

CASE 3868: Application of TEXACO
FOR A WATERFLOOD EXPANSION,
LEA COUNTY, NEW MEXICO.

*Received
12-1-60
J. B. H.*

Case Number

3868

Application

Transcripts.

Small Exhibits

ETC.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 7, 1968

C
O
P
Y

Mr. John M. Kelly
Consultant
Elk Oil Company
1001 Connecticut Avenue, N.W. - Suite 625
Washington, D.C. 20036

Dear John:

With further reference to Case 3868, I regret to advise that an order had already been entered granting the application prior to receipt of your second letter.

After I had answered your letter on September 19th, I referred it to the examiner and in my absence he brought the matter to the attention of the applicant at the hearing. The applicant's response was that as of the evening before the hearing they had not had further word from you. You had probably departed for Europe at the time of the hearing.

I have requested that the transcript be expedited and will supply you with a copy as soon as possible.

As the order was entered on October 2, 1968, you have 30 days to evaluate your situation and if you feel that you have been adversely affected, ask that the matter be heard de novo.

Yours very truly,

A. L. PORTER, Jr.
Secretary-Director

ALP/esr

cc: Elk Oil Company
Post Office Box 310
Roswell, New Mexico 88201

ELK OIL COMPANY

POST OFFICE BOX 310
ROSWELL, NEW MEXICO 88201

October 4, 1968

Mr. A. L. Porter, Jr.
Secretary-Director
State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Case Number 3868 before the New Mexico
Oil Conservation Commission

Dear Pete:

Thank you for your kind response of September 19, 1968 in reply to my request for a delay in the decision of the above captioned case that was heard before an Oil Conservation Commission Examiner on September 25, 1968.

Unfortunately, I was in Europe at the time your letter arrived, so it was not possible for me to contact TEXACO and again ask for a period of time in which to evaluate the information that they would place before the Examiner.


I had hoped that my letter of September 17th to you would have allowed the Examiner to stipulate a fixed time for me to evaluate the information that would be made public by TEXACO.

If it is at all possible, I respectfully request a copy of the Commission's record in Case No. 3868 and a time period to evaluate it before the Examiner makes his ruling in this case.

With kindest personal regards, I remain,

Very truly yours,

ELK OIL COMPANY



John M. Kelly
Consultant

JMK:sl

ELK OIL COMPANY
Box 310
Roswell, New Mexico

October 4, 1968

Mr. J. H. Markley
Division Manager
TEXACO INC.
Midland Savings Bank
Midland, Texas 79701

Re: Case Number 3868 before the New Mexico
Oil Conservation Commission

Dear Mr. Markley:

On September 17th, we wrote you concerning the above captioned case that was to be heard by the New Mexico Oil Conservation Commission on September 25th.

I am enclosing a copy of the reply that I received from the Oil Conservation Commission in response to my request for a time period in order to have the opportunity to evaluate the information that TEXACO would present to the New Mexico Oil Conservation Commission in support of their petition.

I have not heard from TEXACO; and this letter is to again request a copy of the geological and engineering data that you presented to the New Mexico Oil Conservation Commission.

I wish to assure you that as soon as the data is received, it will be immediately evaluated and our response to the Commission will be made within 30 days after receipt of this data.

Sincerely yours,

ELK OIL COMPANY

John M. Kelly
Consultant

JMK:sl
Encl.

cc: New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

September 19, 1968

C
O
P
Y

AIR MAIL

Mr. John M. Kelly
Elk Oil Company
Post Office Box 310
Roswell, New Mexico 88201

Dear John:

With regard to your letter of September 17, 1968, requesting a delay in the decision in Case No. 3868, I would suggest that you contact Texaco Inc. concerning a possible continuance of the case or a stipulation in the record at the hearing that you should be given some fixed period of time in which to file your information after having the opportunity to evaluate the information supplied by Texaco.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

cc: Mr. J. H. Markley
Texaco Inc.
Midland, Texas

ELK OIL COMPANY

POST OFFICE BOX 310
ROSWELL, NEW MEXICO 88201

September 17, 1968

Mr. A.L. Porter
Secretary and State Geologist
New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico 87501

Re: Case Number 3868 before the New Mexico
Oil Conservation Commission.

Dear Mr. Porter:

With reference to the above captioned case in which TEXACO INC. requests permission to inject water into its "BV" State (NCT-1) Well No. 5 located in Unit M of Section 26, Township 13 South, Range 33 East, Lea County, New Mexico. ELK Oil Company is owner of State Oil and Gas Leases underlying all of Section 27, Township 13 South, Range 33 East.

We have written to TEXACO, copy enclosed, and requested their engineering and geological data for our evaluation.

This is to request that no decision be made in granting the TEXACO application under case 3868 until we have had the opportunity of evaluating the information that TEXACO, must of necessity, present to the New Mexico Oil Conservation Commission.

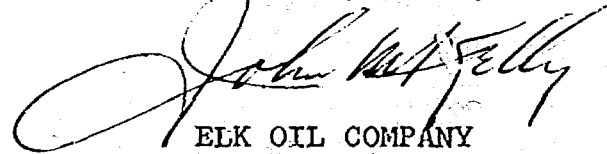
I will be unable to attend the September 25, 1968 examiner hearing by reason that I have been asked to serve as an advisor to the US Delegate to the OECD Oil Committee meeting being held in Paris, France from September 23 to 26.

