

CASE 2997: Application of SOJONY
MOBIL OIL CO. for abolishment of
existing pool and creation of two
new oil pools and rules therefor.

CASE No.
2997

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

JMD/esr
3-15-64

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

Order No. R- 2677

APPLICATION OF SOCONY MOBIL OIL COMPANY,
INC., FOR THE ABOLISHMENT OF AN EXISTING
POOL, THE CREATION OF TWO NEW OIL POOLS
AND FOR SPECIAL TEMPORARY POOL RULES, *Ca*
LEA COUNTY, NEW MEXICO.

This cause came on for hearing at 9 o'clock a.m. on February 19, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz. ~~Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations;~~

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, Socony Mobil Oil Company, Inc., seeks the abolishment of the Vacuum-Pennsylvanian Pool in Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, and the creation of the Vacuum Upper-Pennsylvanian Pool in Sections 25 and 36, and the Vacuum Lower-Pennsylvanian Pool in Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That the applicant also seeks the promulgation of special pool rules for the Vacuum Lower-Pennsylvanian Pool establishing 80-acre spacing and a limiting gas oil ratio of 6,000 to 1.
- (4) That the Vacuum-Pennsylvanian Pool encompasses more than one separate common source of supply and should therefore be abolished.

(5) That the Socony Mobil State Bridges Well No. 96 located in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, was completed March ³~~12~~, 1963, and encountered a separate common source of supply which should be designated the Vacuum Lower-Pennsylvanian Pool; that the vertical limits of said pool should be the zone encountered in said well and between 11,292 feet and 11,492 feet; that the horizontal limits of said pool should be the ~~E~~/2 of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(6) That the Texaco Inc. State "O" Well No. 17 located in Unit N of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, was completed June 18, 1963, and encountered a separate common source of supply which should be designated the Vacuum Upper-Pennsylvanian Pool; that the vertical limits of said pool should be that portion of the Pennsylvanian formation above the marker found at 10,324 feet in the above-described Socony Mobil State Bridges Well No. 96; and that the horizontal limits of said pool should be the SE/4 of Section 25 and the N/2 and SW/4 of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk caused from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Vacuum Lower-Pennsylvanian Pool.

(8) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(9) That the temporary special rules and regulations should provide for a limiting gas-oil ratio of 6,000 to 1 in order to allow each operator in the pool the opportunity to use his just and equitable share of the reservoir energy.

(10) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(11) That this case should be reopened at an examiner hearing in April, 1965, at which time the operators in the subject pool should be prepared to appear and show cause why the Vacuum Lower-Pennsylvanian Pool should ^{not} be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production is hereby created and designated the Vacuum Lower-Pennsylvanian Pool with vertical limits comprising the zone encountered in the Socony Mobil State Bridges Well No. 96, located in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, between the interval from 11,292 feet to 11,492 feet and horizontal limits comprising the E/2 of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(2) That a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production is hereby created and designated the Vacuum Upper-Pennsylvanian Pool with vertical limits comprising that portion of the Pennsylvanian formation above the marker found at 10,324 feet in the Socony Mobil State Bridges Well No. 96 located in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, and horizontal limits comprising the SE/4 of Section 25 and the N/2 and SW/4 of Section 36, Township 17 South, Range 34 East.

(3) That the Vacuum-Pennsylvanian Pool is hereby abolished.

(4) That Special Rules and Regulations for the Vacuum Lower-Pennsylvanian Pool are hereby promulgated as follows, effective April 1, 1964.

RULE 1. Each well completed or recompleted in the Vacuum Lower-Pennsylvanian Pool or in the ^{Lower} Pennsylvanian formation within one mile of the Vacuum Lower-Pennsylvanian Pool, and not nearer to or within the limits of another designated ^{Lower} Pennsylvanian ~~oil~~ pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

~~Each well completed or recompleted in the Vacuum Lower-Pennsylvanian Pool or in the Gallup formation within one mile of the Vacuum Lower-Pennsylvanian Pool, and not nearer to or within the limits of another designated Pennsylvanian pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.~~

RULE 2. Each well completed or recompleted in the Vacuum Lower-Pennsylvanian Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

of the Commission

RULE 3. The Secretary-Director may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a single quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well projected to or completed in the Vacuum Lower-Pennsylvanian Pool shall be located within 150 feet of the center of a single governmental quarter-quarter section, provided, however, ~~that nothing contained herein shall be construed as prohibiting the drilling of a well on each quarter-quarter section in a standard unit.~~

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) in the Vacuum Lower-Pennsylvanian Pool shall be assigned an 80-acre

proportional factor of 6.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable in the Vacuum Lower-Pennsylvanian Pool as the acreage in such non-standard unit bears to 80 acres.

RULE 7. The limiting gas-oil ratio in the Vacuum Lower-Pennsylvanian Pool shall be 6,000 cubic feet of gas for each barrel of oil produced.

IT IS FURTHER ORDERED:

Lower
(1) That any well presently drilling to or completed in the Pennsylvanian formation within the Vacuum Lower-Pennsylvanian Pool or within one mile of the Vacuum Lower-Pennsylvanian Pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before April 1, 1964.

(2) That any operator desiring to dedicate 80 acres to a well presently drilling to or completed in the Vacuum Lower-Pennsylvanian Pool shall file a new Form C-128 with the Commission on or before April 1, 1964.

(3) That this case shall be reopened at an examiner hearing in April, 1965, at which time the operators in the subject pool may appear and show cause why the Vacuum Lower-Pennsylvanian Pool should not be developed on 40-acre spacing units.

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

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

GILBERT, WHITE AND GILBERT
ATTORNEYS AND COUNSELORS
BISHOP BUILDING
SANTA FE, NEW MEXICO

MAIN OFFICE OCC

CARL H. GILBERT (1891-1963)
L. C. WHITE
WILLIAM W. GILBERT
SUMNER S. KOCH
WILLIAM BOOKER KELLY
JOHN F. MCCARTHY, JR.

March 9, 1964

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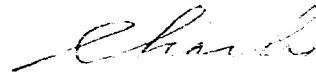
POST OFFICE BOX 787
TELEPHONE 983-4324
(AREA CODE 505)

Mrs. Ida M. Rodriguez
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Ida:

Am returning this for your files. Thank you for
loaning us this copy.

Very truly yours,


L. C. WHITE

LCW/ab
Encl: 1

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SOCONY MOBIL OIL
COMPANY, INC. FOR THE CREATION OF
A NEW OIL POOL, LEA COUNTY, NEW
MEXICO, TO BE DESIGNATED AS THE
VACUUM (LOWER) PENN POOL AND FOR
THE ESTABLISHMENT OF TEMPORARY
SPECIAL POOL RULES FOR THE POOL.

APPLICATION

1. Applicant is the owner and operator of wells designated as the State Bridges No. 98 Well located within the NW/4 of SE/4 of Section 26 and of the State Bridges No. 96 Well located in Unit H of said Section 26, Township 17 South, Range 34 East, within the horizontal limits of the Vacuum Pennsylvanian Pool, Lea County, New Mexico.
2. The wells of applicant are producing from a reservoir which is outside and below the vertical limits of the presently designated Vacuum Pennsylvanian Pool, and that no other wells within the Vacuum Pennsylvanian Pool, as presently designated, are producing from this reservoir.
3. That the reservoir or pool from which the above identified wells are producing should be designated and classified as a separate pool from the presently designated Vacuum Pennsylvanian Oil Pool with a suggested designation of Vacuum (Lower) Pennsylvanian Pool, with present horizontal limits to be established comprising the E/2 of said Section 26, with vertical limits of the pool to be established after hearing on this Application.

4. That special pool rules should be adopted applicable to the proposed pool providing for temporary well spacing on 80-acre units and providing for limiting gas-oil ratio of 6000 cubic feet of gas per barrel of oil produced, and that economic and physical waste will result if such rules are not adopted.

