

CASE 3786: Application of TEXACO
INC. FOR RULES FOR THE NORTH
PADUCA-DELAWARE POOL, LEA COUNTY.

Case Number

3786

Application
Transcripts.

Small Exhibits

ETC.

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. 3786
Order No. R-3437-B

THE MATTER OF CASE NO. 3786 BEING REOPENED
PURSUANT TO THE PROVISIONS OF ORDER NO. R-
3437-A, WHICH ORDER CONTINUED THE SPECIAL
RULES FOR THE NORTH PADUCA-DELAWARE POOL,
LEA COUNTY, NEW MEXICO, AS PROMULGATED BY
ORDER NO. R-3437.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 6, 1971,
at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 15th day of January, 1971, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That by Order No. R-3437, dated June 18, 1968, temporary
Special Rules and Regulations were promulgated for the North Paduca-
Delaware Pool, Lea County, New Mexico.

(3) That by Order No. R-3437-A, dated July 17, 1969, said
temporary Special Rules and Regulations were continued in full
force and effect for an additional period of 18 months.

(4) That pursuant to the provisions of Order No. R-3437-A,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the Special Rules and Regulations
should not be discontinued.

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CASE No. 3786

Order No. R-3437-B

(5) That the evidence establishes that the North Paduca-Delaware Pool has been and will be efficiently and economically drained and developed under the Special Rules and Regulations promulgated by Orders Nos. R-3437 and R-3437-A.

(6) That the Special Rules and Regulations promulgated by Orders Nos. R-3437 and R-3437-A have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil and gas in the pool.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Orders Nos. R-3437 and R-3437-A should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the North Paduca-Delaware Pool, Lea County, New Mexico, promulgated by Orders Nos. R-3437 and R-3437-A, are hereby continued in full force and effect until further order of the Commission.

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

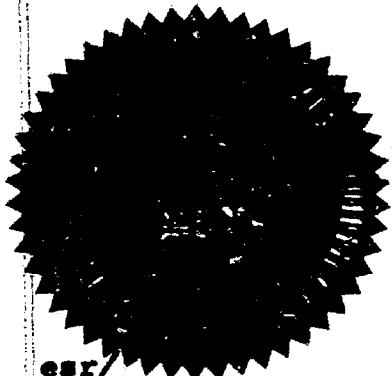
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


BRUCE KING, Chairman


ALEX C. ARMILLO, Member


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



esr/



PETROLEUM PRODUCTS
May 13, 1968

DOMESTIC PRODUCING DEPARTMENT
MIDLAND DIVISION

TEXACO INC.
P. O. BOX 8100
MIDLAND, TEXAS 79701

HEARING REQUEST - FIELD RULES
NORTH PADUCA (DELAWARE) OIL POOL
LEA COUNTY, NEW MEXICO

New Mexico Oil
Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. A. L. Porter, Jr.

Gentlemen:

It is respectfully requested that a hearing be scheduled on the first available examiner hearing docket in Santa Fe, New Mexico, to consider the application of Texaco Inc. to promulgate Field Rules to govern the development and production of oil and gas reserves in the North Paduca (Delaware) Oil Pool in Lea County, New Mexico.

The rules to be recommended at the above requested hearing will include provisions for 40 acre oil proration units and 160 acre gas proration units with wells to be located not closer than 330' to any tract or lease boundary or quarter/quarter section line, nor closer than 660' to the nearest well completed in the same pool. A limiting gas-oil ratio of 3000 standard cubic feet per barrel of oil will be recommended. The source of supply in the North Paduca (Delaware) Oil Pool is the Delaware Sand formation. Two wells have been completed in this oil pool to date, being Texaco Inc. Cotton Draw Unit Wells No. 69 and 70.

Attached is a list showing all working interest owners in the Cotton Draw Unit, each of which is receiving a copy of this hearing request. In addition, all offset operators as listed below are receiving a copy, as well as the office of the United States Geological Survey in Roswell and the Commissioner of Public Lands in Santa Fe.

Yours very truly,

C. L. Whigham
Division Proration Engineer

CLW:jl
Attach.

cc: Beard Oil Company - 2000 Classen Blvd. - Oklahoma City, Oklahoma
Continental Oil Company - Box 460 - Hobbs, New Mexico
Getty Oil Company - Vaughn Building - Midland, Texas 79701
Gulf Oil Corporation - Petroleum Building - Roswell, New Mexico
Pauley Petr. Corp. - 10,000 Santa Monica Blvd. - Los Angeles, Calif.
Comm. of Public Lands - Box 1148 - Santa Fe, New Mexico 87501
U.S. Geol. Survey - c/o Regional Oil & Gas Supervisor - Drawer 1857 -
Roswell, New Mexico 88201

COTTON DRAW UNIT
WORKING INTEREST OWNERS
MAILING LIST

Pauley Petroleum Inc.
10,000 Santa Monica Blvd.
Los Angeles 25, California 90067

Perry R. Bass
1200 Fort Worth National Bank Building
Fort Worth, Texas

S.W. Richardson Estate
1200 Fort Worth National Bank Building
Fort Worth, Texas

Continental Oil Company
Box 460
Hobbs, N.M. 88240

Gulf Oil Corporation
Petroleum Building
Roswell, New Mexico

Humble Oil & Refining Company
Box 1600
Midland, Texas

Beard Oil Company
2000 Classen Blvd. Room 610
Oklahoma City, Oklahoma

Union Oil Company of California
P.O. Box 671
Midland, Texas

Mrs. Peggy P. Jennings
1200 Fort Worth National Bank Building
Fort Worth, Texas

Mr. E.B. Todhunter
Box 852
Roswell, New Mexico

Tenneco Oil Company
Box 1031
Midland, Texas

Panther City Investment Company
Fort Worth National Bank Bldg.
Fort Worth, Texas

Mr. Wm. G. Ross
Gulf Building
Midland, Texas 79701

Texaco Inc.
P.O. Box 3109
Midland, Texas 79701

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 6, 1971

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

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

CASE 4463: Continued from the November 18, 1970, Examiner Hearing

Application of Roger C. Hanks for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the NE/4 of Section 18, Township 9 South, Range 36 East, Vada-Pennsylvanian Pool, Lea County, New Mexico, said acreage to be dedicated to applicant's Ford Federal Well No. 1 located in the NW/4 NE/4 of Section 18. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4477: Application of Gulf Oil Corporation for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Northwest Eumont Unit Waterflood Project, Eumont Pool, by the conversion to water injection of thirteen additional wells in Sections 26, 27, 33, and 34, of Township 19 South, Range 36 East, Lea County, New Mexico.

CASE 3786: (Reopened):

In the matter of Case No. 3786 being reopened pursuant to the provisions of Order No. R-3437-A, which order extended for a period of 18 months the special rules and regulations for the North Paduca-Delaware Pool, Lea County, New Mexico. All interested persons may appear and show cause why the gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons should not be reduced and why the special rules and regulations should not be discontinued.

CASE 4455: Continued from the November 18, 1970, Examiner Hearing

In the matter of the hearing called by the Oil Conservation Commission for the creation of a new oil pool and for the assignment of a discovery allowable, Sandoval County, New Mexico. The Commission, at the request of Refiners Petroleum Corporation, will consider the creation of a new oil pool for the production of oil from the Dakota formation comprising the NE/4 of Section 25, Township 22 North, Range 3 West, Sandoval County, New Mexico, said pool having been discovered by said corporation's Cuba Union Well No. 1 located in Unit A of said Section 25. Also to be considered will be the assignment of approximately 34,390 barrels of discovery allowable to said well.

- CASE 4478: Application of Refiners Petroleum Corporation for the creation of a new oil pool and special rules therefor, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Graneros-Dakota formation for its Cuba-Union Well No. 1 located in Unit A of Section 25, Township 22 North, Range 3 West, Sandoval County, New Mexico, and for the promulgation of special rules therefor, including a provisions for 160-acre spacing units.
- CASE 4479: Application of Eastland Oil Company for the creation of a new pool, assignment of discovery allowable, and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks creation of a new pool for the production of oil from the Grayburg and San Andres formations for its Arco Federal Well No. 1 located in the NW/4 NW/4 of Section 5, Township 18 South, Range 31 East, Eddy County, New Mexico, and for the assignment of an oil discovery allowable to said well. Applicant further seeks the adoption of special pool rules to provide for a limiting gas-oil ratio of 5,000 to one.
- CASE 4480: Application of Coastal States Gas Producing Company for expansion of a unit area, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand the Flying "M" (San Andres) Unit Area, authorized by Order No. R-3220, to include some 879 acres, more or less, of Federal, State and Fee lands in Townships 9 and 10 South, Range 33 East, Flying "M" San Andres Pool, Lea County, New Mexico.
- CASE 4481: Application of Delaware-Apache Corporation for a non-standard proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the SW/4 NE/4 and NW/4 SE/4 of Section 20, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled at a standard location in the SW/4 NE/4 of said Section 20.
- CASE 4482: Application of the Petroleum Corporation for the creation of a new pool, special rules therefor, and exceptions to Orders Nos. R-3221 and R-4070, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn oil pool for its Petco State Well No. 1 located in Unit P of Section 26, Township 19 South, Range 29 East, Eddy County, New Mexico, and for the promulgation of special rules therefor, including provisions for 160-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil. Applicant further seeks exceptions to Orders Nos. R-3221 and R-4070, respectively, to permit the disposal of water produced by said well in an unlined surface pit and to flare gas produced by said well.
- CASE 3709: (Reopened)
In the matter of Case 3709 being reopened pursuant to the provisions of Order No. R-3366-A, which order extended 80-acre spacing units for the Akah Nez-Devonian Oil Pool, San Juan County, New Mexico, for a period of two years. All interested persons may appear and show cause why said pool should not be developed on 40-acre spacing units.

- CASE 4483: Application of Pubco Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Kemnitz-Lower Wolfcamp East Unit Area comprising the SW/4 and W/2 SE/4 of Section 22, the E/2 NW/4 of Section 27, and the E/2 NE/4 of Section 28, Township 16 South, Range 34 East, Kemnitz-Lower Wolfcamp Pool, Lea County, New Mexico.
- CASE 4484: The application of the Oil Conservation Commission upon its own motion for an order granting an exception to the ninth paragraph of Chapter II, Section 2 of Order No. R-333-F to permit shutting in gas wells for the required shut-in test at some period during the 1971 test season other than immediately following the 7-day deliverability flow test; further to permit measuring the shut-in test pressure during the 8th to 15th day of shut-in of the well rather than on the 8th day as presently required. The above exceptions would be for the 1971 annual deliverability test season only and would be applicable to all wells in San Juan, Rio Arriba, McKinley, and Sandoval Counties, New Mexico, subject to the testing requirements of Chapter II of Order No. R-333-F.
- CASE 4485: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a 240-acre non-standard gas proration unit comprising the NW/4 NW/4, S/2 NW/4, NE/4 SW/4, and S/2 SW/4 of Section 1, Township 25 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its Wells "A" Wells Nos. 2 and 7, located, respectively, in Units E and F of said Section 1. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.
- CASE 4486: Application of Continental Oil Company for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Langlie-Mattix Jack A-29 waterflood project, Langlie-Mattix Pool, by the drilling of an additional injection well at an orthodox location in the SW/4 NW/4 of Section 29, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 4487: Application of Pennzoil United, Inc., for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Strawn formation underlying the W/2 of Section 6, Township 23 South, Range 27 East, South Carlsbad Strawn Gas Pool, Eddy County, New Mexico, said acreage to be dedicated to a well in the W/2 of said Section 6. Also to be considered will be the cost of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4488: Application of Resler and Sheldon for downhole commingling, Lea County, New Mexico. Applicants, in the above-styled cause, seek approval for the downhole commingling of gas and liquids produced from the Jalmat Gas Pool and oil and gas produced from the Langlie-Mattix Oil Pool through a common string of tubing in their Steeler Well No. 1 located in Unit L of Section 20, Township 23 South, Range 37 East, Lea County, New Mexico.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2086 - SANTA FE

87801

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

July 17, 1969

Mr. Booker Kelly
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: Case No. 3766
Order No. R-3437-A
Applicant:
Texaco Inc.

