

Case No.

7276

Application

Transcripts

Small Exhibits

ETC



· BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

July 2, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
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Mr. James Sperling
Modrall, Sperling, Roehl,
Harris & Sisk
Attorneys at Law
Post Office Box 2168
Albuquerque, New Mexico 87103

Re: CASE NO. 7276
ORDER NO. R-6716

Applicant:

Mobil Producing Texas & New Mexico
Inc.

Dear Sir:

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

~~Yours very truly,~~

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD	x
Artesia OCD	x
Aztec OCD	

Other

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7276
Order No. R-6716

APPLICATION OF MOBIL PRODUCING TEXAS
AND NEW MEXICO INC. FOR THE EXTENSION
OF THE VERTICAL LIMITS OF THE LANGLIE-
MATTIX POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 17, 1981,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 1st day of July, 1981, the Division
Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Mobil Producing Texas and New
Mexico Inc., seeks the contraction of the vertical limits of
the Jalmat Pool and the upward extension of the vertical limits
of the Langlie-Mattix Pool to the following depths underlying
the following 40-acre tracts in Township 25 South, Range 37
East:

NE/4 SE/4 of Section 4: 3327 feet;
NE/4 SW/4 of Section 3: 3215 feet; and
NE/4 NW/4 of Section 15: 3206 feet.

(3) That the vertical limits of the Jalmat Pool as defined
by Order No. R-520, dated August 12, 1954, include the Tansill
and Yates formations and all but the lowermost 100 feet of the
Seven Rivers formation.

(4) That the vertical limits of the Langlie-Mattix Pool, as defined by said Order No. R-520, include the lowermost 100 feet of the Seven Rivers formation and all of the Queen formation.

(5) That there has been some disparity among some geologists as to the actual base of the Seven Rivers formation and the top of the Queen formation and hence as to the location of the 100-foot marker separating the Jalmat and Langlie-Mattix Pools.

(6) That as a result of this disparity, the subject well and certain other wells in the general area which are classified as Langlie-Mattix wells have perforations extending across the aforesaid 100-foot marker in the Seven Rivers formation and into the Jalmat Pool.

(7) That such crossing over from one pool into the other in this case appears to be an unintentional error.

(8) That to rectify the aforesaid error would require workover operations on the subject well which would be expensive and might endanger the productivity of the subject well, and would actually serve no beneficial purpose, inasmuch as the production and reservoir characteristics of the perforations immediately above and below the 100-foot marker are quite similar.

(9) That a reasonable solution to the problem is to contract the vertical limits of the Jalmat Pool and to adjust the vertical limits of the Langlie-Mattix Pool upward to the depths described in Finding No. (2) above in order to accommodate the present perforations in the Lower Seven Rivers formation which are actually within the present Jalmat vertical limits in applicant's Humphrey Queen Unit Wells Nos. 13 and 16 and Langlie Mattix Queen Unit Well No. 10, respectively.

(10) That such adjustment will prevent waste and should not impair correlative rights and should be approved.

IT IS THEREFORE ORDERED:

(1) That the lowermost vertical limit of the Jalmat Pool underlying each of the following tracts in Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, dedicated to the indicated Mobil Producing Texas and New Mexico wells is hereby contracted to the depth shown as the new pool boundary, and the uppermost limit of the Langlie-Mattix Pool underlying each of said tracts is hereby extended upward to the same subsurface depth:

-3-
Case No. 7276
Order No. R-6716

<u>Tract</u>	<u>Section</u>	<u>Well Name and No.</u>	<u>New Pool Boundary</u>
NE/4 SE/4	4	Humphrey Unit No. 13	3327 feet
NE/4 SW/4	3	Humphrey Unit No. 16	3215 feet
NE/4 NW/4	15	Langlie Mattix Unit No. 10	3206 feet

(2) That the effective date of this order with respect to each of the aforesaid wells shall be the date said well was perforated above the old vertical limit of the Langlie-Mattix Pool.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

SEAL

rd/

Dockets Nos. 20-81 and 21-81 are tentatively set for July 2 and 15, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 17, 1981

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

- ALLOWABLE:** (1) Consideration of the allowable production of gas for July, 1981, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for July, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 7273:** Application of Blanks Energy Corporation for an unorthodox oil well location and possible directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 330 feet from the South line and 900 feet from the East line of Section 16, Township 18 South, Range 35 East, South Vacuum-Devonian Pool, the S/2 SE/4 of said Section 16 to be dedicated to the well. If commercial production is not obtained at said location, applicant proposes to come back up the hole and directionally drill in a westerly direction and bottom the well in the Devonian formation at a standard location in the SW/4 SE/4 of said Section 16.
- CASE 7274:** Application of Bass Enterprises Production Company for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its James Ranch Unit Well No. 13 from an unorthodox surface location 660 feet from the South line and 1340 feet from the East line of Section 36, Township 22 South, Range 30 East, in such a manner as to bottom said well in the Morrow formation at a standard location at least 660 feet from the South line and 1980 feet from the West line of Section 31, Township 22 South, Range 31 East, the S/2 of said Section 31 to be dedicated to the well.
- CASE 7275:** Application of S. P. Yates for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the N/2 of Section 21, Township 19 South, Range 27 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7263:** (Continued from June 3, 1981, Examiner Hearing)
- Application of Yates Petroleum Corporation for amendment of Order No. R-5527, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Division Order No. R-5527, which approved an unorthodox Morrow location, to permit the recompletion of its Blevins "IK" Well No. 1 in Unit D of Section 35, Township 17 South, Range 26 East, as an unorthodox gas well location in all Wolfcamp and Pennsylvanian formations.
- CASE 7276:** Application of Mobil Producing Texas & New Mexico Inc. for the extension of the vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to the following depths underlying the following 40-acre tracts in Township 25 South, Range 37 East: NE/4 SE/4 of Section 4: 3327 feet; NE/4 SW/4 of Section 3: 3215 feet; and NE/4 NW/4 of Section 15: 3296 feet.
- CASE 7277:** Application of Holly Energy, Inc. for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Beeson Well No. 2 to be drilled 1100 feet from the North line and 2300 feet from the West line of Section 29, Township 17 South, Range 30 East, Grayburg-Jackson Pool, the NE/4 NW/4 of said Section 29 to be dedicated to the well.
- CASE 7278:** Application of Pollution Control, Inc. for an oil treating plant permit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the E/2 NW/4 of Section 18, Township 20 South, Range 33 East.

