

RELEASE 4-29-93



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APR 13 1993

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April 12, 1993

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

Attention: Ben Stone

Re: Application for Expansion of Waterflood;  
Orders R-2748/48A, 3889, 4521/22, WFX-454 & 9847/48  
Texaco Exploration and Production Inc.  
Rhodes Yates Unit, Rhodes B Fed NCT-1 & NCT-2  
T-26-S, R-37-E, Lea County, New Mexico

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests administrative approval for the expansion of the cooperative waterflood on the Rhodes Yates Unit, Rhodes B Fed NCT-1 and Rhodes B Fed NCT-2. A total of nine wells will be converted to water injection. This work will help maintain reservoir pressure and recover additional oil reserves that would otherwise be left in place. This work will be done in conjunction with a workover program to develop additional Yates reserves. Ten infill oil wells will also be drilled. If additional information is needed, contact Robert McNaughton at 505-397-0428.

Yours very truly,

*Terry L. Frazier/HOB*

Terry L. Frazier  
Hobbs Area Manager

TLF/rtm

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 & Production Inc.
- Address: P.O. Box 730, Hobbs, New Mexico 88240
- Contact party: Terry L. Frazier, 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 R-2748,48A, 3889, 4521/22,  
If yes, give the Division order number authorizing the project WFX-454 and R-9847/9848
- 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: Terry L. Frazier Title Area Manager

Signature: Terry L. Frazier / DSR Date: 4-8-93

- \* 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. Examiner Hearings: 6/29/74, 12/3/69, 12/2/69, 5/17/73, 8/2/77

## 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

Rhodes Yates Unit - Rhodes Yates Seven Rivers

4 - Unit Letter A,	560 FNL & 660 FEL, Section 28, T26S, R37E
6 - Unit Letter C,	660 FNL & 1980 FWL, Section 27, T26S, R37E
11 - Unit Letter K,	2310 FSL & 2310 FWL, Section 27, T26S, R37E

III. All pertinent well data is included on the well schematic sheets. Additional wells will eventually be converted as part of later phases of infill drilling. A braden head survey was run in April, 1991 on Texaco's Rhodes wells and all passed.

V. A lease map of wells within a 2 mile radius is attached. A 1/2 mile radius circle is drawn around the subject wells.

VI. Data for sections VI, VIII, X and XI have been previously submitted under NMOCD Order R-2748 dated 6/29/64, R-2748A on 12/3/69, R-3889 on 12/2/69, R-4521 and 4522 on 5/17/73 and WFX-454 on July 18, 1977. Information concerning the 1992 Phase I development plan was submitted for NMOCD order R-9847/9848 on September 8 and September 21, 1992.

5 infill wells were drilled in 1992; No.s 14, 15 and 16 on the Rhodes Yates Unit and No.s 21 and 22 on the Rhodes B NCT-1 lease. Completion reports are attached and a schematic of RYU No. 16 is included since it is a typical new well completion. Texaco is planning on drilling 10 infill wells in the second half of 1993. Seven will be on the Rhodes B NCT-1 and three will be on the Rhodes Yates Unit. The full plan of development has been discussed with the NMOCD in Hobbs and the BLM in Roswell, and both have given their approval.

Two wells have been plugged within the area of review up to 1991. Meridian Oil Inc's State UTP No.1 was plugged 3-27-92. Texaco E&P Inc's W.H. Rhodes B NCT-1 No. 2 was plugged on 12-08-92. Wellbore schematics for Meridian's Mobil Q State No. 2C is attached. Additional schematics for other wells within the area of review are also attached.

VII. Proposed average daily injection rate per well is 400 Bbls per day and anticipated maximum rate is 600 Bbls per day. The initial average surface injection pressure will not exceed approximately 600 psi (.2 psi/ft). Step rate tests will be run to establish higher limits with the authorization of the NMOCD. Maximum pressure will not exceed the 2000 psi system working pressure. The system will be closed.

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

Rhodes Yates Unit, Rhodes Yates Seven Rivers

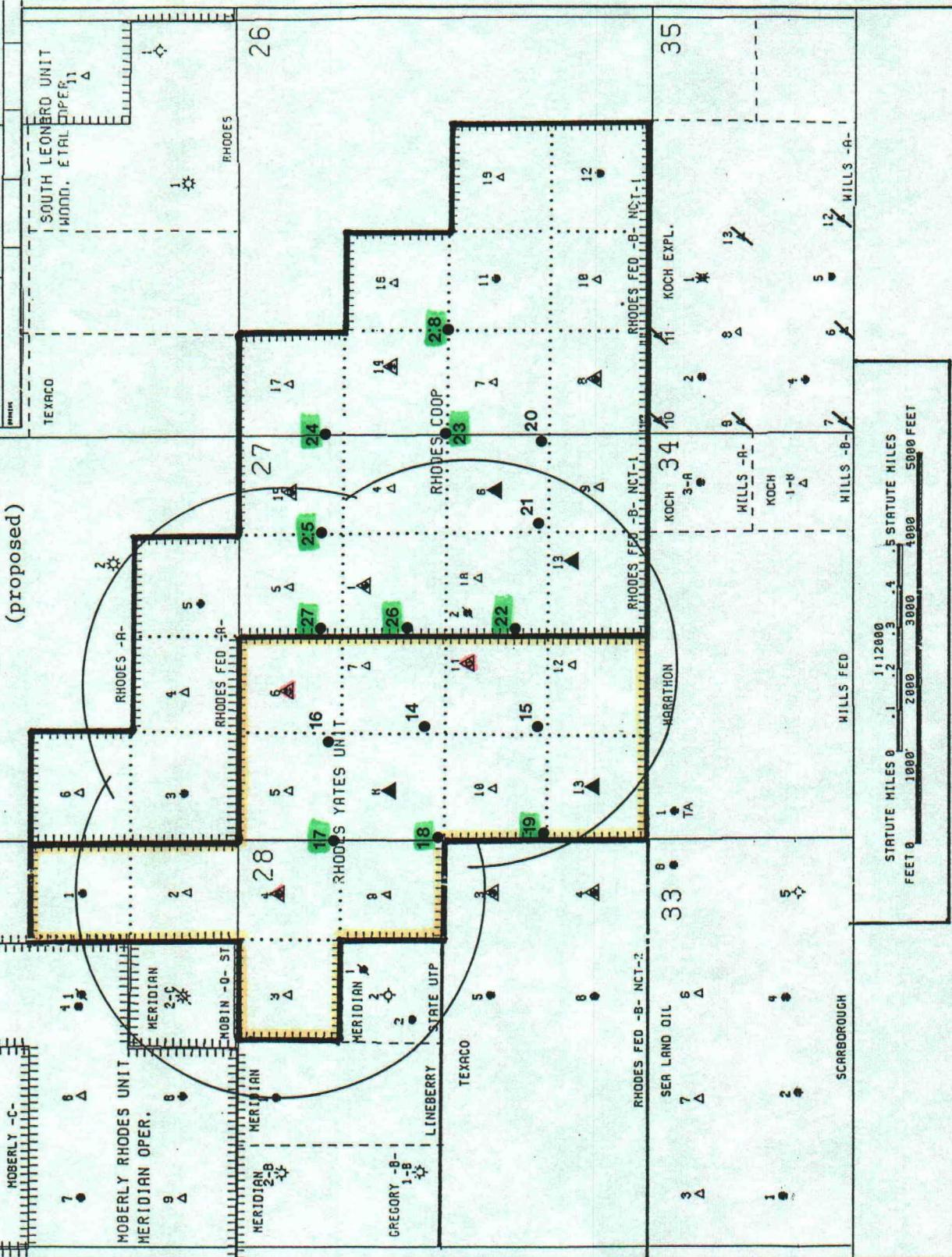
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- IX. As part of the overall infill drilling project, a workover program will be aimed at developing the middle Yates zone. Both producers and injectors will have some upper pay zones opened and hydraulically fractured. The injection work will be centered around diverting some of the water into the middle zones. The details of individual workovers will be covered on subsequent sundry notices when the work is actually started.
- XII. Based on current geological and engineering data, there is no evidence of natural or artificially induced open faults within the unitized interval or above. There is no communication from the injection zone to any subsurface source of drinking water.
- XIII. A copy of the notarized proof of publication is attached. Copies of registered mail receipts for the offset operators and landowner are attached.

TEXACO INC.  
HOBBS NM U.S.A.

