

CASE 4147: Application of MOBIL  
OIL CORP. FOR POOL RECLASSIFICA-  
TION, LEA COUNTY, NEW MEXICO.

Case Number.

4147

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Application

Transcripts.

Small Exhibits

ETC.

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

June 4, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Mobil Oil  
Corporation for pool  
reclassification, Lea County,  
New Mexico.

Case 4147

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: Case 4147, application of Mobil Oil Corporation for pool reclassification, Lea County, New Mexico.

MR. SPERLING: James E. Sperling of Modrall, Seymour, Sperling, Roehl & Harris, Albuquerque, appearing for the Applicant, Mobil Oil Corporation. I have one witness.

(Thereupon, Applicant's Exhibits 1 through 5 were marked for identification.)

C. R. KREUZ

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

DIRECT EXAMINATION

BY MR. SPERLING:

Q Please state your name, your place of residence, the name of your employer, and the capacity in which you are employed?

A My name is C. R. Kreuz. I reside in Midland, Texas, and work for Mobil Oil Corporation as a Senior Production Engineer.

Q Have you on previous occasions testified before the Oil Conservation Commission, and are your qualifications

a matter of record?

A Yes, they are.

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

MR. NUTTER: Yes, they are.

Q Mr. Kreuz, are you familiar with the application which is the subject of this Hearing?

A Yes, I am.

Q Would you please state briefly the request contained in the application by Mobil Oil Corporation?

A Mobil is seeking reclassification of the North Vacuum-Morrow Pool, which is currently established as the east half of Section 11, 34 East, 17 South, Lea County, New Mexico, from oil to gas.

Q The present pool limits were established in Order No. R-3562?

A That's correct.

Q When was the pool established?

A The production from the pool was first established in Pennzoil Bridges State Well No. 1, which is located in the northeast quarter of Section 11.

Q Would you please refer to what has been marked as Exhibit No. 1, which purports to be a map of the area, and I assume that the location of the well you have just

identified is shown on that exhibit?

A That's correct. Exhibit No. 1 is an area map of the Vacuum Area, and the two wells which are currently completed in the North Vacuum-Morrow Pool are indicated on this map by red circles. These two wells are Pennzoil's Bridges State Well No. 1, located in the northeast quarter of Section 11, and Mobil's Bridges State 126, which is located in the southeast quarter of Section 11.

Pennzoil's well was potentialed on April 23, 1966, and potentialed for 215 barrels of oil per day flowing through a 20/64 inch choke, with tubing pressure of 1,670 PSI and oil gravity of 48.6; and Pennzoil's well was perforated in the interval from 11,960 feet to 11,979 feet.

MR. NUTTER: What was the completion date again?

A April 23, 1966. Mobil's Bridges State Well No. 126, which was completed July 23, 1968, potentialed for 219 barrels of oil per day flowing, and 77 barrels of water per day through an 18/64 inch choke, with a tubing pressure of 1,000 PSI and oil gravity of 52.1 degrees, and was perforated in the interval from 11,855 feet to 11,932 feet.

Q Please refer to Exhibit No. 2 as marked for identification, and explain the import of that exhibit?

A Exhibit 2 is a monthly production history of Pennzoil's Bridges State Well No. 1. Production from Pennzoil's well, oil production from Pennzoil's well has declined from 3,615 barrels of oil in July of 1966 to zero barrels of oil in March of 1969; and the GOR has increased from 3,574 cubic feet per barrel in July of 1966 to a GOR in December of 1968 of 268,500; and in January and February, the GOR continued to climb there. But I don't think the oil production there is significant enough to make a valid GOR calculation, that a little variation in this oil production, half a barrel one way or the other, will cause your GOR to be influenced significantly.

Q Now, refer to Exhibit 3.

A Exhibit 3 is a monthly production history of Mobil's Bridges State No. 126. Oil production has remained fairly constant in this well, except for the latter part of 1968, when we were reworking the well and working on two other zones in this well, the two other zones being the Abo and Upper Penn. These two zones have subsequently been squeezed off in this well, and that is the reason

for the erratic nature of production there in the latter part of 1968.

The GOR on Mobil's well has increased, however, from 10,596 cubic feet per barrel in July of 1968 to 18,551 cubic feet per barrel in March of 1969.

Q Now, has Mobil had a study made or tests conducted upon the Mobil well?

A Yes, they have.

Q Is the result of those tests reflected in Exhibit 4?

A Yes, Exhibit 4 consists of three sheets, a letter from Core Lab, and an attached recombination data sheet and hydrocarbon analysis sheet. In this letter, Core has recorded that they obtained fluid samples from Mobil Bridges State Well No. 126, and recombined these samples in a visual cell at high pressure, and expanded this reservoir fluid sample at a constant temperature of 175 degrees, and the fluid exhibited a retrograde dew point of 5,888 PSIG. This is pointed out in the report in the last sentence of the second paragraph of Core's letter.

Q I take it the 175 degree Fahrenheit is the average equivalent of the reservoir temperature?

A Yes. This 175 degrees is actually an extrapolation of a bottomhole temperature of 174 degrees Fahrenheit, measured



at 11,744. The temperature was extrapolated to the midpoint of the producing interval, and came out to be 175 degrees.

Q What does the report of Core Laboratories, Inc., mean to you insofar as classification of this reservoir is concerned?

A Core Labs report indicates to me that the Vacuum-North Morrow Pool is a condensate gas reservoir and that the Vacuum-North Morrow Pool should be reclassified from oil to gas.

Q You stated previously, I believe, that there are only two wells in the pool, that is the Pennzoil well and the Mobil well?

A That's correct.

Q And the horizontal limits now consist of a total of 320 acres?

A That's correct.

Q Please refer to Exhibit No. 5, and explain the information contained on that exhibit?

A Exhibit 5 is a Commission form C-122, which was completed for Mobil's Bridges State Well No. 126, and attached back pressure curve, which indicates that Mobil's well has an absolute open flow of 1,122,000 Mcf per day.

Q Is the gas being produced from these wells being marketed?

A Yes, it is. At the current time, the gas from these wells is being marketed under a casing head gas contract to Phillips.

Q What does the calculation as contained on Exhibit 5 show, insofar as calculated actual open flow capacity of the well, or potential?

A The absolute open flow indicated on Exhibit 5 is 1,122 Mcf per day.

Q Do you have anything further to add?

A No, sir.

Q With the exception of Exhibit 4 which, of course, was prepared by Core Laboratories, were the Exhibits 1, 2, and 3, and 5 prepared by you or under your supervision?

A Exhibits 1, 2, and 3 were prepared by me or under my supervision, and Exhibit 5 was prepared by Forrest Tefteller, Incorporated, who was instructed to conduct this test by Mobil, and through my contact with him.

