



Texaco E & P

205 E. Bender Blvd.  
Hobbs NM 88240  
505 393 7191

OIL CONSERVATION DIVISION  
RECEIVED  
'96 JUN 28 AM 8 52

June 25, 1996

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Attn: Mr. William J. LeMay, Division Director

RE: Request for Exception to Rule 303  
Downhole Commingling  
Vacuum Blinebry and Vacuum Drinkard Pools  
1314 New Mexico O State NCT-1 #34, Unit Letter P  
1315 New Mexico O State NCT-1 #35, Unit Letter O  
1316 New Mexico O State NCT-1 #36, Unit Letter N  
1317 New Mexico O State NCT-1 #37, Unit Letter I  
Section 36, T-17-S, R-34-E  
Lea County, New Mexico

GAIN VERBAL ON THIS ONE  
ONLY ON 7.31.96  
(3)

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests administrative approval for an exception to Rule 303 to permit the downhole commingling of the Vacuum Blinebry and Vacuum Drinkard pools in the above wells.

Enclosed is the pertinent data supporting this application as outlined in Rule 303. Copies of this administrative application are being provided to our offset operators via Certified Mail.

If you have any questions concerning this proposal, or if you require further information, please contact Darrell Carriger at (505) 397-0426 or myself at (505) 397-0418.

Thank you for your consideration of this proposal.

Sincerely,

Monte C. Duncan  
Engineer's Assistant

/mcd, Chrono, Attachments

cc: New Mexico Land Department, Santa Fe  
New Mexico Oil Conservation Division, District I Office

NOTIFICATION CONTAINED  
IN DHC-1314  
(BS)

## COMMINGLE PRE-APPLICATION

STATE LAND OFFICE RULES 1.053-1.055 APPLY TO COMMINGLING OIL AND GAS PRODUCTION FROM NEW MEXICO STATE LANDS. PLEASE PROVIDE THE FOLLOWING INFORMATION SO THAT WE CAN DETERMINE WHETHER OR NOT A COMMINGLE APPLICATION PACKAGE SHOULD BE SUBMITTED.

1. BRIEFLY DESCRIBE WHAT YOU PROPOSE TO DO.

Texaco Exploration and Production Inc. proposes to downhole commingle  
production of the Vacuum Drinkard and Vacuum Blinbery pools.

2. FILL IN THE FOLLOWING INFORMATION FOR EACH WELL.

WELL NUMBER	LEGAL DESCRIPTION	LESSEE OF RECORD	N.M. LEASE NUMBER	FORMATION
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N.M. O State	NCT-1 #34	P-36-17S-34E	TEPI	B-155	Vacuum Drinkard
N.M. O State	NCT-1 #35	O-36-17S-34E	TEPI	B-155	Vacuum Drinkard
N.M. O State	NCT-1 #36	N-36-17S-34E	TEPI	B-155	Vacuum Drinkard
N.M. O State	NCT-1 #37	I-36-17S-34E	TEPI	B-155	Vacuum Drinkard

NAME: Monte C. Duncan, Engineer's Assistant

COMPANY: Texaco Exploration and Production Inc.  
205 East Bender; Hobbs, New Mexico 88240

PHONE NUMBER: (505) 397-0418 or (505) 393-7191

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE OIL, GAS AND MINERALS DIVISION AT (505) 827-5744.

**DISTRICT I**  
P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
811 South First St., Artesia, NM 88210

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-A  
New 3-12-96

**OIL CONSERVATION DIVISION**

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

Administrative  Hearing

EXISTING WELLBORE

YES  NO

**APPLICATION FOR DOWNHOLE COMMINGLING**

Operator Texaco Exploration & Production Inc. 205 E. Bender; Hobbs, NM 88240 Address Lea  
New Mexico "O" State NCT-1 # 37 I-36-17S-34E  
Lease 11048 Well No. 30 025 32450 Unit Ltr. - Sec - Twp - Rge 11048 County Lea  
OGRID NO. 022351 Property Code 11048 API NO. 30 025 32450 Federal     , State X, (land/or) Fee       
Spacing Unit Lease Types: (check 1 or more)

