

CASE 3968: Application of TEXACO,
INC. for salt water disposal,
Lea County, New Mexico.

Order already entered
- covered on answers;
no necessity for reappearing
on Dec 19th.

Case Number

3968

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 19, 1968

IN THE MATTER OF:

Application of Texaco, Inc.,
for salt water disposal,
Lea County, New Mexico.

) Case No. 3968

) (Continued and
) Readvertised)
)

BEFORE: DANIEL S. NUTTER

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 3968.

MR. HATCH: Case 3968, Continued and Readvertised, Application of Texaco, Incorporated, for salt water disposal, Lea County, New Mexico. If the Examiner please, this case, the testimony was heard in this case on December 2nd, and an Order has been issued in this case.

MR. NUTTER: For the sake of the record, we might state that the case was heard December 2nd, ^{and} readvertised ¹ ~~and~~ with a statement to the applicant that an Order could be entered if certain waivers were obtained. These waivers were obtained and the Order has been entered, so the Case 3968 will be taken under study.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERANLILLO)

I, ADA DEARNLEY, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand this 20th day of December, 1968.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3968 heard by me on 12/19 1968.

Ada Dearnley
Ada Dearnley
New Mexico Oil Conservation Commission

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

December 2, 1968

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Texaco,
Inc., for salt water
disposal, Lea County,
New Mexico.)
)

Case No. 3968

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 3968.

MR. HATCH: Case No. 3968, application of Texaco, Incorporated, for salt water disposal, Lea County, New Mexico.

MR. KELLY: Booker Kelly, on behalf of the applicant. Let the record show that Mr. Whigham previously testified and is still under oath.

MR. NUTTER: Also, I would like for the record to show at this time that there was an error in the legal notice for this case. The Hobbs Daily News Sunday in its advertisement stated that injection would be into the Devonian Formation in open-hole interval from approximately 12,400 feet to 12,500 feet, thus excluding the lowermost 50 feet of the disposal zone. I don't know if this may be fatal, I don't know. Do you think you could get a waiver of objection from Sunray DX and Mobil? They appear to be, from your Exhibit 1 here, the only companies that could possibly be affected, and then we could proceed with issuing an order more promptly. Otherwise, I am afraid we would probably have to just make the record here and readvertise it, and we couldn't enter an order until after we had called the case formally again.

MR. KELLY: When is the deadline for next year?

MR. NUTTER: It would be December 19th, and we have to know by tomorrow. We could go ahead and put it on.

MR. KELLY: All right.

MR. NUTTER: Go ahead and put it on that docket. If we get a waiver, we can go ahead and enter an order, providing everything else is in order. If not, we would have to wait until December 19th.

MR. KELLY: Yes, Mr. Examiner, I feel sure that we can get waivers from Sunray DX and from Mobil. We can contact these two operators tomorrow, and request that they submit waivers.

(Whereupon, Applicant's Exhibits Numbers 1 through 3, inclusive, were marked for identification.)

C. L. WHIGHAM, JR.

called as a witness by the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLY:

Q You are the same Mr. Whigham that testified in the previous two cases?

A Yes, sir.

Q Again referring to what has been marked Texaco's Exhibit Number 1, would you state what you seek by this application?

A In Case 3968, Texaco seeks an order authorizing the use of Texaco's U. D. Sawyer Well No. 4 as a salt water disposal

well.

Exhibit Number 1 is a map of the Crossroads Pool in Lea County, New Mexico. The proposed salt water disposal well is indicated by the red triangle, and is shown to be located in Section 34, Township 9 South, Range 36 East. At the bottom of this plat is a legend which shows the completions of the various wells indicated on this map. In the vicinity of and immediately north of the proposed injection well are a number of other wells, most of which are completed in the Devonian reservoir. The Devonian reservoir in this area is a water drive reservoir, and does produce significant quantities of salt water from the lower wells on the edges of the reservoir.

Texaco U. D. Sawyer Lease is comprised of the east half of Section 34, where there are four wells. Well No. 4, the proposed water injection well, is located on the southern extremity of the lease, and the pool, and failed to produce oil on an initial testing and completion attempt. The Devonian in this particular well was found to be below the oil-water contact, so this well was completed in the Mississippian Formation, overlying the Devonian.

The other three wells on this lease at the present time produce about 90 barrels of water daily.

MR. NUTTER: Each, or total?

THE WITNESS: Total, which is considered rather low. However, it is expected that these wells will eventually produce a lot more water than they are producing at the present time. So our plans are to drill out below the bottom of the production casing that is installed in Well No. 4, and install a string of tubing, and inject water into a proposed open-hole interval that will extend from the bottom of the casing at a depth of 12,400 feet, down to a new total depth of 12,550 feet.

