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PO 257 NOT 5 HO 8 52 Hobbs NM 88241-0730 HO 8 52

October 31, 1995

Attn:

Mr. William J. LeMay

Mr. J. T. Sexton

NMOCD

NMOCD

PO Box 2088

PO Box 1980

Santa Fe, NM 87501

Hobbs, NM 88240

RE: Application for Unorthodox North Teague Tubb- Ass. Gas Well Location and Simultaneous Dedication

F. B. Davis #1

North Teague Tubb-Associated

UL A, Sect. 8, Town. 23S, Range 37E

Lea County, New Mexico

Dear Mr. LeMay and Mr. Sexton:

Texaco Exploration and Production Inc. respectfully requests administrative approval for an unorthodox Tubb gas well location for the F. B. Davis #1, located 660' FNL, and 500' FEL, section 8, Township 23S, and Range 37E. The F. B. Davis #1 is currently completed in the Drinkard-Abo formation and has reached it's economic limit. TEPI intends to recomplete the subject well uphole to the Tubb gas pool. TEPI also requests simultaneous dedication of the Tubb gas production from the F. B. Davis #1 with the production from F. B. Davis #5. The F. B. Davis #5 is a Tubb gas well that is currently dedicated to an existing 160 acre proration unit comprised of the NE corner of section 8.

Attached is NMOCD form C102 identifying the proposed situation on the subject 160 acre proration unit. Also attached is a list of offset operators and/or co-owners for this unit.

TEPI believes approval of this request will be in the interest of conservation, will protect correlative rights, and will allow for a more complete recovery of Tubb gas reserves from the subject acreage.

TEPI has notified offset operators of this application by copy of this application package sent by certified mail. If you need further information concerning this matter, please contact me at (505) 397-0426. Thank you for your consideration of this proposal.

Sincerely,

Darrell J. Carriger Engineer Assistant

dic

Attachments

<u>DISTRICT I</u>
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719 DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-102 Revised February 10,1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name		
30 025 32495	96315	N. Teague Tubb Associated		
Property Code 13195	<sup>5</sup> Prop	<sup>6</sup> Well No. 5		
7 OGRID Number	•	rator Name	<sup>®</sup> Elevation	
022351		ION & PRODUCTION INC.	GR-3319', KB-3331'	

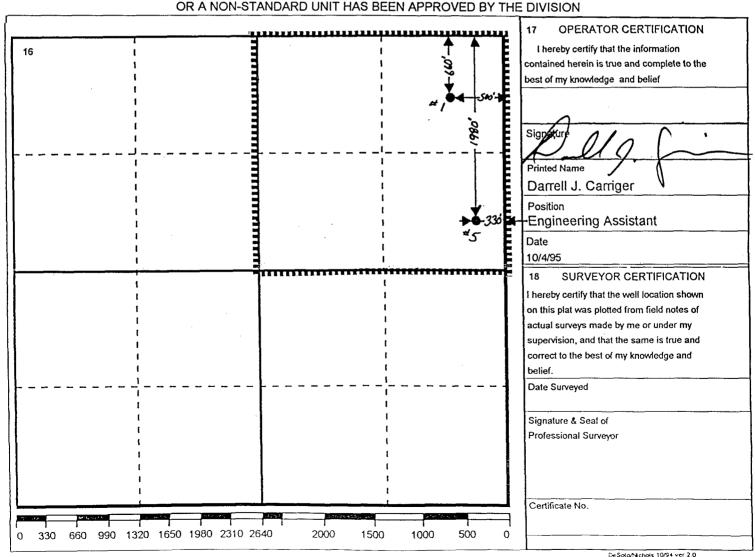
### <sup>10</sup> Surface Location

UI or lot no.	Section	Township	Range	Lot.ldn	Feet From The	North/South Line	Feet From The	East/West Line	County
Н	8	23-8	37-E		1980	NORTH	330	EAST	LEA

