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August 25, 1992

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

Attention: Ben Stone

Case 10572

Re: Application for Expansion of Waterflood;
Orders R-2748/48A, 3889, 4521/22 & WFX-454
Texaco Exploration and Production Inc.
Rhodes Yates Unit, Rhodes B Fed NCT-1 - Rhodes Yates 7R
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 Rhodes Yates Unit and Rhodes B Fed NCT-1 (CO-OP). Two oil wells in the Unit and two oil wells on the Rhodes B NCT-1 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. Five infill oil wells will also be drilled.

Texaco E&P Inc. respectfully requests that the Rhodes Yates Unit and the Rhodes B NCT-1 be expanded to include the conversion of four producing wells to water injection. Administration approval is requested so that the necessary operations can be advanced in a prudent manner.

Yours very truly,

Terry L. Frazier
Hobbs Area Manager

TLF:rtm

attachments

Case 10572

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 - 397 - 0411
- 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, 2748 A, 3889,
If yes, give the Division order number authorizing the project 4521, WFX-454, R-4522
- 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* Date: 8/25/92
- * 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. R-2748, 6-29-74; 2748A, 12-3-69; 3889, 12-2-69; 4521, 5-17-73;
R-4522, 5-17-73 and WFX-454, 8-2-77, Examiner Hearings and administrative applications.
DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

III. WELL DATA

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

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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

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

Summary of Details for Conversion of Wells to Water Injection

Rhodes Yates Unit - Rhodes Yates Seven Rivers8 - Unit Letter E, 1875 FNL & 765 FWL, Section 27, T26S, R37E13 - Unit Letter M, 660 FSL & 660 FWL, Section 27, T26S, R37EW.H. Rhodes B Fed NCT-1 - Rhodes Yates Seven Rivers6 - Unit Letter I, 1980 FSL & 660 FEL, Section 27, T26S, R37E13 - Unit Letter O, 990 FSL & 1650 FEL, 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 all unit and Co-op wells within the area of review. Survey sheets for the referenced wells are attached.

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. Additional information was supplied on July 18, 1977 as part of the 1978 waterflood expansion application (WFX-454).

Rhodes Yates Unit #13 was drilled in 1978 and was the last well drilled in the area of review. Texaco will drill 5 infill wells in the last quarter of 1992. Two will be in the Co-op and three will be on the 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. Construction details for the five infill wells are attached. However, the applications to drill have not been filed yet.

Four wells have been plugged within the leasehold area. Three were plugged before 1960 and information on these has previously been submitted in prior applications. Meridian Oil Inc's State UTP #1 was plugged 3-27-92 and a final plugging report is attached. Texaco E&P Inc's W.H. Rhodes B NCT-1 #2 will be plugged as soon as partner and Federal approval have been granted. The intent to plug is also attached.

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

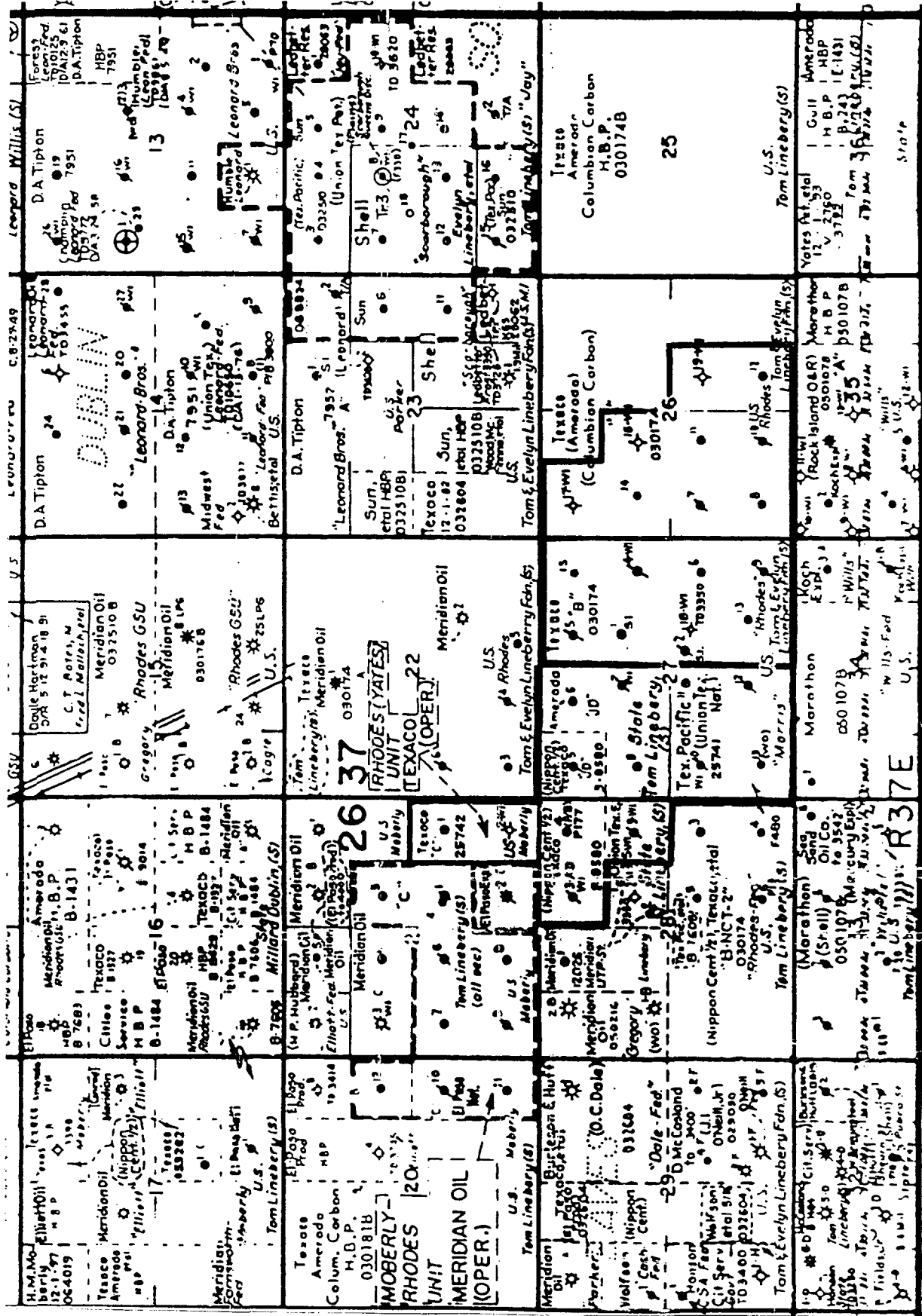
Summary of Details for Conversion of Wells to Injection Status

Rhodes Yates Unit, Rhodes B NCT-1 - Rhodes Yates Seven Rivers

- VII. Proposed average daily injection rate per well is 500 Bbls per day and anticipated maximum rate is 750 Bbls per day. Maximum pressure will not exceed 2000 psi system working pressure. The average injection pressure will not exceed 600 psi until a step rate test establishes a higher limit. The system will be closed.
- 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 stimulated. Net additional pay will average about 60' and will be hydraulically fracture treated. The injection well work will be centered around diverting a substantial part of the water into the middle zones that have not been developed across the leasehold.
- 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 notarized copy of a "Proof of Notice" is included.

RHODES YATES FIELD

LEA COUNTY, NEW MEXICO



1" = 3000'

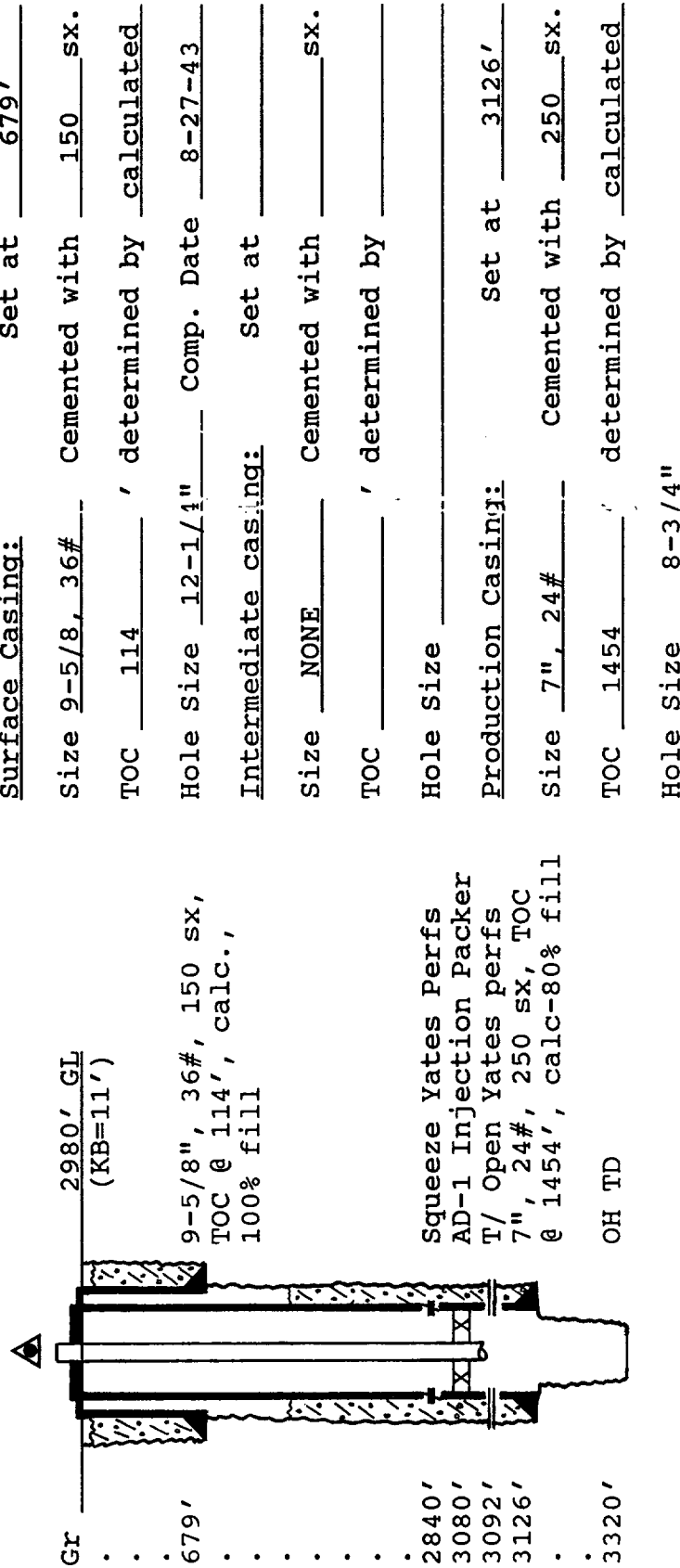
29 ACTIVE



Proposed Injection Conversion

OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes Yates Unit #8
 FOOTAGE LOCATION: 1875 FNL X 765 FWL Sec./Twn/Rng: Unit E, Sec 27, T-26-S, R-37-E
Former Amerada Petroleum Corp. State 'AJ' #2 Lea County, New Mexico