Q (By Mr. Kelly) Now, you say that the proposed injection well is presently producing from the Mississippian?

A Yes.

Q What is the rate of production at the present time?

A The well is producing twelve barrels of oil a day, and no water at the present time. And at this depth below 12,000 feet, this rate of production is uneconomical.

Q Then it certainly would be uneconomic to attempt to make a dual completion to keep the Mississippian open?

A Yes, it would be uneconomical.

Q All of the produced water will be from the Devonian, is that right?

A Yes.

Q So you will be reinjecting into the Devonian?

A That's right, we will be injecting Devonian-produced

water back into the Devonian reservoir.

Q All of the produced water comes from Texaco's U. D. Sawyer Lease in the east half of Section 34?

A Yes, sir.

Q Referring to Exhibit 2, your sketch, will you explain the injection?

A Exhibit Number 2 is a schematic diagram of the subsurface installation that will be effected upon approval of this application. This sketch shows that the production casing was set at a depth of 12,400 feet. This is five and a half-inch casing. As mentioned, our plans are to drill additional holes from a depth of 12,400 feet down to 12,550 feet, and that would be the injection interval. Then we plan to install a string of approximately 12,000 feet of two and seven-eighths-inch internal plastic-coated tubing without a packer in the well, and the water will be, of course, injected down the two and seven-eighths-inch plastic-coated tubing.

The plans at the present time are to load the entire annular area in this well with kerosene to inhibit any possibility of corrosion.

Q Are you aware of any fresh water in the area?

A In this particular area, it is my understanding that there is very little, if any, fresh water. However, the

Devonian reservoir is expected to produce very significant quantities of salt water before final depletion. So it is felt that a good salt water disposal system would be necessary in order to deplete this reservoir.

Q Will the installation that you propose protect any possible fresh water, and also protect any other producing zones that might obstruct you from the Devonian?

A Exhibit Number 2 shows that the casing installed in this well has been very adequately cemented, and there would be no chance at all for the water injected at a depth of 12,400 feet to find its way up to contaminate any of the fresh water intervals or any of the intervals that might be suspected to be fresh-water bearing.

Q Now, I believe you previously testified that your initial injection rate would be around 90 barrels a day?

A That is correct.

Q But you would expect that to go up?

A Yes. We think that it will be considerably higher than that, eventually.

Q Do you expect to inject under pressure?

A We expect that we may encounter as much as 275 pounds injection pressure in this well. However, there is a very strong possibility that at that depth the water will enter the injection

interval under its own hydrostatic head, and it is quite possible that no pressure at all will be required from the surface.

Q I understand you also previously testified that in your previous test of the Devonian of this well, you were below the well water content?

A Several drill stem tests were made, and the well produced substantial quantities of water and no oil at all.

Q In your opinion, would the granting of this application have any adverse effect on the Devonian reservoir?

A No.

Q Exhibit Number 3 is a log of the well?

A That is correct.

Q Were Exhibits 1, 2, and 3 prepared by you or under your supervision?

A Yes, sir.

MR. KELLY: I move the introduction of Applicant's Exhibits 1, 2 and 3.

MR. NUTTER: Texaco's Exhibits 1 through 3 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Numbers 1 through 3, inclusive, were admitted in evidence.)

MR. KELLY: That is all I have.

CROSS EXAMINATION

BY MR. NUTTER:

Q What was the original total depth of the well, do you know?

A Yes, the original total depth was 12,400 feet.

Q So you will actually be going down below that with your deepening program?

A Yes, sir.

Q And that will be well into the water, because at 12,400, you were making water on your DST?

A That's right. The top of the Devonian in this well was encountered at a depth of 12,326 feet, and the drill stem tests that were run below that depth recovered only water.

Q You are going to load the annulus with kerosene. You can equip that with a guage?

A Yes, sir, we will.

MR. NUTTER: Any further questions of Mr. Whigham? You may be excused. Do you have anything further?

MR. KELLY: No, sir.

MR. NUTTER: Is there anything that anyone wishes to offer in Case 3968? We will take the case under advisement, and call Case 3969.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
C. L. WHIGHAM, JR.	
Direct Examination by Mr. Kelly	3
Cross Examination by Mr. Nutter	9

<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Numbers 1 through 3	3	8

STATE OF NEW MEXICO)
)
 COUNTY OF BERNALILLO) 53

I, SAMUEL MORTELETTE, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Executive Hearing of Case No. 3968 heard by me on 12/2, 1968.

