

CASE 3788: Application of TEXACO
INC. for a waterflood project,
Lea County, New Mexico.

Case Number

3788

Application
Transcripts.

Small Exhibits

ETC.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

July 23, 1968

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

Dear Sir:

Reference is made to Commission Order No. R-3442, recently entered in Case No. 3788, approving the Texaco State "W" Waterflood Project in the Vacuum Pool.

Injection shall be into open hole through the one water injection well authorized by said order. The injection well shall be equipped with 2 3/8-inch plastic-lined tubing set in a packer located within 100 feet of the casing shoe.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 84 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status

OIL CONSERVATION COMMISSION

P. O. BOX 2088

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July 23, 1968

of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSM/ir

cc:
Oil Conservation Commission
Post Office Box 1980
Hobbs, New Mexico

Mr. D. E. Gray
State Engineer Office
Santa Fe, New Mexico

State of New Mexico
Oil Conservation Commission



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

July 3, 1968

Re: Case No. 3788
Order No. R-3442
Applicant:
TEXACO INC.

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

Carbon copy of order also sent to:

Other _____

Case 3758

Heard 6-26-68

Res 6-27-68

Grant Texas's request for an injection well waterflood project.

The injection is thru H. Mer Lt. (W) NCT-1 #1 located in O 13-17-34 vacuum - Grayburg - San Andrews. Oil pool.

The Project area would be 80 ac. E/2 SE/4 13-17-34.

The tubing shall be coated internally, and annulus shall be filled with an inert fluid with a pressure gauge at surface to detect leaks in the annulus.

Trust. Co.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 26, 1968

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

The following cases will be heard before Elvis A. Utz, Examiner,
or A. L. Porter, Jr., Alternate Examiner:

CASE 3788: Application of Texaco Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation through its New Mexico State "W" NCT-1 Well No. 1 located in Unit O of Section 13, Township 17 South, Range 34 East, Vacuum (Grayburg-San Andres) Oil Pool, Lea County, New Mexico.

CASE 3789: Application of Tenneco Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Mesa Queen Unit Area comprising 1,040 acres, more or less, of state lands in Township 16 South, Range 32 East, Mesa-Queen Pool, Lea County, New Mexico.

CASE 3790: Application of Tenneco Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Mesa Queen Unit Area by the injection of water into the Queen formation through 12 wells located in Sections 16, 17, and 20, Township 16 South, Range 32 East, Mesa-Queen Pool, Lea County, New Mexico.

CASE 3573 (Reopened):

In the matter of Case 3573 being reopened pursuant to the provisions of Order No. R-3240 to permit all interested parties to appear and show cause why the temporary rules for the South Corbin-Strawn Oil Pool, Lea County, New Mexico, which include a provision for 160-acre spacing units and a 4000 to one gas-oil ratio limit, should remain in effect.

CASE 3791: Application of Kewanee Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Square Lake "12" Unit Area comprising 1,360 acres, more or less, of Federal lands in Township 17 South, Ranges 29 and 30 East, Square Lake Pool, Eddy County, New Mexico.

CASE 3792: Application of Kewanee Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg formation underlying its Square Lake "12" Unit Area through seven wells located in Sections 1 and 12, Township 17 South, Range 29 East, and Sections 6 and 7, Township 17 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico.

- CASE 3793: Application of Gulf Oil Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Grayburg formation in the interval from approximately 3812 feet to 3900 feet in its Keohane "C" Federal Well No. 3 located in Unit I of Section 21, Township 18 South, Range 31 East, Shugart Yates-Seven Rivers-Queen-Grayburg Pool, Eddy County, New Mexico.
- CASE 3794: Application of Gulf Oil Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation adjacent to the Eunice-San Andres Pool in the interval from approximately 4100 feet to 4900 feet in the Warren Petroleum Corporation Eunice Plant SWD Well No. 1, located 2255 feet from the North line and 908 feet from the East line of Section 3, Township 22 South, Range 37 East, Lea County, New Mexico.
- CASE 3795: Application of Pan American Petroleum Corporation for a pool creation and discovery allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Bate-Yates Pool in Lea County, New Mexico, comprising the S/2 of Section 26 and the N/2 of Section 35, both in Township 19 South, Range 33 East, and for the assignment of approximately 16,750 barrels of oil discovery allowable to the discovery well, its Bate Federal Well No. 1 located in Unit N of said section 26.
- CASE 3796: Application of The Superior Oil Company for the creation of a new pool, assignment of discovery allowable, and the promulgation of pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new upper Pennsylvanian oil pool for its State D COM Well No. 1 located in Unit G of Section 4, Township 14 South, Range 34 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 52,010 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 160-acre proration units.
- CASE 3797: Application of Ernest A. Hanson 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 overall interval from approximately 4604 to 5036 feet in his Mescalero Ridge Unit "35" Well No. 11 located in Unit N of Section 35, Township 19 South, Range 34 East, Pearl-Queen Pool, Lea County, New Mexico.

