

CASE 3982: Application of TEXACO
FOR A DUAL COMPLETION AND WATER
INJECTION, LEA COUNTY, N. MEX.

Case Number

3982

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATE AGENS. EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1170 SIMMS 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 a dual completion)
and water injection, Lea)
County, New Mexico.)

Case No. 3982

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 3982.

MR. HATCH: Application of Texaco, Incorporated for a dual completion and water injection, Lea County, New Mexico.

MR. KELLY: Let the record show the same appearances as in Case No. 3981. Mr. Whigham has already been sworn.

(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 For the record, you are the Carl Whigham who testified previously in Case 3981?

A Yes.

Q Referring to what has been marked Texaco's Exhibit Number 1, would you state briefly what Texaco seeks by that application?

A Exhibit Number 1 is a map of a portion of the Jalmat and Langlie-Mattix Pools which are involved in this application. Many of the wells in this area are multiple completions, but we will only be discussing the completions in the Jalmat and Langlie-Mattix Pools. The well that we are proposing for water

injection and requesting approval for multiple completion as a dual is Texaco's Well No. 6 on the Fristoe "A", NCT-1 Lease comprising the west half of the northwest quarter of Section 35 in Township 24 South, Range 37 East. This is an 80-acre lease with two wells on the north 40 and two wells on the south 40. The particular area here in the vicinity of Section 35 lies along the eastern boundary of the Langlie-Mattix and Jalmat Pool areas.

You may note that this particular lease of Texaco adjoins Amerada's Woolworth Unit, and the well that we propose for an injection well will be on a pattern with and in cooperation with the Woolworth Unit.

Well No. 6 is presently completed as a Jalmat gas well. It was formerly completed in the Langlie-Mattix. Our plans are to drill out the Langlie-Mattix interval and inject water into the Langlie-Mattix zone that formerly produced in Well No. 6.

Well No. 11, which is a very close north offsetting well, is completed in the Justin Blinbry Pool. We would like to request approval for a project area comprising this entire lease.

We have identified the injection well as No. 6, and the other producing well will be Well No. 1. This well is not

found on the Conservation Commission's allowable schedule, because it has been shut in for a number of years. But it is planned that as responses indicating in this particular area, we will be able to put this particular well back on production from the Langlie-Mattix reservoir.

Then Well No. 10, which is a direct south offset from Well No. 1, is completed in the Justin Blinebry Pool. So our project area will be comprised of this entire lease.

I might add here that it would have been within the intent of the 701 and the provisions thereof, to include the adjoining tracts, 40-acre tracts which have wells completed in the Langlie-Mattix, but these are different leases, so we did not plan at this time to unitize. Later on, when response is exhibited in this area, serious and concerted effort will be made at that time to unitize a larger area.

Q Now, as I understand it, the proposed injection well, Well No. 6, is presently a Jalmat gas well, and was at one time producing from the Langlie-Mattix Pool?

A That is correct.

Q And your Well No. 1 in the south half of that lease will also be assigned as a Langlie-Mattix well, and be put back on production if you get response?

A Yes.

Q Now, what is the production history on that injection well, and Well No. 1?

A Well, the injection well ceased producing from the Langlie-Mattix interval several years ago when, in 1963, the well was plugged with cement and reperforated or recompleted. However, there has been no market for the gas, and the well has not produced.

Now, at the present time, negotiations are under way, and we are assured that we will be able to sell the gas that will be produced from Well No. 6.

Well No. 1 was a very low marginal oil well, and it ceased producing oil in 1957, but the well is still open in the Langlie-Mattix reservoir.

Q Do you have any estimate of the total production from this lease in the Jalmat and Langlie-Mattix Pool?

A No, I do not. However, these wells in this particular area on a broad average can be expected to yield approximately 30,000 to 40,000 barrels of oil per well. So these completions are very marginal from an economic standpoint. It is seldom profitable to drill a well in the Langlie-Mattix reservoir in this vicinity for completion as a single producer.

Q Do you have any information on the subject of the Woolworth unit?

A Yes, this unit was originally approved as a project, or as a pilot project, and has subsequently been expanded on several occasions by converting additional wells to water injection service. Water injection operations have been in operation long enough to indicate that the water flooding of the Langlie-Mattix reservoir will be successful. It is my understanding that the Amerada reservoir engineers roughly estimate at this time that secondary recovery may be as much as primary. So we can expect successful water flooding in the future.

