

CASE 3008: Application of PHILLIPS  
PETR. CO. for the triple comple-  
tion of Santa Fe Well No. 87.

CASE No.  
3008

Application,  
TRANSCRIPTS,  
SMALL Exhibits  
ETC.

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

*State of New Mexico*  
**Oil Conservation Commission**



LAND COMMISSIONER  
E. S. JOHNNY WALKER  
MEMBER

P. O. BOX 871  
SANTA FE

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

March 13, 1964

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: Case No. 3008  
Order No. R-2267  
Applicant: 2667  
Phillips Petroleum Company

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

ix/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC       

Astec OCC       

OTHER

DRAFT  
JMD/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:

CASE No. 3008

Order No. R- 2267

APPLICATION OF PHILLIPS PETROLEUM  
COMPANY FOR A TRIPLE COMPLETION,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 11, 1964, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 March, 1964, the Commission, a quorum being present, having considered the ~~application and~~ testimony, the record, ~~evidence and~~ 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, Phillips Petroleum Company, seeks authority to complete its Santa Fe Well No. 87, located in Unit L of Section 31, Township 17 South, Range 35 East, NMPM, Lea County,

New Mexico, as a triple completion (conventional) to produce oil <sup>from the Vacuum - Glorieta and the North Vacuum - Pool through parallel strings of 2 1/16 inch tubing, and</sup> ~~from the Vacuum - Wolfcamp Pool through a third string~~ of 2 3/8 inch tubing, with separation of the zones by packers set at approximately 9124 feet and 9985 feet.

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

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to complete its Santa Fe Well No. 87, located in Unit L of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, as a triple completion (conventional).

*to produce oil from the Vacuum-Klorita and North Vacuum Pools through parallel strings of 2 1/16-inch tubing and from the Vacuum-Wolfcamp Pool through a third string of 2 7/8-inch*

tubing, with separation of zones by packers set at approximately 9124 feet and 9985 feet;

PROVIDED HOWEVER, 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;

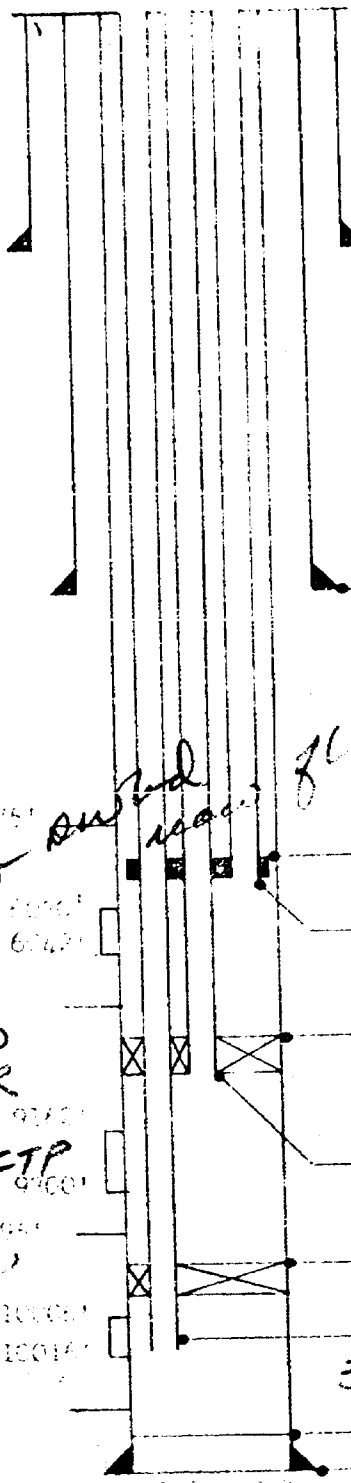
PROVIDED FURTHER, That the applicant shall take packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Vacuum-Wolfcamp Pool.

(2) 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.

[illegible]

CASE NO. 3008



✓

✓

1. What is the purpose of the study? ✓  
 2. What are the research objectives? ✓

October 1999

309 BO  
165 BW  
6406012  
38.5°  
dip 7051

297 BOW  
1350 GOR  
37.7°  
850-170 F

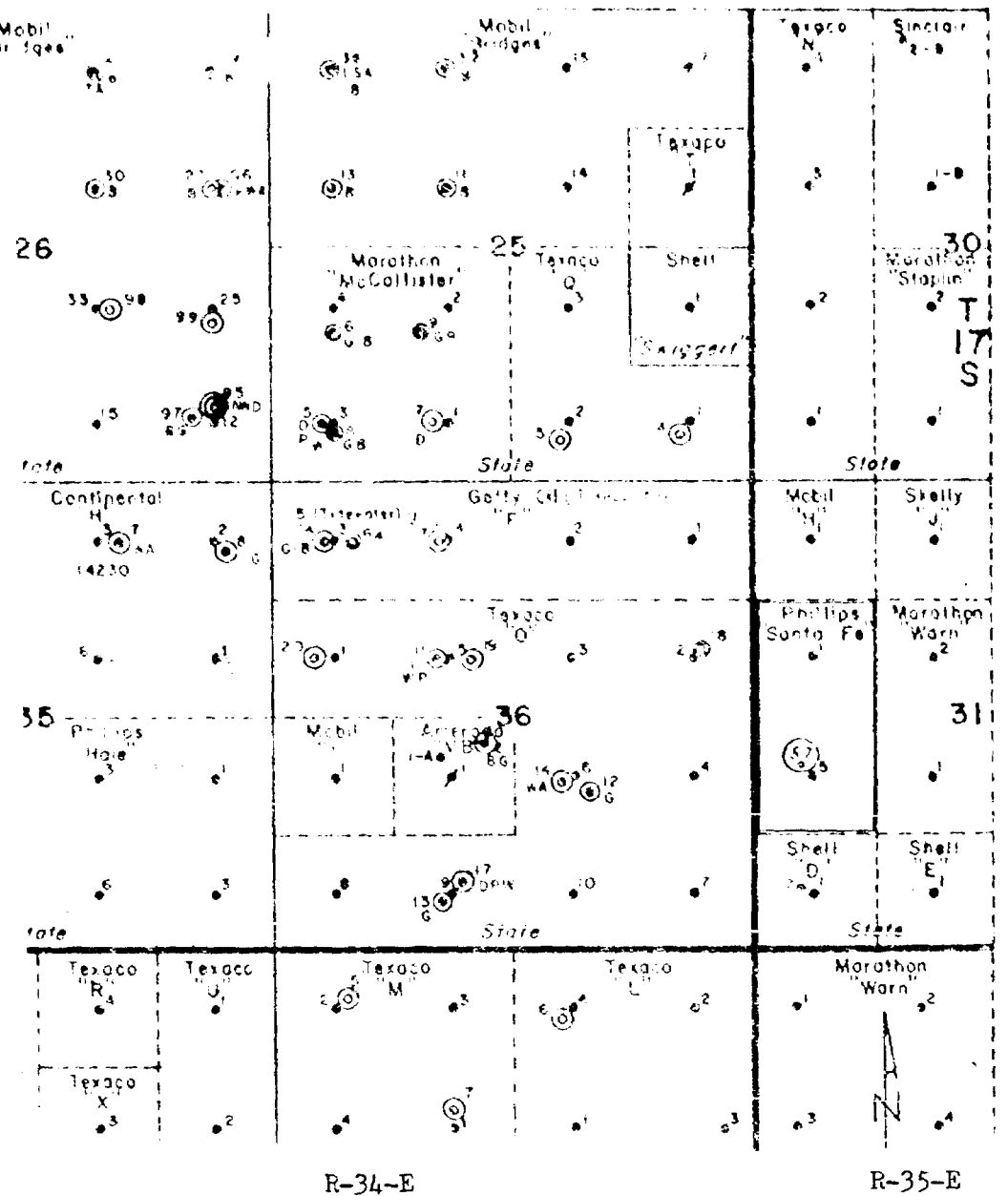
Koltkamp 9394  
26750 000  
117960R  
410  
950 FTP  
Penn 101401

