

CASE 2964: Application of SOCONY
MOBIL OIL CO. for an exception
to RULE 506, LEA COUNTY, N.M.

CASE No.
2964

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

DRAFT

JMD/esr
January 30, 1964

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. 2964

Order No. R-2647

APPLICATION OF SOCONY MOBIL OIL COMPANY,
INC., FOR AN EXCEPTION TO RULE 506, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

Examiner

This cause came on for hearing at 9 o'clock a.m. on
January 8, 1964, at Santa Fe, New Mexico, before Daniel S. Nutter,
~~Examiner duly appointed by the Oil Conservation Commission of New~~
~~Mexico, hereinafter referred to as the "Commission," in accordance~~
~~with Rule 1214 of the Commission Rules and Regulations.~~

NOW, on this _____ day of January, 1964, the Commission,
a quorum being present, having considered the ~~application~~ testimony,
the record, ~~evidence adduced~~ 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 an exception to Rule 506(a) of the Commission Rules and
Regulations to produce its State Bridges Well No. 96 in Unit H
of Section 26, Township 17 South, Range 34 East, NMPM, Vacuum-
Pennsylvanian Pool, Lea County, New Mexico, with a limiting
gas-oil ratio in excess of 2000 cubic feet of gas per barrel of
oil.

(3) That the solution gas-oil ratio in the Vacuum-
Pennsylvanian Pool in the area of the subject well is approxi-
mately 3900 to 1; that the subject well is apparently producing

from a different zone of the Pennsylvanian formation than Pennsylvanian wells to the east and southeast in Sections 25 and 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(4) That in order to afford the applicant the opportunity to produce its just and equitable share of the oil in the subject pool and to use its just and equitable share of the reservoir energy, and to otherwise prevent waste and protect correlative rights, the subject well should be allowed to produce with a limiting gas-oil ratio of 5000 cubic feet of gas for each barrel of oil produced.

IT IS THEREFORE ORDERED:

(1) That the applicant, Socony Mobil Oil Company, Inc., is hereby granted an exception to Rule 506(a) of the Commission Rules and Regulations to produce its State Bridges Well No. 96 in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Vacuum-Pennsylvanian Pool, Lea County, New Mexico, with a limiting gas-oil ratio of 5000 cubic feet of gas for each barrel of oil produced.

(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.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 8, 1964

9:00 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 2963: Application of Tom Brown Drilling Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Antelope Sink Unit Area comprising 3680 acres, more or less, of State land in Township 19 South, Range 23 East, Eddy County, New Mexico.
- CASE 2964: Application of Socony Mobil Oil Company, Inc. for an exception to Rule 506, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the statewide limiting gas-oil ratio of 2,000 feet of gas per barrel of oil as promulgated by Commission Rule 506 for its State Bridges Well No. 96, located in Unit H of Section 26, Township 17 South, Range 34 East, Vacuum-Pennsylvanian Pool, Lea County, New Mexico.
- CASE 2965: Application of Stanley J. Stanley for rescission of Order No. R-2585, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order rescinding Order No. R-2585 and authorizing the applicant to assume ownership and operation of the Bunce-Federal Well No. 1, located 1586 feet from the North line and 1503 feet from the East line of Section 19, Township 29 North, Range 10 West, San Juan County, New Mexico.
- CASE 2966: Application of Harlan Production Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water into the Queen formation through four wells located in Sections 16 and 17, Township 17 South, Range 30 East.
- CASE 2720 (Reopened) : In the matter of Case No. 2720 being reopened pursuant to the provisions of Order No. R-2397, which order established special rules governing the production of oil and gas wells in the Double-X Delaware Pool, Lea County, New Mexico, including classification of wells as gas wells when the gas-liquid hydrocarbon ratio exceeds 30,000 to one.
- CASE 2682 (Reopened): In the matter of Case 2682 being reopened pursuant to the provisions of Order No. R-2375, which order established temporary 80-acre oil proration units for the Simpson-Gallup Oil Pool, San Juan 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 2967: Application of Standard Oil Company of Texas for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Jurnegan Point Unit Area comprising 7680 acres, more or less, of State and Fee land in Township 24 South, Ranges 24 and 25 East, Eddy County, New Mexico.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 1/29/64