MR. SPERLING: At this time, we would like to offer Exhibits 1 through 5.

MR. NUTTER: Mobil's Exhibits 1 through 5 will

be admitted in evidence.

(Thereupon, Applicant's Exhibits 1 through 5 were admitted in evidence.)

MR. SPERLING: That is all I have.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Kreuz, this reservoir was originally discovered by the Pennzoil well, and you gave us the potential, and the gravity, and the perforated interval. You didn't give us the initial GOR.

A The initial GOR of Pennzoil's well is indicated on the scout ticket as 12,465 standard cubic feet per barrel.

Q How about your well, what is the initial GOR?

A The GOR reported on this scout ticket for Mobil's well was 4,600 standard cubic feet per barrel.

Q Now, apparently from your Exhibit No. 2, the Pennzoil well after the first month experienced an increase in GOR. The production GOR for July was 3,500 to one, and the the following month it jumped up to 12,000 and stayed in the 12,000 to 14,000 range there for six months, which would approach the initial GOR that

was reported on completion?

A Yes.

Q So there is a possibility there that that first month's gas production wasn't all metered, or something?

A Right, some of it -- I can't say. Some of it could have escaped, not be connected, or something.

Q Now, you stated that in your opinion this was a retrograde condensate gas reservoir. The gravity of the oil or condensate, however, isn't in the neighborhood that is normally expected of a condensate, which usually will be 60 degrees or greater.

A Yes.

Q And normally condensate is a white or light straw color. What is the color of the fluid in this reservoir?

A I don't know, sir. I haven't observed the fluid, and haven't obtained a report from the field as to the color of the fluid. I can obtain that, though.

Q It has been recognized, and produced, and sold as oil, though, all this time?

A Yes, it has.

Q Is there a penalty for gravity on the oil or condensate produced here?

A I don't know.

Q Do you know what price it brings?

A No, sir, I don't know.

Q Now, the pool has a depth factor for 11,000 to 12,000 feet. I am not sure just what the depth factor is. I am not even sure what the Commission Order on the pool establishes as spacing here. Is this an 80-acre pool or 160?

A It is an 80-acre.

Q Do you know what the allowable for this pool at the present time?

A No, sir, I don't.

Q Or what the top allowable would be?

A No, sir, I don't know, and I don't have anything with me that would indicate what the allowable is.

Q I was just wondering what the necessity for the classification of the pool as a gas pool would be, because it would appear that the oil well allowable times the GOR limit, 2,000 to one, would provide a rather substantial gas allowable.

A Yes, sir, it would, but we would be subject to a high GOR penalty, and it is my understanding that this well of Mobil's, Mobil Bridges 126, is currently

penalized due to a high GOR.

Q It is making approximately 40 barrels a day?

A Yes, sir.

Q Apparently from your production report for March here, it made 1,223 barrels of oil. What is the well capable of making, as far as liquids are concerned?

A We have a recent test on our well, which was taken May 30, 1969, and this well flowed 92 barrels of oil, and 1,546 Mcf of gas.

Q That is even higher than the calculated absolute open flow?

A Yes, sir. We point out here that we have received indications that this well was -- this formation was damaged during drilling and upon completion, and that we feel like the well will clean up as it is produced. And, in fact, this test that we have on May 30th indicates that it is getting better.

Q The highest production you have had on Exhibit No. 3 would indicate about a million a day, being in February of 1969?

A Yes. Another reason why we want this pool reclassified is so we could obtain a gas well price for our gas.

Q I was going to come to that, and you said you are selling it as casing head gas?

A Right.

Q What is the price on it as casing head gas?

A I don't know. Probably 10 cents, thereabouts. As gas well gas, it would be around 16 or 17. We do not currently have a gas well contract for our well, and we are negotiating for one now.

Q Would that be with the present purchaser, or another purchaser?

A The present purchaser, plus other purchasers.

Q It looks like the Pennzoil well could produce a substantial amount of gas, too, although the liquids have fallen off considerably on that?

A Yes.

Q Do you have any recent potential on that well?

A No, I contacted Pennzoil last week, and the man I talked to said he would try to find out what the well was currently doing, and he never called me back. I assumed that he couldn't get hold of that information from his field people.

Q How have the pressures gone on this reservoir?

A The average bottomhole pressure in Pennzoil's

well was 7,022 PSIG at 11,950 feet. And the latest reservoir pressure that we have is around 5,600. It was reported to be 5,605 PSIG at 11,894 feet in Mobil's well. I don't have a recent bottomhole pressure test on Pennzoil's well.

Q When was that pressure taken on the Mobil well?

A That was taken March 29, 1969.

Q So the pressure has dropped below Core Labs calculated retrograde dew point, then?

A Yes, it has.

MR. NUTTER: Any further questions of Mr. Kreuz?

You may be excused. Do you have anything further, Mr. Sperling?

MR. SPERLING: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4147: We will take the Case under advisement, and call Case 4148.



I N D E XWITNESSPAGE

C. R. KREUZ

Direct Examintion by Mr. Sperling

2

Cross Examination by Mr. Nutter

9

EXHIBITSMARKEDADMITTED IN  
EVIDENCEApplicant's Exhibits  
1 through 5

2

9

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

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

Samuel R. Northcutt

I do hereby certify that the foregoing is  
a correct and true copy of the  
the [illegible] of the [illegible] in  
handed to me on 6/4, 1969.

*[Signature]*, Secretary  
New Mexico Oil Conservation Commission



## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

July 16, 1969

Mr. James E. Sperling  
Modrall, Seymour, Sperling, Roehl,  
& Harris  
Attorneys at Law  
Public Service Building - Box 2168  
Albuquerque, New Mexico 87103

Re: Case No. 4147  
Order No. R-3792  
Applicant:  
Mobil Oil Corporation

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.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC       

Aztec 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. 4147  
Order No. R-3792  
NOMENCLATURE

APPLICATION OF MOBIL OIL CORPORATION  
FOR POOL RECLASSIFICATION, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 4, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of July, 1969, 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 by Order No. R-3084, dated June 30, 1966, the  
Commission created the North Vacuum-Morrow Pool, classified as  
an oil pool for Morrow production, and promulgated Special Rules  
and Regulations governing said pool.

(3) That the applicant, Mobil Oil Corporation, now seeks to  
have the subject pool reclassified from an oil pool to a gas pool.

(4) That while said North Vacuum-Morrow Pool is presently  
classified as an oil pool, the evidence adduced indicates that  
it is in fact a "dew point" or retrograde gas condensate.

(5) That the North Vacuum-Morrow Pool should be reclassified  
as a gas pool and redesignated the North Vacuum-Morrow Gas Pool.