RHODES YATES WATERFLOOD  
LEA COUNTY, NEW MEXICO

▲ CONVERSIONS  
● NEW INFILL WELLS  
(proposed)



RHODES YATES FIELD LEA COUNTY, NEW MEXICO

## LEA COUNTY, NEW MEXICO

$$1'' = 3000'$$

PO-108  
(5/91)

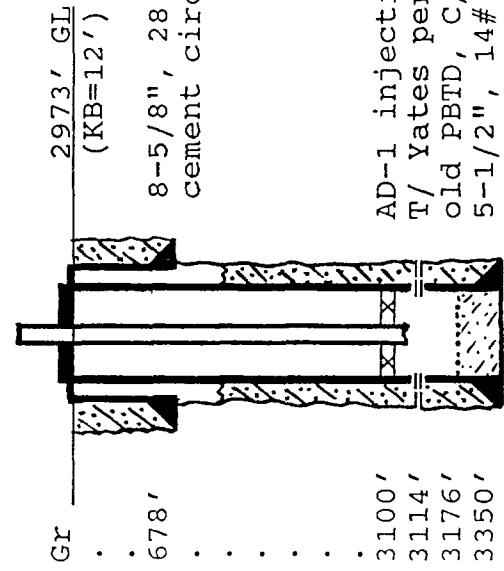
PROPOSED INJECTION WELL CONVERSION

OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes Yates Unit #4

FOOTAGE LOCATION: 560 FNL X 660 FEL Sec./Twn/Rng: Unit A, Sec 28, T-26-S, R-37-E

Lea County, New Mexico

SCHEMATIC



Note: will be cleaned out to 3250' PBTD,  
new perfs from 3180'-3245',  
retainer set at 3176'

Surface Casing: TABULAR DATA  
Size 8-5/8", 28.5# Cemented with 600 sx.  
TOC surface, determined by circulation  
Hole Size 12-1/4" Comp. Date 12-16-76

Intermediate casing: Set at \_\_\_\_\_  
Size NONE Cemented with \_\_\_\_\_ sx.  
TOC \_\_\_\_\_ determined by \_\_\_\_\_  
Hole Size \_\_\_\_\_

Production Casing: Set at 3350'  
Size 5-1/2", 14# Cemented with 700 sx.  
TOC 1300', determined by Temp. Sv.  
Hole Size 7-7/8"

Tops:

Salt 1410'-2650'  
Yates 2940'  
Seven Rivers 3180'  
Queen na

Injection Interval:

3114' to 3245' Size 6-1/8", nitro shot  
Tubing: 2-3/8", 4.7# J-55, ICC, 2000# WP

PO-113  
(5/91)

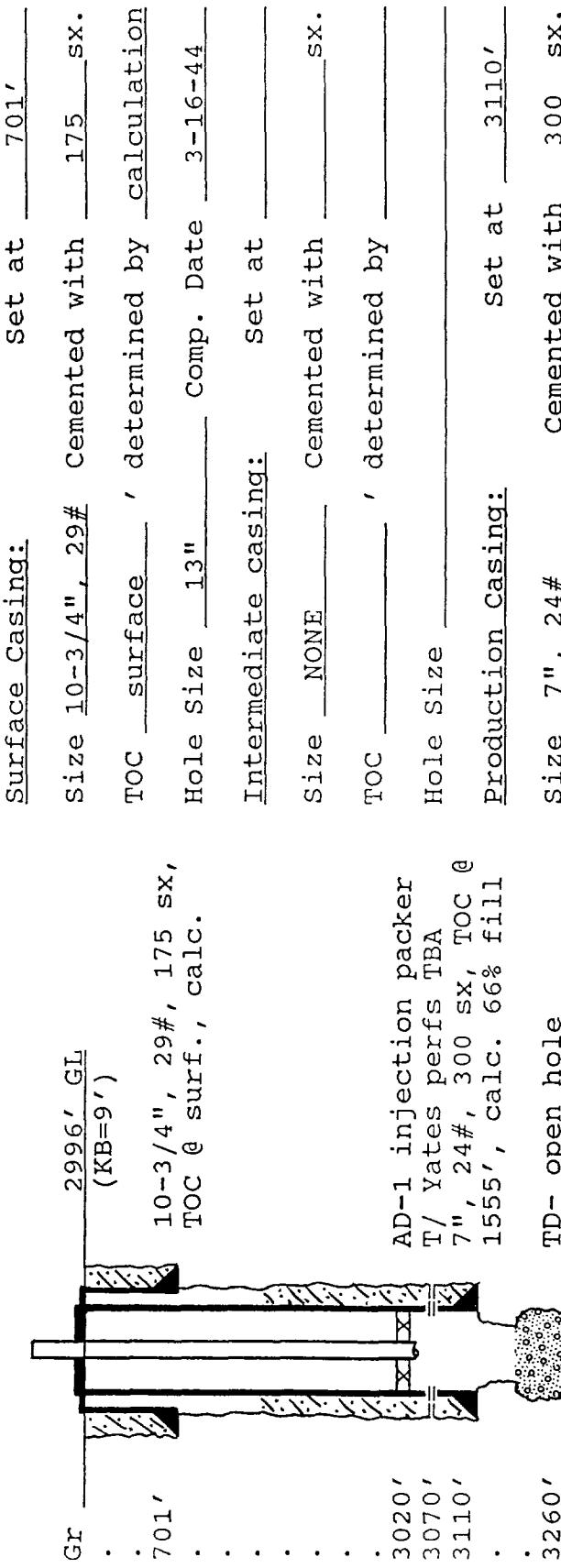
PROPOSED INJECTION WELL CONVERSION

OPERATOR: Texaco Exploration & Production Inc.    Lease: Rhodes Yates Unit #6

FOOTAGE LOCATION: 660 FNL X 1980 FWL    sec./Twn/Rng: Unit C, Sec 27, T-26-S, R-37-E

Former Amerada State J "A" #3, State "JD" Unit #1    Lea County, New Mexico

SCHEMATIC



Tops:

Salt 1207'-2676'  
Yates 2930'  
Seven Rivers na  
Queen na

PO-108  
(5/91)

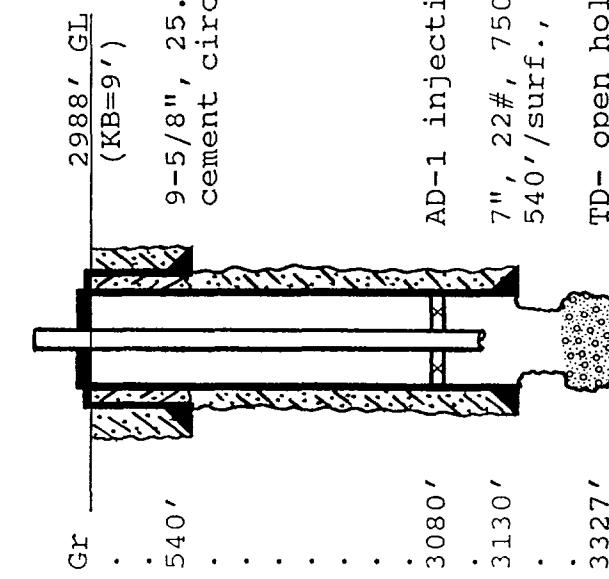
PROPOSED INJECTION WELL CONVERSION

OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes Yates Unit #11

FOOTAGE LOCATION: 2310 FNL X 2310 FWL Sec./Twn/Rng: Unit K, Sec 27, T-26-S, R-37-E

Former Anderson-Pritchard Gregory "B" - Morris #1 Lea County, New Mexico

SCHEMATIC



	<u>Surface Casing:</u>	<u>TABULAR DATA</u>
Gr	Size 9-5/8, 25.7#	Cemented with 250 sx.
.	TOC surface	determined by circulation
.	Hole size 11-1/4"	Comp. Date 4-20-46
.	Intermediate casing:	
.	Size NONE	Cemented with _____ sx.
.	TOC _____	determined by _____
.	Hole Size _____	
.	Production Casing:	
.	Size 7", 22#	Cemented with 750 sx.
.	TOC 540' / surf.'	determined by SQZ/ circ.
.	Hole Size 8-3/4"	

Tops:

Salt	1170' -2800'
Yates	2975'
Seven Rivers	na
Queen	na

Injection Interval: open hole

3130' to 3327' Size 6-1/8", nitro shot  
Tubing: 2-3/8", 4.7#, J-55, ICC 2000# WP

PO-90m  
(5/91)

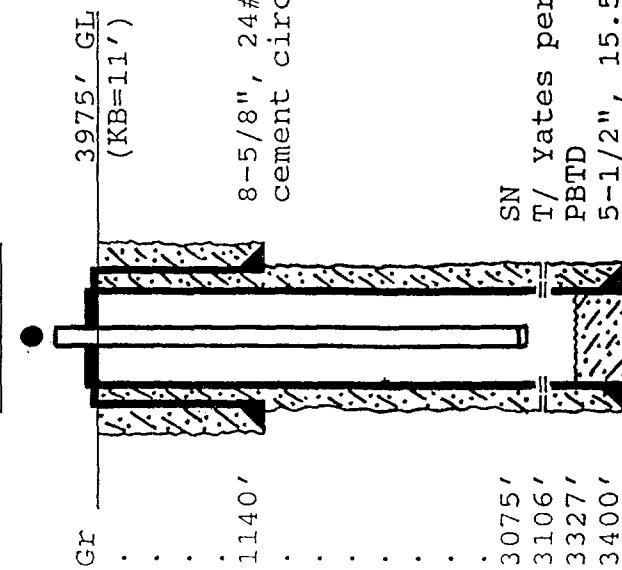
WELL DATA SHEET

OPERATOR: Texaco Exploration & Prod. Inc Lease: Rhodes Yates Unit #16

FOOTAGE LOCATION: 1295 FNL, 1357 FWL Sec./Twn/Rng: Unit C, Sec 27, T-26-S, R-37-E

Lea County, New Mexico

SCHEMATIC



Surface Casing: TABULAR DATA

Size 8-5/8", 24# Cemented with 950 sx.