no BHP estimate 2216

3299 120 hr (C) - 5125

3177 BNP 48 hr @ -5900

PBTL 14239  
 7th casing set at 1500' ✓  
 (Top of cement at 1500' ✓



PHILLIPS PETROLEUM COMPANY  
 SANTA FE LEASE  
 VACUUM FIELD  
 Lea County, N.M.

BEFORE EXAMINER NUTTER  
 OIL CONSERVATION COMMISSION  
 Exhibit NO. 2  
 CASE NO. 3008

## APPLICATION FOR MULTIPLE COMPLETION

Phillips Petroleum Company

Box 2130 - Hobbs, New Mexico

Unit

L

Section

31

Township

Range

Range

Section

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

If answer is yes, identify one such instance: Order No. \_\_\_\_\_ Operator, Lease, and Well No. \_\_\_\_\_

## 3. The following facts are submitted:

|  | Upper Zone      | Intermediate Zone | Lower Zone       |
|--|-----------------|-------------------|------------------|
| a. Name of Pool and Formation                        | Vacuum Gloriosa | No. Vacuum No.    | Vacuum No. 10006 |
| b. Top and Bottom of Pay Section (Perforations)      | 8030-8042       | 9142-9300         | 10006-10016      |
| c. Type of production (Oil or Gas)                   | Oil             | Oil               | Oil              |
| d. Method of Production (Flowing or Artificial Lift) | Pump            | 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.

Mobil Oil Company: Box 1800 - Hobbs, New Mexico

Skelly Oil Company: Box 730 - Hobbs, New Mexico

Marathon Oil Company: Box 220 - Hobbs, New Mexico

Shell Oil Corp.: Box 845 - Roswell, New Mexico

Texaco, Inc.: Drawer 728 - Hobbs, New Mexico

Tidewater Oil Company: Box 547 - Hobbs, 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 \_\_\_\_\_

CERTIFICATE: I, the undersigned, state that I am the Asst. Area Superintendent of the Phillips Petroleum Co. (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.

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 proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.



1000 ft

1000 ft

Depth 1000 ft (approx.)

Sample No. 57 2130 TSL  
660 NW 31-175-35 E Sea

N. Vac. 660 2130 TSL  
Vac. WC  
Vac. Lil

REPORT OF THE COMMISSIONER OF THE LAND DEPARTMENT

IN THE MATTER OF AN APPLICATION FOR  
OF PHILLIPS PETROLEUM COMPANY, FOR  
PERMISSION TO MAKE A TRIPLE COM-  
PLETION FOR PRODUCTION FROM THE  
NORTH VACUUM ABO, THE VACUUM HOLICAMP,  
CAMP, AND THE VACUUM GLORICETTA POOLS,  
DELA COUNTY, NEW MEXICO.

APPLICATION

Comes now Phillips Petroleum Company, and applies to the Oil  
Conservation Commission for permission to make a triple completion  
(conventional) of its Santa Fe Well No. 37, located 2130 feet from  
the South line, and 560 feet from the West line of Section 31, Town-  
ship 17 South, Range 35 East.

Applicant proposes to complete subject well for production from  
the North Vacuum Abo, the Vacuum Holicamp, and the Vacuum Glorietta  
pools. Production will be through separate strings of 2 3/8 inch  
tubing. Separation of the zones will be achieved by installation  
of packers.