- CASE 7279:** Application of BCO, Inc. for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and Lybrook-Gallup production in the wellbores of the following wells located in Township 23 North, Range 7 West: Dunn Well No. 3 located in Unit I of Section 3 and State H Wells Nos. 3 and 4, located in Units M and D, respectively, of Section 2.
- CASE 7280:** Application of Northwest Pipeline Corporation for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Rosa Unit Well No. 77 located in Unit L of Section 33, Township 31 North, Range 5 West, to produce gas from the Mesaverde formation and commingled Gallup and Dakota production through separate strings of tubing.
- CASE 7281:** Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesig-nated Gallup and Basin-Dakota production in the wellbore of its Windfall Well No. 10 located in Unit F of Section 31, Township 26 North, Range 11 West.
- CASE 7282:** Application of Jerome P. McHugh for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Wildhorse-Gallup and Basin-Dakota production in the wellbore of his Apache Well No. 3-E located in Unit H of Section 19, Township 26 North, Range 3 West.
- CASE 7254:** (Continued from May 20, 1981, Examiner Hearing)
Application of Mesa Petroleum Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde formation underlying the W/2 of Section 15, Township 30 North, Range 11 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7270:** (Continued from June 3, 1981, Examiner Hearing)
Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the N/2 of Section 21, Township 19 South, Range 27 East, to be dedicated to its Pecos River Federal 21-A Com Well No. 1 drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7250:** (Continued from June 3, 1981, Examiner Hearing)
Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 22, Township 18 South, Range 29 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
17 June 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Mobil Producing Texas
& New Mexico, Inc., for the extension
of the vertical limits of the Langlie
Mattix Pool, Lea County, New Mexico.

CASE
7276

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

James Sperling, Esq.
MODRALL, ROEHL, SPERLING,
HARRIS & SISK
Albuquerque, New Mexico

I N D E X

H. F. WEAVER

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2 MR. NUTTER: We'll call next Case Number
3 7276.

4 MR. PADILLA: Application of Mobil
5 Producing Texas and New Mexico, Inc., for the extension of
6 the vertical limits of the Langlie Mattix Pool, Lea County,
7 New Mexico.

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9 (Witness sworn.)

10
11 H. F. WEAVER

12 being called as a witness and being duly sworn upon his oath,
13 testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. SPERLING:

17 Q Please state your name, your occupation,
18 your employer, and your place of residence.

19 A My name is H. F. Weaver and I live in
20 Houston, Texas. I work for Mobil Producing Texas, New Mexico,
21 incorporated. I'm an environmental and regulatory engineer.

22 Q Have you on any previous occasion
23 testified before the Commission or Division so that your
24 qualifications are a matter of record?

25 A Yes, sir.

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MR. SPERLING: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q Are you familiar with the application which Mobil has filed in this matter?

A Yes, sir.

Q Would you please explain for the record what Mobil seeks by its application?

A The vertical limits of the Langlie Mattix Oil Pool were established by Order No. R-520, which was issued August the 12th, 1954.

These limits were defined to extend from a point 100 feet above the base of the Seven Rivers formation to the base of the Queen formation.

The Jalmat Gas Pool, which is productive of both oil and gas, overlies the Langlie Mattix Oil Pool and extends from the top of the Tansill formation to a point 100 feet above the base of the Seven Rivers formation. The basis for the delineation of the two reservoirs was a reservoir study and log correlation performed by an industry committee in 1954.

In May of 1980, Mr. John Runyon, a New Mexico Oil Conservation Division geologist, completed a well by well study of nearly 2000 wells in the two pools.

Exhibit Number One is a summary of his findings. Now he found that 233 wells were completed in intervals crossing the pool boundaries. Of these 183 had previously been granted exceptions by various orders of the New Mexico Oil Conservation Division. 50 other wells had not been granted exceptions and were found to be in violation of the pool rules.

Q What action was taken by the New Mexico Oil Conservation Division to address this problem?

A Well, in August the 7th, 1980, the New Mexico Oil Conservation Division indicated that corrective action should be initiated on the out of limit wells. This action could be any one of the three following: Or four following:

One, squeeze off the sections of the wells that are outside of the pool limits.

Two, review the correlation and interpretation of the pool boundaries with Mr. Runyon if it appears his interpretation is incorrect.

Three, file for a hearing to ask for exception to the pool rules for the wells involved.

And four, or four, apply for permission for downhole commingling.

Q What is the problem that Mobil faces

1
2 wit respect to the violation of the pool rules?

3 A Well, Mobil operates three wells which
4 were found to be in violation of these pool rules by virtue
5 of the fact that they are completed in intervals that extend
6 above the boundaries of the Langlie Mattix Oil Pool into the
7 Jalmat Gas Pool.

8 MR. NUTTER: They are classified as
9 Langlie Mattix wells, however.

10 A Yes, sir.

11 MR. NUTTER: With perforations in the
12 Langlie Mattix and in the lower part of the Jalmat.

13 A Yes, sir.

14 MR. NUTTER: Okay.

15 Q Would you please refer to what's been
16 marked as Exhibit Two and explain what that exhibit is and
17 what it's intended to show?

18 A Exhibit Number Two is a tabulation
19 which was prepared from Mr. Runyon's report, which shows only
20 Mobil's out of limit wells. They are the Humphrey Queen Unit
21 Wells Nos. 13 and 16 and Langlie Mattix Queen Unit Well No.
22 10.

23 They were found to be completed in in-
24 tervals ranging from 36 to 65 feet above the Langlie Mattix
25 Pool boundary.

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Q Would you please refer to what's been marked as Exhibit Three and explain that exhibit?

A Exhibit Number Three is a map which shows the Mobil operated Humphrey Queen and the Langlie Mattix Queen Units. The three out of limit wells are also indicated on this map.

We also have indicated on there the six wells that had prior exemptions to the pool rules that were by Order 520 in 1954.

Q How are those wells identified?

A They are identified with just a square around the individual well, while the three wells that we're interested in getting a vertical extension to have a little hexagonal mark around the well itself and then colored in yellow on the exhibit.

The Humphrey Queen and the Langlie Mattix Queen Units are waterflood projects which were approved by New Mexico Oil Conservation Division orders in R-3823 and R-3823A and 3824 and 3824A. The unitized interval is the Langlie Mattix Queen sand and is defined in an identical manner to the New Mexico Oil Conservation Division Order No. R-520, which was previously mentioned.

The two units are in the latter stages of waterflood production. Example, 38 produced wells on the

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2 two properties average 8 barrels of oil per day and 55 barrels
3 of water per day each.

4 Q Would you now identify Exhibit Number
5 Four?

6 A Exhibit Four is a log, gamma ray neutron
7 log, of the Humphrey Queen Unit Well No. 13, which is one of
8 the out of limit wells. The log shows the top of the Queen
9 sand. That's the base -- also, it's the base of the Seven
10 Rivers formation. It shows the upper limit of the Langlie
11 Mattix Oil Pool and the perforated interval of this particular
12 well, which extends 54 feet above the Langlie Mattix Pool
13 boundary.