SCHEMATIC



Tops:

Salt 1307'-2810'
 Yates 2955'
 Seven Rivers NR

Injection Interval:

3092' to 3320' through: OH, Perforations

Tubing: 2-3/8", 4.7#, J-55, IPC 2000# WP

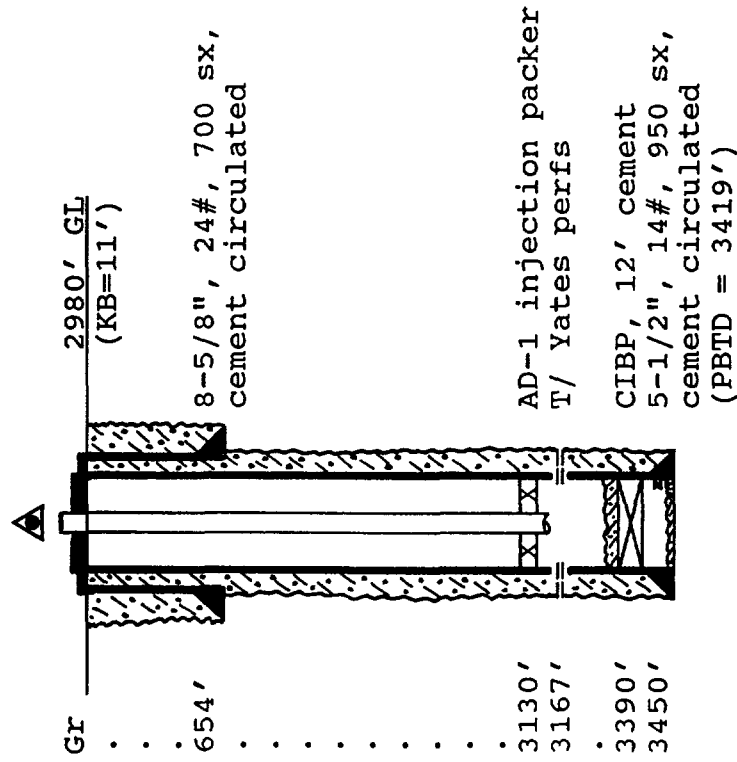
Proposed Injection Conversion

OPERATOR: Texaco Exploration & Production Inc. **Lease:** Rhodes Yates Unit #13

FOOTAGE LOCATION: 660 FSL X 660 FWL Unit: M, Sec 27, T-26-S, R-37-E

Lea County, New Mexico

SCHEMATIC



Tops:

Salt	1215'-2878'
Yates	3045'
Seven Rivers	3362'

LABULAR DATA

Surface Casing: _____ Set at 654'

Size 8-5/8", 24# Cemented with 700 sx.

TOC surface, determined by circulated

Hole Size 12-1/4" Comp. Date 2-15-78

Intermediate casing: Set at _____

Size NONE Cemented with sx.

TOC _____, determined by _____

Hole Size

Production Casing: Set at 3450'

Size 5-1/2", 14# Cemented with 950 sx.

TOC surface , determined by circulated.

Hole Size 7-7/8"

Injection Interval:

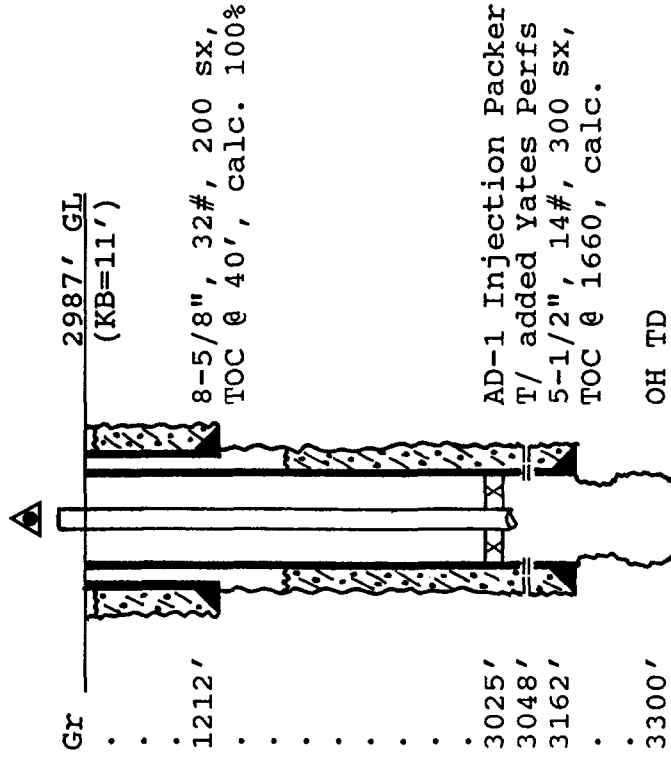
3167 ' to 3349 ' through: Perforations

Tubing: 2-3/8", 4.7#, J-55, IPC 2000# WP

Proposed Injection Conversion

OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes B Fed NCT-1 #6
 FOOTAGE LOCATION: 1980 FSL X 660 FEL Sec./Twn/Rng: Unit I, Sec 27, T-26-S, R-37-E
 Former Texaco Rhodes 'B' #6 Lea County, New Mexico

SCHEMATIC



TABULAR DATA

Surface Casing: Set at 1212'
 Size 8-5/8, 32# Cemented with 200 sx.
 TOC 40 ' determined by calculated
 Hole Size 11" Comp. Date 8-11-44
Intermediate casing: Set at
 Size NONE Cemented with sx.
 TOC ' determined by
 Hole Size (Perfs to be added: 3048'-3150')
Production Casing: Set at 3162'
 Size 5-1/2", 14# Cemented with 300 sx.
 TOC 1660 ' determined by calculated
 Hole Size 7-1/2", 4-3/4" open hole

Injection Interval:

3048' to 3300' through: OH, Perforations
Tubing: 2-3/8", 4.7#, J-55, IPC 2000# WP

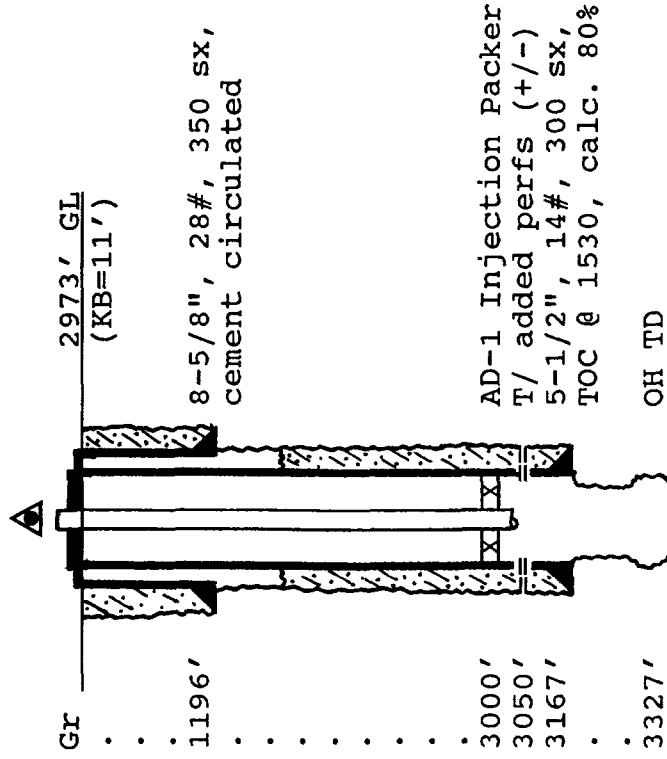
Tops:

Salt 1262'-2780'
 Yates 2922'
 Seven Rivers NR

Proposed Injection Conversion

OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes B Fed NCT-1 #13
 FOOTAGE LOCATION: 990 FSL X 1650 FEL Sec./Twn/Rng: Unit O, Sec 27, T-26-S, R-37-E
 Former Texas Company W. H. Rhodes 'B' #13 Lea County, New Mexico

SCHEMATIC



TABULAR DATA

Surface Casing: Set at 1212'
 Size 8-5/8, 28# Cemented with 350 sx.
 TOC surface ' determined by calculated
 Hole Size 11" Comp. Date 7-26-45
 Intermediate casing: Set at _____
 Size NONE Cemented with _____ sx.
 TOC _____ ' determined by _____
 Hole Size (Perfs to be added: 3050'-3150')
 Production Casing: Set at 3167'
 Size 5-1/2", 14# Cemented with 300 sx.
 TOC 1530 ' determined by calculated
 Hole Size 7-7/8", 4-3/4" open hole

Injection Interval:

3050' to 3327' through: OH, Perforations
 Tubing: 2-3/8", 4.7#, J-55, IPC 2000# WP

Tops:

Salt 1255'-2828'
 Yates 2950'
 Seven Rivers NR

APPLICATION OF TEXACO, INC.
TO EXPAND ITS RHODES "B"
FEDERAL WATER FLOOD PROJECT
IN THE RHODES POOL IN LEA COUNTY,
NEW MEXICO

Rhodes Coop.