CASE 3798: Application of Ernest A. Hanson for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the interval from approximately 4177 feet to 4185 feet in his Hanson Federal Well No. 7 located in Unit J of Section 25, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.

CASE 3799: Application of Amerada Petroleum Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter and complete as a gas well the State WR "B" Well No. 1 located at an unorthodox location 554 feet from the North line and 2086 feet from the East line of Section 35, Township 12 South, Range 34 East, Ranger Lake-Devonian Gas Pool, Lea County, New Mexico, and to dedicate to said well the E/2 of said section 35.

ir/

DOMESTIC PRODUCING DEPARTMENT
MIDLAND DIVISION



PETROLEUM PRODUCTS

May 28, 1968

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

Case 3788

REQUEST FOR HEARING
WATERFLOOD APPLICATION
VACUUM (GRAYBURG-SAN ANDRES) OIL POOL
LEA COUNTY, NEW MEXICO

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

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

Gentlemen:

It is respectfully requested that an examiner hearing be scheduled on the first available docket in Santa Fe, New Mexico to consider the application of Texaco Inc. for approval to conduct waterflood operations by the injection of water into a well on Texaco's New Mexico "W" State NCT-1 Lease in the Vacuum (Grayburg-San Andres) Oil Pool in Lea County, New Mexico. The subject lease is comprised of the SE/4 of Section 13, T-17-S, R-34-E, Lea County, New Mexico. The project area will be comprised of the W/2 of the one-quarter section lease on which is located Well No. 1, the proposed injection well, and Well No. 2, a currently producing well. In compliance with Rule 701(B), a plat is enclosed showing the proposed injection well and all other wells and properties within a two mile radius. This project will be known as Texaco's New Mexico "W" State Cooperative Waterflood and will be an extension to and in agreement with the waterflood operation being conducted by Mobil Oil Corporation under Conservation Commission Order No. R-1244.

It is proposed to inject water into the Grayburg-San Andres reservoir in Well No. 1 through 2-3/8" O.D. internally plastic-coated tubing with a packer set at a depth of 4300' into an open hole interval at a depth from 4348' to 4680'. The injection fluid will be a mixture of Ogallala fresh water and produced salt water. This fluid will be purchased from the Mobil Oil Corporation system and will be injected into the proposed injection

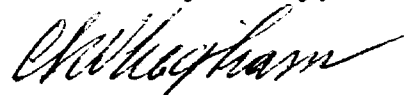
DOCKET MAILED

Date *6/13/68*

well at a rate of approximately 500 BPD with an injection pressure estimated at 2200 PSI.

In addition to the plat mentioned above, a log of a near-by well is enclosed showing tops of producing formations and the proposed injection interval. A log was not run in the proposed injection well. Also enclosed is a sketch of the proposed sub-surface installation in the injection well and a list of all offset operators. Each of the offset operators listed is receiving a copy of this letter.

Yours very truly,



C. L. Whigham
Division Proration Engineer

CLW:jl
Enclosures

cc: OCC - Box 1980 - Hobbs, New Mexico
Commissioner of Public Lands - Box 1148 - Santa Fe, New Mexico

dearnley-meier reporting service, inc.

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
June 26, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc., for
a waterflood project, Lea County,
New Mexico.