14 And in order to prevent loss of oil and
15 gas which would otherwise be produced through the Upper Queen
16 Units No. 13 and 16 and the Langlie Mattix Unit Well No. 10,
17 Mobil requests that the proration units occupied by the three
18 wells, that is the upper limits of the Langlie Mattix Oil
19 Pool, be extended to include all of the present completion
20 interval. The revised vertical upper limits of the Langlie
21 Mattix Oil Pool would then for these three wells become the
22 Humphrey Queen Well No. 13, its current boundary is 3381,
23 with a 54 foot extension would give it a revised pool boundary
24 of 3327.

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The Humphrey Queen Unit Well No. 16 has

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2 a current pool boundary of 3280 feet, with a 65 foot extension
3 would give it a revised pool boundary of 3,115 feet.

4 The Langlie Mattix Queen Unit Well No.
5 10 has a current pool boundary of 3342 feet, a 36 foot ex-
6 tension would give it a revised pool boundary of 3306 feet.

7 Q Identify Exhibit Five, please.

8 A Exhibit Number Five is a copy of the
9 latest NMOCD Form O-116 for these wells that we're speaking
10 of. The tests show that the wells produced from 1 to 7
11 barrels per day of 39 gravity oil. Each well produces approx-
12 imately 1000 cubic feet of gas per day.

13 Q Now would you identify Exhibits Six,
14 Seven, and Eight, since they're all interrelated?

15 A Exhibits Six, Seven, and Eight are up-
16 dated production curves for each of the three wells. The
17 cumulative production since unitization for each of the wells
18 is as follows:

19 The Humphrey Queen Unit Well No. 13
20 has produced a total of 2470 barrels of oil, 12,498 barrels
21 of water, 1,126,000 feet of gas, and its completion date was
22 1970.

23 The Humphrey Queen Unit Well No. 16
24 has a cumulative production of 13,342 barrels of oil, 81,852
25 barrels of water, 8,000,037 Mcf of gas. Its completion date,

1963.

The Langlie Mattix Queen Unit Well No. 10 has produced 41,646 barrels of oil, 67,877 barrels of water, 11,961,000 cubic feet of gas, and its completion date was 1965.

The wells have been completed in their present intervals throughout the life of the waterflood.

Production data, we feel, clearly shows that these wells are oil wells and have been throughout their life. Their production is in clear contrast to wells in the immediate vicinity which produce from the Jalmat Gas Pool.

There are presently six active gas wells completed in the Jalmat Gas Pool on Sections 3, 4, and 15 of Township 25 South, 37 East. These are the same sections in which Mobil's wells are being considered.

These six gas, active gas wells, averaged 118 Mcf per day with no condensate production during February, 1981. There are no oil wells in the Jalmat Gas Pool in Sections 3, 4, and 15 of 25 South, 37 East.

The three Mobil wells completed outside the pool boundaries have therefor not been draining reserves from adjacent wells completed in the Jalmat Gas Pool.

Q You mentioned earlier, Mr. Weaver, the alternatives suggested by the Commission in 1980 with respect

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2 to the problem that you've been describing. Which of these
3 alternatives has Mobil elected to follow?

4 A Well, let me explain, if you will, the
5 alternatives as we looked at them and then I'll tell you what
6 we felt --

7 Q All right.

8 A -- we needed to do.

9 Q All right.

10 A We made cost estimates for squeezing off
11 the Jalmat section to make the wells stay within the boundaries
12 of the Queen zone, and as a result of those studies, cost
13 estimate studies, we found that we would have to workover the
14 wells with open hole completions by setting a liner, cementing
15 it, perforating those, and in the one well that has perforated
16 interval throughout, we would have to squeeze it off and then
17 re-perforate it, and our average cost estimate was \$21,400
18 per well.

19 Now, given the low production rates for
20 the Humphrey Queen Unit Well Nos. 13 and 16, these wells
21 could not justify the expenditure and would therefor have to
22 be plugged and the remaining reserves for these wells would
23 be lost.

24 Langlie Mattix Queen Unit Well NO. 10
25 could possibly justify the workover expenditure; however, any

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2 production that may be coming from the Jalmat zone would be
3 irretrievably lost. In order to prevent loss of oil reserves,
4 we recommend that the wells not be squeezed to bring them
5 into conformance with the pool rules.

6 Another alternative would be to provide
7 downhole commingling of the zones in each well. This course
8 is not recommended because of a difficulty in ascertaining
9 the contribution of each zone or the added cost accounting
10 burden associated with commingled production.

11 And finally, possible conflicts for the
12 unit agreements which specify a waterflood in the Queen zone.

13 Q What alternative has Mobil chosen?

14 A Mobil is recommending to extend the
15 vertical limits of the Langlie Mattix Oil Pool boundaries
16 for the three wells. This approach has ample precedents for
17 the Mobil properties, since six additional wells on the two
18 units were completed with part of the producing interval in
19 the wells within the vertical limits of the Jalmat Gas Pool.

20 Now these six wells are Mobil operated
21 wells within the unit, were granted exceptions under Order
22 R-520, which established the vertical boundaries of the Langlie
23 Mattix Oil Pool and the Jalmat Gas Pool.

24 Q Could you locate those six wells that
25 you're referring to that have been granted exceptions previously?

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2 A Yes, sir, on Exhibit Number Three. I
3 believe on Exhibit Number Three, Dan probably has his marked
4 there with a square around it?

5 MR. NUTTER: It has a little blue
6 square around it.

7 A A little blue square. How well defined
8 do you want it, just define it as the little blue squares on
9 the --

10 Q Okay, indicate it on Exhibit Three, and
11 you have identified how they can be located.

12 A Yeah.

13 Q That's sufficient, I believe.

14 Do you feel, Mr. Weaver, that the
15 granting of this application would be in the best interest of
16 conservation, prevent waste, and protect correlative rights?

17 A Yes, sir.

18 Q Okay.

19 MR. SPERLING: We'd like to offer Ex-
20 hibits which have been identified by the witness at this time.

21 MR. NUTTER: Mobil Exhibits One through
22 Eight will be admitted in evidence.
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CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Weaver, now you mentioned that the vertical limits of these two units coincided with the vertical limits of the pools as defined by the Commission back in 1954.

Now who owns the Jalmat rights above these units?

A We do.

Q It's Mobil that owns it?

A Yes, sir.

Q So you don't see any conflict, then, of ownership by intruding in Mobil's ownership with the unitized production?

A We see none.

Q And you're not going to fuss about it?

A No, we won't fuss among ourselves over that, no.

Q Okay, this has created a problem in some of the cases.

A Right.

MR. NUTTER: Are there any further questions of Mr. Weaver? He may be excused.

Does anyone have anything they wish to

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offer in Case Number 7276?

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We'll take the case under advisement.

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(Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7274 heard by me on 6/17 1981.

[Signature] Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
17 June 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Mobil Producing Texas
& New Mexico, Inc., for the extension
of the vertical limits of the Langlie
Mattix Pool, Lea County, New Mexico.