Q Upon that assumption, then, you could expect to recover approximately 40,000 barrels from each well, if this were a successful flooding?

A That's correct.

Q What volumes of water will you be injecting into this well?

A Texaco's injection operations will be in cooperation with the Woolworth Unit, and in that line it is currently planned to inject about 400 barrels of water a day into Well No. 6.

Now, currently there is only about 100 barrels of produced salt water available for injection, so an additional 300 barrels of water daily will be obtained from the water source

that Amerada is using, so initially we will plan to inject approximately 300 barrels of purchased water and 100 barrels of produced water daily into this well at pressures that are estimated to be in the order of 500 PSI, initially.

Q Where will your produced water come from?

A Primarily from all of Texaco's adjoining leases in this immediate area. Texaco has leases on the east half of Section 26, and the north half of Section 35, as well as the southeast quarter of Section 35.

Q Your purchased water, that is fresh water?

A Yes.

Q So most of the water that would be injected into this well would be fresh water?

A Yes, that's correct.

Q Do you expect that your ratio of salt water will increase, or do you expect these adjoining wells to increase their water production as time goes on?

A If the water production does increase, it will probably be as a result of the water that is injected in the formation, because this particular area is in the late stages of primary production, and it is doubtful that natural primary water production will increase significantly above the rate at the present time.

Q Now, what is the drive mechanism of this reservoir?

A The Langlie-Mattix is a solution gas drive.

Q Now, turning to what has been marked as Exhibit Number 2, your schematic diagram of the proposed injection well, would you explain both the salt water injection features and the proposed multiple completion features?

A Exhibit Number 2 is a schematic diagram of the sub-surface installation that is anticipated from this well, subsequent to approval by the Commission for dual completion. We will plan to drill out the Langlie-Mattix Zone that has been previously plugged with cement. The open-hole interval below the casing is set down to a total depth, will be from a depth of 3,369 feet down to 3,918 feet, and water will be injected into this interval through the two and three-eighths-inch internally plastic-coated tubing, with a packer set at 3,300 feet.

The Jalmat gas perforations shown on this sketch are from a depth of 2,708 feet -- I'd like to correct that statement. The perforations are not over an interval, but are at specific points. There are four perforations, one at 2,708, one at 2,720, one at 2,788, and one at 2,796. The Jalmat gas will be produced from this interval up the tubing casing annulus to the outlet. The Jalmat gas from the Yates Formation is relatively

dry and as long as it continues to produce in that state, no difficulties are anticipated, and this type of completion should be quite adequate. If and when significant volumes of liquid, either oil or water, are produced, it may then be necessary to install another string of tubing through which to produce this Jalmat gas.

Q What kind of cementing program do you have in that well?

A Three strings of casing have been installed in the well, and each has been cemented adequately to preclude the migration of fluid from one zone to the other. The seven-inch casing has a cement top behind the casing at approximately 2,200 feet, which is through and above the Jalmat gas interval.

Q How about any surface water in this area?

A There is some fresh Oglalla water in the area, and there is also some brackish water found in the Santa Rosa Formation in this vicinity.

Q You have cement circulated to the surface through the fresh water area?

A No, the cement was not circulated to the surface on this particular completion. It was common practice at that time to cement with a volume of cement that would cover the lower 200, or 300, or 400 feet of casing, and at the time it was

not felt necessary to cement the casing all the way to the surface.

However, the casing records do indicate that sufficient casing, or sufficient cement was used to preclude the movement of fluids from one formation to another.

Q Well, your injection in this case will be water, which is not particularly corrosive, because most of it being fresh water?

A Yes, that is correct.

Q Do you anticipate any problems with corrosion or leaks?

A No, we don't.

Q How would you be able to detect any leaks since you will not have any inert fluid in the annulus?

A Probably the best way will be to compare the analysis of the water being injected with the water being produced. If very similar characteristics were noted, we could assume that the injection tubing was leaking, and we could remove the tubing and inspect it or replace it with a new string of tubing. But the primary method of determining whether or not a leak existed, I believe, would be by an analysis of the water that was produced on the Jalmat side of the well head, with the water that was being injected.

Q Are there other wells in the area that are producing gas up the annulus from the Jalmat?

A Yes, it is my understanding that Pan American Petroleum Corporation recently obtained approval from the Commission for a similar annular production authority to produce a Jalmat gas well located up in Section 21, in the northwest portion of the map that we show as Exhibit Number 1. If I'm not mistaken, this well was known as Pan American, US Meyers Well No. 4, located in Unit E, in Section 21.