CASE 2964

Hearing Date 9am 1/8/64

DSN @ SF

My recommendations for an order in the above numbered cases are as follows:

Enter an order granting Mobil
Oil Company an exception to
Commission Rule 506 (a) for
its Stair Bridge well no 96

located in block H of Sec 26, Twp 17 S,
Rge 34 E ^{Vacuum Pennsylvania Pool}
A ^{W&A County, New Mexico}

Find that this well is apparently
producing from a different
pay in the Pennsylvanian formation
than the Pennsylvanian wells to the
East and Southeast in Sections 25
and 36. Also find that the solution
gas-oil ratio in the area of the
subject well is approximately
3900 to 1. Establish a GOR
limit for the subject well of
5000 to 1

[Signature]

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SOCONY MOBIL OIL
COMPANY, INC. FOR EXCEPTION OF ITS
STATE BRIDGES NO. 96 WELL, VACUUM
PENN FIELD, LEA COUNTY, NEW MEXICO,
FROM THE LIMITING GAS-OIL RATIO AS
PROVIDED IN COMMISSION RULE 506.

APPLICATION

1. Applicant is the owner and operator of a well located 510 feet from the East line and 1980 feet from the North line of Section 26, Township 17 South, Range 34 East, N.M.P.M., Lea County, New Mexico, designated Mobil's State Bridges No. 96 within the horizontal limits of the Vacuum Penn Oil Pool.

2. Applicant seeks exception to Commission Rule 506 which imposes a limiting gas-oil ratio of 2000 cubic feet of gas for each barrel of oil produced from said well, which rule results in penalized production for the proration unit upon which said well is located.


3. That economic waste will occur if exception of said rule is not granted.

4. That the granting of exception to Rule 506 as requested herein will not cause physical waste and will not impair correlative rights.

WHEREFORE, Applicant prays that the Commission, upon hearing of this application, enter its Order granting exception to Applicant from the application of Rule 506 to said well. Applicant further prays that this matter be set for hearing as provided by the rules and regulations of the Commission.

SOCONY MOBIL OIL COMPANY, INC.

By MODRALL SEYMOUR SPERLING ROEHL & HARRIS


James E. Sperling
1200 Simms Building
Albuquerque, New Mexico

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

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

February 5, 1964

Mr. James Sperling
1200 Simms Building
Albuquerque, New Mexico

Re: Case No. 2964
Order No. R-2647
Applicant:
Socony Mobil Oil Company

Dear Sir:

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

Very truly yours,

A handwritten signature in cursive script, reading "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. Joe Gordon

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. 2964
Order No. R-2647

APPLICATION OF SOCONY MOBIL OIL COMPANY,
INC., FOR AN EXCEPTION TO RULE 506, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
January 8, 1964, at Santa Fe, New Mexico, before Examiner
Daniel S. Nutter.

NOW, on this 5th day of February, 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 an exception to Rule 506(a) of the Commission Rules and
Regulations to produce its State Bridges Well No. 96 in Unit H
of Section 26, Township 17 South, Range 34 East, NMPM, Vacuum-
Pennsylvanian Pool, Lea County, New Mexico, with a limiting
gas-oil ratio in excess of 2000 cubic feet of gas per barrel
of oil.

(3) That the solution gas-oil ratio in the Vacuum-
Pennsylvanian Pool in the area of the subject well is approxi-
mately 3900 to 1; that the subject well is apparently producing
from a different zone of the Pennsylvanian formation than
Pennsylvanian wells to the east and southeast in Sections 25
and 36, Township 17 South, Range 34 East, NMPM, Lea County, New
Mexico.