ORDER WFX NO. 454

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order Nos. R-2748 and R-2748-A, Texaco, Inc. made application to the Commission on July 18, 1977, for permission to expand its Rhodes "B" Federal Water Flood Project in the Rhodes Pool in Lea County, New Mexico.

NOW, on this 2nd day of August, 1977, 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-2748.
4. That the proposed injection wells are eligible for conversion to water injection under the terms of Order Nos. R-2748 and R-2748-A.
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 Yates formation through plastic-lined tubing set in packers at approximately 3107, 3123 and 3109 feet respectively in the following described wells for purposes of secondary recovery, to wit:

W. H. Rhodes "B" Federal NCT-1 Well No. 16 in Unit F;
W. H. Rhodes "B" Federal NCT-1 Well No. 17 in Unit D; and
W. H. Rhodes "B" Federal NCT-1 Well No. 19 in Unit J;
all in Section 26, Township 26 South, Range 37 East,
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 injection pressures shall be limited to 640 pounds per square inch as measured at the surface.

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

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RHODES YATES UNIT
(Formerly State "JD" Unit)
Lea County, New Mexico

Order No. R-4522, Cancelling the State "JD" Unit Agreement and Approving the Rhodes Yates Unit Agreement, Lea County, New Mexico, May 17, 1973.

Application of Texaco Inc. for Approval of the Rhodes Yates Unit Agreement, Lea County, New Mexico.

CASE NO. 4935
Order No. R-4522

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on April 11, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 17th day of May, 1973, 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 the dissolution of the State "JD" Unit Area approved by Commission Order No. R-3886, and seeks the approval of a new unit area as described by the Rhodes Yates Unit Agreement covering 520 acres, more or less, of State and Federal lands described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM
Section 21: E/2 SE/4
Section 27: W/2
Section 28: N/2 NE/4 and SE/4 NE/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the State "JD" Unit Area, approved by Commission Order No. R-3886, is hereby cancelled and that a new unit designated the Rhodes Yates Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(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.

NORTHEAST PEARL-QUEEN UNIT
Lea County, New Mexico

Order No. R-3836, Approving the Northeast Pearl-Queen Unit Agreement, Lea County, New Mexico, September 12, 1969.

Application of Tamarack Petroleum Company, Inc., for Approval of the Northeast Pearl-Queen Unit Agreement, Lea County, New Mexico.

CASE NO. 4216
Order No. R-3836

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on September 10, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of September, 1969, 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, Tamarack Petroleum Company, Inc., seeks approval of the Northeast Pearl-Queen Unit Agreement covering 920 acres, more or less, of State and Fee lands described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPM
Section 15: E/2 SW/4, W/2 SE/4, and SE/4 SE/4
Section 22: E/2 NE/4
Section 23: N/2 and N/2 S/2
Section 24: NW/4 SW/4, W/2 NW/4, and NE/4 NW/4

(2) That injection into each of the aforesaid wells shall be through 2-3/8-inch plastic-lined tubing set in a packer located as near as practicable to the uppermost casing perforation; that the casing-tubing annulus shall be loaded with an inert liquid and equipped with a pressure gauge at the surface.

(3) That the subject waterflood project is hereby designated the Tamarack Bronco Wolfcamp Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

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

(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.

RHODES-YATES POOL
(Texaco Rhodes-Yates Waterflood)
Lea County, New Mexico

Order No. R-4521, Authorizing Texaco Inc. to Institute the Rhodes-Yates Waterflood Project in the Yates-Seven Rivers Formations in the Rhodes-Yates Pool, Lea County, New Mexico, May 17, 1973.

Application of Texaco Inc. for a Waterflood Project, Lea County, New Mexico.

CASE NO. 4936
Order No. R-4521

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on April 11, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 17th day of May, 1973, 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.

**(RHODES-YATES (TEXACO RHODES-YATES
WATERFLOOD) POOL - Cont'd.)**

(2) That the applicant, Texaco Inc., seeks authority to institute a waterflood project in the Rhodes Yates Unit Area, Rhodes-Yates Pool, by the injection of water into the Yates-Seven Rivers formations through seven injection wells in Sections 21, 27, and 28, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

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

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project in the Rhodes Yates Unit Area, Rhodes-Yates Pool, by the injection of water into the Yates-Seven Rivers formations through the following-described seven wells in Township 26 South, Range 37 East, NMPM, Lea County, New Mexico:

Lease	Well No.	Location
State "JD" Unit	2	660' FNL and 660' FWL, Sec. 27
State "JD" Unit	4	650' FNL and 2310' FWL, Sec. 27
N. M. "AD" State	1	660' FNL and 1980' FWL, Sec. 28
Morris	2	1980' FNL and 660' FWL, Sec. 27
Morris	3	990' FSL and 2970' FEL, Sec. 27
State "A" 28	1	1980' FNL and 660' FEL, Sec. 28
H. G. Moberly "C" (NCT-2)	3	660' FSL and 660' FEL, Sec. 21

(2) That injection into each of said wells shall be through internally plastic-coated tubing set in a packer which shall be located as near as is practicable to the uppermost perforation, or in the case of open-hole completions, as near as is practicable to the casing-shoe; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with a pressure gauge at the surface.

(3) That the subject waterflood project is hereby designated the Texaco Rhodes-Yates Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

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

(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.

RHODES (YATES-SEVEN RIVERS) POOL
(Texaco State "JD" Rhodes Waterflood)
Lea County, New Mexico

Order No. R-3889, Authorizing Texaco Inc. to Institute a Waterflood Project in its State "JD" Unit Area, Rhodes (Yates-Seven Rivers) Pool, Lea County, New Mexico, December 2, 1969.

Application of Texaco Inc. for a Waterflood Project, Lea County, New Mexico.

CASE NO. 4269
Order No. R-3889

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on November 25, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 2nd day of December, 1969, 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 permission to institute a waterflood project in its State "JD" Unit Area, Rhodes (Yates-Seven Rivers) Pool, by the injection of water into the Yates-Seven Rivers formations through two injection wells located in Unit D and Unit F of Section 27, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional lands and injection wells in the area of the said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

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

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

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project in its State "JD" Unit Area, Rhodes (Yates-Seven Rivers) Pool, by the injection of water into the Yates-Seven Rivers formations through the following-described wells in Section 27, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico:

Texaco New Mexico "AD" State Well No. 2 located in Unit D

Amerada New Mexico "JA" State Well No. 1 located in Unit F

(2) That the subject waterflood project is hereby designated the Texaco State "JD" Rhodes Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, That the Secretary-Director of the Commission may approve expansion of the Texaco State "JD" Rhodes Waterflood Project to include such additional lands and injection wells in the area of the project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

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

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

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

**(PEARL-QUEEN (NORTHEAST PEARL QUEEN
UNIT AREA WATERFLOOD EXPANSION) POOL - Cont'd.)**

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

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

**RHODES-YATES POOL
(Texaco - Yates and Seven Rivers Waterflood Expansion)
Lea County, New Mexico**

Order No. R-2748-A, Authorizing Texaco Inc. to Expand the Waterflood Project in the Yates and Seven Rivers Formations in the Rhodes-Yates Pool, Lea County, New Mexico, December 3, 1969.

Application of Texaco Inc. for a Waterflood Expansion and Amendment of Order No. R-2748, Lea County, New Mexico.

CASE NO. 4271
Order No. R-2748-A

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on November 25, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of December, 1969, 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., is the operator of the Texaco Rhodes "B" Federal Waterflood Project in the Rhodes (Yates-Seven Rivers) Pool, Lea County, New Mexico, approved by Commission Order No. R-2748.

(3) That the applicant now seeks authority to expand said waterflood project by the injection of water into the Yates and Seven Rivers formations through three additional wells in Units B, H, and P of Section 27, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

(4) That the applicant further seeks to institute an additional waterflood project in said pool by the injection of water into the Yates and Seven Rivers formations through one well located

in Unit N of Section 22 of said Township and Range.

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

(6) That the proposed expansion of the Rhodes "B" Federal Waterflood Project authorized by said Order No. R-2748 and the institution of the proposed new waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) That the applicant further seeks the establishment of an administrative procedure whereby said projects could be expanded to include additional lands and injection wells in the area of said projects as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

(8) That the subject application should be approved and the projects should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to expand its Rhodes "B" Federal Waterflood Project in the Rhodes (Yates-Seven Rivers) Pool, authorized by Order No. R-2748, by the injection of water into the Yates and Seven Rivers formations through the following-described three additional wells in Section 27, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico:

W. H. Rhodes "b" (NCT-1) Well No. 5 located in Unit B
W. H. Rhodes "b" (NCT-1) Well No. 4 located in Unit H
W. H. Rhodes "B" (NCT-1) Well No. 9 located in Unit P

(2) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project in the Rhodes (Yates-Seven Rivers) Pool, to be designated the Texaco Rhodes "A" Federal Waterflood Project, by the injection of water into the Yates and Seven Rivers formations through its W. H. Rhodes "A" Federal Well No. 4 located in Unit N of Section 22, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the subject waterflood projects shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the above-described waterflood projects to include such additional lands and injection wells in the area of said projects as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

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

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

**RHODES-YATES POOL
(Texaco - Yates and Seven Rivers Waterflood)
Lea County, New Mexico**

Order No. R-2748, Authorizing Texaco Inc. to Institute a Waterflood Project in the Yates and Seven Rivers Formations in the Rhodes-Yates Pool, Lea County, New Mexico, July 29, 1964.

Application of Texaco Inc. for a Waterflood Project, Lea County, New Mexico.

**CASE NO. 3086
Order No. R-2748,**

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on July 22, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nuttall.