CASE
7276

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

James Sperling, Esq.
MODRALL, ROEHL, SPERLING,
HARRIS & SISK
Albuquerque, New Mexico

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H. F. WEAVER

Direct Examination by Mr. Sperling

Cross Examination by Mr. Nutter

EXHIBITS

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Applicant Exhibit Two, Tabulation

Applicant Exhibit Three, Map

Applicant Exhibit Four,

Applicant Exhibit Five, Form C-116

Applicant Exhibit Six, Graph

Applicant Exhibit Seven, Graph

Applicant Exhibit Eight, Graph

1
2 MR. NUTTER: We'll call next Case Number
3 7276.

4 MR. PADILLA: Application of Mobil
5 Producing Texas and New Mexico, Inc., for the extension of
6 the vertical limits of the Langlie Mattix Pool, Lea County,
7 New Mexico.

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9 (Witness sworn.)

10
11 H. F. WEAVER
12 being called as a witness and being duly sworn upon his oath,
13 testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. SPERLING:

17 Q Please state your name, your occupation,
18 your employer and your place of residence.

19 A My name is H. F. Weaver and I live in
20 Houston, Texas. I work for Mobil Producing Texas, New Mexico,
21 incorporated. I'm an environmental and regulatory engineer.

22 Q Have you on any previous occasion
23 testified before the Commission or Division so that your
24 qualifications are a matter of record?

25 A Yes, sir.

1
2 MR. SPERLING: Are the witness' qualifi-
3 cations acceptable?

4 MR. NUTTER: Yes, they are.

5 Q Are you familiar with the application
6 which Mobil has filed in this matter?

7 A Yes, sir.

8 Q Would you please explain for the record
9 what Mobil seeks by its application?

10 A The vertical limits of the Langlie
11 Mattix Oil Pool were established by Order No. R-520, which
12 was issued August the 12th, 1954.

13 These limits were defined to extend from
14 a point 100 feet above the base of the Seven Rivers formation
15 to the base of the Queen formation.

16 The Jalmat Gas Pool, which is productive
17 of both oil and gas, overlies the Langlie Mattix Oil Pool
18 and extends from the top of the Tansill formation to a point
19 100 feet above the base of the Seven Rivers formation. The
20 basis for the delineation of the two reservoirs was a reservoir
21 study and log correlation performed by an industry committee
22 in 1954.

23 In May of 1980, Mr. John Runyon, a New
24 Mexico Oil Conservation Division geologist, completed a
25 well by well study of nearly 2000 wells in the two pools.

Exhibit Number One is a summary of his findings. Now he found that 233 wells were completed in intervals crossing the pool boundaries. Of these 183 had previously been granted exceptions by various orders of the New Mexico Oil Conservation Division. 50 other wells had not been granted exceptions and were found to be in violation of the pool rules.

Q What action was taken by the New Mexico Oil Conservation Division to address this problem?

A Well, in August the 7th, 1980, the New Mexico Oil Conservation Division indicated that corrective action should be initiated on the out of limit wells. This action could be any one of the three following: Or four following:

One, squeeze off the sections of the wells that are outside of the pool limits.

Two, review the correlation and interpretation of the pool boundaries with Mr. Runyon if it appears his interpretation is incorrect.

Three, file for a hearing to ask for exception to the pool rules for the wells involved.

And four, or four, apply for permission for downhole commingling.

Q What is the problem that Mobil faces

1
2 wit respect to the violation of the pool rules?

3 A Well, Mobil operates three wells which
4 were found to be in violation of these pool rules by virtue
5 of the fact that they are completed in intervals that extend
6 above the boundaries of the Langlie Mattix Oil Pool into the
7 Jalmat Gas Pool.

8 MR. NUTTER: They are classified as
9 Langlie Mattix wells, however.

10 A Yes, sir.

11 MR. NUTTER: With perforations in the
12 Langlie Mattix and in the lower part of the Jalmat.

13 A Yes, sir.

14 MR. NUTTER: Okay.

15 Q Would you please refer to what's been
16 marked as Exhibit Two and explain what that exhibit is and
17 what it's intended to show?

18 A Exhibit Number Two is a tabulation
19 which was prepared from Mr. Runyon's report, which shows only
20 Mobil's out of limit wells. They are the Humphrey Queen Unit
21 Wells Nos. 13 and 16 and Langlie Mattix Queen Unit Well No.
22 10.

23 They were found to be completed in in-
24 tervals ranging from 36 to 65 feet above the Langlie Mattix
25 Pool boundary.

1
2 Q Would you please refer to what's been
3 marked as Exhibit Three and explain that exhibit?

4 A Exhibit Number Three is a map which
5 shows the Mobil operated Humphrey Queen and the Langlie Mattix
6 Queen Units. The three out of limit wells are also indicated
7 on this map.

8 We also have indicated on there the
9 six wells that had prior exemptions to the pool rules that
10 were by Order 520 in 1954.

11 Q How are those wells identified?

12 A They are identified with just a square
13 around the individual well, while the three wells that we're
14 interested in getting a vertical extension to have a little
15 hexagonal mark around the well itself and then colored in
16 yellow on the exhibit.

17 The Humphrey Queen and the Langlie
18 Mattix Queen Units are waterflood projects which were approved
19 by New Mexico Oil Conservation Division orders in R-3823 and
20 R-3823A and 3824 and 3824A. The unitized interval is the
21 Langlie Mattix Queen sand and is defined in an identical
22 manner to the New Mexico Oil Conservation Division Order No.
23 R-520, which was previously mentioned.

24 The two units are in the latter stages
25 of waterflood production. Example, 38 produced wells on the

1
2 two properties average 8 barrels of oil per day and 55 barrels
3 of water per day each.

4 Q Would you now identify Exhibit Number
5 Four?

6 A Exhibit Four is a log, gamma ray neutron
7 log, of the Humphrey Queen Unit Well No. 13, which is one of
8 the out of limit wells. The log shows the top of the Queen
9 sand. That's the base -- also, it's the base of the Seven
10 Rivers formation. It shows the upper limit of the Langlie
11 Mattix Oil Pool and the perforated interval of this particular
12 well, which extends 54 feet above the Langlie Mattix Pool
13 boundary.

14 And in order to prevent loss of oil and
15 gas which would otherwise be produced through the Upper Queen
16 Units No. 13 and 16 and the Langlie Mattix Unit Well No. 10,
17 Mobil requests that the proration units occupied by the three
18 wells, that is the upper limits of the Langlie Mattix Oil
19 Pool, be extended to include all of the present completion
20 interval. The revised vertical upper limits of the Langlie
21 Mattix Oil Pool would then for these three wells become the
22 Humphrey Queen Well No. 13, its current boundary is 3381,
23 with a 54 foot extension would give it a revised pool boundary
24 of 3327.

25 The Humphrey Queen Unit Well No. 16 has

1
2 a current pool boundary of 3280 feet, with a 65 foot extension
3 would give it a revised pool boundary of 3215 feet.