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

Docket to Ken Bateman
ALP/ir

DOCKET MAILED
Date 7-23-70

Copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC

Other

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 3786
Order No. R-3437-A

THE MATTER OF CASE NO. 3786 BEING REOPENED
PURSUANT TO THE PROVISIONS OF ORDER NO. R-
3437, WHICH ORDER ESTABLISHED SPECIAL RULES
FOR THE NORTH PADUCA-DELAWARE POOL, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

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

NOW, on this 17th day of July, 1969, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

- (1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.
- (2) That by Order No. R-3437, dated June 18, 1968, temporary
Special Rules and Regulations were promulgated for the North Paduca-
Delaware Pool, Lea County, New Mexico.
- (3) That pursuant to the provisions of Order No. R-3437,
this case was reopened to allow all operators in the subject pool
to appear and show cause why the Special Rules and Regulations
for the North Paduca-Delaware Pool should not be discontinued.
- (4) That the temporary Special Rules and Regulations for
the North Paduca-Delaware Pool, promulgated by Order No. R-3437,
should be continued in effect for an additional 18-month period

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Order No. R-3437-A

in order to allow the operators in the subject pool sufficient time to gather additional information concerning the reservoir characteristics of the pool.

(5) That this case should be reopened at an examiner hearing in January, 1971, at which time the operators in the subject pool should appear and establish that the gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons will effectively maintain the gas-oil contact in the subject pool, and that the Special Rules and Regulations should be continued in effect.

IT IS THEREFORE ORDERED:

(1) That the temporary Special Rules and Regulations for the North Paduca-Delaware Pool promulgated by Order No. R-3437 are hereby continued in full force and effect for an additional 18-month period.

(2) That this case shall be reopened at an examiner hearing in January, 1971, at which time the operators in the subject pool shall appear and show cause why the gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons should not be reduced and why the Special Rules and Regulations should not be discontinued.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. GARGO, Chairman

ALEX J. ARMISTO, Member

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

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. 3786
Order No. R-3437

APPLICATION OF TEXACO INC.
FOR SPECIAL POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 5, 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 18th day of June, 1968, 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, Texaco Inc., seeks the promulgation
of special rules and regulations for the North Paduca-Delaware
Pool, Lea County, New Mexico, including a provision for classi-
fication of oil and gas wells in said pool, a limiting gas-oil
ratio of 3,000 to one, and 40-acre spacing for oil wells and
160 acre-spacing for gas wells.

(3) That the reservoir characteristics of the subject pool
indicate that the gas area can be efficiently and economically
drained and developed on 160-acre spacing, and that the oil area
can be efficiently and economically drained and developed on
40-acre spacing.

(4) That the reservoir characteristics of the subject pool
presently available justify the definition of a gas well as a

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Order No. R-3437

well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons.

(5) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons.

(6) That temporary special rules and regulations providing for 160-acre gas well spacing and 40-acre oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

(7) That the temporary special rules and regulations should provide for the classification of a gas well as a well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons and should provide for the establishment of a gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.

(8) That the temporary special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.

(9) That this case should be reopened in July, 1969, at which time the operators in the subject pool should be required to establish that a gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons will effectively maintain the gas-oil contact in the subject pool, and that the special rules and regulations should be continued in effect.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the North Paduca-Delaware Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH PADUCA-DELAWARE POOL

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

RULE 2. (a) Each gas well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 2. (b) Each oil well shall be located on a standard unit containing 40 acres, more or less, consisting of a governmental quarter-quarter section.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 (a) without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental quarter section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the quarter section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified

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Order No. R-3437

by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well, oil or gas, shall be located no nearer than 330 feet to any quarter-quarter section line, except that any well drilled in a known gas productive area shall be located within 150 feet of the center of a quarter-quarter section.

RULE 5. A well shall be classified as a gas well if it has a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons. A well shall be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons. The simultaneous dedication of any acreage to an oil well and a gas well is prohibited.

RULE 6. The gas-liquid ratio limitation shall be 3,000 cubic feet of gas per barrel of liquid hydrocarbons.

RULE 7. An oil well which has 40 acres dedicated to it shall be permitted to produce an amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 40-acre oil proration unit, the operator may produce the allowable assigned to the 40-acre unit from the wells on the unit in any proportion.

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 40. In the event there is more than one gas well on a 160-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion.

RULE 8. The operator of each newly completed well shall cause a gas-liquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under a temporary gas allowable assigned

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in accordance with Rule 11. Any well which is shut in shall be exempted from the gas-liquid ratio test requirement so long as it remains shut in. The initial gas-liquid ratio test shall be taken in the manner prescribed by Rule 9. If the gas-liquid ratio is 30,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

No gas shall be flared or vented from any well classified as an oil well more than 60 days after the well begins to produce or 60 days after the effective date of these rules, whichever is later. Any operator that desires to obtain an exception to the foregoing provisions for a well classified as an oil well shall submit to the Secretary-Director of the Commission an application for such exception with a statement setting forth the facts and circumstances justifying it. The Secretary-Director is hereby authorized to grant such an exception if he determines that the granting of it is reasonably necessary. If the Secretary-Director declines to grant administrative approval of the requested exception, the matter shall be set for hearing if the operator so requests.

RULE 9. Gas-liquid ratio tests shall be taken on all wells during the months of January, April, July, and October of each year. The initial gas-liquid ratio test shall suffice as the first quarterly test. Tests shall be 24-hour tests, being the final 24 hours of a 72-hour period during which the well shall be produced at a constant normal rate of production. Results of such tests shall be filed on Commission Form C-116 on or before the 10th day of the following month. At least 72 hours prior to commencement of any such gas-liquid ratio tests, each operator shall file with the Hobbs Office of the Commission a test schedule for its wells, specifying the time each of its wells is to be tested. Copies of the test schedule shall also be furnished to all offset operators.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such special tests shall be taken in accordance with the procedures outlined hereinabove, including notification to the Commission and offset operators.

RULE 10. An initial shut-in pressure test shall be taken on each gas well and shall be reported to the Commission on Form C-125.

RULE 11. Any well completed after the effective date of these rules shall receive an allowable only upon receipt by the Commission's Hobbs Office of Commission Forms C-104 and C-116, properly executed. The District Supervisor of the Commission's Hobbs Office is hereby authorized to assign a temporary gas allowable to wells connected to a gas transportation facility during the recovery of load oil, which allowable shall not exceed the number of cubic feet of gas obtained by multiplying the daily top unit allowable for the pool by the limiting gas-liquid ratio for the pool.

RULE 12. Balancing dates shall be 7 o'clock a.m. January the first and 7 o'clock a.m. July the first, and the periods of time bounded by these dates shall be gas proration periods.

RULE 13. Any gas well which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14. Production during any one month of a gas proration period in excess of the allowable assigned to a well for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

RULE 15. Any well which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period, provided that such overproduction shall be compensated for during such succeeding period. Any well which has not compensated for the overproduction carried into a gas proration period by the end of such proration period shall be shut in until such overproduction is compensated for. If, at any time, a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that month and each succeeding month until the well is overproduced less than three times its current monthly allowable.

RULE 16. The allowable assigned to a well during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.

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CASE No. 3786

Order No. R-3437

RULE 17. The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.

RULE 18. The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.

RULE 19. Each purchaser or taker of gas shall submit a report to the Commission so as to reach the Commission on or before the 15th day of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the oil proration schedule.

RULE 20. Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and purchaser in writing of the date of allowable cancellation and the reason therefor.

RULE 21. All transporters or users of gas shall file gas well-connection notices with the Commission as soon as possible after the date of connection.

RULE 22. Allowables to wells whose classification has changed from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

IT IS FURTHER ORDERED:

(1) That all operators shall, prior to July 1, 1968, file with the Commission Form C-102 for each well showing the acreage dedicated to the well.

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CASE No. 3786

Order No. R-3437

(2) That all operators shall take new gas-oil ratio tests on all wells and file the results thereof with the Commission on Form C-116 prior to August 1, 1968; that the daily tolerance provision of Commission Rule 502 I is hereby waived for the purpose of testing wells at the allowable rate authorized by these rules.

(3) That this case shall be reopened at an examiner hearing in July, 1969, at which time the operators in the subject pool shall show cause why the gas-liquid ratio limitation of 3,000 cubic feet of gas per barrel of liquid hydrocarbons should not be reduced and why the special rules and regulations promulgated by this order should not be discontinued.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


GORTON B. HAYS, Member


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


esr/



PETROLEUM PRODUCTS

May 13, 1968

DOMESTIC PRODUCING DEPARTMENT
MIDLAND DIVISION

TEXACO INC.
P. O. BOX 8100
MIDLAND, TEXAS 79701

**HEARING REQUEST - FIELD RULES
NORTH PADUCA (DELAWARE) OIL POOL
LEA COUNTY, NEW MEXICO**

New Mexico Oil
Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Call 3-4-68
MAY 15 AM 8 41

Attn: Mr. A. L. Porter, Jr.

Gentlemen:

It is respectfully requested that a hearing be scheduled on the first available examiner hearing docket in Santa Fe, New Mexico, to consider the application of Texaco Inc. to promulgate Field Rules to govern the development and production of oil and gas reserves in the North Paduca (Delaware) Oil Pool in Lea County, New Mexico.

The rules to be recommended at the above requested hearing will include provisions for 40 acre oil proration units and 160 acre gas proration units with wells to be located not closer than 330' to any tract or lease boundary or quarter/quarter section line, nor closer than 660' to the nearest well completed in the same pool. A limiting gas-oil ratio of 3000 standard cubic feet per barrel of oil will be recommended. The source of supply in the North Paduca (Delaware) Oil Pool is the Delaware Sand formation. Two wells have been completed in this oil pool to date, being Texaco Inc. Cotton Draw Unit Wells No. 69 and 70.

Attached is a list showing all working interest owners in the Cotton Draw Unit, each of which is receiving a copy of this hearing request. In addition, all offset operators as listed below are receiving a copy, as well as the office of the United States Geological Survey in Roswell and the Commissioner of Public Lands in Santa Fe.

Yours very truly,

C. L. Whigham

C. L. Whigham
Division Proration Engineer

CLW:jl
Attach.

cc: Beard Oil Company - 2000 Classen Blvd. - Oklahoma City, Oklahoma
Continental Oil Company - Box 460 - Hobbs, New Mexico
Getty Oil Company - Vaughn Building - Midland, Texas 79701
Gulf Oil Corporation - Petroleum Building - Roswell, New Mexico
Pauley Petr. Corp. - 10,000 Santa Monica Blvd. - Los Angeles, Calif.
Comm. of Public Lands - Box 1148 - Santa Fe, New Mexico 87501
U.S. Geol. Survey - c/o Regional Oil & Gas Supervisor - Drawer 1857 -
Roswell, New Mexico 88201

DOCKET MAILED

5723-68

COTTON DRAW UNIT
WORKING INTEREST OWNERS
MAILING LIST

Pauley Petroleum Inc.
10,000 Santa Monica Blvd.
Los Angeles 25, California 90067

Perry R. Bass
1200 Fort Worth National Bank Building
Fort Worth, Texas

S.W. Richardson Estate
1200 Fort Worth National Bank Building
Fort Worth, Texas

Continental Oil Company
Box 460
Hobbs, N.M. 88240

Gulf Oil Corporation
Petroleum Building
Roswell, New Mexico

Humble Oil & Refining Company
Box 1600
Midland, Texas

Beard Oil Company
2000 Classen Blvd. Room 610
Oklahoma City, Oklahoma

Union Oil Company of California
P.O. Box 671
Midland, Texas

Mrs. Peggy P. Jennings
1200 Fort Worth National Bank Building
Fort Worth, Texas

Mr. E.B. Todhunter
Box 852
Roswell, New Mexico

Tenneco Oil Company
Box 1031
Midland, Texas

Panther City Investment Company
Fort Worth National Bank Bldg.
Fort Worth, Texas

Mr. Wm. G. Ross
Gulf Building
Midland, Texas 79701

Texaco Inc.
P.O. Box 3109
Midland, Texas 79701

July 7, 1969

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Please be advised that the New Mexico Electric Service Company has, together with Texaco, Inc., a gas contract which is applicable to the casinghead gas produced in the North Paducah Delaware Oil Pool.