### Bottom Hole Location If Different From Surface

UI or lot no. Se	ction	Township	Range	Lot.ldn	Feet From	The	North/South Line	Feet From The	East/West Line	County	
12 Dedicated Acr	es 13	Joint or Infill	14	Consolidatio	n Code	15 Ord	der No.			<del></del>	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Box 2088, Santa Fe, NM 87504-2088

DISTRICT IV

State of New Mexico Energy, Minerals and Natural Resources Department

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-102 Revised February 10,1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	<sup>3</sup> Pool Name			
30 025 32226	30 025 32226 96315		b - Associated		
4 Property Code	<sup>5</sup> Prop	erty Name	<sup>6</sup> Well No.		
13195	DAV	/IS, F. B.	1		
<sup>7</sup> OGRID Number 022351		rator Name ION & PRODUCTION INC,	<sup>9</sup> Elevation GR-3323', KB-3337'		

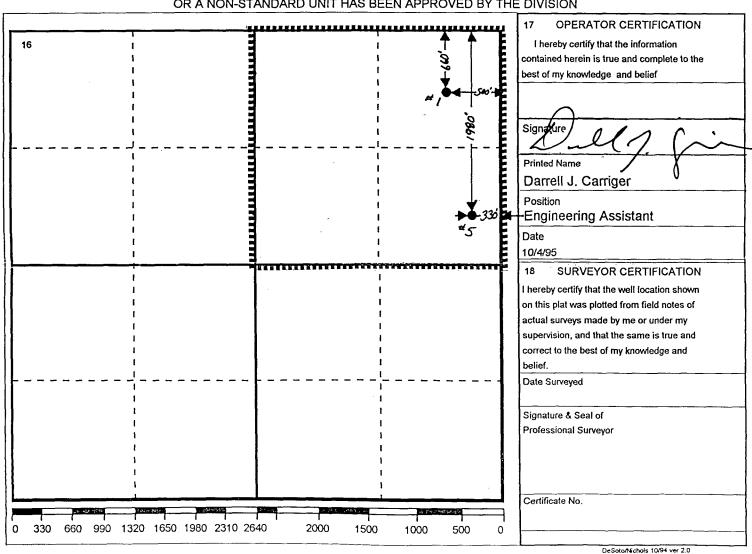
<sup>10</sup> Surface Location

UI or lot no.	Section	Township	Range	Lot.idn	Feet From The	North/South Line	Feet From The	East/West Line	County
A	8	23-S	37-E		660	NORTH	500	EAST	LEA

Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot.idn	Feet From	The	North/South Line	Feet From The	East/West Line	County
12 Dedicate		<sup>13</sup> Joint or Infill No	14	Consolidatio	n Code	<sup>15</sup> Ord	der No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



### DISTRICT I. P.O. Box 1980, Hobbs, NM 88241-1980 DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department

### OIL CONSERVATION DIVISION

P.O. Box 2088

Form C-101 Revised February 10,1994 Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

#### 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088 Fee Lease - 5 Copies DISTRICT IV P.O. Box 2088, Santa Fe, NM 87504-2088 ☐ AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address **OGRID Number** 022351 TEXACO EXPLORATION & PRODUCTION INC. P.O. BOX 730, HOBBS, NM 88240 API Number 30 025 32226 <sup>5</sup> Property Name <sup>4</sup> Property Code 6 Well No. DAVIS, F. B. 13195 Surface Location Feet From The North/South Line Ul or lot no. Section Township Range Lot.ldn Feet From The East/West Line County 660 37-E 500 8 23-S NORTH **EAST** LEA <sup>8</sup> Proposed Bottom Hole Location If Different From Surface Feet From The Feet From The North/South Line East/West Line Ul or lot no. Section Township Range Lot.ldn County 10 Proposed Pool 2 9 Proposed Pool 1 North Teague Tubb Associated WellType Code Work Type Code <sup>15</sup> Ground Level Elevation Rotary or C.T. Lease Type Code GR-3323', KB-3337' Contractor 17 Proposed Depth Formation 20 Spud Date Multiple 7700 No Unknown 10/11/95 Tubb Proposed Casing and Cement Program SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH SACKS OF CEMENT EST. TOP SIZE OF HOLE SURFACE 14 3/4 11 3/4 1180 SURFACE 42# 750 8 5/8 32# 11 1825 3750 SURFACE 5 1/2 1580 7 7/8 15.5# 7700 SURFACE 22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zoneand proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. Objective: Texaco intends to plug back the current Drinkard - Abo completion and recomplete to the North Teague Tubb Associated interval. 1. MIRU. Install BOP. TOH with production equipment. Clean out wellbore to PBTD. 2. RIH with CIBP and set 50' above uppermost Drinkard-Abo perforation. Cap with 35' cement. Re-classify Drinkard-Abo perforations to TA.