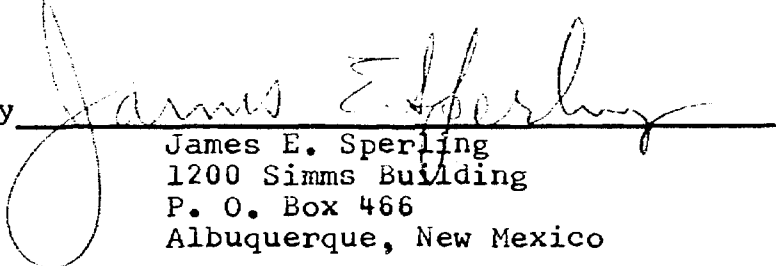
5. That the granting of this Application will not impair correlative rights and will prevent waste.

WHEREFORE, Applicant prays that the Commission set this matter for hearing as provided by the rules and regulations of the Commission and upon hearing enter its Order establishing a new pool to be designated as the Vacuum (Lower) Pennsylvanian Pool and that horizontal and vertical limits of the field be established and special rules be adopted and prescribed in accordance with this Application.

SOCONY MOBIL OIL COMPANY, INC.

BY MODRALL SEYMOUR SPERLING ROEHL & HARRIS

By


James E. Sperling
1200 Simms Building
P. O. Box 466
Albuquerque, New Mexico

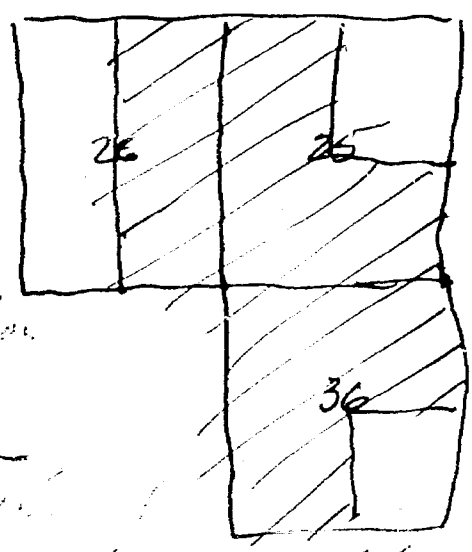
Case 2887 Homundature
Hear 2-18-64
Rec. 2-26-64

1. Grant Socony Mobil request.
2. Abolish the Vacuum - Penn.
oil Pool & Create, Vacuum -
Upper - Penn Oil Pool & Vacuum
Lower - Penn Oil Pool.
3. The Lower - Penn shall be that
zone found in the Soc. Mobil.
St. Bridges # 96 between 11,282 to
11,492 and the log on this well shall
be the type log for the ~~the~~ pool.
3. Set a 6000:1 GOR for the
Lower Penn pool.

Thus A. W. R.

Upper Penn
Vacuum Pool

That portion of
the Penn formation
above the marker
found at 10324 in
the above well
~~was~~ St. Bridges # 96



Disc by, T. W. R. Co. 10/1/64
17 loc. in the N. of the 10/1/64
Camp, T. W. R. Co. 10/1/64

ALBUQUERQUE, N. M.
PHONE 243-6591

SANTA FE, N. M.
PHONE 953-1971

FARMINGTON, N. M.
PHONE 325-1182

DEARNLEY-MEIER REPORTING SERVICE, Inc.

TRANSCRIPT OF HEARING

BEFORE: ELVIS A. UTZ, EXAMINER

In the matter of application of Socony
Mobil Oil Company, Inc., for the abolish-
ment of an existing pool and the creation
of two new oil pools, and for special
temporary pool rules, Lea County, New
Mexico.

IN THE MATTER OF:

EXAMINER HEARING

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 19, 1964.

Case No. 2997

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 19, 1964.

EXAMINER HEARING

IN THE MATTER OF:

In the matter of application of Socony
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BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 19, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Socony Mobil Oil
Company, Inc., for the abolishment
of an existing pool and the creation
of two new oil pools, and for special
temporary pool rules, Lea County, New
Mexico.

CASE NO. 2997

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

MR. UTZ: Case 2997.

MR. DURRETT: Application of Socony Mobil Oil Company,
Inc., for the abolishment of an existing pool and the creation of
two new oil pools, and for special temporary pool rules, Lea
County, New Mexico.

MR. SPERLING: Jim Sperling of Modrall, Seymour, Sperling,
Roehl & Harris, Albuquerque, appearing for the applicant. We have
one witness, Mr. Examiner.

MR. UTZ: Are there other appearances?

(Witness sworn)



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R. L. FLOWERS, JR.,

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

DIRECT EXAMINATION

BY MR. SPERLING:

Q State your name, please?

A R. L. Flowers, Jr.

Q Where do you live and by whom are you employed and in what capacity, Mr. Flowers?

A Hobbs, New Mexico, employed by Socony Mobil Oil, Inc.

Q And what is your position?

A Production Engineer.

Q Have you testified on previous occasions before the Commission and are your qualifications a matter of record?

A Yes.

Q All right.

MR. SPERLING: Are his qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Sperling) Mr. Flowers, are you familiar with the application filed in this case on behalf of Socony Mobil Oil Company, Inc.?

A Yes, I am.

Q What is proposed by the application?

A Socony Mobil wishes to establish a Vacuum Lower Penn

field, which will have horizontal limits of the East Half of



Section 26, Township 17 South, Range 34 East. The subject East Half of Section 26 contains Socony Mobile's State Bridges Number 96 and Number 98 wells, which produce from a lower Penn reservoir, and approximately 11,400 feet in depth.

Q Now, Mr. Flowers, would you please refer to what has been marked as Exhibit Number One, and tell us what that portrays?

A Exhibit Number One is a base map which shows all wells producing from the Vacuum Penn Field. To enumerate these wells, the ones marked in blue are the Penn producers, and there is quite a difference in horizontal extent between the State Bridges lease and the other three producers, which are owned by Texaco. Texaco State "Q" Number 4 and their Number O-18 and their O-17 are the Penn producers there. Number 11 tested this zone at an initial potential, but it was then plugged back and did not have any other production. Other wells which have penetrated this zone are Continental's Number Seven in Section 35, 17-34, and Marathon's Number Five and Seven in Section 25, 17-34, and Tidewater's Number 6-F in Section 36, 17-34, and Texaco's State "M" Five and Seven in Section One of 17-35, and Number State L-6, Texaco, in the same section. Number One, 17-35- - 18-35. If I stated 17, I am sorry.

Q Well, now, Mr. Flowers, the wells which are described in the application are shown, I believe, in the East Half of Section 26 and are designated respectively as Mobil State Bridges Number 96 and 98; is that correct?



A Yes, sir.

Q And these wells are currently producing from the Vacuum Penn Field as presently designated; is that right?

A Yes. Exhibit Number Two is a cross section which shows all wells presently completed in the Vacuum Penn Pool. You will note the section covered here in the lower right-hand corner is an AA Prime cross section. This cross section shows three producing wells from an Upper Penn just below the base of the Wolfcamp reservoir. And this- - These are Texaco's State "O" Number 17, "O" Number 18, and State "Q" Number 4. And on the left-hand side, we have State Bridges Number 98, producing from a zone below 11,400, and State Bridges Number 96, producing from the same zone at a little different depth, somewhere below 11,300.

Q Well, then, as I understand it, there is approximately 1,000 feet of vertical separation between the Texaco wells to which you have referred, and which are shown on the cross section, and the Mobil State Bridges Number 98 and 96; is that correct?

A Yes. Our State Bridges Number 95 has been used as a type log for this area. However, because Well Number 95 does not have a full section of the lower Penn, Socony Mobil wishes to submit Well Number 96 as a type log for this reservoir. Socony Mobil recommends that the vertical limits of the lower Penn Field be defined at an interval of 11,292 feet to 11,492 feet, which is the top of the Mississippi.

From the type log of the State Bridges Number 96, this



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log is submitted as Exhibit Number Three, I wish to point out here that Socony Mobil has attempted to limit the vertical limits of this lower reservoir as much as possible. The member we are interested in is a fairly clean section. It is not clean in lithology, but in character. And you can see from the full cross section, it is correlated, I believe, through this area, however, the sand that is a producing member is not present in all wells. There has been no other production developed in Texaco's leases, or other operators, and there have been 15 wells penetrated this zone.

