

CASE 2826: Application of TEXACO
for a triple completion and for

CASE No.
2826

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

DRAFT

JMD/esr
June 7, 1963

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. 2826

Order No. R- 2505

JMD
APPLICATION OF TEXACO INC.
FOR A TRIPLE COMPLETION AND
FOR CERTAIN ADMINISTRATIVE
PROCEDURES, LEA COUNTY, NEW
MEXICO.

A.P. 6/10
ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
June 5, 1963, at Santa Fe, New Mexico, before Elvis A. Utz,
Examiner duly appointed by the Oil Conservation Commission of New
Mexico, hereinafter referred to as the "Commission," in accordance
with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of June, 1963, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner,
Elvis A. Utz, 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
complete its State "L" Well No. 6, located in Unit B of Section
1, Township 18 South, Range 34 East, NMPM, Vacuum Field, Lea
County, New Mexico, as a triple completion (combination) to
produce oil from the Wolfcamp and Pennsylvanian formations
through parallel strings of 2 7/8-inch casing and from the
Devonian formation through 1 1/2-inch tubing installed within
3 1/2-inch casing, all casing strings to be cemented in a
common well bore.

(3) That the applicant proposes to circulate cement
from total depth into the intermediate casing, to cement the

intermediate casing into the surface casing, and circulate the surface casing cement to the surface.

(4) That the mechanics of the proposed triple completion, *including the casing and tubing programs,* are feasible and in accord with good conservation practices.

(5) That approval of the proposed multiple completion will prevent waste and protect correlative rights.

(6) That the applicant also seeks the establishment of an administrative procedure for approval of similar multiple completions in this area.

(7) That the proposed casing and tubing program for the Devonian zone of said multiple completion may readily be adapted to artificial lift by means of hydraulic pumping equipment, when artificial lift becomes necessary and therefore justifies the establishment of an administrative procedure for approval of similar multiple completions in this immediate area.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized ^{770/8820 71/E 1/1/64} to complete its State "L" Well No. 6, located in Unit B, of Section 1, Township 18 South, Range 34 East, NMPM, Vacuum Field, Lea County, New Mexico, as a triple completion (combination) to produce oil from the Wolfcamp and Pennsylvanian formations through parallel strings of 2 7/8-inch casing and from the Devonian formation through 1 1/2-inch tubing installed within 3 1/2-inch casing, all casing strings to be cemented in a common well bore.

PROVIDED HOWEVER, That cement shall be circulated from total depth into the intermediate casing, the intermediate casing shall be cemented into the surface casing, and the surface casing cement shall be circulated to the surface.

PROVIDED FURTHER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.

PROVIDED FURTHER, That the applicant shall take zone segregation tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Devonian formation.

IT IS FURTHER ORDERED:

(1) That the Secretary-Director is hereby authorized to grant administrative approval of similar multiple completions where the provisions of Section IV of Rule 112-A have been fully complied with; and

1. The well will be completed as a multiple completion (combination) to produce oil from the Vacuum Field and will include a completion in the Devonian formation.
2. The Devonian completion will utilize tubing having an inside diameter of not less than 1.38 inches installed in not less than 3 1/2-inch casing.
3. The well is within one mile of a similar multiple completion well that has been approved by the Commission after notice and hearing or by administrative order.

(2) That the provisions of Rule 112-A shall apply to all wells receiving administrative approval under this order insofar as said rule is not inconsistent with this order.

IT IS FURTHER ORDERED:

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.

OIL CONSERVATION COMMISSION

BOX 2045

BOBBS, NEW MEXICO

1963 MAY 23 AM 11

File 282.6

DATE May 8, 1963

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

Re: Proposed NSP

Proposed NSL

Proposed NFO

Proposed DC

Triple X

Gentlemen:

I have examined the application dated 5/6/63

for the Texaco, Inc. St. of N. M. "L" #6-B 1-18-34
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Cement must tie back into 9 5/8"---E.F.E.

Geologically O.K.---J.W.R.

Yours very truly,

OIL CONSERVATION COMMISSION

Case 2826

OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

DATE May 22, 1963

Re: Proposed NSP

Proposed NSL

Proposed NFO

Proposed DC

Revision X

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

Gentlemen:

I have examined the application dated 5/9/63
for the Texaco, Inc. St. of New Mexico "L" #6-B 1-18-34
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Cement must tie back into 9 5/8"---E.F.E.

Top Penn (Cisco) @ \pm 10,005--geologically O.K. as proposed---J.W.R.

Yours very truly,

OIL CONSERVATION COMMISSION

MAY 23 1963

TEXACO
INC.

PETROLEUM PRODUCTS



P. O. Box 728
Hobbs, New Mexico
May 8, 1963

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Re: Correction to Application for
Triple Conventional and Dual
Tubingless Completion, State
of New Mexico "L", Well No. 6,
Lea County, New Mexico

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

Gentlemen:

Attached is a revised application for multiple completion and diagrammatic sketch to correct the initial application for TEXACO Inc. State of New Mexico "L" Well No. 6, Lea County, New Mexico, dated May 3, 1963. The estimated perforated Pennsylvanian interval should read 10,250 feet to 10,300 feet instead of the indicated 10,925 feet to 10,935 feet.

Your indulgence shall be appreciated and all offset operators are being sent copies of this corrected application this date by registered mail.

Yours very truly,

A handwritten signature in cursive script, appearing to read "J. G. Ellevins, Jr.".

J. G. Ellevins, Jr.
Assistant District Superintendent

WPY/om

cc: NMOCC, Hobbs
Offset Operators

Attachments

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

5-1-61

APPLICATION FOR MULTIPLE COMPLETION

Operator TEXACO Inc.		County Lea	Date May 8, 1963
Address Box 728, Hobbs, New Mexico		Lease State of N.M. "L"	Well No. 6
Location of Well B	Unit 1	Township 18-S	Range 34-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☒ NO ☐

2. If answer is yes, identify one such instance: Order No. **MC-1265**; Operator, Lease, and Well No.:

TEXACO Inc. State of New Mexico "O" (NCT-1) Well No. 11.

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Vacuum Wolfcamp	Undesign. Pennsylvanian	Vacuum Devonian
b. Top and Bottom of Pay Section (Perforations)	Est. 9500' - 10,000'	Est. 10,250' - 10,300'	Est. 11,800' - 11,820'
c. Type of production (Oil or Gas)	Oil	Oil	Oil
d. Method of Production (Flowing or Artificial Lift)	Flow	Flow	Flow

4. The following are attached. (Please mark YES or NO)

- Yes a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- No c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- No d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Marathon Oil Company, P. O. Box 2107, Hobbs, New Mexico

Shell Oil Corporation, Box 1858, Roswell, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO ☐ . If answer is yes, give date of such notification **May 8, 1963 (registered mail)**.