4 The Langlie Mattix Queen Unit Well No.
5 10 has a current pool boundary of 3342 feet, a 36 foot ex-
6 tension would give it a revised pool boundary of 3306 feet.

7 Q Identify Exhibit Five, please.

8 A Exhibit Number Five is a copy of the
9 latest NMOC Form G-116 for these wells that we're speaking
10 of. The tests show that the wells produced from 1 to 7
11 barrels per day of 39 gravity oil. Each well produces approx-
12 imately 1000 cubic feet of gas per day.

13 Q Now would you identify Exhibits Six,
14 Seven, and Eight, since they're all interrelated?

15 A Exhibits Six, Seven, and Eight are up-
16 dated production curves for each of the three wells. The
17 cumulative production since unitization for each of the wells
18 is as follows:

19 The Humphrey Queen Unit Well No. 13
20 has produced a total of 2470 barrels of oil, 12,498 barrels
21 of water, 1,126,000 feet of gas, and its completion date was
22 1970.

23 The Humphrey Queen Unit Well No. 16
24 has a cumulative production of 13,342 barrels of oil, 81,852
25 barrels of water, 8,000,037 Mcf of gas. Its completion date,

1
2 1963.

3 The Langlie Mattix Queen Unit Well No.
4 10 has produced 41,646 barrels of oil, 67,877 barrels of
5 water, 11,961,000 cubic feet of gas, and its completion date
6 was 1965.

7 The wells have been completed in their
8 present intervals throughout the life of the waterflood.
9 Production data, we feel, clearly shows that these wells are
10 oil wells and have been throughout their life. Their pro-
11 duction is in clear contrast to wells in the immediate vicinity
12 which produce from the Jalmat Gas Pool.

13 There are presently six active gas wells
14 completed in the Jalmat Gas Pool on Sections 3, 4, and 15 of
15 Township 25 South, 37 East. These are the same sections in
16 which Mobil's wells are being considered.

17 These six gas, active gas wells, aver-
18 aged 118 Mcf per day with no condensate production during
19 February, 1981. There are no oil wells in the Jalmat Gas Pool
20 in Sections 3, 4, and 15 of 25 South, 37 East.

21 The three Mobil wells completed outside
22 the pool boundaries have therefor not been draining reserves
23 from adjacent wells completed in the Jalmat Gas Pool.

24 Q You mentioned earlier, Mr. Weaver, the
25 alternatives suggested by the Commission in 1980 with respect

1
2 to the problem that you've been describing. Which of these
3 alternatives has Mobil elected to follow?

4 A Well, let me explain, if you will, the
5 alternatives as we looked at them and then I'll tell you what
6 we felt --

7 Q All right.

8 A -- we needed to do.

9 Q All right.

10 A We made cost estimates for squeezing off
11 the Jalmat section to make the wells stay within the boundaries
12 of the Queen zone, and as a result of those studies, cost
13 estimate studies, we found that we would have to workover the
14 wells with open hole completions by setting a liner, cementing
15 it, perforating those, and in the one well that has perforated
16 interval throughout, we would have to squeeze it off and then
17 re-perforate it, and our average cost estimate was \$21,400
18 per well.

19 Now, given the low production rates for
20 the Humphrey Queen Unit Well Nos. 13 and 16, these wells
21 could not justify the expenditure and would therefor have to
22 be plugged and the remaining reserves for these wells would
23 be lost.

24 Langlie Mattix Queen Unit Well NO. 10
25 could possibly justify the workover expenditure; however, any

1
2 production that may be coming from the Jalmat zone would be
3 irretrievably lost. In order to prevent loss of oil reserves,
4 we recommend that the wells not be squeezed to bring them
5 into conformance with the pool rules.

6 Another alternative would be to provide
7 downhole commingling of the zones in each well. This course
8 is not recommended because of a difficulty in ascertaining
9 the contribution of each zone or the added cost accounting
10 burden associated with commingled production.

11 And finally, possible conflicts for the
12 unit agreements which specify a waterflood in the Queen zone.

13 Q What alternative has Mobil chosen?

14 A Mobil is recommending to extend the
15 vertical limits of the Langlie Mattix Oil Pool boundaries
16 for the three wells. This approach has ample precedents for
17 the Mobil properties, since six additional wells on the two
18 units were completed with part of the producing interval in
19 the wells within the vertical limits of the Jalmat Gas Pool.

20 Now these six wells are Mobil operated
21 wells within the unit, were granted exceptions under Order
22 R-520, which established the vertical boundaries of the Langlie
23 Mattix Oil Pool and the Jalmat Gas Pool.

24 Q Could you locate those six wells that
25 you're referring to that have been granted exceptions previously?

1
2 A Yes, sir, on Exhibit Number Three. I
3 believe on Exhibit Number Three, Dan probably has his marked
4 there with a square around it?

5 MR. NUTTER: It has a little blue
6 square around it.

7 A A little blue square. How well defined
8 do you want it, just define it as the little blue squares on
9 the --

10 Q Okay, indicate it on Exhibit Three, and
11 you have identified how they can be located.

12 A Yeah.

13 Q That's sufficient, I believe.

14 Do you feel, Mr. Weaver, that the
15 granting of this application would be in the best interest of
16 conservation, prevent waste, and protect correlative rights?

17 A Yes, sir.

18 Q Okay.

19 MR. SPERLING: We'd like to offer Ex-
20 hibits which have been identified by the witness at this time.

21 MR. NUTTER: Mobil Exhibits One through
22 Eight will be admitted in evidence.
23
24
25

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Weaver, now you mentioned that the vertical limits of these two units coincided with the vertical limits of the pools as defined by the Commission back in 1954.

Now who owns the Jalmat rights above these units?

A We do.

Q It's Mobil that owns it?

A Yes, sir.

Q So you don't see any conflict, then, of ownership by intruding in Mobil's ownership with the unitized production?

A We see none.

Q And you're not going to fuss about it?

A No, we won't fuss among ourselves over that, no.

Q Okay, this has created a problem in some of the cases.

A Right.

MR. NUTTER: Are there any further questions of Mr. Weaver? He may be excused.

Does anyone have anything they wish to

offer in Case Number 7276?

We'll take the case under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 727A, heard by me on 6/17 1981:

[Signature], Examiner
Oil Conservation Division

EXHIBIT 1

SUMMARY LANGLIE MATTIX -- JALMAT POOL STUDY

Total number of wells in Jalmat Pool (Checked in this study)	<u>549</u>
Total number of wells in Langlie Mattix Pool	<u>1425</u>
Wells crossing Jalmat--Langlie Mattix Pool Boundary	<u>50*</u>
Wells in wrong pool	<u>1</u>
Total number of wells exempt by Division Orders	<u>183</u>
*Total number of wells out of pool limits by 25' or less	<u>7</u>

Note: When vertical limits of Langlie Mattix and Jalmat Pool were changed by orders and the wells were OK, they were considered OK by pool rules.