-2-

CASE No. 4147  
Order No. R-3792

(6) That said North Vacuum-Morrow Gas Pool should be governed by all Commission Rules and Regulations applicable to gas pools in Lea, Chaves, Eddy, and Roosevelt Counties of Pennsylvanian age or older.

(7) That the Special Rules and Regulations for the North Vacuum-Morrow Pool promulgated by Order No. R-3084 should be abolished.

IT IS THEREFORE ORDERED:

(1) That the North Vacuum-Morrow Pool is hereby reclassified as a gas pool for Morrow production and is hereby redesignated the North Vacuum-Morrow Gas Pool.

(2) That the horizontal limits of the North Vacuum-Morrow Gas Pool are hereby established as follows:

NORTH VACUUM-MORROW GAS POOL  
LEA COUNTY, NEW MEXICO  
TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM  
Section 11: All

(3) That effective immediately, the North Vacuum-Morrow Gas Pool, Lea County, New Mexico, shall be governed by all Commission Rules and Regulations applicable to gas pools in Lea, Chaves, Eddy, and Roosevelt Counties of Pennsylvanian age or older including the provision for 320-acre spacing of such wells.

(4) That the locations of all wells presently drilling to or completed in the North Vacuum-Morrow Gas Pool or in the Morrow formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 1, 1969.

(5) That the Special Rules and Regulations for the North Vacuum-Morrow Pool, Lea County, New Mexico, promulgated by Order No. R-3084, are hereby abolished.

(6) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the North Vacuum-Morrow Gas Pool shall have dedicated thereto 320 acres in accordance with Rule 104 C of the Commission Rules and Regulations; or, pursuant to Paragraph C. of said Section

-3-

CASE No. 4147

Order No. P-3792

65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 320 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the North Vacuum-Morrow Gas Pool or in the Morrow formation within one mile thereof shall receive no more than an 80-acre allowable.

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

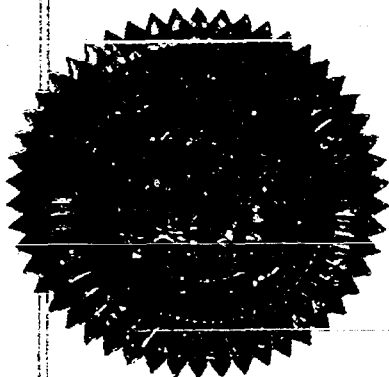
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID P. CARGO, Chairman

  
ALEX J. ARMILLO, Member

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



ESR/

**Mobil Oil Corporation**

P.O. BOX 633  
MIDLAND, TEXAS 79701

June 9, 1969

JUN 10 1969

New Mexico Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

Att: Mr. D. S. Nutter

RECLASSIFICATION HEARING  
NO. VACUUM MORROW POOL  
LEA COUNTY, NEW MEXICO  
CASE NO. 4147  
JUNE 4, 1969

Dear Mr. Nutter:

In answer to the question posed by you at the subject hearing, the color of the liquid hydrocarbons from Mobil's Bridges State Well #126 is clear to very light straw.

Very truly yours,

*C. R. Kreuz*

C. R. Kreuz  
Sr. Production Engineer

CRK/bje

Docket No. 16-69

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 4, 1969

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, Alternate Examiner:

CASE 4121: (Continued from the May 7, 1969, Examiner Hearing)  
Application of Roger C. Hanks for special pool rules, Lea County,  
New Mexico. Applicant, in the above-styled cause, seeks the  
promulgation of special pool rules for the Bar U-Pennsylvanian  
Pool, Lea County, New Mexico, including a provision for 160-  
acre spacing and proration units and the assignment of 80-acre  
allowables.

CASE 4143: (Continued from the May 21, 1969, Examiner Hearing)  
Application of Amerada Petroleum Corporation for downhole  
commingling and special gas-oil ratio limitation, Lea County,  
New Mexico. Applicant, in the above-styled cause, seeks  
authority to commingle production from the Eumont Gas Pool and  
the Skaggs-Grayburg Pool in the wellbore of its Fred Turner,  
Jr., "A" Well No. 2, the Eumont completion of which is presently  
classified as a gas completion, located in Unit K of Section 18,  
Township 20 South, Range 38 East, Lea County, New Mexico. Appli-  
cant, further seeks the establishment of a special gas-oil ratio  
limitation for the subject well.

CASE 3796: (Reopened)  
In the matter of Case No. 3796 being reopened pursuant to the  
provisions of Order No. R-3452, which order established 160-  
acre spacing units for the Cerca-Upper Pennsylvanian Pool, Lea  
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 40-acre or 80-acre spacing units.

CASE 4093: (Reopened)  
Application of BTA Oil Producers for salt water disposal, Lea  
County, New Mexico. Order No. R-3727, dated April 15, 1969,  
authorized the applicant to dispose of produced salt water into  
the Devonian formation in the intervals from approximately  
12,233 feet to 12,275 feet in its Max Pray State "E" Well No. 1  
and from approximately 12,088 to 12,164 feet in its Max Pray  
State "E" Well No. 2 located, respectively, in Units F and C of  
Section 5, Township 10 South, Range 36 East, adjacent to the  
West Crossroads-Devonian Pool, Lea County, New Mexico. Applicant  
now seeks authority to extend said Devonian zones of disposal  
to 12,233 feet to 12,500 feet in said Well No. 1 and 12,088  
feet to such depth as is necessary in said Well No. 2.



Examiner Hearing  
June 4, 1969  
-2-

Docket No. 16-69

CASE 4144: Application of Sam G. Dunn Oil Operations for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 1910 feet to 1950 feet in its E. Faircloth "C" Well No. 1 located in Unit N of Section 32, Township 7 South, Range 27 East, Acme-San Andres Pool, Chaves County, New Mexico.

CASE 4139: (Continued and readvertised)  
Application of Mallard Petroleum Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3700 feet to 3800 feet in its Milner Federal Well No. 4, located in Unit C of Section 24, Township 20 South, Range 34 East, Lynch (Yates) Pool, Lea County, New Mexico.

CASE 4145: Application of Tenneco Oil Company for an exception to Order No. R-3221, as amended, Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's Lusk Field leases comprising the SW/4 NW/4 of Section 19, Township 18 South, Range 32 East, Lea County, New Mexico, and the NE/4 of Section 24, Township 19 South, Range 31 East, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed on said leases in unlined surface pits on said leases.

CASE 4146: Application of V. S. Welch for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for the applicants lease comprising the NE/4 of Section 28, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed or to be completed on said lease in unlined surface pits on said lease.

Examiner Hearing

June 4, 1969

-3-

Docket No. 16-69

CASE 4147: Application of Mobil Oil Corporation for pool reclassification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have the North Vacuum-Morrow Pool, Lea County, New Mexico, reclassified from an oil pool to a gas pool.

