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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

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE. NEW MEXICO 87501 FORM C-108 Revised 7-1-81

Case 10572

APPLICATION	EUD	AUTHORIZATION	TO INTECT
MERLILATION	run	AUTHURIZATIUN	IU INJECI

I.	Purpose: Applicat	Secondary Recovery Pressure Maintenance Disposal Storage ion qualifies for administrative approval? Dyes Dno
II.	Operator:	Texaco Exploration & Production Inc.
	Address:	P.O. Box 730, Hobbs, New Mexico 88240
	Contact par	ty:Terry L. Frazier, Area ManagerPhone: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.
- - 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:
 - 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: / eum fran:	Date: 8/25/92
the information required under Sections VI, VII	I, X, and XI above has been previously

* 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;

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:
 - 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

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 Rivers

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

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

W.H. Rhodes B Fed NCT-1 - Rhodes Yates Seven Rivers
6 - Unit Letter I, 1980 FSL & 660 FEL, Section 27, T26S, R37E
13 - 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.

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U.S.A. RHODES YATES WATERFLOOD LEA COUNTY, NEW MEXICO шишин 35 26 SOUTH LEONBRO UNIT P## 29-HAR-91 RHODES 12 N HILLS -A-17 DAME C. E. SADLER RHODES FED -B- NCT-1 TEXACO INC. KOCH EXPL. 2< us D 94 00 scate 1 " 11888" 7 TEXACO RHODES CCOP 1 косн 34 HILLS -B-S STRTUTE MILES 22 27 RHODES FED -B- NCT-1 MILLS . MERIDIAN OIL 1,12880 RHODES -A-WILLS FED MARRITHON .. RHODES YATES UN STATUTE MILES 0 5 ∞€ 28 21 33 MERIDIAN OIL MOBERLY RHODES UNIT THITITION HERIDIAN OPER. MOBERLY RHODES FED -B- NCT-3 MERIDI # SCARBOROUGH SER LAND OIL TEXACO LINEBERRY MERIDIAN Pa ELL TOIT FED NERIDIAN CRECORY -B-1 HERIDIAN 00

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Proposed Injection Conversion

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

3092 ' to 3320 ' through: OH, Perforations

1307'-2810' 2955' NR

Salt Yates Seven Rivers

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

Proposed Injection Conversion

Sec./Twn/Rng: Unit M, Sec 27, T-26-S, R-37-E Lease: Rhodes Yates Unit #13 OPERATOR: Texaco Exploration & Production Inc. 660 FWL FOOTAGE LOCATION: 660 FSL X

Lea County, New Mexico

sx. SX. ' determined by circulated determined by <u>circulated</u> 2-15-78 3450' 950 3167 'to 3349 'through: Perforations 4.7#, J-55, IPC 2000# WP 654 700 Cemented with Set at Comp. Date Set at Cemented with Set at Cemented with ' determined by TABULAR DATA Intermediate casing: 7-7/8" Injection Interval: Hole Size 12-1/4" Size 5-1/2", 14j^t_ Production Casing: Size 8-5/8", 24# Tubing: 2-3/8", Surface Casing: TOC surface TOC surface NONE Hole Size __ Hole Size Size Toc AD-1 injection packer 8-5/8", 24#, 700 sx, CIBP, 12' cement 5-1/2", 14#, 950 sx, cement circulated cement circulated T/ Yates perfs (PBTD = 3419')2980' GL (KB=11') 1215'-2878' 33627 3045 SCHEMATIC • Seven Rivers 3130' 3167' 3390' Yates 3450' Tops: Salt 6547 Gr

Proposed Injection Conversion

T-26-S Lease: Rhodes B Fed NCT-1 Sec./Twn/Rng: Unit I, Sec 27 OPERATOR: Texaco Exploration & Production Inc. 660 FEL 1980 FSL X FOOTAGE LOCATION:

Former Texaco Rhodes 'B' #6

Lea County, New Mexico

SX.

200

Cemented with

Size 8-5/8, 32#

Surface Casing:

1212'

Set at

TABULAR DATA

' determined by calculated

Comp. Date 8-11-44

Set at

Intermediate casing:

Hole Size 11"

TOCE

Cemented with

Size NONE

TOC

' determined by

TOC @ 40', calc. 100% AD-1 Injection Packer T/ added Yates Perfs 5-1/2", 14#, 300 sx, TOC @ 1660, calc. 8-5/8", 32#, 200 sx, 2987' GL (KB=11') OT HO 1000 CM SCHEMATIC • 3048 1212' 3025' 3162' 33007 Gr

Cemented with 300 sx.

Set at

Production Casing:

Size 5-1/2", 14#

TOC 1660

Hole Size (Perfs to be added: 3048'-3150')

determined by calculated

:sdoL

1262'-2780' 2922 Seven Rivers Yates Salt

3048 'to 3300 'through: OH, Perforations 7-1/2" , 4-3/4" open hole Injection Interval: Hole Size

4.7#, J-55, IPC 2000# WP

Tubing: 2-3/8",

Proposed Injection Conversion

Lea County, New Mexico #13 T-26-S Lease: Rhodes B Fed NCT-1 Sec./Twn/Rng: Unit 0, Sec 27 OPERATOR: Texaco Exploration & Production Inc. Former Texas Company W. H. Rhodes 'B' #13 990 FSL X 1650 FEL FOOTAGE LOCATION:

AD-1 Injection Packer TOC @ 1530, calc. 80% T/ added perfs (+/-) 5-1/2", 14#, 300 sx, 8-5/8", 28#, 350 sx, cement circulated 2973' GL (KB=11') OH TD SCHEMATIC 1196 3050' 3000' 3167' 3327' Gr

Tops:

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

SX. SX. ' determined by <u>calculated</u> Comp. Date 7-26-45 350 Cemented with Set at Cemented with Set at TABULAR DATA Intermediate casing: Size 8-5/8, 28# Surface Casing: Hole Size 11" TOC surface Size NONE

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

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

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.
- 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, In. 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 strict Office before injection is commerced the Hobbs District Office before injection is commenced through said we live and

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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 con-traction 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,

- (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,

(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.)

R. W. Byram & Co., - Nov., 1990

(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.

SEC

- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper"
- (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	ĺ	1980' FNL and 660' FEL, Sec. 28
H. G. Moberly "C" (NCT-2)	3	1980' FNL and 660' FEL,Sec. 28 660' 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 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 Maxico "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.

(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 Fules 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 herein-above 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. 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

bi (S

- (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

RYU #:	LOC:	Original Name	and Operator:
1 2	21,I 21,P	Texaco Texaco	H.G. Moberly C NCT-2 #3 H.G. Moberly C NCT-2 #3
3 4 5	•		NM State 'AD' #1 Rhodes Yates Unit #4 NM State 'AD' #2
6 7 8	27,F	Amerada Amerada Amerada	State 'JA' #1 State 'JA' #4 State 'JA' #3
9	28,H	Union Texas	State 'A' #1
10 11 12	27,L 27,K 27,N	Texas Pacific	Morris #1
13	27,M	Texaco	Rhodes Yates Unit #13

