



Texaco USA

Environmental  
Planning & Compliance  
3301 Park Lane

January 27, 1987

State of New Mexico  
Department of Energy & Minerals  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. David Catanach

RE: Conversion to Salt Water Disposal  
A. H. Blinebry Fed NCT-1 Well No. 11  
Unit Letter L, Sec. 28, T-22-S, R-38-E  
Lea County, New Mexico

Gentlemen:

Texaco Inc. respectfully requests administrative approval of the referenced application by provisions provided in Rule 701.B.3. and 701.D.

In support of this application, you will find attached:

- 1) Form C-108
- 2) Map identifying wells and leases within 2-mile radius.
- 3) Map identifying the 1/2 mile radius area of review.
- 4) Table containing data on wells in area of review.
- 5) Schematic of a plugged well in the area of review.
- 6) Injection well data sheet.
- 7) List of affected offset operators and surface owner.
- 8) Letters mailed to offset operators and surface owner notifying them of this application.
- 9) Chemical analysis of waters to be injected.
- 10) Affidavit of publication and copy of legal notice.

Average injection rate into the well will be 250 barrels per day with a maximum rate of 350 barrels per day. Average injection pressure will be 600 PSI and the maximum injection pressure will be 990 PSI. The well will be stimulated with 2500 gallons 15% HCL acid. Injection will be into the San Andres formation at a depth of 4952' to 5030'. A chemical analysis of the disposal zone formation water is not available.

Mr. David Catanach

-2-

January 27, 1987

The Ogallala Aquifer lies above the disposal zone at approximately 90'-150' below the surface. There are no fresh water wells producing from this aquifer within a one-mile radius of the subject well.

Texaco has examined available geologic and engineering data and found no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

Your timely consideration of this application will be greatly appreciated.

Yours very truly,

*L.J. Seeman*

L. J. Seeman  
District Petroleum Engineer

LDR:JRB

Attachments

## APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  Yes  No

II. Operator: Texaco Inc.

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

Contact party: L. J. Seeman Phone: 505-393-7191

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project?  Yes  No  
If yes, give the Division order number authorizing the project \_\_\_\_\_.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or Closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\* VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: L. J. Seeman Title Dist. Petr. Engr.

Signature: L. J. Seeman Date: January 27, 1987

\* 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.

## III. WELL DATA

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

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

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

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

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

## XIV. PROOF OF NOTICE

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

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

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

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

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

OFFSET OPERATORS WITHIN 1/2-MILE OF  
A. H. BLINEBRY FED. NCT-1 WELL NO. 11

Bravo Energy, Inc.  
P. O. Box 2160  
Hobbs, New Mexico 88240

Chevron U.S.A., Inc.  
P. O. Box 670  
Hobbs, New Mexico 88240

SURFACE OWNER

Mr. Tom Lineberry  
P. O. Box 1536  
Midland, Texas 79702



Texaco USA

P.O. Box 728  
Raton NM 88240  
505-937-1191

January 27, 1987

Mr. Tom Lineberry  
P. O. Box 1536  
Midland, Texas 79702

RE: Conversion to Salt Water Disposal  
A. H. Blinebry Fed NCT-1 Well No. 11  
Lea County, New Mexico

Dear Sir:

In compliance with New Mexico Oil Conservation Division Rule 701.B.2, Texaco Inc. hereby notifies you that an application to convert the subject well to a salt water disposal well has been submitted to the Oil Conservation Division. The water will be injected into the San Andres formation at a depth of 4952-5030'. The well is located 1980' FSL and 330' FWL of Section 28, T-22-S, R-38-E.

Only the surface area absolutely required will be used in operating the well. The well is cased and cemented in such a way that all surface and subsurface fresh waters will be protected.

Objections to this request or a request for hearing should be filed with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days following receipt of this letter.

A copy of the application and a plat are attached for your information. If there are any questions, please do not hesitate to call this office.

Yours very truly,

A handwritten signature in black ink, appearing to read "J. A. Schaffer".