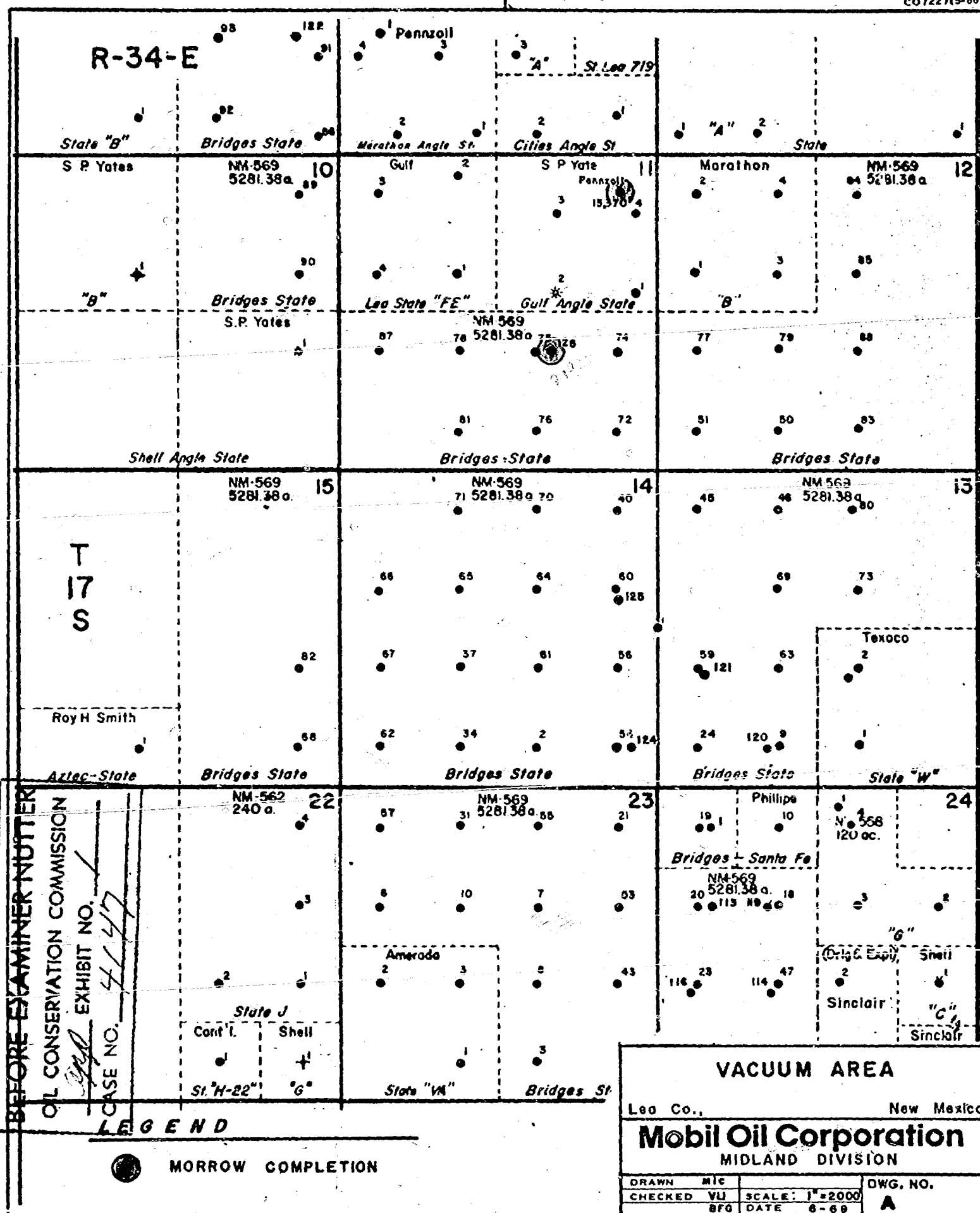
CASE 4148: Application of Fannie Lee Mitchell, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Wolfcamp formation in the perforated interval from approximately 10,450 feet to 10,550 feet in the former Southern Petroleum Exploration Co., Inc. Machris State 36-3 Well No. 1 located in Unit W of Section 3, Township 16 South, Range 35 East, Townsend-Wolfcamp Pool, Lea County, New Mexico.

CASE 4149: Application of Jack L. McClellan for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's Harris Well No. 1 located in Unit P, Section 5, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in unlined surface pits in the vicinity of the well.

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ON DEMAND.

C07227(5-66)



2

PRODUCTION HISTORY  
 PENNZOIL'S BRIDGES STATE WELL NO. 1  
 NORTH VACUUM-MORROW POOL  
 LEA COUNTY, NEW MEXICO

| Year            | Month     | Production  |            |                | GOR<br>Scf/Bbl |
|-----------------|-----------|-------------|------------|----------------|----------------|
|                 |           | Oil<br>Bbls | Gas<br>Mcf | Water<br>Fbbls |                |
| 1966            | July      | 3,615       | 12,920     | -              | 3,574          |
|                 | August    | 2,510       | 30,730     | -              | 12,243         |
|                 | September | 2,754       | 37,026     | -              | 13,444         |
|                 | October   | 3,557       | 47,372     | -              | 13,318         |
|                 | November  | 2,443       | 33,450     | -              | 13,692         |
|                 | December  | 2,563       | 35,024     | -              | 13,665         |
| 1967            | January   | 2,234       | 33,024     | -              | 14,782         |
|                 | February  | 2,128       | 33,918     | -              | 15,939         |
|                 | March     | 2,609       | 47,653     | -              | 18,265         |
|                 | April     | 1,990       | 42,943     | -              | 21,579         |
|                 | May       | 1,905       | 46,825     | 36             | 24,580         |
|                 | June      | 1,684       | 48,436     | 14             | 28,762         |
|                 | July      | 1,429       | 44,925     | 19             | 31,438         |
|                 | August    | 1,202       | 43,282     | 10             | 36,008         |
|                 | September | 1,010       | 38,619     | 8              | 38,237         |
|                 | October   | 793         | 32,730     | 6              | 41,274         |
|                 | November  | 619         | 29,095     | 29             | 47,003         |
|                 | December  | 492         | 23,969     | -              | 48,717         |
| 1968            | January   | 492         | 27,299     | -              | 55,486         |
|                 | February  | 410         | 22,346     | 4              | 54,502         |
|                 | March     | 569         | 34,748     | 6              | 61,068         |
|                 | April     | 329         | 28,010     | -              | 85,137         |
|                 | May       | 249         | 27,971     | -              | 112,333        |
|                 | June      | 154         | 25,382     | -              | 164,818        |
|                 | July      | 176         | 24,090     | -              | 136,875        |
|                 | August    | 138         | 24,310     | -              | 176,159        |
|                 | September | 62          | 21,400     | -              | 345,161        |
|                 | October   | 96          | 20,116     | -              | 209,542        |
|                 | November  | 89          | 17,056     | -              | 191,640        |
|                 | December  | 26          | 6,981      | -              | 268,500        |
| 1969            | January   | 1           | 1,920      | -              | 1,920,000      |
|                 | February  | 8           | 2,364      | -              | 295,500        |
|                 | March     | 0           | 4,318      | -              | -              |
| Cumulative..... |           | 38,336      | 950,252    | 132            |                |