NEW MEXICO OIL CONSERVATION DIVISION CASING--BRADENHEAD TEST

POOL: FOOTAGE FOOTAGE ORDER NO.	RHODES Y RHODES Y 1875-N 765-W	ATES UNIT	. 27		S	WELL # 8 E S RANGE 37 E TYPE WELL P
TEST DATE OPERATOR CASING SURFACE	REP: SIZE	TEST TYPE		PASS/FAIL OCD REP: . CEMENTED 150SX	PRESSURE	REMARKS
INTERM-1 INTERM-2 PROD		3128	NDB	25ØSX	•	•
LINER	• .	•	• 1	•	****	
TUBING	. •	•	•		•	•
REMARKS: REPAIR LE	ETTER DAT	re .		DATE RE		SNC .
TEST DATE OPERATOR CASING SURFACE	REP: SIZE	TEST TYPE SET AT	E .	PASS/FAIL OCD REP: . CEMENTED 150SX	PRESSURE	
INTERM-1 INTERM-2 PROD		•	NDB	25ØSX		· ·
LINER	•	•	•	•		
TUBING	•	•	•		•	•
REMARKS: REPAIR LE		TE .		DATE RE	EPAIR	SNC .
TEST DATE OPERATOR CASING SURFACE		HOLLIS/O	E BHY Lga Top cmt a ndb	PASS/FAIL _OCD REP: _ CEMENTED 150SX	LYLE PRESSURE O	REMARKS
INTERM-1 INTERM-2 PROD	7		5 NDB	25ØSX	54	
LINER	•	÷	•	*		
TUBING	•	•	•		52	
REMARKS: REPAIR LE	ETTER DAT	TE	DAT	E REPAIRED		SNC

NEW MEXICO OIL CONSERVATION DIVISION CASING--BRADENHEAD TEST

POOL: FOOTAGE	RHODES Y RHODES Y 660-S 660-W	ATES UNIT		UNIT LT TWN 2 TYPE LEASE F DATE INJ. BEGAN	WELL # 13 R M 6 S RANGE 37 E TYPE WELL P
		TEST TYPE • SET AT • 654	TOP CMT	PASS/FAIL . OCD REP: . CEMENTED PRESSUR 500SX .	E REMARKS
INTERM-1 INTERM-2 PROD		: : : :345Ø	Ø		· ·
LINER	•	•	• •	•	
TUBING .	•	•	•	<i>_</i> .	•
REMARKS: REPAIR LE	TTER DAT			DATE REPAIR	SNC .
TEST DATE OPERATOR CASING SURFACE		TEST TYPE SET AT 654	TOP CMT	PASS/FAIL . OCD REP: . CEMENTED PRESSUR 500SX .	E REMARKS
INTERM-1 INTERM-2 PROD	5 1/2	3450	• • Ø	1050SX	· ·
LINER	•	•	•	·	
TUBING	•		•	•	•
REMARKS: REPAIR LE	ETTER DAT	re .		DATE REPAIR	SNC .
TEST DATE OPERATOR CASING SURFACE		7/ TEST TYPE Hollis Of SET AT 654	GA TOP CMT	PASS/FAIL OCD REP: LYLE CEMENTED PRESSUR 500SX	E REMARKS
INTERM-1 INTERM-2 PROD	· · 5 1/2	3450	•		
LINER	•	•	•	•	
TUBING	•	•	•	65	
REMARKS: REPAIR LE	TTER DAT	re	DAT	E REPAIRED	SNC

NEW MEXICO OIL CONSERVATION DIVISION CASING--BRADENHEAD TEST

OPERATOR: JEXACO INC		IDENHEAD LEST	
LEASE: W.H. RHODE	ES "B" FED NCT-1		WELL # 6
POOL: RHODES YA		UNIT LTR	
FOOTAGE 1980-S FOOTAGE 660-E			S RANGE 37 E TYPE WELL P
ORDER NO	TREAD LIII	DATE INJ. BEGAN	e
•			;
TEST DATE.	TEST TYPE .	PASS/FAIL .	
OPERATOR REP: CASING SIZE	SET AT TOP CMT	OCD REP: . CEMENTED PRESSURE	REMARKS
SURFACE 8 5/8	1212 NDB	200SX	•
INTERM-1 .	•	•	•
INTERM-2 . PROD 5 1/2	3162 NDB	300SX	•
	CIOZ NOD		
LINER .		•	. ,
771.07.71.17			
TUBING .	•	•	•
REMARKS: COMPLETED	1944		SNC .
REPAIR LETTER DATE		DATE REPAIR	•
			=======================================
TEST DATE. OPERATOR REP:	TEST TYPE .	PASE/FAIL . OCD REP: .	
CASING SIZE	SET AT TOP CMT		REMARKS
SURFACE 8 5/8	1212 NDB	200SX .	•
INTERM-1 . INTERM-2 .	•	•	•
FROD 5 1/2	3162 NDB	3ØØSX	•
LINER .	•	•	
TUBING .			_
	•	•	•
REMARKS: .			SNC .
REPAIR LETTER DATE		DATE REPAIR	
TEST DATE 4-25-91	TEST TYRE \$	PASS/FAIL	
OPERATOR REP:	HOLLIS OLGA	OCD REP: LYLE	
CASING SIZE		CEMENTED PRESSURE	REMARKS
SURFACE 8 5/8	1212 NDB	2005X <u>O</u>	
INTERM-1 .		•	
INTERM-2 .	•	•	
PROD 5 1/2	3162 NDB	300SX 32	
LINED		•	
LINER .		•	
TUBING .		60	
ناسم در الرسو الار الم الم المسر السو			PM 1 PM
REMARKS:	חאדו	E REPAIRED	_ SNC
REPAIR LETTER DATE		-	

NEW MEXICO OIL CONSERVATION DIVISION CASING--BRADENHEAD TEST

LEASE: POOL: FOOTAGE FOOTAGE ORDER NO.	RHODES YAT 990-S 1650-E	S "B" FED ES SECTION PRESS LMT	27	TWN TYPE LEASE DATE INJ. E	UNIT LTR 1 26 F BEGAN	WELL # 13 O S RANGE 37 E TYPE WELL P
TEST DATE	REP: SIZE	TEST TYPE SET AT	•	PASS/FAIL OCD REP: . CEMENTED	•	
INTERM-1 INTERM-2 PROD		3154	NDB	300SX	:	•
LINER		•	н	•		
TUBING	•	•	•		•	•
REPAIR LE	COMPLETED	•		DATE RE		SNC .
OPERATOR	REP: SIZE	TEST TYPE SET AT 1196	TOP CMT	PASS/FAIL OCD REP: . CEMENTED 350SX		REMARKS
INTERM-1 INTERM-2 PROD	•	3154	NDB	300sx		·
LINER		•	-	•		
TUBING	•	•	•			•
	3/91 SWEDO	GE COLLAPS	ED CSG 3:	109-3112-RET		SNC.
TEST DATE OPERATOR CASING SURFACE	E <u>4-25-9/</u> REP: SIZE 8 5/8	TEST TYPE Hollis 01 SET AT 1196	TOP CMT	PASS/FAIL OCD REP: CEMENTED 350SX	LyLE PRESSURE	REMARKS
INTERM-1 INTERM-2 PROD	5 1/2	3154	NDB	300sx	38	
LINER	•	•	•			·
TUBING	•	•	•		_40_	
REMARKS: REPAIR LI	TTER DATE			REPAIRED		SNC

001t ma (December 1989)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

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

5. Lease Designation and Serial No.

LC-030174	b
6. If Indian, Allottoc	or Tribe Name

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	7. If Unit or CA. Agrocment Designation	
I. Type of Well Oil Well Well Other 2. Name of Operator		# Well Name and No. W.H. Rhodes B NCT-1 #2
Texaco Exploration & Produc 3. Address and Telephone No.	•	9. API Wal No. 30 - 025 - 12060
P.O. Box 730, Hobbs, NM 84 4. Location of Well (Footage, Sec., T., R., M., or Servey Desc		3-7191 IO. Field and Pool. or Exploratory Area Rhodes Yates
2970 FNL, 2310 FEL Unit J, Sec. 27, T-26-S, R-	37-E	II. County or Parish, State Lea County, NM
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF N	OTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	T	YPE OF ACTION
Notice of Intent	Abandonment Recompletion Plugging Back	Change of Plans New Construction Non-Routine Fracturing
Final Abandonment Notice	Casing Repair Altering Casing Other	Water Shut-Off Conversion to Injection
Describe Proposed or Completed Operations (Clearly state all prive subsurface locations and measured and true vertical)	ertinent details, and give pertinent dates, including	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) estimated date of starting any proposed work. If well is directionally drilled, work.1°

Inform BLM 24 hours prior to commencement of plugging. 1)

MIRU, Install BOP. Run bit and casing scraper and clean hole to TD. Tag 2) CIBP. POH. Run 5-1/2" packer and test CIBP for possible leak. POH.