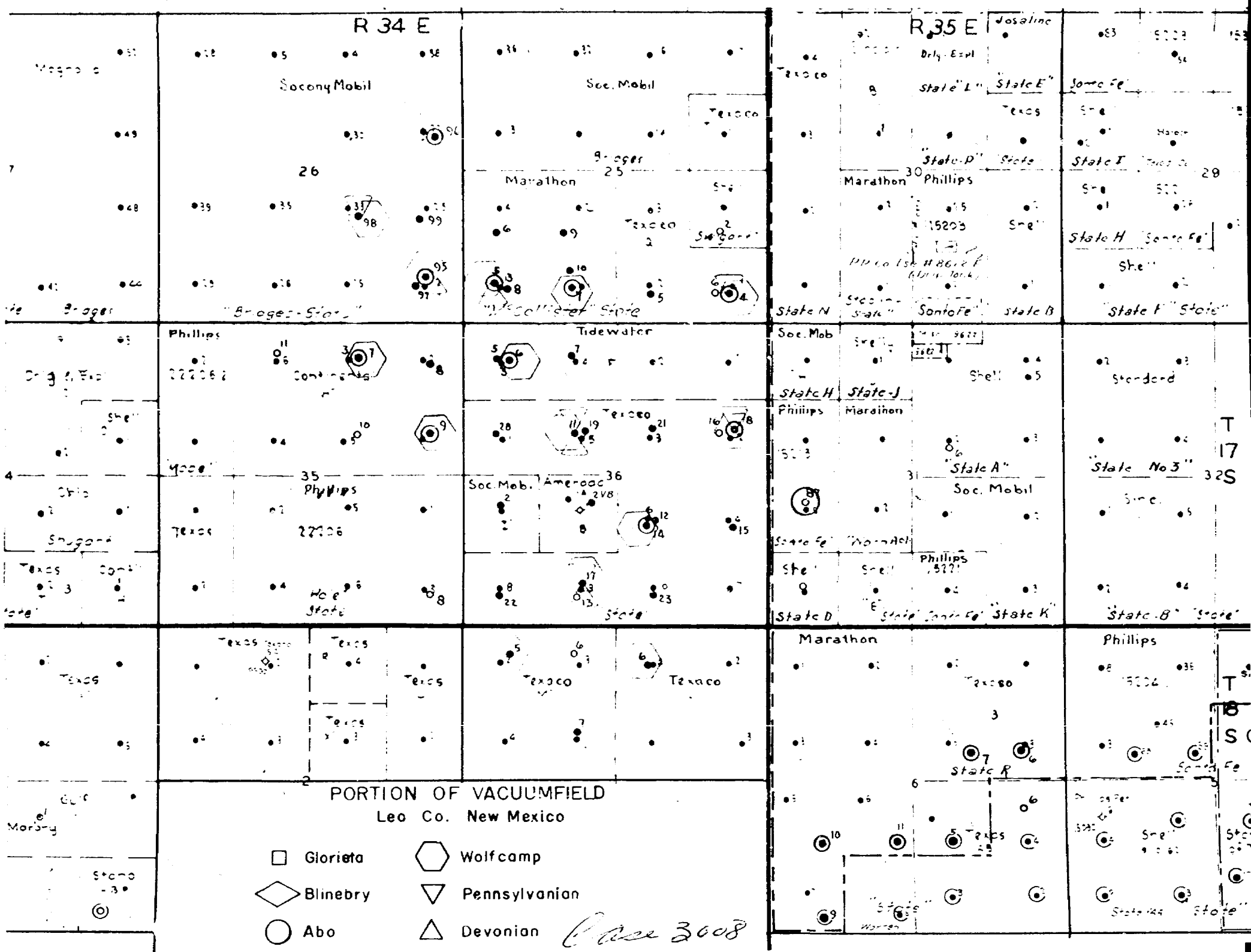
Applicant requests that this application be set for hearing  
before the Commission's duly appointed examiner and that after notice  
and hearing, the Commission approve the triple completion as applied  
for.

Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

By Jason W. Kellahin  
Kellahin & Fox  
P. O. Box 1713  
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT



PORTION OF VACUUMFIELD  
Lea Co. New Mexico

- Glorieta
- ◇ Blinbry
- Abo
- ⬡ Wolfcamp
- ▽ Pennsylvanian
- △ Devonian

*Case 3008*

|                           |                 |                            |      |          |        |         |      |
|---------------------------|-----------------|----------------------------|------|----------|--------|---------|------|
| Operator                  |                 | Phillips Petroleum Company |      | Well No. |        | 87      |      |
| Well                      | Unit            | Sec                        | 31   | 12-5     | 12-5   | 12-5    | 12-5 |
| Name of Reservoir or Pool |                 | Oil                        | Pump | Flow     | Tubing | Shut-in |      |
| Upper                     | Vacuum Glorieta | Oil                        | Pump | Flow     | Tubing | Shut-in |      |
| Lower                     | Vacuum Wolfcamp | Oil                        | Flow | Flow     | Tubing | Shut-in |      |
| Middle                    | N. Vacuum Abo   | Oil                        | Flow | Flow     | Tubing | Shut-in |      |
| Compl                     |                 |                            |      |          |        |         |      |

Both zones shut-in at (hour, date): 12:00 Noon March 4, 1964

Well opened at (hour, date): 7:00 AM March 5, 1964

Indicate by ( X ) the zone producing.....

|  | Middle Completion | Upper Completion | Lower Completion |
|--|-------------------|------------------|------------------|
| Pressure at beginning of test.....                       | 1100              | 250              | 750              |
| Stabilized? (Yes or No).....                             | Yes               | Yes              | Yes              |
| Maximum pressure during test.....                        | 1100              | 250              | 500              |
| Minimum pressure during test.....                        | 1100              | 250              | 300              |
| Pressure at conclusion of test.....                      | 1100              | 250              | 480              |
| Pressure change during test (Maximum minus Minimum)..... | None              | None             | 200              |
| Was pressure change an increase or a decrease?.....      |                   |                  | Increase         |

Well closed at (hour, date): 12:00 Noon 3-5-64

Oil Production \_\_\_\_\_ Gas Production \_\_\_\_\_

During Test: 81 bbls; Grav. 39.8 ; During Test 102 MCF; GOR 1260

Remarks \_\_\_\_\_

FLOW TEST NO. 2 (Abo)

Well opened at (hour, date): 7:00 AM 3-6-64

Indicate by ( X ) the zone producing.....

|  | Middle Completion | Upper Completion | Lower Completion |
|--|-------------------|------------------|------------------|
| Pressure at beginning of test.....                       | 1100              | 250              | 1090             |
| Stabilized? (Yes or No).....                             | Yes               | Yes              | Yes              |
| Maximum pressure during test.....                        | 550               | 250              | 1090             |
| Minimum pressure during test.....                        | 225               | 250              | 1090             |
| Pressure at conclusion of test.....                      | 225               | 230              | 1090             |
| Pressure change during test (Maximum minus Minimum)..... | 325               | 20 *             | None             |
| Was pressure change an increase or a decrease?.....      | Decrease          | Decrease*        | -                |

Well closed at (hour, date) 2:00 PM 3-6-64

Oil Production \_\_\_\_\_ Gas Production \_\_\_\_\_

During Test: 105 bbls; Grav. 37.8 ; During Test 104.4 MCF; GOR 995

Remarks \* Drop of 20# on Upper Zone due to gas from Abo cooling upper string.