New Mexico Electric is presently purchasing all of the gas tendered to it and that the gas is being put to beneficial use. Further, that New Mexico Electric will put to a beneficial use all volumes that may be tendered to it from the North Paducah Delaware.

Very truly yours,


J. F. MADDOX
President

JFM/r1

DOCKET NO. 19-69

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 9, 1969

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

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

CASE 4160: Application of Roger C. Hanks for pool redelineation,
Roosevelt County, New Mexico. Applicant, in the above-
styled cause, seeks the redelineation of certain pool
boundaries to include the deletion of the NE/4 of Section
29 from the South Prairie-Cisco Pool and the extension of
the Middle Allison-Pennsylvanian Pool to include all of
Section 29, the SE/4 of Section 30, and the N/2 of Section
32, all in Township 8 South, Range 36 East, Roosevelt
County, New Mexico.

CASE 4161: Application of Roger C. Hanks for special pool rules,
Lea County, New Mexico. Applicant, in the above-styled
cause, seeks the promulgation of special pool rules for
the North Mescalero-Cisco Pool, Lea County, New Mexico,
including a provision for 160-acre spacing and proration
units and the assignment of 80-acre allowables.

CASE 3786: (Reopened)

In the matter of Case No. 3786 being reopened pursuant to
the provisions of Order No. R-3437, which order established
special rules and regulations for the North Paduca-Delaware
Pool, Lea County, New Mexico, including provisions for the
classification of and spacing for oil and gas wells and a
special gas-liquid ratio limitation. All interested parties
may appear and show cause why the special rules and regula-
tions should not be discontinued.

CASE 4162: Application of Western States Producing Company for a dual
completion and salt water disposal, Roosevelt County, New
Mexico. Applicant, in the above-styled cause, seeks
authority to dually complete its State 30 Well No. 2 located
in Unit M of Section 30, Township 7 South, Range 33 East,
Roosevelt County, New Mexico, in such a manner as to permit
the production of oil from the Chaveroo-San Andres Pool and
the disposal of produced salt water through 8 5/8 X 4 1/2 inch
casing-casing annulus into the Yates, Seven Rivers, and Queen
formations in the open-hole interval from approximately 1825
feet to 3785 feet.

- CASE 4163: Application of Pan American Petroleum Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 181-acre non-standard gas proration unit for its Pike Federal Well No. 1 located in Unit A of Section 6, Township 23 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico, said unit to comprise the N/2 N/2 of said Section 6.
- CASE 4164: Application of Mobil Oil Corporation for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Fristoe Well No. 8 at an unorthodox location 2470 feet from the North line and 430 feet from the East line of Section 3, Township 25 South, Range 37 East, Langlie Mattix Pool, Lea County, New Mexico.
- CASE 4165: Application of Sam Boren for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.
- CASE 4166: Application of Sam Boren for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Barbera State "A" Well No. 1 located in Unit P of Section 6, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Bagley-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres and Glorieta formations in the open-hole interval from approximately 4060 feet to 6562 feet.
- CASE 4167: Application of Charles B. Read for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Hobbs "Y" Well No. 1 located in Unit J of Section 29, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Hightower-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Glorieta, Yeso, and Abo formations in the open-hole interval from approximately 4195 feet to 7720 feet.

- CASE 4168: Application of Charles B. Read for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers Reef formation in the open-hole interval between 3783 feet and 3797 feet in his Sinclair State Well No. 1 located 2310 feet from the South and West lines of Section 2, Township 21 South, Range 33 East, Lynch Pool, Lea County, New Mexico.
- CASE 4169: Application of Mask, Jennings, Keohane and Westall for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicants' wells in the E/2 NW/4 and the NE/4 of Section 2, Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico. Applicants seek authority to dispose of salt water produced by said wells in an unlined surface pit located in Unit C of said Section 2.
- CASE 4170: Application of H. C. Hood for pool redelineation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the High Plains-Pennsylvanian Pool by the deletion of the SW/4 of Section 14 and the SE/4 of Section 15, Township 14 South, Range 34 East, Lea County, New Mexico.

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2000
SANTA FE

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

June 18, 1968

Mr. Booker Kelly
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: Case No. 3786
Order No. R-3437
Applicant:
Texaco Inc.

Dear Sir:

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

Very truly yours,

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

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Elvis A. Utz - Gas Proration Department

DOCKET MARKED
Date 6-25-69

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. 3246
Order No. R-2935

APPLICATION OF PAUL DeCLEVA
FOR AN AMENDMENT TO ORDER
NO. R-2691, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 12, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 13th day of July, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Paul DeCleva, seeks amendment of Order No. R-2691 to establish special rules and regulations governing the Mesa-Queen Pool in Lea County, New Mexico.

(3) That the applicant seeks the promulgation of rules classifying wells as gas wells or oil wells, establishing spacing units for gas wells and oil wells, and establishing proration rules for gas wells.

(4) That the applicant also seeks the assignment of a retroactive gas allowable to his Tidewater State Well No. 1 located 660 feet from the North line and 660 feet from the

West line of Section 17, Township 16 South, Range 32 East, NMPM, Lea County, New Mexico, said allowable to be computed under the proposed rules from the effective date of Order No. R-2691.

(5) That the reservoir characteristics of the subject pool indicate that the gas area can be efficiently and economically drained and developed on 160-acre spacing, and that the oil area can be efficiently and economically drained and developed on 40-acre spacing.

(6) That the reservoir characteristics of the subject pool presently available justify the definition of a gas well as a well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons.

(7) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of liquid hydrocarbons.

(8) That temporary special rules and regulations providing for 160-acre gas well spacing and 40-acre oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

(9) That the temporary special rules and regulations should provide for the classification of a gas well as a well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons and should provide for the establishment of a gas-liquid ratio of 5,000 cubic feet of gas per barrel of liquid hydrocarbons in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.

(10) That the temporary special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.

(11) That this case should be reopened in January, 1966, at which time the operators in the subject pool should be required

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CASE No. 3246
Order No. R-2935

to establish that a gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of liquid hydrocarbons will effectively maintain the gas-oil contact in the subject pool, and that the special rules and regulations should be continued in effect.

(12) That the applicant has not established that the assignment of a retroactive allowable to his Tidewater State Well No. 1 would prevent waste or protect correlative rights.

(13) That the applicant's request for the assignment of a retroactive allowable to his Tidewater State Well No. 1 should be denied.

IT IS THEREFORE ORDERED:

That, effective July 1, 1965, Order No. R-2691 is hereby amended to promulgate temporary Special Rules and Regulations for the Mesa-Queen Pool as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
MESA-QUEEN POOL

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

RULE 2. (a) Each gas well shall be located on a standard unit containing 160 acres, more or less, consisting of a governmental quarter section.

RULE 2. (b) Each oil well shall be located on a standard unit containing 40 acres, more or less, consisting of a governmental quarter-quarter section.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 (a) without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental quarter section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the quarter section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well, oil or gas, shall be located no nearer than 330 feet to any quarter-quarter section line.

RULE 5. A well shall be classified as a gas well if it has a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons. A well shall be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons. The simultaneous dedication of any acreage to an oil well and a gas well is prohibited.

RULE 6. The gas-liquid ratio limitation shall be 5,000 cubic feet of gas per barrel of liquid hydrocarbons.

RULE 7. An oil well which has 40 acres dedicated to it shall be permitted to produce an amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 40-acre oil proration unit, the operator may produce the allowable assigned to the 40-acre unit from the wells on the unit in any proportion.

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CASE No. 3246

Order No. R-2935

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is ~~40~~ 60. In the event there is more than one gas well on a 160-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion.

RULE 8. The operator of each newly completed well shall cause a gas-liquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under a temporary gas allowable assigned in accordance with Rule 11. Any well which is shut in shall be exempted from the gas-liquid ratio test requirement so long as it remains shut in. The initial gas-liquid ratio test shall be taken in the manner prescribed by Rule 9. If the gas-liquid ratio is 30,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

No gas shall be flared or vented from any well classified as an oil well more than 60 days after the well begins to produce or 60 days after the effective date of these rules, whichever is later. Any operator that desires to obtain an exception to the foregoing provisions for a well classified as an oil well shall submit to the Secretary-Director of the Commission an application for such exception with a statement setting forth the facts and circumstances justifying it. The Secretary-Director is hereby authorized to grant such an exception if he determines that the granting of it is reasonably necessary. If the Secretary-Director declines to grant administrative approval of the requested exception, the matter shall be set for hearing if the operator so requests.

RULE 9. Gas-liquid ratio tests shall be taken on all wells during the months of January, April, July, and October of each year. The initial gas-liquid ratio test shall suffice as the first quarterly test. Tests shall be 24-hour tests, being the final 24 hours of a 72-hour period during which the well shall be produced at a constant normal rate of production. Results of such tests shall be filed on Commission Form C-116 on or before the 10th day of the following month. At least 72 hours prior to

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CASE No. 3246
Order No. R-2935

commencement of any such gas-liquid ratio tests, each operator shall file with the Hobbs Office of the Commission a test schedule for its wells, specifying the time each of its wells is to be tested. Copies of the test schedule shall also be furnished to all offset operators.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such special tests shall be taken in accordance with the procedures outlined hereinabove, including notification to the Commission and offset operators.

RULE 10. An initial shut-in pressure test shall be taken on each gas well and shall be reported to the Commission on Form C-125.

RULE 11. Any well completed after the effective date of these rules shall receive an allowable only upon receipt by the Commission's Hobbs Office of Commission Forms C-104 and C-116, properly executed. The District Supervisor of the Commission's Hobbs Office is hereby authorized to assign a temporary gas allowable to wells connected to a gas transportation facility during the recovery of load oil, which allowable shall not exceed the number of cubic feet of gas obtained by multiplying the daily top unit allowable for the pool by the limiting gas-liquid ratio for the pool.

RULE 12. Balancing dates shall be 7 o'clock a.m. January the first and 7 o'clock a.m. July the first, and the periods of time bounded by these dates shall be gas proration periods.

RULE 13. Any gas well which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14. Production during any one month of a gas proration period in excess of the allowable assigned to a well for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

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CASE No. 3246
Order No. R-2935

RULE 15. Any well which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period, provided that such overproduction shall be compensated for during such succeeding period. Any well which has not compensated for the overproduction carried into a gas proration period by the end of such proration period shall be shut in until such overproduction is compensated for. If, at any time, a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that month and each succeeding month until the well is overproduced less than three times its current monthly allowable.

RULE 16. The allowable assigned to a well during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.

RULE 17. The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.

RULE 18. The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.

RULE 19. Each purchaser or taker of gas shall submit a report to the Commission so as to reach the Commission on or before the 15th day of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the oil proration schedule.

RULE 20. Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and

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CASE No. 3246

Order No. R-2935

purchaser in writing of the date of allowable cancellation and the reason therefor.

RULE 21. All transporters or users of gas shall file gas well-connection notices with the Commission as soon as possible after the date of connection.

RULE 22. Allowables to wells whose classification has changed from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

IT IS FURTHER ORDERED:

(1) That all operators shall, prior to August 1, 1965, file with the Commission Form C-102 for each well showing the acreage dedicated to the well.

(2) That all operators shall take new gas-oil ratio tests on all wells and file the results thereof with the Commission on Form C-116 prior to August 1, 1965; that the daily tolerance provision of Commission Rule 502 I is hereby waived for the purpose of testing wells at the allowable rate authorized by these rules.

(3) That this case shall be reopened at an examiner hearing in January, 1966, at which time the operators in the subject pool shall show cause why the gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of liquid hydrocarbons should not be reduced and why the special rules and regulations promulgated by this order should not be discontinued.

(4) That the applicant's request for assignment of a retro-active gas allowable to his Tidewater State Well No. 1 is hereby denied.