If my request for a delay in the decision is

Mr. A.L. Porter
page - 2

granted, I will make a thorough and immediate examination of TEXACO's data and will notify the New Mexico Oil Conservation Commission within 30 days as to ELK's position in this case.

Sincerely yours,



ELK OIL COMPANY
by John M. Kelly
Consultant

cc. Mr. J. H. Markley
TEXACO INC
Midland, Texas

JMK/pk

encl.

ELK OIL COMPANY
Box 310
Roswell, New Mexico

September 17, 1968

Mr. J. H. Markley
Division Manager
TEXACO INC.
Midland Savings Bank
Midland, Texas 79701

Re: Case Number 3868 before the New Mexico
Oil Conservation Commission.

Dear Mr. Markley:

With reference to the above captioned case in which TEXACO asked for permission to inject water into its "EV" State (NCT-1) Well No. 5 located in Unit M of Section 26, Township 13 South, Range 33 East, Lea County, New Mexico.

ELK Oil Company is the owner of State of New Mexico Oil and Gas Leases underlying all of Section 27, Township 13 South, Range 33 East.

I would appreciate receiving from TEXACO a copy of the geological and engineering data that you will present to the New Mexico Oil Conservation Commission when case 3868 is heard. We hope that this data will show that the reservoir underlying Section 27 will not be damaged, nor that we will be precluded from producing the oil that underlies Section 27 by reason of your injecting water in a well that is located only 660 feet from our lease boundary line.

Your courtesy in furnishing this information will be appreciated.

Sincerely yours,

ELK OIL COMPANY
by John M. Kelly
Consultant

cc. New Mexico Oil Conservation
Commission
Santa Fe, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 2, 1968

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

O Dear Sir:

Enclosed herewith is Commission Order No. R-3514, entered in Case No. 3868, approving the expansion of Texaco's Lazy J-Pennsylvanian Water-flood Project.

P Additional injection is to be through the one newly authorized water injection well, which shall be equipped with internally plastic-coated tubing set in a packer at approximately 9600 feet. The casing-tubing annulus shall be loaded with an inhibited fluid and equipped with a pressure gauge at the surface to facilitate detection of leakage in the casing, tubing, or packer.

Y 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 as expanded will be eligible to receive under the provisions of Rule 701-E-3 is 634 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 of wells in the project area, i.e., when active injection

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

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

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/DSH/ir
Enclosure

cc: Oil Conservation Commission, Hobbs, New Mexico
Mr. D. E. Gray, State Engineer Office, Santa Fe, New Mexico

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. 3868
Order No. R-3514

APPLICATION OF TEXACO INC.
FOR A WATERFLOOD EXPANSION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 25, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 2nd day of October, 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 expand its Texaco BV Waterflood Project in the Lazy J-Pennsylvanian Pool by the injection of water into the Pennsylvanian formation through its "BV" State (NCT-1) Well No. 5, located in Unit M of Section 26, Township 13 South, Range 33 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 expansion of the Texaco BV Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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CASE No. 3868

Order No. R-3514

(5) That the subject application should be approved and the expanded 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 expand its Texaco BV Waterflood Project in the Lazy J-Pennsylvanian Pool by the injection of water into the Pennsylvanian formation through its "BV" State (NCT-1) Well No. 5, located in Unit M of Section 26, Township 13 South, Range 33 East, HMPM, Lea County, New Mexico.

(2) That the expanded waterflood project 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 expanded 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


GULTON B. HAYS, Member


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


esr

- CASE 3865: Application of Southern Union Production Company for an unorthodox location and a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Jicarilla "A" Well No. 9 to produce gas from the Blanco-Mesaverde and Basin Dakota Pools at an unorthodox location for the Blanco-Mesaverde Pool 790 feet from the North line and 1670 feet from the West line of Section 14, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.
- CASE 3866: Application of Shell Oil Company for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 3360 feet to 3512 feet in its Thelma Crosby "F" Well No. 1 located in Unit H of Section 17, Township 9 South, Range 30 East, Cato-San Andres Pool area, Chaves County, New Mexico.
- CASE 3867: Application of Tenneco Oil Company for a unit agreement, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Hospah Unit Area comprising 476 acres, more or less, of federal lands in Section 12, Township 17 North, Range 9 West, South Hospah Upper Sand Oil Pool, McKinley County, New Mexico.
- CASE 3868: Application of Texaco, Inc., for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks expansion of the Texaco BV Waterflood Project, Lazy J-Pennsylvanian Pool, by the conversion to water injection of its "BV" State (NCT-1) Well No. 5 located in Unit M of Section 26, Township 13 South, Range 33 East, Lea County, New Mexico.
- CASE 3869: Application of Texaco, Inc., for a down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle the marginal production from the Blinebry and Paddock Oil Pools in the wellbore of its C. H. Lockhart Federal NCT-1 Well No. 3 located in Unit O of Section 18, Township 22 South, Range 38 East, Lea County, 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 243-4491 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 25, 1968

EXAMINER HEARING

IN THE MATTER OF:

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

Case 3868

BEFORE: Daniel S. Nutter
Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 3868.