I hereby certify that the rules and regulations of the Oil Conservation OIL CONSERVATION DIVISION -Division have been complied with and that the information given above is true and complete: est of my knowledge and belief. Signature Approved By: Darrell J. Carriger Printed Name Title: **Engineering Assistant** Approval Date: Title **Expiration Date:** Conditions of Approval: 10/4/95 Telephone Date 397-0426

3. Perforate the North Teague Tubb-Associated interval selectively (to be determined) with 2 jspf.

4. Fracture stimulate interval with 58000 gallons gel + 203000# sand.

Texaco will submit forms C-104 and C-105 at the completion of this workover.

5. Flow well back and return to production.

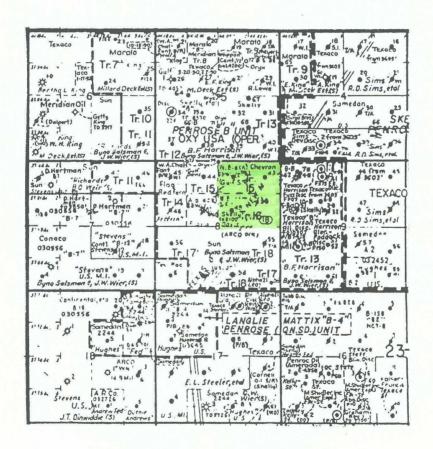
6. Place on test.

# F. B. Davis Lease Offset Operators

Texaco Exploration and Production Inc.

ARCO Permian PO Box 1610 Midland, TX 79702

Amerada Hess Coporation PO Box 2040 Houston, TX 77252



## (NORTH TEAGUE DRINKARD-ABO (GAS-OIL RATIO) POOL - Con'td.)

- (20) Production tests conducted on the Drinkard formation within the G. W. Sims Well No. 1 indicate that the well produces more efficiently on a larger choke setting and that the smaller choke setting results in higher GOR's.
- (21) The test data further indicates that the G. W. Sims Well No. 1 produces more efficiently and recovers more liquid hydrocarbons at a gasoil ratio limitation of approximately 10,000:1 than at lesser GOR's.
- (22) The evidence available at the current time indicates that a gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil should be established for a temporary period of time, pending the gathering of additional reservoir data.
- (23) A gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil should be established for the North Teague Drinkard-Abo Pool for a temporary period of eighteen months to permit Texaco the opportunity to gather additional reservoir data. This case should be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why a gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil is appropriate, on a permanent basis, for the North Teague Drinkard-Abo Pool.
- (24) At the hearing the applicant requested that the gas-oil ratio limitation established herein be made effective retroactive to February, 1994, being the date of first production from the G. W. Sims Well No. 1.
- (25) The evidence presented in this case indicates that the North Teague Drinkard-Abo Pool will likely be very limited in extent and should ultimately only comprise acreage which is currently owned and operated by Texaco Exploration & Producing Inc. The applicant's request for a retroactive date for establishment of a 10,000:1 GOR should therefore not adversely affect any offset operator and should not adversely affect the reservoir, and should therefore be approved.