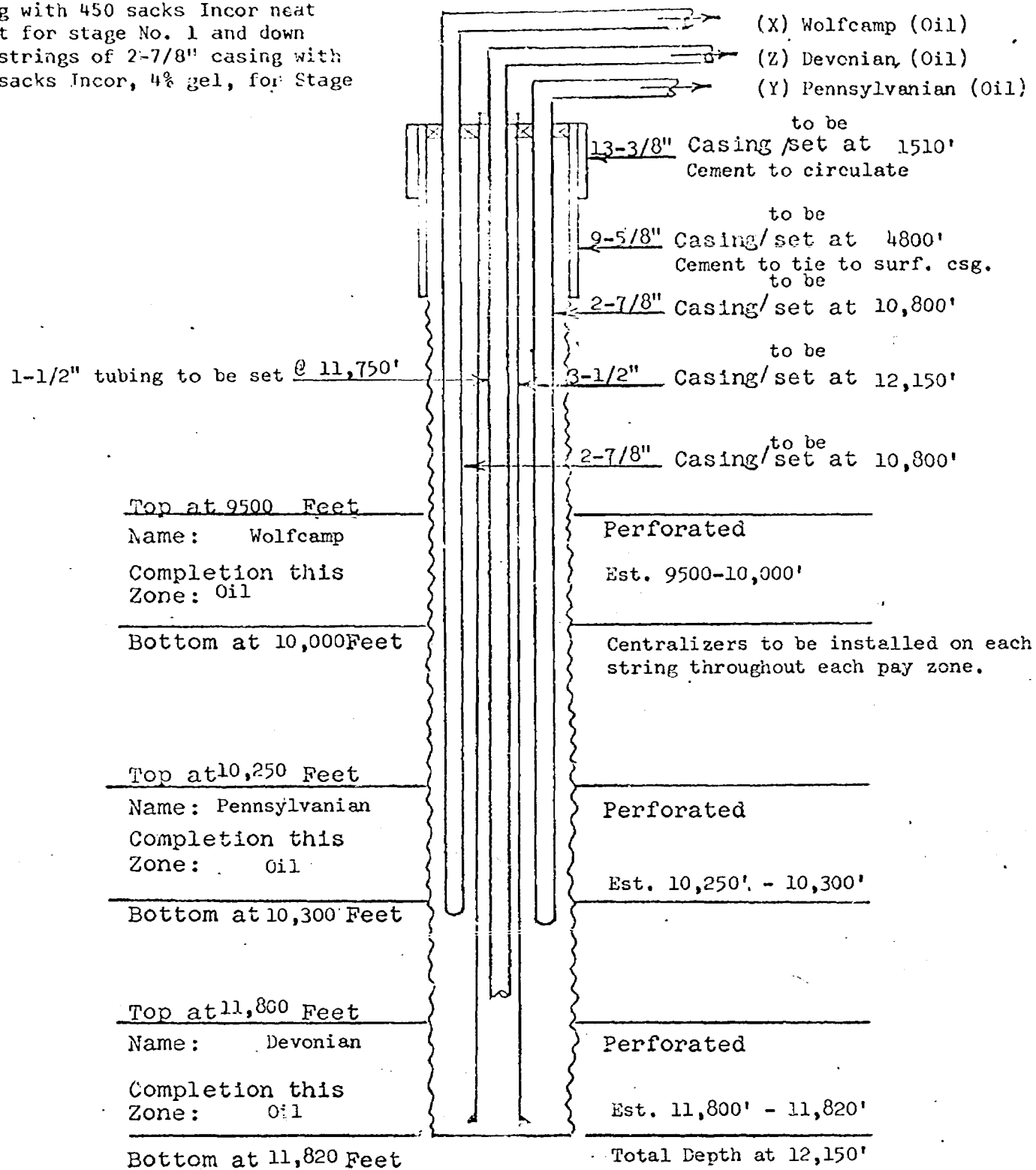
CERTIFICATE: I, the undersigned, state that I am the **Asst. Dist. Supt.** of the **TEXACO Inc.** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

J.G. Blevins, Jr. Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.
- NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

DIAGRAMMATIC SKETCH OF TRIPLE COMPLETION INSTALLATION (TYPING)

NOTE: To be cemented down 3-1/2" casing with 450 sacks Incor neat cement for stage No. 1 and down both strings of 2-7/8" casing with 1750 sacks Incor, 4% gel, for Stage No. 2



TEXACO Inc.

LEASE: State of New Mexico "L" Well No. 6
 FIELD: Vacuum (Devonian and Wolfcamp) and Undesign. Pennsylvanian
 DATE: May 8, 1963.

TEXACO
INC.

PETROLEUM PRODUCTS



P. O. Box 728
Hobbs, New Mexico
May 3, 1963

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Re: Application for Triple Conventional
and Dual Tubingless Completion
State of New Mexico "L" Well No. 6
Lea County, New Mexico

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

Gentlemen:

Attached is TEXACO Inc.'s application for conventional and dual tubingless completion for the State of New Mexico "L" Well No. 6, located 770 feet from the north line and 2,090 feet from the east line, Unit B, Section 1, T-18-S, R-34-E, Lea County, New Mexico. TEXACO plans to complete this well as a conventional and dual tubingless oil completion in the Vacuum (Devonian, and Wolfcamp) and Undesignated Pennsylvanian Pools. It is anticipated that all zones will be oil completions and will flow initially. Approval has been granted previously by the New Mexico Oil Conservation Commission for these zones for TEXACO Inc.'s State of New Mexico "O" (NCT-1) Well No. 11 by Order No. MC-1265.

Also attached is a copy of the plat showing the area immediately surrounding TEXACO's State of New Mexico "L" Lease and a diagrammatic sketch of the proposed conventional and dual tubingless completion. It is respectfully requested that TEXACO Inc. be granted administrative approval for this application as provided for under Rule 112-A.

Yours very truly,

J. G. Blevins, Jr.
J. G. Blevins, Jr.
Assistant District Superintendent

WPY/om

cc: NMOCC, Hobbs
Offset Operators
Attachments

DOCKET MAILED

5-10-63

92

Set for hearing
6/20/63

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

APPLICATION FOR MULTIPLE COMPLETION

5-1-61

Operator TEXACO Inc.		County Lea		Date May 3, 1963
Address Box 728, Hobbs, New Mexico		Lease St. N. M. "L"		Well No. 6
Location of Well B	Unit 1	Section 1	Township 18-S	Range 34-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES X NO _____

2. If answer is yes, identify one such instance: Order No. MC-1265 _____; Operator, Lease, and Well No.:

TEXACO Inc. State of New Mexico "O" (NCT-1) Well No. 11

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Vacuum Wolfcamp	Undesign. Pennsylvanian	Vacuum Devonian
b. Top and Bottom of Pay Section (Perforations)	Est. 9500-10,000'	Est. 10,925-10,935'	Est. 11,800-11,820'
c. Type of production (Oil or Gas)	Oil	Oil	Oil
d. Method of Production (Flowing or Artificial Lift)	Flow	Flow	Flow

4. The following are attached. (Please mark YES or NO)

Yes a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

No c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*

No d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Marathon Oil Co., P. O. Box 2107, Hobbs, New Mexico

Shell Oil Corporation, Box 1858, Roswell, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification May 3, 1963.

CERTIFICATE: I, the undersigned, state that I am the Assistant Dist. Supt. of the TEXACO Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