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	Vacuum Blinebry		Vacuum Drinkard
2. Top and Bottom of Pay Section (Perforations)	6396'-7162'		7503'-7918'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 2409 psi	a.	a. 1490 psi
	b. (Original) NA	b.	b. NA
6. Oil Gravity (°API) or Gas BTU Content	36.1°		36.7°
7. Producing or Shut-In?	To be completed		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: New Zone Rates: (See Attached)	Date: Rates:	Date: Rates: NA
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: NA	Date: Rates:	Date: 5/96 Rates: 31 BO, 0 BW, 175 MCF, 24 hours
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 45 % Gas: 12 %	Oil: % Gas: %	Oil: 55 % Gas: 88 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones?  Yes  No  
If not, have all working, overriding, and royalty interests been notified by certified mail?  Yes  No  
Have all offset operators been given written notice of the proposed downhole commingling?  Yes  No
11. Will cross-flow occur?  Yes  No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable.  Yes  No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other?  Yes  No
13. Will the value of production be decreased by commingling?  Yes  No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application.  Yes  No NA
15. NMOCD Reference Cases for Rule 303(C) Exceptions: ORDER NO(S). NONE
16. ATTACHMENTS:  
\* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
\* Production curve for each zone for at least one year. (If not available, attach explanation.)  
\* For zones with no production history, estimated production rates and supporting data.  
