

HALLIBURTON DIVISION LABORATORY

HALLIBURTON COMPANY
MIDLAND DIVISION

LABORATORY WATER ANALYSIS

No. W1-078-69

To Texaco, Inc.
Box 728
cc: Box 458
Hobbs, New Mexico 88240

Date Febvuary 14, 1969

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____ Date Rec. 2-11-69

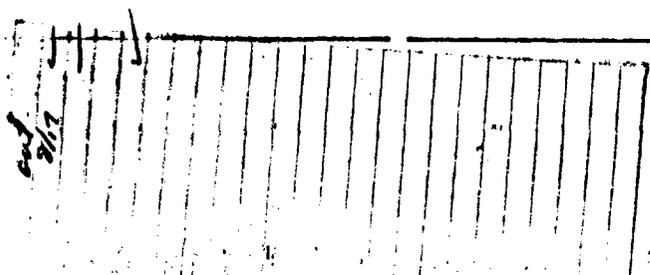
Well No. _____ Depth _____ Formation _____

County _____ Field _____ Source _____

	Water Well	Water Well	NM "CR" St. (Pit)
Resistivity	3.82 @ 72 F	17.0 @ 72 F	.072 @ 72 F
Specific Gravity	1.000	1.000	1.089
pH	7.4	7.6	6.2
Calcium (Ca)	170	50	10,200 *MPL
Magnesium (Mg)	42	21	1,680
Chlorides (Cl)	340	50 ✓	82,500
Sulfates (SO ₄)	240	30	45
Bicarbonates (HCO ₃)	145	160	110
Soluble Iron (Fe)	N11	N11	N11

Source 6 miles E. NM "CR" St. 1/4 mile W. Duncan
Ⓣ Ⓛ
Fed #1 (Tenneco)

Remarks:



*Milligrams per liter
app Ex 6
ca 4046

Respectfully submitted,

Analyst: Frank Whitfield
cc:

HALLIBURTON COMPANY

By Frank Whitfield
DIVISION CHEMIST

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

VI

HALLIBURTON DIVISION LABORATORY
 HALLIBURTON COMPANY
 MIDLAND DIVISION

LABORATORY WATER ANALYSIS

No. WI-043-69

To Texaco, Inc.
Box 728
Hobbs, New Mexico 88240
Attention: E. D. McCarter

Date January 30, 1969

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management. It may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____ Date Rec. 1-24-69

Well No. _____ Depth _____ Formation _____

County _____ Field _____ Source _____

	Water Well @ Halfway	Lusk Ranch	Windmill
Resistivity	4.64 @ 78 F	4.90 @ 78 F	12.6 @ 78 F
Specific Gravity	1.000	1.000	.998
pH	7.1	7.2	8.3
Calcium (Ca)	125	130	70 *MPL
Magnesium (Mg)	90	85	35
Chlorides (Cl)	350 ✓	300	75
Sulfates (SO ₄)	140	160	30
Bicarbonates (HCO ₃)	70	65	110
Soluble Iron (Fe)	N11	N11	N11

Sample from S.E. of N.M. "CR" St. W. of N. M. "CR" St. No. of N.M. "CR" St.
(5) (6) (2) (3)

cc: Texaco Inc.
Attn: A. Wilkinson
Hobbs, New Mexico

Remarks:

*Milligrams per liter

Appl Ex 7
Ca 4046

Respectfully submitted,

Analyst: Frank Whitfield
 cc:

HALLIBURTON COMPANY
 By Frank Whitfield *JH*
 DIVISION CHEMIST

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

TO TEXAS, INC

COUNTY _____

HOBBS, N. M.

Milchem, Inc.
Chemical, Div.

WATERFLOOD

Source and Date of Sample

1. T. Heflin & S.E. Windmill
- 2.
- 3.
- 4.
- 5.

COMPONENT PPM	SAMPLE NO.				
	1	2	3	4	5
Hardness, Calcium Total	1,350				
Sulfate	20				
Chlorides	14,000				
Iron	2.4				
Silica					
PH	8.0				
Oxygen, Dissolved					
Hydrogen Sulfide					
Bacteria/ml.					
Aerobic					
Sulfate Reducing					

Specific Gravity 1.000
Magnesium 30



Case 4046

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

PETROLEUM PRODUCTS
December 5, 1968

TEXACO INC.
P. O. BOX 3109
MIDLAND, TEXAS 79701

SALT WATER DISPOSAL
LUSK STRAWN
LEA COUNTY, NEW MEXICO

RECEIVED

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

'69 JAN 21 PM 1 51

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Texaco Inc. respectfully requests exception from the provisions of Order (3) of Order No. R-3221 to authorize disposal of water produced in conjunction with the production of oil and gas from the three wells located on Texaco's New Mexico State "CR" lease in an unlined surface pit located in Unit F on said lease. The lease comprises all of Section 32, Township 19 South, Range 32 East, Lea County, New Mexico with the exception of the N/2 of the NE/4.

