Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
P.O. Box 1980
Hobbs, NM 88240

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.

6. If Indian, Alottee or Tribe Name

7. If Unit or CA, Agreement Designation

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

8. Well Name and Number
UNITED ROYALTY 'A'
5

2. Name of Operator
TEXACO EXPLORATION & PRODUCTION INC.

3. Address and Telephone No.
205 E. Bender, HOBBS, NM 88240 397-0432

9. API Well No.
30-025-33533

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Unit Letter F : 1980 Feet From The NORTH Line and 1980 Feet From The WEST Line Section 19 Township 24-S Range 38-E

10. Field and Pool, Exploaratory Area
East Fowler Ellenberger, Lower Fusselman

11. County or Parish, State
LEA , NEW MEXICO

12. Check Appropriate Box(s) To Indicate Nature of Notice, Report, or Other Data

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Atlering Casing	☐ Conversion to Injection
	☐ OTHER:	☒ Dispose Water

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

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

Propose to dispose of water from the United Royalty #5 into the West Dollarhide Drinkard Battery.

Please find attached: Water Production & disposal information, Administrative Order # WFX-669, water analysis.

RECEIVED
1997 MAY 20 P 12: 26
BUREAU OF LAND MGMT.
HOBBS, NEW MEXICO

SUBJECT TO
LIKE APPROVAL
BY STATE

APPROVED
MAY 28 1997
AUTHORIZED OFFICER, MINERALS
MANAGEMENT

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

SIGNATURE Paula S. Ives TITLE Engineering Assistant DATE 5/16/97

TYPE OR PRINT NAME Paula S. Ives

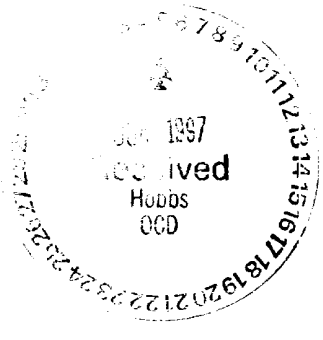
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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

DeSoto/Nichols 12-93 ver 1.0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Water Production & Disposal Information

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Blinebry, Tubb, Drinkard, Abo, Ellenberger

2. Amount of water produced from all formations in barrels per day. 5,000

3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates. (one sample will suffice if the water is commingled)

4. How water is stored on the lease. Tanks

5. How water is moved to the disposal facility. Via pumps and separator

6. Identify the Disposal Facility by:

   A. Facility operators name. Texaco Exploration & Production Inc.

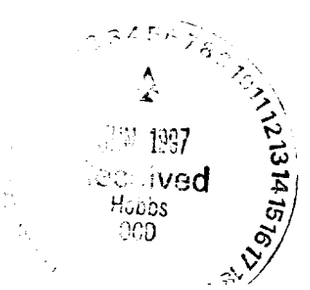
   B. Name of facility or well name & number. West Dollarhide Drinkard Unit Central Battery

   C. Type of facility or well (WDW)(WIW) etc. WIW

   D. Location by 1/4 1/4 NW/NW section 32 township 24S range 38E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, 414 West Taylor, Hobbs, NM 88240, the above required information on a Sundry Notice 3160-5. Submit 1 original and 5 copies, within the required time frame. (This form may be used as an attachment to the Sundry Notice.) Call me at 505-393-3612 if you need to further discuss this matter.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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

ADMINISTRATIVE ORDER NO. WFX-669

APPLICATION OF TEXACO EXPLORATION & PRODUCTION, INC. TO EXPAND ITS WATERFLOOD PROJECT IN THE DOLLARHIDE TUBB-DRINKARD POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3768 as amended, Texaco Exploration & Production, Inc. has made application to the Division on April 6, 1995 for permission to expand its West Dollarhide Drinkard Unit Waterflood Project in the Dollarhide Tubb-Drinkard Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

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

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

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

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

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

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Texaco Exploration & Production, Inc., be and the same is hereby authorized to inject water into the Tubb and Drinkard formations at approximately 6382 feet to approximately 6860 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the wells described on Exhibit "A" attached hereto, for purposes of secondary recovery.


Received
HOBBS
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IT IS FURTHER ORDERED THAT:

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

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

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

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

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

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

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

The subject wells shall be governed by all provisions of Division Order No. R-3768, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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

The injection authority granted herein shall terminate one year after the effective date of this order unless the operator has commenced injection operations in accordance with Division Rule 701.

WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs

EXHIBIT "A"
DIVISION ORDER NO. WFX-669
WEST DOLLARHIDE DRINKARD UNIT WATERFLOOD PROJECT
APPROVED INJECTION WELLS

Well Name	Well No.	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Injection Pressure
[illegible]VDDU	80	330' FNL & 330' FEL	A	6-25S-38E	6382' - 6860'	6300'	2 3/8"	1276 PSIG
[illegible]WDDU	150	650' FSL & 540' FEL	P	31-24S-38E	6400' - 6600'	6350'	2 3/8"	1276 PSIG
[illegible]WDDU	151	640' FNL & 2000' FEL	B	5-25S-38E	6400' - 6600'	6350'	2 3/8"	1276 PSIG
[illegible]WDDU	152	600' FSL & 760' FWL	M	29-24S-38E	6400' - 6600'	6350'	2 3/8"	1276 PSIG

*W[illegible]ls to be drilled.

NO[illegible]E: Proposed injection intervals for Well Nos. 150, 151 and 152 are approximate. Actual intervals may be slightly different.