NOW, on this 29th day of July, 1964, 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 permission to institute a waterflood project in the Rhodes Yates Oil Pool by the injection of water into the Yates and Seven Rivers formations through two injection wells in Section 26, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

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

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project in the Rhodes Yates Oil Pool by the injection of water into the Yates and Seven Rivers formations through the following-described wells in Section 26, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico:

W. H. Rhodes "b" (NCT-1) Well No. 7, Unit L
W. H. Rhodes "b" (NCT-1) Well No. 10, Unit N

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

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

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

ORIGINAL RHODES YATES UNIT WELL NAMES and OPERATORS

<u>RYU #:</u>	<u>LOC:</u>	<u>Original Name and Operator:</u>	
1	21,I	Texaco	H.G. Moberly C NCT-2 #3
2	21,P	Texaco	H.G. Moberly C NCT-2 #3
3	28,B	Texaco	NM State 'AD' #1
4	28,A	Texaco	Rhodes Yates Unit #4
5	27,D	Texaco	NM State 'AD' #2
6	27,C	Amerada	State 'JA' #1
7	27,F	Amerada	State 'JA' #4
8	27,E	Amerada	State 'JA' #3
9	28,H	Union Texas	State 'A' #1
10	27,L	Texas Pacific	Morris #2
11	27,K	Texas Pacific	Morris #1
12	27,N	Texas Pacific	Morris #3 (R. Olson, Anderson-Pritchard former operators)
13	27,M	Texaco	Rhodes Yates Unit #13

NEW MEXICO OIL CONSERVATION DIVISION
CASING--BRADENHEAD TEST

OPERATOR: TEXACO INC.

LEASE: RHODES YATES UNIT

POOL: RHODES YATES

FOOTAGE 1875-N SECTION 27

FOOTAGE 765-W PRESS LMT .

ORDER NO..

UNIT LTR E

WELL # 8 --

26 S RANGE 37 E

TYPE LEASE S

TYPE WELL P

DATE INJ. BEGAN .

=====

TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	OCD REP: .	
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 9 5/8	670 NDB 150SX	.

INTERM-1
INTERM-2
PROD 7	3126 NDB	250SX	.	.	.

LINER
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TUBING
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REMARKS: COMPLETED 1943
REPAIR LETTER DATE . DATE REPAIR . SNC .

=====

TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	OCD REP: .	
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 9 5/8	670 NDB 150SX	.

INTERM-1
INTERM-2
PROD 7	3126 NDB	250SX	.	.	.

LINER
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TUBING
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REMARKS: .
REPAIR LETTER DATE . DATE REPAIR . SNC .

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TEST DATE	4-25-91	TEST TYPE	BHJ	PASS/FAIL	
OPERATOR REP:	Hollis/Olga	OCD REP:	Lyle		
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE	REMARKS		
SURFACE 9 5/8	670 NDB 150SX	0			

INTERM-1	
INTERM-2	
PROD 7	3126 NDB	250SX	54		

LINER	
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TUBING	52	
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REMARKS: _____ SNC _____
REPAIR LETTER DATE _____ DATE REPAIRED _____

NEW MEXICO OIL CONSERVATION DIVISION
CASING--BRADENHEAD TEST

OPERATOR: TEXACO INC.

LEASE: RHODES YATES UNIT

POOL: RHODES YATES

FOOTAGE 660-S SECTION 27

UNIT LTR M

WELL # 13 --

FOOTAGE 660-W PRESS LMT .

TYPE LEASE F

26 S RANGE 37 E

TYPE WELL P

ORDER NO..

DATE INJ. BEGAN .

=====

TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	OCD REP: .	
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 8 5/8	654 0 500SX	.

INTERM-1
INTERM-2
PROD 5 1/2	3450	0 1050SX	.	.	.

LINER
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TUBING
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REMARKS: COMPLETED 1978

SNC .

REPAIR LETTER DATE .

DATE REPAIR .

=====

TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	OCD REP: .	
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 8 5/8	654 0 500SX	.

INTERM-1
INTERM-2
PROD 5 1/2	3450	0 1050SX	.	.	.

LINER
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TUBING
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REMARKS: .

SNC .

REPAIR LETTER DATE .

DATE REPAIR .

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TEST DATE	4-25-91	TEST TYPE	BHJ	PASS/FAIL	
OPERATOR REP:	HOLLIS/OLGA	OCD REP:	LYLE		
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS			
SURFACE 8 5/8	654 0 500SX	0			

INTERM-1
INTERM-2
PROD 5 1/2	3450	0 1050SX	62		

LINER
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TUBING	65	
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REMARKS: .

SNC .

REPAIR LETTER DATE

DATE REPAIRED

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NEW MEXICO OIL CONSERVATION DIVISION
CASING--BRADENHEAD TEST

OPERATOR: TEXACO INC.

LEASE: W.H. RHODES "B" FED NCT-1

POOL: RHODES YATES

FOOTAGE 1980-S SECTION 27

UNIT LTR I

WELL # 6 --

FOOTAGE 660-E PRESS LMT .

TYPE LEASE F

26 S RANGE 37 E

TYPE WELL P

ORDER NO. . DATE INJ. BEGAN .

=====

TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	.	OCD REP: .
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 8 5/8	1212 NDB	200SX . .

INTERM-1
INTERM-2
PROD 5 1/2	3162 NDB	300SX	.	.	.

LINER
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TUBING
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REMARKS: COMPLETED 1944

SNC .

REPAIR LETTER DATE . DATE REPAIR .

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TEST DATE.	TEST TYPE .	PASS/FAIL .
OPERATOR REP:	.	OCD REP: .
CASING SIZE	SET AT TOP CMT CEMENTED	PRESSURE REMARKS
SURFACE 8 5/8	1212 NDB	200SX . .

INTERM-1
INTERM-2
PROD 5 1/2	3162 NDB	300SX	.	.	.

LINER
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TUBING
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REMARKS: .

SNC .

REPAIR LETTER DATE . DATE REPAIR .

=====

TEST DATE	4-25-91	TEST TYPE	BHJ	PASS/FAIL	
OPERATOR REP:		HOLLIS/OLGA		OCD REP:	LYLE
CASING SIZE		SET AT TOP CMT CEMENTED		PRESSURE	REMARKS
SURFACE 8 5/8		1212 NDB	200SX	0	

INTERM-1	
INTERM-2	
PROD 5 1/2	3162 NDB	300SX		32	

LINER	
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TUBING	60
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REMARKS: .

SNC .

REPAIR LETTER DATE . DATE REPAIRED .

=====

NEW MEXICO OIL CONSERVATION DIVISION
CASING--BRADENHEAD TEST

OPERATOR: TEXACO INC.

LEASE: W.H. RHODES "B" FED NCT-1

WELL # 13 --

POOL: RHODES YATES

UNIT LTR 0

FOOTAGE 990-S SECTION 27

TWN

26 S RANGE 37 E

FOOTAGE 1650-E PRESS LMT .

TYPE LEASE F

TYPE WELL P

ORDER NO..

DATE INJ. BEGAN .

TEST DATE.

TEST TYPE .

PASS/FAIL .

OPERATOR REP:

OCD REP: .

CASING SIZE

SET AT TOP CMT

CEMENTED

PRESSURE REMARKS

SURFACE 8 5/8

1196 NDB

350SX

INTERM-1 .

INTERM-2 .

PROD 5 1/2

3154 NDB

300SX

LINER .

TUBING .

REMARKS: COMPLETED 1945

SNC .

REPAIR LETTER DATE .

DATE REPAIR .

TEST DATE.

TEST TYPE .

PASS/FAIL .

OPERATOR REP:

OCD REP: .

CASING SIZE

SET AT TOP CMT

CEMENTED

PRESSURE REMARKS

SURFACE 8 5/8

1196 NDB

350SX

INTERM-1 .

INTERM-2 .

PROD 5 1/2

3154 NDB

300SX

LINER .

TUBING .

REMARKS: 3/91 SWEDGE COLLAPSED CSG 3109-3112-RETURN TO PR

SNC .

REPAIR LETTER DATE .

DATE REPAIR .

TEST DATE 4-25-91 TEST TYPE BHJ PASS/FAIL

OPERATOR REP: Hobbs/OLGA OCD REP: LYLE

CASING SIZE

SET AT TOP CMT

CEMENTED

PRESSURE REMARKS

SURFACE 8 5/8

1196 NDB

350SX

0

INTERM-1 .

INTERM-2 .

PROD 5 1/2

3154 NDB

300SX

38

LINER .

TUBING .

40

REMARKS:

SNC

REPAIR LETTER DATE

DATE REPAIRED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Designation and Serial No. LC-030174 b
2. Name of Operator Texaco Exploration & Production Inc.		6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. P.O. Box 730, Hobbs, NM 88241-0730 (505) 393-7191		7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2970 FNL, 2310 FEL Unit J, Sec. 27, T-26-S, R-37-E		8. Well Name and No. W.H. Rhodes B NCT-1 #2
		9. API Well No. 30 - 025 - 12060
		10. Field and Pool, or Exploratory Area Rhodes Yates
		11. County or Parish, State Lea County, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

- 1) Inform BLM 24 hours prior to commencement of plugging.
- 2) MIRU, Install BOP. Run bit and casing scraper and clean hole to TD. Tag CIBP. POH. Run 5-1/2" packer and test CIBP for possible leak. POH.
- 3) If necessary, set 2nd CIBP by wireline. Perf 2 squeeze holes at 1284'.
- 4) TIH w/ work string and tag CIBP. Load hole with salt gel mud; 10# brine and 25# gel/ Bbl. Pump 100', 15 sx class 'C' cement on top of CIBP.
- 5) Establish circulation through squeeze perfs and circulate annulus with 110 sx class 'C'. Adjust volumes if needed. Fill casing from 1284' - 1105' with 24 sx cement. WOC. Tag plug. Spot 12 sx from 100' - surface.
- 6) POH. Fill annulus and casing from surface with 1" tubing if necessary.
- 7) Cut off wellhead and install marker. Clean location.
- 8) Restore surface as per Federal requirements.