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved \_\_\_\_\_ 19 \_\_\_\_\_  
New Mexico Oil Conservation Commission

Operator Phillips Petroleum Company

By C. J. Sumner

Lease Foreman

Date March 8, 1964

|                           |  |  |                           |  |                               |             |            |
|---------------------------|--|--|---------------------------|--|-------------------------------|-------------|------------|
| Operator                  |  |  | Lease                     |  |                               | Well No. 87 |            |
| Location of Well          |  |  | Unit                      |  |                               | Sec         |            |
| Twp                       |  |  | R, e                      |  |                               | County      |            |
| Name of Reservoir or Pool |  |  | Type of Prod (Oil or Gas) |  | Method of Prod Flow, Art Lift |             | Choke Size |
| Upper Compl               |  |  |                           |  |                               |             |            |
| Lower Compl               |  |  |                           |  |                               |             |            |

FLOW TEST NO. 13  
(Glorieta)

Both zones shut-in at (hour, date): 2:00 PM 3-6-64

Well opened at (hour, date): 4:00 AM 3-7-64

|  | Middle Completion | Upper Completion | Lower Completion |
|--|-------------------|------------------|------------------|
| Indicate by ( X ) the zone producing.....                |                   | X                |                  |
| Pressure at beginning of test.....                       | 1060              | 200              | 1090             |
| Stabilized? (Yes or No).....                             | Yes               | Yes              | Yes              |
| Maximum pressure during test.....                        | 1060              | 130              | 1090             |
| Minimum pressure during test.....                        | 1060              | 40               | 1080             |
| Pressure at conclusion of test.....                      | 1060              | 40               | 1080             |
| Pressure change during test (Maximum minus Minimum)..... | None              | 90               | 10               |
| Was pressure change an increase or a decrease?.....      | Decrease          | Decrease         | Decrease         |

Well closed at (hour, date): 8:30 AM 3-7-64

Oil Production During Test: 38 bbls; Grav. 37.6; Gas Production During Test: 24.3 MCF; GOR 64-

Remarks Glorieta zone flowed during test; will pump during normal operations

FLOW TEST NO. 2

|  | Upper Completion | Lower Completion |
|--|------------------|------------------|
| Well opened at (hour, date):                             |                  |                  |
| Indicate by ( X ) the zone producing.....                |                  |                  |
| Pressure at beginning of test.....                       |                  |                  |
| Stabilized? (Yes or No).....                             |                  |                  |
| Maximum pressure during test.....                        |                  |                  |
| Minimum pressure during test.....                        |                  |                  |
| Pressure at conclusion of test.....                      |                  |                  |
| Pressure change during test (Maximum minus Minimum)..... |                  |                  |
| Was pressure change an increase or a decrease?.....      |                  |                  |

Well closed at (hour, date):

Oil Production During Test: bbls; Grav. ; Gas Production During Test: MCF; GOR

Remarks

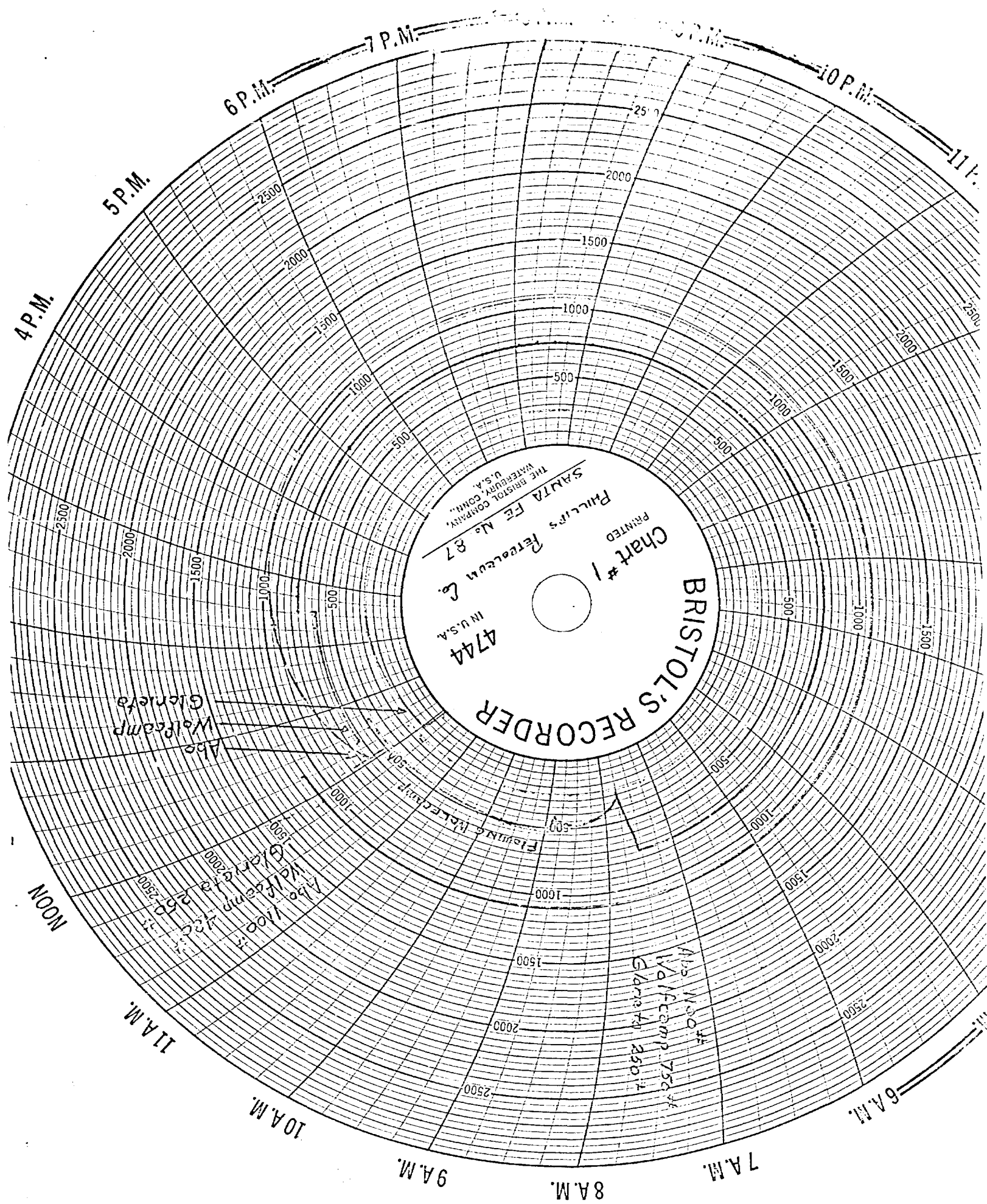
I hereby certify that the information herein contained is true and complete to the best of my knowledge.