Q Now, as I understand your testimony, only the two Mobil wells, which you described in the application, that is, the Bridges 96 and 98, those are the only wells in this lower section which is some 1,000 feet below the other Penn section, from which the other wells that you have referred to are producing?

A Yes.

Q Now, would you refer to Exhibit Number Four, and tell us what that is?

A Exhibit Number Four is reservoir data on the Vacuum Penn lower Penn. I should qualify that as the lower Penn. The formation is Morrow, the net pay is approximately 28 feet, and the estimated formation volume factor is 2.7. Estimated solution gas-oil ratio is 3900 to one, the formation temperature is 140 degrees, the oil gravity is 50 degrees API, the estimated bubble point pressure is 6,450 PSI, the crude being produced is a high gravity. It is



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PAGE 7

saturated crude, which means that the pressure is below the bubble point. The initial GOR is believed to be 3900 to one. Exhibit Number One- - Five and Six will show that the GOR is increasing at a rapid rate. And the wells will be penalized throughout the remaining life if the 6,000 to one ratio is not permitted. The GOR is expected to climb, thus continually reducing the oil allowable. Socony Mobil is permitted the top allowable at the present time of 222 barrels of oil per day. The State Bridges Number 96 has top allowable because of the 5,000 to one GOR, limited, which is effective February 5, 1964. The well is not capable of producing top allowable at this time. Exhibit Five is test summary. You will note the special test at the bottom dated 2-14-64. This well flowed- - 96 flowed 113 barrels new oil, no water, in 24 hours, on a 13/64ths choke, and a GOR was 9740 to one.

Exhibit Number Six shows the only two tests we have on State Bridges Number 98, which is a fairly recent completion. The date of the last test was the 2-10-64. This well flowed 156 barrels of new oil and no water in 24 hours on a 16/64ths choke. The GOR was 8,551 to one. There is no evidence of gas cap at this time.

Q What is the reservoir mechanism?

A It is solution gas.

Q Now, would you please refer to Exhibit Number Seven and tell us what that indicates?

A Exhibit Number Seven shows first of all that the reservoir



is not rate sensitive. When you combine this data with Exhibit Number Seven, this exhibit, Exhibit Seven, shows pressure versus accumulative production for the Yuma loan reservoir. This shows the anticipated recovery from the Yuma loan reservoir. This type of plot has been used successfully in predicting recovery in similar loan reservoirs. It shows the expected recovery when is small. Recovery will be a function of the reservoir pressure. The rate at which this reservoir is produced will not affect the oil or gas recovery.

Exhibit Number Eight covers the same data, and it does include the date at which the pressure measurements were made along with the accumulative production. It is to be noted that during the period of 4-19-63 to 6-1-63, approximately one and one half months, 9,200 barrels of oil were produced. During the period of 6-1-63 to 7-19-63, approximately one and one half months, 9,000 barrels of oil were produced. During the last period from 7-19-63 to 1-6-64, approximately eight months - - six months, only 20,300 barrels of oil were produced. Therefore, although the rate of production was approximately one half the rate during the previous two periods, the rate on decline on the pressure versus accumulative, plotted on Exhibit Seven, did not improve. Thus, showing that the reservoir is not rate sensitive. Socony Mobil will suffer economic waste if a 6,000 to one GOR limit is not permitted, because of the prolonged producing life due to a penalized allowable, which is caused by limited gas allowable.



Q Now, Mr. Flowers, we have already established that the two Mobil wells are the only wells which are producing from this particular reservoir that you have been discussing and that you have explained. What do you anticipate so far as extension of the horizontal limit is concerned in view of the unsuccessful attempt to test this particular formation in the other wells that you have referred to?

A I don't think I got all your question there. I am sorry.

Q Well, do you think that the horizontal limits which you describe now as encompassing the East Half of Section 26, are going to be expanded any or is this the reservoir that we are concerned with in this hearing?

A Well, our plot here shows the two wells which already are in this zone, are draining the reservoir in its entirety. The feasibility of drilling another well is very questionable.

Q What recommendations are you making with reference to the special rules which you have requested be adopted as a result of this application and hearing?

A Socony Mobil requests special pool rules be adopted for the proposed pool providing for a limiting GOR of 6,000 cubic feet of gas per barrel of oil produced. We are also proposing 80 acre spacing. It is requested for the lower Penn reservoir because the reservoir does not have sufficient reserves to justify drilling a single lower Penn well, it is apparent, from the



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initial bottom hole pressure of the State Bridges Number 98, which is given as 105 hour bottom hole pressure, entry of 1-1-64, Exhibit Number Eight. This pressure was 4,680. This was the original pressure on 98. The drainage of the reservoir was taking place with the Well Number 96, and no reserves were added by drilling the second well. Therefore, Socony Mobil requests 80 acre spacing units for the proposed Vacuum Lower Penn Pool.

Q I assume from your testimony, Mr. Flowers, that in your opinion, the reservoir which you have described as the Lower Penn Reservoir is a separate and distinct reservoir from that from which the Texaco wells, that appear on your cross section, Exhibit Number Two, are producing?

A Yes, they are.

Q Do you have anything further you wish to add?

A I would like to add that waste should not occur due to this 6,000 to one GOR limit. All the gas is being sold to Phillips Buckeye Plant. I believe that is all.

Q Were Exhibits One through Eight, I believe, prepared by you or under your supervision?

A Yes.

MR. SPERLING: We offer One through Eight at this time, Mr. Examiner.

MR. UTZ: Without objection, Exhibits One through Eight will be entered into the record of this case.

MR. SPERLING: That is all we have at this time.



CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Flowers, your Exhibit Number Four shows an estimated solution gas-oil ratio of 3900 to one. Now, is that from a reservoir sample?

A No, sir, it is not. It is from the original measurements which were- - on our potential test on Exhibit Number Five of this well.

Q Exhibit Number what?

A Number Five. The potential test on the 4-15-63. This well had a GOR of 3876.

Q Isn't it true that producing GORs are usually higher than solution GORs?

A In this- - Due to our data here, we looked at all the zones, or all the tests, I am sorry, and derived that approximately 3900 fit our data the best. Now, in reference to the bottom hole sample, surface samples are sometimes used in the surface measurements, they are used normally for the solution GOR.

Q But, the reservoir or solution GORs usually are lower than producing GORs, are they not?

A Possibly.

Q What is your, or what was your initial bottom hole pressure on this well?

A I believe Exhibit Eight shows the original pressure we

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took from the DST, on Well 96, and the plot, Exhibit Number Seven, will show that there is a possibility of some error there because the DST extrapolating backward looks like it might be a little high. It should be approximately in the neighborhood of 6500, perhaps 6450.

Q So, the reservoir, even at the initial stages, are practically at the bubble point?

A Yes, sir.

Q So, any pressure reduction from now on will tend to increase GORs and would you attribute that to the reason why your GORs are going up as the reservoir is produced?

A Yes, it is. It would be physically impossible, I believe, to lower the GOR.

Q What size tubing are you producing these wells through?

A I believe that 98 is producing from a string of 2 3/8ths tubingless well. 96 I am not sure. I believe it is in the neighborhood of two inch tubing.

Q So, as far as flow efficiency is concerned, there is not too much you can do to help that either, is there?

A No, sir.

Q Now, you made a recommendation as to the type log and vertical limits, is the Lower Penn- -

A Yes, sir.

Q - -that you asked to be designated? How about the Upper Penn?



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PAGE 1

A The Upper Penn. Pool is located by Tennesse, and it is my understanding they are a horizon. In the very near future we set the location on this horizon.

Q Neither of these wells are completed in the Upper Penn?

A No.

Q Is the Lower Penn productive in either of these wells?

A Not to my knowledge.

Q Have you -- I got the impression that these were multiple completions. Are they single completions?

A Both wells are multiple completions. Number 24 is a completion with the Wolfcamp. Number 96 is a triole in the Lower Age, and Wolfcamp, as well as the Lower Penn.

Q Does the present Vacuum Penn Pool encompass the East Half of Section 26 horizontally?