CASE NUMBER

3788

BEFORE:

ELVIS A. UTZ, Examiner

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date JUNE 26, 1968 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
Gordon D. Ryan	Pan Am Pet. Corp	Fort Worth
DAVID G WIGHT	PAN AM. PET. CORP.	Fort Worth
N. D. Haring	Mr. Bryan	SF
E. F. Datman	The Superior Oil Co.	Austin, Tex
Jerry Colacy	The Superior Oil Co.	Midland, Tex
Walter Palmer	Tenneco Oil Co.	Midland, Texas
Richard S. Morris	Montgomery firm	Santa Fe
Harry F. Schrom	Hanson Oil Co.	Roswell
Borke Kelly	realtor Robert Kelly	S.F.
CARL L. WHIGHAM	TEXACO	MIDLAND
WV Kastler	GULF Oil Corp	Roswell N.M.
JH Hoover	✓	✓
Jason Kellahi	Kellahi & Fox	Santa Fe
H. L. Jones Jr	Getty Oil	Midland, Texas
JW Graham	Kewanee Oil Co.	Tulsa, Okla
R. Allison	Kewanee Oil Co	Tulsa, Okla

MR. UTZ: Case 3788.

MR. HATCH: Case 3788, application of Texaco, Inc.,
for a waterflood project, Lea County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch
and Kelly, on behalf of the applicant, and I have one witness
to be sworn.

(Witness sworn.)

(Whereupon, Exhibits Numbers 1-6
were marked for identification.)

MR. UTZ: Are there other appearances? You may proceed.

CARL L. WHIGHAM

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

DIRECT EXAMINATION

BY MR. KELLY:

Q Would you state your name, position and employer?

A My name is Carl L. Whigham, Junior. I am employed
by Texaco, Incorporated, as Midland Division proration engineer
located in Midland, Texas.

Q You have previously qualified as a petroleum expert
in front of this Commission?

A Yes, sir.

Q Would you state what Texaco seeks by this application?

A Texaco requests authority to initiate a waterflood

project in the Vacuum Grayburg San Andres Pool in Lea County, New Mexico, by the injection of water into New Mexico State "W" NCT-1 Well Number 1. This well is located in Unit 0, Section 13, Township 17 South, Range 34 East.

Q Referring to what has been marked Exhibit 1, the plat of the area, would you locate the proposed injection well on the unit?

A Exhibit 1 is a map showing a portion of the Vacuum Grayburg San Andres Oil Pool in Lea County. The various wells are colored to designate the pool in which they are completed and are producing. The project that we're requesting here is located in Section 13. Referring to the map, the southeast quarter of Section 13 is colored yellow. This is Texaco State "W" NCT-1 lease. The project area will be the west half of this quarter section.

There is no development in the east half of that quarter section. There are three wells in the west half, two completed in the Vacuum Grayburg San Andres Pool and one well, Well Number 3, which is dually completed in the Middle Penn and the North Abo Pools.

This map also shows the large Mobil State Bridges lease to the west and designates the injection wells that Mobil is using in this waterflood project.

Q So, this will be in cooperation with Mobil's unit?

A Yes, it will. It will tie in with their eighty-acre five-spot injection pattern.

Q What is the present status of the two wells on your acreage?

A Well Number 1 has been shut in for -- no, Well Number 1 is producing. Well Number 2 has been shut in for several years. Well Number 1 is currently producing just under two barrels of oil a day, average.

Q Well Number 1 is the proposed injection well?

A Yes, it is.

Q Now, going to Exhibit Number 2, which is your structure map, would you explain that to the Examiner?

A Exhibit Number 2 is a structure map contoured on top of the San Andres Reservoir with a fifty-foot contour interval. This map shows that the field is a large east-west trending anticlinal structure. The predominant drive mechanism in this field is solution gas drive, even though there has been some evidence of pressure support by water influx, but there is no pressure as evidenced in this particular area of the field.

Q Have you had any effect from the Mobil injection wells as yet?

A Our production from the one well is very low and very erratic and we don't believe that we are getting any response

thus far. However, it is expected in the near future. Mobil made an application to the Commission about two months ago for administrative approval to convert Well Number 10 down in Section 24, Unit C to water injection service and in their application we did state that they had detected response to the waterflood project in that vicinity, so we feel that we will be observing some response in the near future.

Q Going on to Exhibit Number 3, which is your production curve, will you explain that to the Examiner?

A Exhibit 3 is a production performance curve, or set of curves, where we have shown gas-oil ratio, monthly oil production and water production. The gas-oil ratio averaged around 4,000 cubic feet per barrel for several years, as shown by this curve. In recent months, the gas-oil ratio has declined.