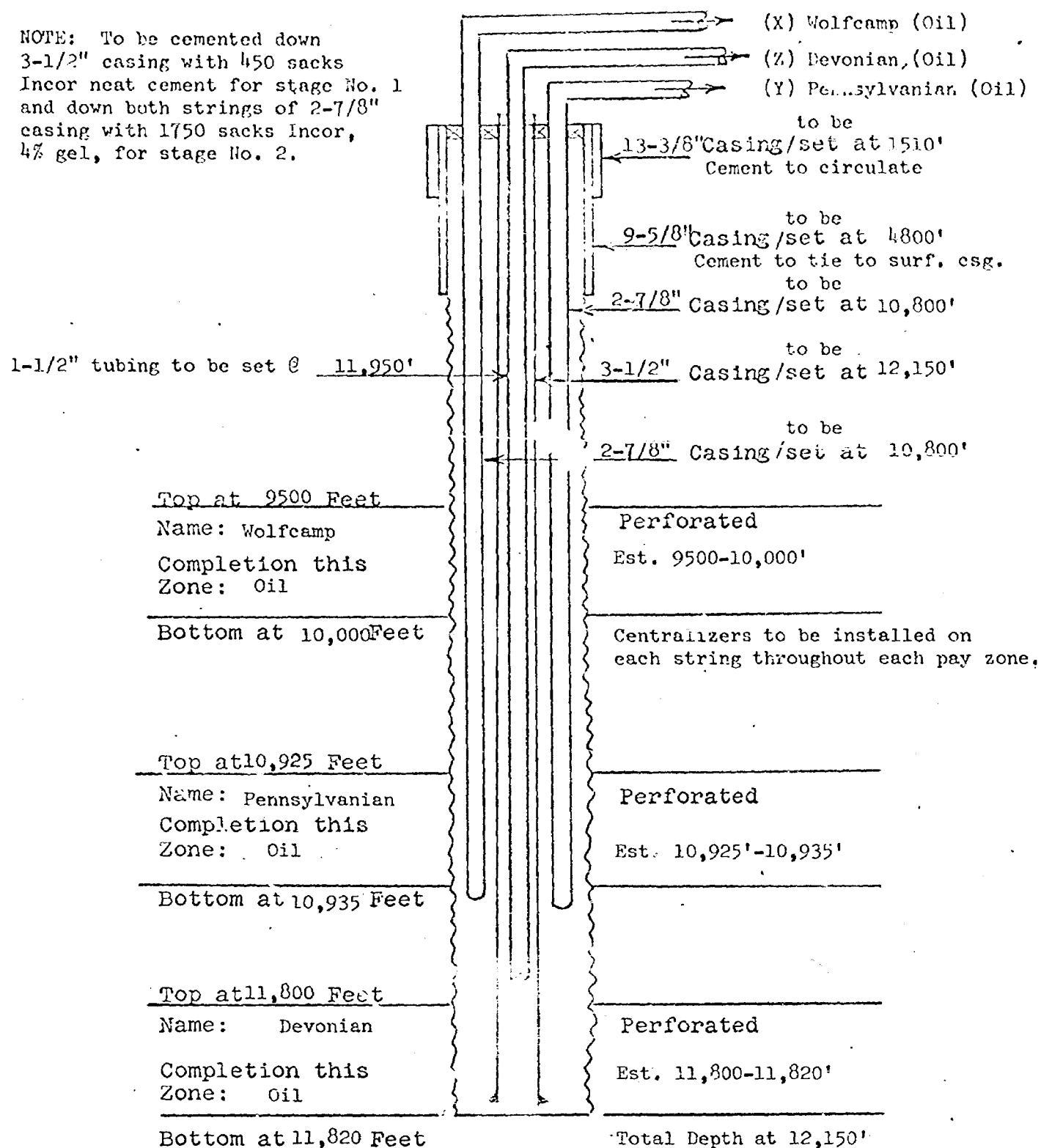
G. G. Blevins, Jr. Signature

* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

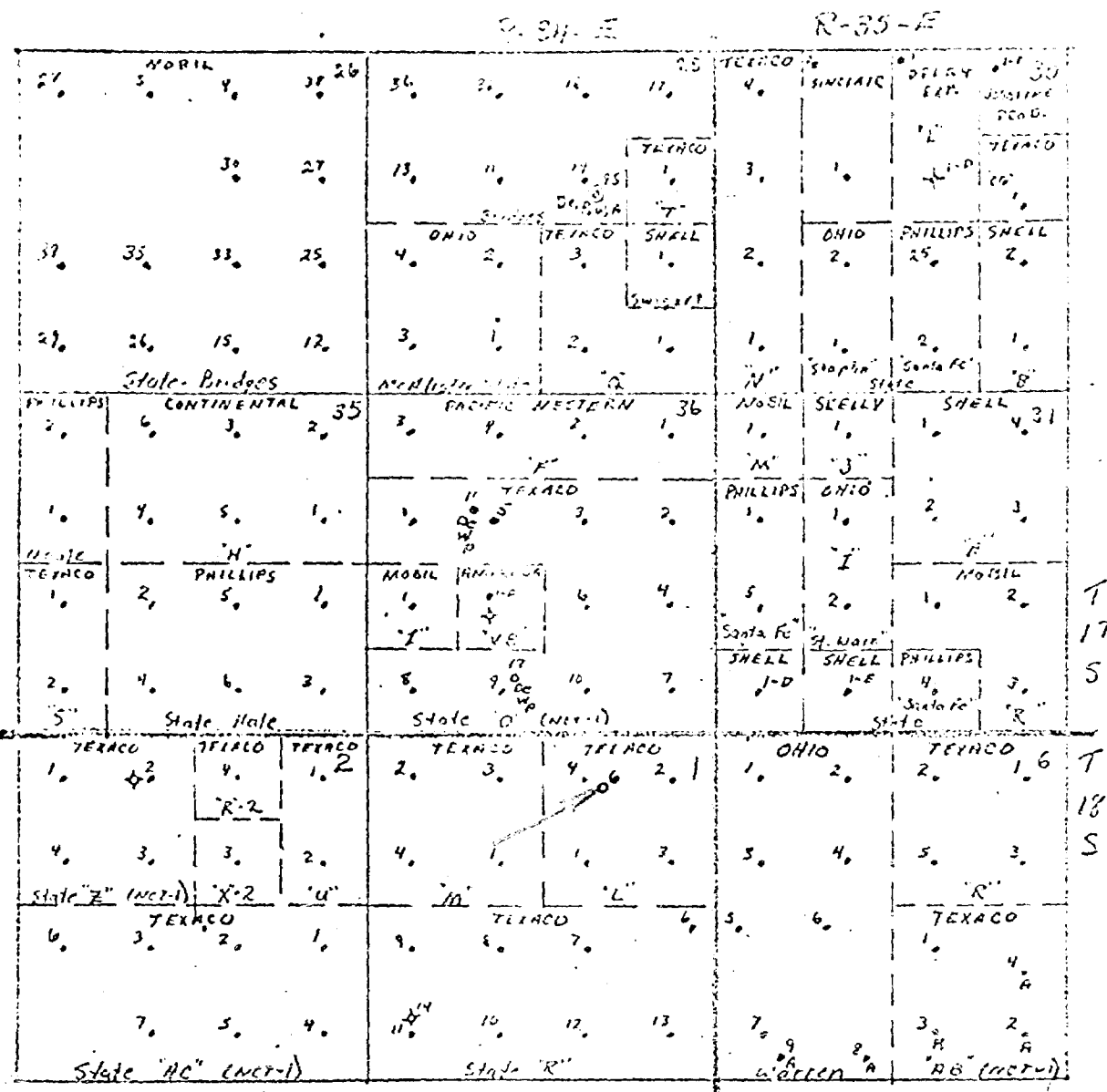
DIAGRAMMATIC SKETCH OF TRIPLE COMPLETION INSTALLATION (TUI ENGINEERING)

NOTE: To be cemented down
3-1/2" casing with 450 sacks
Incor neat cement for stage No. 1
and down both strings of 2-7/8"
casing with 1750 sacks Incor,
4% gel, for stage No. 2.



TEXACO Inc.

LEASE: State of New Mexico "L" Well No. 6
FIELD: Vacuum (Devonian and Wolfcamp) and Undesig. Pennsylvanian
DATE: May 3, 1963



Plat of TEXACO Inc.
State of New Mexico "L" Lease
Lea County, New Mexico
Scale 1" = 2640'

LEGEND

D - Vacuum - Drinkard
A - Vacuum - Abo
De- Undesignated Devonian
P - Undesignated Pennsylvanian
W - Undesignated Wolfcamp

OFFSET OPERATORS

Marathon Oil Co., P. O. Box 2107, Hobbs, N. M.
Shell Oil Corp., Box 1858, Roswell, N. M.

Note: Wells not noted are in
the Vacuum Pool.

No. 15-63

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 22, 1963

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

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

- CASE 2814: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Stanley L. Jones and Sam Watkins and all other interested parties to appear and show cause why La Esperanza State Well No. 1, located in Unit D of Section 10, Township 19 South, Range 29 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2815: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Corine Foster dba Corine Foster Oil Company and all other interested parties to appear and show cause why the Corine Foster Oil Company Ohio Farris Well No. 1, located in Unit P of Section 4, Township 19 South, Range 26 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2816: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit C. T. Robertson and all other interested parties to appear and show cause why the Honolulu-State "B" Wells Nos. 4 and 5 in Units G and H respectively, of Section 11, Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2817: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Fred M. Allison and C. T. Robertson and all other interested parties to appear and show cause why the Honolulu State "A" Wells Nos. 1, 2, 3, 4, and 5, located in Units D, C, E, F, and D, respectively, of Section 14; the Honolulu State "B" Wells Nos. 1, 2, and 3, located in Units I, O, and J, respectively, of Section 11; and the Magnolia State Well No. 1, located in Unit P of Section 11, all in Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2818: Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West McDonald Unit Area comprising 2,560 acres of State and Fee lands in Township 14 South, Range 35 East, Lea County, New Mexico.
- CASE 2819: Application of M. F. Abraham for a unit agreement, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Star Lake Unit Area comprising 22,358 acres of Federal, State, Indian and Fee lands in Townships 18 and 19 North, Ranges 5 and 6 West, McKinley County, New Mexico.
- CASE 2820: Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration

unit comprising the NE/4 of Section 20 and the NW/4 of Section 21 Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its State "A" A/c-1 Well No. 6, located 2310 feet from the North line and 1650 feet from the West line of said Section 21.