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

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CASE No. 3246

Order No. R-2935

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 5, 1968

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

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

- CASE 3777: Application of Atlantic Richfield Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Bough "C" zone of the Pennsylvanian formation in its State AE Well No. 2 located in Unit L of Section 36, Township 8 South, Range 36 East, Allison-Pennsylvanian Pool, Roosevelt County, New Mexico, in the perforated interval from 9662 feet to 9672 feet.
- CASE 3778: Application of Atlantic Richfield Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State BH Well No. 1 located 660 feet from the North and West lines of Section 13, Township 19 South, Range 34 East, Quail-Queen Pool, Lea County, New Mexico, in such a manner as to permit production of oil from 5080 feet to 5136 feet in the lower Queen formation through tubing and the disposal of produced salt water into the upper Queen formation through the casing-tubing annulus in the perforated interval from 4820 feet to 4830 feet.
- CASE 3779: Application of Shenandoah Oil Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Yates, Seven Rivers, Queen, and Grayburg formations through five wells located in units F and N of Section 29, and units A, G, and I of Section 30, all in Township 18 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.
- CASE 3780: Application of Amerada Petroleum Corporation for an amendment to Order No. R-3407, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3407, which authorized the drilling of a water injection well in its Langlie-Mattix Woolworth unit waterflood project at an unorthodox location 75 feet from the North line and 2635 feet from the West line of Section 27, Township 24 South, Range 37 East, Lea County, New Mexico. Applicant now proposes to locate said well 75 feet from the North line and 2540 feet from the West line of said Section 27.

- CASE 3781: Application of Sinclair Oil & Gas Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water by injection into the Permo-Pennsylvanian formation in the interval 10,434 feet to 11,537 feet in the Cities Service State "AW" well No. 4 located in Unit I of Section 35, Township 15 South, Range 36 East, Dean Field, Lea County, New Mexico.
- CASE 3782: Application of Pan American Petroleum Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Seven Rivers and Queen formations underlying its Cortland Myers unit area through three wells located in units F, J, and P of Section 22, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 3783: Application of Pan American Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Cortland Myers Unit Area comprising 240 acres, more or less, of Federal lands in Section 22, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 3784: Application of Pan American Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North King Camp Unit Area comprising 14,697 acres, more or less, of State, Federal, and fee lands in Township 13 South, Ranges 29 and 30 East, Chaves County, New Mexico.
- CASE 3785: Application of Pan American Petroleum Corporation for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Poitevent Gas "Com" Well No. 1 at an unorthodox gas well location 990 feet from the North line and 1650 feet from the East line of Section 11, Township 15 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, in exception to the pool rules which require wells in said pool to be located in the NW/4 or SE/4 of the section.

Page -3-
Docket No. 17-68
June 5, 1968 Examiner Hearing

CASE 3786: Application of Texaco Inc. for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the North Paduca-Delaware Pool, Lea County, New Mexico, including a provision for classification of oil and gas wells in said pool, a limiting gas-oil ratio of 3000 to one, and 40-acre spacing for oil wells and 160-acre spacing for gas wells. Locations would be no nearer than 330 feet to a quarter-quarter section line.

CASE 3776: (Continued from the May 22, 1968 Examiner Hearing)
Application of J. M. Huber Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Union-State Unit Area comprising 1360 acres, more or less, of State lands in Township 15 South, Range 32 East, Lea County, New Mexico.

ir/

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 9, 1969

EXAMINER HEARING

IN THE MATTER OF:

Case No. 3786 being reopened pursuant
to the provisions of Order No.R-3437,
which order established special rules
and regulations for the North Paduca-
Delware Pool, Lea County, New Mexico,
including provisions for the classi-
fication of and spacing for oil and
gas wells and a special gas-liquid
ratio limitation.

Case No. 3786

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case Number 3786.

MR. HATCH: Case 3786, reopened, reopened pursuant to the provisions of Order No. R-3437, which order established special rules and regulations for the North Paduca-Delaware Pool, Lea County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch and Kelly appearing on behalf of the applicant.

I have one witness, Mr. Examiner, and ask that he be sworn.

(Witness sworn.)

BILLY R. HENSON

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

DIRECT EXAMINATION

BY MR. KELLY:

Q Would you state your name, position and employer, please?

A Billy R. Henson, Texaco, Incorporated in Hobbs. I am the Hobbs District Production Engineer.

Q Mr. Henson, how do you spell your last name?

A H-E-N-S-O-N.

Q And have you previously qualified as an expert witness before this Commission?

A No.

Q Will you give the Examiner a brief resume of your professional education and experience?

A I am a graduate of Texas Tech, 1959, Bachelor of Science Degree in Petroleum Engineering, have eight years of oilfield and related experience, having held various field assignments with Texaco, and holding my present position for some three months.

Q Now, are you familiar with the Paduca-
Delaware Pool?

A Yes, sir.

Q All right.

MR. KELLY: Mr. Examiner, are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

(Whereupon, Applicant's
Exhibits 1 through 3 were
marked for identification.)

Q (By Mr. Kelly) Please refer to what has been marked Exhibit Number One, which is a structure map and a plat of the area, and locate the wells

that were producing at the time of this last hearing in June, 1968?

A In June of 1968, we had Wells Number 69 and 70 in Section 34 producing.

Q And at that time, both of those wells were classified as oil wells, is that correct?

A Yes sir, that's correct.

Q Now, what has happened so far as those two wells since that time?

A Number 70 has been reclassified as a gas well effective March 1st, 1969, in accordance with the special field rules.

Q Is that since the special rules in this pool define as gas well as having a GOR of thirty thousand to one, is that correct?

A That is correct, and this well was producing with a GOR in excess of thirty thousand to one.

Q Now, what new developments have occurred in the pool since June of '68?

A Since June of '68, we drilled Well Number 71 in the southwest quarter of the northwest quarter, which was a dry hole. On the drill stem

test of the pay, what was considered to be pay, we recovered only water, with no show of oil or gas.

Well Number 72 in the southeast quarter of the southeast quarter of 33 has been completed in September of 1968. It's a dry gas well.

Well Number 73 just south of Number 72 was completed in December of 1968, also a dry gas well.

Q Both of these new wells, Number 72 and 73, are off-structure oil and gas contacts, is that right?

A Both wells are completed above the oil-gas contact.

Q And as I understand it, you now have four completed wells in this pool, three of which are classified as a gas well and one which is still classified as an oil well?

A That is correct.

Q And actually, of the gas wells, Number 70 is the only one that's producing any oil at all?

A This is true.

Q All right; now, based upon the drilling

that has occurred in the area, in your opinion, what would be the defined limits of the pool?

A We feel that the pool limits have been established on the north, the east and the southeast portion of the pool due to dry holes in those areas.

Q So there still might be some drilling sites in the southwest or west?

A This is true.

Q Does Texaco have any present plans to drill additional wells?

A At this time, we have no scheduled wells to be drilled, but it's highly probable that we could drill one or more gas wells in the gas area.

Q All right; now, refer to what has been marked Exhibit Number Two, which is a compilation of completion data on all the wells. Would you just briefly point out the significant factors there?

A Exhibit Two simply shows the completion date, completion interval, dirt-floor elevations, current status and the monthly production for April or May on each individual well.

Q Now, what is your actual daily oil production on your Wells Number 69 and 70?

A Well Number 69 is currently producing approximately six barrels of oil per day, and Number 70 is producing eight barrels of oil per day. These are current test figures, since this Exhibit Two was prepared before these tests were taken.

Q Pardon me, I -- what was your answer on that?

A Number 69 is producing six barrels of oil per day, and Number 70 is eight barrels of oil per day.

MR. NUTTER: Give us the gas while you're at it, Mr. Henson, please, on those two wells?

A Number 69, gas production is 700 MCF per month; Number 70, in the month of April, produced 333¹/₄ MCF.

Q (By Mr. Kelly) You can go ahead on those, 72 and 73.

A Number 72 is currently producing 1148 MCF per month; Number 73 is producing 4958 per month. Now, I might add that these figures were prior to setting a compressor to handle the gas from these wells, and they are -- are actually low to what

the wells have been potentially producing.

MR. NUTTER: Is the compressor on there now?

A The compressor has been set and is operating.

Q (By Mr. Kelly) Now, referring to what has been marked Exhibit Number Three, your cross-section, would you point out the gas-oil contact that you established on those?

A We have established a gas-oil contact in this pool of minus 1269-1265, as exhibited by the dashed line on the horizontal plane there at minus 1265.

Q Now, is there anything else you want to point out of significance on the cross section?

A You might show that Well Number 70 is completed across the gas-oil contact.

Q Now, I believe at the last hearing Mr. Wigham, the witness from Texaco, testified that in his opinion this was a solution gas drive reservoir with probable gas cap. Based on the more up to date studies, what is your opinion on this?

A We feel that it's a solution gas drive

with a large gas cap and just a small oil column.

Q Now, you have already given the current rate of your gas production on the wells?

A Yes, sir.

Q None of these wells appear capable of making their allowable based on the present field rules of three thousand to one GOR, is that correct?

A That's true.

Q Now, are all these wells now connected to a gas line?

A Yes sir, they are.

Q Now, based on the experience over the year, do you feel that the present field rules have allowed an efficient and economical development of this pool?

A Yes, I do.

Q Are you asking that any changes be made in the pool rules, or are you asking that they be made permanent at this time?

A We are asking that they be made permanent at this time.

Q Now, since none of the existing wells are capable of using their three thousand to one GOR,

what is Texaco's position, why are they seeking the retention of that particular rule?

A We feel that a solution GOR of approximately three thousand exists in the oil column, and it's only logical that a limiting GOR should be stayed at or near that figure. Further, any additional gas well completions might possibly result in a top allowable well. Also, we feel that workover prospects exist in Wells Number 72 and 73, since they indicated that they would produce top allowable on our initial potential of the two wells.

Q What are your figures for your gas-oil ratio on that Number 69 oil well?

A We have established a solution GOR for Number 69 as an oil well, that being about three thousand to one. The initial potential test indicated a solution gas-oil ratio of thirty-three, ten, and we have had subsequent tests to run as low as twenty-seven fifty, but I might add that the cumulative producing GOR over the eighteen month history of the well has averaged thirty-five forty.

Q And then if you were to bring in a good gas well or another oil well, it's possible that it

would be unfairly limited by a two thousand to one GOR?

A This is the way we feel. It wouldn't be unjustified, but penalized.

Q Now, do you feel that the retention of this three thousand to one GOR would in any way endanger the reservoir?

A We do not feel that there would be any detrimental effect on the reservoir from the three thousand to one GOR. It is possible that the oil ring could move up-structure. However, we feel that this oil ring, being relatively small, the change in the ultimate recovery would be small or negligible.

Q I see.

A It should be pointed out that within the two thousand to one limiting GOR, that the same problem would exist under the present characteristics of the reservoir. And I might say that it appears that Well Number 69 will be the only oil well completion in the pool due to its low economic value.

Q You are basically dealing with a gas reservoir here, aren't you?

A That's the way it looks.

Q Were Exhibits One through Three prepared by you or under your supervision?

A Yes sir, they were.

MR. KELLY: I would move the introduction of Applicant's Exhibits One through Three.

MR. NUTTER: Texaco's Exhibits One through Three will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 3 were offered and admitted in evidence.)

MR. KELLY: That's all we have on direct, Mr. Examiner.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Henson, according to the Exhibit Five at the original hearing of this pool -- well, no, it's not according to the exhibit, it's according to a note made on this exhibit, it must be on some other exhibit, the estimated gas-oil contact at that time was 12 minus 1240?

A Yes sir, at that time. That's where we thought it was, but I -- but in reading the transcript, I know that you questioned maybe that we were completed

in that Number 70 across the gas-oil contact, and it so happened that we weren't.

Q The only change which has been made in the last year as far as classification of wells is you have had a well that has gone from an oil well to a classification of a gas well?

A Yes, sir.

Q And there haven't been any changes -- re-classifications in the opposite direction?

A No, sir.

Q So it would appear then, if anything, that the gas-oil contact is moving downwards rather than upward?

A Well, we haven't -- we feel that this 1265 is where the thing happened originally, and we don't feel that there has been any movement up of it, because actually we haven't produced enough volume out there, out of those two gas wells to effectively change that thing, change the pressure. These two were -- these three gas wells have been on production about three months and have a low cumulative recovery.

Q They are new wells then?

A Yes sir, as far as the producing part goes, they are new. They were completed in '68, but we didn't get them on the line until February the 18th of this year.

Q I see; and then when was this compressor installed?

A Its been in operation about one month.