The points on this curve were plotted to represent a yearly average and they were plotted at midyear. However, the last point was plotted to represent the gas-oil ratio during the first three months of this year. At the present time, the gas-oil ratio of the only producing well on this lease fluctuates between approximately 700 and 1300 cubic feet per barrel of oil.

The next curve down is the monthly oil production and this curve shows that the present production is about 52

barrels of oil per month. That would be from the Number 1 well, only.

Then the lowermost curve shows the water production. It shows that the water production was about 118 barrels of water per month back in 1964, when Well Number 2 was shut in, and since that time has steadily decreased, and at the present time water production is nil on this lease.

Q What is your cumulative well production from the wells?

A Cumulative oil production from the Vacuum Grayburg San Andres Reservoir is just over two million. Correction, 200,000 barrels. It was 202,803 barrels as of June 1st, 1968.

Q Do you have a figure of primary production reserves that has been depleted?

A Yes. We feel that approximately ninety-nine per cent of the primary reserves have already been produced, so the ultimate primary recovery from this lease would be in excess of 202,000 barrels.

Q What does Texaco expect to get from the secondary recovery?

A It is felt that the secondary recovery will be approximately equal to primary recovery.

Q What amount of water will you inject?

A We propose to inject about 500 barrels of water per day into this well.

Q And at what pressures?

A Initially the pressure will be quite low, but we anticipate a maximum pressure of about 2200 p.s.i.

Q What will your source of water be?

A We will purchase injection water from Mobil Oil Corporation. They obtain their water from the Ogallala formation and also from their own production facilities they will obtain their produced water. They mix ~~this~~ water together. It's compatible and they'll deliver it to Texaco at the lease boundary. We'll purchase it at that point.

Q Now, going on to your sketch of the proposed injection well, would you explain the proposed installation?

A This sketch shows that the proposed injection well will be a standard conventional completion. We'll propose to inject water below a packer through two and three-eighths-inch plastic-lined tubing. We will put an inhibited fluid in the annulus and we will inject into an open hole interval from a depth of 4348 feet down to a total depth of 4680 feet.

Q Is there any fresh water in the area?

A I don't have any information regarding fresh water in the immediate area.

Q Would this installation protect any fresh water in the field?

A Yes, it would. The well has been very adequately cemented.

Q Will you have any kind of a pressure gauge on your annulus or will you keep it open?

A Yes, we will. The annulus will be corrected regularly to detect any leaks as soon as they occur. Might I point out that this sketch did differ slightly from the sketch submitted with the Application for Hearing. The first sketch that was submitted, showed that the top of the cement behind the five-and-a-half-inch casing was unknown and that the top of the cement behind the surface casing was unknown. That notation was made primarily because the temperature survey had not been run.

However, I have corrected hole sizes and the amount of cement used and calculated the fill-up, and my calculations show that the top of the cement behind the five-and-a-half-inch casing should be up into the surface casing at a depth of about 1468 feet. The same type of calculations shows that enough cement was used on the seven and five-eighths-inch surface casing to bring the cement all the way to the surface. These facts are shown on our sketch that was presented

here at the hearing.

Q Now, Exhibit Number 5 is a log of the proposed injection well, is that right?

A Yes.

Q Do you have anything you want to point out to the Examiner on that exhibit?

A We have shown the tops of the significant formations in the area. This is a Schlumberger electric log run in 1935. When this well was completed, they ran the log when they reached casing depth of 4361 and then after setting casing they ran another section to cover the open hole interval. We have designated on this log the top of the Yates at 2930, the top of the Seven Rivers at 3210 and the top of the Queen at 3840. Then in the open hole interval in another section of the log down below we show the top of the Grayburg at 4360 and the top of the San Andres at 4545.

Q Now, your Exhibit Number 5 is a list of the offset operators, is that right?

A Yes. There are four offset operators and we list their addresses. Each one of these offset operators received a copy of our Application for Hearing.

Q In your opinion, will the granting of this application prevent waste by allowing Texaco to produce oil

and gas that would otherwise be left in place?

A Yes.

Q In your opinion will the granting of this application have any adverse effect on correlative rights of other operators?

A No, it won't.

Q Were Exhibits 1 through 5 prepared by you or under your supervision?

A Yes, sir.

MR. KELLY: I move the introduction of Texaco's Exhibits 1 through 5.

MR. UTZ: How about 6?

MR. KELLY: 6 is the list of offset operators. We will introduce that, too.