If necessary, set 2nd CIBP by wireline. Perf 2 squeeze holes at 1284'. 3)

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.

- 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.
- POH. Fill annulus and casing from surface with 1" tubing if necessary. 6)
- Cut off wellhead and install marker. Clean location. 7)
- Restore surface as per Federal requirements.

L I hereby certify that the forescipt in tops and cooper		
Signod	Title Production Engineer	Date 8-20-92
(This space for Federal or State office use)		
Approved by	Title	Datc

Tide 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.

WELL DATA SHEET

(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 TABULAR DATA ستهري Set at _ Surface Casing: 1234' 2988' GL Size 7-5/8. 26.4# Cemented with 450 sx. Gr (KB=9') TOC <u>surface</u> ' determined by <u>circulation</u> Hole Size 9-5/8 Comp. Date 8-23-40 7-5/8⁴, 26.4#, 450 1234' sx, Cement Circ. Intermediate casing: Set at _____ Size NONE Cemented with TOC _____ ' determined by _ 29361 TOC CIBP, no cement Hole Size ____ 3000' 5-1/2", 14#, 125 sx, 30771 Set at ____3077' TOC @ 2936', temp. Production Casing: 32751 4-1/2" liner stub, Size <u>5-1/2", 14#</u> Cemented with <u>125</u> sx. 26' fragment TOC __2936_____/ determined by _Temp_log____ Hole Size ___6-3/4" Tops: Open Hole Interval: 1155'-2850' Salt Yates 2960' <u>_3077</u>' to <u>_3275</u>' Size <u>_ ???</u> Seven Rivers 3183' Queen NR Nitro Shot 500 Ots SOWE #1, 3130' - 3275' PO-113 PLUG AND ABANDON DATA (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. Gr 100'-surface, Squeeze annulus with 110 sx to surface. 12 sx plug Class 'C' Cement, 1.32 cu ft/ sx 1105'-1284', 24 sx plug Intermediate Plug(s): Size 1284'-1105' Cemented with 24 sx. Class 'C' cement, 1.32 cu ft/ sx CIBP, add 100' cement, Intermediate plug covers t/ salt and shoe. 15 sx Lower plug covers b/ salt and open hole. 3077' Producing Zone Plugs:

Size CIBP, 100' Cemented with 15 sx.

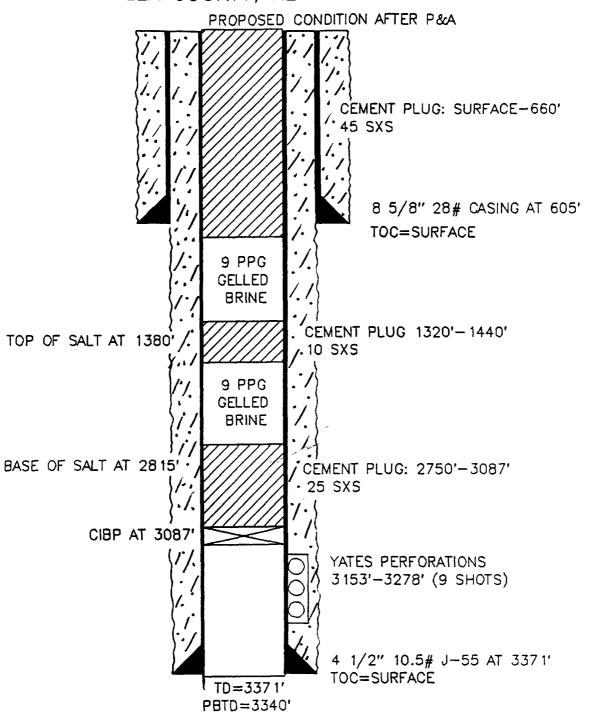
3275'

State of New Mexico Submit 3 Copies Form C-103 Energy, Minerals and Natural Resources Department to Appropriate Revised 1-1-89 District Office OIL CONSERVATION DIVISION DISTRICTI WELL API NO. P.O. Box 1980, Hobbs, NM 88240 P.O. Box 2088 30-025-25492 Santa Fe. New Mexico 87504-2088 DISTRICTI P.O. Drawer DD, Artesia, NM 88210 5. Indicate Type of Lease STATE FEE L 1000 Rio Brazos Rd., Aztec, NM 87410 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 7. Lease Name or Unit Agreement Name DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) State "UTP" Type of Well: WELL [] WELL X 2. Name of Operator & Well No. Meridian Oil Inc 3. Address of Operator 9. Pool name or Wildcat P.O. Box 51810, Midland, TX 79710-1810 Rhodes (Yates, 7 Rivers) 4 Well Location : 1650 Feet From The North Unit Letter G 1650 Feet From The East Line and Line Township 265 Range 37E **NMPM** County Lea 10. Elevation (Show whether DF, RKB, RT, GR, etc.) 2966' GR Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data 11. NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK ALTERING CASING **TEMPORARILY ABANDON CHANGE PLANS** COMMENCE DRILLING OPNS. PLUG AND ABANDONMENT **PULL OR ALTER CASING** CASING TEST AND CEMENT JOB OTHER: OTHER:_ 12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed - work) SEE RULE 1103. 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.

hereby certify that the information above is true and complete to the best of my knowledge	e and belie	<i>t.</i>	· · · · · · · · · · · · · · · · · · ·	
SIGNATURE Korann Schole	- TITLE -	Production Asst	DA	TE 04/06/92
TYPEOR PRINT NAME ROXANT Scholz			Test	EPHONE NO. (915)688-69
(This space for State Use)		DIL & GAS	INSPECTOR	APR 28'92
CONDITIONS OF APPROVAL, IF ANY:	- TITLE -		DA DA	18