J. A. Schaffer  
District Operations Manager

LDR:JRB

Attachments



Texaco USA

P. O. Box 2088  
Santa Fe, NM 87501  
505/437-7740

January 27, 1987

Chevron U.S.A., Inc.  
P. O. Box 670  
Hobbs, New Mexico 88240

RE: Conversion to Salt Water Disposal  
A. H. Blinebry Fed NCT-1 Well No. 11  
Unit Letter L, Sec. 28, T-22-S, R-38-E  
Lea County, New Mexico

Gentlemen:

This is to notify you, as an Offset Operator, that Texaco Inc. is requesting the New Mexico Oil Conservation Division to approve injection of water into the San Andres formation at the depth of 4952'-5030' into the subject well. A copy of Form C-108 and a plat are attached.

Objections to this request or a request for hearing should be filed with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico, 87501, within fifteen (15) days following receipt of this letter.

Yours very truly,

A handwritten signature in cursive script that reads "L. J. Seeman".

L. J. Seeman  
District Petroleum Engineer

LDR:JRB

Attachments



Texaco USA

P.O. Box 728  
Hobbs NM 88240  
505 393-7001

January 27, 1987

Bravo Energy, Inc.  
P. O. Box 2160  
Hobbs, New Mexico 88240

RE: Conversion to Salt Water Disposal  
A. H. Blinebry Fed NCT-1 Well No. 11  
Unit Letter L, Sec. 28, T-22-S, R-38-E  
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Yours very truly,

A handwritten signature in cursive script that appears to read "L.J. Seeman".

L. J. Seeman  
District Petroleum Engineer

LDR:JRB

Attachments

BLK. A-39

T  
22  
S

32°25'

32800

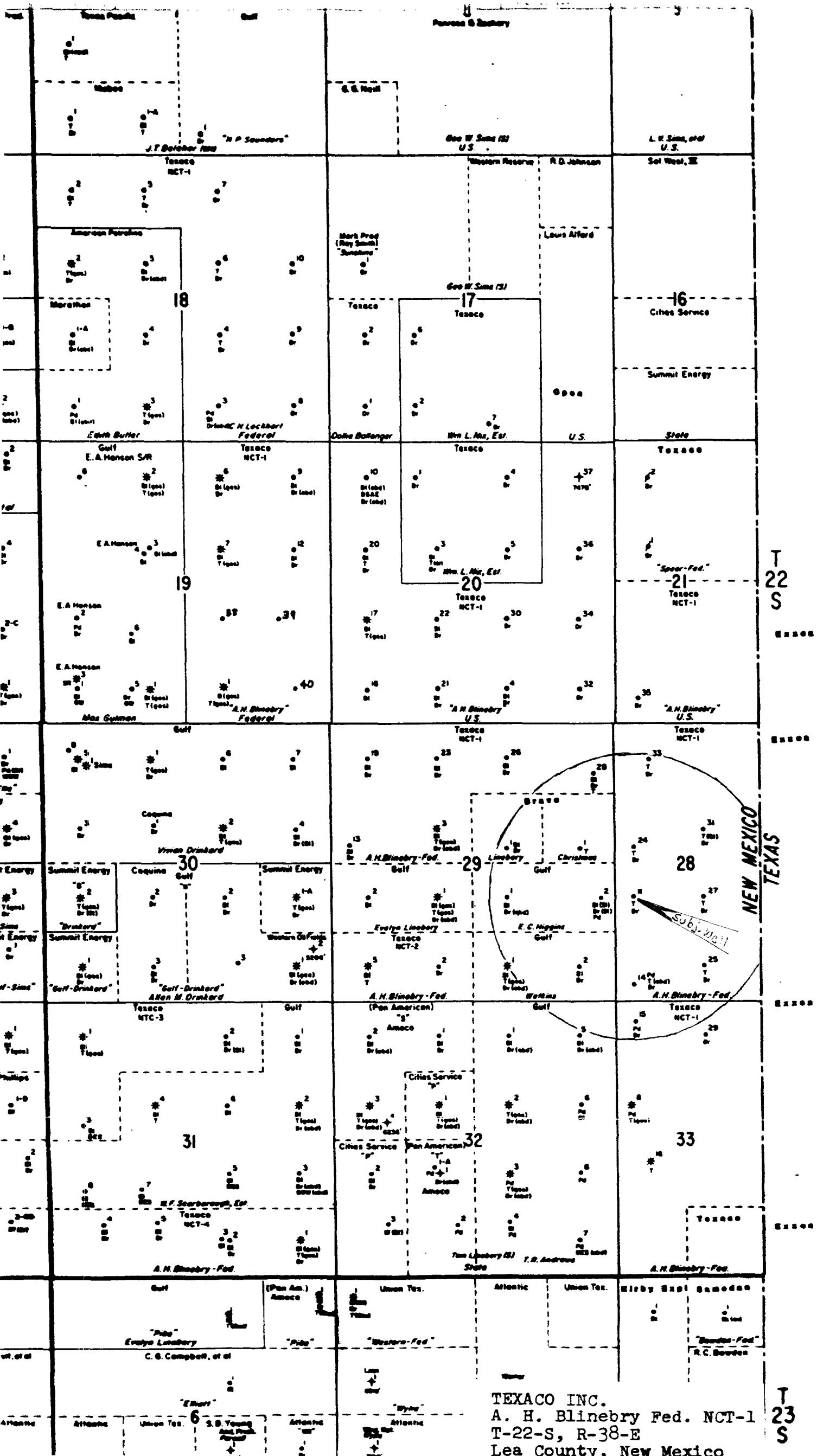
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TEXACO INC.  
A. H. Blinebry Fed. NCT-1  
T-22-S, R-38-E  
Lea County, New Mexico