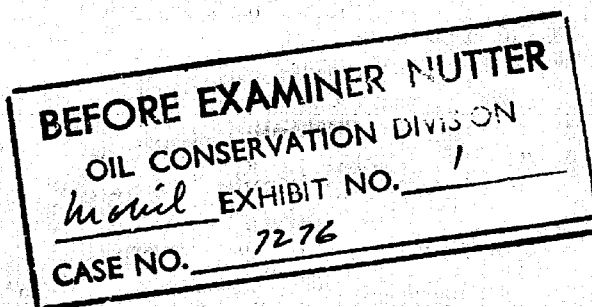


EXHIBIT 2

LANGLIE MATTIX POOL COMPLETIONS INTO JALMAT POOL

<u>Company</u>	<u>Lease</u>	<u>Well No.</u>	<u>Location</u>	<u>Status</u>	<u>Top Queen OCD</u>	<u>Pool Boundary</u>	<u>Completion</u>	<u>Into Jalmat By</u>
Mobil Prod	Humphrey Queen Unit	13	I-4-25-37	0	3481-L	3381	P 3327-3655	54'
Mobil Prod	Langlie Mattix Queen Unit	10	C-15-25-37	0	3342-I	3242	OH 3206-3402	36'
Mobil Prod	Humphrey Queen Unit	16	K-3-25-37	0	3380-I	3280	OH 3215-3546	65'

Abbreviations

L = Log
 I = Interpolated
 O = Oil
 P = Perforations
 OH = Open Hole

*This would be the
top of the Langlie Mattix
pool (and the lease
to the Jalmat)*

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

EXHIBIT NO. 7276CASE NO. 7276

EXHIBIT 5

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTSC-116
Revised 1-1-85

Operator Mobil Producing TX. & N.M. Inc.		Pool Langlie Mattix Queen				County Lea										
Address Greenway Plaza, Suite 2700, Houston, Texas 77046						TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT/BBL.
		U	S	T	R							WATER BBL.	GRAV. OIL	OIL BBL.	GAS M.C.F.	
Langlie Mattix Queen Unit	10	C	15	25	37	10-10-80		2"	20	8	24	15	39.8	7	1	143
Humphrey Queen Unit	13	I	4	25	37	10-08-80		2"	20	2	24	8	38.3	2	1	500
Humphrey Queen Unit	16	K	3	25	37	10-12-80		2"	20	2	24	1	38.3	1	1	1000

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 7276

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.68.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

A. N. Heath
(Signature)

Authorized Agent

(Title)

October 21, 1980

(Date)

EXHIBIT 1

SUMMARY LANGLIE MATTIX -- JALMAT POOL STUDY

Total number of wells in Jalmat Pool (Checked in this study)	<u>549</u>
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*Total number of wells out of pool limits by 25' or less	<u>7</u>

Note: When vertical limits of Langlie Mattix and Jalmat Pool were changed by orders and the wells were OK, they were considered OK by pool rules.

EXHIBIT 2

LANGLIE MATTIX POOL COMPLETIONS INTO JALMAT POOL

<u>Company</u>	<u>Lease</u>	<u>Well No.</u>	<u>Location</u>	<u>Status</u>	<u>Top Queen OCD</u>	<u>Pool Boundary</u>	<u>Completion</u>	<u>Into Jalmat By</u>
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Mobil Prod	Langlie Mattix Queen Unit	10	C-15-25-37	0	3342-I	3242	OH 3206-3402	36'
Mobil Prod	Humphrey Queen Unit	16	K-3-25-37	0	3380-I	3280	OH 3215-3546	65'

Abbreviations

L = Log
I = Interpolated
O = Oil
P = Perforations
OH = Open Hole

EXHIBIT 5

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTSC-116
Revised 1-1-65

Operator Mobil Producing TX. & N.M. Inc.		Pool Langlie Mattix Queen						County Lea								
Address 9 Greenway Plaza, Suite 2700, Houston, Texas 77046						TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TSG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BBL.
		U	S	T	R							WATER BBL.	GRAV. OIL	OIL BBL.	GAS M.C.F.	
Langley Mattix Queen Unit	10	C	15	25	37	10-10-80		2"	20	8	24	15	39.8	7	1	143
Humphrey Queen Unit	13	I	4	25	37	10-08-80		2"	20	2	24	8	38.3	2	1	500
Humphrey Queen Unit	16	K	3	25	37	10-12-80		2"	20	2	24	1	38.3	1	1	1000

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.66.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 201 and appropriate pool rules.

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

J. N. Heath
(Signature)

Authorized Agent

(Title)

October 21, 1980

(Date)

JAMES E. SPERLING
JOSEPH E. ROEHL
GEORGE T. HARRIS, JR.
DANIEL A. SISK
LELAND S. SEDBERRY, JR.
ALLEN C. DEWEY, JR.
JAMES A. PARKER
JOHN R. COONEY
KENNETH L. HARRIGAN
PETER J. ADAMS
DALE W. EK
DENNIS J. FALK
JOE R. G. FULCHER
ARTHUR D. MELENDES
JAMES P. HOUGHTON

LAW OFFICES
MODRALL, SPERLING, ROEHL, HARRIS & SISK

A PROFESSIONAL ASSOCIATION

PUBLIC SERVICE BUILDING
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JOHN F. SIMMS
(1888-1954)

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(1902-1977)

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(1907-1965)

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RUTH M. SCHIFANI
THOMAS L. JOHNSON
LYNN H. SLADE
ZACHARY L. MCCORMICK
CLIFFORD K. ATKINSON
DOUGLAS A. BAKER
LARRY P. AUSHERMAN
CHARLES E. STUCKEY
DOUGLAS R. VADNAIS

May 11, 1981

Mr. Joe D. Ramey
Secretary-Director
Department of Energy & Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Mobil Producing Texas & New Mexico Inc.
Application to Extend the Vertical
Limits of the Langlie-Mattix Oil Pool
Lea County, New Mexico

Dear Mr. Ramey:

Enclosed herewith, please find original and two copies
of Mobil Producing Texas & New Mexico Inc.'s application
for hearing concerning the above-captioned matter.

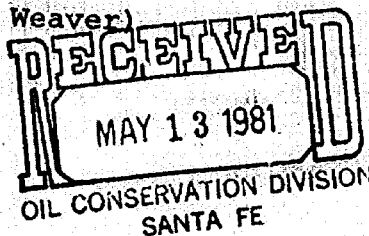
It would be appreciated if this matter can be scheduled
for hearing before an examiner on June 17, 1981.