(4) That in order to afford the applicant the opportunity
to produce its just and equitable share of the oil in the subject
pool and to use its just and equitable share of the reservoir

-2-

CASE No. 2964
Order No. R-2647

energy, and to otherwise prevent waste and protect correlative rights, the subject well should be allowed to produce with a limiting gas-oil ratio of 5000 cubic feet of gas for each barrel of oil produced.

IT IS THEREFORE ORDERED:

(1) That the applicant, Socony Mobil Oil Company, Inc., is hereby granted an exception to Rule 506(a) of the Commission Rules and Regulations to produce its State Bridges Well No. 96 in Unit H of Section 26, Township 17 South, Range 34 East, NMPM, Vacuum-Pennsylvanian Pool, Lea County, New Mexico, with a limiting gas-oil ratio of 5000 cubic feet of gas for each barrel of oil produced.

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

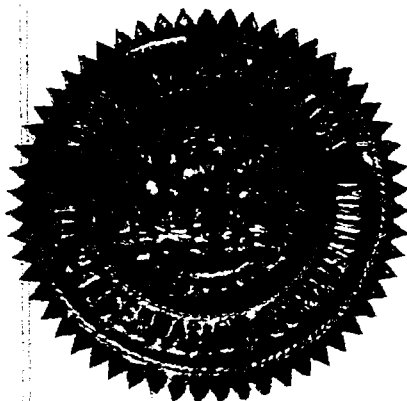
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

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

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



esr/

EXHIBIT NO. 1

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 NUTTER
OIL CONSERVATION COMMISSION
Agnes C. EXHIBIT NO. 2
CASE NO. 2964

EXHIBIT 2

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 Flow 271 BNO + 0 Wtr. 24 hrs., 10/64" ch., GOR 3876

30-60 Day

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

Special Test

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

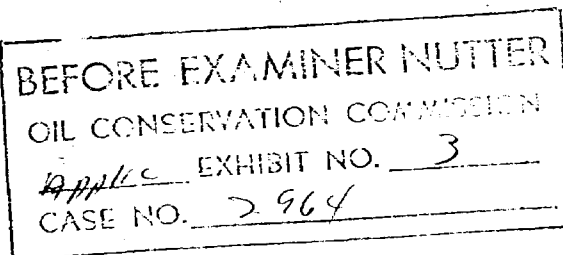


EXHIBIT 5
PRESSURE AND PRODUCTION DATA
VACUUM PENN
STATE BRIDGES NO. 96 & NO. 98

<u>Date</u>	<u>Pressure</u>	<u>Cum. Prod.</u>	<u>Source of Pressure</u>
2-6-63	6534	0	DST #3 from Well No. 96
4-19-63	6368	1,858	Extrapolated 24 hr. build-up from Well No. 96
6-1-63	5941	11,045	Extrapolated 92 hr. build-up from Well No. 96
7-19-63	5469	20,036	72 hr. BH Pressure from Well No. 96
1-6-64	4680	40,315	105 hr. BH Pressure from Well No. 98

All pressures corrected to -7373 datum.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 2964

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARGINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 8, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Socony Mobil Oil Company,
Inc., for an exception to Rule 506, Lea
County, New Mexico.

Case No. 2964

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico.
January 8, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Socony Mobil Oil
Company, Inc. for an exception
to Rule 506, Lea County, New
Mexico.

CASE NO. 2964

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

MR. NUTTER: We will call next case, take one here out
of turn, we will call next 2964.

MR. DURRETT: Application of Socony Mobil Oil Company,
Inc. for an exception to Rule 506, Lea County, New Mexico.

MR. SPERLING: Jim Sperling appearing for the applicant
in this case. We have one witness, Mr. Examiner.

(Witness sworn)

R. L. FLOWERS, JR.,
called as a witness herein, having been first duly sworn, was



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

examined and testified as follows:

DIRECT EXAMINATION

BY MR. SPERLING:

Q Would you state your name, please, and place of residence?

A R. L. Flowers, Jr., Hobbs, New Mexico.

Q By whom are you employed and in what capacity?

A Mobil Oil Company, Production Engineer.

Q Have you had occasion to testify previously before the Commission?

A No.