Q So you will expect to see these withdrawals increase from those two gas wells?

A Yes, we do.

Q Actually, from all three of the gas wells, I suppose?

A Yes, sir. I have current test figures on those three wells since we installed the compressor.

Q I'd like to have those.

A Okay, on those three gas wells, Well Number 70 is producing 400 MCF per day, or twelve million per month; Number 72, 75 MCF, or two point twenty-five million per month; Number 73 is producing 350 MCF per day, or ten point five million per month. That's with the compressor.

Q So the Number 70 is the best gas well

you got there then, isn't it?

A According to the test, it is.

MR. NUTTER: Are there any further questions of this witness?

MR. KELLY: Mr. Examiner, I'd like to ask if the Commission has received a letter from New Mexico Electric Service Company, which is the purchaser of the gas. It probably came in today's date, but I have a copy of this, which was mailed.

MR. NUTTER: I don't think there's one in the case file.

MR. KELLY: I would like to include that in the record. It just indicates that they are purchasing our gas and have a market which will take all the gas that we can produce.

That's all we have.

MR. NUTTER: If there's no further questions of Mr. Henson, he may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything they wish to offer in Case 3786? We'll take the case under advisement.

Now, a fifteen-minute recess.

I N D E XWITNESSPAGE

BILLY R. HENSON

Direct Examination by Mr. Kelly
Cross Examination by Mr. Nutter2
12EXHIBITMARKEDOFFERED AND
ADMITTEDApplicant's 1
through 3

3

12


STATE OF NEW MEXICO }
COUNTY OF BERNALILLO }

I, JERRY MARTINEZ, Notary Public in and for the
County of McKinley, 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.


Notary Public

My Commission Expires:

January 24, 1970.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 3786
heard by me on 19 1969.
 Examiner
New Mexico Oil Conservation Commission

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-4391 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 5, 1968

EXAMINER HEARING

IN THE MATTER OF:)

Application of Texaco Inc. for)
special pool rules, Lea County,)
New Mexico.)

Case No. 3786

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call next Case Number 3786.

MR. HATCH: Case 3786. Application of Texaco Inc.
for special pool rules, Lea County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch
and Kelly on behalf of the Applicant. I have one witness and
ask that he be sworn.

(Witness sworn.)

(Whereupon, Exhibits 1
through 10 were marked
for identification.)

CARL L. WHIGHAM, JR.

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

DIRECT EXAMINATION

BY MR. KELLY:

Q Would you state your name, position and employer,
please?

A I am Carl L. Whigham, Junior; employed by Texaco,
Incorporated as Midland Division Proration Engineer, located
in Midland, Texas.

Q Would you briefly state what Texaco seeks by this
application?

A We seek the adoption of special pool rules to
govern the development and production of reserves from the

North Paduca-Delaware Pool in Lea County, New Mexico.

Q Referring to what has been marked Exhibit No. 1, which is a plat of the general area, would you explain that to the Examiner?

A Yes. Exhibit No. 1 is a plat of the North Paduca-Delaware Pool area. The development that has taken place to date is located in Section 34 in the center of the map. The first well drilled was completed in November, that's Well No. 69, designated as an oil well in the Southwest Quarter of Section 34. Also in that quarter section is the next well drilled, Well No. 70, which is designated here as a gas well. Immediately north of Well No. 70 is a proposed location for Well No. 71. Drilling operations were actually commenced on this well about three days ago. This map also shows all of the offset operators. There are seven offset operators that have been notified of this application. /

Q This Section 34 is all in the Cotton Draw Unit, is that right?

A Yes, that's correct.

Q And the outer boundary of the Cotton Draw Unit is the east edge of Section 34?

A That is correct.

Q Just for a matter of clarification, your

identification there of Township 24 South, Range 32 East actually refers to the heavy line running along the bottom of Section 34, is that right?

A Yes. The Section 34 in which development has occurred to date is in Range 32 East in Township 24 South.

Q Now, Exhibit No. 2 is a summary of your proposed rules. Would you briefly go over those for the Examiner?

A Yes. In our application for a hearing we summarize them very briefly, but we list them again here as an exhibit. The first provision we are requesting is 40-acre oil well spacing and 160-acre gas well spacing with administrative procedures for approval of non-standard proration units that may be comprised of less than 160 acres.

The second provision is that gas wells in this pool be defined as any well with a gas-oil ratio exceeding 30,000 cubic feet of gas per barrel of oil, and that an oil well be defined as any well that produces oil with a gas-oil ratio of less than 30,000. Thirdly, we are requesting a rule preventing the simultaneous designation of acreage to oil and gas wells.

Number four, we are requesting a limiting gas-oil ratio of 3,000 cubic feet of gas per barrel of oil. Number five, we request a rule to provide gas well allowables equal

to top oil well allowables times the limiting gas-oil ratio times a fraction, the numerator of which is the number of acres assigned to the well and denominator, 40.

Six, we are requesting a rule that will provide for periodic annual gas-oil ratio tests to be reported to the Commission on the standard form C-116.

Seventh and last, we are requesting six months' balancing period with balancing dates of January the 1st and July the 1st of each year.

Q Were these rules basically patterned after the Double "X" Field, which is located a little over a mile north of the proposed field?

A Yes, they were. These two fields are very similar, so we choose to pattern these rules as nearly as possible to the Double "X"-Delaware Pool.

Q Can you explain to the Examiner what differences there are in the proposed rule and the Double "X" rules?

A Yes. There are twenty-two various rules in the Double "X"-Delaware Pool, but they can be consolidated into these seven provisions that we have requested here. The major differences are two in number, the first is that the Double "X"-Delaware Pool, about one and a half to two miles to the north, has a limiting gas-oil ratio of 2,000 to one, and we're

requesting 3,000 to one. Also, the Double "X"-Delaware Pool has a rule that provides for quarterly gas-oil ratio tests, and we are recommending that annual gas-oil ratio tests be taken.

Q I notice that in your application, or in the publication for this hearing, the publication sets out the location requirements and that is not in your summary. What location requirements are you requesting?

A We would suggest and recommend that wells be located no closer than 330 feet to tract boundaries and quarter, quarter section lines and no closer than 660 feet from other wells completed in the same reservoir.

Q Now, turning to what has been marked as Exhibit No. 3, which is your structure map, would you explain that significance to the Examiner?

A Exhibit No. 3 is a structure map contoured with 50-foot contour intervals on top of the Delaware sand. The first thing it shows is the relationship between the North Paduca-Delaware Pool, located in Section 34 in the approximate center of the map and the Double "X" Pool, approximately two miles to the north, and the Paduca-Delaware Pool, approximately two miles to the south.

These three pools all produce from the Delaware

sand, which is the upper producing sand member of the Bell Canyon, which is the upper formation in the Delaware mountain group in the Guadalupian series. You will note from this structure contour map that all three of these pools are aligned on a north-south trending monocline. We believe that this North Paduca Pool is separated from the pool to the north and the one to the south primarily by permeability and porosity pinchouts.

Toward the south dry holes have been drilled between the North Paduca Pool and the Paduca-Delaware Pool. Also over in Section 35 a dry hole has been drilled in the Southwest Quarter. There have been no dry holes drilled between the Double "X" Pool to the north and the North Paduca-Delaware; however, the production or productivity of the wells is low and we believe that there is probably a porosity pinchout across there.

Q You feel there is a complete separation between the Double "X" Field and the North Paduca and the Paduca Field to the south?

A Yes. We feel these pools are quite similar, however, we do believe they are separate reservoirs. With only two wells drilled and producing to date in the North Paduca-Delaware Pool, we cannot accurately delineate the limits of

this reservoir. However, we do feel that this reservoir will be similar to the many other Delaware reservoirs that have been developed in New Mexico, most of which will have a limit on the down-structure side due to oil-water contact.

Now, our log calculations and the production from the wells indicate that we are, in Well No. 69, at or near the oil-water contact.

MR. NUTTER: What about the well in Section 35? Was it water-productive?

THE WITNESS: I don't have the details on the production, but it undoubtedly was because it encountered the Delaware sand, as shown here on the log at a subsea depth of 1296, and all of the wells shown on this map will produce water if they're completed below or at that depth.

Q (By Mr. Kelly) Do you know what the water-oil contact up here in the Double "X" is?

A I believe that it is at approximately 1260 feet and also down in the Paduca-Delaware.

MR. NUTTER: About 1260?

THE WITNESS: Yes.

MR. NUTTER: So you anticipate 1260 here?

THE WITNESS: Actually we have estimated that the oil-water contact in the Paduca-Delaware may be lower. We

think it may be at 1290 feet in this pool.

MR. NUTTER: But you went west for your first location after your discovery, anyway?

THE WITNESS: We went updip.

MR. NUTTER: And got gas?

THE WITNESS: Yes, and some oil. Now updip we

think the limits of this pool will be determined by porosity and permeability pinchouts that are caused by the increase in shaliness as you move updip in the Delaware sands. This will be confirmed, of course, by our later development.

Q (By Mr. Kelly) You have a summary of the reservoir data, which is Exhibit No. 4. Would you go through that for the Examiner?

A Yes. This shows, again, that the producing reservoir in this North Paduca-Deleware Pool is similar to other Delaware reservoirs. It has a high porosity and permeability of 26 percent and 23 millidarcies, respectively. The water saturation is about 47 percent. Here is where we have listed an estimated water-oil contact at a minus 1290. We estimate a gas-oil contact at 1240 subsea depth. This gives a gross interval of 50 feet, however, we estimate that the net effective pay would be only about 13 feet.

The gravity is 40.4 A.P.I. for the oil and 0.826

for the gas. The pressure is about 1713 P.S.I. at the present time in the reservoir and we list here that in our opinion this is a typical stratigraphic trap and the producing mechanism is solution gas drive.

Q What acreage is going to be dedicated or is dedicated to the two wells?

A Well, at the present time the pool is operating under statewide regulations, so the Northeast Quarter of the Southwest Quarter would be dedicated to Well No. 69 and the Northwest Quarter of the Southwest Quarter would be dedicated to Well No. 70.

Upon approval of these rules the acreage for Well No. 69 will remain the same, however, the remaining 120 acres in the Southwest Quarter of Section 34 would be dedicated to Well No. 70.

Q Going on to Exhibit No. 5, which is your well data for your two wells, would you briefly go over that for the Examiner?

A Yes. This shows the limited development in this pool to date, with Well No. 69 being completed last November and Well No. 70 being completed last March. Both wells are completed at approximately the same interval with regard to depth. As shown by a later exhibit, both wells are completed

in the same geological interval. We list on this exhibit the elevation of both wells. Applying this number to the completion interval we will find that Well No. 70 is completed exactly 20 feet higher structurally than Well No. 69. Well No. 69 is presently pumping at a rate of 11 barrels of oil and 17 barrels of water daily with a gas-oil ratio of 2970, whereas Well No. 70, the gas well, is flowing 27 barrels of oil, 30 barrels of water, with a gas-oil ratio of 27,630.

Q Now, Exhibits 6 and 7 are the logs of the two wells; do you have anything you want to add on that?

A Actually the information that is shown on the logs is also contained here in a tabular form on this Exhibit No. 5.

Q Go on to your completion and the test history of the two wells, which we have marked as Exhibits 8 and 9.

A Exhibits 8 and 9 show, firstly, the difficulty encountered in completing these wells. The wells require a considerable amount of stimulation before they will produce. These exhibits also show that even after this type of treatment, the productivity is not high at all. It also indicates the questionable economics. We think that with the rules that have been recommended, that this type of production could be economical.

Well No. 69 was acidized and then sand fracked, then after several days of swabbing all of the load fluid was

recovered and new oil was present in the well bore. At that time a pump was installed and the first test taken November 23, 1967 showed 20 barrels of new oil and 46 barrels of water produced during a 24-hour period with a gas-oil ratio of 2,400. Then over the next two or three months the production had declined to 11 barrels of oil and 17 barrels of water with a gas-oil ratio of 2,970. That's the same test that was reported previously on our exhibit entitled "Well Data Summary".

Then the next exhibit, Exhibit No. 9 gives the same information for Well No. 70. This well was completed in a very similar manner; however, as shown by these tests, it produces about ten or eleven barrels of oil with about 40 barrels of water, with a gas-oil ratio ranging anywhere from 27,630 up to in excess of 100,000 cubic feet of gas per barrel of oil.