It is suggested that this exception be granted administratively by an amendment to Order No. R-3221-B enlarging the exception area established by said order so as to include Section 32. Due to the proximity of Section 32 to the excepted area defined by Order No. R-3221-B, the findings of this order would likewise apply to Texaco's subject lease and would justify its inclusion in the previously excepted area.

Three wells are located on the New Mexico State "CR" lease. The No. 1 well in Unit G is a dual completion in the Lusk Strawn oil and the Lusk Morrow gas reservoirs. The No. 2 well in Unit P was dry and abandoned. The other two wells in Units D and L are Lusk Strawn oil completions. Water production from all three wells in Section 32 currently totals approximately 50 barrels per day and is not expected to vary appreciably in the future. The nearest evidence of fresh water in this vicinity is indicated by a windmill located 4 1/2 miles north of the subject lease in Section 8. Another windmill is located 5 miles west in Section 28, Township 19 South, Range 31 East and a third windmill is located 5 1/2 miles southwest in Section 26, Township 20 South, Range 32 East. The subject lease lies within the oil-potash area designated by the Secretary of the Interior May 11, 1965 effective May 15, 1965. Large volumes of brine are disposed of in an earthen pit in this potash area by National Potash Company two miles south of the subject lease.

DOCKET MAILED

Date 2-10-69

December 5, 1968

If this application cannot be approved administratively, it is requested that it be scheduled on the first available hearing docket. In this event, it is also requested that a fifteen day emergency order be issued as provided by Statewide Rule 1202 to provide for a temporary exception to permit disposal of oil field brine in the unlined pit on Texaco's subject lease until January 15, 1969 or until such time as to permit a ruling by the New Mexico Oil Conservation Commission with regard to the requested hearing.

Attached is a list showing the names and addresses of all operators and lessees adjacent to the subject lease, all of whom are receiving a copy of this application.

Yours very truly,

Darrell Smith

By


C. L. Whigham

Division Proration Engineer

CLW/pw

Attach.

OFFSET OPERATORS

Atlantic Richfield Co.
Box 1610
Midland, Texas 79701

J. S. Burns - Address Unknown

Ferry R. Bass
1200 Ft. Worth National Bank Bldg.
Ft. Worth, Texas 76102

W. N. Price Est.
804 Amarillo Bld.
Amarillo, Texas

Tenneco Oil Company
Box 1031
Midland, Texas 79701

Trebol Oil Co.
1109 American Bank of Commerce Bldg.
Odessa, Texas 79760

Shell Oil Company
Box 1509
Midland, Texas 79701



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

February 26, 1969

MAR 3 11 8 26
TEXACO INC.
P. O. BOX 3109
MIDLAND, TEXAS 79701

REGULAR HEARING CASE 4046
LUSK POOL AREA
LEA COUNTY, NEW MEXICO

File

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. D. S. Nutter

Gentlemen:

At the above subject hearing February 19, 1969 Texaco Inc. applied for an exception to Order No. R-3321 permitting continued use of a salt water disposal pit on the Texaco, New Mexico State CR lease in Section 32, Township 19 South, Range 32 East, Lea County, New Mexico.

Additional information was requested concerning a fresh water well located approximately six miles east of the subject lease designated as Water Well No. 7 on Texaco's Exhibit No. 1, a plat of the Lusk Pool Area, and Exhibit No. 5, Water Well Information. This is to advise that the subject water well is located in the SW/4, SE/4, SW/4, Section 5, Township 20 South, Range 33 East. The well produces from the triassic red bed section with a total depth of 680 feet. The water was originally used in oil well drilling operations. As shown by Texaco's Exhibit No. 6, a laboratory water analysis indicated the water to be of good quality with a chloride content of 340 PPM.

Yours very truly,

Darrell Smith

By *C. L. Whigham*
C. L. Whigham
Division Proration Engineer

CLW/pw



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87201

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

March 3, 1969

Mr. Charles White
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: Case No. 4046
Order No. R-3686
Applicant:
Texaco Inc.

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x

Aztec OCC _____

Other State Engineer Office