TOC surface determined by circulated

Hole Size 12-1/4" Comp. Date 11-08-92

Intermediate casing:

Size none Cemented with sx.

TOC surface determined by

Hole Size Set at 1140'

Production Casing: Set at 3400'

Size 5-1/2", 15.5# Cemented with 1010 sx.

TOC surface determined by circulation

Hole Size 7-7/8"

Producing Interval:

3106' to 3326', perfs @ 2 SPF, 67 holes

Stimulation: 3300 g 15% NEFE, 33/112 frac

Tops:

Salt 1285'-2786'  
Yates 2932'  
7 Rivers 3276'

Hobbs Area Manager

Submits 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., Artesia, NM 88410

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.

30-026-31731

5. Indicate Type of Lease

STATE

FEE

6. State Oil & Gas Lease No.

B-1431-3

7. Lease Name or Unit Agreement Name

RHODES YATES UNIT

8. Well No.

14

9. Pool name or Wildcat

RHODES YATES SEVEN RIVERS

### 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  DEMPEN  PLUG BACK  DIFF REVR  OTHER \_\_\_\_\_

2. Name of Operator  
TEXACO EXPLORATION & PRODUCTION INC.

3. Address of Operator  
P. O. Box 3109, Midland, Texas 79702

4. Well Location

Unit Letter F : 2445 Feet From The NORTH Line and 1521 Feet From The WEST Line

Section 27 Township 26-SOUTH Range 37-EAST NMPM LEA County

10. Date Spudded 10-27-92	11. Date T.D. Reached 11-01-92	12. Date Compl. (Ready to Prod.) 11-13-92	13. Elevations (DF& RKB, RT, GR, etc.) GR-2976', KB-2986'	14. Elev. Casinghead 2976'
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15. Total Depth 3400'	16. Plug Back T.D. 3376'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools 0 - 3400'	Cable Tools 1
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19. Producing Interval(s), of this completion - Top, Bottom, Name 3116' - 3346': SEVEN RIVERS	20. Was Directional Survey Made YES
--	--

21. Type Electric and Other Logs Run GR-DLL-MSFL, GR-SDL-DSN, GR-COMP-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
8 5/8	24#	1150'	12 1/4	950 SX, CIRC. 250 SX	
5 1/2	15.5#	3400'	7 7/8	850 SX, CIRC. 115 SX	

### LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 7/8	3102'	

26. Perforation record (interval, size, and number) 3116 - 18', 3124 - 29', 3145 - 48', 3151', 3156', 3158 - 61', 3176 - 90', 3193 - 96', 3239 - 51', 3258 - 95', 3343 - 46' W/2 JSPF (93 HOLES)	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 3116' - 3346' ACID - 3200 GAL 15% NEFE FRAC - 33000 GAL XLEG & 150000# 12/20 SD
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### PRODUCTION

Date First Production 11-25-92	Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING, 2.5 X 1.75 X 24	Well Status (Prod. or Shut-in) PRODUCING
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Date of Test 11-25-92	Hours Tested 24	Choke Size	Prod's For Test Period	Oil - Bbl. 52	Gas - MCF 8	Water - Bbl. 430	Water - Bbl./Bbl. Oil 154	Gas - Oil Ratio
--------------------------	--------------------	------------	---------------------------	------------------	----------------	---------------------	------------------------------	-----------------

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.) 37.4
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29. Disposition of Gas (Sold, used for fuel, vented, etc.) VENTED FOR TEST PURPOSES ONLY	Test Witnessed By G. WEIR
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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/RDC Printed Name C. P. BASHAM

Title DRILLING OPNS MGR Date 12-01-92

RTM

Form 3160-4  
(July 1989)  
(formerly 9-330)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED  
(See other instructions on  
reverse side)

BLM Roswell District  
Modified Form No.  
NM060-3160-3

5. LEASE DESIGNATION AND SERIAL NO.  
**NM-25741**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
**RHODES YATES UNIT**

8. FARM OR LEASE NAME

9. WELL NUMBER  
**15**

10. FIELD AND POOL, OR WILDCAT  
**RHODES YATES SEVEN RIVER**

11. SEC., T., R. M., OR BLOCK AND SURVEY  
OR AREA

**SEC. 27, T-28-S, R-37-E**

12. COUNTY OR  
PARISH  
**LEA**

13. STATE  
**NM**

**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  DEEP-EN  PLUG BACK  DIFF. RESER  Other \_\_\_\_\_

2. NAME OF OPERATOR

**TEXACO EXPLORATION AND PRODUCTION INC.**

3. ADDRESS OF OPERATOR  
**P. O. Box 3109, Midland, Texas 79702**

3a. AREA CODE & PHONE NO.  
**(915) 688-4620**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface **1518' FSL & 1453' FWL, UNIT LETTER: K**

At top prod. interval reported below **SAME**

At total depth **SAME**

9a. API WELL NO.  
**30-025-31757**

14. PERMIT NO.  
**10-15-92**

DATE ISSUED  
**10-15-92**

15. DATE SPUNNED  
**11-03-92**

16. DATE T.D. REACHED  
**11-08-92**

17. DATE COMPL. (Ready to prod.)  
**11-28-92**

18. ELEVATIONS (OF, RKB, RT, GR, ETC.)\*  
**GR-2976', KB-2986'**

19. ELEV. CASINGHEAD  
**2976'**

20. TOTAL DEPTH, MD & TVD  
**3440'**

21. PLUG BACK T.D., MD & TVD  
**3352'**

22. IF MULTIPLE COMPL.  
HOW MANY\*  
→

23. INTERVALS  
DRILLED BY  
→

ROTARY TOOLS  
**0-3440'**

CABLE TOOLS

24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*  
**3161' - 3343': SEVEN RIVERS**

25. WAS DIRECTIONAL  
SURVEY MADE  
**YES**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**GR-DLL-MSFL, GR-DSN-SDL, GR-SONIC**

27. WAS WELL CORED  
**NO**

28. Casing Record (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<b>8 5/8</b>	<b>24#</b>	<b>1190'</b>	<b>12 1/4</b>	<b>950 SX, CIRC. 160 SX</b>	
<b>5 1/2</b>	<b>15.5#</b>	<b>3440'</b>	<b>7 7/8</b>	<b>735 SX, CIRC. 116 SX</b>	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					<b>2 7/8</b>	<b>3131'</b>	

31. PERFORATION RECORD (Interval, size, and number)

**3161-65, 3171-72, 3190-95, 3199-3201, 3204-05,  
3208-12, 3228-32, 3235-38, 3240-44, 3284-95,  
3301-09, 3312-43. w/ 2 JSPF: 158 HOLES**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<b>3161' - 3343'</b>		<b>FRAC: 4000 GAL 2% KCL F/B 32000</b>
		<b>GAL XLG KCL w/ 14000# 12/20 SD.</b>

33. PRODUCTION

DATE OF FIRST PRODUCTION  
**11-20-92**

PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)  
**PUMPING - 2.5 x 1.75 x 24**

WELL STATUS (Producing or shut-in)  
**PRODUCING**

DATE OF TEST  
**12-13-92**

HOURS TESTED  
**24**

CHOKE SIZE  
CALCULATED  
24 HOUR RATE  
→

PRODN'L FOR  
TEST PERIOD  
→

OIL - BBL.  
**49**

GAS - MCF.  
**29**

WATER - BBL.  
→

GAS - MCF.  
→

OIL GRAVITY - API (CORR.)  
**37.4**

WATER - BBL.  
→

TEST WITNESSED BY  
**JOHN VANCE**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED **C.P. Basham / cwh**

TITLE **DRILLING OPERATIONS MANAGER**

DATE **12-15-92**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Send 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 Bracito Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-104  
Revised 1-1-89