A I don't know.

MR. SPERLING: Yes, I think so.

A I don't believe I have the data on that.

Q (By Mr. Utz) Well, if it does, you are requesting that that portion be deleted from the present pool limits; is that right?

A Yes.

Q And that new horizontal limits be established for a Lower Penn Pool?

A Yes, sir.

MR. UTZ: Are there other questions of the witness?

MR. DURANTE: Yes, sir, I have a question.



CROSS EXAMINATION

BY MR. DURRETT:

Q Now, Mr. Flowers, what you are really seeking to do is abolish the Vacuum Penn Pool as it now exists; is that correct, and to redesignate what is now the Vacuum Penn Pool as the Vacuum Upper Penn Pool, deleting from that pool the East Half of Section 26, and creating a new pool comprising the East Half of Section 26, which is - - you desire to be designated as the Vacuum Lower Penn?

A I believe it is a little fuzzy as to the definitions of the dividing line. The old Vacuum Penn was determined and the type log Number 95, which did not cover the entire Penn section, the entire section of the Penn was not in that well. Therefore -

Q On the horizontal limits as determined from that log, your two wells in the East Half of Section 26 were included?

MR. SPERLING: They were in the Vacuum Penn.

Q (By Mr. Durrett) Well, am I correct in stating that you don't care what anything else is called except the East Half of 26, you would like it called the Lower Penn, Vacuum Lower Penn, correct?

A Yes, I would.

Q And you would like the Commission to designate the rest of the area that was formerly the Vacuum Penn as something that won't be confused with your new pool?



A Yes, sir.

Q All right.

MR. SPERLING: Just so they are designated as separate pools.

A We have tried to keep the limits as small as possible, the vertical limits as well as horizontal.

Q (By Mr. Durrett) You desire to pick the vertical limits of your new pool off the cross section?

A Or the type log as marked.

Q One additional question, are you familiar with this entire area here, the three or four sections offsetting the Section 26?

A Fairly well.

Q Didn't we just recently grant a GOR exception for some well in that area?

A Well Number 96.

MR. SPERLING: Order Number 2647.

Q (By Mr. Durrett) 2647 granted an exception?

A Yes, sir, 5,000 to one limit.

Q And that was for your Well Number 96, which is also the subject matter of this case?

A Yes.

Q 5,000 to one?

A Granted. We asked for six.

Q You asked for six, we gave you five?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

A Yes, sir.

MR. DURRETT: Thank you.

* * *

RECROSS EXAMINATION

BY MR. UTZ:

Q You have already proven, have you not, through the drilling of Number 96 and Number 98 that the Upper Penn is not productive in the East Half of Section 26; is that true?

A Is not productive in the Upper Penn? No, I don't believe it is.

Q Did you DST it, try to complete it?

A We did not try any completions.

Q So, actually, you are not sure?

A We are not sure, but we tried 98 pretty thoroughly in everything that had shows, we ended up with a dual, and it was originally planned as a triple.

Q Now, you asked for the East Half of Section 26 to be designated as the Lower Penn Pool and you are also asking for 80 acre spacing. You have stated that you didn't intend to drill any more wells in the East Half of Section 26, so is there any good reason why the North Half of the Northeast Quarter and the South Half of the Southeast Quarter should be included in the pool?

A No.

MR. UTZ: Other questions? The witness may be excused.



Are there other statements in this case?

MR. WHITE: Charles White of Gilbert, White & Gilbert of Santa Fe, appearing on behalf of the Texaco, Inc., as one of the interested operators in the subject area, and they fully support Socony Mobil's application, and further concur in the proposed rules.

MR. UTZ: You didn't ever give a recommendation, did you, for a pool name?

A Lower.

MR. SPERLING: Lower.

MR. DURRETT: Vacuum Lower.

MR. UTZ: Take the case under advisement.

* * * *

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

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

WITNESS MY Hand and Seal of Office, this 29th day of February, 1964.

I do hereby certify that the foregoing is
My Commission Expires record of the proceedings in
September 6, 1967 the Examiner hearing of Case No. 2887 PUBLIC
heard by me on Feb 19 1964.
Examiner
New Mexico Oil Conservation Commission



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 18, 1964

Mr. James Sperling
Modrall, Seymour, Sperling, Roehl
& Harris
Attorneys at Law
Suite 1200 - Simms Building
Albuquerque, New Mexico

Re: Case No. 2997
Order No. R-2677
Applicant:

Socony Mobil Oil Company

DOCKET MAILED

Dear Sir:

Date 4-15-65

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 Mr. Charlie White

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 28, 1965

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 3217: (Continued from the March 10, 1965 examiner hearing)
In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit S. S. Sutton, dba Eddy Oil Company and all other interested parties to show cause why the Eddy Oil Company Stanolind-State Wells Nos. 1 and 2, located in Units G and J, respectively, of Section 36, Township 19 South, Range 30 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission approved plugging program.
- CASE 3240: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Central Drinkard Unit Area comprising 2,600 acres, more or less, of State and Fee lands in Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 3241: Application of Gulf 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 Drinkard Pool, Lea County, New Mexico, in its Central Drinkard Unit Area by the injection of water into the Drinkard formation through six wells in Sections 28, 29, and 32, Township 21 South, Range 37 East.
- CASE 2676: In the matter of the application of Gulf Oil Corporation to
(Reopened) reopen Case No. 2676 to reconsider applicant's request that a full 80-acre proration unit comprising the S/2 NW/4 of Section 23, Township 24 South, Range 37 East, Fowler Ellenburger Pool, Lea County, New Mexico, be approved for applicant's Lillie Well No. 3 located 2310 feet from the North line and 330 feet from the West line of said Section 23.
- CASE 3242: Application of Austral Oil Company Incorporated, for an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the well location requirements for the Blanco-Mesaverde Gas Pool for its Bunny et al Well No. 1 at an unorthodox location 1040 feet from the South line and 1190 feet from the East line of Section 10, Township 27 North, Range 9 West, San Juan County, New Mexico.

Examiner Hearing - April 28, 1965

CASE 3243: Application of Monsanto Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Dagger Draw-Strawn Gas Pool and the Dagger Draw-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 640-acre gas well spacing units.

CASE 3003: In the matter of Case No. 3003 being reopened pursuant to the provisions of Order No. R-2685, which order established temporary 80-acre proration units for the Tobac-Pennsylvanian Pool, Chaves 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 spacing units.

CASE 2997: In the matter of Case No. 2997 being reopened pursuant to the provisions of Order No. R-2677, which order established 80-acre spacing units for the Vacuum-Lower 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 spacing units.

CASE 3244: Application of James E. Logan for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Rain Spring Unit Area comprising 10,542.00 acres, more or less, of State, Federal and Fee lands in Townships 22 and 23 South, Ranges 24 and 25 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. 2997
Order No. R-2677
NOMENCLATURE

APPLICATION OF SOCONY MOBIL OIL COMPANY,
INC., FOR THE ABOLISHMENT OF AN EXISTING
POOL, THE CREATION OF TWO NEW OIL POOLS,
AND FOR SPECIAL TEMPORARY POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
February 19, 1964, at Santa Fe, New Mexico, before Examiner
Elvis A. Utz.

NOW, on this 18th 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, Socony Mobil Oil Company, Inc.,
seeks the abolishment of the Vacuum-Pennsylvanian Pool in Town-
ship 17 South, Range 34 East, NMPM, Lea County, New Mexico, and
the creation of the Vacuum-Upper-Pennsylvanian Pool in Sections
25 and 36, and the Vacuum-Lower-Pennsylvanian Pool in Section 26,
Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That the applicant also seeks the promulgation of
special pool rules for the Vacuum Lower-Pennsylvanian Pool
establishing 80-acre spacing and a limiting gas oil ratio of
6,000 to 1.

(4) That the Vacuum-Pennsylvanian Pool encompasses more
than one separate common source of supply and should therefore
be abolished.