\* Data to support allocation method or formula.  
\* Notification list of all offset operators.  
\* Notification list of working, overriding, and royalty interests for uncommon interest cases.  
\* Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Darrell J. Carriger TITLE PROD ENG. DATE 6/25/96  
TYPE OR PRINT NAME Darrell J. Carriger TELEPHONE NO. ( 505 ) 397-0426

# Attachments

1. C-102 plats: A C-102 for each zone is attached
2. Production curve for each zone: A production curve for the Vacuum Drinkard is attached. However, because the Vacuum Blinebry is a new zone, the production had to be estimated from offset performance. Attached is a production curve from two Blinebry wells located in Unit letter K & L of the same section, township, and range, of the subject well. The two wells are the State "I" and the State "VB".
3. Estimated production rates: The plot described in item #2 above shows that production rates will probably begin around 40 BOPD for one month and then quickly fall to a steadier 25 BOPD. Allocation percentages for the subject well were determined using the 25 BOPD.
4. Data to support allocation method: The production plot described in item #2 above was used to estimate well performance (25 BOPD, 25 MCFPD) and determine an allocation split as follows:

	BOPD	MCFPD
Vacuum Drinkard	31	175
Vacuum Blinebry	<u>25</u>	<u>25</u>
<b>TOTAL:</b>	<b>56 BOPD &amp; 200 MCFPD</b>	

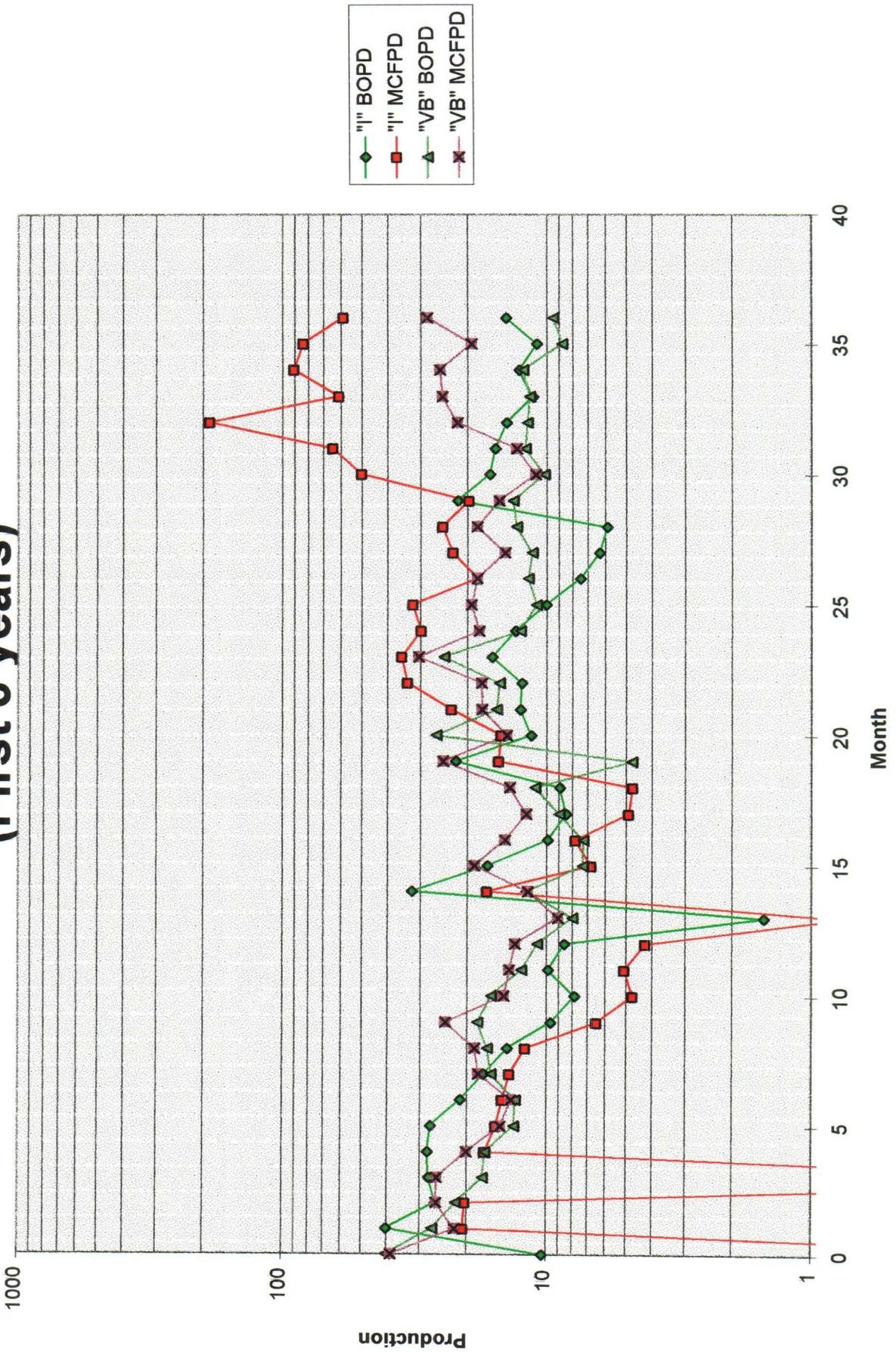
Therefore:            Drinkard Oil - 55%            Blinebry Oil - 45%  
                          Drinkard Gas - 88%            Blinebry Gas - 12%  
%