MERIDIAN OIL

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



Lease Name: RHODES YATES UNIT Wel	II No.: 14 Form M-31A (4-9
County: LEA State:	NEW MEXICO Page
Deviation Rules: Distance to the No.	earest Lease Line330 lacement329
Unit F, Sec. 27, T-26S, R-37E MUD	
Depth Type Weight Visc	
0 - 1150 FRESH 8.4 28 1150 - 3400 BRINE 10.0 30-32	2 20 CC CIRC RESERVE,PH 9-10 W/LIME
TARGUER OF THE POPUL FOR OFFICE MAN F D	CONDITIONS DICTATE, DIVISION APPROVAL REQUIRED
TARCH/PAPER/FIBER/MULTISEAL FOR SEEPAGE WHILE DI	monitor gains/losses, when circulating reserve
	NG PROGRAM
<u> </u>	OLE FROM TOP TO BOTTOM AS SHOWN
ONDUCTOR PIPE	The second second
Hole Size 16 "	Hole Size "
Set 13.375 ** Casing @ 40 ** 40' 13.375, 48#, WC-40 STC CEMENT WITH READY-MIX	Hole Size" Set" Casing @' TOL @'
CHAIN PIPE WHILE DRILLING SURFACE HOLE.	TOL @
Pressure Test min @ ps1 REQ'D DEPTH BY	
DEFINE CASING	
Hole Size 12.25 " Set 8.8% " Casing 6 1160 '	Pressure Testmin @psi
Set 8.896 " Casing 6 1160 ' 1150' 8.625, 24#, WC-50 STC CENT BTM 3 & EVERY	PRODUCTION CASING
4TH JOINT TO SURF. NO CENT ABOVE LOSS CIRC ZONE	Hole Size
Pressure Test 30 min 01500 psi	Set 5.5 " Casing @ 3400 "
REQ'D DEPTHBY	3400' 5.5, 15.6# WC-50, LTC
uolo sigo II	CENT BTM 5 & EVERY OTHER JT TO 2900'
Hole Size" Set" Casing @'	
	Pressure Test 30 min @ 3000 psi
Pressure Test min @ psi	_
	TING PROGRAM
IDELCE CLCINC	12 Hours Pump Rate 10 B/M
Pump Time 120 Min 0 70 or BHS	ST 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
NTERMEDIATE CASING Min. WOC Time_	Hours Pump RateB/M
Pump Time Min. 0 °F BHS	ST
RODUCTION CASING Min. WOC Time Minimum Pump Time 150 Min. @ 100	18 Hours Pump Rate 8 B/M F BHST 400 SX 35/65 POZ 'H'
WITH 6% GEL. 5% SALT25#/SX FC (12.8 PPG. 1.87 C (15.6 PPG. 1.19 CUFT/SX, 5.2 GAL/SX)	CUFT/SX. 9.9 GAL/SX). TAIL 250 SX CL 'H'. 2%CACL
CEMENT VOLUME BASED ON 9in HOLE PLUS 30% IN OH AL	ND 13% EXCESS IN CSG ANNULUS
Min. woc Time Minimum Pump Time Min. @	Hours Pump RateB/M
REMARKS:	
1. THREADLOCK BOTTOM 3 COUPLINGS ON SURF AND ALL 2. H2S AND PYT EQUIPMENT TO BE OPERATIONAL PRIOR	FLOATS. SANDBLAST BTM 500' OF 5.5 IN TO DRILLING OUT 8.625 SHOE.
	WOC 6 HOURS AND RUN TEMP SURVEY. RUN 1 INCH
AND CEMENT WITH 100 SX PLUGS UNTIL CEMENT REA 4. IF CMT DOES NOT CIRC ON PROD CSG. WOC 8 HRS AND	
REGULATORY REQUIREMENTS	
 	APPROVAL:
Exception to SWR 13 (A)(1) Required: H 9 Required:	DIV. DRLG. ENG. MIM 8-18-92
Compliance w/SWR 11 (D)(3) Required:	DIV. DRLG. OPR. MGR. VSIH 8/18/92
Rule 37 Required:	DIV. DRLG. OPR. MGR. KSIN 8/18/92 DIV. DRLG. MGR. AAB/8-92
	RHODES14