BEFORE EXAMINER NUTTER  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 2  
 CASE NO. 4142

PRODUCTION HISTORY  
 MOBIL OIL CORPORATION'S  
 BRIDGES STATE WELL NO. 126  
 NORTH VACUUM-MORROW POOL  
 LEA COUNTY, NEW MEXICO

| Year            | Month     | Production  |            |               | GOR<br>Scf/Bbl |
|-----------------|-----------|-------------|------------|---------------|----------------|
|                 |           | Oil<br>Bbls | Gas<br>Mcf | Water<br>Bbls |                |
| 1968            | June      | -           | -          | -             | -              |
|                 | July      | 1,139       | 12,069     | 400           | 10,596         |
|                 | August    | -           | -          | -             | -              |
|                 | September | 949         | 2,708      | 333           | 2,853          |
|                 | October   | -           | -          | -             | -              |
|                 | November  | 461         | -          | 162           | -              |
|                 | December  | 899         | 9,772      | 316           | 10,870         |
| 1969            | January   | 1,959       | 29,952     | 688           | 15,289         |
|                 | February  | 1,962       | 30,445     | 690           | 15,517         |
|                 | March     | 1,223       | 22,688     | 430           | 18,551         |
| Cumulative..... |           | 8,592       | 107,634    | 3,019         |                |

BEFORE EXAMINER NUTTER  
 OIL CONSERVATION COMMISSION  
*app.* EXHIBIT NO. 3  
 CASE NO. 4147

CORE LABORATORIES, INC.

*Petroleum Reservoir Engineering*  
DALLAS, TEXAS 75207

RESERVOIR FLUID ANALYSIS  
P. L. MOSES, MANAGER

April 22, 1969

REPLY TO  
BOX 10185

CABLE  
CORELAB

Mr. E. G. Thurman  
Division Exploitation Engineer  
Mobil Oil Corporation  
P. O. Box 633  
Midland, Texas 79701

Attention: Mr. R. G. Edgerton

Subject: Progress Report  
Reservoir Fluid Study  
Bridges State No. 126 Well  
Vacuum Morrow Field  
Lea County, New Mexico  
Our File Number: RFL 5720

Gentlemen:

Primary separator gas and liquid samples were collected from the Bridges State No. 126 well by a representative of Core Laboratories, Inc. on April 5, 1969. These samples were delivered to our laboratory in Dallas to be used in a reservoir fluid study.

The separator gas composition was determined by chromatography. The separator products were physically recombined in the corrected producing gas-liquid ratio of 15,778 cubic feet of primary separator gas at 14.696 psia and 60° F. per barrel of stock tank liquid at 60° F. The resulting fluid was charged to a visual cell at high pressure and heated to the reservoir temperature of 175° F. When expanded at this temperature, the fluid exhibited a retrograde dew point at 5888 psig.

This information was telephoned to Mobil Oil Corporation on April 22, 1969, and we were authorized to perform a constant-volume depiction study. This study should be completed in approximately three to four weeks. Please call on us at any time if you have any questions.

Very truly yours,

CORE LABORATORIES, INC.  
Reservoir Fluid Analysis

*P. L. Moses*  
P. L. Moses  
Manager

|                             |                      |
|-----------------------------|----------------------|
| BEFORE EXAMINER NUTTER      |                      |
| OIL CONSERVATION COMMISSION |                      |
| <i>app.</i>                 | EXHIBIT NO. <u>4</u> |
| CASE NO. <u>4447</u>        |                      |

PLM:JB:pb  
encl.

CL-549

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

Page 1 of 2File RFL 5720

|         |                       |              |               |
|---------|-----------------------|--------------|---------------|
| Company | Mobil Oil Corporation | Date Sampled | April 5, 1969 |
| Well    | Bridges State No. 126 | County       | Lea           |
| Field   | Vacuum Morrow         | State        | New Mexico    |

**FORMATION CHARACTERISTICS**

|                                    |                       |
|------------------------------------|-----------------------|
| Formation Name                     | Morrow                |
| Date First Well Completed          | April 23, 1966        |
| Original Reservoir Pressure (DST)  | 7022 PSIG @ 11950 Ft. |
| Original Produced Gas-Liquid Ratio | 12465 SCF/Bbl         |
| Production Rate                    | 215 Bbls/Day          |
| Separator Pressure and Temperature | PSIG ° F.             |
| Liquid Gravity at 60° F.           | 48.6 ° API            |
| Datum                              | 7890 Ft. Subsea       |

**WELL CHARACTERISTICS**

|                         |                   |           |
|-------------------------|-------------------|-----------|
| Elevation               | 4044 GL           | Ft.       |
| Total Depth             | 12000 PB          | Ft.       |
| Producing Interval      | 11855 - 11932     | Ft.       |
| Tubing Size and Depth   | 2 In. to 11810    | Ft.       |
| Open Flow Potential     |                   | MMSCF/Day |
| Last Reservoir Pressure | 5605 PSIG @ 11894 | Ft.       |
| Date                    | March 29, 1969    |           |
| Reservoir Temperature   | 174* ° F. @ 11744 | Ft.       |
| Status of Well          | Shut in           |           |
| Pressure Gauge          | Amerada           |           |

**SAMPLING CONDITIONS**

|  |        |                |
|--|--------|----------------|
| Flowing Tubing Pressure                        | 2812   | PSIG           |
| Flowing Bottom Hole Pressure                   | 4284   | PSIG           |
| Primary Separator Pressure                     | 485    | PSIG           |
| Primary Separator Temperature                  | 89     | ° F.           |
| Secondary Separator Pressure                   | 40     | PSIG           |
| Secondary Separator Temperature                | 82     | ° F.           |
| Field Stock Tank Liquid Gravity                | 52     | ° API @ 60° F. |
| Primary Separator Gas Production Rate          | 555.4  | MSCF/Day       |
| Pressure Base                                  | 14.696 | PSIA           |
| Temperature Base                               | 60     | ° F.           |
| Compressibility Factor ( $F_{pv}$ )            | 1.039  |                |
| Gas Gravity (Laboratory)                       | 0.681  |                |
| Gas Gravity Factor ( $F_g$ )                   | 0.9386 |                |
| Stock Tank Liquid Production Rate @ 60° F.     | 35.2   | Bbls/Day       |
| Primary Separator Gas/ Stock Tank Liquid Ratio | 15778  | SCF/Bbl        |
| or   | 63.38  | Bbls/MMSCF     |
| Core Laboratories, Inc., Engineer              | JC     |                |

REMARKS: \* Temperature extrapolated to mid-point of producing interval = 175° F.