Q Now, I take it you don't feel that any of the present wells or any of the future wells in this pool will probably be top allowable oil wells?

A It is not indicated by the production and test history of these two wells.

Q And you previously testified this is a solution gas drive?

A Yes.

Q Do you think that having a gas-oil ratio of 3,000 to one would have any effect on ultimate recovery in this reservoir?

A It should have no effect at all on ultimate recovery. The rate of withdrawals from this solution type reservoir should have no effect on any amount of oil that is ultimately recovered from the reservoir.

Q Do you have an opinion as to the effect that a 2,000 to one GOR would have on further development and, therefore, ultimate recovery in this pool?

A Well, with the standard 2,000 limiting gas-oil ratio, these wells would be penalized excessively, and unnecessarily, it would accomplish no useful purpose and also it would cause an operator to be reluctant to drill additional wells in this area if he thought that his wells would be unduly and unnecessarily penalized with regard to allowable.

Q Do you think that a 3,000 to one GOR would have any adverse effect on anyone's correlative rights in the area?

A No, it should not.

Q I take it that in your opinion, based on the definition of a gas well, that you would propose that Well No. 70 would probably become a gas well?

A Yes. The most recent test shows that it has a gas-oil ratio of 27,000 some odd cubic feet per barrel of oil. We haven't mentioned yet, but this well has only produced about once a week. We do not have it connected to a gas outlet at the present time, so for conservation purposes we only produce it a minimum amount and we feel that this gas-oil ratio will go higher if we produce it continuously.

Along these same lines I can advise that there are two gas lines in the very immediate area of this development and we feel that as soon as we find out what rules we'll be operating under, and also complete Well No. 70, correction, Well No. 71, we will have a better idea, much better idea of how much gas will be available and we anticipate no difficulty whatsoever in negotiating a contract to sell all the gas that is purchased.

Q You have an Exhibit No. 10 which is your total performance, do you have anything you want to add on that?

A Yes. I would like to say that Exhibit No. 10 represents the production of oil, water and gas on a monthly basis since development. However, since Well No. 69 and Well 70 are somewhat different, these curves represent an average of what you might call two extremes, so they're not very indicative of individual well performance.

We have already discussed the tests that have been made on these two wells and their producing capabilities, and that information would be much more valid on an individual well basis than anything that could be determined from Exhibit No. 10. So this exhibit serves primarily to show how much oil, water and gas has been produced from the North Paduca-Delaware Pool since it was discovered last November.

Q I assume, based on the information you now have, that you feel that an oil well could drain 40 acres and a gas well 160 acres?

A Yes, we do. And, of course, this spacing is statewide spacing, so we think that the future development can proceed under that type of regulation.

Q In your opinion, would the granting of this application prevent waste and promote the efficient production of hydrocarbons in the proposed pool?

A Yes.

Q And protect correlative rights of all operators?

A Yes, we think so.

Q Were Exhibits 1 through 10 prepared by you or under your supervision?

A Yes, they were.

MR. KELLY: I move the introduction of Texaco's

Exhibits 1 through 10.

MR. NUTTER: Texaco's Exhibits 1 through 10 will be admitted in evidence.

(Whereupon, Exhibits 1 through 10 were offered and admitted in evidence.)

MR. KELLY: That's all I have, Mr. Examiner, on direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Whigham, you had a very brief perforated interval in both of these wells, the No. 69 is perforated from 4795 to 4800, which is only five feet. The other well, which is the gas well, is perforated from 4764 to 74, so it's only perforated ten feet there. Is there any possibility that you have got a gas-oil contact and that that ten-foot interval in the No. 70 has cut that gas-oil contact?

A There is a possibility that the perforations in Well No. 70 could be very near to the gas-oil contact.

Q Because, of course, you only have ten feet perforated but you have twice as many feet of perforations as you do in the other well.

A Yes. Yes, that's possible. Let me refer back to our well data exhibit, Exhibit No. 5. Well No. 70 would have

a completion interval based upon sea level of 1258 to 1268. The ten feet you referred to, and then we have estimated our gas-oil contact at a minus 1240, so our estimate at this time is that the gas-oil contact is some 18 feet above the top of the perforations in Well No. 70.

Q How do you account for the high gas-oil ratio here, then?

A Well, there is undoubtedly a transition zone and we--

Q You are in the transitional zone?

A Actually I would imagine that if we were completed another 18 feet up we might get maybe, well, close to dry gas.

Q This is what's concerning me, Mr. Whigham. You are asking for a 3,000 to one GOR here and if you go up here, go on up-structure and get well above the gas-oil contact and get into a dry gas zone and start taking gas out at the current rate of 58 barrels of oil per day top allowable times 3,000 times 30 days a month, you will be taking out five million cubic feet of gas a day. I'm wondering if you are going to complete the gas cap that might be here and cause the migration of oil up-sand and wet those gas sands, thereby losing oil.

A If future development indicates that to be the case, then there would be a very small oil rim lying on structure

trending north and south and this might well, then, essentially be a gas reservoir.

Q Do you know up here in the Double "X" Field this Tenneco gas well which is there in Section 22, is it a dry gas well or is it a well that makes oil and gas, or what?

A Well, I'm not familiar with this Double "X" Pool. However, with the several oil wells that are indicated east of that well, it would appear to me that Well No. 2, the gas well, would probably be completed in the gas cap.

Q Of course, it's a good half mile from the nearest oil well to the gas well. Here on your location you went a quarter of a mile away and change from an oil well to gas well.

A Yes.

Q It may be that you have some dry gas if you keep on going west up-structure before you get to this porosity and permeability pinchout?

A That may be true. It could certainly happen that Well No. 71 being on the strike with Well No. 70 may not, well, we don't know what that will show, it should be a well similar to Well No. 70, but any future development will probably be westward and possibly at that time we will have a better idea of what type of reservoir this may be.

Q Incidentally, for the sake of the record, that five

million that I was talking about awhile ago would be for 40 acres. If you had 160 acres for a gas well you would be producing over twenty-one million?

A Yes.

Q Is there any gas cap that you know of in the Paduca-Delaware sand down in your pool to the south? The exhibit doesn't show any gas wells in this portion of the pool, anyway.

A That's right. Let me refer to another map that I have with me that shows in more detail that Paduca-Delaware Pool. I don't believe there are any gas wells in the Paduca-Delaware.

No, I have another map here that shows the entire Paduca-Delaware Pool and there are no gas wells designated on this particular map. This map has been presented to the Commission at other Texaco hearings concerning the Cotton Draw Unit area, so you have this map on file. It indicates no gas wells in this immediate area.

Q No gas cap to the west in the pool in that case?

A No.

Q Where is the Battle Axe-Delaware Pool, do you know?

A I looked that up a few days ago. I don't remember exactly where it was. It was removed from this area, so I

didn't investigate it.

Q It's a similar type of pool to this, however, isn't it?

A I don't know. I don't know exactly what type it is. It was removed from this area so I didn't investigate it.

Q How long do you think it will be before the No. 71 is completed, Mr. Whigham?

A Probably one month from now we should have a test on it.

Q And you didn't have any other locations proposed right at this present time?

A No, we don't. However, Mr. Beard, who holds half interest in the half section immediately west of this area, has indicated an interest in the development in this area and it's quite possible that a well will be drilled in the near future in the East Half of Section 33.

Q He'd probably wait the outcome of No. 71 before he drilled that?

A Yes. Texaco has one-fourth interest in the East Half of Section 33. I think all of this is shown on Exhibit No. 1. Texaco has a fourth, Paul Lippett has a fourth and Beard Oil Company has one-half interest, and all three of these parties have expressed interest in further

development.

Q We were talking about Exhibit 5 awhile ago, we got these subsea elevations of these perforated intervals on the No. 7 well, what would that be for the No. 69? Have you got those figured out?

A Yes. The completion interval would be from 1278 to 1283.

Q That's where you had your twenty feet difference then, between 58 and 70?

A Yes.

MR. NUTTER: Are there any other questions of Mr. Whigham?

MR. KELLY: Just one or two questions.

REDIRECT EXAMINATION

BY MR. KELLY:

Q The proposed rules are proposed as temporary or permanent rules?

A Well, we have proposed them as permanent rules. Needless to say, Texaco will be, and other operators will be obtaining as much reservoir information as possible in order to more accurately delineate the reservoir and define its producing characteristics. We would, of course, have no objection at all to these rules being promulgated on a

temporary basis for, say, a twelve-month period. We expect to have additional information, certainly, by that time.

Q If the Commission wanted to continue jurisdiction of this case, say, to find the effect that higher GOR ratio would have, you would have no objection?

A Not at all.

MR. NUTTER: Along those same lines, in the event that the Commission approves these pool rules you have proposed here while this pool is being investigated on a temporary basis, wouldn't it be advisable for the Commission to schedule the GOR tests more frequent than once a year in order to detect migration of oil up-structure?

THE WITNESS: Yes. We have considered that, Mr. Examiner, and there would be no objection to submitting these tests more frequently.

MR. NUTTER: At least during the period of development and fluctuation in the pool?

THE WITNESS: Absolutely. We will have the gas-oil ratio available, if you would like to see them more frequently, and I believe probably you would, we would have no objection at all to quarterly or semi-annually gas-oil ratio tests.

MR. NUTTER: You further understand that in the event the Commission enters the order and approves the

designation certain wells as gas wells and certain wells as oil wells, that it would be prohibited to produce the gas and flare the gas until such a time as they had been connected?

THE WITNESS: Yes, we understand that. We feel, as I mentioned previously, that we can get suitable contract and can sell all the gas that will be produced.

MR. NUTTER: This would not only be gas well gas, but casinghead gas as well?

THE WITNESS: Yes.

MR. NUTTER: Very good. Any further questions of Mr. Whigham? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kelly?

MR. KELLY: No.

MR. NUTTER: Does anyone have anything further to offer in Case 3786? We will take the case under advisement, and the hearing is adjourned.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
CARL L. WHIGHAM	
Direct Examination by Mr. Kelly	2
Cross Examination by Mr. Nutter	16
Redirect Examination by Mr. Kelly	21

<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Exhibits 1 - 10	2	16

[illegible]

I, ADA DEARNLEY, 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 this 9th day of July, 1968.

Dea Searnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1971.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3786, heard by me on 4/5, 1968.

Arthur Date of Recd
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

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

209 SIMMS BLDG. • P.O. BOX 1091 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 6, 1971

EXAMINER HEARING

IN THE MATTER OF:

Case No. 3786 being reopened pursuant)
to the provisions of Order No. R-3437-A,)
which Order extended for a period of 18)
months the special rules and regulations)
for the North Paduca-Delaware Pool, Lea) Case No.
County, New Mexico. All interested per-) 3786
sons may appear and show cause why the) (Reopened)
gas-liquid ratio limitation of 3,000 cubic)
feet of gas per barrel of liquid hydro-)
carbons should not be reduced, and why)
the special rules and regulations should)
not be discontinued.)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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I N D E X

PAGE

E. D. McCARTER

Direct Examination by Mr. Bateman
Cross Examination by Mr. Nutter

3
7

E X H I B I T S

MARKED

OFFERED AND
ADMITTED

Applicant's Exhibits Nos. 1 & 2

4

6

1 MR. HATCH: This is Case No. 3786, reopened, in
2 the matter of Case No. 3786 being reopened pursuant to the
3 provisions of Order No. R-3437-A, which Order extended for
4 a period of 18 months the special rules and regulations for
5 the North Paduca-Delaware Pool, Lea County, New Mexico.

6 MR. BATEMAN: I am Ken Bateman; I am an attorney
7 associated with White, Gilbert, Koch and Kelly of Santa
8 Fe, and I am appearing for Texaco, the original applicant
9 in this case. I have one witness, E. D. McCarter.

10 E. D. McCARTER

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

13 DIRECT EXAMINATION

14 BY MR. BATEMAN:

15 Q Mr. McCarter, have you previously appeared be-
16 fore the Commission and had your qualifications entered
17 as a matter of record?