MR. HATCH: Case 3868. Application of Texaco, Incorporated, for a waterflood expansion, Lea County, New Mexico.

(Whereupon, Applicant's Exhibits Numbers 1, 2, 3 and 4 were marked for identification.)

MR. KELLY: Booker Kelly, White, Gilbert, Koch and Kelly on behalf of Texaco. I have one witness and ask that he be sworn.

(Witness sworn.)

DALE McCARTER

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, please?

A Dale McCarter, District Proration Engineer, Hobbs, New Mexico, employed by Texaco, Incorporated.

Q And you have previously testified before this Commission as an expert petroleum engineer?

A Yes, sir.

Q Were you the witness that testified in the original Case Number 3590 or the pilot waterflood project approval?

A Yes, I was.

Q Would you briefly state what Texaco seeks by this application?

A Texaco seeks approval to expand the Texaco BV Water-flood Project by conversion of its New Mexico BV State NCT-1 Well Number 5 to water injection into the Pennsylvanian section for the Lazy J Penn Field.

The well is located in Unit M of Section 26, Township 13 South, Range 33 East.

MR. NUTTER: Just a minute. Off the record.

(Whereupon, off-the-record discussion was had.)

Q Now, referring to what has been marked as Exhibit Number 1, would you locate the original project area and then the proposed addition?

A The original project area is outlined in blue in Section 26, comprises the Southwest Quarter of the Northwest Quarter and the North Half of the Southwest Quarter of Section 26, Township 13 South, Range 33 East.

The proposed expansion includes that proration unit upon which Well Number 5 is located which is the Southwest Southwest Quarter of that section.

Q And Well Number 5 is the proposed injection well?

A Correct.

Q What was your original anticipated volume injection for the original project?

A Original anticipated volume of water being injected into Number 1, the approved injection well, was approximately 175 barrels of water per day which was the produced water from Texeco's properties at that time.

Q What now is your injection rate?

A Injection rate is currently averaging about 300 barrels of water per day.

Q Referring to what has been marked as Exhibit 2, what type of response have you had, if any, to your production program?

A To date, we have received no response to water injection. You will note that on the exhibit, the exhibit has continued to decline. There is a scale change on that exhibit occurring on the January 1, 1967 date. Water injection commenced in September of 1967 and the oil production has continued to decline.

Q In your opinion, what is the reason for this lack of response?

A We haven't put enough water in the ground yet.

Q What is the amount of water that you feel will be necessary to put in before you would get response?

A You'd have to take into consideration the volume of voidage occurring during primary recovery which, in the area of original project, is approximately 400,000 barrels of oil plus

its associated gas. So we'd have to put in, I imagine, 400,000 before we'd even start to approach fill-up.

Q Now, how long has this project been going?

A Since September of '67.

Q About how long do you think it would take for you to get fill-up?

A I approximate two and a half years.

Q Now, what do you anticipate your injection rate will be on your second well?

A The injection rate, anticipated injection rate on the second well will be around 300 barrels of water per day also.

Q So your two, two and a half year area figure basis is posed on approval therefor to be able to inject into the two wells?

A No. I would say you could expect response in the area two and a half years based on the first well. The second well fitting into the pattern and including the production from that area immediately around it, it would take another two and a half years to, or the same two and a half years to get response on that area or more, because we are about 160,000 barrels of water behind.

Q I see. What is the source of the present water and, also, the source of the water for the proposed injection well?

A The source of the present injection water is the water

produced with the oil from Texaco's properties in the Lazy J Penn Field.

Q So this is serving as a salt water injection --

A Yes, sir, it is.

Q -- project, along with --

A It serves very well as a salt water injection well also. The anticipated injection water for Well Number 5 will be supplied by Skelly Oil Company. We expect them to tie into our salt water disposal system in the very near future and dispose of their water prior to the no-pit order.

MR. NUTTER: That will be produced water also?

THE WITNESS: Yes, sir, from the Penn. It would be around 300 barrels of water per day.

Q What is the present status of the injection well?

A The well is currently shut-in. It has been shut-in since January of 1965.

Q Now, referring to what has been marked as Exhibit Number 3 which is your sketch, would you explain the proposed installation?

A The proposed installation involves running a string of two and seven inch OD internally plastic coated tubing, set on a packer at an estimated 9600 feet and to load the tubing casing annulus with inhibited fluid, installing a pressure valve, pressure gauge into the surface to be sure we have no leaks.

Q Is this the same basic installation as your original injection well?

A It is the same basic installation. The only difference being the original well has two inch nominal OD internally plastic coated tubing.

Q And would you have some kind of pressure gauge on your annulus?

A Yes.

Q This is all salt water, I assume?

A Yes.

Q And the actual characteristics of the water were furnished by an exhibit in the original case, is that correct?

A That's correct. There was an exhibit to that effect.

Q Is there any fresh water in the area that could be endangered by this injection well?

A There is fresh water in the area, the Ogallala Formation which is a portion of the Lea County underground water basin. However, the casing and the cementing program on the surface and intermediate string precludes any damage to that formation.

Q What pressures, if any, would you inject this water into?

A Initially, we expected it to be injected on a vacuum, then we found it to be the case on the original well.

Q You don't expect this well to have any trouble taking

the amount of water that you anticipate?

A No, sir, I do not.