(5) That the Socony Mobil State Bridges Well No. 96 located
in Unit H of Section 26, Township 17 South, Range 34 East, NMPM,

Lea County, New Mexico, was completed March 3, 1963, and encountered a separate common source of supply which should be designated the Vacuum-Lower-Pennsylvanian Pool; that the vertical limits of said pool should be the zone encountered in said well between 11,292 feet and 11,492 feet; and that the horizontal limits of said pool should be the E/2 of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(6) That the Texaco Inc. State "O" Well No. 17 located in Unit N of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, was completed June 18, 1963, and encountered a separate common source of supply which should be designated the Vacuum-Upper-Pennsylvanian Pool; that the vertical limits of said pool should be that portion of the Pennsylvanian formation above the marker found at 10,324 feet in the above-described Socony Mobil State Bridges Well No. 96; and that the horizontal limits of said pool should be the SE/4 of Section 25 and the N/2 and SW/4 of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk caused from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Vacuum Lower-Pennsylvanian Pool.

(8) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(9) That the temporary special rules and regulations should provide for a limiting gas-oil ratio of 6,000 to 1 in order to allow each operator in the pool the opportunity to use his just and equitable share of the reservoir energy.

(10) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(11) That this case should be reopened at an examiner hearing in April, 1965, at which time the operators in the subject pool should be prepared to appear and show cause why the Vacuum Lower-Pennsylvanian Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

- (1) That the Vacuum-Pennsylvanian Pool is hereby abolished.
- (2) That a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production is hereby created and designated the Vacuum-Lower-Pennsylvanian Pool with vertical limits comprising the zone encountered in the Socony Mobil State Bridges Well No. 96, located in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, between the interval from 11,292 feet to 11,492 feet and horizontal limits comprising the E/2 of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production is hereby created and designated the Vacuum-Upper-Pennsylvanian Pool with vertical limits comprising that portion of the Pennsylvanian formation above the marker found at 10,324 feet in the Socony Mobil State Bridges Well No. 96 located in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, and horizontal limits comprising the SE/4 of Section 25 and the N/2 and SW/4 of Section 36, Township 17 South, Range 34 East.
- (4) That Special Rules and Regulations for the Vacuum-Lower Pennsylvanian Pool are hereby promulgated as follows, effective April 1, 1964.

SPECIAL RULES AND REGULATIONS
FOR THE
VACUUM-LOWER-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the Vacuum Lower-Pennsylvanian Pool or in the Lower Pennsylvanian formation within one mile of the Vacuum Lower-Pennsylvanian Pool, and not nearer to or within the limits of another designated Lower Pennsylvanian pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Vacuum-Lower-Pennsylvanian Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit

-4-

CASE No. 2117
Order No. 3-2417

comprising a single governmental quarter-quarter section or less. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well projected to or completed in the Vacuum Lower-Pennsylvanian Pool shall be located within 150 feet of the center of a single governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) in the Vacuum Lower-Pennsylvanian Pool shall be assigned an 80-acre proportional factor of 6.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable in the Vacuum Lower-Pennsylvanian Pool as the acreage in such non-standard unit bears to 80 acres.

RULE 7. The limiting gas-oil ratio in the Vacuum Lower-Pennsylvanian Pool shall be 6,000 cubic feet of gas for each barrel of oil produced.

IT IS FURTHER ORDERED:

(1) That any well presently drilling to or completed in the Lower Pennsylvanian Formation within the Vacuum Lower-Pennsylvanian Pool or within one mile of the Vacuum Lower-Pennsylvanian Pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The

-5-

CASE No. 2997
Order No. R-2677

operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before April 1, 1964.

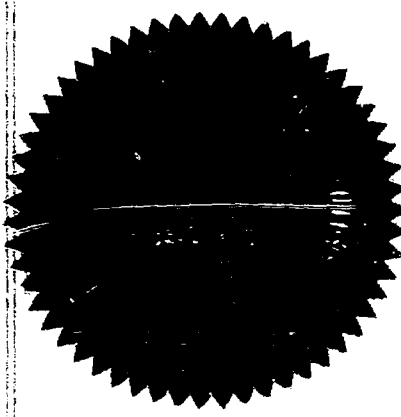
(2) That any operator desiring to dedicate 80 acres to a well presently drilling to or completed in the Vacuum Lower-Pennsylvanian Pool shall file a new Form C-128 with the Commission on or before April 1, 1964.

(3) That this case shall be reopened at an examiner hearing in April, 1965, at which time the operators in the subject pool may appear and show cause why the Vacuum-Lower-Pennsylvanian Pool should not be developed on 40-acre spacing units.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Jack M. Campbell

JACK M. CAMPBELL, Chairman

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

A. L. Porter, Jr.

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

csr/

State of New Mexico
Oil Conservation Commission



P. O. BOX 2088
SANTA FE

May 10, 1965

Mr. James E. Sperling
Modrall, Seymour, Sperling,
Roehl & Harris
Attorneys at Law
P. O. Box 466
Albuquerque, New Mexico

Re: Case No. 2997
Order No. R-2677-A
Applicant:
Socony Mobil

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC_____

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. 2997
Order No. R-2677-A

APPLICATION OF SOCOMY MOBIL OIL COMPANY,
INC., FOR THE ABOLISHMENT OF AN EXISTING
POOL, THE CREATION OF TWO NEW OIL POOLS,
AND FOR SPECIAL TEMPORARY POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 28, 1965, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of May, 1965, 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-2677, dated March 18, 1964, temporary Special Rules and Regulations were promulgated for the Vacuum-Lower Pennsylvanian Pool, Lea County, New Mexico.

(3) That pursuant to the provisions of Order No. R-2677, this case was reopened to allow the operators in the subject pool to appear and show cause why the Vacuum-Lower Pennsylvanian Pool should not be developed on 40-acre spacing units.

(4) That no additional wells have been drilled in the subject pool since the issuance of Order No. R-2677 and the drilling of additional wells in the future is not anticipated.

-2-

CASE No. 2997

Order No. R-2677-A

(5) That the wells in the subject pool are approaching the economic limit of production and that no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-2677.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Vacuum-Lower Pennsylvanian Pool promulgated by Order No. R-2677 are hereby abolished.

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

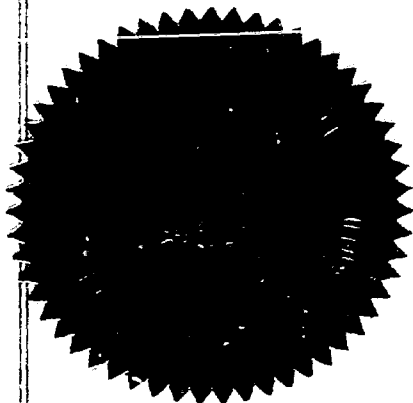
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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



esr/

EXHIBIT 8

PRESSURE AND PRODUCTION DATA
VACUUM PENN
STATE BRIDGES NO. 96 & NO. 98

<u>Date</u>	<u>Pressure</u>	<u>Cum. Prod.</u>	<u>Source of Pressure</u>
2-6-63	6,534	0	DST #3 from Well No. 96
4-19-63	6,368	1,858	24 Hr. Build-up from Well No. 96 Extrapolated
6-1-63	5,941	11,045	92 Hr. Build-up from Well No. 96 Extrapolated
7-19-63	5,469	20,036	72 Hr. BH Pressure from Well No. 96
1-1-64	4,680	40,315	105 Hr. BH Pressure from Well No. 98

All pressures corrected -7373 datum.

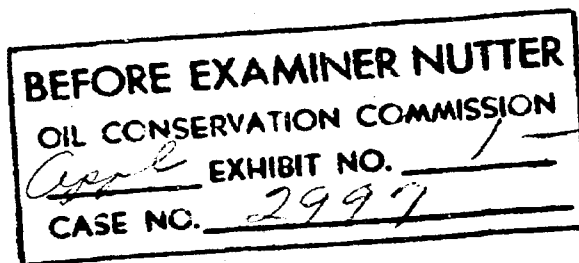
EXHIBIT NO.

