



NEW MEXICO OIL CONSERVATION DIVISION  
RECEIVED

June 27, 1994

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New Mexico Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attention: Mr. David R. Catanach

Re: Exception to NMOCD Rule 303 (A), Order No. R-10033 ;  
Addition of Five Wells to Previous Division Order  
Jalmat and Langlie Mattix Pools  
Cooper Jal Unit  
Well Numbers 406, 407, 409, 414, and 419  
T-24-S, R-36 & 37-E  
Lea County, New Mexico

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests administrative approval to add the five said wells to the its previous Division Order for downhole commingling of production from the Jalmat and Langlie Mattix Pools. The five said wells are located within the unit boundaries of the Cooper Jal Unit, Lea County, New Mexico. Each wells location is indicated in the attachments to this letter. All of the said wells are proposed to be drilled to the base of the Langlie Mattix Pool and simultaneously completed in the Langlie Mattix and Jalmat Pools as downhole commingled producers.

During 1993, the New Mexico Oil Conservation Division approved a Texaco E&P proposal for certification of Enhanced Oil Recovery on the Cooper Jal Unit. In this proposal, Texaco indicated that future locations would need to drilled as downhole commingled wells to complete the enhanced oil recovery project. The five subject wells presented in this application are part of that project. Within the Cooper Jal Unit, the Jalmat and Langlie Mattix Pools have been concurrently waterflooded since October 1970. All produced fluids have entered a common production and injection facility since that time with no fluid compatibility problems.

The proposed downhole commingling will provide a more economical means of production. It will allow complete development of the productive capacity within the unit by allowing the two intervals to be waterflooded on concurrent 40-acre five spot patterns. This will extend the productive life of both intervals, thereby preventing waste. It is therefore requested by Texaco Exploration and Production Inc., to administratively downhole commingle the Jalmat and Langlie Mattix Pools within the said five wellbores. Texaco requests that this be performed

by adding these wells to the previously signed downhole commingling order, No. R-10033, dated December 10, 1993.

The subject wells meet all of requirements as set forth by Rule 303 (C) except Rule 303 (C) 1. a. (1), where the total volumes of water produced are above the set state wide limits. This issue was addressed and resolved during a NMOCD Hearing, Case No. 10879, on December 2, 1993. The ownership of both zones are common (including working and royalty interests). The Jalmat and Langlie Mattix pools have been successfully commingled within the Cooper Jal Unit area with no incompatibility of reservoir fluids.

The following information is submitted as support for this request :

1. Location plat (Form C-102)
2. Well Data Sheets
3. Computation of Value for commingled production
4. Individual Well Casing Programs (Form C-101)
5. Average Production plots for the five 1993 infield producers.
6. Statement of notification to offset operators and USGS.

It is requested that the allocation of production for each zone be deferred until each well is placed on production. At such time, it is proposed to isolate the Jalmat interval in each well, to determine its productive rate prior to commingling. Production will then be allocated to the Langlie Mattix by subtracting the Jalmat production rate from the total stabilized production rate after downhole commingling the well.

Texaco Exploration and Production, Inc. believes that the administrative approval for downhole commingling and use of artificial lift on said wells will improve secondary recovery efforts and prolong the productive life of both zones, therefore preventing waste. If you have any questions concerning this application, please contact Michael Alexander at (505)397-0411.

Yours very truly,



Russell Pool  
Hobbs Area Engineer

MCA

attachments  
Chrono

cc: Jerry Sexton/NMOCD/Hobbs  
Shannon Shaw/BLM/Carlsbad

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  
 P. O. Box 1980, Hobbs, NM 88240