### IT IS THEREFORE ORDERED THAT:

- (1) Effective February 1, 1994, a new pool for the production of oil and gas from the Drinkard and Abo formations is hereby created and designated the North Teague Drinkard-Abo Pool. The North Teague Drinkard-Abo Pool shall comprise the NE/4 NE/4 of Section 8, and the N/2 NW/4 and the NW/4 NE/4 of Section 9, both in Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) The vertical limits of the North Teague Drinkard-Abo Pool shall comprise that interval containing the Drinkard and Abo formations as found from a depth of 6,346 feet to 7,160 feet as identified on the electric log run on the F. B. Davis Well No. 1 located in Unit A of Section 8, Township 23 South, Range 37 East, NMPM.
- (3) Temporary Special Rules and Regulations for the North Teague Drinkard-Abo Pool are hereby promulgated as follows:

# TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE NORTH TEAGUE DRINKARD-ABO POOL

- RULE 1. The limiting gas-oil ratio for the North Teague Drinkard-Abo Pool is 10,000 cubic feet of gas per barrel of oil.
- (4) This case shall be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why a gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil is appropriate, on a permanent basis, for the North Teague Drinkard-Abo Pool.
- (5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.
- DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

#### NORTH TEAGUE-TUBB ASSOCIATED POOL Lea County, New Mexico

Order No. R-5353-P, Adopting Temporary Special Rules and Regulations for the North Teague-Tubb Associated Pool, Lea County, New Mexico, September 26, 1994.

Application of Texaco Exploration and Production Inc. for Creation of a New Pool in the Tubb Formation, Classification of this Pool as an Associated Oil and Gas Pool and for the Promulgation of Special Pool Rules, Lea County, New Mexico.

Nomenclature Case No. 11016 Order No. R-5353-P

#### ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on July 7, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 26th day of September, 1994, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Division Case Nos. 11016, 11017 and 11018 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Texaco Exploration and Production Inc. (Texaco), seeks the creation of a new "associated pool" for production from the Tubb formation comprising the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.
- (4) The applicant further seeks to adopt the "General Rules and Regulations for the Associated Oil and Gas Pools in Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, as the rules governing this pool, including provisions for 40-acre oil and 160-acre gas spacing and proration units. The applicant further seeks to establish a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil for this pool.
- (5) Texaco proposes to develop the Tubb oil and gas reserves within this area concurrently and in conjunction with the development of the oil and gas reserves within the Lower Paddock-Blinebry formations (being the subject of Division Case No. 11017), and the Drinkard-Abo formations (being the subject of Division Case No. 11018).
- (6) The applicant has recently concluded drilling operations on its B. F. Harrison "B" Well No. 25 located 825 feet from the North line and 1980 feet from the West line (Unit C) of Section 9. This well was completed in the Tubb formation through the perforated interval from 6,084 feet to 6,234 feet in June, 1994.
- (7) The subject well is located within one mile of the outer boundary of the Teague-Tubb Pool, an oil pool comprising the NE/4 of Section 17, Township 23 South, Range 37 East, NMPM.
- (8) The applicant presented geologic evidence and testimony to support its position that the subject well has discovered a new common source of supply in the Tubb formation.