Q In your opinion, this proposed installation will effectively segregate the two zones to prevent migration?

A Yes, sir.

Q You have also as Exhibit Number 3 a log?

A Yes.

Q In your opinion, would the granting of this application prevent waste by allowing you to produce oil and gas that might otherwise be left in place?

A Yes, it will.

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

A No, it will not.

MR. KELLY: I move the admission of the Applicant's

Exhibits 1, 2, and 3.

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

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

MR. KELLY: That is all I have on direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Whigham, do you have any idea what the calculated top of the cement on the thirteen-inch casing might be?

A Not off-hand, Mr. Nutter.

Q Do you know what size hole was drilled there?

A I do not have any exhibits with me that indicate the hole size.

Q I suppose the same would be true of the eight and five-eighths-inch casing?

A Yes.

Q However, the surface casing was cemented with fifteen sacks, and the intermediate with 100 sacks?

A That is correct.

Q And you do have the top of the cement on the long string, being at 2,200 feet?

A That's right, well above the Jalmat gas interval.

Q Do you know whether Texaco -- you mentioned that you were going to cooperate with Amerado on this plug to the west there. Is it their intention, then, to put either their No. 7 well in the southeast-southeast of 27, or their No. 1 well in the southeast-northeast of 34 on injection?

A Yes, sir. I don't know what the time is on that, but consideration has been given to converting one or both of those two wells.

Q And they would be an extension of the existing pattern, and you well would be a further extension of the same pattern, then?

A Yes.

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

MR. KELLY: Nothing further.

MR. NUTTER: Does anyone have anything further in Case 3982? We will take the case under advisement.

I N D E X

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<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

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 hearing held on Case No. 3982
 held by me on 12/22, 1968.
W. J. ..., Chairman
 New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 6, 1969

C
Mr. Booker Kelly
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 737
Santa Fe, New Mexico

O
Dear Sir:

Reference is made to Commission Order No. R-3625, recently entered in Case No. 3982, approving the Texaco Langlie Mattix Fristoe "A" Waterflood Project.

P
Injection is to be through the one authorized water injection well which is to be equipped with plastic-coated tubing set in a packer at approximately 3300 feet.

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 will be eligible to receive under the provisions of Rule 701-E-3 is 34 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

-2-

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

January 6, 1969

C
O
P
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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/DSN/ir

cc: Oil Conservation Commission
Hobbs, New Mexico

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

ROUGH DRAFT FOR WATERFLOOD LETTERS

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-3625, ^{mainly} entered in Case No. 3982, approving the Texaso Langlie matting Frisco "A" Waterflood Project.

Injection is to be through the one authorized water injection well which is to be equipped with plastic-coated tubing set in a packer at approximately 3300 feet.

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 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,

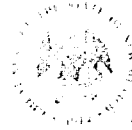
A. L. PORTER, Jr.
Secretary-Director

cc: OCC: Hobbs x
Artesia
Aztec
USGS

Mr. Frank Irby, State Engineer Office, Santa Fe, New Mexico

Mr. D. E. Gray

State of New Mexico
Oil Conservation Commission



P. O. BOX 2088
SANTA FE

Other _____

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. 3982
Order No. R-3625

APPLICATION OF TEXACO INC.
FOR A DUAL COMPLETION AND
WATER INJECTION, 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 9th 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., seeks authority to dually complete its C. C. Frietas "A" Federal NCT-1 Well No. 6, located in Unit D of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of gas from the Jalmat Gas Pool in the perforated interval from approximately 2708 feet to 2796 feet through the casing-tubing annulus, and to permit the injection of water for secondary recovery purposes into the Queen formation of the Langlie-Mattix Pool in the open-hole interval from approximately 3369 feet to 3518 feet through 2 3/8-inch plastic-lined tubing, with separation of the zones by a packer set at approximately 3300 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That the Langlie-Mattix wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the proposed dual completion will prevent the drilling of unnecessary wells, and that the proposal will otherwise prevent waste and protect correlative rights; and that the dual completion and the proposed waterflood project 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:

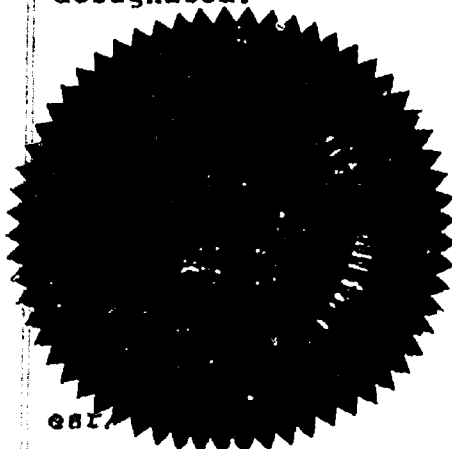
(1) That the applicant, Texaco Inc., is hereby authorized to dually complete its C. C. Fristoe "A" Federal NCT-1 Well No. 6, located in Unit D of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of gas from the Jalmat Gas Pool in the perforated interval from approximately 2708 feet to 2796 feet through the casing-tubing annulus, and to permit the injection of water for secondary recovery purposes into the Queen formation of the Langlie-Mattix Pool in the open-hole interval from approximately 3369 feet to 3518 feet through 2 3/8-inch plastic-lined tubing, with separation of the zones by a packer set at approximately 3300 feet.

(2) That the subject waterflood project is hereby designated the Texaco Langlie-Mattix Fristoe "A" 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
DAVID F. CARGO, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

- CASE 3978: Application of Texas Pacific Oil 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 Seven Rivers-Queen formations in the perforated interval from 3148 feet to 3450 feet in its McKinney Well No. 1 located in Unit A of Section 36, Township 24 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 3979: Application of Consolidated Oil & Gas, 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 Abo formation in the perforated and open-hole interval from 8500 feet to 9200 feet in its Shipp Well No. 2 located in the NE/4 SE/4 of Section 17, Township 17 South, Range 37 East, Midway-Abo Pool, Lea County, New Mexico.
- CASE 3980: 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 Upper Pennsylvanian formation in the perforated interval from approximately 9791 feet to 9954 feet in its State "22" Well No. 1 located in Unit I of Section 22, Township 14 South, Range 32 East, Tulk-Pennsylvanian Pool, Lea County, New Mexico.
- CASE 3981: 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 Yates-Seven Rivers formations, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico, through the following two wells located in Section 34, Township 20 South, Range 34 East:
- B. V. Lynch "A" Federal Well No. 8 in Unit I;
Disposal Interval - 3690 feet to 3753 feet;
- B. V. Lynch "A" Federal Well No. 11 in Unit G;
Disposal Interval - 3538 feet to 3617 feet.
- CASE 3982: Application of Texaco, Inc. for a dual completion and water injection, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its C. C. Fristoe "A" Federal NCT-1 Well No. 6 located in Unit D of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas through the casing-tubing annulus from the Jalmat Gas Pool in the perforated interval from 2708 feet to 2796 feet and

(CASE 3982 continued)

the injection of water for secondary recovery purposes into the Queen formation of the Langlie-Mattix Pool in the open-hole interval from 3369 feet to 3518 feet through tubing.

CASE 3983: Application of Newmont Oil Company for a waterflood expansion and unorthodox well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Loco Hills Sand Unit Waterflood Project by the injection of water into the Loco Hills sand of the Grayburg formation through three injection wells to be drilled at unorthodox locations in Township 18 South, Range 29 East, Eddy County, New Mexico, as follows:

A well to be drilled 1960 feet from the South line and 1310 feet from the East line of Section 4;

A well to be drilled 10 feet from the North line and 1320 feet from the East line of Section 9;

A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

Applicant further seeks to drill a producing well in said project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, said Township and Range.

Produced Gas

Injected Water

13" csg. set at 168'. Cmtd. with 50 sx.

8-5/8" csg. set at 1295'. Cmtd. with 100 sx.

7" csg. set at 3369'. Top of cmt. at 2200'.

2-3/8" internal plastic coated tubing with beveled couplings at 3300'.

Jalmat Gas (Yates)
Perforations:
2708', 2720',
2788', 2796'

Packer at 3300'.

3369

Langlie Mattix (Queen)
Open Hole 3369'-3518'.