[Signature], Chairman
 New Mexico Oil Conservation Commission

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2088
SANTA FE

December 16, 1968

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

Re: Case No. 3968
Order No. R-3612
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.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other State Engineer Office

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. 3968
Order No. R-3612

APPLICATION OF TEXACO INC.
FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 2, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of December, 1968, 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 owner and operator of the U. D. Sawyer Well No. 4, located in Unit O of Section 34, Township 9 South, Range 36 East, NMPM, Crossroads-Devonian Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the open-hole interval from approximately 12,400 feet to 12,550 feet.

(4) That the injection should be accomplished through 2 7/8-inch plastic-lined tubing set at approximately 12,000 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to

-2-

CASE No. 3968
Order No. R-3612

the annulus at the surface in order to determine leakage in the casing or tubing.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

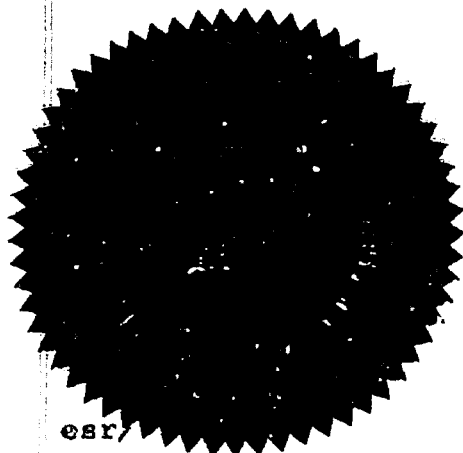
(1) That the applicant, Texaco Inc., is hereby authorized to utilize its U. D. Sawyer Well No. 4, located in Unit O of Section 34, Township 9 South, Range 36 East, NMPM, Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 2 7/8-inch tubing set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,400 feet to 12,550 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing or tubing.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(3) 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

David F. Cargo
DAVID F. CARGO, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

Had to make
a few
adjustments

Already admitted
for the Dec. 19th
leaving
Check George!

?

DOCKET: EXAMINER HEARING - THURSDAY - DECEMBER 19, 1968

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner:

CASE 4000: Application of Coastal States Gas Producing Company for
salt water disposal, Lea County, New Mexico. Applicant,
in the above-styled cause, seeks authority to dispose of
produced salt water into the Delaware Sand formation in
the perforated interval from 5051 feet to 5055 feet in its
Conoco-Federal Well No. 2 located in Unit B of Section 15,
Township 26 South, Range 33 East, Salado Draw-Delaware
Pool, Lea County, New Mexico.

CASE 4001: Application of Tamarack Petroleum Company, Inc. for salt
water disposal, Lea County, New Mexico. Applicant, in the
above-styled cause, seeks authority to dispose of produced
salt water into the Queen formation in the perforated
interval from approximately 4862 feet to 4892 feet in its
Union State Well No. 2, located in Unit K of Section 15,
Township 19 South, Range 35 East, Pearl-Queen Pool, Lea
County, New Mexico.

CASE 4002: Application of Marathon Oil Company for a unit agreement,
Chaves County, New Mexico. Applicant, in the above-styled
cause, seeks approval of the Dallas Ranch Unit Area
comprising 8,929 acres, more or less, of State lands in
Township 9 South, Ranges 26 and 27 East, Chaves County,
New Mexico.

CASE 3968: (Continued and Readvertised)