Wells Within 2640' Radius of A. H. Blinebry Fed NCT-1 Well No. 11

Formation & No.	Formation	Total Depth	Date Drilled	Current Status	Hole Size	Casing Size	Depth	Cement (sxs)	TOC	Determined By
Blinebry Fed NCT-1 Well No. 14	Drinkard Paddock	7,200'	9/14/61	Oil - Active	12-1/4" 8-3/4"	9-5/8"	700 6922, 400	Surface 3462'	Circulated Calculated	
Well No. 15	Drinkard	7,242'	3/15/62	Oil - Active	11" 7-7/8" 7-7/8"	8-5/8" 2-7/8" 2-3/8"	1350' 6864' 7242'	Surface 1200>	Circulated Survey	
Well No. 24	Tubb Drinkard	7,300'	4/27/65	Oil - Active	11" 7-7/8" 7-7/8"	8-5/8" 2-7/8" 2-7/8"	1396' 7289' 7298'	Surface 1000>	Circulated Calculated	
Well No. 25	Drinkard Tubb	7,250'	6/02/65	Oil - Active	11" 7-7/8" 7-7/8"	8-5/8" 2-7/8" 2-7/8"	1402' 7245' 7248'	Surface 1000>	Circulated Calculated	
Well No. 27	Tubb Drinkard	7,300'	8/01/65	Oil - Active	11" 7-5/8" 7-5/8"	8-5/8" 2-7/8" 2-7/8"	1405' 7248' 7300'	Surface 1000>	Calculated Calculated	
Well No. 28	Blinebry Tubb	7,310'	8/28/65	Oil - Active	11" 7-7/8"	8-5/8" 3 Strings	1315' 7310'	Surface 1050	Calculated Calculated	
Well No. 31	Drinkard	7,330'	11/05/65	Oil - Active	11" 7-7/8" 7-7/8"	8-5/8" 2-7/8" 2-7/8"	1422' 7315' 7316'	Surface 530	Calculated Calculated	
Well No. 33	Drinkard Tubb	7,350'	12/13/65	Oil - Active	11" 7-7/8" 7-7/8"	8-5/8" 2-7/8" 2-7/8"	1395' 7350' 7345'	Surface 530 1000>	Calculated Calculated	
- Higgins Well No. 1	Blinebry Drinkard	7,003'	7/13/45	Oil - Active	17" 12-1/2" 8-3/4"	13-3/8" 9-5/8" 7"	307' 2938' 6910'	Surface 1325 700	Circulated N/A N/A	
Well No. 2	Paddock	7,200'	4/14/62	Oil - Active	12-1/4" 8-3/4"	9-5/8" 7"	1362' 7200'	Surface 1055	Circulated Temp. Survey	
- Watkins Well No. 1	Drinkard	7,000'	9/15/45	Oil - Active	17-1/2" 12-1/4" 8-3/4"	13-3/8" 9-5/8" 7"	311' 2930' 6901'	Surface 1300 700	Circulated N/A N/A	
Well No. 2	Drinkard Blinebry	7,150'	4/13/61	Oil - Active	12-1/4" 8-3/4"	9-5/8" 7"	1349' 7150'	Surface 1250	Circulated Circulated	
GY - XMAS Well No. 1	Tubb	7,300'	10/08/65	P & A	12-1/4" 8-3/4"	9-5/8" 7"	1360' 7300'	Surface 590 600	Calculated Calculated	
GY - Lineberry Well No. 1	Blinebry	7,092'	5/18/57	Oil - Active	15-1/2" 11" 7-7/8"	13-3/8" 8-5/8" 5-1/2"	280 2925' 6929'	Surface 200 1400 450	N/A Circulated N/A	