5. Attached is a list of all offset operators and their addresses
6. Working, overriding & royalty interests are all common for the Vacuum Drinkard and the Vacuum Blinebry zones (same school).
7. Additional information: Bottomhole pressures were acquired from the following:

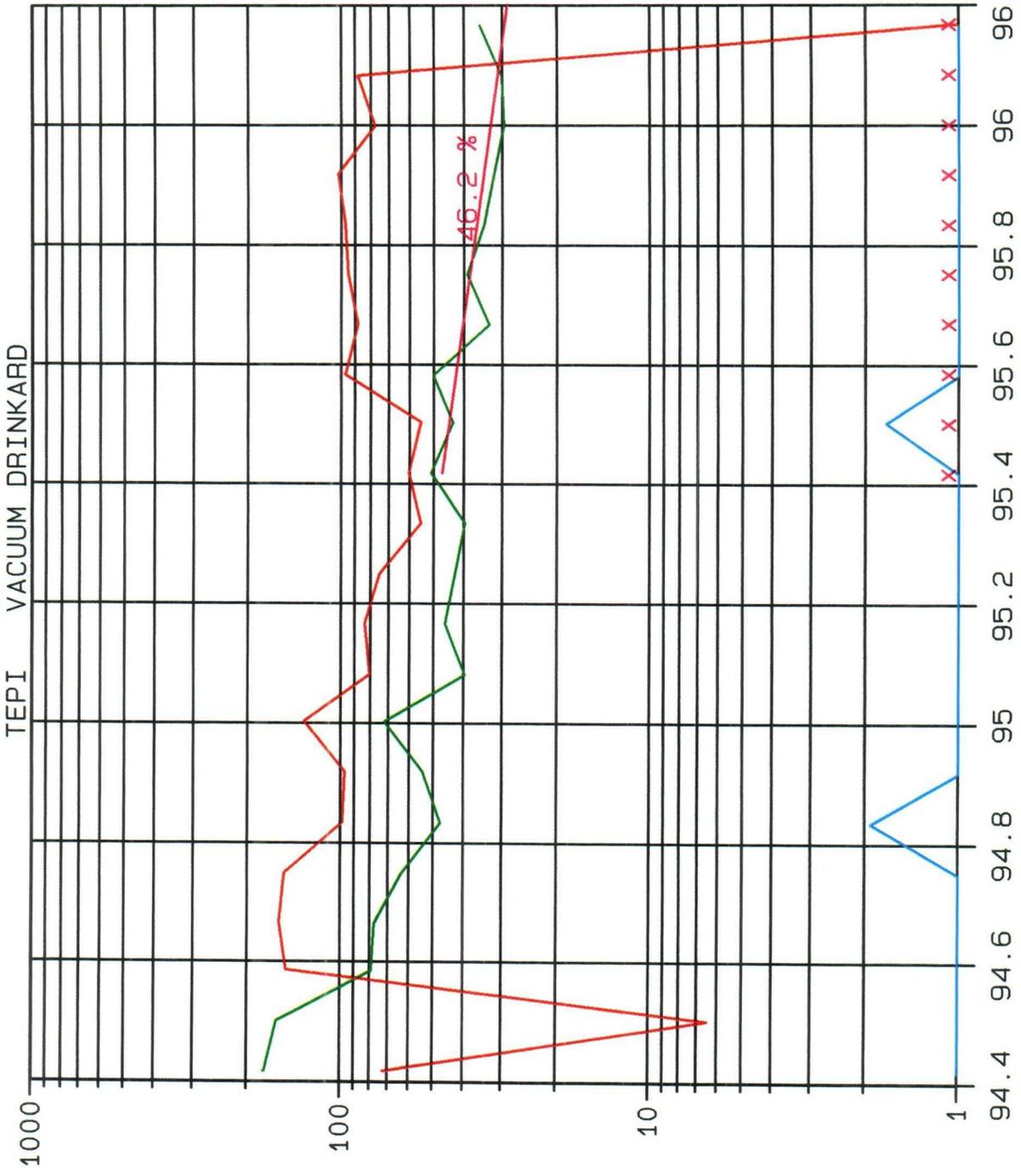
**Vacuum Drinkard:** New Mexico "O" State #38 (new well): Pressure tested zone while drilling (offset Drinkard)