CASE 2821:

Application of D. W. Falls, Inc. for an extension of Order No. R-2213, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the extension of Order No. R-2213, which order assigned a temporary deliverability for allowable purposes to applicant's Federal Well No. 2-11, located in Unit O of Section 11, Township 28 North, Range 13 West, Basin-Dakota Gas Pool, San Juan County, New Mexico.

CASE 2822:

Application of Gulf Oil Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the SE/4 SE/4 of Section 28 and the NE/4 NE/4 of Section 33, Township 21 South, Range 37 East, Blinebry Gas Pool, Lea County, New Mexico, to be dedicated to its J. N. Carson Well No. 6 located in Unit P of said Section 28.

CASE 2823:

Application of Pan American Petroleum Corporation for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico, to produce oil from the Drinkard and Blinebry formations through parallel strings of tubing and gas from the Tubb Gas Pool through the casing annulus.

CASE 2824:

Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 14, located in Unit J of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the North Vacuum-Abo and the Vacuum-Wolfcamp Pools through parallel strings of 2 7/8-inch casing and from the Vacuum-Devonian Pool through 1 1/2-inch tubing installed within 3 1/2-inch casing, all casing strings to be cemented in a common well bore.

CASE 2825:

Application of Sinclair Oil & Gas Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its State Lea 403 Well No. 4 located in Unit D of Section 17, Township 18 South, Range 35 East, Lea County, New Mexico, to produce oil from the Bone Springs and Devonian formations through parallel strings of tubing.

CASE 2826:

Application of Texaco, Inc. for a triple completion and for certain administrative procedures, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "L" Well No. 6 located in Unit B of Section 1, Township 18 South, Range 34 East, Lea County, New Mexico, to produce oil from the Vacuum Wolfcamp Pool and an undesignated Pennsylvanian pool through

-3-

Docket No. 15-63

parallel string of 2 7/8 inch casing and from the Vacuum-Devonian Pool through 1 1/2 inch tubing installed within 3 1/2 inch casing, all casing strings to be cemented in a common well bore. Applicant further seeks a procedure whereby 1 1/2 inch tubing for Devonian production in this field may be approved administratively.

CASE 2806:

(Continued from May 15, 1963 Hearing)

Application of Sun Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in the Oil-Center Blinebry Pool underlying the W/2 SW/4 of Section 3, Township 21 South, Range 36 East, Lea County, New Mexico.

Case 2826

Heard 5-5-63

Rec. 5-6-63

1. Grant Texas permission for a triple completion of its str. of G. Sh. "L" #6 located 770 (N, 2090/E line Sec. 18 185-34E

2. Completions are:
Vacuum - Wolfcamp -
Unders. - Perm.
Vacuum - Devonian.

3. The Wolfcamp + Perm. will be produced thru $2\frac{7}{8}$ " casing cemented in common wellbore. The Devonian ^{will} be produced thru $1\frac{1}{2}$ " ~~casing~~ tubing set inside $3\frac{1}{2}$ " in casing. Cement shall come up into the $9\frac{7}{8}$ " inter. and the $9\frac{7}{8}$ " cement shall come up into the $13\frac{7}{8}$ " and the $13\frac{7}{8}$ " circulated to the surface.

4. Grant Administrative approval for use of $1\frac{1}{2}$ " tubing in similar triple completions ~~aprox~~ Vacuum-Dev. oil pool.
Use paragraph (1) of R-2380.
Minimum diameter tubing 1.38 " inside diameter.

Frank R.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

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

June 11, 1963

Mr. Charlie White
Gilbert, White & Gilbert
Attorneys at Law
Box 787
Santa Fe, New Mexico

Re: Case No. 2826 and 2827
Order No. R-2505 and R-2500
Applicant:
TEXACO INC.

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Antec OCC

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. 2826
Order No. R-2505

APPLICATION OF TEXACO INC.
FOR A TRIPLE COMPLETION AND
FOR CERTAIN ADMINISTRATIVE
PROCEDURES, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 5, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 11th day of June, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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 complete its State "L" Well No. 6, located in Unit B of Section 1, Township 18 South, Range 34 East, NMPM, Vacuum Field, Lea County, New Mexico, as a triple completion (combination) to produce oil from the Wolfcamp and Pennsylvanian formations through parallel strings of 2 7/8-inch casing and from the Devonian formation through 1 1/2-inch tubing installed within 3 1/2-inch casing, all casing strings to be cemented in a common well bore.

(3) That the applicant proposes to circulate cement from total depth into the intermediate casing, to cement the intermediate casing into the surface casing, and circulate the surface casing cement to the surface.

(4) That the mechanics of the proposed triple completion, including the casing and tubing programs, are feasible and in accord with good conservation practices.

(5) That approval of the proposed multiple completion will prevent waste and protect correlative rights.

(6) That the applicant also seeks the establishment of an administrative procedure for approval of similar multiple completions in this area.

(7) That the proposed casing and tubing program for the Devonian zone of said multiple completion may readily be adapted to artificial lift by means of hydraulic pumping equipment when artificial lift becomes necessary and therefore justifies the establishment of an administrative procedure for approval of similar multiple completions in this immediate area.

IT IS THEREFORE ORDERED:

That the applicant, Texaco Inc., is hereby authorized to complete its State "L" Well No. 6, located in Unit B of Section 1, Township 18 South, Range 34 East, NMPM, Vacuum Field, Lea County, New Mexico, as a triple completion (combination) to produce oil from the Wolfcamp and Pennsylvanian formations through parallel strings of 2 7/8-inch casing and from the Devonian formation through 1 1/2-inch tubing installed within 3 1/2-inch casing, all casing strings to be cemented in a common well bore.

PROVIDED HOWEVER, That cement shall be circulated from total depth into the intermediate casing, the intermediate casing shall be cemented into the surface casing, and the surface casing cement shall be circulated to the surface.

PROVIDED FURTHER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.

PROVIDED FURTHER, That the applicant shall take zone segregation tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Devonian formation.

IT IS FURTHER ORDERED:

(1) That the Secretary-Director is hereby authorized to grant administrative approval of similar multiple completions where the provisions of Section IV of Rule 112-A have been fully complied with; and

1. The well will be completed as a multiple completion (combination) to produce oil from the Vacuum Field and will include a completion in the Devonian formation.
2. The Devonian completion will utilize tubing having an inside diameter of not less than 1.38 inches installed in not less than 3 1/2-inch casing.
3. The well is within one mile of a similar multiple completion well that has been approved by the Commission after notice and hearing or by administrative order.

(2) That the provisions of Rule 112-A shall apply to all wells receiving administrative approval under this order insofar as said rule is not inconsistent with this order.