14. I hereby certify that the foregoing is true and correct

Signed [Signature] Title Production Engineer Date 8-20-92

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any: _____

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

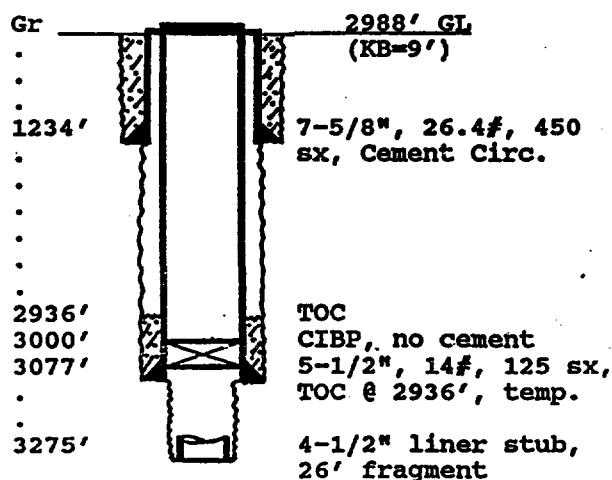
*See Instruction on Reverse Side

WELL DATA SHEET

PO-113
(5/91)

OPERATOR: Texaco Exploration & Production Inc. Lease: W.H. Rhodes B Fed NCT-1 #2
 FOOTAGE LOCATION: 2970 FNL X 2310 FEL Sec./Twn/Rng: Unit J, Sec 27, T-26-S, R-37-E
Classified TA on 4-12-84; CIBP set at 3000'. Lea County, New Mexico

SCHEMATIC



Tops:

Salt 1155'-2850'
 Yates 2960'
 Seven Rivers 3183'
 Queen NR

TABULAR DATA

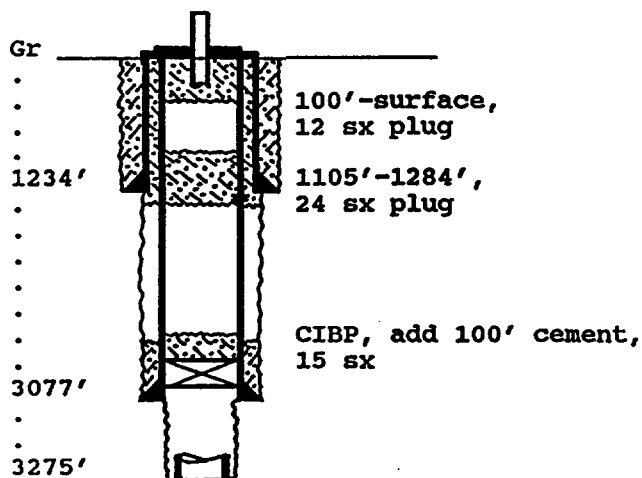
Surface Casing: Set at 1234'
 Size 7-5/8, 26.4# Cemented with 450 sx.
 TOC surface ' determined by circulation
 Hole Size 9-5/8" Comp. Date 8-23-40
Intermediate casing: Set at _____
 Size NONE Cemented with _____ sx.
 TOC _____ ' determined by _____
 Hole Size _____
Production Casing: Set at 3077'
 Size 5-1/2", 14# Cemented with 125 sx.
 TOC 2936 ' determined by Temp log
 Hole Size 6-3/4"
Open Hole Interval:
3077' to 3275' Size ???
 Nitro Shot 500 Ots SOWE #1, 3130' - 3275'

PLUG AND ABANDON DATA

PO-113
(5/91)

OPERATOR: Texaco Exploration & Production Inc. Lease: W.H. Rhodes B Fed NCT-1 #2
 FOOTAGE LOCATION: 2970 FNL X 2310 FEL Sec./Twn/Rng: Unit J, Sec 27, T-26-S, R-37-E
Failed MIT on 4-25-91, 70 psig on casing. Lea County, New Mexico

SCHEMATIC



PLUGGING DATA

Surface Plug:
 Size 100'-surf. Cemented with 12 sx.
 Squeeze annulus with 110 sx to surface.
 Class 'C' Cement, 1.32 cu ft/ sx
Intermediate Plug(s):
 Size 1284'-1105' Cemented with 24 sx.
 Class 'C' cement, 1.32 cu ft/ sx
 Intermediate plug covers t/ salt and shoe.
 Lower plug covers b/ salt and open hole.
Producing Zone Plugs:
 Size CIBP, 100' Cemented with 15 sx.

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.
30-025-25492

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B-7606

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.)

7. Lease Name or Unit Agreement Name

State "UTP"

1. Type of Well:
OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. Name of Operator
Meridian Oil Inc

8. Well No.
1

3. Address of Operator
P.O. Box 51810, Midland, TX 79710-1810

9. Pool name or Wildcat
Rhodes (Yates, 7 Rivers)

4. Well Location
Unit Letter G : 1650 Feet From The North Line and 1650 Feet From The East Line
Section 28 Township 26S Range 37E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
2966' 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.

3/27/92 RIH to CIBP @ 3087'. MIRU Halliburton. Mix & circ well w/ 9# brine w/ salt gel., spot 25 sxs cmt plug @ 3087', 25 sxs @ 1440', 60 sxs @ 660' and 5 sxs @ surface (105 sxs premium plus w/ 2% caci). LD workstring. RDMOPU. Cut off wellhead & place p&a marker on well.

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

SIGNATURE Roxann Scholz TITLE Production Asst DATE 04/06/92

TYPE OR PRINT NAME Roxann Scholz

TELEPHONE NO. (915)688-68

(This space for State Use)

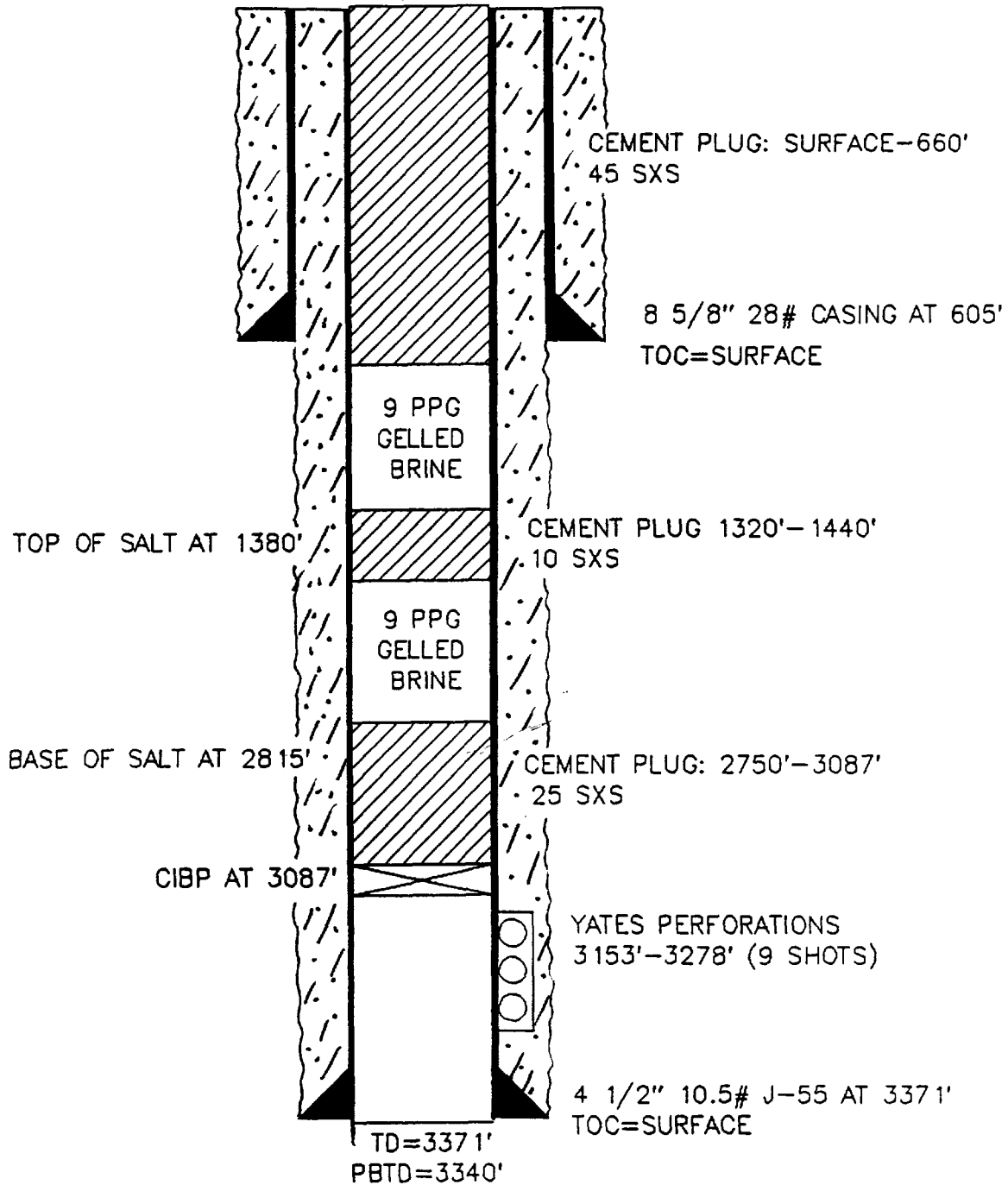
APPROVED BY Charles Pers... TITLE OIL & GAS INSPECTOR DATE APR 28 '92

CONDITIONS OF APPROVAL, IF ANY:

MERIDIAN OIL

STATE UTP NO. 1
RHODES (OIL) FIELD
LEA COUNTY, NEW MEXICO

PROPOSED CONDITION AFTER P&A



Deviation Rules: Distance to the Nearest Lease Line 330
Max. Allowed Displacement 329

Unit F, Sec. 27, T-26S, R-37E **MUD PROGRAM** 2400' FNL, 1475' FWL

Depth	Type	Weight	Visc	Water Loss	Remarks
0 - 1150	FRESH	8.4	28		CIRC RESERVE, PH 9-10 W/LIME
1150 - 3400	BRINE	10.0	30-32	20 CC	CIRC RESERVE, PH 9-10 W/LIME
					MUD UP IN STEEL PITS IF HOLE
					CONDITIONS DICTATE. DIVISION APPROVAL REQUIRED.

STARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DRILLING IF NEEDED.

Circulate steel pits for one hour each tour to monitor gains/losses, when circulating reserve.

CASING PROGRAM

NOTE: PIPE TO END UP IN HOLE FROM TOP TO BOTTOM AS SHOWN

CONDUCTOR PIPE

Hole Size 18 "
Set 13.375 " Casing @ 40 '
40' 13.375. 48# WC-40 STC CEMENT WITH READY-MIX
CHAN PIPE WHILE DRILLING SURFACE HOLE.
Pressure Test min @ psi
REQ'D DEPTH BY

Hole Size "
Set " Casing @ '
TOL @ '

SURFACE CASING

Hole Size 12.25 "
Set 8.875 " Casing @ 1150 '
1150' 8.825. 24# WC-50 STC CENT BTM 5 & EVERY
4TH JOINT TO SURF. NO CENT ABOVE LOSS CIRC ZONE
Pressure Test 30 min @ 1500 psi
REQ'D DEPTH BY

Pressure Test min @ psi

PRODUCTION CASING

Hole Size 7.875 "
Set 5.5 " Casing @ 3400 '
TOL @ '
3400' 6.5. 15.6# WC-50, LTC
CENT BTM 5 & EVERY OTHER JT TO 2900'

Hole Size "
Set " Casing @ '

Pressure Test 30 min @ 3000 psi

Pressure Test min @ psi

CEMENTING PROGRAM

SURFACE CASING

Min. WOC Time 12 Hours Pump Rate 10 B/M
Pump Time 120 Min. @ 70 °F BHST 725 SX CLASS 'C' WITH 2% GEL, 2% CACL (14.1PPG,
1.51 CUFT/SX, 7.6 GAL/SX) FB 225 SX CL C, 2% CACL (14.8PPG, 1.32CUFT/SX, 6.3 GAL/SX) 300% gauge hole

INTERMEDIATE CASING

Min. WOC Time Hours Pump Rate B/M
Pump Time Min. @ °F BHST

PRODUCTION CASING

Min. WOC Time 18 Hours Pump Rate 8 B/M
Minimum Pump Time 150 Min. @ 100 °F BHST 400 SX 35/65 POZ 'H'
WITH 6% GEL, 6% SALT, .25# /SX FC (12.8 PPG, 1.87 CUFT/SX, 9.9 GAL/SX). TAIL 250 SX CL 'H'. 2% CACL
(15.6 PPG, 1.19 CUFT/SX, 5.2 GAL/SX)

CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AND 13% EXCESS IN CSG ANNULUS

Min. WOC Time Hours Pump Rate B/M
Minimum Pump Time Min. @ °F BHST

REMARKS:

1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL FLOATS. SANDBLAST BTM 500' OF 5.5 IN
2. H2S AND PVT EQUIPMENT TO BE OPERATIONAL PRIOR TO DRILLING OUT 8.625 SHOE.
3. IF CEMENT DOES NOT CIRC ON SURFACE NOTIFY DIV. WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REACHES SURFACE. (CLASS 'C'. 2% CACL)
4. IF CMT DOES NOT CIRC ON PROD CSG. WOC 8 HRS AND RUN TEMP SURVEY.

REGULATORY REQUIREMENTS

Exception to SWR 13 (A)(1) Required:
H 9 Required:
Compliance w/SWR 11 (D)(3) Required:
Rule 37 Required:

APPROVAL:

DIV. DRLG. ENG. MM 8-18-92
DIV. DRLG. OPR. MGR. KSH 8/18/92
DIV. DRLG. MGR. JA 8-18-92

Lease Name: RHODES YATES UNIT Well No.: 15

Form M-31A (4-91)

County: LEA State: NEW MEXICO

Page 2

Deviation Rules: Distance to the Nearest Lease Line 330Max. Allowed Displacement 329

1500' FSL, 1475' FWL

MUD PROGRAM Unit K, Sec. 27, T-26S, R-37E

Depth	Type	Weight	Visc	Water Loss	Remarks
0 - 1190	FRESH	8.4	28		CRC RESERVE, PH 9-10 W/LIME
1190 - 3440	BRINE	10.0	30-32	20 CC	CRC RESERVE, PH 9-10 W/LIME
					MUD UP IN STEEL PITS IF HOLE
					CONDITIONS DICTATE. DIVISION APPROVAL REQUIRED.

STARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DRILLING IF NEEDED.

Circulate steel pits for one hour each tour to monitor gains/losses, when circulating reserve.

CASING PROGRAM

NOTE: PIPE TO END UP IN HOLE FROM TOP TO BOTTOM AS SHOWN

CONDUCTOR PIPE

Hole Size 16 "
Set 13.375 " Casing @ 40 '
40' 13.375, 48#, WC-40 STC CEMENT WITH READY-MIX
CHAN PIPE WHILE DRILLING SURFACE HOLE.
Pressure Test _____ min @ _____ psi
REQ'D DEPTH _____ BY _____

Hole Size _____ "
Set _____ " Casing @ _____ '
TOL @ _____ '

SURFACE CASING

Hole Size 12.25 "
Set 8.625 " Casing @ 1190 '
1190' 8.625, 24#, WC-50 STC CENT BTM 3 & EVERY
4TH JOINT TO SURF. NO CENT ABOVE LOSS CRC ZONE
Pressure Test 30 min @ 1500 psi
REQ'D DEPTH _____ BY _____

Pressure Test _____ min @ _____ psi

PRODUCTION CASING

Hole Size 7.875 "
Set 5.5 " Casing @ 3440 '
TOL @ _____ '
3440' 5.5, 15.5# WC-50, LTC
CENT BTM 5 & EVERY OTHER JT TO 2900'

Hole Size _____ "
Set _____ " Casing @ _____ '

Pressure Test 30 min @ 3000 psi

Pressure Test _____ min @ _____ psi

CEMENTING PROGRAM**SURFACE CASING**Min. WOC Time 12 Hours Pump Rate 10 B/M

Pump Time 120 Min. @ 70 °F BHST 725 SX CLASS 'C' WITH 2% GEL, 2% CACL (14.1PPG,
1.51 CUFT/SX, 7.6 GAL/SX) FB 225 SX CL C, 2% CACL (14.8PPG, 1.32CUFT/SX, 6.3 GAL/SX) 300% gauge hole

INTERMEDIATE CASING

Min. WOC Time _____ Hours Pump Rate _____ B/M

Pump Time _____ Min. @ _____ °F BHST _____

PRODUCTION CASINGMin. WOC Time 18 Hours Pump Rate 8 B/M

Minimum Pump Time 150 Min. @ 100 °F BHST 400 SX 35/65 POZ 'H'
WITH 6% GEL, 5% SALT, .25#/SX FC (12.8 PPG, 1.97 CUFT/SX, 9.9 GAL/SX), TAIL 250 SX CL 'H', 2% CACL
(15.6 PPG, 1.19 CUFT/SX, 5.2 GAL/SX)

CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AND 13% EXCESS IN CSG ANNULUS

Minimum Pump Time _____ Min. @ _____ °F BHST _____

REMARKS:

1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL FLOATS. SANDBLAST BTM 500' OF 5.5 IN
2. H2S AND PVT EQUIPMENT TO BE OPERATIONAL PRIOR TO DRILLING OUT 8.625 SHOE.

3. IF CEMENT DOES NOT CRC ON SURFACE NOTIFY DIV. WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REACHES SURFACE. (CLASS 'C', 2% CACL)
4. IF CMT DOES NOT CRC ON PROD CSG. WOC 8 HRS AND RUN TEMP SURVEY.

REGULATORY REQUIREMENTS

Exception to SWR 13 (A)(1) Required:
H 9 Required:
Compliance w/SWR 11 (D)(3) Required:
Rule 37 Required:

APPROVAL:

DIV. DRLG. ENG. MY 8-18-92
DIV. DRLG. OPR. MGR. KSH 8/18/92
DIV. DRLG. MGR. JAA 8-18-92

Lease Name: RHODES YATES UNIT Well No.: 16 Form M-31A (4-91)
County: LEA State: NEW MEXICO Page 2

Deviation Rules: Distance to the Nearest Lease Line 330
Max. Allowed Displacement 329

1250 FNL, 1300' FWL

MUD PROGRAM Unit D, Sec 27, T-26S, R-37E

Depth	Type	Weight	Visc	Water Loss	Remarks
<u>1140</u>	<u>FRESH</u>	<u>8.4</u>	<u>28</u>		<u>CIRC RESERVE, PH 9-10 W/LIME</u>
<u>1140 - 3400</u>	<u>BRINE</u>	<u>10.0</u>	<u>30-32</u>	<u>20 CC</u>	<u>CIRC RESERVE, PH 9-10 W/LIME</u>
					<u>MUD UP IN STEEL PITS IF HOLE</u>

CONDITIONS DICTATE. DIVISION APPROVAL REQUIRED.

STARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DRILLING IF NEEDED.

Circulate steel pits for one hour each tour to monitor gains/losses, when circulating reserve.