LOCATION \_\_\_\_\_ EST. NO. \_\_\_\_\_ BY \_\_\_\_\_

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

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

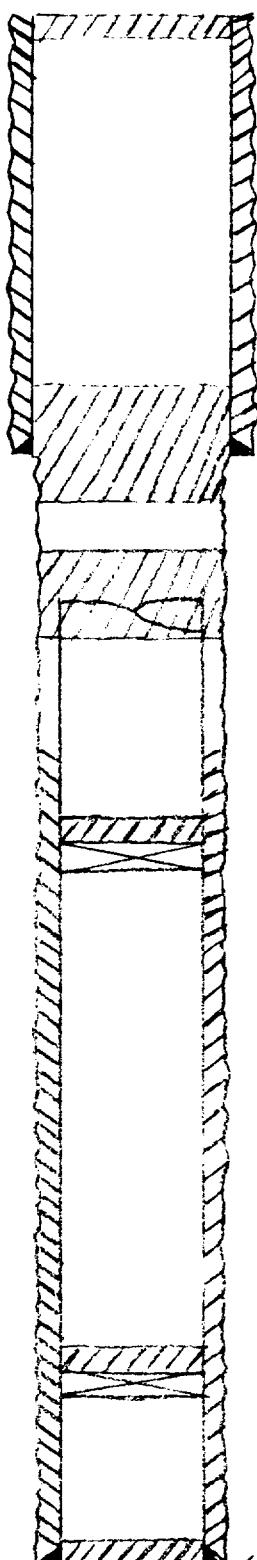
## SCHEMATIC OF PLUGGED WELL

Moranco  
Xmas #/  
Unit H, Sec. 29, T-22-S, R-38-E  
2310' FNL + 660' FEL

125 sx plug  
from 1500'-1200'

75 sx plug across  
stub of 7" @ 1995'

P.B.TD 7260'  
TD 7300'



surface plug

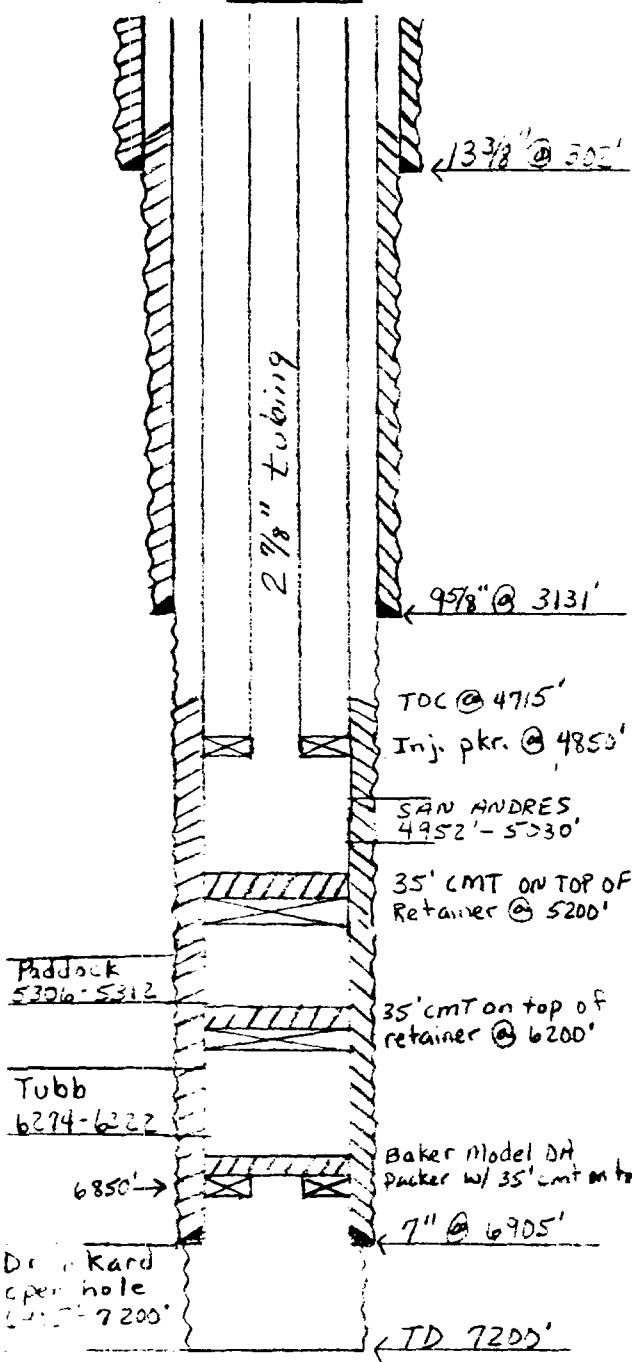
12 1/4" hole, 9 5/8 csq @ 1360'  
cmt. w/ 590 sx5 TOC calc  
@ surface (60% fillup)