IT IS FURTHER ORDERED:

That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

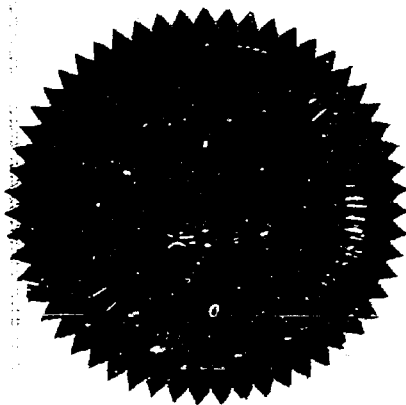
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

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



DATA SHEET

TEXACO Inc.
State of New Mexico "O" (NCT-1) Lease
Vacuum (Devonian) Field
Lea County, New Mexico

Crude Oil Data: 55.6° API Gravity

Estimated Bubble Pressure: 2043 psi

Reservoir and Equipment Data:

	<u>Well No. 11</u>	<u>Well No. 17</u>
Static bottom-hole pressure at mid-point csg. perfs. (psi)	4488	4727
Mid-point casing perforations	12,102'	11,935'
Subsea Depth	-8,080'	-7,977'
Time shut-in (Hours)	24	48
Tubing pressure - shut-in (psi)	1673	2101
Stabilized flow pressure at mid-point csg. perfs. (psi)	3829	4379
Stabilized tubing flow pressure (psi)	1091	1742
Choke Size (Adjustable)	8/64" (10/64"BHC)	19/64"
Average pressure drop through tubing (psi/ft)	.2265	.22
Flow rate (BOPD)	274	264
(BWPD)	135	0
Productivity Index	.6207	.7586
Gas-Oil-Ratio (SCF/BO)	1930	1977
Casing - Outside Diameter	4.5"	3.5"
Inside Diameter	4.0"	2.992"
Tubing - Outside Diameter	2.375"	1.9"
Inside Diameter	1.995"	1.61"
Anticipated maximum artificial lift with hydraulic subsurface equipment (BFPD)	1200	800

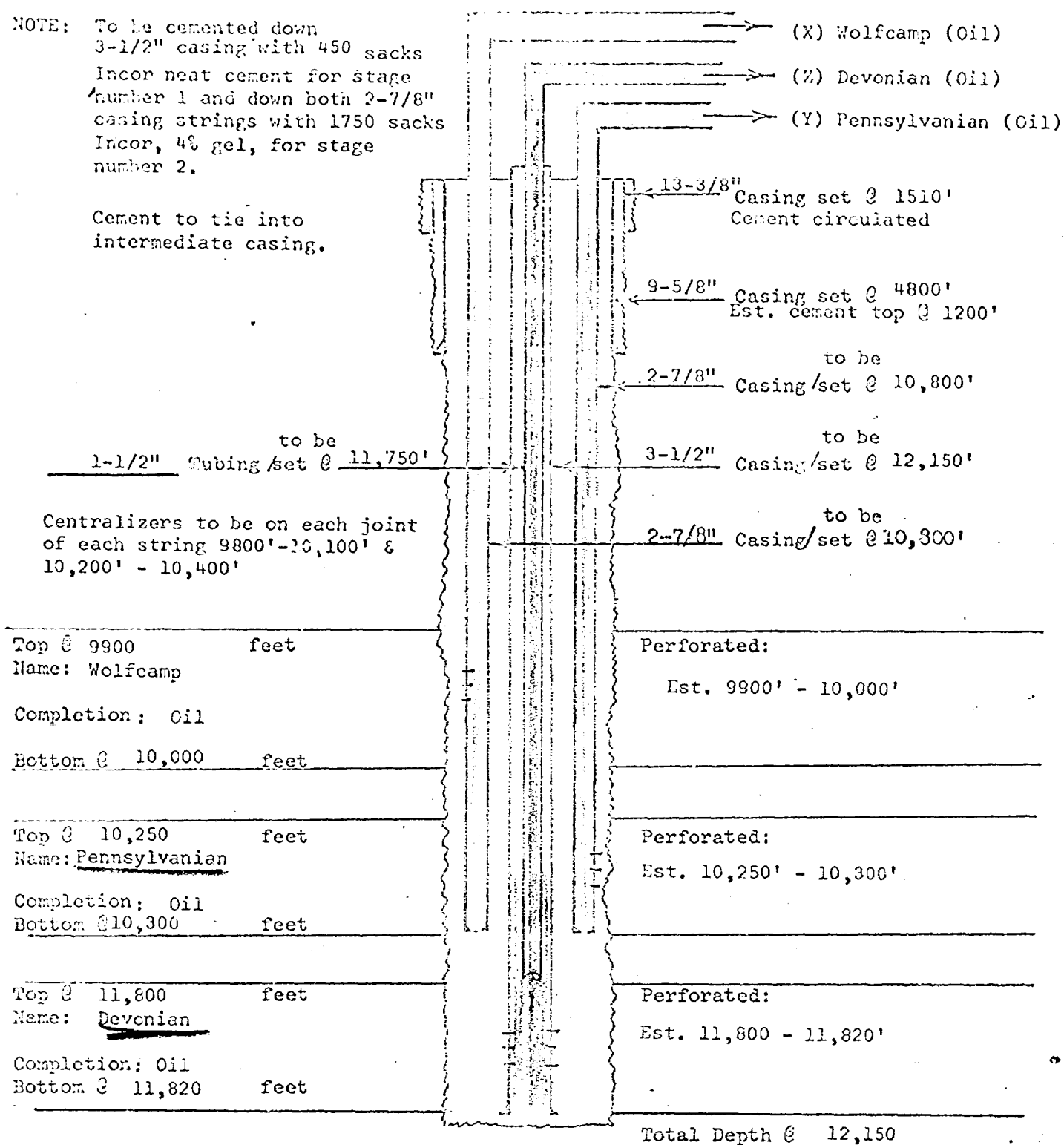
R-35-E



TEXACO INC.
VACUUM POOLS AREA
LEA COUNTY, NEW MEXICO
SCALE 1" = 2000

NOTE: To be cemented down
3-1/2" casing with 450 sacks
Incor neat cement for stage
number 1 and down both 2-7/8"
casing strings with 1750 sacks
Incor, 4% gel, for stage
number 2.

Cement to tie into
intermediate casing.



TEXACO Inc.

Lease: State of New Mexico "L" Well No. 6
Field: Vacuum (Wolfcamp, Pennsylvanian and Devonian)
Date: June 3, 1963

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 22, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc. for a triple comple-
tion and for certain administrative procedures,
Lea County, New Mexico. Applicant, in the
above-styled cause, seeks approval of the triple
completion (combination) of its State "L" Well
No. 6 located in Unit B of Section 1, Township
18 South, Range 34 East, Lea County, New Mexico,
to produce oil from the Vacuum Wolfcamp Pool and
an undesignated Pennsylvanian pool through
parallel strings of 2 7/8-inch casing and from
the Vacuum-Devonian Pool through 1 1/2-inch tubing
installed within 3 1/2-inch casing, all casing
strings to be cemented in a common well bore.
Applicant further seeks a procedure whereby
1 1/2-inch tubing for Devonian production in this
field may be approved administratively.

CASE 2826

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call 2826.

MR. DURRETT: Application of Texaco, Inc. for a triple
completion and for certain administrative procedures, Lea County,
New Mexico. If the Examiner please, on the basis of the letter
I just read in Case 2824 from Mr. C. R. Black, Division Proration
Engineer, requesting that this case be continued to June 5, in
conjunction with Case 2824, I move at this time to continue this
case to June 5.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1152

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691



MR. NUTTER: Case 2826 will be continued to 9:00 o'clock
June 5th at this same place.

* * * *

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 25th day of May, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 2826,
heard by me on 5/22, 1963.

[Signature] Examiner
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 5, 1963

EXAMINER HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3371

ALBUQUERQUE, N. M.
PHONE 243-6691

IN THE MATTER OF:

(Continued from the May 22, 1963 examiner hearing.)

Application of Texaco Inc. for a triple completion and for certain administrative procedures, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "L" Well No. 6 located in Unit P of Section 1, Township 18 South, Range 34 East, Lea County, New Mexico, to produce oil from the Vacuum Wolfcamp Pool and an undesignated Pennsylvanian Pool through parallel strings of 2 7/8 inch casing and from the Vacuum-Devonian Pool through 1 1/2 inch tubing installed within 3 1/2 inch casing, all casing strings to be cemented in a common well bore. Applicant further seeks a procedure whereby 1 1/2 inch tubing for Devonian production in this field may be approved administratively.

CASE 2826

IN THE MATTER OF:

Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 17 located in Unit N of Section 36, Township 17 South, Range 34 East, Vacuum Field, Lea County, New Mexico, to produce oil from the Wolfcamp and the Pennsylvanian formations through parallel strings of 2 7/8 inch casing and from the Devonian formation through 1 1/2 inch tubing installed with 3 1/2 inch casing, all casing strings to be cemented in a common well bore.

CASE 2827

BEFORE: Elvis A. Utz, Examiner



TRANSCRIPT OF HEARING

MR. UTZ: Case 2827.