Q Now, Exhibit Number 4 is a log of the well, is that right?

A That's correct.

Q In your opinion, would the granting of this application have any adverse effect on the correlative rights of any other operators in the area?

A I do not think so. No, sir.

Q Referring back to Exhibit Number 1 and to the correspondence with -- What's the name of it?

A Elco Oil Company.

Q Elco Oil Company. Are there any producing wells -- First, where is the acreage that this man has?

A According to his letter, it does not show on the map that is prepared under my supervision because the information was not available. He owns all of Section 27, the mineral interest, which is immediately west and adjacent to the proposed and the current project area.

Q Are there any producing wells on 27?

A There are no producing wells, currently, in that section.

Q All those wells are --

A All the wells that have been completed in the Lazy J Penn in that section have been abandoned. There are no wells

immediately offset to Texaco's acreage in that section.

Q Now, did the original mineral owner at the time of the original hearing have notification or enter into this original case at all?

A Yes, sir, he did. He furnished a waiver of objection. That was the Ralph Lowe Estate at the time of the original hearing.

Q Were Exhibits 1 through 4 prepared by you or under your supervision?

A Yes, sir, they were.

MR. KELLY: I move the introduction of Texaco Exhibits 1 through 4 at this time.

MR. NUTTER: Texaco's Exhibits 1 through 4 will be admitted in evidence.

MR. KELLY: That's all we have on direct.

(Whereupon, Applicant's Exhibits 1 through 4 admitted in evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. McCarter, you have been injecting approximately 300 barrels of water per day into the Number 1. How much water has been injected to date?

A Approximately 160,000 barrels of water.

Q So you've got less than half of the required amount to achieve fill-up then, correct?

A Yes, sir.

Q And you'd anticipate for the down southwardly producing wells, you'd have to inject approximately the same amount as Number 5?

A Yes, sir, I do.

Q The water is being injected in Number 1 and will be injected in Number 2 in the same producing interval as Numbers 2 and 3 are completed, isn't that right?

A Yes, sir, they are.

MR. NUTTER: Are there any further questions of Mr. McCarter? He may be excused. Do you have anything further, Mr. Kelly?

MR. KELLY: Nothing further.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3868? We'll take the case under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
DALE McCARTER	
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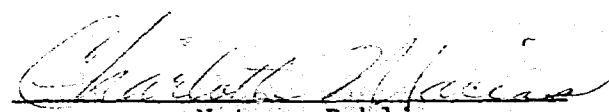
E X H I B I T S

<u>Number</u>	<u>Marked for Identification</u>	<u>Received in Evidence</u>
Applicant's Exhibits 1 through 4	2	9

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

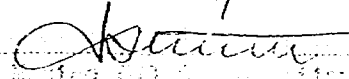
I, CHARLOTTE MACIAS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings,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

Witness my Hand and Seal this 7th day of October, 1968.


Notary Public

My Commission Expires:

February 10, 1971.

I do hereby certify that the foregoing is a true and correct copy of the original as the same appears in the records of the Commission.
9/25 3868 68

New Mexico Oil Conservation Commission

Case
file

November 22, 1968

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OIL CONSERVATION COMMISSION
CASE NO. 3868
LAZY "J" (PENNSYLVANIAN) OIL POOL
LEA COUNTY, NEW MEXICO

Elk Oil Company
P. O. Box 310
Roswell, New Mexico 88201

Gentlemen:

This will acknowledge your letter of November 14, 1968 under the above subject expressing your amazement concerning the proceedings relative to Texaco Inc. obtaining authority from the Oil Conservation Commission of New Mexico to inject salt water into the New Mexico "BV" State NCT-1 Well No. 5.

You may recall that this recent authorization constituted approval for the expansion of an existing waterflood project. Both the original authority and the approval for expansion were obtained through due process in accordance with established approved procedures including notice of hearing to permit any interested party to arrange for representation at the hearings. We did furnish you the information you requested and as pointed out in Mr. Porter's letter to you of October 7, you had thirty days to evaluate your situation and if you felt that you had been adversely affected, ask that the matter be heard de novo. Even though the thirty days has expired we would have no objection to your requesting a new hearing even at this late date.

With regard to the drilling venture that you described in your above subject letter, we sincerely wish you every success in completing a profitable well, however, we can see no possibility of the tests that you propose in the subject well reflecting in any way the waterflooding operation on Texaco's adjoining lease.

Thank you for keeping us advised of your operations. If we can be of any further service to you, please advise.

Yours very truly,

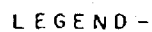
Darrell Smith

By
V. F. Dullnig
Assistant Division Manager

CLW/pw

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

R 33 E



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 3860

SCALE: 0' 2000' 4000'

FMR 8-23-68

ELK OIL COMPANY

POST OFFICE BOX 310
ROSWELL, NEW MEXICO 88201

November 14, 1968

Mr. A. L. Porter, Jr.
Secretary-Director
State of New Mexico
OIL CONSERVATION COMMISSION
P.O. Box 2088
Santa Fe, New Mexico 87501

*gsma
file
con 3868*

Re: OIL CONSERVATION COMMISSION
CASE NO. 3868
LAZY "J" (PENNSYLVANIAN) OIL POOL
LEA COUNTY, NEW MEXICO

Dear Pete:

With further reference to Case 3868, I wish to thank you for forwarding to me a copy of the transcript of the hearing held on September 25, 1968.