MR. UTZ: Do you want to put it in?

MR. KELLY: Yes.

MR. UTZ: Exhibits 1 through 6 will be admitted into the record.

(Whereupon, Exhibit Numbers 1-6 were offered and admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q How long has the Number 2 Well been abandoned?

A Since June, 1964. We have tested that well

periodically, Mr. Utz. It makes a trace of oil and several barrels of water a day. Periodically we go out and test the well.

Q Where is the nearest injection well to this well? This does -- Let me preface that, first, with this question: This does offset a Mobil waterflood, does it not?

A Yes, sir.

Q And where is the nearest injection well to the Number 2 Well?

A The Mobil State Bridges Well Number 63 direct west offset from the Number 2 Well is the nearest injection well.

Q How long has it been injecting water?

A Since October, 1967. At that time that well, Well Number 63 and its diagonal offset to the northeast which would be Well Number 73, were both converted to injection service.

Q Well, it hasn't been taking water for very long, then?

A No, sir.

Q Less than a year?

A Yes, sir, that's correct.

Q But you still don't have any response?

A No, sir.

Q You say the Phillips reported in Unit C that their

well in Unit C of Section 34 did have some response?

A I mentioned the application by Mobil Oil Corporation, dated April 26th, 1968, where they advised the Commission that they had purchased Well Number 10 in Section 24 from Phillips Petroleum Corporation and they requested authority to convert that well to injection service.

In their application, they advised that they had detected a response in that vicinity. They state that Well Number 9 offsets the Santa Fe Well Number 10 to the north and Bridges State Number 19 offsets the well to the west. They state that both of these producers have experienced substantial response to the waterflood program as evidenced by well tests set out on attached Form C116.

Q Where would they have gotten response from, what injection well, any idea?

A Yes. Exhibit Number 1 shows that several wells along the southern boundary of Section 14 in Section 13 are on injection. Also, the well in the northeast corner of Section 23. So there has been substantial injection around the northwest quarter of Section 24.

There is also an injection well directly southwest of the Santa Fe Number 10 Well. That injection well is Number 20.

Q So, it would appear that the reason you don't have any response to your Number 2 Well is, there just hasn't been enough water put in there?

A Yes, sir, up in that vicinity.

Q Did I hear you state that you would reinject produced water at such time as it is produced?

A Yes.

Q Your tubing, I believe, does show that it will be plastic-coated tubing?

A Yes, it is.

Q With fluid in the annulus, and what are you going to do with the annulus to the surface, pressure gauge or leave it open?

A More than likely a pressure gauge will be installed. Until a pressure gauge is installed, it will be left open and observed periodically.

MR. UTZ: Are there any other questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case? The case will be taken under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
CARL L. WHIGHAM	
Direct Examination by Mr. Kelly	2
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<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED AND ADMITTED IN EVIDENCE</u>
Exhibits 1 through 6	2	10

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

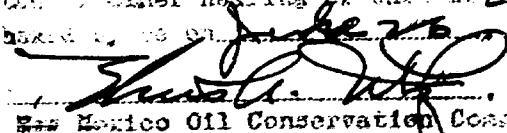
I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings,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

Witness my Hand and Seal this 5th day of July, 1968


 NOTARY PUBLIC

My Commission Expires:

June 19, 1971

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the preliminary hearing of Case No. 3258
 heard at the Oil Conservation Commission
 on July 25, 1968.

 [illegible], Secretary
 New Mexico Oil Conservation Commission

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. 3788
Order No. R-3442

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 a.m. on June 26, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of July, 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., seeks permission to
institute a waterflood project in the Vacuum (Grayburg-San Andres)
Oil Pool by the injection of water into the Grayburg-San Andres
formation through its New Mexico State "W" NCT-1 Well No. 1,
located in Unit O of Section 13, Township 17 South, Range 34
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.

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CASE No. 3788

Order No. R-3442

(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 Vacuum (Grayburg-San Andres) Oil Pool by the injection of water into the Grayburg-San Andres formation through its New Mexico State "W" NCT-1 Well No. 1, located in Unit O of Section 13, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(2) That the subject waterflood project is hereby designated the Texaco State "W" Waterflood Project and 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 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.