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County:					Page
Deviation Rules	s: Dist	ance to t	he Nea	rest Lease L	ine330
	Max.	Allowed	Displa	cement	329
1500' FSL, 1475	5' FWL	Γ	MUD P	ROGRAM Uni	t K, Sec. 27, T-26S, R-3
					Remarks
0 - 1190	FRESH	8.4	28		CIRC RESERVE, PH 9-10 W/LIME
1190 - 3440	BRINE	10.0	30-32	20 CC	CIRC RESERVE.PH 9-10 W/LIME
				CONDITIONS D	MUD UP IN STEEL PITS IF HOLE ICTATE. DIVISION APPROVAL REQUIRED.
STARCH/PAPER/FIBER/N	MULTISEAL F	OR SEEPAGE V	VHILE DRIL		
Circulate steel pit	s for one	hour each t	our to m	onitor gains/los	ses, when circulating reserve.
		Γ	CASING	PROGRAM	
	NOTE: PI	PE TO END U	P IN HOL	E FROM TOP TO BO	TTOM AS SHOWN
ONDUCTOR PIPE					
Hole Size 16	M				
Set 13.375 M Ca				HOTE SIZE	" Casing @'
40' 13.375, 48#, WC-				TOL A	
CHAIN PIPE WHILE DRIL					
Pressure Test	min	0ps1			
REQ'D DEPTH URFACE CASING		BI	<u> </u>		
Hole Size <u>12.2</u>	25 H			Pressure T	est min ê psi
Set_ 8.625 " Car					
1190' 8.625. 24#, WO				PRODUCTION	
4TH JOINT TO SURF. N	O CENT ABO	WE LOSS CIRC	ZONE	Hole Size	7.875 "
Pressure Test	30 min	01500 ps1		TOT. A	H Casing @ 3440
REQ'D DEPTH		BY			5# WC-50, LTC
					EVERY OTHER JT TO 2900'
Hole Size Car	<u> </u>	_		·	
Set" Car	sing @	·			
					inat 90 min 0 2000 mil
Pressure Test _	1	C Min. WOC T	EMENTII	NG PROGRAM	Pump Rate 10 B/M
URFACE CASING Pump Time 120 1.51 CUFT/SX, 7.6 G) Min. 0 AL/SX) FB 2	70 C	EMENTII Time_ PF BHST X CACL (1	NG PROGRAM 12 Hours 725 SX CLASS 'C' V	Pump Rate 10 B/M WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole
CURFACE CASING Pump Time 120 1.51 CUFT/SX, 7.6 G/	Min. 0 AL/SX) FB 2 ASING N	Min. WOC T 70 C 25 SX CL C, 2	EMENTII Fime_ PF BHST X CACL (1	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S	Pump Rate <u>10</u> B/M WITH 2% GEL, 2% CACL(14.1PPG,
URFACE CASING Pump Time 120 1.51 CUFT/SX, 7.6 G	Min. 0 AL/SX) FB 2 ASING N	Min. WOC T 70 C 25 SX CL C, 2	EMENTII Time_ PF BHST X CACL (1	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S	Pump Rate 10 B/M WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole
CURFACE CASING Pump Time 120 1.51 CUFT/SX, 7.6 G/	Min. 0 AL/SX) FB 2 ASING N	Min. WOC T 70 C 25 SX CL C, 2	EMENTII Fime_ PF BHST X CACL (1	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S	Pump Rate 10 B/M WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA	Min. 0 AL/SX) FB 2 ASING N Min. 0	Min. WOC TO COME TO CO	FIME_PF BHST	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA	Min. 0 AL/SX) FB 2 ASING N Min. 0	Min. WOC TO COME TO CO	FIME_PF BHST	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI	Min. 0 AL/SX) FB 2 ASING N Min. 0	Min. WOC TO SEE SEE SEE SEE SEE SEE SEE SEE SEE SE	Fime_PF BHST.	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours BHST 400 SX 35/	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M // S5 POZ 'H'
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 I25#/SX	Min. WOC T 70 C 25 SX CL C, 22 Min. WOC T Min. WOC T Min. WOC T Min. @ FC (12.8 PPG.	Fime_PF BHST.	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours BHST 400 SX 35/	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX	Min. WOC TO COME TO CO	Fime PF BHST CACL (1 Pime PF BHST Cime 100 F 1.87 CUF	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours BHST 400 SX 35/ T/SX, 9.9 GAL/SX).	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M // S5 POZ 'H'
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON 9in HC	Min. WOC TO COMMIN. WOC TO COMMIN. WOC TO MIN. WOC TO MIN. @ FC (12.8 PPG. NL/SX)	PIME PF BHST CACL (1 PIME PF BHST Time 100 PF 1.87 CUE	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours 18 Hours BHST 400 SX 35/ T/SX. 9.9 GAL/SX).	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M G5 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
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Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON 9in HC	Min. WOC TO COMMIN. WOC TO COMMIN. WOC TO MIN. WOC TO MIN. @ FC (12.8 PPG. NL/SX)	PIME PF BHST CACL (1 PIME PF BHST Time 100 PF 1.87 CUE	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours 18 Hours BHST 400 SX 35/ T/SX. 9.9 GAL/SX).	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate B/M Pump Rate B/M From Parte B/M
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Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASE	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON 9in HC	Min. WOC TO COMMIN. WOC TO COMMIN. WOC TO MIN. WOC TO MIN. @ FC (12.8 PPG. NL/SX)	PIME PF BHST CACL (1 PIME PF BHST Time 100 PF 1.87 CUE	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S Hours Hours 18 Hours BHST 400 SX 35/ T/SX. 9.9 GAL/SX).	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M G5 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
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Pump Time 120 1.51 CUFT/SX, 7.6 G NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASI Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EOUP	Min. 0 AL/SX) FB 2 ASING Min. 0 Min. 0 ING M	Min. WOC TO COMMIN. WOC TO COMMIN. WOC TO MIN. @ MI	PIME PF BHST PIME PF BHST PIME 100 PF BHST PIME 100 PF 1.87 CUF PRIOR TO PRIOR TO PRIOR TO	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S HOURS 18 HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST C 6 HOURS AND RUN	Pump Rate10B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M 75 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH
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Pump Time 120 1.51 CUFT/SX, 7.6 GA NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASE Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EQUP 3. IF CEMENT DOES NOT COME	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON Sin HO Cime OM 3 COUPLI PMENT TO BE OT CIRC ON S 100 SX PLUX	Min. WOC TO COMMIN. WOC TO COMMIN. WOC TO MIN. WOC TO MIN. @ FC (12.8 PPG. N./SX) MIN. WOC TO MIN. @ MIN.	PIME PF BHST PIME PF BHST PIME 100 PF BHST 1.87 CUF N OH AND PIME PRIOR TO Y DIV. WO	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST C 6 HOURS AND RUN ES SURFACE. (CLASS	Pump Rate10B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
PURFACE CASING Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASI Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EQUP 3. IF CEMENT WITH 4. IF CMT DOES NOT C	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON Sin HO Cime OM 3 COUPLI PMENT TO BE OT CIRC ON S 100 SX PLUX RC ON PROD Y REQUIREM	Min. WOC TO COME TO CO	PIME PF BHST PIME PF BHST PIME 100 PF BHST 1.87 CUF N OH AND PIME PRIOR TO Y DIV. WO	MG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST C 6 HOURS AND RUN ES SURFACE. (CLASS	Pump Rate10B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M 765 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 120 1.51 CUFT/SX, 7.6 G NTERMEDIATE CA Pump Time Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASI Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EQUP 3. IF CEMENT WITH 4. IF CMT DOES NOT C REGULATORY	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON Sin HO Cime OM 3 COUPLI PMENT TO BE OT CIRC ON S 100 SX PLUX RC ON PROD Y REQUIREM	Min. WOC TO COME TO CO	PIME PF BHST PIME PF BHST PIME 100 PF BHST 1.87 CUF N OH AND PIME PRIOR TO Y DIV. WO	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S HOURS HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST DRILLING OUT 8.625 C 6 HOURS AND RUN ES SURFACE. (CLAS UN TEMP SURVEY.	Pump RateB/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump RateB/M Pump RateB/M 75 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH IS 'C'. 2% CACL)
Pump Time 120 1.51 CUFT/SX, 7.6 G/ NTERMEDIATE CA Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASE Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EQUP 3. IF CEMENT DOES NOT COME AND CEMENT WITH 4. IF CMT DOES NOT COME REGULATORY Exception to SWR H 9 Required:	Min. 0 AL/SX) FB 2 ASING N LING N LIN	Min. WOC TO COME TO CO	PIME PF BHST PIME PF BHST PIME 100 PF BHST 1.87 CUF N OH AND PIME PRIOR TO Y DIV. WO	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S 4.8PPG, 1.32CUFT/S HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST DRILLING OUT 8.625 UN TEMP SURFACE. (CLAS UN TEMP SURVEY. APPROVAL	Pump Rate 10 B/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate B B/M Pump Rate B B/M ANNULUS Pump Rate B/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS'C'. 2% CACL)
Pump Time 120 1.51 CUFT/SX, 7.6 G NTERMEDIATE CA Pump Time Pump Time PRODUCTION CASI Minimum Pump T WITH 6% GEL. 5% SAL (15.6 PPG. 1.19 CUFT CEMENT VOLUME BASI Minimum Pump T REMARKS: 1. THREADLOCK BOTTO 2. H2S AND PVT EQUP 3. IF CEMENT WITH 4. IF CMT DOES NOT C REGULATORY	Min. 0 AL/SX) FB 2 ASING N Min. 0 ING N Cime 150 T25#/SX I/SX, 5.2 GA ED ON 9in HO Cime 1 OM 3 COUPLI PMENT TO BE OT CIRC ON S 100 SX PLUX ERC ON PROD Y REQUIREM 13 (A)(1) 11 (D)(3)	Min. WOC TO COME TO CO	PIME PF BHST PIME PF BHST PIME 100 PF BHST 1.87 CUF N OH AND PIME PRIOR TO Y DIV. WO	NG PROGRAM 12 Hours 725 SX CLASS 'C' V 4.8PPG, 1.32CUFT/S 4.8PPG, 1.32CUFT/S HOURS BHST 400 SX 35/ T/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST DRILLING OUT 8.625 UN TEMP SURFACE. (CLAS UN TEMP SURVEY. APPROVAL	Pump RateB/M MITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump RateB/M Pump RateB/M 75 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH IS 'C'. 2% CACL)