Very truly yours,

James E. Sperling

/jev
Enclosures

cc: J. A. Morris, w/encl. (attn: H. F. Weaver)



NEW MEXICO DEPARTMENT OF ENERGY & MINERALS
OIL CONSERVATION DIVISION

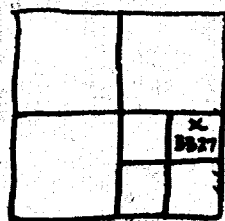
IN THE MATTER OF THE APPLICATION
OF MOBIL PRODUCING TEXAS & NEW
MEXICO INC. TO EXTEND THE VERTICAL
LIMITS OF THE LANGLIE-MATTIX OIL
POOL WITH RESPECT TO THREE WELLS,
LEA COUNTY, NEW MEXICO.

Case No. 7276

A P P L I C A T I O N

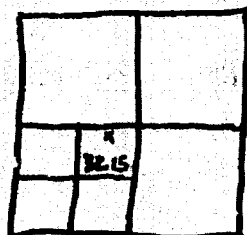
Mobil Producing Texas & New Mexico Inc. ("Mobil"), whose address is Nine Greenway Plaza, Suite 2700, Houston, Texas 77046, hereby makes application for amendment of Division Order No. R-520 with respect to the vertical limits of the Langlie-Mattix Oil Pool to accommodate three out-of-vertical limit wells owned and operated by Mobil, and in support of its application states:

1. Order No. R-520 defines the vertical limits of the Langlie-Mattix Oil Pool as extending from a point 100 feet above the base of the Seven Rivers Formation to the base of the Queen Formation. Pertinent information with respect to the three wells operated by Mobil is as follows:



Section 4
T13

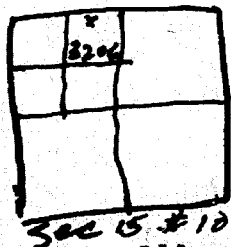
Humphrey Queen Unit Well No. 13 located in Unit I, Section 4, total depth 3700 feet, producing through casing from the interval 3327 feet to 3655 feet at the rate of two barrels of oil per day with a gas/oil ratio of 500 to 1.



Section 3
No 16

Humphrey Queen Unit Well No. 16 located in Unit K, Section 3, total depth 3546 feet, producing open hole from the interval 3215 feet to 3546 feet at the rate of one barrel of oil per day with a gas/oil ratio of 1,000 to 1.

RECEIVED
MAY 13 1981
OIL CONSERVATION DIVISION
SANTA FE



Langlie-Mattix Queen Unit Well No. 10 located in Unit C, Section 15, total depth 3405 feet, producing open hole from the interval of 3206 feet to 3405 feet at the rate of seven barrels per day with a gas/oil ratio of 143 to 1.

All of the above-described wells are located in Township 25 South, Range 37 East, N.M.P.M.

2. At the locations of the respective wells, Well No. 13 is 28 feet above the defined vertical limits of the Langlie-Mattix Oil Pool. Well No. 16 is 65 feet above the vertical limits of said pool and Well No. 10 is 36 feet above the vertical limits of said pool. It is therefore necessary that the vertical limits of the Langlie-Mattix Oil Pool be extended at least to a point 165 feet above the base of the Seven Rivers

Formation as its upper vertical limit. *under each of the 40-acre tracts to accommodate the well located thereon. **

Mobil requests the Division to set this matter for hearing before an Examiner on June 17, 1981, and following such hearing to issue the order of the Division amending Rule No. R-520 to extend the upper vertical limits of the Langlie-Mattix Oil Pool as hereinabove set forth.

Respectfully submitted,

MOBIL PRODUCING TEXAS & NEW MEXICO INC.

By: MODRALL SPERLING ROEHL HARRIS & SISK, P.A.

By:

James E. Sperling
James E. Sperling
P. O. Box 2168
Albuquerque, New Mexico 87103
Telephone: (505) 243-4511

ATTORNEYS FOR MOBIL PRODUCING TEXAS
& NEW MEXICO INC.

** by O&G after discussion
w/ Jim Sperling 5/18*

NEW MEXICO DEPARTMENT OF ENERGY & MINERALS
OIL CONSERVATION DIVISION

**IN THE MATTER OF THE APPLICATION
OF MOBIL PRODUCING TEXAS & NEW
MEXICO INC. TO EXTEND THE VERTICAL
LIMITS OF THE LANGLIE-MATTIX OIL
POOL WITH RESPECT TO THREE WELLS,
LEA COUNTY, NEW MEXICO.**

Case No. 7276

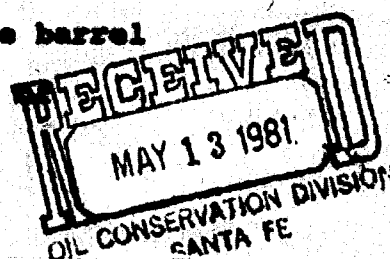
A P P L I C A T I O N

Mobil Producing Texas & New Mexico Inc. ("Mobil"), whose address is Nine Greenway Plaza, Suite 2700, Houston, Texas 77046, hereby makes application for amendment of Division Order No. R-520 with respect to the vertical limits of the Langlie-Mattix Oil Pool to accommodate three out-of-vertical limit wells owned and operated by Mobil, and in support of its application states:

1. Order No. R-520 defines the vertical limits of the Langlie-Mattix Oil Pool as extending from a point 100 feet above the base of the Seven Rivers Formation to the base of the Queen Formation. Pertinent information with respect to the three wells operated by Mobil is as follows:

Humphrey Queen Unit Well No. 13 located in Unit I, Section 4, total depth 3700 feet, producing through casing from the interval 3327 feet to 3655 feet at the rate of two barrels of oil per day with a gas/oil ratio of 500 to 1.

Humphrey Queen Unit Well No. 16 located in Unit K, Section 3, total depth 3546 feet, producing open hole from the interval 3213 feet to 3546 feet at the rate of one barrel of oil per day with a gas/oil ratio of 1,000 to 1.



Langlie-Mattix Queen Unit Well No. 10 located in Unit C, Section 15, total depth 3405 feet, producing open hole from the interval of 3206 feet to 3405 feet at the rate of seven barrels per day with a gas/oil ratio of 143 to 1.

All of the above-described wells are located in Township 25 South, Range 37 East, N.M.P.M.

2. At the locations of the respective wells, Well No. 13 is 28 feet above the defined vertical limits of the Langlie-Mattix Oil Pool. Well No. 16 is 65 feet above the vertical limits of said pool and Well No. 10 is 36 feet above the vertical limits of said pool. It is therefore necessary that the vertical limits of the Langlie-Mattix Oil Pool be extended at least to a point 165 feet above the base of the Seven Rivers Formation as its upper vertical limit.

Mrbil requests the Division to set this matter for hearing before an Examiner on June 17, 1981, and following such hearing to issue the order of the Division amending Rule No. R-528 to extend the upper vertical limits of the Langlie-Mattix Oil Pool as hereinabove set forth.

Respectfully submitted,

MOBIL PRODUCING TEXAS & NEW MEXICO INC.

By: MODRALL SPERLING ROEHL HARRIS & SISK, P.A.