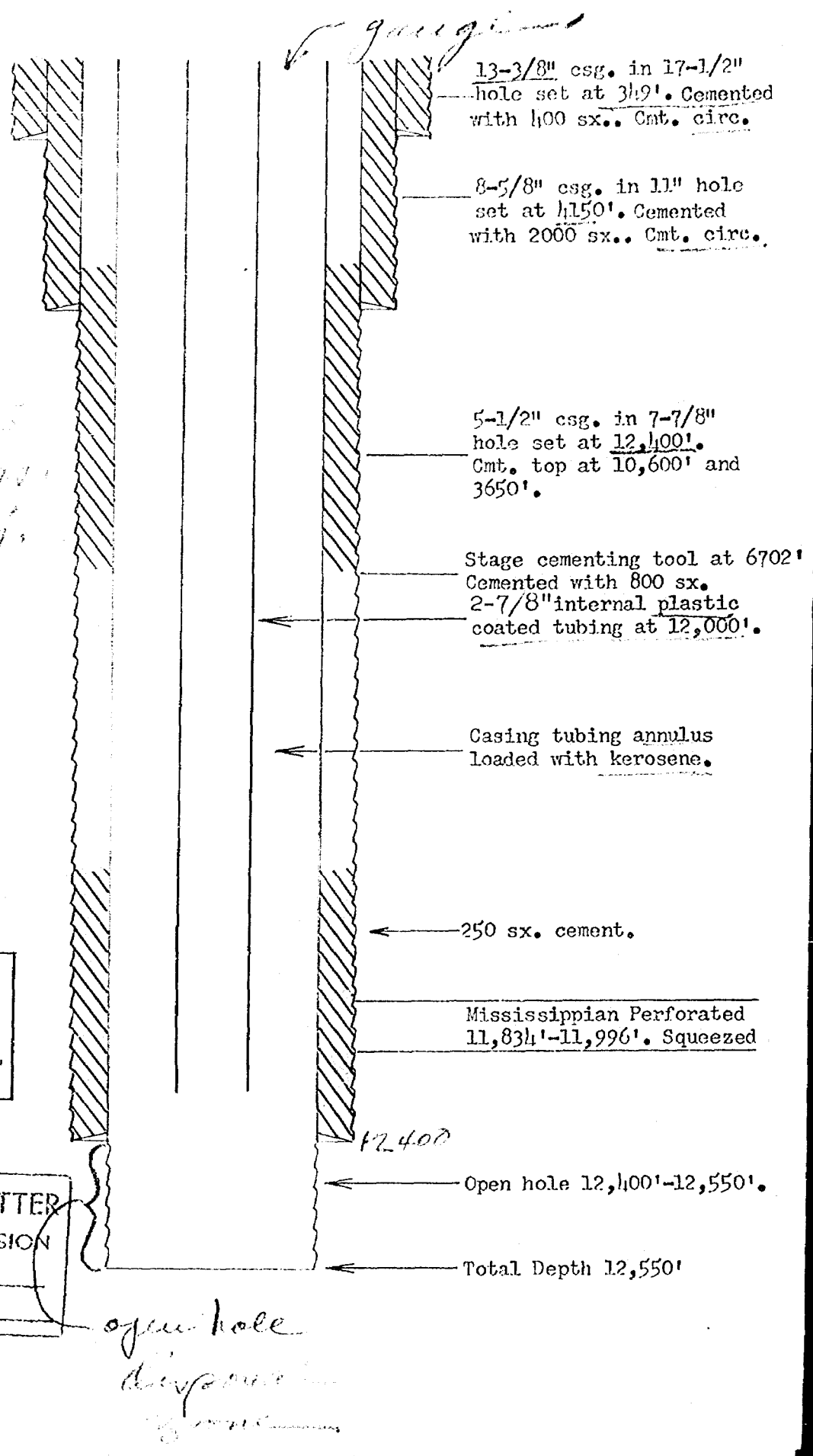
Application of Texaco, Inc. for salt water disposal, Lea
County, New Mexico. Applicant, in the above-styled cause,
seeks authority to dispose of produced salt water into the
Devonian formation in the open-hole interval from approxi-
mately 12,400 feet to 12,550 feet in its U. D. Sawyer Well
No. 4 located in Unit O of Section 34, Township 9 South,
Range 36 East, Crossroads-Devonian Pool, Lea County, New
Mexico.

*app. of 2
 1/2" csg. in 17-1/2"
 hole set at 319'. Cemented
 with 400 sx. Cmt. circ.
 8-5/8" csg. in 11" hole
 set at 4150'. Cemented
 with 2000 sx. Cmt. circ.
 5-1/2" csg. in 7-7/8"
 hole set at 12,400'.
 Cmt. top at 10,600' and
 3650'.*

TEXACO INCORPORATED
 Schematic Diagram
 Proposed SWD Completion
 U.D. SAWYER NO. 1
 CROSSROADS DEVONIAN POOL
 LEA COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 TEXACO EXHIBIT NO. 2
 CASE NO. 3968

jbs 10-31-68



OFFSET OPERATORS

TEXACO INC.