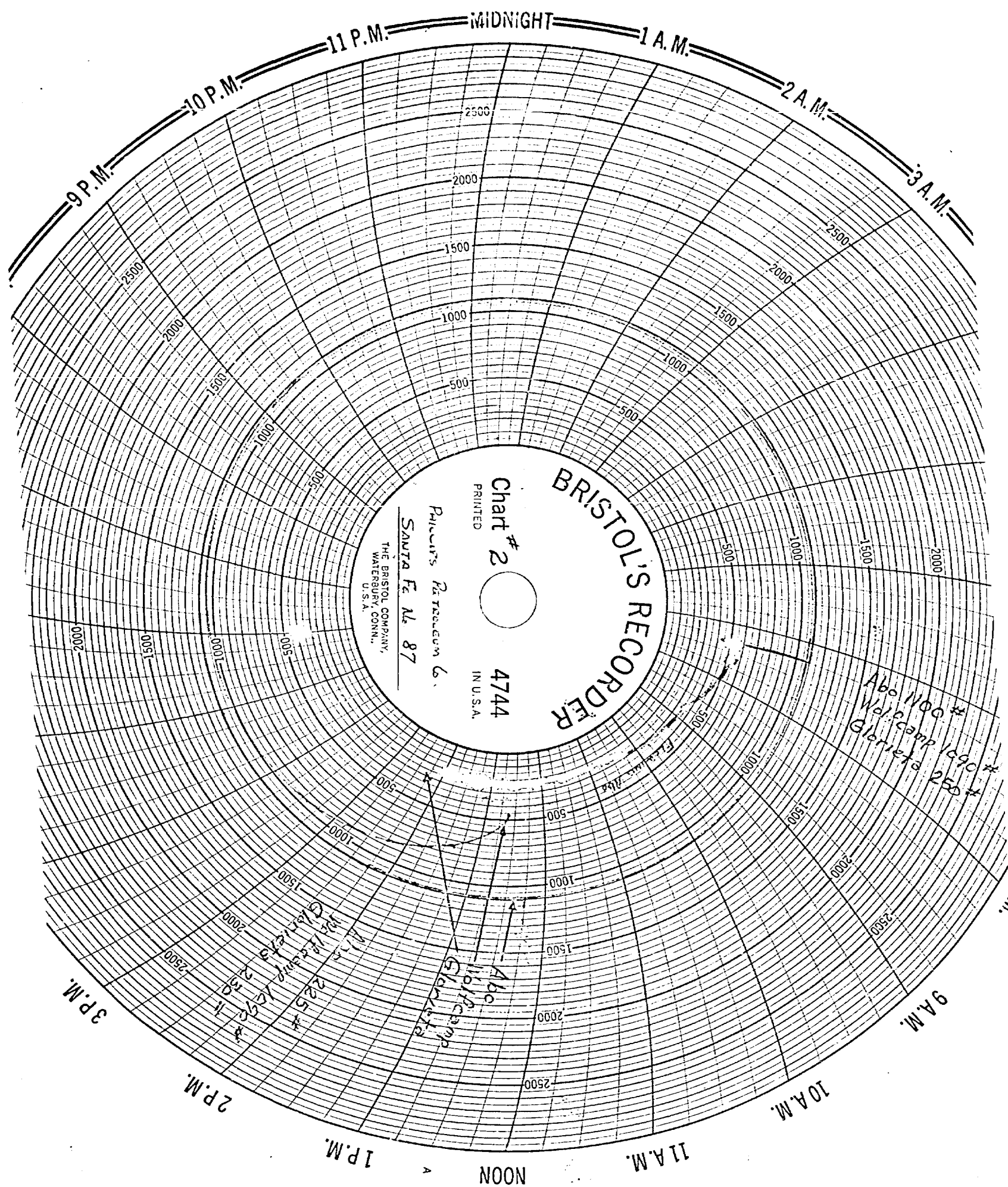
Approved \_\_\_\_\_ 19\_\_\_\_  
New Mexico Oil Conservation Commission