RESERVOIR DATA
VACUUM PENN
STATE BRIDGES NO. 96

Formation	Morrow
Net Pay	28 Feet
Estimated Formation Volume Factor	2.7
Estimated Solution Gas-Oil Ratio	3900/1
Formation Temperature	140° F
Oil Gravity	50° API
Estimated Bubble Point Pressure	6,450 psi

PRODUCTION HISTORY - VACUUM LOWER PENN FIELD
LEA COUNTY, NEW MEXICO - SOCONY MOBIL OIL COMPANY, INC.
STATE BRIDGES LEASE, WELLS NO. 96 AND 98

<u>Yr/Mo</u>	<u>Oil - Bbls.</u>	<u>Water - Bbls.</u>	<u>Gas - Cu. Ft.</u>	<u>GOR - Cu. Ft./Bbl.</u>
1963				
Jan.				
Feb.				
Mar.	200	---	---	---
Apr.	4,464	---	13,495	3,025
May	6,725	---	27,133	4,035
June	5,920	---	28,027	4,734
July	6,849	---	34,055	4,972
Aug.	3,234	---	19,012	5,879
Sept.	3,255	---	17,160	5,272
Oct.	3,247	---	16,515	5,086
Nov.	3,109	---	13,679	4,400
Dec.	6,142	---	27,199	4,428
Total	43,145	---	196,275	
1964				
Jan.	9,862	---	65,682	6,660
Feb.	7,599	---	75,177	9,893
Mar.	4,356	---	64,724	14,859
Apr.	4,002	---	64,836	16,200
May	4,344	---	64,836	14,925
June	3,094	---	90,677	29,307
July	2,418	---	82,750	34,222
Aug.	1,610	---	76,651	47,609
Sept.	1,302	---	68,301	52,458
Oct.	1,131	---	56,548	50,000
Nov.	970	---	52,456	54,078
Dec.	875	---	51,097	58,397
Total	41,563	---	748,899	
1965				
Jan.	684	---	47,994	70,166
Feb.	450	---	40,749	90,553
Mar.	387	---	30,248	78,160
Apr.				
May				
June				
July				
Aug.				
Sept.				
Oct.				
Nov.				
Dec.				
Total				



April 28, 1965

JMMcGee/jlh
4/23/65

EXHIBIT NO. 6

GOR TESTS
VACUUM PENN
STATE BRIDGES NO. 98

Potential:

12-18-63 Flo 228 BNO + 0 Wtr., 24 Hrs. 14/64" Ch., GOR 5197
2-10-64 Flo 156 BNO + 0 Wtr. 24 Hrs., 16/64" Ch., GOR 8551

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	6
CASE NO.	2997

EXHIBIT 5

GOR TESTS
VACUUM PENN
STATE BRIDGES NO. 96

Test after perforating:

3-11-63 Flo 157 BNO + 0 Wtr. 14 hrs., 14/64" ch., GOR 2871

Potential:

4-15-63 Flo 271 BNO + 0 Wtr. 24 hrs., 10/64" ch., GOR 3876

30-60 Day

5-24-63 Flo 270 BNO + 0 Wtr. 24 hrs., 11/64" ch., GOR 4221

Special Test

1-7-64 Flo 110 BNO + 0 Wtr. 24 hrs., 9/64" ch., GOR 3877/1

Special Test

2-14-64 Flo 113 BNO + 0 Wtr. 24 hrs., 13/64" ch., GOR 9704/1

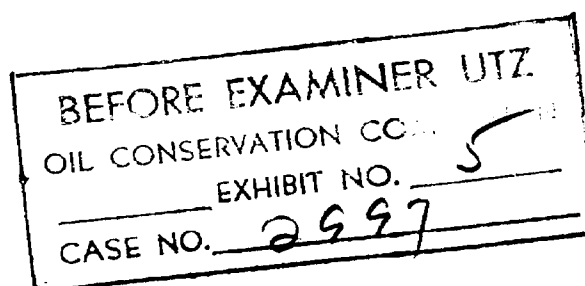


EXHIBIT NO. 2

RESERVOIR DATA
VACUUM PENN
STATE BRIDGES NO. 96

Formation	Morrow
Net Pay	28 Feet
Estimated Formation Volume Factor	2.7
Estimated Solution Gas-Oil Ratio	3900/1
Formation Temperature	140° F
Oil Gravity	50° API
Estimated Bubble Point Pressure	6,450 psi

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 2997

BOTTOM HOLE PRESSURE VS CUMULATIVE PRODUCTION VACUUM PENN FIELD

State Bridges No. 96 & 98

Lea County,	New Mexico
R.L.F.	1-7-64
J.M.M.	4-22-65
	CTA
	M.L.R.

Bottom Hole Pressure, psi

10 X 10 TO THE 1/2 INCH
NEUTRAL & ESSEX CO
359-111L

7000
6000
5000
4000
3000
2000
1000

5 10 15 20 25 30 35 5 120 125 130 135 140 145 150

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Good EXHIBIT NO. 2-4-28/65
CASE NO. 2997

noted Reserves 1-7-64

limit

10 X 10 TO THE 1/2 INCH
359.11 L
NEWELL & ESSEX CO

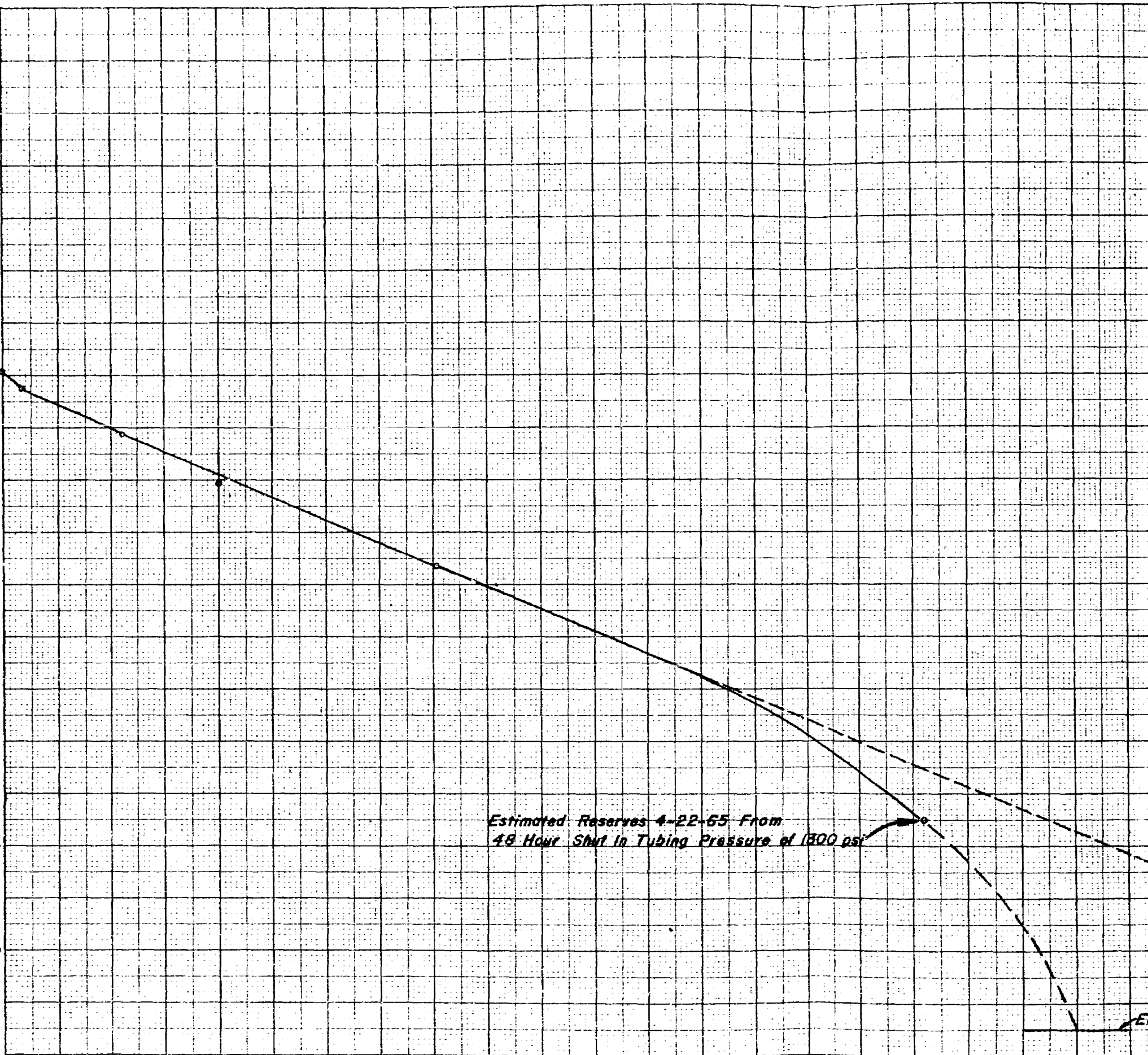
Bottom Hole Pressure, psi

7000
6000
5000
4000
3000
2000
1000

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105

Cumulative Oil Production, M Bbls.