Total Depth 3518'.

open hole

TEXACO INCORPORATED

Schematic Diagram

Proposed Water Injection Completion

C.C. FRISTOE "A" (NCT-1) NO. 6

JALMAT GAS (YATES) AND LANGLIE MATTIS (QUEEN) POOL
LEA COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

TEXACO EXHIBIT NO. 2

CASE NO. 3982



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

November 13, 1968

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

Case 3982

DUAL COMPLETION AND SALT WATER DISPOSAL
LANGLIE-MATTIX OIL POOL
JALMAT GAS POOL
LEA COUNTY, NEW MEXICO

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

*waterflood
via tele.*

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

Gentlemen:

It is respectfully requested that an examiner hearing be scheduled in Santa Fe on the next available docket to consider the application of Texaco Inc. for approval of a dual completion and salt water disposal project. An order will be sought authorizing the dual completion of Texaco Inc. C. C. Fristoe "A" Federal NCT-1 Well No. 6 in such a manner as to produce gas from the Jalmat Gas Pool and to inject salt water into the Langlie-Mattix Oil Pool. The subject well is located in Unit D, Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.

The well will be equipped with 2 3/8" OD internally plastic coated tubing with a packer installed at a depth of 3,300' to isolate the two reservoirs. Approximately 600 barrels of water per day will be injected at a pressure of approximately 500 psi through the tubing into the open hole interval at a depth of 3,369' to 3,518'. Gas will be produced from the Yates Reservoir of the Jalmat Gas Pool through the tubing-casing annulus. The project area will be comprised of the W/2 of the NW/4 of Section 35, Township 24 South, Range 37 East being the entire C. C. Fristoe "A" Federal NCT-1 Lease.

In compliance with Oil Conservation Commission State-wide Rule 701, we attach herewith a plat of the area, a diagrammatic

DOCKET MAILED

Date 11-21-68

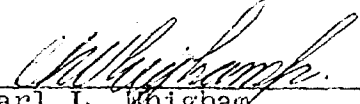
November 13, 1968

sketch of the proposed dually completed injection well, a well log and a list of the six offset operators. Each of the six offset operators are receiving a copy of this application for a hearing.

Yours very truly,

Darrell Smith

By


Carl L. Whigham
Division Proration Engineer

CLW/pw
Attach.

OFFSET OPERATORS

TEXACO Inc
C. C. FRISTOE 'A' FEDERAL NCT-1 LEASE
LANGLIE-MATTIX FIELD
LEA COUNTY, NEW MEXICO

Amerada Petroleum Corp
P. O. Box 312
Midland, Texas 79701

Robert L. Parker
P. O. Box 1742
Midland, Texas 79701

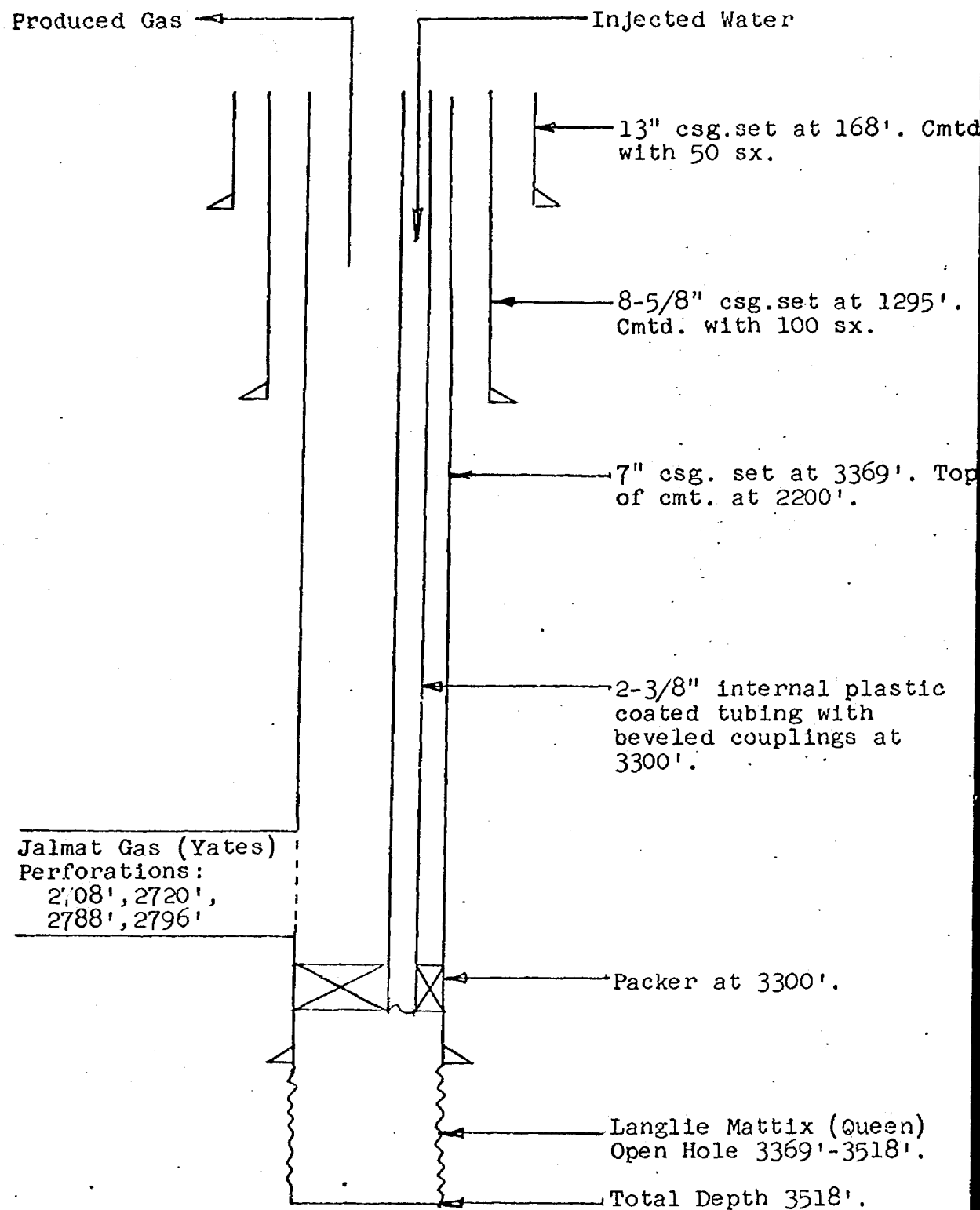
George L. Buckles Company
P. O. Box 56
Monahans, Texas 79756