Q That being the case, would you please review for us briefly your qualifications educationally and experience-wise?

A I was educated at the University of Oklahoma, graduated in 1954. I went to work that year with Gulf Oil and served for three months on a training program and then was inducted in the army. I served two years and I went to school in 1956 for one semester and in 1957, January, I was employed by Mobil Oil Company who was then Magnolia Petroleum Company. I have been with them since that time, and have served as area engineer in Southeastern New Mexico, Tatum area, and have, since 1961, been in the reservoir reserves and evaluation department, under a district engineer staff.

Q You have a degree in Petroleum Engineering from the University of Oklahoma?

A Yes, a BS.



Q I see.

MR. SPERLING: Mr. Flowers' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Sperling) Mr. Flowers, would you please refer to what has been marked in this case for identification as Exhibit Number One, and explain to us what this exhibit is designed to portray?

A This is a pays map of the area, Vacuum Penn Field, and shows the TDs and completions in wells which are producing from the Vacuum Penn Field. The data shown here is total depth completion date, completion interval, initial potential, current production, and the accumulative to 10-1-63. The blue outline denotes the area that I consider developed, and there is one additional well which was not shown, is Texaco's State Q Number Four, has been potentialized from the Penn.

Q Would you point out to us the location of the well which is the subject of this application, that being Mobil's State Bridges Number 96?

A That is in the Southeast of the Northeast, Section 26.

Q As shown on Exhibit One. Now, you are familiar with the application which has been filed on behalf of Mobil in this case, are you not, Mr. Flowers?

A Yes.

Q That application seeks exception to Commission Rule No. 506, which is the limiting gas-oil ratio rule, and would you please



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6601

explain to the Commission why the relief prayed for in the application is necessary with respect to this well?

A The properties of the oil being produced by the State Bridges Number 96 are such that the gas-oil ratio will continue, or will increase at a rapid rate later in the life, and the well being- - will be penalized for the remaining life. Producing life will be extended unnecessarily due to limiting the production of gas to the present allowable rate of 2,000 to one.

Q Now, this well is completed in what formation?

A It is completed in a Morrow sand at the depth of 11,300 feet, approximately.

Q And can you, by referring to Exhibit One, point out the other wells in the area that are completed in this same formation?

A Mobil-

Q If any?

A - -has completed Well Number Ninety-eight, only recently and it is producing from the same zone. Other wells, Number 95, from State Bridges, Socony Mobil, has been tested. The Marathon wells Number Five and Seven, penetrated that depth, depth sufficient to test the zone.

Q All right.

A Continental State H 35 Number Seven penetrated that zone. Tidewater State F Number Six penetrated the zone. Texaco has tested four zones from the Vacuum Penn. Their State O, 11, 13 and 14, 14 has not been tested, but it was penetrated, zone penetrated



in that well Number 18 well, has been completed in the Vacuum Penn and their State Q Number Four has been completed in the Penn.

Q Well, do I understand then that with the exception of Mobil's 96 well and the 98 well, which is recently completed, that none of the wells which you have enumerated have been completed in the Morrow, although that section has been tested; is that a fair statement?

A The zone possibly has not been tested in all wells. However, it has been penetrated and there are no other completions in this zone.

Q What is your opinion, Mr. Flowers, with reference to the extent of the reservoir with which we are concerned here, that is, the reservoir in which your 96 well is completed at the lower level?

A If I understood properly, we have a later exhibit which will show the difference in zone depths and I would like to hold that up until that time.

Q All right. All right. Now, would you please refer to what has been identified as Exhibit Number Two, and explain to us what that is designed to show?

A Exhibit Number Two contains reservoir data on the Vacuum Penn as it applies to the State Bridges 96. The formation is the Morrow, net pay is 28 feet. The estimated formation volume factor is 2.7. The estimated solution gas-oil ratio is 3900 to one. The formation temperature is 140 degrees FH, the oil gravity is 50 degrees API. Estimated bubble point pressure is 6,450 PSI. It is



an extremely high pressure zone with a large amount of gas in solution.