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

Page 2 of 2

File RFL 5720

Company Mobil Oil Corporation Formation Morrow  
 Well Bridges State No. 126 County Lea  
 Field Vacuum Morrow State New Mexico

**HYDROCARBON ANALYSIS OF Separator GAS SAMPLE**

| COMPONENT        | MOL PER CENT | G P M |
|------------------|--------------|-------|
| Hydrogen Sulfide |              |       |
| Carbon Dioxide   | 0.29         |       |
| Nitrogen         | 0.83         |       |
| Methane          | 84.70        |       |
| Ethane           | 8.21         | 2.068 |
| Propane          | 3.41         | 0.936 |
| iso-Butane       | 0.48         | 0.157 |
| n-Butane         | 0.94         | 0.296 |
| iso-Pentane      | 0.28         | 0.102 |
| n-Pentane        | 0.26         | 0.094 |
| Hexanes          | 0.23         | 0.094 |
| Heptanes plus    | 0.37         | 0.168 |
|                  | 100.00       | 3.915 |

Calculated gas gravity (air = 1.000) = 0.681

Calculated gross heating value = 1186 BTU  
 per cubic foot of dry gas at 14.696 psia and 60° F.

Collected at 490 psig and 80 ° F.

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



**NEW MEXICO OIL CONSERVATION COMMISSION**  
**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122  
 Revised 9-1-65

5

|  |                |   |                            |  |                    |
|--|----------------|---|----------------------------|--|--------------------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                |   |                            | Test Date <b>3-30-69</b>                                     |                    |
| Company <b>Mobil Oil Corporation</b>   |                |   |                            | Connection <b>Phillips</b>                                   |                    |
| Pool <b>No. Vacuum Morrow</b>  |                |   |                            | Formation <b>Morrow</b>                                      |                    |
| Completion Date <b>12-6-68</b>   |                | Total Depth <b>12046</b>                  |                            | Plug Back TD <b>12000</b>                                    |                    |
|  |                |   |                            | Elevation <b>4044 GL</b>                                     |                    |
| Farm or Lease Name <b>Bridges State</b>  |                |   |                            | Unit <b>J</b>  |                    |
| Csq. Size <b>7"</b>  | Wt. <b>23</b>  | Set At <b>6.366</b>                       | Perforations: <b>12046</b> | Well No. <b>126</b>  |                    |
| Tbg. Size <b>2 3/8</b>   | Wt. <b>4.7</b> | Set At <b>1.995</b>                       | Perforations: <b>11810</b> | Unit <b>J</b> Sec. <b>11</b> Twp. <b>17S</b> Rge. <b>34E</b> |                    |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple <b>Single</b>  |                |   |                            | Packer Set At <b>11770</b>                                   |                    |
| Producing Thru <b>Tubing</b>   |                | Reservoir Temp. °F <b>175</b>             |                            | Mean Annual Temp. °F <b>60</b>                               |                    |
|  |                | Boro. Press. - P <sub>g</sub> <b>13.2</b> |                            | State <b>New Mexico</b>                                      |                    |
| L <b>11894</b>   | H <b>11894</b> | G <sub>g</sub> <b>0.800</b>               | % CO <sub>2</sub>          | % N <sub>2</sub>   | % H <sub>2</sub> S |
| Prover   |                |   | Moter Run <b>4"</b>        |  |                    |
|  |                |   | Taps <b>Flange</b>         |  |                    |

| FLOW DATA |                  |   |              |                 |                      | TUBING DATA |                 | CASING DATA |                 | Duration of Flow |              |
|-----------|------------------|---|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|------------------|--------------|
| NO.       | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. h <sub>w</sub> | Temp. °F    | Press. p.s.i.g. | Temp. °F    | Press. p.s.i.g. |                  | Temp. °F     |
| SI        |                  |   |              |                 |                      |             | <b>3944</b>     | <b>60</b>   |                 |                  |              |
| 1.        | <b>4" x .75"</b> |   |              | <b>120</b>      | <b>36</b>            | <b>65</b>   | <b>3478</b>     | <b>70</b>   |                 |                  | <b>7 hrs</b> |
| 2.        | <b>4" x .75"</b> |   |              | <b>160</b>      | <b>79</b>            | <b>78</b>   | <b>3240</b>     | <b>70</b>   |                 |                  | <b>5 hrs</b> |
| 3.        | <b>4" x .75"</b> |   |              | <b>390</b>      | <b>73</b>            | <b>80</b>   | <b>2791</b>     | <b>70</b>   |                 |                  | <b>7 hrs</b> |
| 4.        | <b>4" x .75"</b> |   |              | <b>510</b>      | <b>94</b>            | <b>84</b>   | <b>2233</b>     | <b>70</b>   |                 |                  | <b>6 hrs</b> |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |              |

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |   |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|---|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | <b>2.661</b>          | <b>69.2</b>      | <b>133.2</b>            | <b>0.9952</b>                    | <b>1.118</b>                  | <b>1.021</b>                            | <b>209.2</b>         |
| 2                         | <b>2.661</b>          | <b>117.0</b>     | <b>173.2</b>            | <b>0.9822</b>                    | <b>1.118</b>                  | <b>1.022</b>                            | <b>349.4</b>         |
| 3                         | <b>2.661</b>          | <b>171.6</b>     | <b>403.2</b>            | <b>0.9813</b>                    | <b>1.118</b>                  | <b>1.060</b>                            | <b>531.0</b>         |
| 4                         | <b>2.661</b>          | <b>221.8</b>     | <b>523.2</b>            | <b>0.9777</b>                    | <b>1.118</b>                  | <b>1.075</b>                            | <b>693.5</b>         |
| 5                         |                       |                  |                         |                                  |                               |   |                      |

|     |                |            |                |              |  |
|-----|----------------|------------|----------------|--------------|--|
| NO. | P <sub>t</sub> | Temp. °R   | T <sub>r</sub> | Z            | Gas Liquid Hydrocarbon Ratio <b>15.56</b> Mcf/bbl.     |
| 1.  | <b>0.20</b>    | <b>525</b> | <b>1.24</b>    | <b>0.963</b> | A.P.I. Gravity of Liquid Hydrocarbons <b>52.0</b> Deg. |
| 2.  | <b>0.26</b>    | <b>538</b> | <b>1.27</b>    | <b>0.955</b> | Specific Gravity Separator Gas <b>0.800</b>            |
| 3.  | <b>0.61</b>    | <b>540</b> | <b>1.27</b>    | <b>0.892</b> | Specific Gravity Flowing Fluid <b>X X X X X</b>        |
| 4.  | <b>0.79</b>    | <b>544</b> | <b>1.28</b>    | <b>0.864</b> | Critical Pressure <b>665</b> P.S.I.A.                  |
| 5.  |                |            |                |              | Critical Temperature <b>424</b> R                      |