MR. DUNNETT: Application of Texaco Inc. for a triple completion, Lea County, New Mexico.

MR. WHITE: Charles White of Gilbert, White, and Gilbert appearing on behalf of the Applicant. If the Examiner please, Texaco would like to dismiss Case No. 2824 on today's docket and also we would like to consolidate Case 2826 with Case 2827 for the purposes of presenting testimony.

MR. UTZ: For the purpose of taking testimony, Case 2824 will be dismissed and Case 2826 will be consolidated for the purposes of testimony with Case 2827. Separate orders will be written on each case. Are there other appearances in the cases?

(Whereupon, Applicant's Exhibits Nos. 1 through 5 marked for identification.)

(Witness sworn.)

C. R. BLACK

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. WHITE:

Q Will you state your full name for the record, please?

A I'm C. R. Black.

Q By whom are you employed and in what capacity?

A I am employed by Texaco Inc. as Proration Engineer out



of Midland, Texas.

Q Have you previously testified before the New Mexico Oil Conservation Commission of New Mexico?

A Yes, I have.

Q As a Petroleum Engineer?

A Yes.

Q Are you familiar with the subject applications in Cases 2826 and 2827?

A Yes, I am.

Q Will you briefly state what Texaco is seeking by the applications?

A Case No. 2826, this is the application of Texaco for a triple completion in the Vacuum-Devonian, Vacuum-Wolfcamp reservoirs for our State of New Mexico "L" Well No. 6 and also administrative approval for an administrative procedure to complete the Devonian reservoirs in this field and this area through 1-1/2 inch tubing. With regard to Case 2827, it's the application of Texaco for a triple completion in the Devonian, Pennsylvanian and Wolfcamp reservoirs in the Vacuum area for our State of New Mexico "O" Well No. 17, and also approval to produce the Devonian reservoir through a string of 1-1/2 inch tubing.

Q Will you point out the locations of these wells, and in so doing, refer to Exhibit No. 1?

A Exhibit No. 1 is an ownership map showing the Texaco State of New Mexico "O" lease bordered in yellow, and the State of

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691

SANTA FE, N. M.
PHONE 183-3971

FARMINGTON, N. M.
PHONE 325-1182



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

New Mexico "L" lease bordered in yellow. Also shown on this map are three wells circled in red which are the wells involved with the three applications set for hearing today.

The application with regard to Well No. 14 has been dismissed, so we're only concerned with Well No. 17 located in the Southeast Quarter of the Southwest quarter of Section 36, Township 17 South, Range 34 East; and the location of the State of New Mexico "L" Well No. 6 located in the Northwest Quarter of the Northeast Quarter of Section 1, Township 18 South, Range 34 East.

Q Mr. Black, what is the present status of these wells?

A At the present time Well No. 17 has reached total depth and we have begun production tests in the Devonian formation and perforated the other two zones. Well "L" No. 6 is now drilling at approximately 11,500 feet. We anticipate going to approximately 12,100 feet in this well.

Q Will you now refer to Exhibits 2 and 3 and explain the casing program and the proposed downhole equipment and the perforated intervals?

A Exhibit No. 2 is a diagrammatic sketch of the proposed triple completion installation for the State of New Mexico "L" Well No. 6. This is with regard to Case 2826. Texaco set 13-3/8 inch casing at 1510 feet and circulated cement to the surface. We set 9-5/8 inch casing at 4800 feet and cemented it, and the estimated top of the cement is at 1200 feet, up in the



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182SANTA FE, N. M.
PHONE 983-3971ALBUQUERQUE, N. M.
PHONE 243-6691

13-3/8ths. We continued with an 8-3/4 inch hole and we plan to go to a depth of 12,150 feet. At that point we will run two strings of 2-7/8ths casing to produce the Wolfcamp and Pennsylvanian reservoirs. We will run one string of 3-1/2 inch casing and cement this with a total of 2200 sacks of cement. Cement will tie back into the intermediate casing. We will then perforate the Wolfcamp formation from approximately 9900 to 10,000 feet. We will perforate the Pennsylvanian formation from approximately 10,250 to 10,300 feet, and we will perforate the Devonian formation from approximately 11,800 to 11,820. At that point we will run a string of 1-1/2 inch tubing inside the 3-1/2 inch casing to produce the Devonian reservoir.

With regard to Exhibit No. 3, this is a diagrammatic sketch showing the proposed triple completion installation for the State of New Mexico "C" Well No. 17. This is with regard to Case No. 2827. We set 16-inch and 13-3/8 inch casing at 1612 feet, with the top 100 feet being 16-inch casing. We set 11-3/4 inch and 9-5/8 inch casing at 4750 feet, with the top 100 feet being 11-3/4 inch casing. We circulated cement to the surface on both the surface and intermediate casing strings. We continued with an 8-3/4 inch hole to a total depth of 12,082 feet. At that point we set two strings of 2-7/8 inch casing and one string of 3-1/2 inch casing and cemented with a total of 2700 sacks. The cement top as determined by a temperature survey was at 1625 feet back into the intermediate casing. We perforated the



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182SANTA FE, N. M.
PHONE 983-3971ALBUQUERQUE, N. M.
PHONE 243-6691

Wolfcamp reservoir from 9962 to 9967, and 9992 to 10,004 feet.

We perforated the Pennsylvanian from 10,117 to 10,122, and from 10,130 to 10,140. We perforated the Devonian from 11,980 to 11,990; and we have obtained production tests from the Devonian.

Q What are the crude characteristics of each zone?

A The crude characteristics for the Devonian, which would of course apply to both applications, is a 55.6 degree gravity crude. It's an intermediate sweet crude, has a gas-oil ratio of from 1800 to 1900 cubic feet per barrel. The bottom hole pressure is between 4700 and 4800 psi. This zone will flow initially.

The Wolfcamp is a 40.8 gravity crude. It's an intermediate sweet crude also. It has a gas-oil ratio of 1400 to 1500 cubic feet per barrel, and a bottom hole pressure of 3800 to 3900 psi. Also it will flow initially upon completion.

The Pennsylvanian formation is a 38.9 degree gravity crude, and again it's an intermediate sweet crude with a GOR of approximately 2500. The bottom hole pressure is between 2400 and 2500 psi, and we anticipate it will flow initially.

Q Mr. Black, do you anticipate any corrosion problems?

A We do not anticipate any corrosion problems in any of the three zones, due to the fact that they are intermediate sweet crude.

Q Do you anticipate any paraffin problems?

A With regard to the Wolfcamp and Pennsylvanian, we do



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

not anticipate any paraffin problems; however, in the Devonian, with our experience of other Devonian reservoirs in Southeast New Mexico, we do anticipate some mild paraffin problems.

Q What steps do you propose to take to take care of this condition?

A We have plasti-coated the upper three thousand feet of tubing in this zone.

Q Why do you propose to use an inch and a half tubing and 3-1/2 inch casing to produce the Devonian?

A The primary reason for this, of course, is an economic reason, and this will result in a savings of approximately \$1600 per well for each well completed in this reservoir.

Q Have you made any studies or gathered any information to show that the Devonian can be efficiently produced through an inch and a half tubing?

A Yes, we have. We have recently completed two flowing tests and I would like at this point to refer to Exhibit No. 4, which is a data sheet listing the pertinent data with regard to these two flowing tests.

The test involving the State of New Mexico "O" Well No. 11, and referring again to Exhibit No. 1, this is a Devonian well located in the Southeast Quarter of the Northwest Quarter of Section 36, this well is completed in the Devonian reservoir with 4-1/2 inch casing and 2-3/8 inch tubing.

Going down this data sheet, the crude oil gravity is



DEARNLEY-MEIER REPORTING SERVICE, Inc.FARMINGTON, N. M.
PHONE 325-1182SANTA FE, N. M.
PHONE 983-3971ALBUQUERQUE, N. M.
PHONE 243-6691

59.6 degrees, and the estimated bubble point, based upon reservoir characteristics, not actually a fluid analysis, is 2,043 psi. We found that to conduct the test of this sort, we shut both wells in and then ran a bomb into both wells and then flowed these wells at approximately a top allowable rate. We found that the initial pressure at the mid-point of the casing perforations in Well No. 11 was 4488 psi. Now this would lead us to think that possibly this pressure, or this well had not completely built up to its static pressure in the 24 hours it was shut-in, because the initial pressure in this well was 4814 psi. We found the static pressure opposite the mid-point of the casing perforations in Well No. 17 at 4727 psi. The mid-point of the perforations in No. 11 is 12,102 feet or a minus 8,080 foot subsea. The mid-point of the perforations in No. 17 is at 11,985 feet, or at a minus 7977 foot subsea.