Estimated Reserves 4-22-65 From
48 Hour Shut In Tubing Pressure of 1800 psi



BOTTOM HOLE PRESSURE
VS
CUMULATIVE PRODUCTION
VACUUM PENN FIELD

State Bridges No. 96 & 98

Lea County,

New Mexico

R.L.F.

1-7-64

C.T.A.

J.M.M.

4-22-65

M.L.R.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Appl EXHIBIT NO. *2-4-28/65*
CASE NO. *2997*

Estimated Reserves 4-22-65 From
48 Hour Shut In Tubing Pressure of 1300 psi

Estimated Reserves 1-7-64

Economic Limit

Cumulative Oil Production, M Bbls.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 19, 1964

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

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

- CASE 2991: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Dwight L. Smith and all other interested parties to appear and show cause why the Walker Well No. 1, located 2290 feet from the South line and 500 feet from the East line of Section 21, Township 15 South, Range 11 East, Otero County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2992: Application of Consolidated Oil & Gas, Inc., for an unorthodox location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the unorthodox location of their Hoyt Well No. 3-5, located 1850 feet from the North line and 110 feet from the West line of Section 5, Township 26 North, Range 4 West, Blanco Me averde Pool, Rio Arriba County, New Mexico.
- CASE 2993: Application of Sinclair Oil & Gas Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Southwest Jal Unit Area comprising 6401 acres, more or less, of State, Federal and fee lands in Townships 25 and 26 South, Range 36 East, Lea County, New Mexico.
- CASE 2994: Application of Skelly Oil Company for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Gallup formation underlying its Navajo "P" and "M" leases in Sections 25, 26, 33, 34, 35, and 36, Township 32 North, Range 17 West, Many Rocks-Gallup Oil Pool, San Juan County, New Mexico. Initial injection will be through applicant's Navajo "P" Well No. 6 located in Unit P of said Section 35. Applicant further seeks the promulgation of special rules governing the operation of said project.
- CASE 2995: Application of Deane H. Stoltz for two non-standard oil proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of two 80-acre non-standard oil proration units in the North Bagley-Upper Pennsylvanian Pool, Lea County, New Mexico, the first to comprise the SE¹/₄ NE¹/₄ and NE¹/₄ SE¹/₄ of Section 22, Township 11 South, Range 33 East, to be dedicated to a well completed in the SE¹/₄ NE¹/₄ of Section 22; the second to comprise the SW¹/₄ NE¹/₄ and the NW¹/₄ SE¹/₄ of

CASE 2995: said Section 22 to be dedicated to a well to be re-entered
(Cont.) in the SW/4 NE/4 of said Section 22.

CASE 2984: (Continued from the February 5th Examiner Hearing)

Application of The Pure Oil Company and Continental Carbon Company to utilize natural gas in a carbon black plant, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to utilize approximately 7 million cubic feet of Morrow gas per day in the Continental Carbon Company carbon black plant near Eunice, New Mexico, said gas to be produced from The Pure Oil Company Wilson Deep Unit Well No. 1, located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, Lea County, New Mexico.

CASE 2996: Application of Nearburg & Ingram for the creation of a new gas pool and for special temporary pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for San Andres production in Sections 10, 11, 12, 13, 14 and 15, Township 8 South, Range 37 East, Roosevelt County, New Mexico, and for the establishment of temporary rules therefor, including provisions for 320 acre spacing.

CASE 2739: (Reopened)

In the matter of Case No. 2739 being reopened pursuant to the provisions of Order No. R-2421, which order established temporary 80-acre proration units for the North Vacuum-Abo 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 proration units.

CASE 2740: (Reopened)

In the matter of Case No. 2740 being reopened pursuant to the provisions of Order No. R-2422, which order established temporary 80-acre proration units for the Vacuum-Wolfcamp Oil 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 proration units.

CASE 2741: (Reopened)

In the matter of Case No. 2741 being reopened pursuant to the provisions of Order No. R-2423, which order established temporary 80-acre proration units for the Vacuum-Devonian Oil 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 proration units.

CASE 2742: (Reopened)

In the matter of Case No. 2742 being reopened pursuant to the provisions of Order No. R-2424, which order established temporary 80-acre oil proration units for the Fowler-Blinebry Oil 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 proration units.

CASE 2743: (Reopened)

In the matter of Case No. 2743 being reopened pursuant to the provisions of Order No. R-2425, which order established temporary 320-acre spacing units for the Fowler-Tubb Gas 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 160-acre spacing units.

CASE 2744: (Reopened)

In the matter of Case No. 2744 being reopened pursuant to the provisions of Order No. R-2426, which order established temporary 320-acre spacing units for the Fowler-Paddock Gas 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 160-acre spacing units.

CASE 2997: Application of Socony Mobil Oil Company, Inc., for the abolishment of an existing pool and the creation of two new oil pools, and for special temporary pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for lower Pennsylvanian production in Section 26, Township 17 South, Range 34 East, Lea County, New Mexico, and for the establishment of temporary rules therefor, including provisions for 80-acre units and for the establishment of a gas-oil ratio limitation of 6000 cubic feet of gas per barrel of oil produced. Said pool would be created by the abolishment of the Vacuum-Pennsylvanian Pool in Township 17 South, Range 34 East, and the subsequent creation of the Vacuum Upper Pennsylvanian and Vacuum Lower Pennsylvanian Pools.

CASE 2998: 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 2999: Application of Phillips Petroleum Company for two non-standard oil proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of an 80-acre non-standard oil proration unit for each of two pools, the Vacuum Wolfcamp Pool and the North Vacuum Abo Pool, said units to comprise the NW/4 SW/4 and the SW/4 NW/4 of Section 31, Township 17 South, Range 35 East, Lea County, New Mexico, to be dedicated to applicant's Santa Fe Well No. 87, located 2310 feet from the South line and 660 feet from the West line of said Section 31.

CASE 3000: Application of Franklin, Aston & Fair Inc. for the creation of a San Andres Gas Pool and for special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new San Andres Gas Pool comprising all or portions of Sections 22, 23, 25, 26, 27 and 28, Township 7 South, Range 35 East, and the establishment of special pool rules, including 320 acre spacing and fixed well locations, Roosevelt County, New Mexico.

CASE 2979: (Continued from February 5, 1964, Examiner Hearing)

Application of Pan American Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation through its U.S.A. Malco Refineries 'G' Well No. 13, located 2302 feet from the South line and 1650 feet from the West line of Section 10, Township 18 South, Range 27 East, Empire Abo Pool, Eddy County, New Mexico.

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:

CF Subj. _____

CASE No. 2997

Order No. R-2677-A

add
Don
APPLICATION OF SOCONY MOBIL OIL COMPANY,
INC., FOR THE ABOLISHMENT OF AN EXISTING
POOL, THE CREATION OF TWO NEW OIL POOLS,
AND FOR SPECIAL TEMPORARY POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
April 28, 1965, at Santa Fe, New Mexico, before Examiner
Daniel S. Nutter.

NOW, on this _____ day of May, 1965, 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-2677, dated March 18, 1964, tem-
porary Special Rules and Regulations were promulgated for the
Vacuum-Lower Pennsylvanian Pool, Lea County, New Mexico.