|     |                             |                             |   |  |   |  |
|-----|-----------------------------|-----------------------------|---|--|---|--|
| NO. | P <sub>t</sub> <sup>2</sup> | P <sub>s</sub> <sup>2</sup> | P <sub>s</sub> <sup>2</sup> - P <sub>t</sub> <sup>2</sup> | P <sub>s</sub> <sup>2</sup> / (P <sub>s</sub> <sup>2</sup> - P <sub>t</sub> <sup>2</sup> ) | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.683$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.618$ |
| 1   |                             | P <sub>s</sub>              | P <sub>s</sub> <sup>2</sup>                               | P <sub>s</sub> <sup>2</sup> - P <sub>s</sub> <sup>2</sup>                                  |   |  |
| 2   |                             | <b>5150.2</b>               | <b>26525</b>  | <b>5039</b>  |   |  |
| 3   |                             | <b>4807.2</b>               | <b>23109</b>  | <b>8455</b>  |   |  |
| 4   |                             | <b>4297.2</b>               | <b>18466</b>  | <b>13098</b>   |   |  |
| 5   |                             | <b>3578.2</b>               | <b>12804</b>  | <b>18760</b>   |   |  |

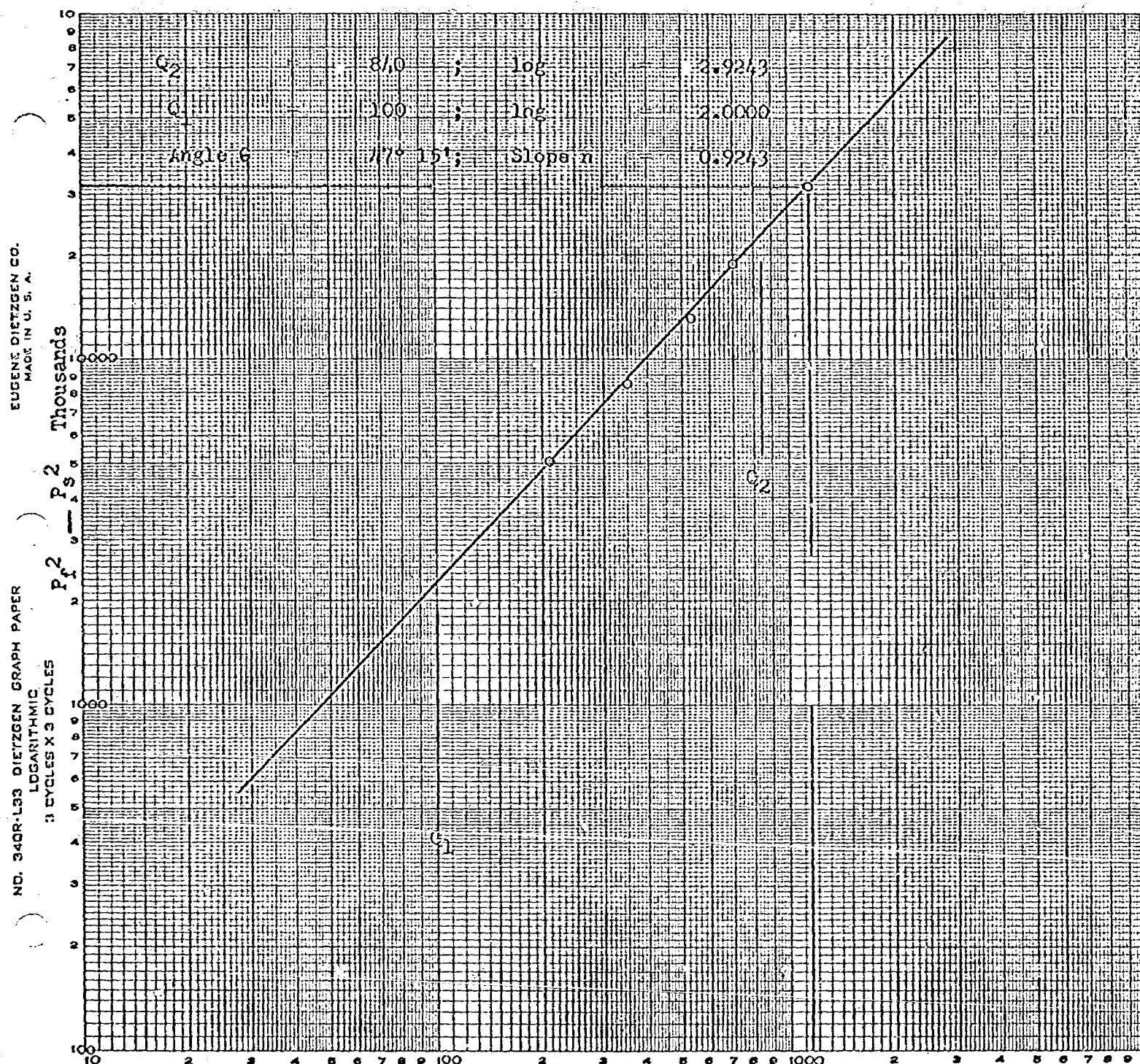
AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1122$

|  |  |                        |
|--|--|------------------------|
| Absolute Open Flow <b>1122</b> Mcfd @ 15.025 | Angle of Slope $\theta$ <b>47° 15'</b> | Slope, n <b>0.9243</b> |
|--|--|------------------------|

Remarks: **BHP measured with Amerada RPG-3 gauge.**

|                         |                                       |  |             |
|-------------------------|---------------------------------------|--|-------------|
| Approved By Commission: | Conducted By: <b>TEFTTELLER, INC.</b> | Calculated By: <b>Farrest Teftteller</b> | Checked By: |
|-------------------------|---------------------------------------|--|-------------|

Company : Mobil Oil Corporation  
 Well : Bridges State No. 126  
 Field : Vacuum Morrow  
 County : Lea  
 State : New Mexico  
 Date : March 30, 1969



Q : MCF/Day : 15.025 PSIA

AOF : 1122 MCF/Day

J. R. MODRALL  
JAMES E. SPERLING  
JOSEPH E. ROEHL  
GEORGE T. HARRIS, JR.  
DANIEL A. SISK  
LELAND S. SEDBERRY, JR.  
ALLEN C. DEWEY, JR.  
FRANK H. ALLEN, JR.  
JAMES P. SAUNDERS, JR.  
JAMES A. PARKER