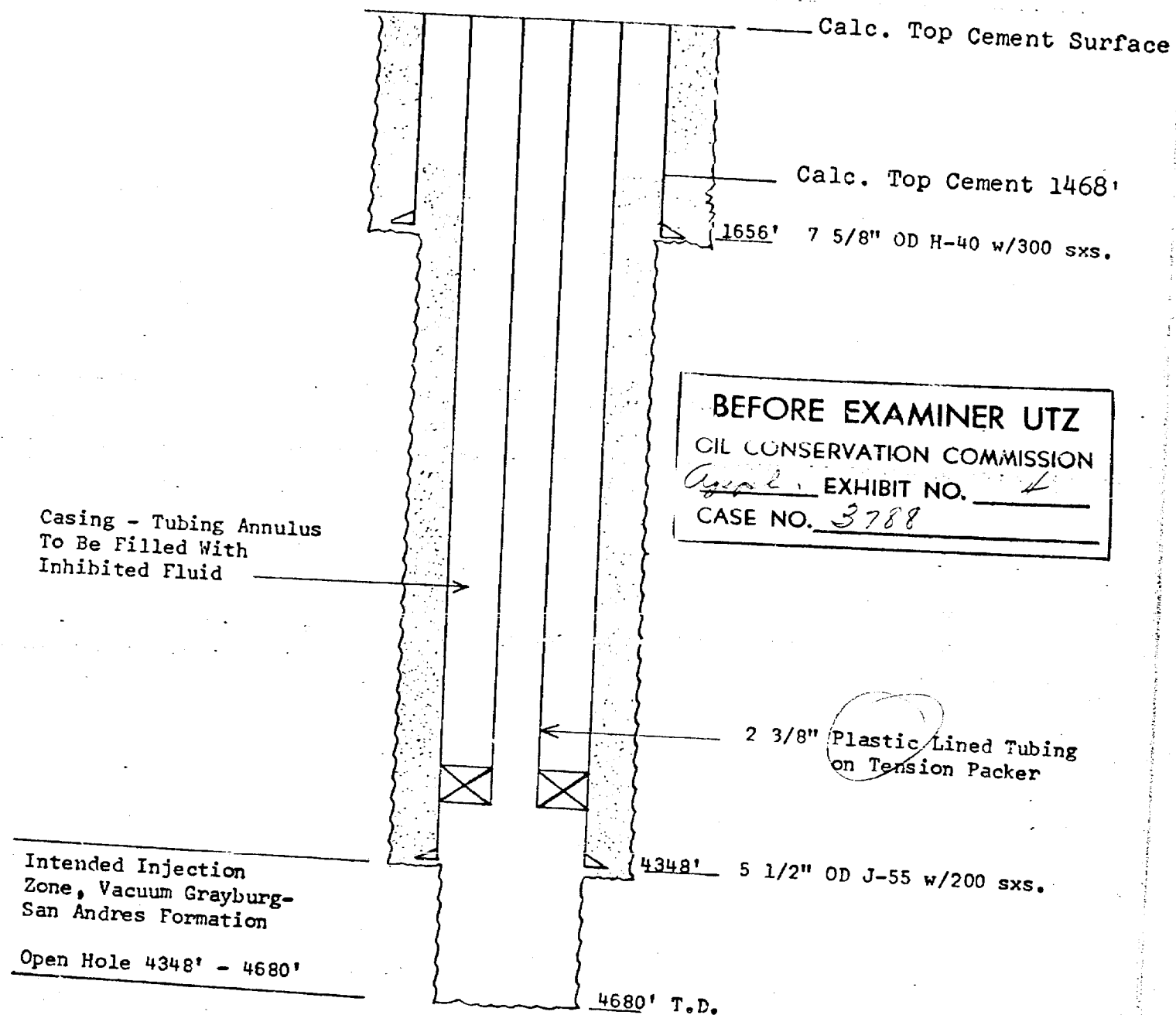
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