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

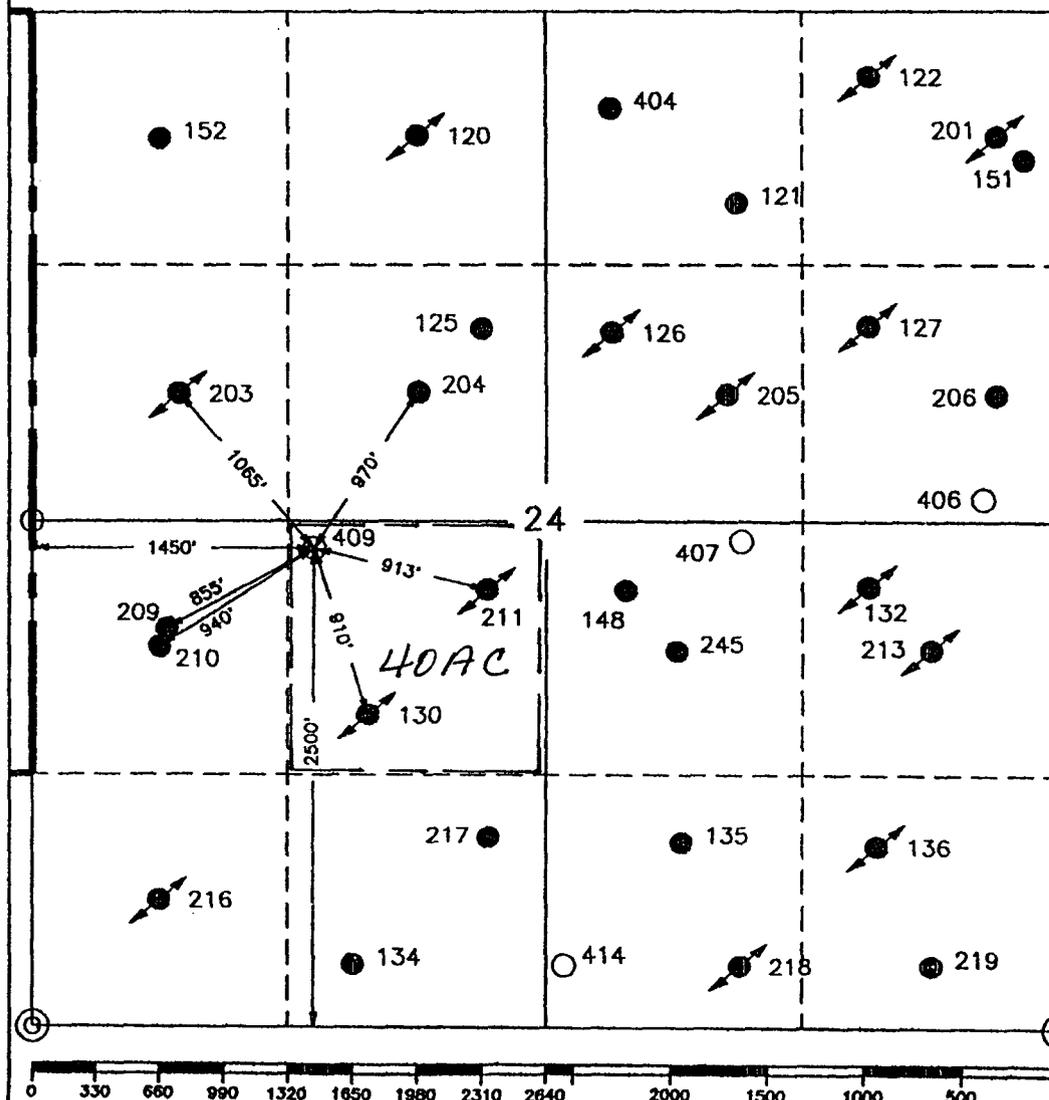
DISTRICT III  
 1000 Rio Brazos Rd., Aztec, NM 87410

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>COOPER JAL UNIT</b>		Well No. <b>409</b>
Unit Letter <b>K</b>	Section <b>24</b>	Township <b>24 South</b>	Range <b>36 East</b>	County <b>Lea</b>	
Actual Footage Location of Well:					
<b>2500'</b> feet from the <b>South</b> line and		<b>1450'</b> feet from the <b>West</b> line			
Ground level Elev. <b>3331'</b>	Producing Formation <b>Tansil, Yates, 7RVRS; 7RVRS, Queen</b>		Pool <b>Jalmat; Langlie Mattix</b>	Dedicated Acreage: <b>40</b> Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 D. Mariott*  
 Printed Name: **Royce D. Mariott**  
 Position: **Division Surveyor**  
 Company: **Texaco Exp. & Prod.**  
 Date: **June 9, 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: **June 7, 1994**  
 Signature & Seal of Professional Surveyor: *John S. Piper*  
 Certificate No.: **7254 John S. Piper**