5/14 ISAAC - NO PROBLEMS COMMINGLING

UNICHEM

A Division of BJ Services Company

Lab Test No : 15890

Texaco

Sample Date : 5/7/97
Lab Date In : 5/8/97
Lab Date Out : 5/13/97

Water Analysis

Listed below please find water analysis report from : United Royalties A #75

Specific Gravity :		1.043
Total Dissolved Solids :		60111
pH :		6.00
Conductivity	(µmhos):	
Ionic Strength :		1.135

Cations:		mg/l
Calcium	(Ca++):	2280
Magnesium	(Mg++):	510
Sodium	(Na+):	19987
Iron	(Fe++):	0.20
Dissolved Iron	(Fe++):	
Barium	(Ba++):	2.30
Strontium	(Sr):	
Manganese	(Mn++):	0.30
Resistivity :		15 @ 72

Anions:		
Bicarbonate	(HCO3-):	683
Carbonate	(CO3--):	0
Hydroxide	(OH-):	0
Sulfate	(SO4--):	2650
Chloride	(Cl-):	34000

Gases:		ppm		
Carbon Dioxide	(CO2):	250.00	Oxygen	(O2):
Hydrogen Sulfide	(H2S):	255.00		

Scale Index (positive value indicates scale tendency) a blank indicates some tests were not run

Temperature		CaCO3 SI	CaSO4 SI
86F	30.0C	-0.52	-8.70
104F	40.0C	-0.31	-8.70
122F	50.0C	-0.05	-8.27
140F	60.0C	0.30	-7.62
168F	70.0C	0.63	-6.75
176F	80.0C	0.99	-4.75

Comments :

If you have any questions or require further information, please contact us.
Sincerely,

Laboratory Technician

cc: Isaac Huskey
Jay Brown

P.O. Box 61427, Midland, TX 79711 • 4312 S. County Rd. 1298, Midland, TX 79765
Office: (915) 563-0241 • Fax: (915) 563-0243

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Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : Texaco, Inc.
Date : 05-13-1997
Location: WDDU - United Royalty (on 05-13-1997)

	Sample 1
Specific Gravity:	1.044
Total Dissolved Solids:	61490
pH:	6.00
IONIC STRENGTH:	1.174

		me/liter	mg/liter
CATIONS:			
Calcium	(Ca+2)	136	2710
Magnesium	(Mg+2)	51.5	626
Sodium	(Na+1)	865	19900
Iron (total)	(Fe+2)	0.009	0.250
Barium	(Ba+2)	0.033	2.30
Manganese	(Mn+2)	0.013	0.350
ANIONS:			
Bicarbonate	(HCO3-1)	11.4	695
Carbonate	(CO3-2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO4-2)	53.5	2570
Chloride	(Cl-1)	987	35000
DISSOLVED GASES			
Carbon Dioxide	(CO2)		213
Hydrogen Sulfide	(H2S)		238
Oxygen	(O2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F	30[C	-0.52	-4.6
104[F	40[C	0.12	-4.6
122[F	50[C	0.41	-4.6
140[F	60[C	0.74	-4.6
168[F	76[C	1.3	-1.2
176[F	80[C	1.5	-1.2

Comments:
CC: Jay Brown
75% United Royalty

25% WDDU

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Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : Texaco, Inc.
Date : 05-13-1997
Location: WDDU - United Royalty (on 05-13-1997)

	Sample 1
Specific Gravity:	1.045
Total Dissolved Solids:	62870
pH:	6.00
IONIC STRENGTH:	1.215

		me/liter	mg/liter
CATIONS:			
Calcium	(Ca+2)	157	3140
Magnesium	(Mg+2)	61.0	741
Sodium	(Na+1)	861	19800
Iron (total)	(Fe+2)	0.011	0.300
Barium	(Ba+2)	0.033	2.30
Manganese	(Mn+2)	0.015	0.400
ANIONS:			
Bicarbonate	(HCO3-1)	11.6	708
Carbonate	(CO3-2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO4-2)	51.8	2490
Chloride	(Cl-1)	1020	36000
DISSOLVED GASES			
Carbon Dioxide	(CO2)		175
Hydrogen Sulfide	(H2S)		221
Oxygen	(O2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F	30[C	-0.31	-1.0
104[F	40[C	0.33	-1.0
122[F	50[C	0.62	-1.0
140[F	60[C	0.96	-1.0
168[F	76[C	1.5	2.4
176[F	80[C	1.7	2.4

Comments:
cc: Jay Brown
50/50 mixture

Company : Texaco, Inc.
Date : 05-13-1997
Location: WDDU - United Royalty (on 05-13-1997)

	Sample 1
Specific Gravity:	1.046
Total Dissolved Solids:	64250
pH:	6.00
IONIC STRENGTH:	1.257

		me/liter	mg/liter
CATIONS:			
Calcium	(Ca+2)	179	3570
Magnesium	(Mg+2)	70.5	857
Sodium	(Na+1)	857	19700
Iron (total)	(Fe+2)	0.013	0.350
Barium	(Ba+2)	0.033	2.30
Manganese	(Mn+2)	0.016	0.450
ANIONS:			
Bicarbonate	(HCO3-1)	11.8	720
Carbonate	(CO3-2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO4-2)	50.2	2410
Chloride	(Cl-1)	1040	37000
DISSOLVED GASES			
Carbon Dioxide	(CO2)		138
Hydrogen Sulfide	(H2S)		204
Oxygen	(O2)		0

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F	30[C	-0.26	1.8
104[F	40[C	0.38	1.8
122[F	50[C	0.67	1.8
140[F	60[C	1.0	1.8
168[F	76[C	1.6	5.1
176[F	80[C	1.7	5.1

Comments:
cc: Jay Brown
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25% United Royalty
75% WDDU