RHODES15

Lease Name:					Form N-31A (4-91
County:					Page
Deviation Rul					Line330
.250 FNL, 1300			-		329
Depth			<u> </u>		it D, Sec 27, T-26S, R-37 Remarks
				HACEL LOS	
1140 1140 - 3400	FRESH BRINE	8.4 10.0	30-32	20 CC	CIRC RESERVE,PH 9-10 W/LIME CIRC RESERVE,PH 9-10 W/LIME
					MUD UP IN STEEL PITS IF HOLE
STARCH/PAPER/FIBER	/MULTISEAL F	OR SEEPAGE	WHILE DRIL		DICTATE. DIVISION APPROVAL REQUIRED.
Circulate steel p	lts for one	hour each	tour to m	onitor gains/	losses, when circulating reserve.
			CASING	PROGRAM	
	NOTE: PI	PE TO END U	P IN HOL	FROM TOP TO	BOTTOM AS SHOWN
ONDUCTOR PIPE					
Hole Size 10 Set 13.375 " C	asing 0	40 1)	Hole Size	e" " Casing @'
40' 13.375. 48#. W	C-40 STC CEM	ENT WITH RE	ADY-MIX	Set	Casing @
CHAIN PIPE WHILE DR	ILLING SURFAC	E HOLE.		TOD 6	· · · · · · · · · · · · · · · · · · ·
Pressure Test					
REQ'D DEPTH URFACE CASING		BX_			
URFAUR UADING Hole Size 👓	.2D #		•	Pressure	Testmin @psi
Hole Size 12 Set 8.625 " C	asing @	1140	1		•
1140' 8.625, 24#, Y				PRODUCTIO	
4TH JOINT TO SURF.	NO CENT ABO	VE LOSS CIRC	ZONE	Hole Siz	e <u>7.875</u> " " Casing <u>@ 3400</u> "
Pressure Test	_30 min	@ <u>1500</u> ps1	L	TOL @	1
REQ'D DEPTH		BY_		3400' 5.5, 1	5.5# WC-50, LTC
Wells Cine	**			CENT BTM 5	& EVERY OTHER JT TO 2900'
Hole Size C	asing P				
				Pressure	Test 30 min @ 3000 psi
Pump Time 12	GAL/SX) FB 2	70	F BHST	725 SX CLASS 'C	Pump Rate 10 B/M WITH 2% GEL, 2% CACL(14.1PPG, T/SX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
Pump Time	•		°F BHST.	nour s	rump RaceB/M
Minimum Pump	Time 210	Min. e	100 F	BHST 400 SX 3	Pump Rate8_B/M 85/65 POZ 'H' X). TAIL 250 SX CL 'H'. 2%CACL
(15.6 PPG, 1.19 CUI	T/SX. 5.2 GA	L/\$X)	1.07 001	70A. 3.3 GAL70	AT. THE 200 SA OL H. 2/ACAOL
			IN OH AND	13% EXCESS IN C	SG ANNULUS
		•••	_ •		
Minimum Dumn	Time I	iin. WOC!	rime	Hours	Pump RateB/M
minimum rump	111114		г	DRST	
REMARKS:	· · · · · · · · · · · · · · · · · · ·			. <u></u>	
	TOM 3 COUPLE	NGS ON SURF	AND ALL FI	OATS, SANDRIAS	ST BTM 500' OF 5,5 IN
					25 SHOE.
					UN TEMP SURVEY. RUN 1 INCH
4. IF CMT DOES NOT					ASS 'C', 2% CACL)
REGULATO	RY REQUIREM	ENTS		•=====	••• ·
Exception to SWI	R 13 (A)(1)	Required:		APPROV	
H 9 Required:		-		DIV. I	ORLG. ENG. MG77778-18-92 ORLG. OPR. MGR. YSH 8/18/92
Compliance w/SWI		Required:		DTV. T	DIG ODD MED YSH 8/18/92
	4.			2411. 4	ALIG. OI A. MUR. CAN TOWN
Rule 37 Required	i:			ז עזמ	ORLG. MGR. 248-18-92

DIV. DRLG. MGR.