CASING PROGRAM

NOTE: PIPE TO END UP IN HOLE FROM TOP TO BOTTOM AS SHOWN

CONDUCTOR PIPE

Hole Size 16"
Set 13.375" Casing @ 40'
40' 13.375. 48# WC-40 STC CEMENT WITH READY-MIX
CHAN PIPE WHILE DRILLING SURFACE HOLE.
Pressure Test min @ psi
REQ'D DEPTH BY

Hole Size "
Set " Casing @ '
TOL @ '

SURFACE CASING

Hole Size 14.25"
Set 8.625" Casing @ 1140'
1140' 8.625. 24# WC-50 STC CENT BTM 3 & EVERY
4TH JOINT TO SURF. NO CENT ABOVE LOSS CIRC ZONE
Pressure Test 30 min @ 1500 psi
REQ'D DEPTH BY

Pressure Test min @ psi

PRODUCTION CASING

Hole Size 7.875"
Set 5.5" Casing @ 3400'
TOL @ '
3400' 5.5, 15.5# WC-50, LTC
CENT BTM 5 & EVERY OTHER JT TO 2900'

Hole Size "
Set " Casing @ '

Pressure Test 30 min @ 3000 psi

Pressure Test min @ psi

CEMENTING PROGRAM

SURFACE CASING

Min. WOC Time 12 Hours Pump Rate 10 B/M
Pump Time 120 Min. @ 70 °F BHST 725 SX CLASS 'C' WITH 2% GEL, 2% CACL (14.1PPG,
1.51 CUFT/SX, 7.8 GAL/SX) FB 225 SX CL C, 2% CACL (14.8PPG, 1.32CUFT/SX, 6.3 GAL/SX) 300% gauge hole

INTERMEDIATE CASING

Min. WOC Time Hours Pump Rate B/M
Pump Time Min. @ °F BHST

PRODUCTION CASING

Min. WOC Time 18 Hours Pump Rate 8 B/M
Minimum Pump Time 210 Min. @ 100 °F BHST 400 SX 35/65 POZ 'H'
WITH 6% GEL, 5% SALT, .25# /SX FC (12.8 PPG, 1.87 CUFT/SX, 9.9 GAL/SX). TAIL 250 SX CL 'H'. 2% CACL
(15.6 PPG, 1.19 CUFT/SX, 5.2 GAL/SX)
CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AND 13% EXCESS IN CSG ANNULUS

Min. WOC Time Hours Pump Rate B/M
Minimum Pump Time Min. @ °F BHST

REMARKS:

1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL FLOATS. SANDBLAST BTM 500' OF 5.5 IN
2. H2S AND PVT EQUIPMENT TO BE OPERATIONAL PRIOR TO DRILLING OUT 8.625 SHOE.

3. IF CEMENT DOES NOT CIRC ON SURFACE NOTIFY DIV. WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REACHES SURFACE. (CLASS 'C'. 2% CACL)
4. IF CMT DOES NOT CIRC ON PROD CSG. WOC 8 HRS AND RUN TEMP SURVEY.

REGULATORY REQUIREMENTS

Exception to SWR 13 (A)(1) Required:
H 9 Required:
Compliance w/SWR 11 (D)(3) Required:
Rule 37 Required:

APPROVAL:

DIV. DRLG. ENG. MJM 8-18-92
DIV. DRLG. OPR. MGR. KSH 8/18/92
DIV. DRLG. MGR. MA 8-18-92

Lease Name: W. H. RHODES 'B' NCT-1 Well No.: 20

Form M-31A (4-91)

County: LEA State: NEW MEXICO

Page 2

Deviation Rules: Distance to the Nearest Lease Line 330Max. Allowed Displacement 329

1300' FSL, 10' FEL

MUD PROGRAM

Unit I, Sec. 27, T-26S, R-37E

Depth	Type	Weight	Visc	Water Loss	Remarks
0 - 1150	FRESH	8.4	28		CIRC RESERVE, PH 9-10 W/LIME
1150 - 3400	BRINE	10.0	30-32	20 CC	CIRC RESERVE, PH 9-10 W/LIME
					MUD UP IN STEEL PITS IF HOLE

CONDITIONS DICTATE. DIVISION APPROVAL REQUIRED.

STARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DRILLING IF NEEDED.

Circulate steel pits for one hour each tour to monitor gains/losses, when circulating reserve.

CASING PROGRAM

NOTE: PIPE TO END UP IN HOLE FROM TOP TO BOTTOM AS SHOWN

CONDUCTOR PIPE

Hole Size 16 "
Set 13.375 " Casing @ 40 '
40' 13.375, 48# WC-40 STC CEMENT WITH READY-MIX
CHAIN PIPE WHILE DRILLING SURFACE HOLE.
Pressure Test min @ psi
REQ'D DEPTH BY

Hole Size "
Set " Casing @ '
TOL @ '

SURFACE CASING

Hole Size 12.25 "
Set 8.625 " Casing @ 1150 '
1150' 8.625, 24# WC-50 STC CENT BTM 3 & EVERY
4TH JOINT TO SURF. NO CENT ABOVE LOSS CIRC ZONE
Pressure Test 30 min @ 1500 psi
REQ'D DEPTH BY

Pressure Test min @ psi**PRODUCTION CASING**

Hole Size 7.875 "
Set 5.5 " Casing @ 3400 '
TOL @ '
3400' 5.5, 15.5# WC-50, LTC
CENT BTM 5 & EVERY OTHER JT TO 2900'

Hole Size "
Set " Casing @ '

Pressure Test 30 min @ 3000 psiPressure Test min @ psi**CEMENTING PROGRAM****SURFACE CASING**Min. WOC Time 12 Hours Pump Rate 10 B/M

Pump Time 120 Min. @ 70 °F BHST 725 SX CLASS 'C' WITH 2% GEL, 2% CACL(14.1PPG,
1.51 CUFT/SX, 7.6 GAL/SX) FB 225 SX CL C, 2% CACL (14.8PPG, 1.32CUFT/SX, 6.3 GAL/SX) 300% gauge hole

INTERMEDIATE CASINGMin. WOC Time Hours Pump Rate B/MPump Time Min. @ °F BHST**PRODUCTION CASING**Min. WOC Time 18 Hours Pump Rate 8 B/M

Minimum Pump Time 210 Min. @ 100 °F BHST 400 SX 35/65 POZ 'H'
WITH 6% GEL, 5% SALT, .25# /SX FC (12.8 PPG, 1.87 CUFT/SX, 9.9 GAL/SX). TAIL 250 SX CL 'H'. 2% CACL
(15.6 PPG, 1.19 CUFT/SX, 5.2 GAL/SX)

CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AND 13% EXCESS IN CSG ANNULUS

Minimum Pump Time Min. @ °F BHST Hours Pump Rate B/M

REMARKS:

1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL FLOATS. SANDBLAST BTM 500' OF 5.5 IN
2. H2S AND PVT EQUIPMENT TO BE OPERATIONAL PRIOR TO DRILLING OUT 8.625 SHOE.

3. IF CEMENT DOES NOT CIRC ON SURFACE NOTIFY DIV, WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REACHES SURFACE. (CLASS 'C', 2% CACL)
4. IF CMT DOES NOT CIRC ON PROD CSG, WOC 8 HRS AND RUN TEMP SURVEY.

REGULATORY REQUIREMENTS

Exception to SWR 13 (A)(1) Required:
H 9 Required:
Compliance w/SWR 11 (D)(3) Required:
Rule 37 Required:

APPROVAL:

DIV. DRLG. ENG. MMH 8-18-92
DIV. DRLG. OPR. MGR. KSH 8/18/92
DIV. DRLG. MGR. MBB 8-18-92

RHODES20

Lease Name: W. H. RHODES 'B' NCT-1 Well No.: 21

Form M-31A (4-91)

County: LEA State: NEW MEXICO

Page 2

Deviation Rules: Distance to the Nearest Lease Line 330Max. Allowed Displacement 329

1450' FSL, 1150' FEL

MUD PROGRAM Unit I, Sec. 27, T-26S, R-37E

Depth	Type	Weight	Visc	Water Loss	Remarks
0 - 1150	FRESH	8.4	28		CIRC RESERVE, PH 9-10 W/LIME
1150 - 3400	BRINE	10.0	30-32	20 CC	CIRC RESERVE, PH 9-10 W/LIME
					MUD UP IN STEEL PITS IF HOLE

CONDITIONS DICTATE. DIVISION APPROVAL REQUIRED.

STARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DRILLING IF NEEDED.

Circulate steel pits for one hour each tour to monitor gains/losses, when circulating reserve.

CASING PROGRAM

NOTE: PIPE TO END UP IN HOLE FROM TOP TO BOTTOM AS SHOWN

CONDUCTOR PIPEHole Size 16 "Set 13.375 " Casing @ 40 '40' 13.375. 48# WC-40 STC CEMENT WITH READY-MIXCHAIN PIPE WHILE DRILLING SURFACE HOLE.Pressure Test min @ psiREQ'D DEPTH BY Hole Size "Set " Casing @ 'TOL @ 'Pressure Test min @ psi**SURFACE CASING**Hole Size 12.25 "Set 8.625 " Casing @ 1150 '1150' 8.625. 24# WC-50 STC CENT BTM 3 & EVERY4TH JOINT TO SURF. NO CENT ABOVE LOSS CIRC ZONEPressure Test 30 min @ 1500 psiREQ'D DEPTH BY **PRODUCTION CASING**Hole Size 7.875 "Set 5.5 " Casing @ 3400 'TOL @ '3400' 5.5. 15.5# WC-50, LTCCENT BTM 5 & EVERY OTHER JT TO 2900'Pressure Test 30 min @ 3000 psiHole Size "Set " Casing @ 'Pressure Test min @ psi**CEMENTING PROGRAM****SURFACE CASING**Min. WOC Time 12 Hours Pump Rate 10 B/MPump Time 120 Min. @ 70 °F BHST 725 SX CLASS 'C' WITH 2% GEL, 2% CACL (14.1PPG,1.51 CUFT/SX, 7.6 GAL/SX) FB 225 SX CL C, 2% CACL (14.8PPG, 1.32CUFT/SX, 6.3 GAL/SX) 300% gauge hole**INTERMEDIATE CASING** Min. WOC Time Hours Pump Rate B/MPump Time Min. @ °F BHST **PRODUCTION CASING** Min. WOC Time 18 Hours Pump Rate 8 B/MMinimum Pump Time 210 Min. @ 100 °F BHST 400 SX 35/65 POZ 'H'WITH 6% GEL, 5% SALT, .25#/SX FC (12.8 PPG, 1.87 CUFT/SX, 9.9 GAL/SX). TAIL 250 SX CL 'H', 2% CACL(15.6 PPG, 1.19 CUFT/SX, 5.2 GAL/SX)CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AND 13% EXCESS IN CSG ANNULUSMin. WOC Time Hours Pump Rate B/MMinimum Pump Time Min. @ °F BHST **REMARKS:**

1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL FLOATS. SANDBLAST BTM 500' OF 5.5 IN