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

a. Type of Well: <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		b. Type of Completion: NEW <input type="checkbox"/> WORK <input checked="" type="checkbox"/> OVER <input type="checkbox"/> DRAFTRUN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER _____	
c. Name of Operator TEXACO EXPLORATION & PRODUCTION INC.		d. Well No. 16	
e. Address of Operator P. O. Box 3109, Midland, Texas 79702		f. Pool Name or Wildcat RHODES YATES SEVEN RIVERS	
g. Well Location Unit Letter <u>C</u> : <u>1295</u> Feet From The <u>NORTH</u> Line and <u>1357</u> Feet From The <u>WEST</u> Line Section <u>27</u> Township <u>26-SOUTH</u> Range <u>37-EAST</u> NMPM LEA County			
10. Date Spudded <u>10-20-92</u>	11. Date T.D. Reached <u>10-26-92</u>	12. Date Compl. (Ready to Prod.) <u>11-08-92</u>	13. Elevations (DF & RKB, RT, GR, etc.) GR-2975', KB-2986' 14. Elev. Casinghead 2975'
15. Total Depth <u>3400'</u>	16. Plug Back T.D. <u>3327'</u>	17. If Multiple Compl. How Many Zones? _____	18. Intervals Drilled By Rotary Tools 0 - 3400' <input type="checkbox"/> Cable Tools
19. Producing Interval(s), of this completion - Top, Bottom, Name <u>3106' - 3326': SEVEN RIVERS</u>			20. Was Directional Survey Made YES
21. Type Electric and Other Logs Run GR-DLL-MSFL, GR-SDL-DSN, GR-SONIC-FWS, GR-CCL			22. Was Well Cored NO
23. CASING RECORD (Report all strings set in well)			
CASING SIZE <u>8 5/8</u>	WEIGHT LB/FT. <u>24#</u>	DEPTH SET <u>1140'</u>	HOLE SIZE <u>12 1/4</u> CEMENTING RECORD <u>950 SX, CIRC. 250 SX</u> AMOUNT PULLED
<u>5 1/2</u>	<u>15.5#</u>	<u>3400'</u>	<u>7 7/8</u> <u>1010 SX, CIRC. 116 SX</u>
24. LINER RECORD			
SIZE _____	TOP _____	BOTTOM _____	SACKS CEMENT SCREEN 2 7/8
25. TUBING RECORD SIZE <u>2 7/8</u> DEPTH SET <u>3075'</u> PACKER SET _____			
26. Perforation record (interval, size, and number) 3106 - 09', 3114 - 19', 3133 - 36', 3142 - 45', 3148', 3153', 3172 - 79', 3190 - 93', 3231 - 44', 3253 - 57', 3320 - 26' W/2 JSPF (67 HOLES)		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL 3106' - 3326' AMOUNT AND KIND MATERIAL USED ACID - 3300 GAL 15% NEFE FRAC - 33000 GAL XLG & 112000# 12/20 SD	
28. PRODUCTION Date First Production <u>11-04-92</u> Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING, 2.5 X 1.75 X 24 Well Status (Prod. or Shut-in) PRODUCING			
Date of Test <u>11-12-92</u>	Hours Tested <u>24</u>	Choke Size _____	Prodn For Oil - Bbl. Gas - MCF Water - Bbl. Test Period <u>96</u> <u>15</u> <u>189</u> <u>Texaco</u> <u>456</u>
Flow Tubing Press.	Casing Pressure _____	Calculated 24-Hour Rate _____	Oil - Bbl. Gas - MCF Water - Bbl. _____ <u>37.4</u> <u>Hanging Gravity - API - (Corr.)</u>
29. Disposition of Gas (Sold, used for fuel, vented, etc.) VENTED FOR TEST PURPOSES ONLY			Test Witnessed By G. WEIR
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 / ROC

Printed Name C. P. BASHAM

Title DRILLING OPNS MGR Date 11-20-92

Form 3160-4  
(July 1989)  
(formerly 9-330)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED  
(See other instructions on  
reverse side)

BLM Roswell District  
Modified Form No.  
NM060-3160-3

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  DEEP-EN  PLUG BACK  DIFF. RESER.  Other \_\_\_\_\_

2. NAME OF OPERATOR

TEXACO EXPLORATION AND PRODUCTION INC.

3. ADDRESS OF OPERATOR  
P. O. Box 3109, Midland, Texas 79702

3a. AREA CODE & PHONE NO.  
(915) 688-4620

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1420' FSL & 10' FEL, UNIT LETTER: I

At top prod. interval reported below SAME

At total depth SAME

9a. API WELL NO.  
30-025-31764

14. PERMIT NO.

DATE ISSUED

10-22-92

12. COUNTY OR PARISH LEA

13. STATE NM

15. DATE SPUNNED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 19. ELEV. CASINGHEAD  
11-10-92 11-14-92 12-11-92 GR-2980', KB-2990' 2980'

20. TOTAL DEPTH, MD & TVD 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL.  
3400' 3309' HOW MANY\* 23. INTERVALS DRILLED BY → ROTARY TOOLS 0-3400' CABLE TOOLS

24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*  
3116' - 3290': SEVEN RIVERS 25. WAS DIRECTIONAL SURVEY MADE  
YES

26. TYPE ELECTRIC AND OTHER LOGS RUN  
GR-DLL-MSFL, GR-DSN-SDL, GR-CCL 27. WAS WELL CORED  
NO

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	
8 5/8	24#	1150'	12 1/4	950 SX, CIRC. 120 SX	
5 1/2	15.5#	3400'	7 7/8	1080 SX, DNC. 400 SX DOWN	
				BACKSIDE TO SURF.	

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8	3048'	

31. PERFORATION RECORD (Interval, size, and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
				DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED			
3116-18, 3124-28, 3138-40, 3143-46, 3148-52, 3155-60, 3164-72, 3180-97, 3226-56, 3263-90, w/ 2 JSPF: 204 HOLES				3116' - 3290' FRAC: 28544 GAL XLG w/ 88200# 12			

33. PRODUCTION							
DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)				WELL STATUS (Producing or shut-in)	
12-08-92	PUMPING - 2.5 x 1.75 x 24					PRODUCING	
DATE OF TEST 12-22-92	HOURS TESTED 24	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL - BBL. 61	GAS - MCF. 13	WATER - BBL. 531	GAS - OIL RATIO 213
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24 HOUR RATE →	OIL - BBL.	GAS - MCF. 23303	WATER - BBL.	OIL GRAVITY - API (CORR.) 34.7	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
VENTED FOR TEST PURPOSES ONLY

TEST WITNESSED BY  
MIKE LOVE

35. LIST OF ATTACHMENTS  
DEVIATION SURVEY

DEC 1992

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED C.P. Basham / cwh TITLE DRILLING OPERATIONS MANAGER DATE 12-23-92

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Form 3160-4  
(July 1989)  
(formerly 9-330)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED  
(See other instructions on  
reverse side)

BLM Roswell District  
Modified Form No.  
NM060-3160-3

RTM

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. RESER.  Other \_\_\_\_\_

2. NAME OF OPERATOR

TEXACO EXPLORATION AND PRODUCTION INC.

3. ADDRESS OF OPERATOR  
P. O. Box 3109, Midland, Texas 79702      3a. AREA CODE & PHONE NO.  
(915) 688-4620

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1543' FSL & 1093' FEL, UNIT LETTER: I

At top prod. interval reported below SAME

At total depth SAME

9a. API WELL NO. 30-025-31765		14. PERMIT NO.	DATE ISSUED 10-22-92	12. COUNTY OR PARISH LEA	13. STATE NM
15. DATE SPUNNED 11-16-92		16. DATE T.D. REACHED 11-21-92	17. DATE COMPL. (Ready to prod.) 12-04-92	18. ELEVATIONS (OF, RKB, RT, GR, ETC.)* GR-2974', KB-2984'	19. ELEV. CASINGHEAD 2974'
20. TOTAL DEPTH, MD & TVD 3400'	21. PLUG BACK T.D., MD & TVD 3337'	22. IF MULTIPLE COMPL. HOW MANY*	23. INTERVALS DRILLED BY →	ROTARY TOOLS 0-3400'	CABLE TOOLS
24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* 3134' - 3317': SEVEN RIVERS					25. WAS DIRECTIONAL SURVEY MADE YES

26. TYPE ELECTRIC AND OTHER LOGS RUN GR-DLL-MSFL, GR-DSN-SDL, GR-SONIC					27. WAS WELL CORED NO
28. Casing Record (Report all strings set in well)					

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24#	1150'	12 1/4	950 SX, CIRC. 260 SX	
5 1/2	15.5#	3400'	7 7/8	775 SX, CIRC. 10 SX	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8	3090'	

31. PERFORATION RECORD (interval, size, and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
3134-43, 3156-60, 3165-69, 3173-75, 3176-84, 3189-90, 3200-01, 3211-16, 3261-81, 3284-90, 3298-3310, 3313-17. w/ 2 JSPF: 148 HOLES				DEPTH INTERVAL (MD)			
				3134' - 3317'			
				AMOUNT AND KIND OF MATERIAL USED			
				FRAC: 5000 GAL 2% KCL F/B 32000			
				GAL XLG KCL w/ 14000# 12/20 SD.			