As I mentioned to you on the telephone, I was rather surprised that the Commission issued an order immediately after hearing the case, when I had a letter on file asking for consideration. I also informed you that upon my return to New Mexico, I found that TEXACO had immediately started injecting salt water into the formation. This water, I understand, is being obtained from a lease not owned by TEXACO.

I also stated that in order for ELK to actually know whether or not their acreage in Section 27 could be damaged by this TEXACO application for a so-called Water Flood Project, ELK commenced the drilling of a 9800' well 660' from the South and East lines of Section 27. We hope to be able to test the LAZY "J" pay in this well in about 30 days. After testing and evaluating the information, ELK then will recontact the Commission; and if the TEXACO Project is damaging or could damage the reserves under their acreage, ELK will then ask for a re-hearing and cancellation of the permit issued to TEXACO.

We are returning the transcript with this letter and we are sending a copy of this letter to TEXACO. With kindest personal regards, I remain,

Very truly yours,

ELK OIL COMPANY

John M. Kelly
John M. Kelly
Consultant

cc: V. F. Dullnig
TEXACO, Midland, Texas

ELK OIL COMPANY
Box 310
Roswell, New Mexico

November 14, 1968

Mr. V. F. Dullnig
Assistant Division Manager
TEXACO INC.
P.O. BOX 3109
Midland, Texas 79701

Re: OIL CONSERVATION COMMISSION
CASE NO. 3868
LAZY "J" (PENNSYLVANIAN) OIL POOL
LEA COUNTY, NEW MEXICO

Dear Mr. Dullnig:

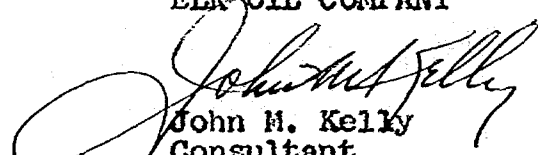
With reference to the above captioned case, I received your letter dated October 4th, but mailed October 8th, in which you gave me a Field Map and Radioactive Log, etc.. Thank you for sending this information for my study.

I was rather amazed that TEXACO did not contact me after ELK sent their first letter to Mr. Markley which was dated September 17, 1968, and was before the case was heard on September 25, 1968 by the Oil Conservation Commission. I was also amazed that TEXACO's Representative in Santa Fe informed the Commission that as of the evening before the hearing they had not had further word from me. I would like to point out that you did not give me the courtesy of a reply to my letter of September 17th, until October 8th.

In order to adequately determine whether damage has been caused or could be caused to the reservoir underlying our acreage in Section 27, we have commenced the drilling of a 9800' well, located 660' from the South and East lines of Section 27. After we have evaluated the information obtained from this well, we will contact you.

Very truly yours,

ELK OIL COMPANY


John M. Kelly
Consultant

JMK:sl

cc: ✓ A. L. Porter, Jr.
Santa Fe, New Mexico



PRODUCING DEPARTMENT - UNITED STATES
MIDLAND DIVISION

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

October 4, 1968

OIL CONSERVATION COMMISSION
CASE NO. 3868
LAZY "J" (PENNSYLVANIAN) OIL POOL
LEA COUNTY, NEW MEXICO

Elk Oil Company
P. O. Box 310
Roswell, New Mexico 88201

Attn: Mr. John M. Kelly

Gentlemen:

Reference is made to your letters dated September 17, 1968 to Texaco Inc. and to the New Mexico Oil Conservation Commission and the Commission's letter to you dated September 19, 1968. For your information we are sending you a copy of each exhibit presented to the New Mexico Oil Conservation Commission at the hearing in Santa Fe, New Mexico, September 25, 1968, concerning the application of Texaco Inc. to expand the State "BV" NCT-1 Waterflood Project in Section 26, T-13-S, R-33-E, in the Lazy "J" (Pennsylvanian) Oil Pool.

- (1) Field map,
- (2) Production performance curves,
- (3) Sketch of subsurface installation in proposed injection well,
- (4) Radioactivity log of proposed injection well.

Yours very truly,

(SIGNED) V. F. DULLNIG

V. F. Dullnig
Assistant Division Manager

CLW:jl

cc: Mr. A. L. Porter, Jr.
Box 2088
Santa Fe, New Mexico

Mr. J. D. Ramey
Box 1980
Hobbs, New Mexico

Copy of Mr. Porter's letter to Mr. Dullnig 10-9-68
6 Mr. Dullnig (10-7-68)
10-9-68



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT - UNITED STATES
MIDLAND DIVISION

September 3, 1968

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

Case 3868
WATERFLOOD EXPANSION
LAZY J (PENNSYLVANIAN) POOL
LEA COUNTY, NEW MEXICO
See 9/25

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

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

Gentlemen:

Subsequent to the hearing of Case 3590 May 24, 1967, the Oil Conservation Commission of the State of New Mexico issued Order No. 3253 June 5, 1967 authorizing Texaco Inc. to institute a pilot waterflood project in the Lazy J (Pennsylvanian) Pool by the injection of water into the Pennsylvanian formation in the interval from 9612' to 9800' in its State "BV" Well No. 1 located in Unit E of Section 26, T-13-S, R-33-E, NMPM, Lea County, New Mexico. The project area was designated to include Units E, K and L of said Section 26. It is respectfully requested that Texaco Inc. be authorized administratively to expand this waterflood project by adding Units M and N of said Section 26 and converting Well No. 5 located in Unit M to water injection service. If this application does not qualify for administrative approval, it is requested that an examiner hearing be scheduled on the next available docket, September 25, 1968 in Santa Fe, New Mexico.