DATA SHEET FOR DOWNHOLE COMMINGLING

Operator : Texaco USA, Inc.  
Address : P.O. 730 , Hobbs, New Mexico 88240  
Lease and Well No.: Cooper Jal Unit No. 409  
Proposed Location : Unit Letter K, 2500' FSL, 1450' FWL of  
Section 24, T-24-S, R-36-E  
Lea County, New Mexico

WELL DATA

	<u>Upper Pool</u>	<u>Lower Pool</u>
Name of Pool	Jalmat Oil & Gas	Langlie Mattix Oil
BHP	520 psia (Est. from #130 SI-FL)	425 psia (Est. from #402 SI-FL)
Completed Interval:	3000'-3250' (250') (Proposed Comp.)	3400'-3650' (250') (Proposed Comp.)
Proposed Prod. Method:	Rod Pumped	Rod Pumped
Current Test Date :	- NA -	- NA -
Oil	- NA -	- NA -
Gas	- NA -	- NA -
Water	- NA -	- NA -
GOR	- NA -	- NA -
GOR Limit	- NA -	- NA -
Gas Gravity	0.8467	0.8467
	(Both Commingled at Common Unit Battery)	

NOTE : It is proposed to drill to Langlie Mattix, cement casing, perforate and fracture stimulate each zone independently, test the Jalmat Zone, obtain a stabilized production test, then commingle both zones and allocate production at that time.

**COMPUTED VALUE OF DHC**  
**PRODUCTION**

**AVERAGE ESTIMATED PRODUCTION BEFORE DHC**  
**(SINGLE JALMAT WELL)**

	<u>L. MATTIX</u>	<u>AVERAGE PRICE</u>	<u>INCOME</u>
Oil	17 BOPD	\$16.50/BO	\$247.50
Gas	20 MCFPD	\$ 1.90/MCF	\$ 38.00
<b>TOTAL SINGLE COMPLETION REVENUES</b>			<b>\$285.50</b>

**AVERAGE ESTIMATED PRODUCTION AFTER DHC**  
**(DETERMINED FROM NORMALIZED 1993 NEW WELL PRODUCTION)**

	<u>JALMAT</u>	<u>LANGLIE MATTIX</u>	<u>COMMINGLED</u>
Oil	15 BOPD	17 BOPD	<b>32 BOPD</b>
Gas	27 MCFPD	20 MCFPD	<b>47 MCFPD</b>
Water	81 BWPD	165 BWPD	<b>246 BWPD</b>

**ESTIMATE OF VALUE OF DHC PRODUCED HYDROCARBONS**

	<u>COMMINGLED</u>	<u>PRODUCT PRICE</u>	<u>REVENUE</u>
Oil	32 BOPD	\$16.50/BBL	\$ 528.00
Gas	47 MCFPD	\$ 1.90/MCF	<u>\$ 89.00</u>
<b>TOTAL ESTIMATED DAILY REVENUES</b>			<b>617.00</b>

**NET DIFFERENCE FROM DOWNHOLE COMMINGLING = \$ 331.50/DAY**

NOTE : All produced volumes are currently commingled at the surface from both the Langlie Mattix and Jalmat Pools. Both pools oil gravities are 38 degree API Crudes and are classified as sour.

**FORMULA FOR DETERMINING ALLOCATION OF PRODUCTION**

**OIL**

J = JALMAT STABILIZED OIL PRODUCTION RATE, BOPD

T = TOTAL COMMINGLED OIL PRODUCTION RATE, BOPD

LANGLIE MATTIX PROD. = M = (T - J) , BOPD

**GAS**

J = JALMAT STABILIZED GAS PRODUCTION RATE, MCFPD

T = TOTAL COMMINGLED GAS PRODUCTION RATE, MCFPD

LANGLIE MATTIX PROD. = M = (T - J) , MCFPD

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

### OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

AMENDED REPORT

#### APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>1</sup> Operator Name and Address TEXACO EXPLORATION & PRODUCTION INC. P.O. Box 3109, Midland Texas 79702		<sup>2</sup> OGRID Number 022351
		<sup>3</sup> API Number
<sup>4</sup> Property Code	<sup>5</sup> Property Name COOPER JAL UNIT	<sup>6</sup> Well No. 409

#### <sup>7</sup> Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
K	24	24-S	36-E		2500	SOUTH	1450	WEST	LEA

#### <sup>8</sup> Proposed Bottom Hole Location If Different From Surface

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
<sup>9</sup> Proposed Pool 1 ..					<sup>10</sup> Proposed Pool 2 ..				