Sunset International Petroleum Corp
Suite 308 - Wall Building
Midland, Texas 79701

Continental Oil Company
P. O. Box 460
Hobbs, New Mexico 88240

Humble Oil & Refining Company
P. O. Box 1600
Midland, Texas 79701

Case 3982



TEXACO INCORPORATED

Schematic Diagram

Proposed Water Injection Completion

C.C. FRISTOE "A" (NCT-1) NO. 6

JALMAT GAS (YATES) AND LANGLEIE MATTIS (QUEEN) POOL
LEA COUNTY, NEW MEXICO

Case 3982

DRAFT

GMH/esr

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:

APPLICATION OF TEXACO INC.
FOR A DUAL COMPLETION AND
WATER INJECTION, LEA COUNTY,
NEW MEXICO.

CASE No. 3982

Order No. R-3625

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 _____ 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., seeks authority to
dually complete its C. C. Fristoe "A" Federal NCT-1 Well No. 6,
located in Unit D of Section 35, Township 24 South, Range 37
East, NMPM, Lea County, New Mexico, in such a manner as to permit
the production of gas from the Jalmat Gas Pool in the perforated
interval from approximately 2708 feet to 2796 feet through the
casing-tubing annulus, and to permit the injection of water for
secondary recovery purposes into the Queen formation of the
Langlie-Mattix Pool in the open-hole interval from approximately
3369 feet to 3518 feet through 2 3/8-inch ^{plastic lined} tubing, with
separation of the zones by a packer set at approximately 3300
feet.

(4) That the wells in the Langlie-Mattix Pool are in an advanced state of depletion and it is the opinion of the Commission that the proposed dual completion project should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(6) That approval of the proposed dual completion will prevent the drilling of unnecessary wells, and will otherwise prevent waste and protect correlative rights. ^{that the proposed dual completion will prevent waste and protect correlative rights} ^{and that the dual completion project 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 dually complete its C. C. Fristoe "A" Federal NCT-1 Well No. 6, located in Unit D of Section 35, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of gas from the Jalmat Gas Pool in the perforated interval from approximately 2708 feet to 2796 feet through the casing-tubing annulus, and to permit the injection of water for secondary recovery purposes into the Queen formation of the Langlie-Mattix Pool in the open-hole interval from approximately 3369 feet to 3518 feet through ^{plastic lined} $2\frac{3}{8}$ -inch tubing, with separation of the zones by a packer set at approximately 3500 feet.

(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.

(2) That the subject waterflood project is hereby designated the Texaco Langlie-Mattix Fristoe "A" 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 the Commission Rules and Regulations 704 and 1120 of the Commission Rules and Regulations.