In compliance with Rule 701 a plat is attached showing the project area and all wells and operations in the area. This plat and the attached list show all operators in the field and offset operators. The offset operators are being furnished a copy of this application. In further compliance with Rule 701 a radioactive well log of the proposed additional injection well is attached with the proposed injection interval indicated at a depth of 9620' to 9810'. A sketch is also included showing the casing and proposed tubing and packer installation.

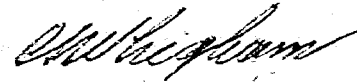
It is proposed to inject fluid down the 2-7/8" OD plastic-coated tubing. The injection fluid will be produced water from Texaco and Skelly operated wells in the Lazy J (Pennsylvanian) Pool.

DOCKET MAILED

Date *9-13-68*

Initial injection into the proposed additional injection well will be approximately 200 barrels water per day on a vacuum. It is desirable to expand the current project to include an additional injection well since injection pressure in the original well has been increasing and additional injection fluid has become available. Furthermore, the additional injection well will be on pattern with the original injection well and should result in a more efficient sweep of the producing reservoir.

Yours very truly,



C. L. Whigham
Division Proration Engineer

CLW:jl
Attachments
cc: Offset Operators

Page 3868

Operators Mailing List
Lazy J. Pennsylvanian Pool
Lea County, New Mexico

Coastal States Gas Producing co.
P.O. Box 235
Midland, Texas 79701

*R. E. Geror
1846 East Broadway
Tucson, Arizona 85719

* C. B. Gillespie, Jr.
Wilkinson-Foster Bldg.
Midland, Texas 79701

Greyhound Leasing & Financial Corp.
1610 Fidelity Union Tower
Dallas, Texas

Hanagan Petroleum Corp.
Box 1737
Roswell, N. M.

H. S. Moss
1503 1st. National Bank Bldg.
Dallas, Texas

McGrath & Smith, Inc.
Vaughn Bldg.
Midland, Texas 79701

Sinclair Oil & Gas Co
P.O. Box 1470
Midland, Texas 79701

Skelly Oil Co.
P.O. Box 730
Hobbs, N. M. 88240

Texaco Inc.
P.O. Box 3109
Midland, Texas 79701

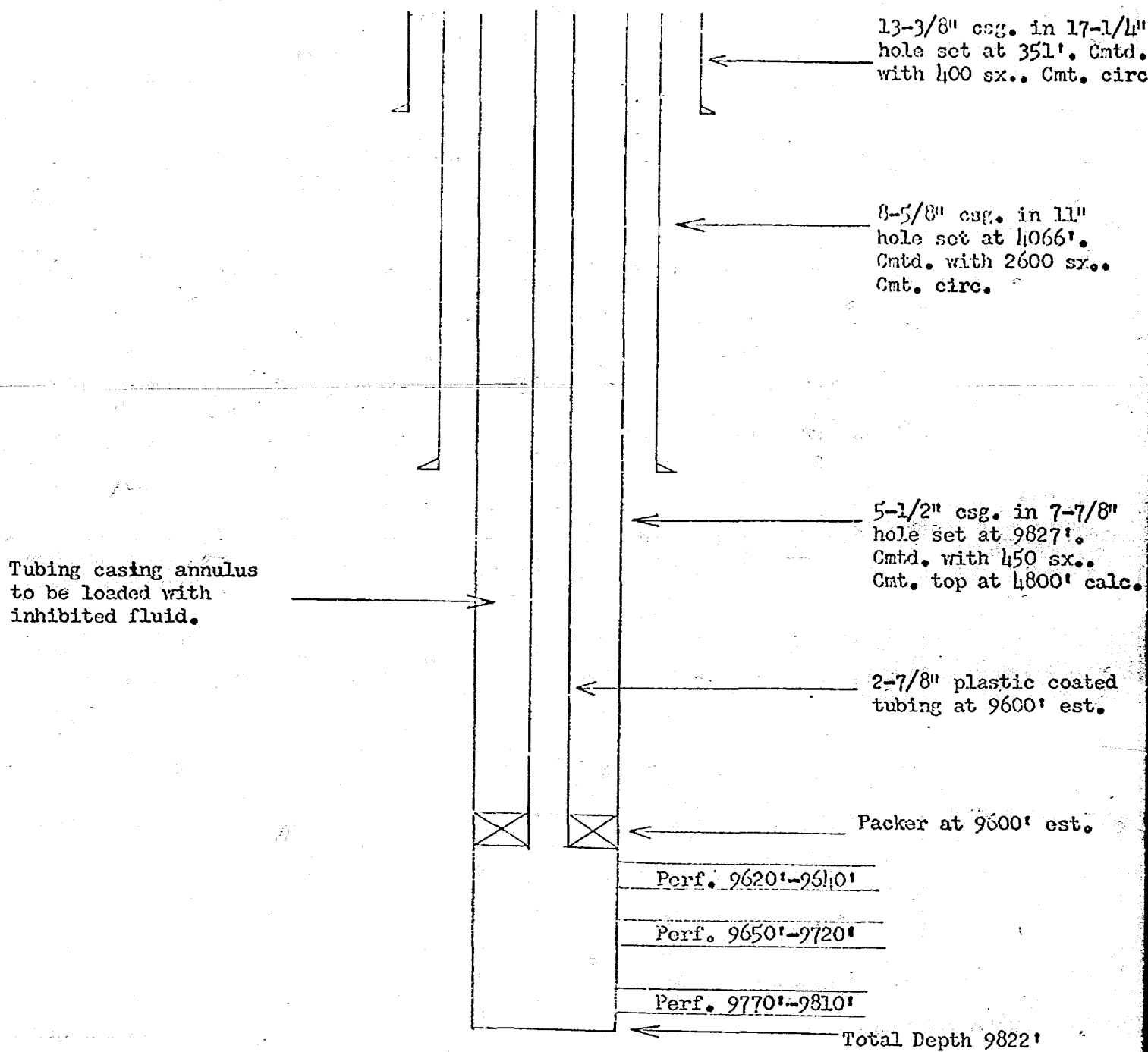
* Texas Crude Oil Co.
205 V & J Tower
Midland, Texas 79701