Bridge Plug @ 4200' w/ 36'  
cmt. on top

Bridge Plug @ 6800' w/ 36'  
cmt. on top

8 3/4" hole, 7" csq @ 7300'  
cmt. w/ 600 sx5 TOC calc  
@ 4003' (70% fillup)

## INJECTION WELL DATA SHEET

Texaco Inc.  
OPERATORA. H. Blinebry Fed NCT-1  
LEASE11  
WELL NO.1980' FSL & 330' FWL,  
FOOTAGE LOCATION28  
SECTION22-S  
TOWNSHIP38-E  
RANGESchematicTabular Data

P O. BOX 1468  
MONAHANS, TEXAS 79756  
PH 843-3234 OR 563-1040

Martin Water Laboratories, Inc.

708 W INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Greg Bowers  
P.O. Box 1065, Eunice, NM 88231

LABORATORY NO. 586348  
SAMPLE RECEIVED 5-28-86  
RESULTS REPORTED 6-6-86

COMPANY Texaco, Inc. LEASE A.H. Blinebry Federal

FIELD OR POOL

SECTION   BLOCK   SURVEY   COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from Blinebry Federal NCT-1 tank battery #4 (heater-treater).

NO. 2 Produced water - taken from Blinebry Federal NCT-1 tank battery #6 (heater-treater).

NO. 3 Produced water - taken from Blinebry Federal NCT-1 tank battery #10 (heater-treater).

NO. 4 Produced water - taken from Blinebry Federal NCT-1 tank battery #11 (heater-treater).

REMARKS: Samples taken 5-28-86

	CHEMICAL AND PHYSICAL PROPERTIES			
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1155	1.1074	1.0936	1.0806
pH When Sampled	7.4	7.5	7.7	6.7
pH When Received	7.06	7.17	7.46	6.74
Bicarbonate as HCO <sub>3</sub>	500	555	403	915
Supersaturation as CaCO <sub>3</sub>	20	—	35	30
Undersaturation as CaCO <sub>3</sub>	—	15	—	—
Total Hardness as CaCO <sub>3</sub>	31,250	26,750	24,500	12,400
Calcium as Ca	7,040	5,840	5,680	3,020
Magnesium as Mg	3,317	2,952	2,503	1,179
Sodium and/or Potassium	54,772	48,839	46,182	41,772
Sulfate as SO <sub>4</sub>	1,641	2,199	1,344	3,194
Chloride as Cl	105,108	92,325	87,353	70,309
Iron as Fe	1.9	6.5	0.92	0.02
Barium as Ba	0	0	0	0
Turbidity, Electric	40	36	21	18
Color as Pt	61	16	63	37
Total Solids, Calculated	172,378	152,710	143,465	120,388
Temperature °F.	60	69	81	61
Carbon Dioxide, Calculated	33	29	13	302
Dissolved Oxygen, Winkler	0.0	0.0	0.0	0.0
Hydrogen Sulfide	2.5	0.8	2.8	562
Resistivity, ohms/m at 77° F.	0.063	0.069	0.072	0.082
Suspended Oil	14	37	9	73
Filtrable Solids as mg/l	46.8	39.5	29.0	10.4
Volume Filtered, ml	205	1,650	900	2,880

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

Waters checked will be ones to be injected.