### (NORTH TEAGUE-TUBB ASSOCIATED POOL - Cont'd.)

- (9) Applicant's geologic evidence and testimony indicates that the proposed pool is:
- a) a circular shaped feature of limited extent draped over a structural high centered approximately in the NW/4 of Section 9;
- b) the reservoir trapping mechanism is a down structural limit of effective porosity within the Tubb formation which effectively isolates it and separates it from the Teague-Tubb Pool.
- (10) The geologic and engineering evidence presented indicates that the B. F. Harrison "B" Well No. 25 has discovered a new common source of supply in the Tubb formation.
- (11) The geologic and engineering evidence further indicates that the B. F. Harrison "B" Well No. 25 is located at the highest point of its structure feature, and that there is no indication that a gas cap exists or is being formed up-structure to any oil column.
- (12) The applicant presented initial production test data from the B. F. Harrison "B" Well No. 25. This initial test data indicates a high gas-oil ratio producing rate ranging from approximately 18,000:1 to 47,000:1. Further testimony by the applicant indicates that during a recent four point test, the subject well produced at an average gas-oil ratio of approximately 20,000:1.
- (13) The applicant contends that the occurrence of increased volumes of gas production in the B. F. Harrison "B" Well No. 25 is attributed to the presence of small higher porosity stringers in the Tubb formation which are both laterally and horizontally discontinuous.
- (14) "Associated pools" have historically been defined as those pools that have a gas cap overlying an oil zone.
- (15) Although the proposed pool does not exhibit the reservoir characteristics of an "associated pool", it appears to exhibit similar reservoir characteristics as found in the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool, namely it is a complex reservoir system of interrelated gasbearing and oil-bearing stringers.
- (16) The proposed pool is located approximately 21/2 miles south of the southern boundary of the Tubb Oil and Gas Pool.
- (17) Although not officially classified as "associated pools", the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool are both essentially governed by the same rules applicable to "associated pools" as contained within Division Order No. R-5353, as amended, namely 40-acre oil and 160-acre gas spacing, a gas/oil ratio cutoff point in distinguishing between gas wells and oil wells of 50,000 cubic feet of gas per barrel of oil and restricted well location requirements.
- (18) The reservoir data currently available indicates that the proposed pool should be initially classified as an "associated pool" and should be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico".
- (19) The subject pool should be designated the North Teague-Tubb Associated Pool and should initially comprise the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM.
- (20) The preliminary reservoir data indicates that the North Teague-Tubb Associated Pool may be efficiently and effectively developed on 40acre oil and 160-acre gas spacing. In addition, the evidence indicates that a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil should be established for a temporary period of time, pending the gathering of additional reservoir data.
- (21) The North Teague-Tubb Associated Pool should be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, for a temporary period of eighteen months to permit Texaco the opportunity to gather additional reservoir data. This

- case should be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the North Teague-Tubb Associated Pool should not be reclassified as an oil pool and to show cause why a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil is appropriate for this pool.
- (22) At the hearing the applicant requested that the rules and regulations promulgated herein be made effective retroactive to the date of first production from the B. F. Harrison "B" Well No. 25, which, according to evidence presented, was approximately July 1, 1994.
- (23) The applicant presented no evidence or testimony which would indicate that a retroactive effective date for the special rules promulgated herein is necessary, therefore this request should be denied.

### IT IS THEREFORE ORDERED THAT:

- (1) A new pool for the production of oil and gas from the Tubb formation is hereby created and designated the North Teague-Tubb Associated Pool, said pool to comprise the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) The North Teague-Tubb Associated Pool shall be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools in Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, insofar as said General Rules and Regulations are not inconsistent with the Special Rules and Regulations for the subject pool as hereinafter set forth, in which event the Special Rules shall apply.

# TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE NORTH TEAGUE-TUBB ASSOCIATED POOL

<u>RULE 2</u> (a) A standard oil proration unit shall comprise 40 acres. A standard gas proration unit shall comprise 160 acres. Top oil allowable for a 40-acre oil proration unit shall be 142 barrels of oil per day.

<u>RULE 6.</u> The limiting gas-oil ratio for the North Teague-Tubb Associated Pool shall be 6,000 cubic feet of gas per barrel of oil.

### IT IS FURTHER ORDERED THAT:

(3) The location of all wells presently drilling to or completed in the North Teague-Tubb Associated Pool or in the Tubb formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.

Pursuant to Paragraph A of Section 70-2-18, N.M.S.A. 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil wells in the North Teague-Tubb Associated Pool shall have dedicated thereto 40 acres and existing gas wells shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating the appropriate acreage to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the North Teague-Tubb Associated Pool or in its corresponding vertical limits, or within one mile thereof, shall receive no more than a 40-acre allowable for the pool.

(4) This case shall be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the North Teague-Tubb Associated Pool should not be reclassified as an oil pool and to show cause why a gas-oil ratio limitation of 6,000:1 is appropriate for this pool.

(5) Jurisdiction of this cause is retained for the entry of such further

orders as the Division may deem necessary.

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