No. 11 was shut-in 24 hours prior to this pressure, and No. 17 was shut-in 48 hours prior to this pressure. The tubing pressure shut-in on No. 11 was 1673, and on No. 17 was 2101. The stabilized flowing pressure after 5-1/2 hours in No. 11 was 3829 psi, or a drop of 659 psi over the static bottom hole pressure as measured after 24 hours. The stabilized flowing pressure in the No. 17 with the inch and a half tubing was 4379 or a drop of 348 psi over the static pressure of 4727.

The stabilized tubing flowing pressure in No. 11 was 1,091 pounds; the stabilized tubing flowing pressure in No. 17



was 1742 pounds. This represents, in No. 11, a 2738 psi drop from the mid-point of the perforations to the tubing at the surface. In No. 17, it represented a 2637 psi drop from the mid-point of the perforations to the tubing at the surface.

No. 11 was flowing on an 8/64-inch choke at the surface. We do have a 10/64-inch bottom hole choke installed in this well. No. 17 was flowing on a 19/64-inch choke at the surface.

Now with regard to the average pressure drop through the tubing, in the No. 11 with the 2-3/8 inch tubing, it was .2265 psi per foot, and in the No. 17 with inch and a half tubing it was .2200 psi per foot. We believe that this substantiates the fact that this Devonian reservoir can be efficiently produced through 1-1/2 inch tubing, because the pressure drops in the 2-3/8ths and inch and a half were almost identical.

The No. 11 was flowing at the rate of 274 barrels of oil and 135 barrels of water per day. The No. 17 was flowing at the rate of 264 barrels of oil and no barrels of water. We had a P.I. of .6207 on No. 11 and a P. I. of .7586 on No. 17. The gas-oil ratios for these two wells during the period of this test was 1930 for the No. 11 and 1977 for the No. 17, which are almost identical.

With regard to the actual diameters of the casing and the tubing, in No. 11 we had a 4-1/2 inch O.D. casing, which has an I.D. of 4.0 inches; and 2.735-inch O.D. tubing, which has an I.D. of 1.995-inch. In No. 17 we had 3.5-inch O.D. casing, which

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691

SANTA FE, N. M.
PHONE 983-3971

FARMINGTON, N. M.
PHONE 325-1182



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

has an I.D. of 2.992 inches; and we had 1.9-inch O.D. tubing which has an I.D. of 1.61 inches.

With regard to the maximum volume of fluid we think we could lift through these two installations under artificial lift, under No. 11 it would be 1200 barrels a day and under No. 17 it would be 800 barrels of fluid per day.

Q Is this well in excess of your allowable?

A Yes, it is. Top allowable for the Devonian is 287 barrels.

Q What conclusions do you draw from these studies?

A We believe that these pressure tests and these flowing tests indicate that this Devonian reservoir can be efficiently produced through 1-1/2 inch I.D. tubing.

Q Except for the 1-1/2 inch tubing, is this a standard type tubing?

A Yes, it is. The rule states that no tubing less than 1.670 can be installed in a multiple completion, and the I.D. is 1.610.

Q Which is the reason for the hearing today.

MR. UTZ: What was that rule again?

A Rule 112-A.

Q (By Mr. White) Do you have a log for Well No. 17?

A Yes, this is an acousti-log of Well No. 17. It has the tops of the formation and the perforations marked, and as soon as we complete Well No. 6 we will submit a copy of the log



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325.1182

SANTA FE, N. M.
PHONE 983.3971

ALBUQUERQUE, N. M.
PHONE 243.6691

for that well, also.

Q Mr. Black, does Texaco also request that similar completions in the Devonian in the future be administratively approved?

A Yes, sir, we would request that an administrative procedure be set up or that similar completions in the Devonian where we use 1-1/2 inch tubing and 3-1/2 inch casing be approved administratively; and, of course, we would request that these administrative procedures be governed by those procedures set forth in Rule 112-A for multiple completions.

Q Does Texaco intend to make further drilling operation in the Devonian in this area?

A Yes, we have been pleased with the Devonian prospects and we anticipate drilling a number of wells.

Q Were these exhibits prepared by you or under your direction?

A Yes, they were.

MR. WHITE: At this time we offer Exhibits 1 through 5.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of these two cases.

(Whereupon, Applicant's Exhibits Nos. 1 through 5 received in evidence.)

MR. WHITE: That concludes our direct.

CROSS EXAMINATION

BY MR. UTZ:



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

Q Is it my understanding that you are here requesting a change in Rule 112-A?

A No, sir. We would not be requesting a change in Rule 112-A, we would only be requesting that 1-1/2 inch tubing installations be administratively approved for this Devonian reservoir, the Vacuum-Devonian reservoir, and only in this area. In other words, it would be other completions similar to these two that we presented here today.

Q Now in Case 2824 you are completing the Abo formation?

A Case 2824 was the application we dismissed. That was with regard to our No. 14 Well.

Q I have the wrong one.

A We were unable to complete in the Devonian in that well.

Q So in all respects except for the perforations, depths, these two triple completions are identical?

A They are identical except for the depth and possibly there is a slight variation in the casing program.

MR. UTZ: Are there other questions of the witness? If not, the witness will be excused.

(Witness excused.)

MR. UTZ: Are there any other statements in this case or these cases? The cases will be taken under advisement.

* * * *



DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691

SANTA FE, N. M.
PHONE 983-3971

FARMINGTON, N. M.
PHONE 325-1182

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

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 10th day of June, 1963.

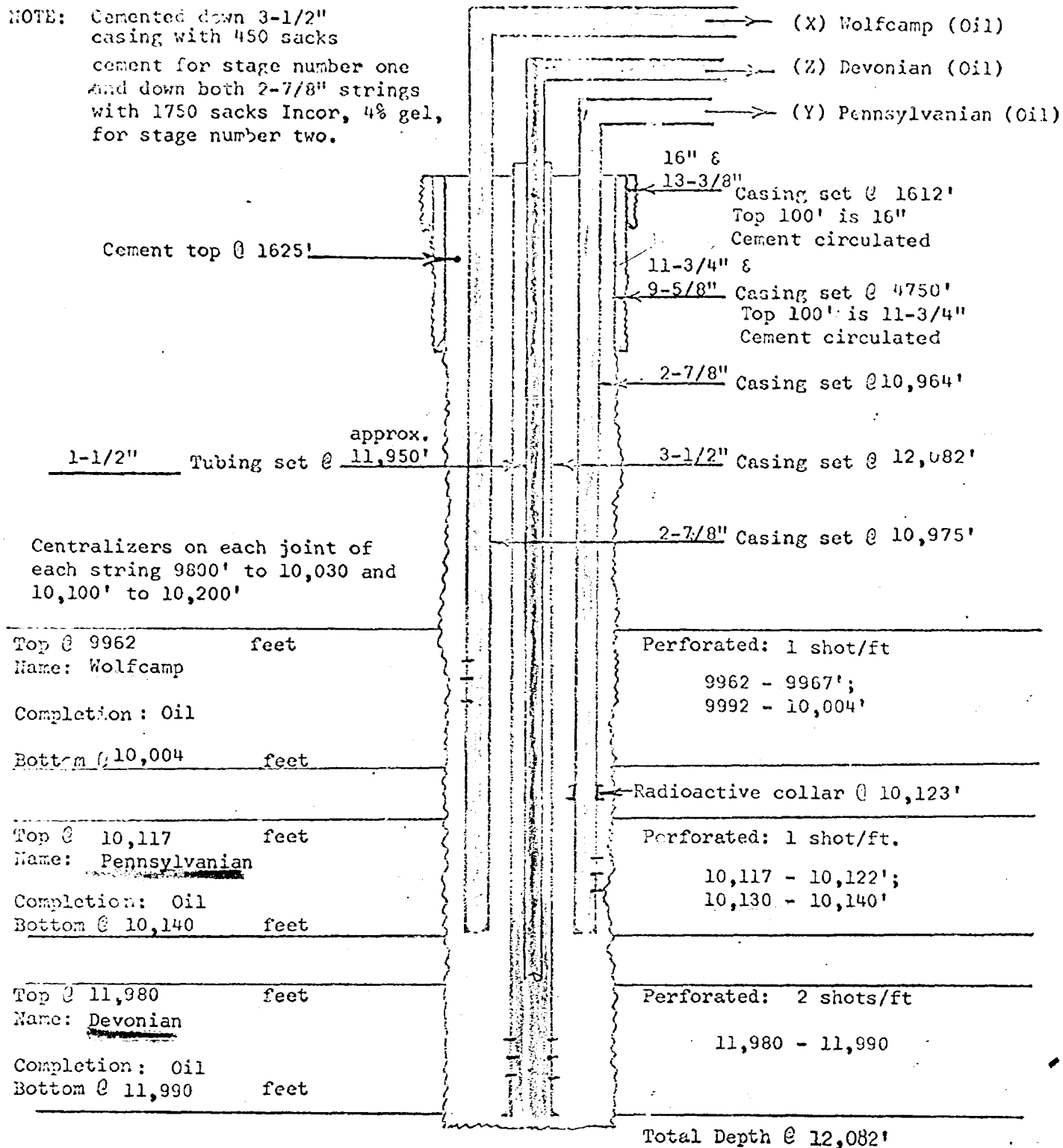
Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2826427 heard by me on June 5, 1963.
Shirley A. [Signature], Examiner
New Mexico Oil Conservation Commission