Q Would you explain a little more in detail some of the properties of the oil encountered in the Morrow at this depth?

A The important properties of the oil are the high gravity. It is an intermediate grade crude. It is saturated, which means that the pressure is below the bubble point. At each pressure drop, more gas comes out of it. The solution, the initial solution, gas-oil ratio is believed to be 3900 to one. I have Exhibit Number Three which is a GOR test, State Bridges 96. First test shown here was immediately after perforating and for a duration of 14 hours. The ratio on that test was 2871. On potential test, which was approximately a month later, this is a multiple completion well, the GOR on this test was 3876. The 30 to 60 day after, measured a little over one month later, the GOR was 4221. I have a recent test, 1-7-64, GOR at this time is 3877 to one. Based on these tests, we believe the solution GOR to be 3900 to one. We have not been able to make any tests since potential, at a lesser ratio.

Q I believe you mentioned the recent completion of another well in that area, which, I believe, is the Bridges 98, Mobil State, is that correct?

A State Bridges 98 was completed during the month of December. And the potential test of this well showed 228 barrels of oil and zero water. The GOR was 5197 to one. The GOR is expected to



climb thus continually reducing the oil allowable Socony Mobil is permitted. The top field allowable at the present time is 222 barrels of oil per day. Socony Mobil's current allowable is 105 due to the GOR of 4221 to one.

Q You have made a study of this reservoir, Mr. Flowers?

A Yes.

Q What type of reservoir is it?

A It is a solution gas drive reservoir, and it has no gas cap. And the reservoir is not and should not be rate sensitive.

Q Now, I understand from your previous testimony that there are no other wells completed in this formation, other than Mobil State 96 and Mobil State 98 Well; is that right?

A That is true. The rights of the others should not be affected by this increased GOR.

Q Why do you say that?

A There are several reasons why. Socony Mobil has the only wells producing from the subject zone, and the zone is not evident in the other wells. Texaco has completed three wells in the same field. However, these completions are approximately ten thousand three hundred feet. Exhibit Number Four is a cross section which will show the completion intervals. The first well to the left is Bridges 98, slightly lower structure than 96. You will see that the other completions, Texaco's 17, 19 and Number Four, Q-4, are approximately a thousand feet higher, just below the base of the Wolfcamp reservoir.



Q Now, you made a statement earlier that the rate of production will not affect materially the gas-oil ratio that you have been speaking about. What do you base that conclusion on?

A I have additional exhibits, Exhibit Number Five, which is a plot of bottom hole pressure versus accumulative production. You see a straight line decline has been established between bottom hole pressure and accumulative oil production. This plot has been used very successfully in predicting the recovery on similar Penn reservoirs, and this plot shows the expected recovery which is quite small. Exhibit Number Six, I might come back to Exhibit Number Five, but Exhibit Number Six is a tabulation of this data and shows in addition to the plotting of this data, the dates. I wish to point out here that accumulative production increased from 1,858 barrels, which was recorded on 4-19-63, that the production increased then in about a month and a half to 11,045 and that is approximately nine thousand barrels of oil in a period of a month and a half.

Then, the next interval is approximately nine thousand barrels of oil in slightly over a month and a half. And the next potential we have is a recent potential, and it is on the bottom hole pressure of Well Number 98 instead of 96. We attempted to bomb Number 96, and lost the bomb. So, we do not have that data. But, we expect and - - From this plot all the data up to that time was on 96. We would expect a similar pressure on Well 96. We have produced 20,000 barrels of oil and it is



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

approximately six months later. The period of time is significant because our allowable has been reduced during that period in Well 96. Yet, you can see no let up in pressure decline on this plot. And therefore, we can assume that the reservoir is not rate sensitive.

The recovery will be a function of reservoir pressure and note rate. This reservoir, the rate at which it is produced, will not affect the oil or gas ultimate recovery. Socony Mobil will suffer economic waste if a 6000 to one GOR limit is not permitted because of the prolonged producing life due to a penalized allowable, which is caused by the limited gas-oil ratio.