**Vacuum Blinebry:** Marathon's Warn State Acc-2 #25 (offset Blinebry)

# State "I" State "VB" Normalized Daily Production (First 3 years)



NEW MEXICO -0- STATE NCT-1 37 VACUUM DRINKARD



LEASE DATA  
 LSE 011048  
 FLD 62110  
 OPER TEPI  
 ZONE 62110  
 --  
 COUNTY 25  
 STATE 30

STATUS 2-96  
 CO 39 MBO  
 CG 58 MCMF  
 CW 0 MBW  
 BOPD 36  
 BWPD 0  
 MCFPD 0  
 WELLS 1  
 CI 0 MBWI  
 BWIPD 0

BOPD  
 BWPD  
 MCFPD

YEARS

# Offset Operators

Marathon  
PO Box 552  
Midland, TX 79702

Phillips Petroleum  
4001 Penbrook  
Odessa, TX 79763

Mobil Oil Co  
PO Box 633  
Midland, TX 79702

Shell  
PO Box 576  
Houston, TX 77001

Amerada Hess  
PO Box 2040  
Houston, TX 77252

Submit to Appropriate District Office  
 State Lease - 4 copies  
 Fee Lease - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-102  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**  
 P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

**DISTRICT I**  
 O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
 P.O. Drawer DD, Artesia, NM 88210

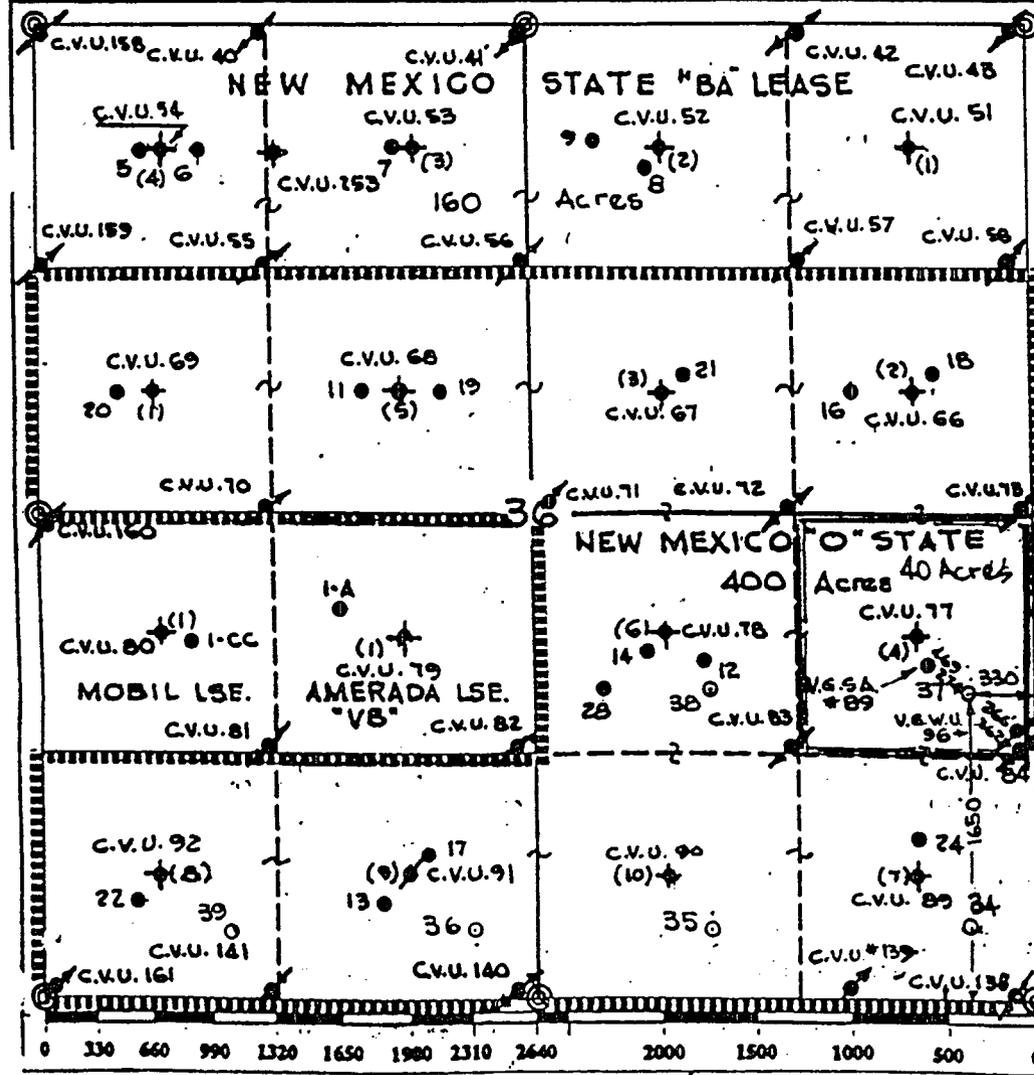
**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**  
 All Distances must be from the outer boundaries of the section

Operator <b>TEXACO EXPLORATION AND PRODUCTION Inc.</b>			Lease <b>New Mexico "O" State NCT-1</b>		Well No. <b>37</b>
Unit Letter <b>I</b>	Section <b>36</b>	Township <b>17 South</b>	Range <b>34 East</b>	County <b>Lea</b>	

Actual Footage Location of Well: <b>1650</b> feet from the <b>South</b> line and <b>330</b> feet from the <b>Est</b> line					
Ground level Elev. <b>3986</b>	Producing Formation <b>Drinkard</b>	Pool <b>Vacuum Drinkard</b>		Dedicated Acreage: <b>40 Acres</b>	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
  - Yes  No If answer is "yes" type of consolidation \_\_\_\_\_
 If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
 No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Royce Mariott*  
 Printed Name: **Royce Mariott**

Position: **Division Surveyor**

Company: **Texaco Expl. & Prod...Inc.**

Date: **March 3, 1994**

**SURVEYOR CERTIFICATION**  
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: **February 25, 1994**

Signature & Seal of Professional Surveyor: *John S. Piper*

John S. Piper  
 Certificate No. **7254**

Lea Co. FB. 10, Pg. 33

◆ = Central Vacuum Unit Producer    ◆ = Central Vacuum Unit Injection Well

**DISTRICT I**  
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

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

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-32450	<sup>2</sup> Pool Code 61850	<sup>3</sup> Pool Name VACUUM BLINEBRY
<sup>4</sup> Property Code 011048	<sup>5</sup> Property Name NEW MEXICO O STATE NCT-1	
<sup>7</sup> OGRID Number 022351	<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION INC.	<sup>6</sup> Well No. 37
		<sup>9</sup> Elevation GR-3986', KB-3998'