	<u>LEA</u>	St	ate:	No.: 20 NEW MEXICO	Page 2
DEATHFIRM MAIN		ance to	the Nea	rest Lease I	ine330
	Max.	Allowed	Displa	cement	329
1300' FSL, 10	O' FEL		MUD PE	OGRAM Uni	t I, Sec. 27, T-26S, R-37
	_				
Depth	Туре	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
				0045075040 0	MUD UP IN STEEL PITS IF HOLE
STARCH/PAPER/FIBE	R/MULTISEAL I	OR SEEPAGE	WHILE DRILL		ICTATE. DIVISION APPROVAL REQUIRED.
					ses, when circulating reserve.
		Г	CASING	PROGRAM	
	NOTE. D	L የመጀም ምላ ጀህመ ነ		FROM TOP TO BO	TTOW 15 SHOWN
ONDUCTOR PIPE		LFE TO END	or IN House	TAOR TO! TO BU	TION AS GHOWN
Hole Size					
Set 13.375 " (Casing @	40	•	Hole Size_	" Casing @'
40' 13.375. 48#. W	VC-40 STC CEI	MENT WITH RE	ADY-MIX	TOL @	
Prossure Test					
Pressure Test REQ'D DEPTH_					7. ·
URFACE CASING			1		
Hole Size 1	2,25 **		_	Pressure T	estmin @psi
Set_ 8.625 " (PRODUCTION	CASING
1150' 8.625. 24#.				Hole Size	7.875 "
4TH JOINT TO SURE.				Set5.5	" Casing @ 3400
Pressure Test REQ'D DEPTH_				TOL @	
_					EVERY OTHER JT TO 2900'
Hole Size	11				
Set" (Casing @		ı		
				Pressure T	est <u>30</u> min @ 3000 psi
Pressure Test					
SURFACE CASIN	G .	_		IG PROGRAM	Dumm Daha 10 D/M
1.51 CUFT/SX, 7.6 INTERMEDIATE	120 Min. 0 GAL/SX) FB 2 CASING	Min. WOC 70 225 SX CL C, Min. WOC	Time OF BHST_ 2% CACL (14 Time	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/	Pump Rate 10 B/M WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6	120 Min. 0 GAL/SX) FB 2 CASING	Min. WOC 70 225 SX CL C,	Time_ OF BHST 2% CACL (14	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole
Pump Time	120 Min. 0 GAL/SX) FB 2 CASING	Min. WOC 70 225 SX CL C, Min. WOC	Time OF BHST_ 2% CACL (14 Time	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole
Pump Time	120 Min. @ GAL/SX) FB 1 CASING Min. @	Min. WOC 70 225 SX CL C, Min. WOC	Time °F BHST. 2% CACL (14 Time °F BHST.	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA	120 Min. @ GAL/SX) FB : CASING Min. @	Min. WOC 225 SX CL C, Min. WOC	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX	Min. WOC 225 SX CL C. Min. WOC Min. WOC Min. WOC Min. WOC Min. WOC	Time °F BHST_2% CACL (14 Time °F BHST_	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours 18 Hours BHST 400 SX 35/	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG, 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 21 GALT25F/SX	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. WOC Min. WOC Min. WOC	Time °F BHST_2% CACL (14 Time °F BHST_ Time 100 °F 1.87 CUF	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours 18 Hours BHST 400 SX 35/ [/SX. 9.9 GAL/SX)	Pump RateB/M Pump RateB/M Pump RateB/M Pump RateB/M TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG, 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 21 GALT25F/SX	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. WOC Min. WOC Min. WOC	Time °F BHST_2% CACL (14 Time °F BHST_ Time 100 °F 1.87 CUF	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours 18 Hours BHST 400 SX 35/	Pump RateB/M Pump RateB/M Pump RateB/M Pump RateB/M TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG, 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30%	Time^F BHST_2% CACL (14 Time^F BHST	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG	Pump RateB/M Pump RateB/M Pump RateB/M Pump RateB/M TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG, 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. E FC (12.8 PPG AL/SX) OLE PLUS 30%	Time^F BHST	12 Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours 18 Hours BHST 400 SX 35/ [/SX. 9.9 GAL/SX).	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.5 PPG. 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30%	Time^F BHST	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.5 PPG. 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30%	Time^F BHST	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.5 PPG. 1.19 CA	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30%	Time^F BHST	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 CA CEMENT VOLUME B. Minimum Pump Minimum Pump	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. @ FC (12.8 PPG AL/SX) OLE PLUS 30% Min. WOC Min. WOC	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours HOURS HST 400 SX 35/ I/SX. 9.9 GAL/SX). HOURS HOURS HOURS	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 CA CEMENT VOLUME B Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 FALT25#/SX FT/SX. 5.2 G ASED ON 9In H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30% Min. WOC Min. @	Time	Hours 725 SX CLASS 'C' N 1.8PPG, 1.32CUFT/ Hours Hours 18 Hours BHST 400 SX 35/ [/SX. 9.9 GAL/SX). 13% EXCESS IN CSG Hours BHST	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M //65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 CA CEMENT VOLUME B Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 FALT25#/SX FT/SX. 5.2 G ASED ON 9In H	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30% Min. WOC Min. @	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours 18 Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG Hours BHST	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M //65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 CX CEMENT VOLUME B Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT EC	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9in H Time	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPG AL/SX) OLE PLUS 30% Min. WOC Min. WOC	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ Hours Hours HOURS HST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST COATS. SANDBLAST DRILLING OUT 8.625	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE.
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG. 1.19 CA CEMENT VOLUME B. Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT EC	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 FALT25F/SX JFT/SX. 5.2 G ASED ON 9In H Time Time	Min. WOC 70 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30X Min. WOC Min. @ INGS ON SURF E OPERATIONA	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/3 Hours	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M //65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (16.6 PPG, 1.19 CX CEMENT VOLUME B. Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT EG 3. IF CEMENT DOES AND CEMENT WITH	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 SALT25#/SX JFT/SX. 5.2 G ASED ON 9In H Time Time UPMENT TO B	Min. WOC 70 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30X Min. WOC Min. @ INGS ON SURF E OPERATIONA	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/3 Hours	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (16.6 PPG. 1.19 CX CEMENT VOLUME B Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT EC 3. IF CEMENT DOES NO 4. IF CMT DOES NO	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 GALT25#/SX JFT/SX. 5.2 G ASED ON 9In H Time	Min. WOC 70 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30X Min. WOC Min. @ INGS ON SURF E OPERATIONA SURFACE NOTI GS UNTIL CEM D CSG, WOC 8	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/' 1.8PPG, 1.32CUFT/' Hours Hours BHST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG Hours BHST OATS. SANDBLAST DRILLING OUT 8.625	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT EC AND CEMENT WITH 4. IF CMI DOES NO	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 SALT25#/SX FT/SX. 5.2 G ASED ON 9In H Time Time TIME TIME TIME TIME TIME TOM 3 COUPL UPMENT TO B	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30X Min. WOC Min. WOC Min. WOC Min. WOC SURFACE NOTH GS UNTIL CEM D CSG, WOC 8	Time	Hours 725 SX CLASS 'C' \ 1.8PPG, 1.32CUFT/ 1.8PPG, 1.32CUFT/ Hours Hours BHST 400 SX 35/ [/SX. 9.9 GAL/SX). 13% EXCESS IN CSG Hours BHST OATS. SANDBLAST DRILLING OUT 8.625 UN TEMP SURVEY.	WITH 2% GEL, 2% CACL(14.1PPG, SX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M /65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 CC CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT ECC AND CEMENT WITH 4. IF CMT DOES NOT REGULAT Exception to St	Min. @ GAL/SX) FB : CASING Min. @ SING Time 210 SALT25#/SX FT/SX. 5.2 G ASED ON 9In H Time Time TIME TIME TIME TIME TIME TOM 3 COUPL UPMENT TO B	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30X Min. WOC Min. WOC Min. WOC Min. WOC SURFACE NOTH GS UNTIL CEM D CSG, WOC 8	Time	Hours 725 SX CLASS 'C' N 1.8PPG, 1.32CUFT/ Hours Hours Hours HST 400 SX 35/ I/SX. 9.9 GAL/SX). 13% EXCESS IN CSG HOURS BHST COATS. SANDBLAST DRILLING OUT 8.625 C 6 HOURS AND RUN ES SURFACE. (CLASUN TEMP SURVEY.	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M 75 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 5% GEL. 5% S (15.6 PPG. 1.19 CC CEMENT VOLUME B Minimum Pump Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PYT EG AND CEMENT WITH 4. IF CMT DOES NOT REGULAT Exception to St H 9 Required:	Min. @ GAL/SX) FB : CASING Min. @ SING Time210 ALT25#/SX FT/SX. 5.2 G ASED ON 9In H Time TIME TIME TIME CHICON PROD ORY REQUIRES WR 13 (A)(1)	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30% Min. WOC Min. @ INGS ON SURF E OPERATIONA SURFACE NOTH GS UNTIL CEM D CSG, WOC 8 Required:	Time	Hours 725 SX CLASS 'C' N 1.8PPG, 1.32CUFT/ Hours	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M //65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)
Pump Time 1.61 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 CC CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PVT ECC AND CEMENT WITH 4. IF CMT DOES NOT REGULAT Exception to St	Min. @ GAL/SX) FB : CASING Min. @ SING Time210 FALT25#/SX FT/SX. 5.2 G ASED ON 9in H Time Time Time ONT CRC ON 11 CRC ON PRO ORY REQUIRES WR 13 (A)(1) WR 11 (D)(3)	Min. WOC 225 SX CL C, Min. WOC Min. WOC Min. @ FC (12.8 PPC AL/SX) OLE PLUS 30% Min. WOC Min. @ INGS ON SURF E OPERATIONA SURFACE NOTH GS UNTIL CEM D CSG, WOC 8 Required:	Time	Hours 725 SX CLASS 'C' N 1.8PPG, 1.32CUFT/ Hours	Pump RateB/M Pump RateB/M Pump RateB/M Pump Rate8_B/M 75 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M BTM 500' OF 5.5 IN SHOE. TEMP SURVEY. RUN 1 INCH SS 'C'. 2% CACL)