2. H2S AND PVT EQUIPMENT TO BE OPERATIONAL PRIOR TO DRILLING OUT 8.625 SHOE.

3. IF CEMENT DOES NOT CIRC ON SURFACE NOTIFY DIV. WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REACHES SURFACE. (CLASS 'C', 2% CACL)

4. IF CMT DOES NOT CIRC ON PROD CSG. WOC 8 HRS AND RUN TEMP SURVEY.

REGULATORY REQUIREMENTS

Exception to SWR 13 (A)(1) Required:

H 9 Required:

Compliance w/SWR 11 (D)(3) Required:

Rule 37 Required:

APPROVAL:DIV. DRLG. ENG. MMB 8-18-92DIV. DRLG. OPR. MGR. YSH 8/18/92DIV. DRLG. MGR. JAB 8-18-92

P 369 428 059


**Receipt for
Certified Mail**

No Insurance Coverage Provided

Meridian Oil, Inc
P.O. Box 51810
Midland, Texas 79710

PS Form 3800, June 1991

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.75
Postmark or Date	

P 369 428 082


**Receipt for
Certified Mail**

No Insurance Coverage Provided

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

PS Form 3800, June 1991

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.75
Postmark or Date	

P 365 085 111

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

Koch Industries
P.O. Box 2256
Wichita, Kansas 67201

PS Form 3800, June 1985

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.75
Postmark or Date	

P 369 428 056


**Receipt for
Certified Mail**

No Insurance Coverage Provided

Marathon Oil Co.
P.O. Box 552
Midland, Texas 79702

PS Form 3800, June 1991

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 2.75
Postmark or Date	

P 369 428 057



**Receipt for
Certified Mail**

No Insurance Coverage Provided

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

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage and Fees	\$ 2.75
Postmark or Date	27 1992 USPO

PS Form 3800, June 1991

P 365 085 108

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

Mack Energy Corp.
P.O. Box 276
Artesia, NM 88211

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	1.00
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage and Fees	\$ 2.75
Postmark or Date	27 1992 USPO

PS Form 3800, June 1985

P 365 085 107

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	Tom & Evelyn Linclay
Street and No.	802 S. Main
P.O., State and ZIP Code	Midland, TX 79701
Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage and Fees	\$ 2.75
Postmark or Date	27 1992 USPO

U.S.G.P.O. 1985-234-555

PS Form 3800, June 1985

P 369 428 058



**Receipt for
Certified Mail**

No Insurance Coverage Provided

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

Postage	\$ 1.75
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage and Fees	\$ 2.75
Postmark or Date	27 1992 USPO

PS Form 3800, June 1991

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

August 24, 19 92
and ending with the issue dated

August 24, 19 92

*Kathi Bearden by
Shirley Perry, Exec. Secy*
General Manager

Sworn and subscribed to before

me this 25th day of

August, 19 92

L. Donna North
Notary Public.

My Commission expires _____

February 14, 19 95
(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

August 24, 1992

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):

8 — Unit Letter E, 1875
FNL & 765 FWL, Section
27, T26S, R37E

13 — Unit Letter M, 660
FSL & 660 FWL, Section 27,
T26S, R37E

Lease/Unit Name: W. H.
Rhodes B Fed NCT-1 Well
Number(s) and Location(s):

6 — Unit Letter I, 1980
FSL & 660 FEL, Section 27,
T26S, R37E

13 — Unit Letter O, 990
FSL & 1650 FEL, Section
27, 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.

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. 3086
Order No. R-2748

APPLICATION OF TEXACO INC.
FOR A WATERFLOOD PROJECT, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 22, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 29th day of July, 1964, 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 permission to institute a waterflood project in the Rhodes Yates Oil Pool by the injection of water into the Yates and Seven Rivers formations through two injection wells in Section 26, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico.

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

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

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CASE No. 3086

Order No. R-2748

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project in the Rhodes Yates Oil Pool by the injection of water into the Yates and Seven Rivers formations through the following-described wells in Section 26, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico:

W. H. Rhodes "b" (NCT-1) Well No. 7, Unit L

W. H. Rhodes "b" (NCT-1) Well No. 10, Unit N

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

S E A L

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

esr/

RANGER LAKE PENN (80 Acre Spacing)			RHODES VATES SEVEN RIVERS			RHODES VATES SEVEN RIVERS CONT'D			SALT LAKE UOLICAMP		
Top Allowable 400	GOR Limit 2,000	No Test Required	Top Allowable 80	GOR Limit 10,000	Top Castinthead Gas Limit 800 MCF	TEXACO EXPLORATION & PRODUCTION INC.	Top Allowable 365	GOR Limit 2,000	Top Allowable 365	GOR Limit 2,000	Top Castinthead Gas Limit 730 MCF
Top Castinthead Gas Limit 800 MCF			Top Castinthead Gas Limit 800 MCF			W.H. Rhodes B Federal Waterflood Project	Top Castinthead Gas Limit 730 MCF		VATES PETROLEUM CORP.		
GRAHAM ROYALTY, LTD.			ARKSTRONG ENERGY CORP.			W.H. Rhodes B Fed. NCT-1	Belco Ala Federal				
State QF-13			H.C. Hoberly A Federal			6 I 27-26-37	1 J	14-20-32	2A		
			1 J 8-26-37	No C-116		"					
			LANEXCO, INC.			"					
			H.C. Hoberly C Federal			"					
			(3) 1 J 17-26-37	M 9000		"					
			MERIDIAN OIL, INC.			"					
			Ellicott Fed. 1			"					
			(2) 2 D 21-26-37	M 14000		"					
			(5) 5 C 21-26-36	M 8000		"					
			State UTP			"					
			(3) 2 G 28-26-37	M 12334		"					
			MERIDIAN OIL INC.			"					
			Hoberly Rhodes Waterflood Project			"					
			CAPACITY ALLOWABLE			"					
			Hoberly 1 F 21-26-37			"					
			Hoberly 4 J			"					
			5 G			"					
			Hoberly 11 P 20-26-37			"					
			Hoberly 12 H			"					
			Hoberly 6 K 21-26-37			"					
			Hoberly 9 M			"					
			10 I 20-36-37			"					
			Hoberly C 3 E 21-26-37			"					
			SMITH & MARSH INC.			"					
			Willie Waterflood Project			"					
			CAPACITY ALLOWABLE			"					
			Hary E. Willie A Federal			"					
			1 C 35-26-37			"					
			2 D			"					
			" 3 A 34-26-37			"					
			" 4 E 35-26-37			"					
			" 8 D 35-26-37			"					
			Mary F. Willie B Federal			"					
			1 H 34-26-37	Input		"					
			(Waterflood Project)			"					
			TEXACO EXPLORATION & PRODUCTION INC.			"					
			R-4571			"					
			Maximum Allowable Formula:			"					
			13 X 80 = 1040			"					
			Rhodes Yates Unit			"					
			1 I 21-26-37			"					
			" 4 A 28-26-37			"					
			" 6 C 27-26-37			"					
			" 8 E			"					
			" 11 K			"					
			" 13 M			"					
			" 2 P 21-26-37	Input		"					
			" 3 P 28-26-37			"					
			" 5 D 27-26-37			"					
			" 7 F			"					
			" 9 H 28-26-37			"					
			" 10 L 27-26-37			"					
			" 12 N			"					
			TEXACO EXPLORATION & PRODUCTION INC.			"					
			W.H. Rhodes A Federal Waterflood Project			"					
			CAPACITY ALLOWABLE			"					
			H.H. Rhodes A Federal			"					
			3 M 22-26-37			"					
			5 O			"					
			4 N 22-26-37	Input		"					
			6 L			"					
			(131)			"					
			REVERES BONE SPRING			"					
			Top Allowable 230	GOR Limit 2,000	No Test Required	WOOD, MCSHANE & THAMS					
			Top Castinthead Gas Limit 460 MCF			Lineberry 1 O 23-26-37	No C-116				
			MITCHELL ENERGY CORP.								
			Abn 13 State(3) 1 D 13-18-35	M 1333							
			REVERES PENNSYLVANIAN								
			Top Allowable 320	GOR Limit 2,000							
			Top Castinthead Gas Limit 640 MCF								
			CARR WFLI SERVICE INC.								
			Reeves State								
			(2) 1 G 14-18-35	M 57500							
			MITCHELL ENERGY CORP.								
			State JR(10) 1 P 11-18-35	M 3895							
			VATES PETROLEUM CORP.								
			Reeves ADQ State								
			(13) 1 A 14-18-35	M 5538							
			REVERES QUEEN								
			Top Allowable 80	GOR Limit 2,000							
			Top Castinthead Gas Limit 160 MCF								
			BASS ENTERPRISES PRODUCTION CO.								
			Reeves 21 State								
			(14) 1 P 21-18-35	M 1857							
			HONDO OIL & GAS CO.								
			Lea 403 State								
			(15) 2 M 22-18-35	M 3767							
			" (2) 3 N 22-18-35	*40							
			Acreage Factor .500								
			Acreage Factor Limits								
			TAMARACK PETROLEUM COMPANY, INC.								
			Arco 28 State								
			(3) 1 A 28-18-35	M 1000							
			" (2) 2 R	M 1500							
			VATES, HARVEY E. CO.								
			/State 22 1 P 22-18-35	SI							
			(131)								
			REVERES BONE SPRING								
			Top Allowable 230	GOR Limit 2,000	No Test Required	ROCK LAKE BONE SPRING, SOUTH					
			Top Castinthead Gas Limit 460 MCF			Top Allowable 230	GOR Limit 2,000				
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230	GOR Limit 2,000		Top Castinthead Gas Limit 460 MCF					
			Top Castinthead Gas Limit 460 MCF			Top Castinthead Gas Limit 460 MCF					
			MITCHELL ENERGY CORP.			Top Castinthead Gas Limit 460 MCF					
			Abn 13 State(3) 1 D 13-18-35	M 1333		Top Castinthead Gas Limit 460 MCF					
			REVERES BONE SPRING			Top Castinthead Gas Limit 460 MCF					
			Top Allowable 230								