18 A I have.

19 Q Are you personally familiar with the are in
20 question in this case, Case No. 3786?

21 A I am.

22 Q As a matter of chronology, would you say the
23 original application was heard before this Commission
24 on June 5, 1968, and that temporary rules were issued
25 in Order No. R-3437-A?

dearnley-meier reporting

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
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FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

1 A Yes.

2 Q And a second hearing was held on June 9th, 1969,
3 and I believe you were present at that time?

4 A I was present, but I did not give testimony.

5 Q But you were present?

6 A I was present.

7 Q An order at that hearing was issued on July 17th,
8 1969. Would you review for the Commission the developments,
9 if any, that have taken place since that date in July of
10 1969?

11 A Since July of 1969 there have been no new wells
12 drilled in the North Paduca-Delaware Pool. The only change
13 which has occurred since that time is in Well No. 70, which
14 is Unit 1 of Section 34.

15 (Whereupon, Exhibits Nos. 1 and 2

16 were marked for identification.)

17 THE WITNESS: It has been reclassified from gas
18 to oil.

19 BY MR. BATEMAN:

20 Q What is the classification of a gas well under
21 the rules?

22 A Under the rules an existing well is classified
23 as a gas well with GOR in excess of 30,000-to-1, and well
24 No. 70 was a perforated deeper into the pay section, and it
25 is now completed from Sub C depth of minus 1291.

1 Q Have there been any further changes?

2 A No, no other changes in the pool.

3 Q Well, at this point, what would Texaco's recom-
4 mendations be on pool rules?

5 A Texaco would recommend at this time that Rule
6 No. 6, the rule covering the extension, concerning the gas-
7 liquid ratio limitation of 3,000 cubic feet of gas per bar-
8 rel of liquid hydrocarbons. Although the well in the field
9 did not commence producing gas, these wells are not capable
10 of producing gas and, therefore, the rule is no longer
11 needed. As to the remaining rules, Texaco would recom-
12 mend they're being adopted as the permanent rules for the
13 pool.

14 Q The deletion of Rule No. 6 would, in effect, cause
15 the limiting ratio to be reduced to 2,000, is that correct?

16 A That is correct.

17 Q If you will refer to Exhibit No. 2, which is a
18 copy of Form C-116, would you give us the latest data from
19 the well?

20 A Exhibit No. 2 is a copy of the latest Texaco data
21 on Well No. 69, which is currently pumping 17 barrels of
22 oil per day during the period of testing. The gas-oil
23 ratio is 2588. Well No. 70 is currently pumping 11 barrels
24 per day and 18 gallons of water per day, and the gas-oil
25 ratio is 4453. Well No. 72 in Section No. 32 is shut in

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FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

1 and it is not capable of producing at the present time. Well
2 No. 73, which is in Section 32, Township 25 south, is flow-
3 ing at 81 MCF of gas per day with no liquid hydrocarbons or
4 water production.

5 Q Is Well No. 72 dry?

6 A It is dry, gas, and therefore the necessity for
7 the retention of the gas rules and the oil rules. We will
8 probably work over Well No. 72, and I could give a date
9 now, but it would depend on the operator or how Texaco
10 will be spending money. It is not very perspective for
11 work-over because the gas from this pool is now being
12 produced through a compressor, it does have to be com-
13 pressed to 650 pounds.

14 Q And all of the produced gas in the pool is being
15 sold at that point?

16 A The casing, it was sold to Phillips.

17 Q Do you have anything further to add?

18 A No, I do not.

19 Q Were Exhibits Nos. 1 and 2 prepared by you
20 or under your direction?

21 A They were.

22 MR. BATEMAN: I offer Exhibits No. 1 and 2
23 at this time.

24 MR. NUTTER: Exhibits No. 1 and 2 will be
25 admitted into evidence.

BY MR. NUTTER:

Q Mr. McCarter, you are proposing that rules be continued in the Delaware Pool?

A That is correct.

MR. NUTTER: Is there anything further of Mr. McCarter?

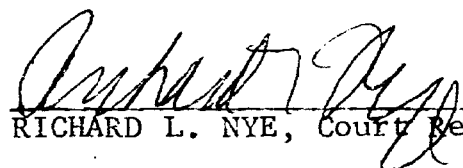
MR. BATEMAN: No.

MR. NUTTER: If there is nothing further, we will take this matter under advisement.

+++

STATE OF NEW MEXICO)
) SS
COUNTY OF SANTA FE)

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


RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a true and correct record of the proceedings of the hearing of Case No. 3786, dated by me on 1/6, 1972.

 , Chairman
New Mexico Oil Conservation Commission

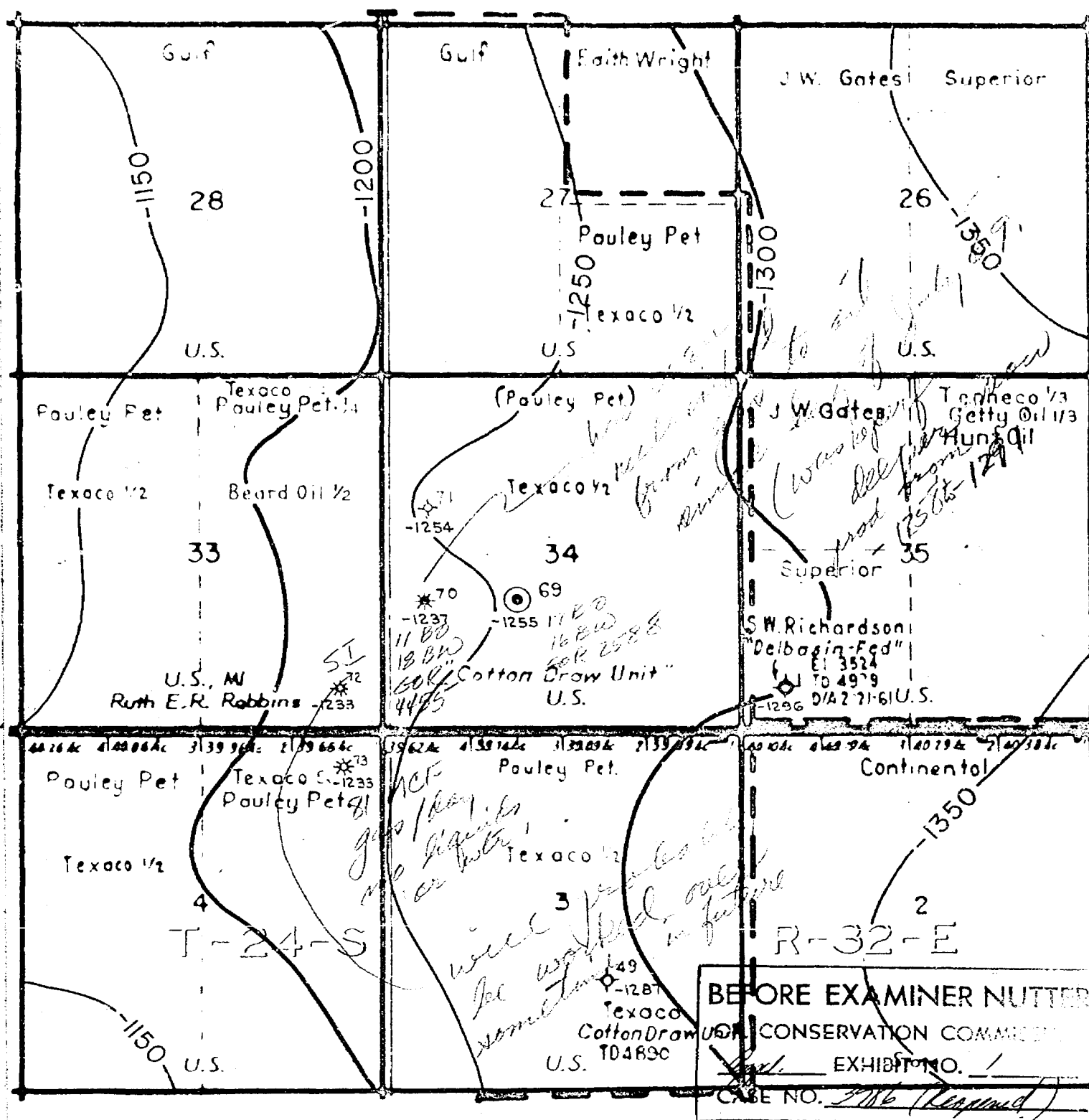
WELL DATA

NORTH PADUCA-DELAWARE POOL

<u>OPERATOR-LEASE</u>	<u>WELL NO.</u>	<u>COMP DATE</u>	<u>COMPLETION INTERVAL</u>	<u>D.F. ELEV</u>	<u>STATUS</u>	<u>DATE</u>	<u>BO</u>	<u>BW</u>	<u>MCF</u>	<u>GOR</u>
TEXACO Inc. Cotton Draw Unit	69	11-26-67	4795'-4800'	3517'	P	5-69	200	300	700	3500
	*70	3-8-68	4764'-4774'	3506'	F	4-69	76	79	3334	43961
	*72	9-20-68	4766'-4774'	3510'	F	5-69	-	155	1148	-
	*73	12-28-68	4768'-4778'	3513'	F	5-69	-	310	4958	-

* Gas Well

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Tex EXHIBIT NO. 2
CASE NO. 3786



STRUCTURE MAP
OF A PORTION OF
THE
COTTON DRAW UNIT
CONTOURED ON
DELAWARE SAND
Contour Interval: 50'
By: BRW/FMR 7-2-69

TEXACO INC.

PADUCA NORTH DELAWARE POOL
Lea County, New Mexico

Scale: 1" = 2000'

May 28, 1968
Rev. 7-1-69

December 22, 1970

(1100)

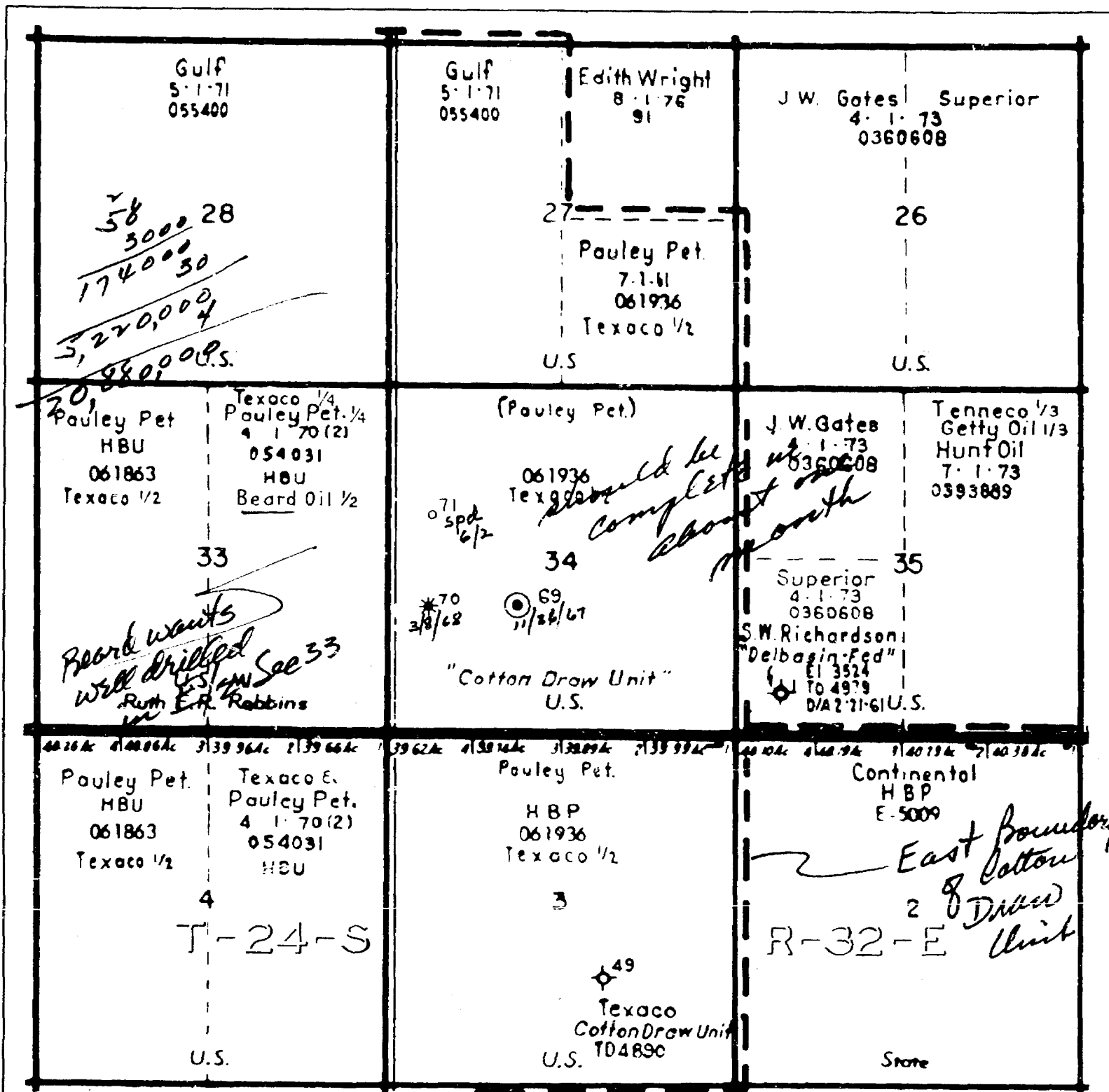
(1100)

During early morning hours of December 22, 1970, the following information was received from the [redacted] office of the [redacted] Department.