33. PRODUCTION						34. WELL STATUS (Producing or shut-in)	
DATE OF FIRST PRODUCTION 12-06-92		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) PUMPING - 2.5 x 1.75 x 24				34. WELL STATUS (Producing or shut-in)	

DATE OF TEST 12-12-92	HOURS TESTED 24	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL - BBL. 141	GAS - MCF. 9	WATER - BBL. 331	GAS - OIL RATIO 64
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24 HOUR RATE →			GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.) 37.4

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) VENTED FOR TEST PURPOSES ONLY				TEST WITNESSED BY JOHN VANCE			
35. LIST OF ATTACHMENTS DEVIAITION SURVEY							

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED C.P. Basham/cwa TITLE DRILLING OPERATIONS MANAGER DATE 12-15-92

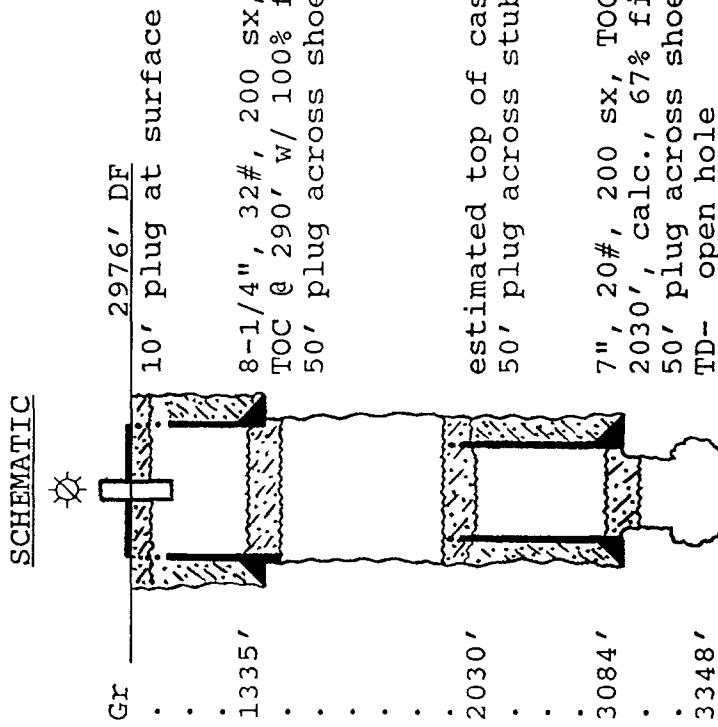
\*(See Instructions and Spaces for Additional Data on Reverse Side)

F&A Well Data Sheet

OPERATOR: Meridian Oil, Inc.      Lease: Mobil "Q" State #2C

FOOTAGE LOCATION: 660 FSL X 1980 FEL      Sec./Twn/Rng: Unit 0, Sec 21, T-26-S, R-37-E

Former Krupp-Flaherty Oil Corp. Moberly "C" #2, El Paso      Lea County, New Mexico

SCHEMATICSCHEMATIC

	<u>Surface Casing:</u>	<u>TABULAR DATA</u>
Gr	Size 8-1/4, 32#	Cemented with 200 sx.
.	TOC 290'	determined by calculated
.	Hole Size 9-7/8" est.	Comp. Date 2-04-42
1335'	8-1/4", 32#, 200 sx, TOC @ 290', w/ 100% fill.	Intermediate casing: Set at
.	50', plug across shoe	
.	Size NONE	Cemented with _____ sx.
.		Note: Cement volumes estimated using 1.18 f3 / ft and cable tool bit sizes based on offset wells drilled at the same time.
.		production Casing: Set at 3084'
2030'	estimated top of casing 50', plug across stub	
.	7", 20#, 200 sx, TOC @ 2030', calc., 67% fill.	size 7", 20#
.	50', plug across shoe	Cemented with 200 sx.
.	TD- open hole	TOC 2030', determined by calculated
3084'		Hole Size 8-3/4" ?, 6-3/4" ? open hole.

Producing Interval:

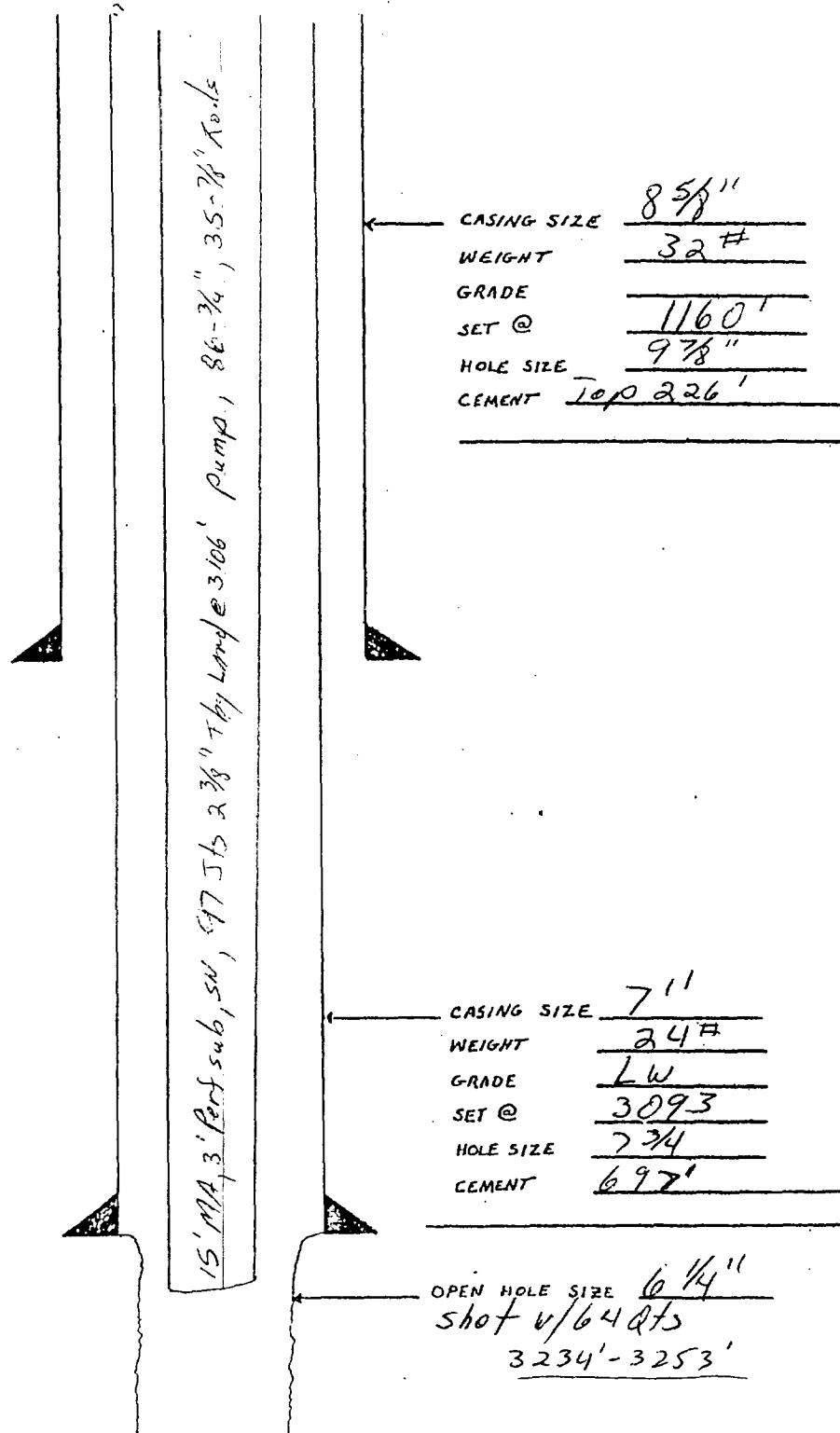
Top: 1235'-2810'  
Salt 2975'  
Yates na  
Seven Rivers na

\*\*surface casing possibly cut and pulled at TOC

\*\*\* Plugged and Abandoned 10-29-48

WELL NAME & NO. Rhodes 4S100 Unit #1

DATE \_\_\_\_\_



PHTD 3253  
TD 3253

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.6.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL:  DIG.  GAS WELL  DRY  Other Injection Well

## 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 _____
--	------------------------------------	---------------------------------	------------------------------------	---------------------------------------	-------------

## 2. NAME OF OPERATOR

TEXACO Inc.