Lease Name:	W. H. RHOD	ES 'B' NCT-1		NO.:	Form M-31A (4-91)
County:	LEA	St	ate:	NEW MEXICO	Page 2
eviation Rul	les: Dist	ance to	the Nea	rest Lease L	ine330
450' FSL, 11					I, Sec. 27, T-26S, R-3
Depth	Туре				Remarks
0 - 1150 1150 - 3400	FRESH BRINE	8.4 10.0	28 30-32	20 CC	CIRC RESERVE.PH 9-10 W/LIME CIRC RESERVE.PH 9-10 W/LIME MUD UP IN STEEL PITS IF HOLE
					CTATE, DIVISION APPROVAL REQUIRED.
TARCH/PAPER/FIBE					ses, when circulating reserve.
Jiroulate Buool	pres for one	_			bos, which our durating reservo.
		L		PROGRAM	
ONDUCTOR PIP		LPE TO END (JP IN HOLD	FROM TOP TO BOT	TOM AS SHOWN
Hole Size	16 #				
Set_13.376 W	Casing @	40	•	Hole Size_	H Coming 0
40' 13.375. 48#. V	NC-40 STC CEN	MENT WITH RE	ADY-MIX	TOL @	Casing @
Prossure Test					
Pressure Test	~ MII	BY_	<u> </u>		
JRFACE CASING	G		,		
Hole Size1	2.25 "	<i>.</i>		Pressure To	estmin @psi
Set 8.625 "				PRODUCTION	CASING
1150' 8.625. 24#. 4TH JOINT TO SURF				Hole Size	7.875
Pressure Test				Set5.5	7.875 " Casing @ 3400
REQ'D DEPTH_	C 30 MII	BY	.	3400' 5.5, 15.5	₩C-50, LTC
				CENT BTM 5 & E	VERY OTHER JT TO 2900'
Hole Size_	# n				
set"	casing e				
				Pressure To	est 30 min @ 3000 psi
				Pressure T	est 30 min @ 3000 psi
Pressure Test	t min	0psi		Pressure To	est <u>30 min @ 3000</u> psi
				Pressure To	est <u>30 min @ 3000</u> psi
	T.C.		L CEMENTIN	IG PROGRAM	•
SURFACE CASIN	IG 1 120 Min. 0	Min. WOC	CEMENTIN Time OF BHST	IG PROGRAM 12 Hours 725 SX CLASS 'C' W	Pump Rate <u>10</u> B/M /ITH 2% GEL, 2% CACL(14.1PPG,
Pump Time 1.51 CUFT/SX, 7.6	IG 120 Min. 0 8 GAL/SX) FB 2	Min. WOC 9	CEMENTIN Time_ °F BHST. 2% CACL (14	NG PROGRAM 12 Hours 725 SX CLASS 'C' W	Pump Rate <u>10</u> B/M /ITH 2% GEL, 2% CACL(14.1PPG, X, 6.3 GAL/SX) 300% gauge hole
URFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1	Min. WOC 970 225 SX CL C, 2	CEMENTIN Time OF BHST 2% CACL (14	NG PROGRAM 12 Hours 725 SX CLASS 'C' W	Pump Rate <u>10</u> B/M /ITH 2% GEL, 2% CACL(14.1PPG,
URFACE CASIN Pump Time 1.51 CUFT/SX, 7.6	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1	Min. WOC 970 225 SX CL C, 2	CEMENTIN Time_ °F BHST. 2% CACL (14	NG PROGRAM 12 Hours 725 SX CLASS 'C' W	Pump Rate <u>10</u> B/M /ITH 2% GEL, 2% CACL(14.1PPG, X, 6.3 GAL/SX) 300% gauge hole
FURFACE CASIN Pump Time 1.51 CUFT/SX, 7.6	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1	Min. WOC 970 225 SX CL C, 2	CEMENTIN Time OF BHST 2% CACL (14	NG PROGRAM 12 Hours 725 SX CLASS 'C' W	Pump Rate <u>10</u> B/M /TTH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1	Min. WOC 9 70 225 SX CL C, 2 Min. WOC	CEMENTIN Time_ °F BHST. 2% CACL (14 Time_ °F BHST.	IG PROGRAM 12 Hours 725 SX CLASS 'C' W 1.8PPG, 1.32CUFT/S Hours	Pump Rate10B/M /ITH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole Pump RateB/M
PURFACE CASIN Pump Time 1.61 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA	IG 120 Min. 0 B GAL/SX) FB 2 CASING Min. 0	Min. WOC	CEMENTIN Time OF BHST. 2% CACL (1' Time OF BHST.	IG PROGRAM 12 Hours 725 SX CLASS 'C' W 1.8PPG, 1.32CUFT/S Hours	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, X, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
PURFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1 Min. 0 ASING 1 Time 210	Min. WOC 9 225 SX CL C, 2 Min. WOC 9	CEMENTIN Time OF BHST. 2% CACL (1' Time OF BHST.	HOURS HOURS HOURS HOURS HOURS HOURS HOURS HOURS HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 65 POZ 'H'
URFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump	IG 120 Min. 0 6 GAL/SX) FB 2 CASING 1 Min. 0 ASING 1 Time 210 SALT. 25#/SX	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG	CEMENTIN Time OF BHST. 2% CACL (1' Time OF BHST.	HOURS HOURS HOURS HOURS HOURS HOURS HOURS HOURS HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, X, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M
PURFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 CA	IG 120 Min. 0 5 GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG	CEMENTIN Time_ °F BHST. 2% CACL (1' Time_ °F BHST. Time_ 100 °F	### Hours ###################################	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 65 POZ 'H'
PURFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 CA	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 66 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
URFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 CA	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 86 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
URFACE CASIN Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, IX, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 66 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 66 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.51 CUFT/SX, 7.6 INTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C)	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 86 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON 9in H	Min. WOC 9 225 SX CL C, 2 Min. WOC 9 Min. WOC 9 Min. WOC 9 Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30%	CEMENTING Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF	HOURS	Pump Rate 10 B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump Rate B/M Pump Rate 8 B/M 66 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON SIN HASED ON S	Min. WOC 10 225 SX CL C, 2 Min. WOC 10 Min. WOC 10 Min. @ FC (12.8 PPG AL/SX) OLE PLUS 30X Min. WOC 10 Min. @	CEMENTIN Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF N CH AND Time °F	HOURS	Pump Rate10B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M 65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0 Min. 0 Time 210 SALI. 25#/SX UFT/SX. 5.2 GASED ON SIN HASED ON S	Min. WOC 10 225 SX CL C, 2 Min. WOC 10 Min. WOC 10 Min. @ FC (12.8 PPG AL/SX) OLE PLUS 30X Min. WOC 10 Min. @	CEMENTIN Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF N CH AND Time °F	HOURS	Pump Rate10B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M 85 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M
Pump Time 1.51 CUFT/SX, 7.6 NTERMEDIATE Pump Time Pump Time PRODUCTION CA Minimum Pump WITH 6% GEL. 5% S (15.6 PPG. 1.19 C) CEMENT VOLUME B Minimum Pump REMARKS: 1. THREADLOCK BO 2. H2S AND PYT EG	IG 120 Min. 0 B GAL/SX) FB 2 CASING 1 Min. 0	Min. WOC 70 225 SX CL C, 2 Min. WOC Min. WOC Min. Q FC (12.8 PPG AL/SX) OLE PLUS 30X Min. WOC Min. Q	CEMENTIN Time °F BHST. 2% CACL (1' Time °F BHST. Time 100 °F 1.87 CUF N OH AND Time F AND ALL FI PRIOR TO	HOURS	Pump Rate10B/M //TH 2% GEL, 2% CACL(14.1PPG, ix, 6.3 GAL/SX) 300% gauge hole Pump RateB/M Pump Rate8_B/M 65 POZ 'H' TAIL 250 SX CL 'H'. 2%CACL ANNULUS Pump RateB/M STM 500' OF 5.5 IN SHOE.
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P 369 428 059



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

	Postage	\$,75
	Certified Fee	\$,75
	Special Delivery Fee	
	Restricted Delivery Fee	
1991	Return Receipt Showing to Whom & Date Delivered	100
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PS Form 3800, June 1991	Posyman Polypare	
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Smith & Marrs, Inc. 1110 N Big Spring Midland, Texas 79701

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,	Certified Fee	1.00
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U, J	TOTAL restage & Fees	\$2.75
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RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

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

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ņ	Postage	s.75
	Certified Fee	1.00
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ر ک	Return Receipt showing to whom and Date Delivered	1.00
e 198	Return Receipt showing to whom, Date, and Address of Delivery	
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P. 369 428 056



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

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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	\$.75
	Certified Fee	1.00
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RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

(See Reverse)

☆ U.S.G.P.O. 1989-234-555	Sent to Tom & Evelyn L	inelan
1989.	Street and No. 802. S. Main	
S.G.P.O	P.O., State and ZIP Code Midland, TX 79	
ů.	Postage	s 15
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RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

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

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

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AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

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
Augus	st 24	, 199

and ending with the issue dated

General Manager Sworn and subscribed to before

day of

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 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 Locat

ion(s):
8- Unit Letter E, 1875
FNL & 765 FWL, Section
27, 726S, 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 Locat-

6 — Unit Letter 1, 1980 FSL & 660 FEL, Section 27, T26S, R37E 13 — Unit Letter 0, 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 max-imum 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 Cpnservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days of this mubilication. 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.

-2-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

SEAL

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

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