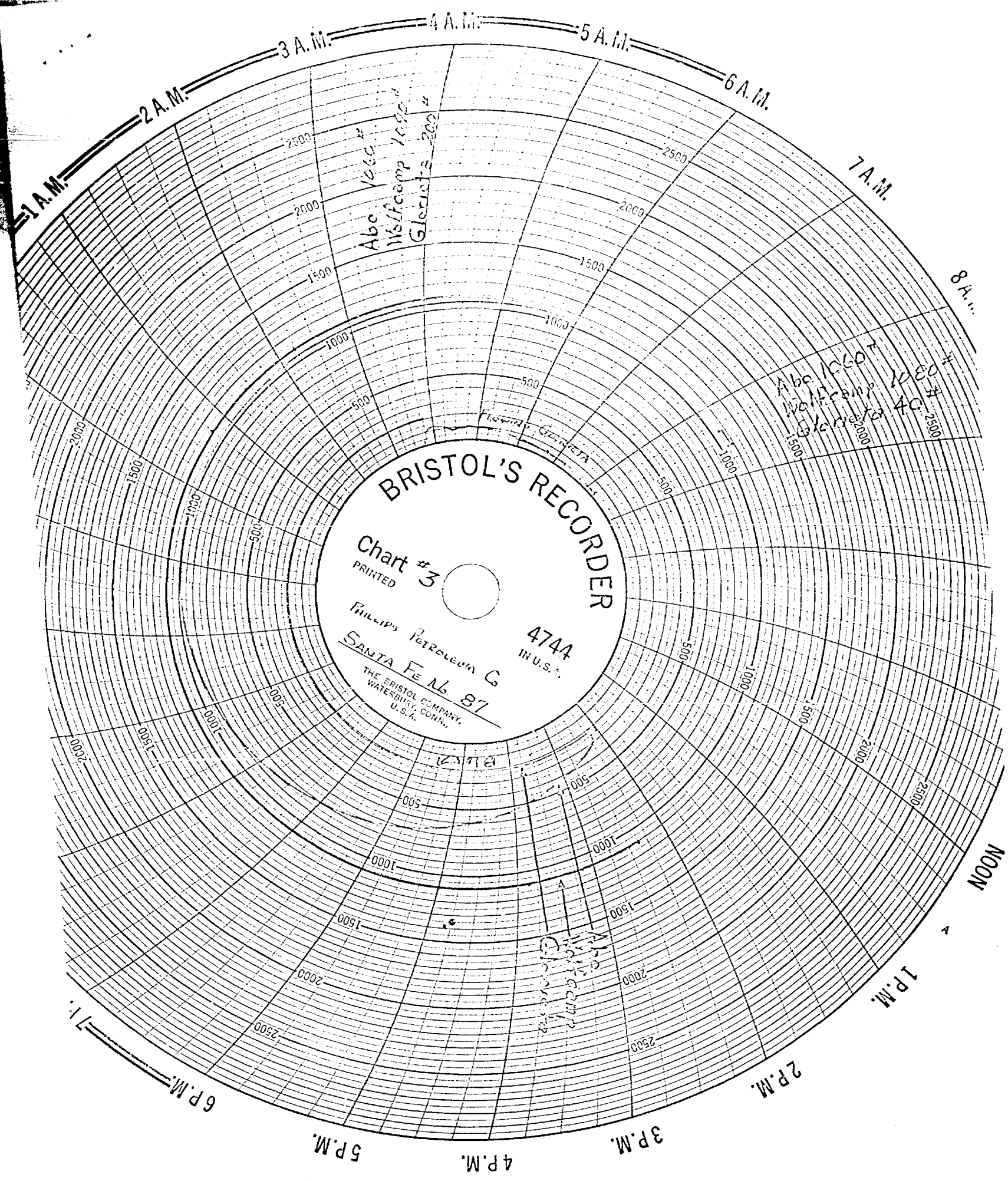
Operator \_\_\_\_\_  
By C. G. Summers

By \_\_\_\_\_  
Title \_\_\_\_\_

Title \_\_\_\_\_  
Date \_\_\_\_\_







Abc 1000 #  
Wolfeamp 1000 #  
Glorieta 2000 #

Abc 1000 #  
Wolfeamp 1000 #  
Glorieta 2000 #

Wolfeamp 1000 #  
Glorieta 2000 #



NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

6-1-56

PACKER-SETTING AFFIDAVIT  
Triple ~~(Pack)~~ Completions)

STATE OF NEW MEXICO )  
County of Lea ) ss

C. L. Sumnerwell, being first duly sworn according to law, upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Phillips Petroleum Company in the capacity of Lease Foreman and as such is its authorized agent.

That on (1) 2-13-64 (2) 2-19-64, 1964, he personally supervised the setting of  
(1) Baker Model D perm. packer  
(2) TIW D-2 dual string packer in Phillips Petroleum Company's  
(Make and Type of Packer) (Operator)

Santa Fe Well No. 87, located in Unit  
(lease)  
Letter L, Section 31, Township 17S, Range 35E, NMPM,  
Lea County, New Mexico.

That said packer was set at a subsurface depth of (1) 9985'  
(2) 9124' feet,  
said depth measurement having been furnished by tubing tally.

That the purpose of setting this packer was to effect a seal in the annular space between the two strings of pipe where the packer was set so as to prevent the commingling, within the well-bore, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer. That this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

Phillips Petroleum Company  
(Company)

C. L. Sumnerwell  
(its Agent)

Subscribed and sworn to before me this the 9 day of March, AD, 19 64.

John L. Sumnerwell  
Notary Public in and for the County  
of Lea.

My Commission Expires 8-28-65.

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
Exhibit EXHIBIT NO. 5  
CASE NO. 3008

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 11, 1964

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

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

CASE 2988 (Continued from the February 5, 1964 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit George E. Willett and all other interested parties to appear and show cause why the SDD Hare Well No. 7, located 600 feet from the South line and 1360 feet from the East line of Section 14, Township 29 North, Range 11 West, San Juan County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.

CASE 2998 (Continued from the February 19, 1964 Examiner Hearing)

Application of Tenneco Oil Company for a gas well-water injection well, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Central Totah Unit Well No. 24 located in Unit O of Section 11, Township 28 North, Range 13 West, San Juan County, New Mexico, to produce gas from the Basin-Dakota Gas Pool through 1 1/2 inch tubing and to inject water into the Gallup formation, Totah-Gallup Oil Pool, through 2 1/16 inch tubing with separation of the zones by a packer set at 5766 feet.

CASE 3001: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit O. A. Peters and all interested parties to appear and show cause why the Peters State Well No. 1, located 860 feet from the South line and 660 feet from the East line of Section 2, Township 1 North, Range 20 East, De Baca County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.

CASE 3002: Application of Pan American Petroleum Corporation for the creation of a new gas pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Lower Paddock Gas Pool for its SMU Well No. 16, located in Unit O of Section 15, Township 24 South, Range 37 East, and the establishment of special pool rules therefor, including a provision for 320-acre spacing, Lea County, New Mexico.

CASE 2737 (Reopened): In the matter of Case No. 2737 being reopened pursuant to the provisions of Order No. R-2429-A, which order established temporary 640-acre spacing units for the White City-Pennsylvanian Gas Pool, Eddy County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 160-acre spacing units.

CASE 3003: Application of Cabot Corporation for the creation of a new oil pool and for special pool rules, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Bough "C" Oil Pool for its Signal State Well No. 1, located in Unit A of Section 29, Township 8 South, Range 33 East, Chaves County, New Mexico, and for the establishment of temporary pool rules therefor, including a provision for 80-acre proration units.