Q What disposition is being made of the gas that is produced from these two wells?

A The gas is being sold to Phillips' Buckeye plant and the increase would effect no waste. We request an increase to 6000 to one.

Q Do you have anything else you want to present at this time, Mr. Flowers?

A No.

MR. SPERLING: I believe that is all at this time, Mr. Examiner.

MR. NUTTER: Are there any questions of the witness?

CROSS EXAMINATION

BY MR. NUTTER:



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

Q Mr. Flowers, your Number 98 is actually completed in the same zone?

A Yes, it is.

Q And you had one GOR on it that was 5197. Was that GOR in initial potential in December?

A Yes, sir.

Q Do you have any more recent than December?

A No, I do not.

Q Well, now, here on your Exhibit Number Six, I note that the test in April and June are depicted as being extrapolated build ups. What are they extrapolated from?

A On the 4-19 and 6-1?

Q Yes.

A This is a normal bottom hole pressure build up curve, which we determine not only PI, but increment of time and pressure. And we have extrapolated that data. The first test was a 24 hour test, and the well was not completely built up in that period of time. It was not completely built up in the 92 hour build up.

Q Well, the first test there in April, was a 24 hour test and extrapolated out to final built up pressure?

A Yes, this is- - It is plotted on the graph paper and extrapolated in the accepted manner of T plus Delta, T over Delta T.

Q Was it an extrapolated 24 hour test, or at the time was extrapolated to 24 hours?



A Oh, no.

Q Or was it 92 hours, then extrapolated to final built up pressure?

A Yes.

Q Now, has any pool been created for this Number 96 well, this Morrow zone of the Pennsylvanian?

A It is assigned to the Vacuum Penn Pool, I believe.

Q Does that pool include the Number 98, also?

A Yes.

Q Are these Texaco wells included in that same pool?

A Yes, they are.

Q So, actually, this may be an error in nomenclature if these wells are separated by a thousand vertical feet?

A Yes.

Q Are there special rules, pool rules, for the Vacuum Penn at this time?

A I don't believe there are special field rules.

Q Actually, if a ratio limit in excess of 2000 to one should be assigned to a well, would be more proper to set pool rules up and make it applicable to all wells in a pool, don't you think?

A This is true. However, the particular case here is that time is important and I believe this nomenclature will be presented in a short time at the special hearings which are to be held on the spacing.

Q Have you filed an application for a spacing case in this



pool yet?

A No. We were supposed to report back, I believe, in February.

Q Well, for Vacuum Pennsylvanian?

A No. For our other reservoirs.

Q But, there are no pool rules here in the Vacuum Pennsylvanian at this time?

A No.

Q Now, what about the Number 98, what is its current producing ratio?

A I assume that would be in excess of five thousand to one.

Q Does it have a penalized allowable there?

A No. Normally these GORs are not filed until the 30 to 60 day.

Q I see. So, it is such a recent completion that the GOR has not been filed and therefore, it is not penalized?

A Yes, that is right.

Q Is the gas being sold from it, also?

A Yes.

Q Are there other questions of this witness?

MR. NUTTER: He may be excused. Do you have anything further, Mr. Sperling?

MR. SPERLING: Mr. Examiner, I would like to offer Mobil's Exhibits Number One through Six.

MR. NUTTER: Mobil's Exhibits One through Six will be



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

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

admitted in evidence.

(Whereupon Mobil's Exhibits One through Six were admitted into evidence by the Examiner)


MR. NUTTER: Does anyone have anything they wish to offer in 2964? Take the case under advisement.

* * * * *

STATE OF NEW MEXICO X
COUNTY OF BERNALILLO X

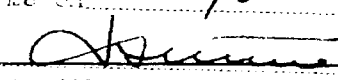
I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings,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

WITNESS my Hand and Seal of Office, this 9th day of January, 1964.


NOTARY PUBLIC

My Commission Expires:
September 6, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2964 heard by me on 1/8, 1964.


New Mexico Oil Conservation Commission