GORTON B. HAYS, Member


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

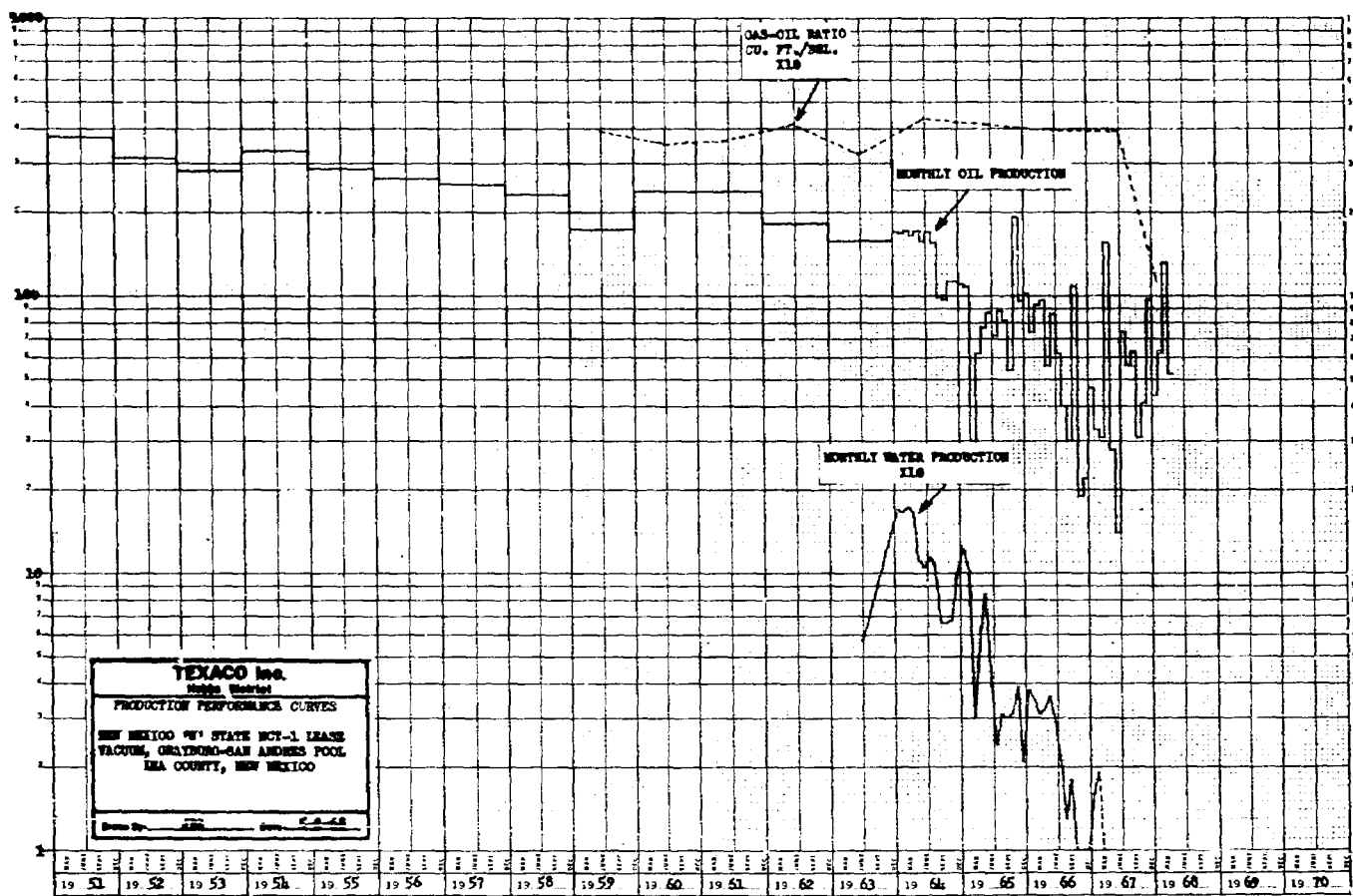
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TEXACO Inc.
Hobbs District

PROPOSED INJECTION WELL
New Mexico "W" State NCT-1
Well No. 1
Vacuum Grayburg San Andres Pool
Lea County, New Mexico

Drawn By KWH Date: 5-2-68



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
App. EXHIBIT NO. 3
CASE NO. 3788

OFFSET OPERATORS
TEXACO INC.
NEW MEXICO "W" STATE NCT-1 LEASE
LEA COUNTY, NEW MEXICO

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

Pennzoil Company
1007 Midland Savings Building
Midland, Texas 79701

Phillips Petroleum Company
Phillips Building
4th & Washington
Odessa, Texas 79760

Shell Oil Company
P. O. Box 1509
Midland, Texas 79701

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Appel EXHIBIT NO. 6
CASE NO. 3788