MARCH 11, 1964 EXAMINER HEARING

- CASE 3004: Application of Ambassador Oil Corporation for a unit agreement Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Pearsall Queen Sand Unit comprising 960 acres of State and Federal land in Townships 17 and 18 South, Range 32 East, Lea County, New Mexico.
- CASE 3005: Application of Ambassador Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Pearsall (Queen) Pool, Lea County New Mexico, by the injection of water into the Queen formation through 5 wells, located in Sections 4 and 5 Township 18 South, Range 32 East.
- CASE 3006: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Pearsall (Queen) Pool, Lea County, New Mexico, by the injection of water into the Queen formation through one well located in Unit M of Section 33, Township 17 South, Range 32 East.
- CASE 3007: Application of Consolidated Oil & Gas, Inc. for a triple completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Hoyt Well No. 2-5, located in Unit L of Section 5, Township 26 North, Range 4 West, Rio Arriba County, New Mexico, to produce gas from the Basin-Dakota and Blanco Mesaverde Gas Pools and oil from an undesignated Gallup oil pool through parallel strings of 2 1/16 inch, 1 1/2 inch, and one inch tubing, respectively.
- CASE 3008: Application of Phillips Petroleum Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Santa Fe Well No. 87, located in Unit L of Section 31, Township 17 South, Range 35 East, Lea County, New Mexico, to produce oil from the North Vacuum-Abo, Vacuum-Wolfcamp and Vacuum-Glorieta Pools through parallel strings of 2 3/8-inch OD tubing.
- CASE 3009: Application of Cities Service Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Owen No. 1 Well located in Unit P of Section 35, Township 21 South, Range 37 East, Lea County, New Mexico, to produce oil from the Blinebry and Drinkard Oil Pools through parallel strings of 1 1/2-inch and 2 1/16-inch tubing, respectively.
- CASE 3010: Application of R. C. Davoust for the expansion of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, as successor to Stanton Oil Company, Ltd., seeks to expand the Turkey Track Pool Waterflood Project authorized by Order No. R-1524. Said expansion would be effected by the drilling of 11 water injection wells to the Queen formation at certain unorthodox locations no nearer than 5 feet distance from any 40-acre lot line in Section 34, Township 18 South, Range 29 East, and Section 3, Township 19 South, Range 29 East, Eddy County, 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. 3008  
Order No. R-2667

APPLICATION OF PHILLIPS PETROLEUM  
COMPANY FOR A TRIPLE COMPLETION,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
March 11, 1964, at Santa Fe, New Mexico, before Examiner  
Daniel S. Nutter.

NOW, on this 13th day of March, 1964, 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, Phillips Petroleum Company, seeks  
authority to complete its Santa Fe Well No. 87, located in Unit L  
of Section 31, Township 17 South, Range 35 East, NMPM, Lea County,  
New Mexico, as a triple completion (conventional) to produce oil  
from the Vacuum-Glorieta and the North Vacuum-Abo Pools through  
parallel strings of 2 1/16-inch tubing, and from the Vacuum-  
Wolfcamp Pool through a third string of 2 3/8-inch tubing, with  
separation of the zones by packers set at approximately 9124 feet  
and 9985 feet.

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

(4) That approval of the subject application will prevent  
waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is  
hereby authorized to complete its Santa Fe Well No. 87, located

-2-

CASE No. 3000  
Order No. R-2667

in Unit L of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the Vacuum-Glorieta and North Vacuum-Abo Pools through parallel strings of 2 1/16-inch tubing, and from the Vacuum-Wolfcamp Pool through a third string of 2 3/8-inch tubing, with separation of the zones by packers set at approximately 9124 feet and 9985 feet;

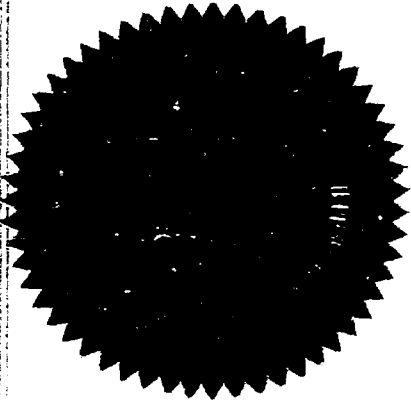
PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Vacuum-Wolfcamp Pool.

(2) 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

esi/

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
March 11, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Phillips Petroleum Company  
for a triple completion, Lea County, New  
Mexico. Applicant, in the above-styled  
cause, seeks approval of the triple com-  
pletion (conventional) of its Santa Fe  
Well No. 87, located in Unit L of Section  
31, Township 17 South, Range 35 East, Lea  
County, New Mexico, to produce oil from the  
North Vacuum-Abo, Vacuum-Wolfcamp and  
Vacuum-Glorieta Pools through parallel  
strings of 2 3/8-inch OD tubing.

Case No. 3008

BEFORE: DANIEL S. NUTTER, EXAMINER.

TRANSCRIPT OF HEARING



MR. NUTTER: We will call Case 3008.

MR. DURRETT: Application of Phillips Petroleum Company for a triple completion, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, representing the applicant. I have one witness I would like to have sworn, please.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Nos. 1 through 6 were marked for identification.)

F. C. MORGAN

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A F. C. Morgan.

Q By whom are you employed and in what position?

A I am with Phillips Petroleum Company, the Assistant Area Superintendent, Hobbs, New Mexico.

Q Mr. Morgan, have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, I have.



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: They are.

Q Are you familiar with the application of Phillips Petroleum Company in Case 3008?

A Yes, sir.

Q Would you state briefly what Phillips proposes in this case?

A Yes, Phillips seeks approval of the triple completion (conventional) of Santa Fe Well 87 located in Unit 1, Section 31, Township 17 South, Range 35 East, Lea County, New Mexico.

Q Referring to what has been marked as Exhibit No. 1, will you identify that exhibit, please?

A Yes, sir. This is a completed application for multiple completion setting forth the pertinent information on our Santa Fe Well 87.

Q Does that contain all of the information required normally by the Commission in an application of this kind?

A Yes, sir, I believe it does.

MR. KELLAHIN: If the Examiner please, we are offering this as an exhibit at this time in view of the fact that the application form filed does not comply in all respects, but it has the basic information for the advertising of the case.





MR. NUTTER: Very good.

Q Referring to what has been marked as Exhibit No. 2, would you identify that exhibit, please?

A Yes, sir, this is a plat of the lease in question with the offset wells and leases also shown. The Phillips Santa Fe lease in this area is outlined in red and the well in question, No. 87, is circled in red.