<sup>11</sup> Work Type Code N	<sup>12</sup> WellType Code O	<sup>13</sup> Rotary or C.T. R	<sup>14</sup> Lease Type Code P	<sup>15</sup> Ground Level Elevation GR-3331'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 3750'	<sup>18</sup> Formation ..	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 7/1/94

#### <sup>21</sup> Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4	8 5/8	24#	400'	250	SURFACE
7 7/8	5 1/2	15.5#	3750'	950	SURFACE

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

#### CEMENTING PROGRAM:

SURFACE CASING - 250 SX CLASS C W/ 2% CACL2 (14.8 PPG, 1.34 CF/S, 6.31 GW/S).

PRODUCTION CASING - 600 SACKS 35/65 POZ CLASS H W/ 6% GEL, 5% SALT, 1/4# FLOCELE (12.8 PPG, 1.94 CF/S, 10.4 GW/S). F/B 350 SACKS CLASS H (15.6 PPG, 1.18 CF/S, 5.20 GW/S).

THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

\*\* FIELD: JALMAT/TANSIL, YATES, 7RVRS FORMATIONS; LANGLIE MATTIX7RVRS, QUEEN FORMATIONS. REQUEST TO DOWN-HOLE COMMINGLE IS BEING FILED.

UNORTHODOX LOCATION - EXCEPTION HAS BEEN APPLIED FOR. (SEE ATTACHED LETTER.)

<sup>23</sup> I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature *C.P. Basham / SDH*

Printed Name C. P. Basham

Title Drilling Operations Mgr.

Date 6/14/94

Telephone 688-4620

### OIL CONSERVATION DIVISION

Approved By:

Title:

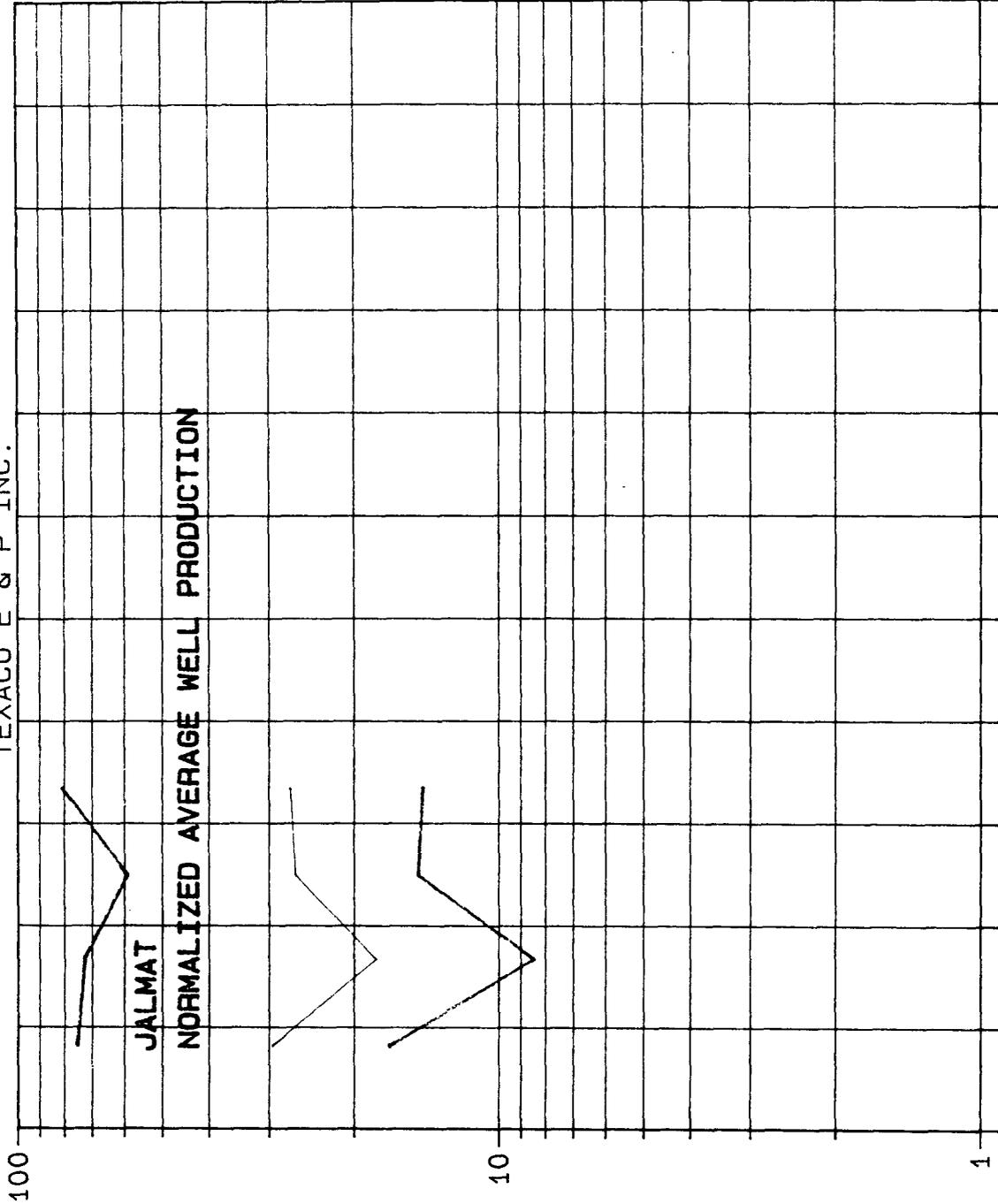
Approval Date:

Expiration Date:

Conditions of Approval:

Attached

COOPER JAL UNIT 404 - 405 JALMAT (TAN/YTS/7 RVRs)  
 TEXACO E & P INC.



LEASE DATA

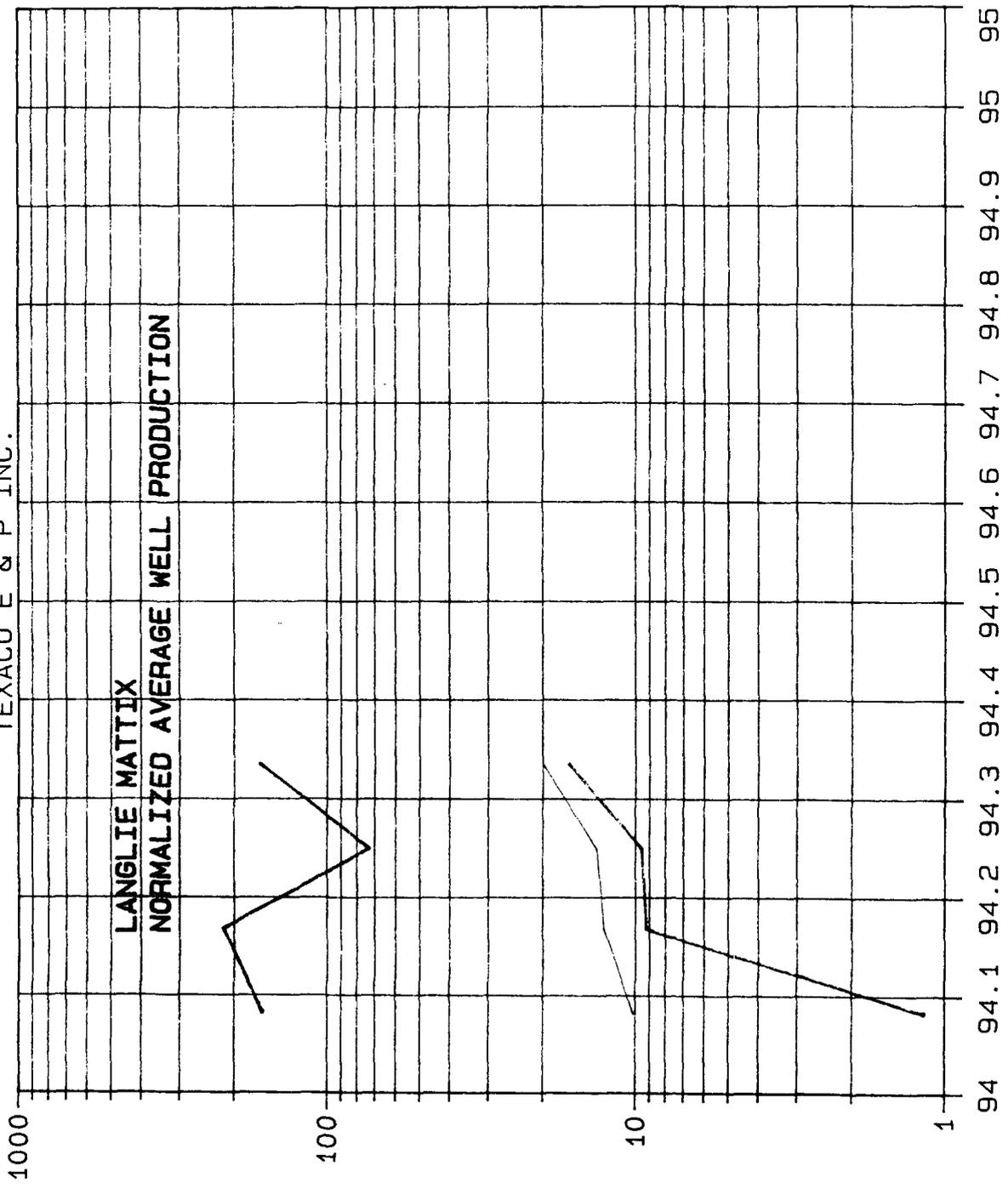
LSE  
 FLD  
 OPER 833331  
 ZONE JM  
 24S-36S & 37S--  
 COUNTY  
 STATE