## 3. ADDRESS OF OPERATOR

P. O. Box 728, Hobbs, New Mexico 88240

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 600' FSL & 660' FEL of Sec. 21, T-26-S, R-37-E, Unit  
 At top prod. interval reported below Letter I

At total depth

14. PERMIT NO.	DATE ISSUED
Regular	10-29-73

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DE, RKB, RT, GR, ETC.)

12-22-73 1-1-74 1-12-74 2966' GR

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY

3350' 3350' -- → 0-3350

## 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

2 JSPF from 3128-34, 3150-76, 3174-94.

## 26. TYPE ELECTRIC AND OTHER LOGS RUN

Gamma-Ray Neutron Log

## 28. Casing Record (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7-5/8"	15.28#	600'	9-7/8"	300 SX. CIRC	0-0-
4-1/2"	10.23#	3350'	6-3/4"	300 SX. TOC@ 1560 T.S.	0-0-

## 29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	3093'	3093'

## 31. PERFORATION RECORD (Interval, size and number)

2 JSPF @ 3128-34, 3150-76,  
3174-94.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3128-3194	30,000 gals. WF-60 gel
	water, 1500 gals. 15% NEA

## 33. PRODUCTION

## DATE FIRST PRODUCTION.

## PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

INJ. 1-12-74 Water Injection 2<sup>1</sup>/<sub>2</sub> Bbls. per minute

## WELL STATUS (Producing 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	→				

## 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

## TEST WITNESSED BY

## 35. LIST OF ATTACHMENTS

## 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED U. H. Fletcher

TITLE Asst. Dist. Supt.

DATE 1-16-74

## TEXACO INC.

SHEET NO. \_\_\_\_\_

DATE 3-21-91BY LWT

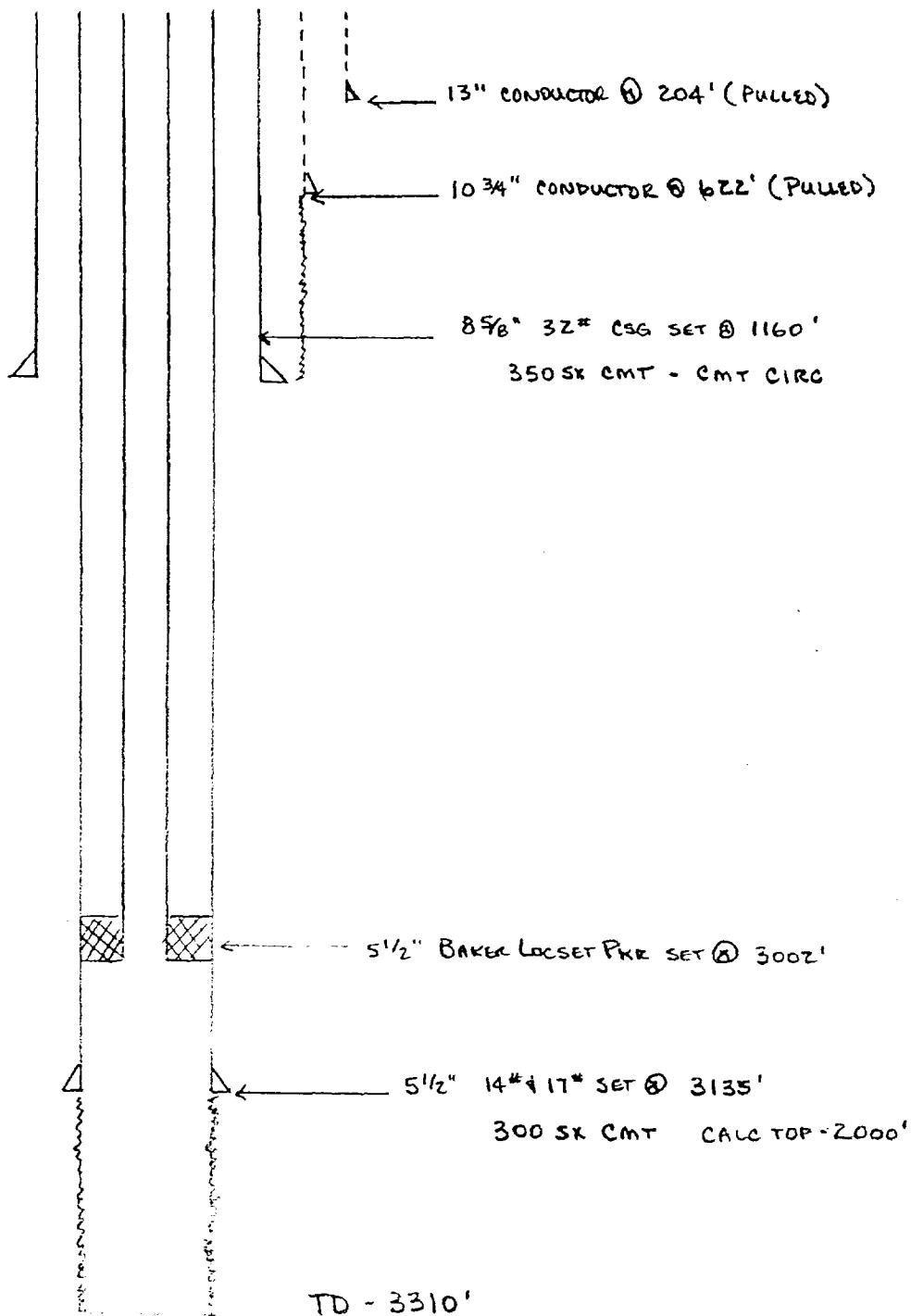
C.K.D. \_\_\_\_\_

APP'D \_\_\_\_\_

LOCATION RHODES YATES UNIT #3

EST. NO. \_\_\_\_\_

SUBJECT:

COMPLETED JULY 1942 - CIW APRIL 1977

COMPANY TEXACO  
LEASE & WELL NO. Rhodes YATES WELL #5  
FORMATION \_\_\_\_\_  
COUNTY & STATE LEA N.M.



6-22-87

11' HOLE

8 5/8" # LW SET @ 1207' 200 SXS

CARDINAL SURVEYS COMPANY  
"FLUID MOVEMENT SPECIALISTS"

P. O. BOX 74      BUS. (915) 683-8667  
MIDLAND, TX 79702      563-4017

101 JTS 2 3/8" PLASTIC COATED T136 8-R-EUE

5 1/2" 14# SMLS @ 3198' 200 SXS

5 1/2" BAKER LOC-SET model A w/ 1.781" I.D. AND ON-OFF TOOL

SET @ 3078'

TOP @ 3175'

1 1/2" GRAVEL PACKED SLOTTED LINER DRIVEN TO 3330'

T.D. 3340

#### CONVERSION FACTORS

MULTIPLY	By	TO OBTAIN
Barrels	5.6146	Cubic Feet
Cubic Feet	7.4806	Gallons
Gallons	0.1337	Cubic Feet
Pounds/gal.	7.4806	Pounds/Cu. Ft.

#### PIPE VOLUMES

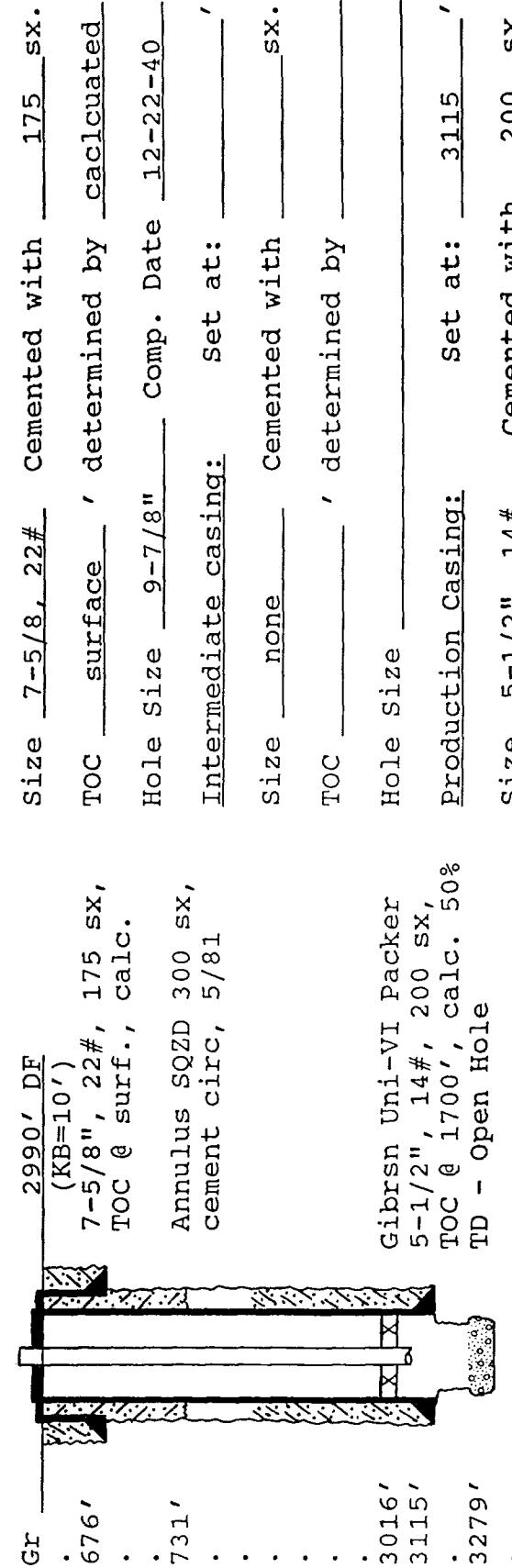
0.00545 x I.D. <sup>2</sup> in inches = Cu. Ft./Ft.
0.0407 x I.D. <sup>2</sup> in inches = Gals./Ft.
0.00097 x I.D. <sup>2</sup> in inches = Bbls./Ft.