Q Referring to what has been marked as Exhibit No. 3, would you identify and discuss that exhibit?

A Yes, sir. Exhibit No. 3 is a diagrammatic sketch of our actual completion of Santa Fe Well No. 87. It shows a three-string completion, the long string being seven inch casing, it shows the perforated intervals of the Glorieta, Abo and Wolfcamp zones, formation tops and tubing strings and packers, of course.

Q In connection with this well have you taken any tests up to the present time?

A Yes, sir. The well has actually been completed and potentialled.

Q Would you give the Examiner the figures you have acquired in connection with the potentials, pressures and fluid characteristics and gravities?

A Yes, sir. Starting with the bottom there, the Wolfcamp, of course, you can see has been perforated from 10,006 to 16.



Following 5,000-gallon acid treatment the well flowed on potential 279 barrels of oil, no water; GOR, 1179; gravity, 41; tubing pressure, 950.

The Abo was actually completed in six selective intervals in 1962 to 9300-foot figure shown on the sketch. Following two acid treatments it potentialized flowing 2297 barrels of oil, no water; GOR, 1350; gravity, 37.7; flowing tubing pressure varied from 850 to 170.

The Glorieta perforated from 6,030 to 6,042, swabbed on potential 309 barrels of oil, 165 barrels of water. The gas-oil ratio was not measured, but it has since approximated 640. The gravity of the crude is 38.5. As to bottom hole pressures, I will summarize those all at one time.

The Wolfcamp bottom hole pressure is 3177, that is a 48-hour bottom hole pressure taken at a datum of a minus 5900. The Abo bottom hole pressure was 3299, and that's after 120-hour shut-in, at a datum of 5125. The Glorieta had a swabbing potential, has since been equipped to flow. We did not get a bottom hole pressure, but based on offset pressure information we think it would be 2618.

Q Now, the advertising and the application in this case shows that you propose to use 2-3/8ths-inch OD tubing. Did you actually complete it in that fashion?

A No, that was our original intention, but we had hoped to



get three joints of "T" to permit a well head that it would accomodate the three strings of 2-3/8ths. We failed to do that and the thing was completed with seven inch from bottom to top, which precluded the use of 2-3/8ths, so the Glorieta and Abo are completed with 2-1/16th.

Q Will that completion in any wise affect your ability to handle all problems that might arise in connection with these two zones?

A No, sir.

Q Does the completion as you have made it effectively separate the producing horizons in this area?

A Yes, sir, that has been demonstrated.

Q Referring to what has been marked as Exhibit No. 4, would you identify that and discuss what you have shown on it?

A Exhibit No. 4 is a Schlumberger dual induction lateral log. I think on the two-inch scale on the log all formation tops are marked as to depth and subsea elevation. The perforated intervals are also shown on the two-inch scale.

Q Referring to what has been marked as Exhibit No. 5, would you identify that exhibit?

A This is a required packer setting affidavit properly sworn to by our lease foreman in actual charge of the completion operations, and the form, of course, he shows the description of the packers, the actual setting depths of it. He swears that



they do effectively prevent communication between the reservoirs.

Q You said that this effectively separated the zones.  
Have you made your packer leakage tests?

A Yes. These tests actually have been completed, I think our Exhibit No. 6 we actually have individual charts. I think this amounted to a three-day test for the packer leakage. The chart No. 1 shows the initial shut-in stabilization period and the flowing of the Wolfcamp zone. Chart No. 2 shows the shut-in period and the flowing of the Abo. Chart No. 3 shows the in-period and the production of the Glorieta.

Q This does show effective separation of the zones, does it not?

A Yes, very effective separation.

Q Were Exhibits 1, 2, 3 and 4 prepared by you or under your supervision?

A Yes, sir, excluding the log, of course.

Q You made the markings on the log, did you not?

A Yes, sir, that is correct.

Q And Exhibits 5 and 6 are records which are prepared by your company as required by this Commission?

A That is correct.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 6, inclusive.



MR. NUTTER: Phillips' Exhibits 1 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 6 were offered and admitted in evidence.)

Q Mr. Morgan, is there any reason that a decision on this case at an early date would be very important to Phillips Petroleum Company?

A Yes, it would be quite advantageous to have an early decision because this represented a different triple than we initially envisioned. We had initially envisioned a Pennsylvanian and we came up with three zones that had not been triply completed in the field, which dictated the hearing requirement. The well is completed and we will be ready to go on production.

Q You don't have an allowable assigned as yet?

A To the Wolfcamp and Abo.

Q Does that represent a sizeable amount of money?

A A sizeable amount, a thousand dollars a day.

Q For that reason you would like an early order in this case?

A Yes, sir.

MR. KELLAHIN: That's all I have on direct examination.

MR. NUTTER: Are there any questions of Mr. Morgan?



CROSS EXAMINATION

BY MR. NUTTER:

Q As I understand it, the original application was for 2-3/8ths-inch tubing to each of the zones?

A Yes.

Q And now you have 2-1/16th to two of the zones?

A That is correct.

Q So, in effect you are amending your application at the hearing today?

A That is correct.

Q I note in the Wolfcamp that you had some squeeze perforations. Was an attempt made in the Upper Wolfcamp and then the well completed lower?

A Yes. Actually the Wolfcamp was completed 10,006 to 16, and that was completed and select testing was done in the Upper Wolfcamp from 9897 to 9901 and 9408 to 9412. This zone proved productive of water. Our log analysis indicated it had a possibility of contributing some Wolfcamp reserves, so we selectively tested and we did go ahead and squeeze. We did a squeeze job on it.

Q The tubing pressure on the Wolfcamp was 950, was it flowing or shut-in?

A That's a flowing tubing pressure.

Q Flowing tubing pressure?



A Yes, sir.

MR. NUTTER: Any other questions of Mr. Morgan?

MR. KELLAHIN: He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further?

MR. KELLAHIN: No, that's all I have.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3008? We will take the case under advisement.

STATE OF NEW MEXICO )  
: SS  
COUNTY OF BERNALILLO )


I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 5th day of April, 1964.

  
Notary Public-Court Reporter

My commission expires:  
June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3008, heard by me on 3/11, 1964.

  
Examiner  
New Mexico Oil Conservation Commission