NOTE: Cemented down 3-1/2" casing with 450 sacks cement for stage number one and down both 2-7/8" strings with 1750 sacks Incor, 4% gel, for stage number two.



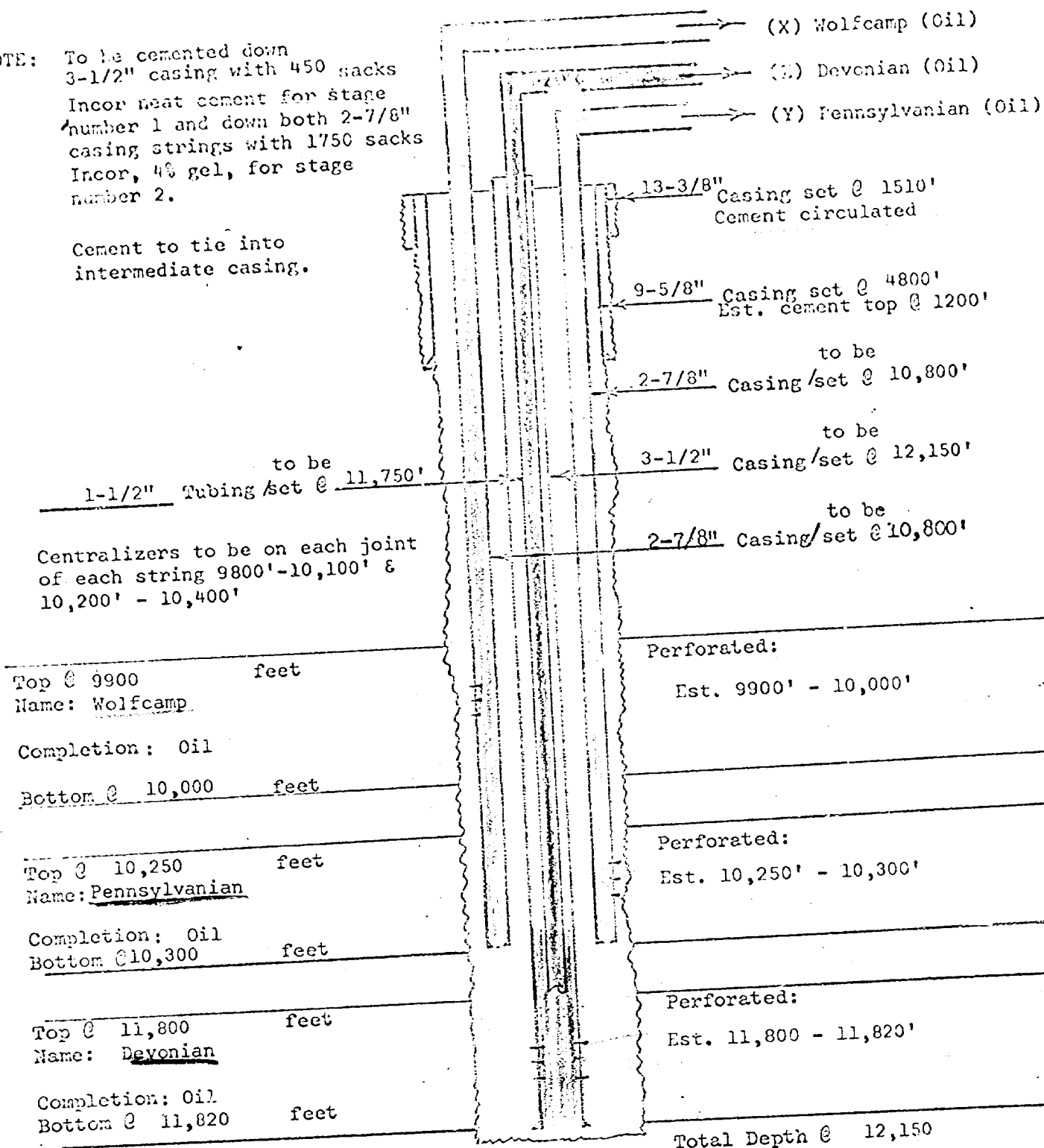
TEXACO Inc.

Lease: State of New Mexico "O" (NCT-1) Well No. 17
Field: Vacuum (Wolfcamp, Pennsylvanian and Devonian)
Date: June 3, 1963

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO. <u>3</u>	
CASE NO. <u>2827-586</u>	

NOTE: To be cemented down
3-1/2" casing with 450 sacks
Incor heat cement for stage
number 1 and down both 2-7/8"
casing strings with 1750 sacks
Incor, 4% gel, for stage
number 2.

Cement to tie into
intermediate casing.



TEXACO Inc.

Lease: State of New Mexico "L" Well No. 6
Field: Vacuum (Wolfcamp, Pennsylvanian and Devonian)
Date: June 3, 1963

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	2
CASE NO.	2827-2826

DATA SHEET

TEXACO Inc.
State of New Mexico "0" (HCT-1) Lease
Vacuum (Devonian) Field
Lea County, New Mexico

Crude Oil Data: 55.6° API Gravity

Estimated Bubble Pressure: 2043 psi

Reservoir and Equipment Data:

	<u>Well No. 11</u>	<u>Well No. 17</u>
Static bottom-hole pressure at mid-point csg. perfs. (psi)	4480	4727
Mid-point casing perforations	12,102'	11,985'
Subsea Depth	-8,080'	-7,977'
Time shut-in (Hours)	24	48
Tubing pressure - shut-in (psi)	1673	2101
Stabilized flow pressure at mid-point csg. perfs. (psi)	3829	4379
Stabilized tubing flow pressure (psi)	1091	1742
Choke Size (Adjustable)	8/64" (10/64" BHC)	19/64"
Average pressure drop through tubing (psi/ft)	.2265	.22
Flow rate (BOPD)	274	264
(BWPD)	135	0
Productivity Index	.6207	.7586
Gas-Oil-Ratio (SCF/BO)	1930	1977
Casing - Outside Diameter	4.5"	3.5"
Inside Diameter	3.0"	2.302"
Tubing - Outside Diameter	2.375"	1.9"
Inside Diameter	1.995"	1.61"
Anticipated maximum artificial lift with hydraulic subsurface equipment (BWPD)	1200	600

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
App'd	EXHIBIT NO. 4
CASE NO.	2827-2826