Texas Pacific Oil Co.
P.O. Box 747
Dallas, Texas 75221

Trice Production Co.
3609 Sinclair
Midland, Texas 79701

Western Oil Producers, Inc.
Box 2055
Hobbs, N. M. 88240

* Offsets Texaco's New Mexico "BV" State NCT-1 Lease



TEXACO INCORPORATED
 NEW MEXICO "BV" STATE (NCT-1) NO. 5
 LAZY "J" FIELD
 LEA COUNTY, NEW MEXICO

Case 3868

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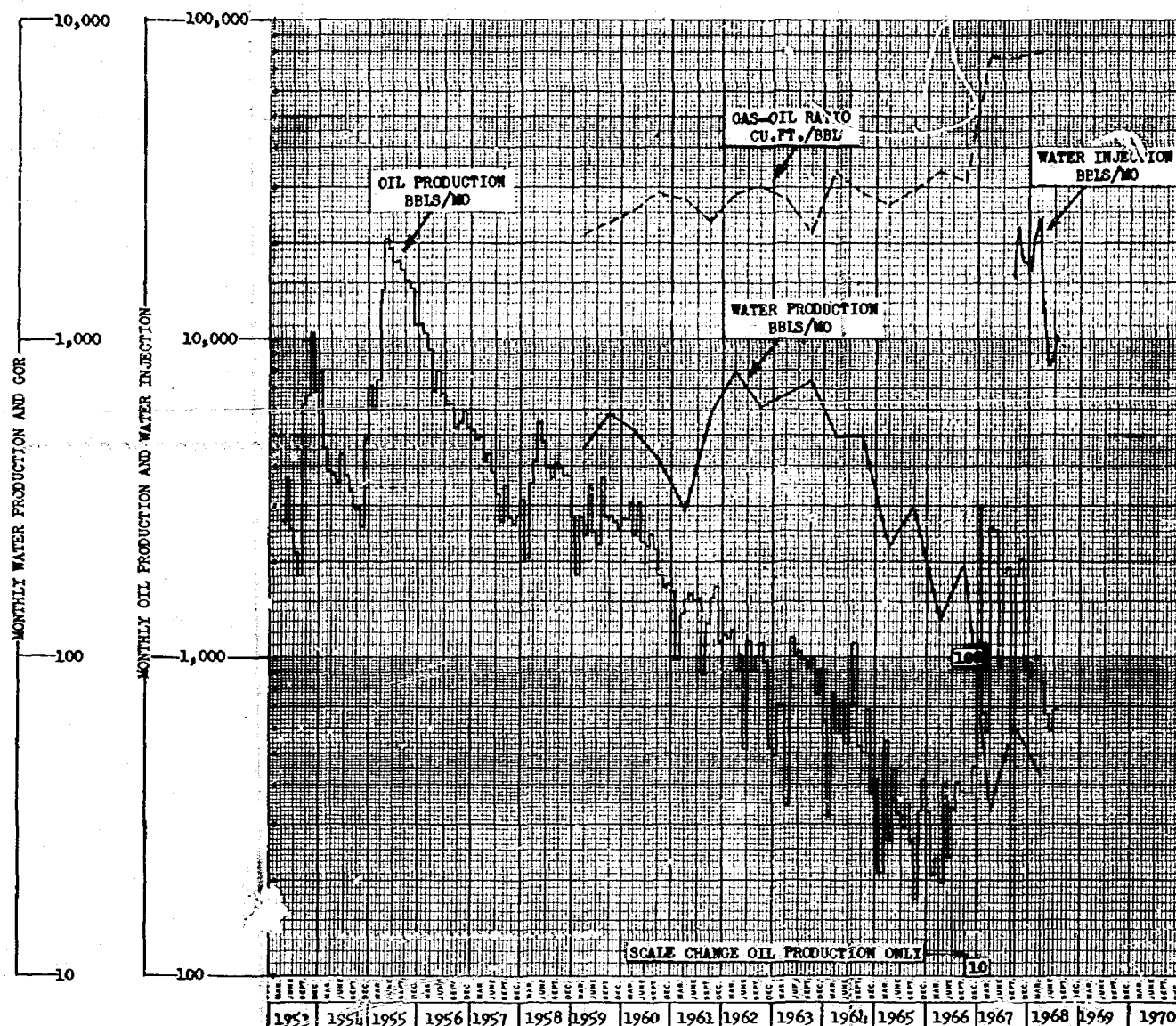
INJECTION WELL
PROPOSED INJECTION WELL

TEXACO Inc.