P. O. BOX 1468  
MONAHANS, TEXAS 79756  
PH 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Greg Bowers  
P.O. Box 1065, Eunice, NM 88231

LABORATORY NO. 586348 (Page 2)

SAMPLE RECEIVED 5-28-86

RESULTS REPORTED 6-6-86

COMPANY Texaco, Inc.

LEASE A.H. Blinebry Federal

FIELD OR POOL

SECTION   BLOCK   SURVEY   COUNTY Lea STATE Texas

SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Produced water - taken from Blinebry Federal NCT-1 tank battery #13 (free water knockout).  
NO. 2 Produced water - taken from Blinebry Federal NCT-2 tank battery #2 (heater-treater).  
NO. 3 Produced water - taken from Blinebry Federal NCT-3 tank battery #5 (free water knockout).  
NO. 4 Produced water - taken from Blinebry Federal NCT-3 tank battery #8 (heater-treater).

REMARKS: Samples taken 5-28-86

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0431	1.1278	1.1184	1.1159
pH When Sampled	7.4	7.4	7.3	7.3
pH When Received	7.37	7.12	6.73	6.98
Bicarbonate as HCO <sub>3</sub>	500	271	439	317
Supersaturation as CaCO <sub>3</sub>	35	0	—	16
Undersaturation as CaCO <sub>3</sub>	—	—	15	—
Total Hardness as CaCO <sub>3</sub>	9,500	36,500	37,750	34,500
Calcium as Ca	2,280	9,400	9,800	8,800
Magnesium as Mg	923	3,159	3,220	3,038
Sodium and/or Potassium	18,253	59,436	53,422	50,119
Sulfate as SO <sub>4</sub>	1,641	1,213	1,265	960
Chloride as Cl	33,379	116,471	107,949	100,847
Iron as Fe	0.38	1.4	103	31.0
Barium as Ba	0	0	0	0
Turbidity, Electric	8	15	14	13
Color as Pt	10	21	79	26
Total Solids, Calculated	56,977	189,950	176,095	164,080
Temperature °F.	71	71	72	79
Carbon Dioxide, Calculated	33	18	36	26
Dissolved Oxygen, Winkler	0.0	0.0	0.0	0.0
Hydrogen Sulfide	32.5	1.6	0.0	0.0
Resistivity, ohms/m at 77° F.	0.145	0.060	0.062	0.065
Suspended Oil	5	14	6	7
Filtrable Solids as mg/l	11.8	5.6	23.2	21.6
Volume Filtered, ml	1,800	4,000	1,100	1,380

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

Waters checked will be ones to be injected.

**AFFIDAVIT OF PUBLICATION**

State of New Mexico,  
County of Lea.

I,

Robert L. Summers

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

January 20, 1987  
and ending with the issue dated

January 20, 1987

Robert L. Summers  
Publisher.

Sworn and subscribed to before

me this 20 day of

January, 1987  
Vera Murphy  
Notary Public.

My Commission expires \_\_\_\_\_

Dec. 14, 1988  
(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.

113

LEGAL NOTICE

JANUARY 20, 1987

Notice is hereby given of the application of Taco to the Attention: C.J. Seaman District Manager, Section 2, P.O. Box 1726, Hobbs, New Mexico, 85240, Telephone (505) 333-7194, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for appraisal of the following injection well(s) for the purpose of salt water disposal:

Well(s) No(s).: 11  
Lessee/Unit Name: A.H.  
Bimonthly Product: 1  
Location: Unit Letter: L  
Section 24, T-22S, R-30E, Lea County, New Mexico.

The injection formation is San Andres at a depth of 3000 feet below the surface of the ground. Expected maximum injection rate is 450 barrels per day, and expected maximum injection pressure is 990 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2000, Santa Fe, New Mexico, 87501, within fifteen (15) days of this publication.



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

TONEY ANAYA  
GOVERNOR

January 30, 1987

POST OFFICE BOX 1980  
HOBBY, NEW MEXICO 88240  
(505) 393-6161

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

RE : Proposed:

MC  
DHC  
NSL  
NSP  
SWD      XXX  
WFX  
PMX

Gentlemen:

I have examined the application for the:

Texaco Inc.   A.H. Blinebry   Fed NCT-1   #11-L   28-22-38  
Operator                    Lease & Well   No.   Unit            S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,

*Jerry Sexton*  
Jerry Sexton  
Supervisor, District 1

1/mc