#### HYDROSTATIC PRESSURE

FOR WATER:
0.434 x Depth in Feet = PSI.
FOR OTHER FLUIDS:
0.434 x Depth x Sp. Gr. = PSI.

INJECTION WELL DATA SHEET

OPERATOR: Texaco Exploration & Production Inc.    WELL: Rhodes Yates Unit #7    WIW  
FOOTAGE LOCATION: 1650 FNL, 2310 FWL    sec./twn/rng: Unit F, Section 27, T-26-S, R-37-E  
Former Amerada State J 'A' #1, Texaco State 'JD' Unit #4,    Lea County, New Mexico

SCHEMATICEstimated Tops:

Salt 1168' - 2786'  
Yates 2945'  
Seven Rivers na

Injection Interval:

3090' to 3327' through: open hole, perf  
Tubing: 2 3/8", 4.7#, J-55, ICC, 2000# WP  
\*\* Additional perf's from 3090' - 3110'

SHEET NO. \_\_\_\_\_

DATE 3-21-91LOCATION RHODES YATES UNIT # 9

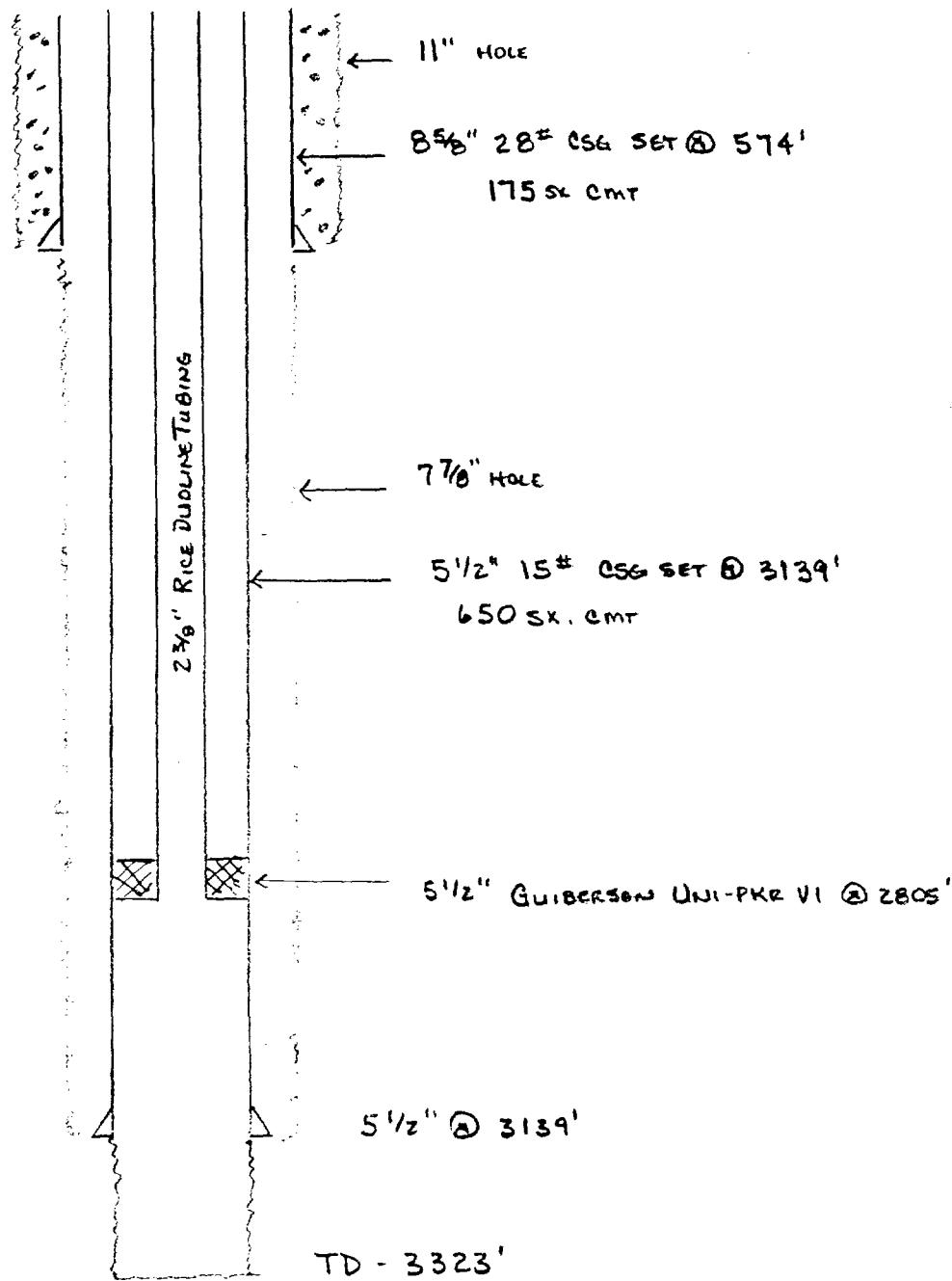
EST. NO. \_\_\_\_\_

BY LWJ

SUBJECT \_\_\_\_\_

C'K'D \_\_\_\_\_

APP'D \_\_\_\_\_

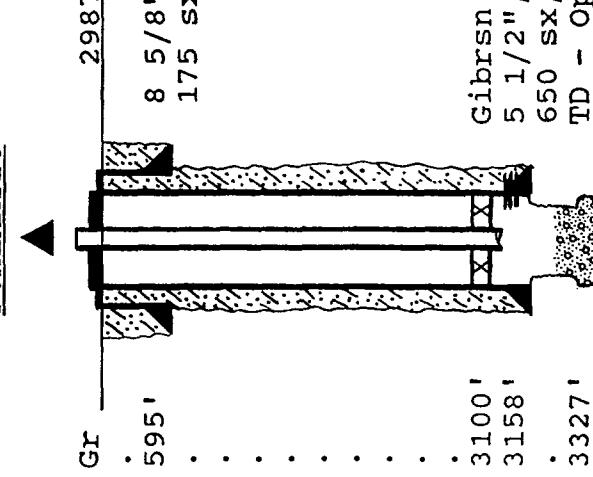


INJECTION WELL DATA SHEET

OPERATOR: Texaco Exploration &amp; Production Inc. WELL: Rhodes Yates Unit #10 WIW

FOOTAGE LOCATION: 2310 FSL, 660 FWL Sec./Twn/Rng: Unit L, Section 27, T-26-S, R-37-E

Additional pay will be added to Middle Yates. DF = 2996' Lea County, New Mexico

SCHEMATICSCHEMATIC

<u>Surface Casing:</u>	<u>TABULAR DATA</u>
Size 8 5/8, 28#	Cemented with 175 sx.
TOC <u>surface</u>	determined by <u>circulated</u>
Hole Size NR	Comp. Date 4-26-43
Intermediate casing:	Set at: 1'
Size none	Cemented with sx.
TOC _____	determined by _____
Hole Size _____	
Production Casing:	Set at: 3158'
Size 5 1/2", 15#	Cemented with 650 sx.
TOC <u>surface</u>	determined by <u>circulated</u>
Hole Size 7 7/8'	

Estimated Tops:  
 Salt 1400' - 2870'  
 Yates 3008'  
 Oil Pay 3287'  
 \*\* Additional perfs from 3122'-3153'

Injection Interval:

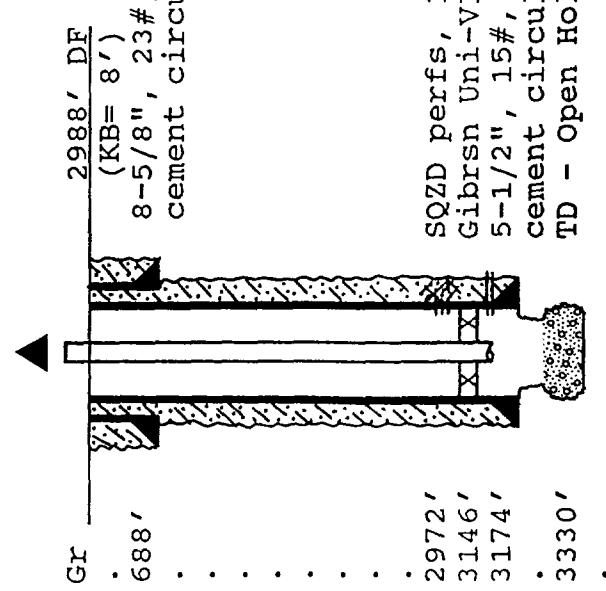
3122' to 3327' through: Open Hole  
 Tubing: 2 3/8", 4.7#, J-55, ICC, 2000# WP

INJECTION WELL DATA SHEET

OPERATOR: Texaco Exploration & Production Inc.    WELL: Rhodes Yates Unit #12 WIW

FOOTAGE LOCATION: 990 FSL, 2310 FWL    sec./Twn/Rng: Unit N, Section 27, T-26-S, R-37-E

Former Anderson-Pritchard Oil Corp. Gregory Morris (B) #3    Lea County, New Mexico

SCHEMATICSCHEMATICSurface Casing:TABULAR DATASet at:

688 '

Size 8-5/8, 23# Cemented with 250 sx.

TOC surface ' determined by circulated

Hole Size 12-1/4" Comp. Date 11-22-45

Intermediate casing:Set at:

none Cemented with sx.

TOC ' determined by

Hole Size

Production Casing:

Set at:

3174 '

Size 5-1/2", 15# Cemented with 600 sx.

TOC surface ' determined by circulated

Hole Size 7-7/8", 4-3/4" open hole

Injection Interval:

Driller's Tops:  
Salt 1170'- 2830'  
Yates 2988'  
Seven Rivers na

\* Additional perfs from 3136' - 3170'  
Tubing: 2 3/8", 4.7#, J-55, ICC, 2000# WP

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to:  <b>BLM-Roswell District attn: Gary Gourley P.O. Box 1397 Roswell, NM 88202-1397</b>		4a. Article Number <u>P- 369- 424-255</u>
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
		7. Date of Delivery <u>11/19/93</u>
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)
6. Signature (Agent) 		

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530      DOMESTIC RETURN RECEIPT

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to:  <b>NMOCD attn: Ben Stone P.O. Box 2088 Santa Fe, NM 87504</b>		4a. Article Number <u>P- 369- 424-254</u>
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Express Mail
		7. Date of Delivery 
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)
6. Signature (Agent) 		

PS Form 3811, November 1990 ★ U.S. GPO: 1991-287-066      DOMESTIC RETURN RECEIPT

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to:  <b>Tom &amp; Evelyn Linebery 802 S. Main Midland, Texas 79701</b>		4a. Article Number <u>P- 369- 424-253</u>
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
		7. Date of Delivery <u>9/10/93</u>
5. Signature (Addressee) 		8. Addressee's Address (Only if requested and fee is paid)
6. Signature (Agent) 		

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530      DOMESTIC RETURN RECEIPT

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

Doyle Hartman  
P.O. Box 10426  
Midland, Texas 79702

5. Signature (Addressee)  
*M. Salgado*

6. Signature (Agent)

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery  
Consult postmaster for fee.

4a. Article Number

P- 369-424-259

4b. Service Type

- |   |   |
|---|---|
| <input type="checkbox"/> Registered           | <input type="checkbox"/> Insured                        |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD                            |
| <input type="checkbox"/> Express Mail         | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

*4/12/93*

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

<b>SENDER:</b>	
<ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>	
3. Article Addressed to:	
<p><b>Mack Energy Corp.</b>  <b>P.O. Box 276</b>  <b>Artesia, NM 88211</b></p>	
4a. Article Number <i>P-369-424-252</i>	
4b. Service Type	
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
7. Date of Delivery <i>4-12-93</i>	
8. Addressee's Address (Only if requested and fee is paid)	
5. Signature (Addressee) <i>Ray Semjord</i>	
6. Signature (Agent)	

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530      DOMESTIC RETURN RECEIPT

<b>SENDER:</b>	
<ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>	
3. Article Addressed to:	
<p><b>Meridian Oil, Inc.</b>  <b>P.O. Box 51810</b>  <b>Midland, Texas 79710</b></p>	
4a. Article Number <i>P 369-424-260</i>	
4b. Service Type	
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
7. Date of Delivery <i>APR 12 1993 4-12-93</i>	
8. Addressee's Address (Only if requested and fee is paid)	
5. Signature (Addressee)	
6. Signature (Agent) <i>W. Miller</i>	

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530      DOMESTIC RETURN RECEIPT

<b>SENDER:</b>	
<ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>	
3. Article Addressed to:	
<p><b>Marathon Oil Co.</b>  <b>P.O. Box 552</b>  <b>Midland, Texas 79702</b></p>	
4a. Article Number <i>P-369-424-407</i>	
4b. Service Type	
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
7. Date of Delivery <i>APR 12 1993</i>	
8. Addressee's Address (Only if requested and fee is paid)	
5. Signature (Addressee)	
6. Signature (Agent) <i>Alfred Borges</i>	

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530      DOMESTIC RETURN RECEIPT

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

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Is your RETURN ADDRESS completed on the reverse side?

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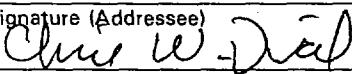
**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

OXY USA Inc.  
P.O. Box 300  
Tulsa, Oklahoma 74102

5. Signature (Addressee)



6. Signature (Agent)

4a. Article Number

P-369-424-258

4b. Service Type

- Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

7. Date of Delivery

APR 12 1993

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530 DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Thank you for using Return Receipt Service.

Thank you for using Return Receipt Service.

**SENDER:**

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- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

Sea Sand Oil Co.  
P.O. Box 101777  
Ft. Worth, Texas 76185

5. Signature (Addressee)

6. Signature (Agent)

4a. Article Number

P-369-424-251

4b. Service Type

- Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

7. Date of Delivery

4-12-93

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530 DOMESTIC RETURN RECEIPT

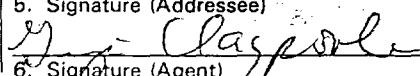
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- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

Smith & Marrs, Inc.  
1110 N Big Spring  
Midland, Texas 79701

5. Signature (Addressee)



6. Signature (Agent)

4a. Article Number

P-369-424-250

4b. Service Type

- Registered       Insured  
 Certified       COD  
 Express Mail       Return Receipt for Merchandise

7. Date of Delivery

4-12-93

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★ U.S.G.P.O.: 1992-307-530 DOMESTIC RETURN RECEIPT

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, Kathi Bearden

General Manager

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

of \_\_\_\_\_

one \_\_\_\_\_ weeks.  
Beginning with the issue dated

April 8 , 19 93

and ending with the issue dated

April 8 , 19 93

*Kathi Bearden*

General Manager

Sworn and subscribed to before

me this 9 day of

April , 19 93

*Christine Perrin*

Notary Public.

My Commission expires  
March 15, 1997

(Seal)

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

LEGAL NOTICE

April 8, 1993

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

Lease/Unit Name:

Rhodes Yates Unit

Well Number(s) and Location(s):

4-Unit Letter A, 560 FNL & 660 FEL, Section 28, T26S, R37E

6-Unit Letter C, 660 FNL & 1980 FWL, Section 27, T26S, R37E

11-Unit Letter K, 2310 FSL & 2310 FWL, Section 27, T26S, R37E

Lease/Unit Name:

W.H. Rhodes  
B Fed NCT-1

Well Number(s) and Location(s):

1-Unit Letter G, 1650 FNL & 1650 FEL, Section 27, T26S, R37E

8-Unit Letter M, 660 FSL & 660 FWL, Section 26, T26S, R37E

14-Unit Letter E, 1980 FNL & 864 FWL, Section 26, T26S, R37E

15-Unit Letter A, 660 FNL & 660 FEL, Section 27, T26S, R37E

Lease/Unit Name:

W.H. Rhodes  
B Fed NCT-2

Well Number(s) and Location(s):

3-Unit Letter I, 1980 FSL & 660 FEL, Section 28, T26S, R37E

4-Unit Letter P, 660 FSL & 660 FEL, Section 28, T26S, R37E

The injection formation is Rhodes Yates Seven Rivers at a depth of 3000 feet below the surface of the ground. Expected maximum injection rate is 600 barrels per day, and expected maximum injection pressure is 1800 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days of this publication.