LAZY "J" PENN FIELD
LEA COUNTY, NEW MEXICO

SCALE: 0' 2000' 4000'

Case 3868 FMR 8-23-68



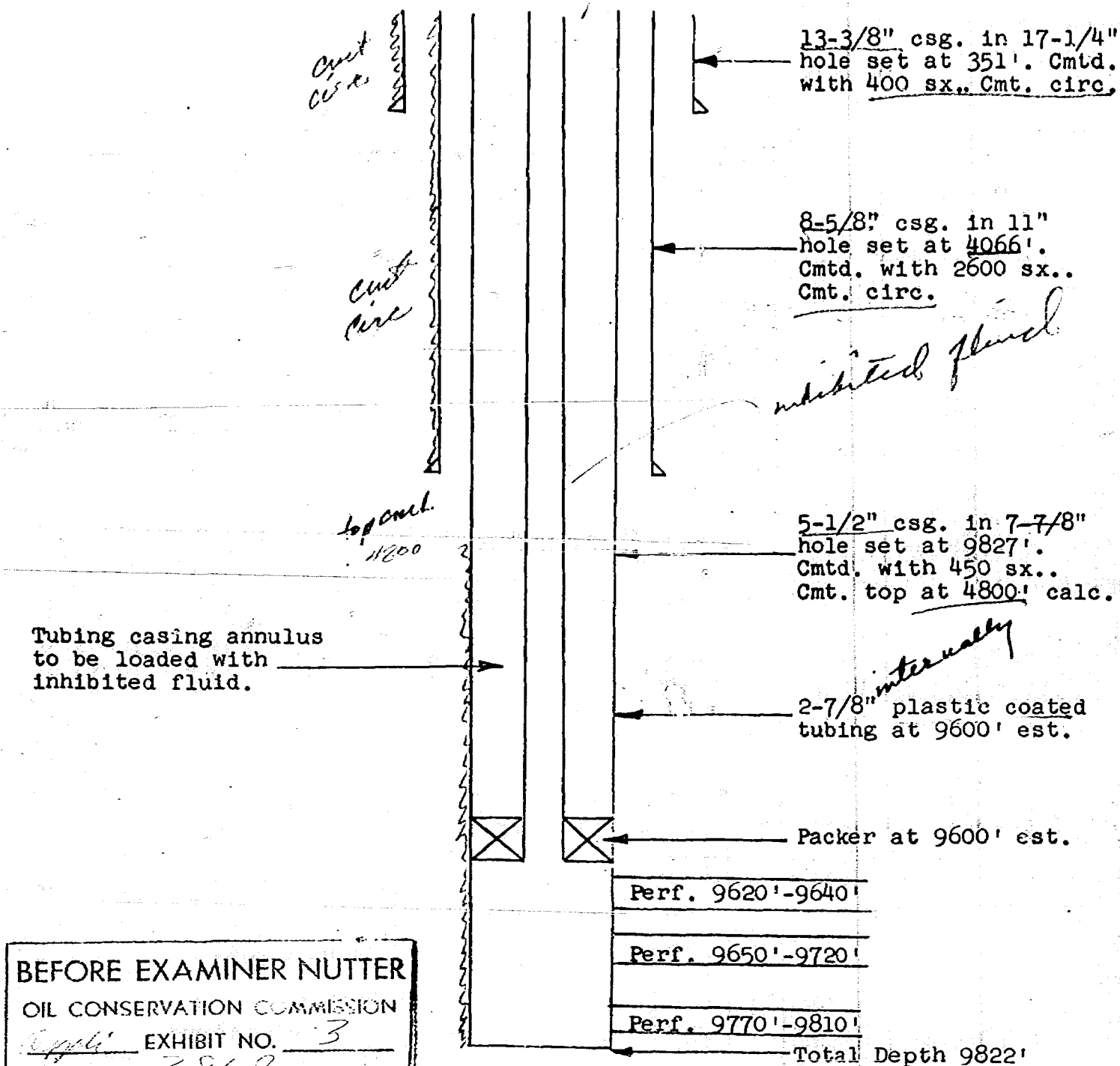
BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 Exhibit NO. 3868
 CASE NO. 3868

TEXACO Inc.
 Mobil Service

PERFORMANCE CURVES

NEW MEXICO "BV" STATE NOT-1 LEASE
 LAZY J (PENN) FIELD
 LEA COUNTY, NEW MEXICO

Drawn By: JBS Date: 9-1-68



TEXACO INC.
 SUBSURFACE INSTALLATION
 NEW MEXICO "BV" STATE (NCT-1) NO. 5
 LAZY "J" FIELD
 LEA COUNTY, NEW MEXICO