furnished direct by logging company
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31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Arlene Pinchan

Printed Name

L. M. Sanders

Title Reg. & Pro. Supv Date 10-23-89