(3) That pursuant to the provisions of Order No. R-2677,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the Vacuum-Lower Pennsylvanian Pool
should not be developed on 40-acre spacing units.

(4) That no additional wells have been drilled in the
subject pool since the issuance of Order No. R-2677 and the
drilling of additional wells in the future is not anticipated.

-2-

CASE No. 2997

Order No. R-2677-A

~~(5) That the applicant has not established that one well can efficiently and economically drain and develop 80 acres in the subject pool.~~

(6) That the wells in the subject pool are approaching the economic limit of production, ^{and} that no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-2677, ~~and that said rules should therefore be abolished.~~

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Vacuum-Lower Pennsylvanian Pool promulgated by Order No. R-2677 are hereby abolished.

(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.

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PAGE 1

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1965

EXAMINER HEARING

-----)
IN THE MATTER OF: Case No. 2997 being reopened)
pursuant to the provisions of Order No.)
R-2677, which order established 80-acre)
spacing units for the Vacuum-Lower Pennsyl-)
vanian 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 spacing)
units.)
-----)

Case No. 2997
(Reopened)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1965

EXAMINER HEARING

-----)
IN THE MATTER OF: Case No. 2997 being reopened)
pursuant to the provisions of Order No. R-2677,)
which order established 80-acre spacing units)
for the Vacuum-Lower Pennsylvanian Pool, Lea)
County, New Mexico, for a period of one year.) Case 2997
All interested parties may appear and show) (Reopened)
cause why said pool should not be developed on)
40-acre spacing units.)
-----)

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2997 (Reopened).

MR. DURRETT: In the matter of Case 2997 being reopened
pursuant to the provisions of Order No. R-2677, which order
established 80-acre spacing units for the Vacuum-Lower
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 spacing units.

MR. SPERLING: Mr. Examiner, I am J. E. Sperling of
Modrall, Seymour, Sperling, Roehl and Harris, Albuquerque,
appearing on behalf of Socony Mobil Oil Company. I would not

presume to take the witness chair, and with the Examiner's permission I'll remain in counsel's chair, and state for the record that I have certain information which has been prepared by the engineering staff of Mobil Oil Company, which reflects up to date data collected since the last hearing, which I believe was held in March of 1964.

The history or the anticipated history of the Vacuum-Lower Pennsylvanian Pool, as predicted by the expert witnesses that appeared at that time, has proven to be almost classic in the results obtained.

For the Commission's information I have a couple of, and I guess what would be termed exhibits, which are simply up-dated information continuing that presented at prior hearings; the first of which is the production history which reflects production as well as -- that is, oil production as well as gas production, and GOR rates which have been experienced in connection with the production in this field. As the Examiner is well aware, I'm sure the horizontal limits of this field, as originally designated, comprise the east half of Section 26 in Township 17 South, Range 34 East, NMMN, Lea County.

(Whereupon, Exhibits Nos. 1 and 2
marked for identification.)

MR. SPERLING: It was predicted at the prior hearings that this reservoir would prove to be quite limited in its

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extent, and for that reason, in order to avoid unnecessary drilling, it was requested that this field be developed on temporary rules on the basis of 80-acre spacing. This request was granted and the production history which I have furnished the Examiner, along with the other exhibit that I mentioned as having available, which reflects bottomhole pressure as against cumulative production in this field, closely parallels the predictions which were made at the time of the prior hearings, except for the fact that the estimated ultimate recovery from the field as shown by the bottomhole pressure versus cumulative production graph is not proving to be as great as originally expected.

If the Examiner will note from the production history that the gas-oil ratio steadily increased to peak value of 90,553 cubic feet per barrel in February of 1965, and in the following month, March, there has been a very marked decrease in gas-oil ratio along with the production for that month. That all goes to show, as was predicted in the earlier hearings, that this is a reservoir of limited extent which is rapidly approaching its economic limit and is in advanced depletion stage.

There has been no additional drilling in the area since the that is to this pool, since the last hearing in March of 1964. We feel that this reservoir has been developed and produced at its maximum efficient rate, and that the action which the

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that there will be no additional development in this particular reservoir area which will be affected one way or another. The bloom has gone from the rose, and it's been done efficiently, economically and with the hope that it won't be the last; we're convinced that it will not be the last example of spirit of cooperation which has been exemplified in this particular instance. That's all I have, Mr. Examiner.

MR. NUTTER: Now, Mr. Sperling, the pool at the present time comprises the east half of 26, is that correct?

MR. SPERLING: Yes, those were defined horizontal limits of the pool in Order Number 2677.

MR. NUTTER: Wasn't this the pool, Mr. Sperling, that was originally designated as the Vacuum Pennsylvanian Pool?

MR. SPERLING: Yes.

MR. NUTTER: Then it was split into an Upper and Lower Pennsylvanian?

MR. SPERLING: That is correct, this is the Lower Pennsylvanian.

MR. NUTTER: This is the Lower Pennsylvanian, and then the area to the southeast was designated as the Upper Pennsylvanian and the two pools did not overlap, as I recall.

MR. SPERLING: Yes, sir, there was some thousand feet of vertical separation as between the two, and I can give you the horizontal limits of the Upper Pennsylvanian, if that would

be of assistance to you.

MR. NUTTER: I have then in this exhibit which was offered a year ago at the hearing in this case.

MR. SPERLING: The Upper Pennsylvanian, very briefly, it's short, at least as of the day of this order, and I assume there has been no change in nomenclature, comprised the southeast quarter of Section 25, and the southwest quarter of Section 36.

MR. NUTTER: In the Lower Pennsylvanian Pool, Socony Mobil had their Number 96 Well and their Number 98 Well.

MR. SPERLING: That is correct.

MR. NUTTER: And those are still the only two wells completed in the Lower Pennsylvanian Pool?

MR. SPERLING: That is correct.

MR. NUTTER: And this is the production history of those wells on Exhibit 1?

MR. SPERLING: Yes, sir, as continued from a previous production history presented.

MR. NUTTER: And in March of 1965, the total production from the two wells combined was 387 barrels?

MR. SPERLING: Yes, sir.

MR. NUTTER: On your Exhibit Number 2, you show a point on this pressure decline curve, and it says estimated reserves at 4-22-'65, from a 48-hour shut-in tubing pressure of 1,300.

Did they furnish you with that -- What did they do, just take a 48-hour shut-in pressure and extrapolate it into a bottom-hole pressure?

MR. SPERLING: That is correct. The advice from Mr. Baish, who is the producing superintendent for Mobil in Hobbs makes reference to the prior exhibit, which is that, essentially. We have added to the curve the estimated current bottom-hole pressure and extrapolated the curve, based on this pressure. As you can see, our ultimate primary recovery is drastically reduced.

MR. NUTTER: So by bending the curve down to accommodate that point, you have an economic limit there of 80,000 barrels at 250 pounds pressure, is that correct?

MR. SPERLING: Yes, sir.

MR. NUTTER: This moved your estimated cumulative recovery at abandonment from some 145,000 barrels back to 100,000 barrels?

MR. SPERLING: That is correct.

MR. NUTTER: And judging by the production report on Exhibit 1, it has almost reached its economic limit then?

MR. SPERLING: Yes, sir, I think the exhibit indicates that there's approximately 85,000 been produced.

MR. NUTTER: And to your knowledge, Mobil does not contemplate any additional drilling in this pool?

MR. SPERLING: They have so advised.

MR. NUTTER: I see. Are there any other questions of Mr. Sperling? Do you have anything further, Mr. Sperling?

MR. SPERLING: No, thank you.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2997?

MR. SPERLING: I should offer the exhibits as part of the record in this case.

MR. NUTTER: Exhibits 1 and 2, dated 4-28-'65 will be admitted.

(Whereupon, Mobil Exhibits 1 and 2 were admitted to the record.)

MR. NUTTER: If nothing further in this case we will take it under advisement.

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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 Examiner 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 11th day of May, 1965.

Ada Dearnley
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 Board, or hearing of Case No. 2997, heard by me on 4/28, 1965.

[Signature] Examiner
New Mexico Oil Conservation Commission