Original
By: Signed by James E. Sperling
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Telephone: (505) 243-4511

ATTORNEYS FOR MOBIL PRODUCING TEXAS
& NEW MEXICO INC.

NEW MEXICO DEPARTMENT OF ENERGY & MINERALS
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF MOBIL PRODUCING TEXAS & NEW
MEXICO INC. TO EXTEND THE VERTICAL
LIMITS OF THE LANGLEY-MATTIX OIL
POOL WITH RESPECT TO THREE WELLS,
LEA COUNTY, NEW MEXICO.

Case No. 7276

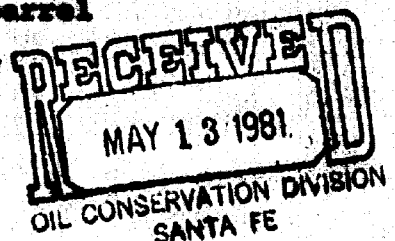
A P P L I C A T I O N

Mobil Producing Texas & New Mexico Inc. ("Mobil"), whose address is Nine Greenway Plaza, Suite 2700, Houston, Texas 77046, hereby makes application for amendment of Division Order No. R-520 with respect to the vertical limits of the Langley-Mattix Oil Pool to accommodate three out-of-vertical limit wells owned and operated by Mobil, and in support of its application states:

1. Order No. R-520 defines the vertical limits of the Langley-Mattix Oil Pool as extending from a point 100 feet above the base of the Seven Rivers Formation to the base of the Queen Formation. Pertinent information with respect to the three wells operated by Mobil is as follows:

Humphrey Queen Unit Well No. 13 located in Unit I, Section 4, total depth 3700 feet, producing through casing from the interval 3327 feet to 3655 feet at the rate of two barrels of oil per day with a gas/oil ratio of 500 to 1.

Humphrey Queen Unit Well No. 16 located in Unit K, Section 3, total depth 3546 feet, producing open hole from the interval 3315 feet to 3546 feet at the rate of one barrel of oil per day with a gas/oil ratio of 1,000 to 1.



Langlie-Mattix Queen Unit Well No. 10 located in Unit C, Section 15, total depth 3405 feet, producing open hole from the interval of 1206 feet to 3405 feet at the rate of seven barrels per day with a gas/oil ratio of 143 to 1.

All of the above-described wells are located in Township 25 South, Range 17 East, N.M.P.M.

3. At the locations of the respective wells, Well No. 13 is 38 feet above the defined vertical limits of the Langlie-Mattix Oil Pool. Well No. 16 is 65 feet above the vertical limits of said pool and Well No. 10 is 36 feet above the vertical limits of said pool. It is therefore necessary that the vertical limits of the Langlie-Mattix Oil Pool be extended at least to a point 165 feet above the base of the Seven Rivers Formation as its upper vertical limit.

Mobil requests the Division to set this matter for hearing before an Examiner on June 17, 1981, and following such hearing to issue the order of the Division amending Rule No. 2-330 to extend the upper vertical limits of the Langlie-Mattix Oil Pool as hereinabove set forth.

Respectfully submitted,

MOBIL PRODUCING TEXAS & NEW MEXICO INC.

By: MODRALL SPERLING ROSS & SISK, P.A.

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ATTORNEYS FOR MOBIL PRODUCING TEXAS
& NEW MEXICO INC.

ROUGH

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

JHR
CASE NO. 7276

Order No. A-6716

2/1
APPLICATION OF MOBIL PRODUCING TEXAS
AND NEW MEXICO INC. FOR THE EXTENSION OF THE
VERTICAL LIMITS OF THE LANGLIE-MATTIX POOL,
LEA COUNTY, NEW MEXICO. *JSu*

ORDER OF THE DIVISION

BY THE DIVISION:

BSL
This cause came on for hearing at 9 a.m. on June 17,
19 81, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of June, 19 81, the
Division Director, 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 Division has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, Mobil Producing Texas and New Mexico
Inc., seeks the contraction of the vertical limits of the Jalmat
Pool and the upward extension of the vertical limits of the

Langlie-Mattix Pool to the following depths underlying the following 40-acre tracts in Township 25 South, Range 37 East:

NE/4 SE/4 of Section 4: 3327 feet;

NE/4 SW/4 of Section 3: 3215 feet; and

NE/4 NW/4 of Section 15: 3206 feet.

(3) That the vertical limits of the Jalmat Pool as defined by Order No. R-520, dated August 12, 1954, include the Tansill and Yates formations and all but the lowermost 100 feet of the Seven Rivers formation.

(4) That the vertical limits of the Langlie-Mattix Pool, as defined by said Order No. R-520, include the lowermost 100 feet of the Seven Rivers formation and all of the Queen formation.

(5) That there has been some disparity among some geologists as to the actual base of the Seven Rivers formation and the top of the Queen formation and hence as to the location of the 100-foot marker separating the Jalmat and Langlie-Mattix Pools.

(6) That as a result of this disparity, the subject well and certain other wells in the general area which are classified as Langlie-Mattix wells have perforations extending across the aforesaid 100-foot marker in the Seven Rivers formation and into the Jalmat Pool.

(7) That such crossing over from one pool into the other in this case appears to be an unintentional error.

(8) That to rectify the aforesaid error would require workover operations on the subject well which would be expensive and might endanger the productivity of the subject well, and would actually serve no beneficial purpose, inasmuch as the production and reservoir characteristics of the perforations immediately above and below the 100-foot marker are quite similar.

(9) That a reasonable solution to the problem is to contract the vertical limits of the Jalmat Pool and to adjust the vertical limits of the Langlie-Mattix Pool upward to the depths

described in Finding No. (2) above in order to annul data the present perforations in the Lower Seven Rivers formation which are actually within the present subject vertical limits. Humphrey Queen Unit Wells Nos. 15 and 16 and Langlie Mattix Queen Unit Well No. 10, respectively.

(10) That such adjustment will prevent waste and should not impair correlative rights and should be approved.

IT IS THEREFORE ORDERED:

(1) That the lowermost vertical limit of the Jalmat Pool underlying the following tracts in Township 26 South, Range 97 East, NMPM, Lea County, New Mexico, subject to the indicative Tract Oil Producing Taxes and New Mexico wells is hereby contracted to the depth shown ^{as the new pool boundary,} and the uppermost limit of the Langlie Mattix Pool underlying each of said tracts is hereby extended upward to the same subsurface depth:

Tract	Section	Well Name and No	New Pool Boundary
NE 1/4 SE 1/4	4	Humphrey Unit No. 13	3327 feet
NE 1/4 SW 1/4	3	Humphrey Unit No. 16	3215 feet
NE 1/4 NW 1/4	15	Langlie Mattix Unit No. 10	3206 feet

(2) That the effective date of this order with respect to each of the aforesaid wells shall be the date said well was perforated outside the above the old vertical limit of the Langlie Mattix Pool.

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

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