HENRY G. COORS  
JOHN R. COONEY  
KENNETH L. HARRIGAN  
PETER J. ADANG  
DALE W. EK

LAW OFFICES OF  
**MODRALL, SEYMOUR, SPERLING, ROEHL & HARRIS**

PUBLIC SERVICE BUILDING  
P. O. BOX 2168  
ALBUQUERQUE, NEW MEXICO 87103

JOHN F. SIMMS (1885-1954)  
AUGUSTUS T. SEYMOUR  
(1907-1965)

TELEPHONE 243-4511  
AREA CODE 505

May 9, 1969

*Case 4147*

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

Re: Application of Mobil Oil Corporation  
for Reclassification of the Vacuum  
North Morrow Pool, Lea County, New  
Mexico

Dear Mr. Porter:

Enclosed herewith, please find above-referenced applica-  
tion, which we would appreciate your filing and docketing  
for Examiner's Hearing as soon as possible.

Very truly yours,

*James E. Sperling*  
James E. Sperling

JES:jv

Enclosures (3)

cc: Mr. Ira B. Stitt, w/encl.  
Mobil Oil Corporation

DOCKET MAILED

Date *5-22-69*

12 5418 4  
69  
BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF MOBIL OIL CORPORATION FOR  
RECLASSIFICATION OF THE VACUUM  
NORTH MORROW POOL, LEA COUNTY,  
NEW MEXICO, AS A GAS POOL

Case No. 4147

A P P L I C A T I O N

Applicant, Mobil Oil Corporation, whose address is  
Post Office Box 633, Midland, Texas 79701, hereby requests  
the Commission to reclassify the Vacuum North Morrow Pool,  
Lea County, New Mexico, and in support of its request states:

1. The Commission, effective December 1, 1968, in  
Order No. R-3562, established the Vacuum North Morrow Pool as  
an oil pool and established the horizontal limits of said  
pool as consisting of the E/2 of Section 11, Township 17 South,  
Range 34 East, N.M.P.M.

2. The discovery well was potentialled on April 23,  
1966, for 215 barrels of oil flowing, with a gas-oil ratio of  
12,465. The only other well in this pool is Mobil's Bridges  
State Well No. 126 located in the SE/4 of said Section 11.

3. Tests recently completed on the Bridges State Well  
No. 126 indicates that the pool is a gas condensate reservoir.

WHEREFORE, applicant requests that this matter be set  
for hearing as provided by law and that following hearing the  
Commission issue its order reclassifying said pool as a gas  
pool.

Respectfully submitted,

MOBIL OIL CORPORATION

BY: MODRALL, SEYMOUR, SPERLING, ROEHL & HARRIS

By

*James E. Sperling*  
James E. Sperling, its attorneys  
800 Public Service Building  
P. O. Box 2168  
Albuquerque, New Mexico 87103

*Permit  
Sept. 4 1968  
71-797 MEF  
11225*

*April 69  
98 60. 1595 89.  
HQR 16276*

DRAFT

GMH/esr  
July 7, 1969

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:

RECORDS CENTER

CASE No. 4147 3792

Order No. R-4147

NOMENCLATURE

APPLICATION OF MOBIL OIL CORPORATION  
FOR POOL RECLASSIFICATION, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 4, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of July, 1969, 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 by Order No. R-3084, dated June 30, 1966, the  
Commission created the North Vacuum-Morrow Pool, classified as  
an oil pool for Morrow production, and promulgated Special Rules  
and Regulations governing said pool.

(3) That the applicant, Mobil Oil Corporation, now seeks to  
have the subject pool reclassified from an oil pool to a gas pool.

(4) That while said North Vacuum-Morrow Pool is presently  
classified as an oil pool, the evidence adduced indicates that  
it is in fact a "gas condensate" reservoir.

(5) That the reservoir characteristics of the subject pool  
indicate that one well in the subject pool can efficiently and  
economically drain and develop 320 acres.

(5) ~~(6)~~ That the North Vacuum-Morrow Pool should be reclassified as a gas pool and redesignated the North Vacuum-Morrow Gas Pool.

(6) ~~(7)~~ That said North Vacuum-Morrow Gas Pool should be governed by all Commission Rules and Regulations applicable to gas pools in Lea, Chaves, Eddy, and Roosevelt Counties of Pennsylvanian age or older.

(7) ~~(8)~~ That the Special Rules and Regulations for the North Vacuum-Morrow Pool promulgated by Order No. R-3084 should be abolished.

IT IS THEREFORE ORDERED:

(1) That the North Vacuum-Morrow Pool is hereby reclassified as a gas pool for Morrow production and is hereby redesignated the North Vacuum-Morrow Gas Pool.

(2) That the horizontal limits of the North Vacuum-Morrow Gas Pool are hereby established as follows:

NORTH VACUUM-MORROW GAS POOL  
LEA COUNTY, NEW MEXICO  
TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM  
Section 11: *A 11*  
~~Section~~  
~~Section~~

(3) That effective immediately, the North Vacuum-Morrow Gas Pool, Lea County, New Mexico, shall be governed by all Commission Rules and Regulations applicable to gas pools in Lea, Chaves, Eddy, and Roosevelt Counties of Pennsylvanian age or older. *including the provision for 320-acre spacing of such wells.*

(4) That the locations of all wells presently drilling to or completed in the North Vacuum-Morrow Gas Pool or in the Morrow formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name

(5) That the Special Rules and Regulations for the North Vacuum-Morrow Pool, Lea County, New Mexico, promulgated by Order No. R-3084, are hereby abolished.

(6) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the North Vacuum-Morrow Gas Pool shall have dedicated thereto 320 acres in accordance with <sup>Rule 104 C of the Commission Rules and Regulations</sup> the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

*Failure to file new Form C-102 with the Commission*  
~~Failure to show evidence of the execution of one or the~~  
~~dedicating 320 acres to a well or to obtain a non-standard unit approved by~~  
~~other of the aforesaid alternatives by the filing of new Form~~  
~~the Commission within 60 days from the date of~~  
~~C-102 with the Commission within 60 days from the date of this~~  
order shall subject the well to cancellation of allowable. <sup>or until a non-standard unit has been approved,</sup> Until  
said Form C-102 has been filed, and subject to said 60-day limitation, each well presently drilling to or completed in the North Vacuum-Morrow Gas Pool or in the Morrow formation within one mile  
<sup>Receive no more than 80-</sup> thereof shall ~~receive a 40-acre~~ allowable.

(7) 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.

CASE 4148: Application of FANNIE  
LEE MITCHELL, INC. FOR SALT WATER  
DISPOSAL, LEA COUNTY, N. MEX.