<sup>10</sup> Surface Location

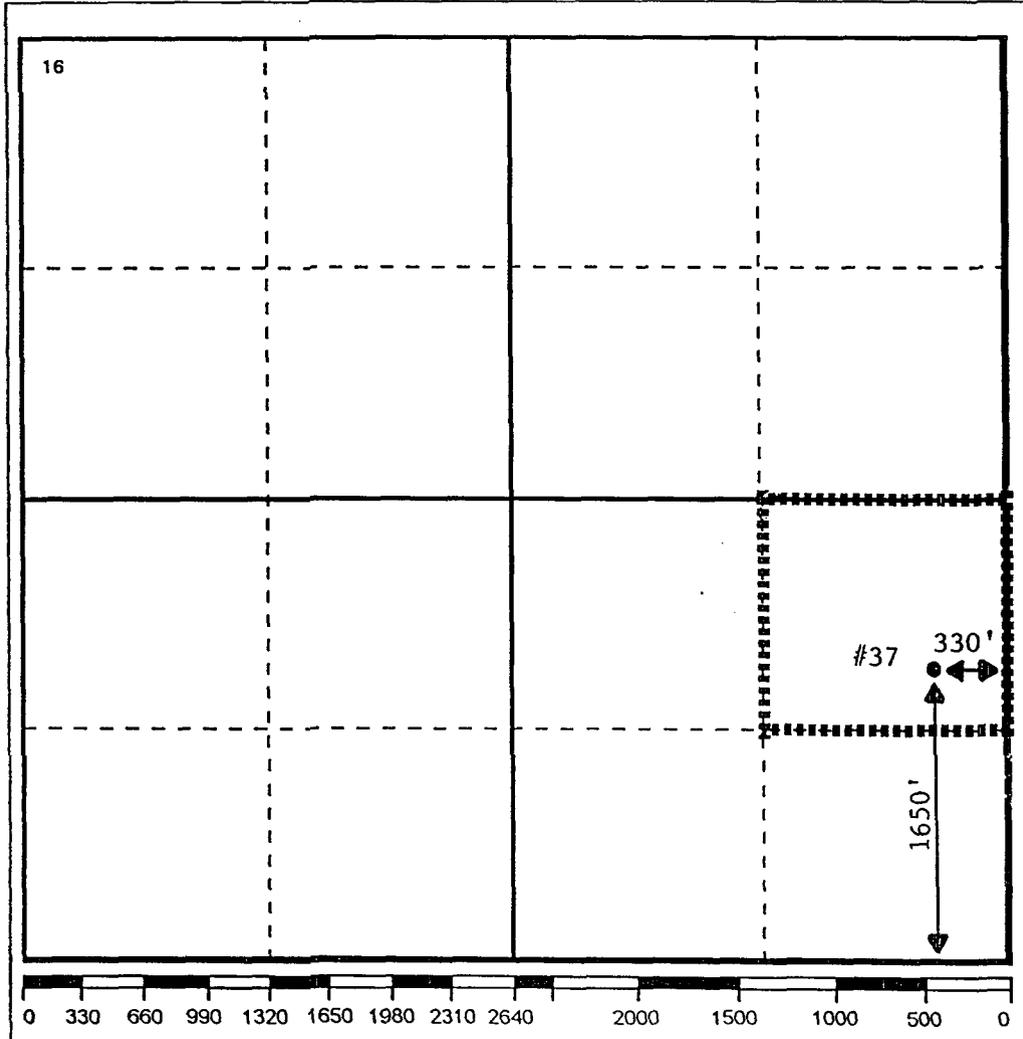
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
I	36	17-S	34-E		1650	SOUTH	330	EAST	LEA

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill No	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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



**17 OPERATOR CERTIFICATION**

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

Signature  
*Monte C. Duncan*

Printed Name  
Monte C. Duncan

Position  
Engr Asst

Date  
6/25/96

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**18 SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

DHC-1317



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

7/8/96

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

GOVERNOR

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

- MC \_\_\_\_\_
- DHC \_\_\_\_\_ *X*
- NSL \_\_\_\_\_
- NSP \_\_\_\_\_
- SWD \_\_\_\_\_
- WFX \_\_\_\_\_
- PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

*Texaco E & P Inc*

Operator \_\_\_\_\_ Lease & Well No. Unit \_\_\_\_\_ S-T-R \_\_\_\_\_

Vacuum Blinbry and Vacuum Drinkard Pools  
New Mexico O State NCT-1 #34, Unit Letter P  
New Mexico O State NCT-1 #35, Unit Letter O  
New Mexico O State NCT-1 #36, Unit Letter N  
New Mexico O State NCT-1 #37, Unit Letter I  
Section 36, T-17-S, R-34-E  
Lea County, New Mexico

and my recommendations are as follows:

*OK*

Yours very truly,

Jerry Sexton  
Supervisor, District 1

/ed