STATUS 4-94  
 CO 8 MBO  
 CG 15 MCF  
 CW 43 MBW  
 BOPD 72  
 BWPD 405  
 MCFPD 136  
 WELLS 5  
 CI 0 MBWI  
 BWIPD 0

BOPD  
 BWPD  
 MCFPD

YEARS

COOPER JAL UNIT 401 - 405 LANGLEIE MATTIX  
 TEXACO E & P INC.



LEASE DATA  
 LSE  
 FLD  
 OPER 833331  
 ZONE LM  
 24S-36S & 37S-  
 COUNTY  
 STATE  
 STATUS 4-94  
 CO 6 MBO  
 CG 8 MMCF  
 CW 92 MBW  
 BOPD 83  
 BWPD 825  
 MCFPD 99  
 WELLS 5  
 CI 0 MBWI  
 BWIPD 0

— MCFPD  
 — BWPD  
 — BOPD

YEARS

# **STATEMENT OF NOTIFICATION**

LIST OF 40-ACRE OFFSET OPERATORS TO PROPOSED WELLS

OPERATORS OTHER THAN TEXACO E & P :

406 : NONE  
 407 : NONE  
 409 : NONE  
 414 : NONE  
 419 : NONE

P 309 854 129



**Receipt for Certified Mail**

No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

Sent to <b>BLM</b>	
Street and No	
P.O., State and ZIP Code <b>Box 1778, Calisbad, NM 88220</b>	
Postage	\$ 1.44
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Business Address	
TOTAL Postage & Fees	\$ 2.44
Postmark or Date <b>27 1994</b> USPS	

PS Form 3800, June 1991

OIL CONSERVATION DIVISION  
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'94 JUL 5 AM 8 50

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

BRUCE KING  
GOVERNOR

June 28, 1994

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

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

RE: Proposed:

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

Gentlemen:

#419-P 13-24S-36E  
#414-O 24-24S-36E  
#409-K 24-24S-36E  
#407-J 24-24S-36E  
#406-H 24-24S-36E

I have examined the application for the:

Texaco Expl & Prod Inc.  
Operator

Cooper Jal Unit

Lease & Well No. Unit S-T-R

and my recommendations are as follows:

*O.K.*

Yours very truly,

*Jerry Sexton*  
Jerry Sexton  
Supervisor, District 1

/ed