U. D. SAWYER LEASE
CROSSROADS DEVONIAN POOL
LEA COUNTY, NEW MEXICO

Cities Service Oil Company
800 Vaughn Building
Midland, Texas 79701

Huber Corporation
Vaughn Building
Midland, Texas 79701

Mobil Oil Company
P. O. Box 633
Midland, Texas 79701

Sunray OX Oil Company
1101 Wilco Building
Midland, Texas 79701

Case 3968



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

November 6, 1968

TEXACO INC.
P. O. BOX 3100
MIDLAND, TEXAS 79701

MAIN OFFICE

NOV 8 11 17

Ch 3968

HEARING REQUEST
SALT WATER DISPOSAL
SAWYER DEVONIAN POOL
LEA COUNTY, NEW MEXICO

Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

It is respectfully requested that an examiner hearing be scheduled in Santa Fe, New Mexico on the first available docket to consider the application of Texaco Inc. for approval to recomplete and use for salt water disposal its U. D. Sawyer Well Number 4 located in Unit O, Section 34, Township 9 South, Range 36 East in the Sawyer Devonian Pool, Lea County, New Mexico.

Disposal will be into an open hole interval from a depth of 12,400' to 12,550'. Injection will be through 3 1/2" OD internally plastic coating tubing installed with a packer set at a depth of 12,000'. The injection fluid will be salt water produced in conjunction with oil production from the Crossroads Devonian Pool on Texaco's U. D. Sawyer Lease at a rate of approximately 90 barrels of water daily.

In compliance with Rule 701, we attach a plat of the Crossroads Pool, a radioactivity well log of the proposed injection well, a diagrammatic sketch of the subsurface installation and a list of the four offset operators, each of whom is receiving a copy of this letter.

Yours very truly,

Darrell Smith

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

CLW/pw

Attachments (4)

DOCKET MAILED DOCKET MAILED

Date 12-5-68 Date 11-21-68



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

December 6, 1968

TEXACO INC.
P. O. BOX 3100
MIDLAND, TEXAS 79701

SALT WATER DISPOSAL
CROSSROADS DEVONIAN
LEA COUNTY, NEW MEXICO

✓ Sunray DX Oil Company
Wilco Building
Midland, Texas 79701

Mobil Oil Corporation
201 West Wall
Midland, Texas 79701

Gentlemen:

Texaco Inc. made application for salt water disposal authorization to the New Mexico Oil Conservation Commission at a hearing December 2, 1968. When this hearing was advertised in the Hobbs, New Mexico newspaper an error of 50' was made in the notice. The Commission advises that an order approving Texaco's application cannot be granted unless the hearing is re-advertised or unless waivers are obtained from the offset operators.

Texaco Inc. would like to obtain Commission approval at the earliest possible date and are therefore hereby requesting your waiver of objection indicated by signature in the space provided below. It is planned to inject approximately 90 barrels of salt per day by gravity into the Devonian formation in an open hole interval from 12,400' to 12,550' in Texaco's U.D. Sawyer Well No. 4 located in Unit 0 of Section 34, Township 9 South, Range 36 East. The Devonian formation was thoroughly tested when this well was drilled and was found to contain only water with no shows of oil. The attached sketch, Summary of Recommendations, Description of Field and Description of Project shows that this proposed operation will have no adverse effects on correlative rights in the area and the injection fluid will be confined to the proposed injection interval.

We would appreciate your signing one copy of this letter and forwarding it to the Oil Conservation Commission in Santa Fe.

Sunray DX Oil Company
Mobil Oil Corporation

-2-

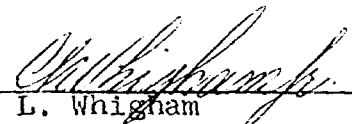
December 6, 1968

Retain one copy for your files.

Yours very truly,

Darrell Smith

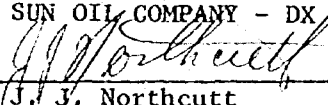
By


C. L. Whigham
Division Proration Engineer

CLW/pw

SUN OIL COMPANY - DX DIVISION

APPROVAL


J. J. Northcutt

DATE

December 10, 1968

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. 3968

Order No. R- 3612

APPLICATION OF TEXACO INC.
FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 2, 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this 2nd day of December, 1968, 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 owner and operator of the U. D. Sawyer Well No. 4,
located in Unit 0 of Section 34, Township 9 South, Range
36 East, NMPM, Crossroads-Devonian Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Devonian
formation, with injection into the open-hole interval
from approximately 12,400 feet to 12,550 feet.

(4) That the injection should be accomplished through
2 1/8 -inch plastic-lined tubing ~~installed in a packer~~ set at

approximately 12000 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing^{or} tubing, ~~or packer~~

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to utilize its U. D. Sawyer Well No. 4 located in Unit 0 of Section 34, Township 9 South, Range 36 East, NMPM, Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 2 7/8-inch tubing ~~installed in a packer~~ set at approximately 12000 feet, with injection into the open-hole interval from approximately 12,400 feet to 12,550 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing^{or} tubing, ~~or packer~~

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(3) 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.