Handwritten note:
The following information was received from the [redacted] office of the [redacted] Department.

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[Faint, mostly illegible text, possibly a list or table of data]



BEFORE EXAMINER NUTTER

CIL CONSERVATION COMMISSION

EXHIBIT NO. 1

CASE NO. 3786

TEXACO INC.

PADUCA NORTH DELAWARE POOL

Lea County, New Mexico

Scale: 1" = 2000'

May 28, 1968

SUMMARY OF PROPOSED RULES

1. 40 Acre Oil Well Spacing and 160 Acre Gas Well Spacing with administrative procedure for approval of non-standard gas proration units of less than 160 acres.
2. Gas Well defined as a well producing with a gas-oil ratio of 30,000 or more cubic feet of gas per barrel of oil and an Oil Well defined as a well producing with a gas-oil ratio of less than 30,000 cubic feet of gas per barrel of oil.
3. Simultaneous dedication of acreage to oil and gas wells prohibited.
4. Limiting gas-oil ratio of 3,000 cubic feet of gas per barrel of oil.
5. Gas Well Allowable equal to top oil well allowable times the limiting gas-oil ratio times a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 40.
6. Annual Gas-Oil Ratio tests shall be taken during July of each year and reported to the NMOCC on Form C-116 by August 10th of each year.
7. Balancing dates on production from gas wells to be January 1, and July 1 of each year.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
<i>Appl</i>	EXHIBIT NO. <u>2</u>
CASE NO.	<u>3786</u>

Basically patterned after Double X Rule. Where Pool rules major diff: Double X: 2000/1 " quarterly GOR tests.

SUMMARY OF RESERVOIR DATA
NORTH PADUCA POOL

Avg. porosity: 26.1% (log analysis)
Avg. permeability: 23md. (core analysis #69)
Avg. water saturation: 47.4% (log analysis)
Water-oil contact: -1290' (Est.)
Gas-oil contact: -1240' (Est.)
Avg. net effective pay thickness: 13' ✓
Oil gravity: 40.4° API ✓
Gas gravity: 0.826 (Air=1) ✓
Reservoir pressure: 1713 ✓
Type of reservoir: Stratigraphic Trap ✓
Producing Mechanism: Solution Gas Drive ✓

BEFORE EXAMINER NUTTER
OIL CONSOLIDATION COMMISSION
April 1944 4
3786

WELL DATA
NORTH PADUCA POOL

-1278
-1283

Operator - Lease	Well No.	Completion Date	Completion Interval	Elevation	Status	Date	Oil	Water	GOR
TEXACO Inc. Cotton Draw Unit	69	11-26-67	4795' - 4800'	3517 D.F.	P	4-17-68	11	17	2,970
	70	3-8-68	4764' - 4774'	3506 D.F.	F	4-25-68	27	30	27,630

1258
1268

Est B-O cont
- 1240

70 exactly
20' higher
than # 69

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Agnes EXHIBIT NO. 5
CASE NO. 3786

COTTON DRAW #69
COMPLETION AND TEST HISTORY

11-8-67 Perf w/2 jspf 4795' - 4800'. Swab 12 hrs. Rec 19 BLW, 12 BFW,
trace oil, good show gas.

11-10-67 Acidize w/500 gallons 15% NEA. Max P 900#. Min P 400#. ISIP 600#.
IR 1/2 BPM. Swab 3 hrs. Rec 33 BLW. SI 12 hrs.

11-11-67 Frac w/1500 gals ref oil w/1500# sand. Max 3800#. Min 3000#.
IR 6 BPM.

11-11 to
11-16-67 Swabbing load oil and formation water.

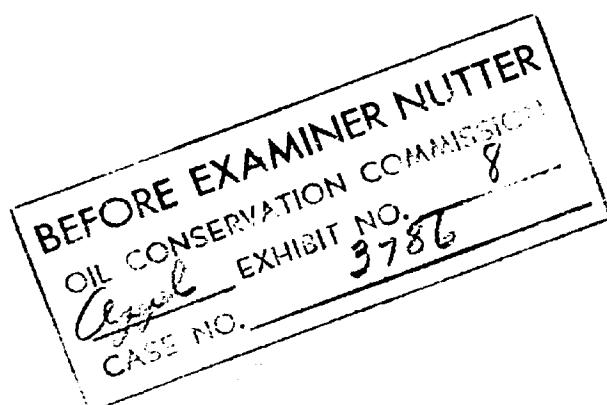
11-17-68 Swab 9 hrs. Rec 22 BLO + 9 BNO + 31 BFW.

11-23-67 Pump 24 hrs. Rec 20 BNO, 46 BFW, GOR 2400-1

11-29-67 On 24 hr Pot. Test Pump 23 BNO 38 BFW GOR 4410

1-5-68	Pump 24 hours	14 BO	6 BW	64 MCF	GOR 4571
4-4-68	Pump 24 hours	8 BO	15 BW	31.4 MCF	GOR 3925
4-17-68	Pump 24 hours	11 BO	17 BW	32.7 MCF	GOR 2970

Well now producing approximately 11 BOPD and 17 BWPD.



COTTON DRAW #70
COMPLETION AND TEST HISTORY

3-5-68 Perf w/2 jspf 4764' - 4774'
Treated w/100 gal mud acid, 250 gal kerosene, 500 gal SAF,
250 gal kerosene, 900 gal mud acid. Max 2800#. Min 900#
ISIP 700#. IR 2.3 BPM. Swb 12-1/2 hrs. Rec 56 BLW, 4 BNO
and 13 BFW. Flowed 3 hrs & died. Rec 3 BNO and 1 BFW.

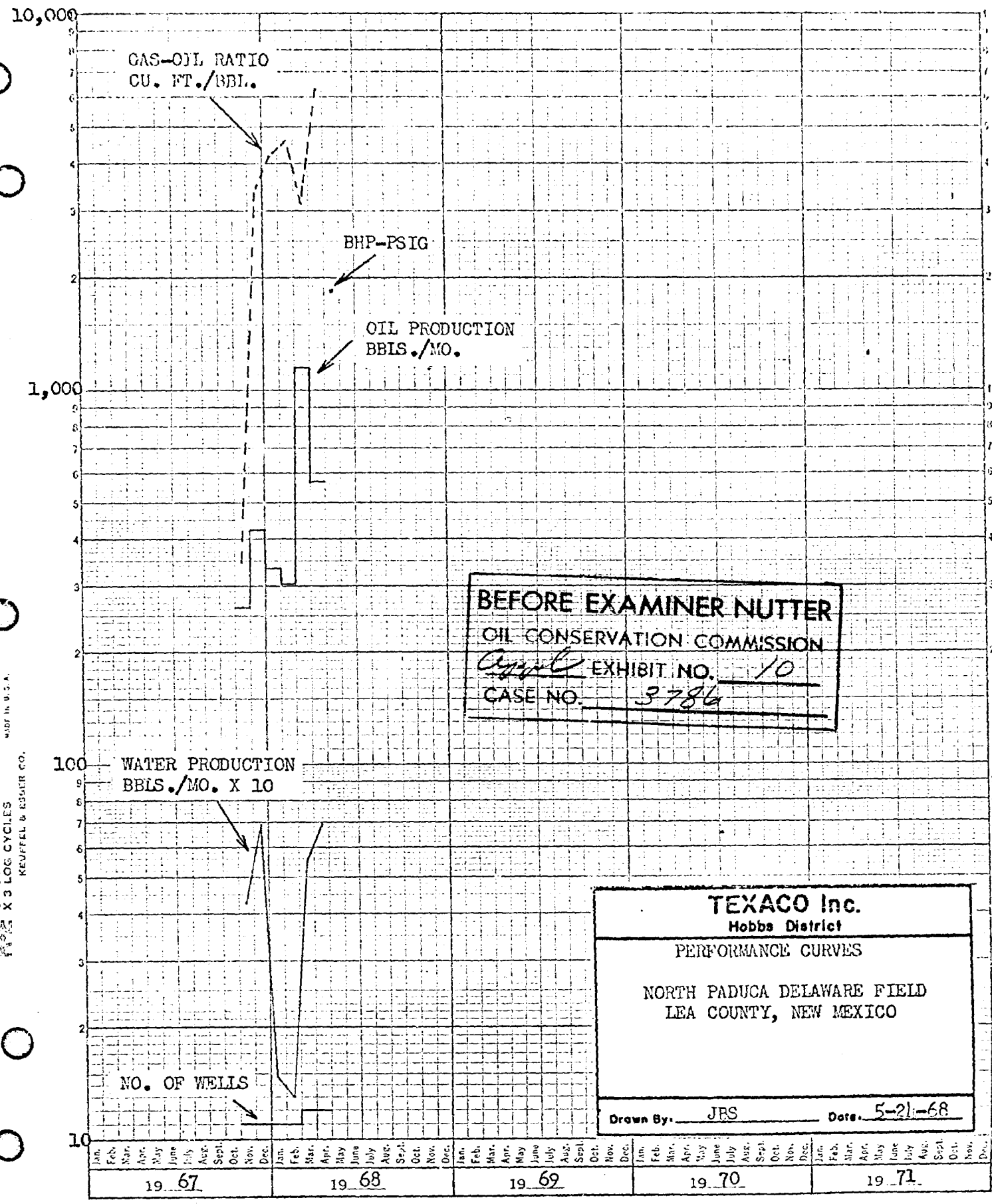
3-7-68 Frac w/2000 gal ref oil, 2000# sand. Max 4500#. Min 4000#.
IR 4.6 B/M. ISIP 1200#. Flow 3 hrs. Swb 3-1/2 hrs. Flowed
17-1/2 hrs. Rec 73 BLO, 42 BNO and 17 BFW.

3-9-68	Flow 12 hrs OPT	63 BO	12 BW	GOR 2750	
4-3-68	Flow 24 hours	23 BO	30 BW	729 MCF	GOR 31,696
4-4-68	Flow 24 hours	8 BO	36 BW	871 MCF	GOR 108,875
4-5-68	Flow 24 hours	8 BO	41 BW	778 MCF	GOR 97,250
4-6-68	Flow 24 hours	6 BO	39 BW	700 MCF	COP. 116,667
4-9-68	Flow 24 hours	8 BO	36 BW	656 MCF	GOR 82,000
4-25-68	Flow 21 hours	27 BO	30 BW	746 MCF	GOR 27,630
4-26-68	Flow 25 hours	15 BO	43 BW	623 MCF	GOR 41,533
4-27-68	Flow 27 hours	10 BO	40 BW	589 MCF	GOR 58,900

Well is currently produced once a week and averages 30 BO each day it is produced.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
<i>Angel</i> EXHIBIT NO. <u>9</u>	
CASE NO. <u>3786</u>	

46 6690
5 YEARS BY MONTHS
X 3 LOG CYCLES
KEUFFEL & ESSER CO.



NO. OF WELLS