



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

11075

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

# NOTICE OF LOCATION

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>419</b>
Unit Letter <b>P</b>	Section <b>13</b>	Township <b>24 South</b>	Range <b>36 East</b>	County <b>Lea</b>	
Actual Footage Location of Well:					
<b>330'</b> feet from the <b>South</b> line and		<b>500'</b> feet from the <b>East</b> line			
Ground level Elev. <b>3315'</b>	Producing Formation <b>Tansil, Yates, 7RVRS; 7RVRS, Queen</b>	Pool <b>Jalmat; Langlie Mattix</b>	Dedicated Acreage: <b>40 Acres</b>		
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, unitization, force-pooling, etc?  <input type="checkbox"/> Yes <input type="checkbox"/> 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					
				<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
				Signature <i>Royce D. Mariott</i>	
				Printed Name <b>Royce D. Mariott</b>	
				Position <b>Division Surveyor</b>	
				Company <b>Texaco Exp. &amp; Prod.</b>	
Date <b>June 9, 1994</b>					
				<b>SURVEYOR CERTIFICATION</b> 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 <b>June 7, 1994</b>	
				Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
				Certificate No. <b>7254 John S. Piper</b>	
				Sheet <b>Lea Co. FB. 11, Pg. 6</b>	

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. 419**

Proposed Location : Unit Letter P, 330' FSL, 500' FEL of  
Section 13, 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	312 psia (Pres from #208 PBU)	540 psia (Est. from #403 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 (Both Commingled at Common Unit Battery)	0.8467

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

W-2  
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. 419

<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
P	13	24-S	36-E		330	SOUTH	500	EAST	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-3315'
<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	15.6#	3750'	950	SURFACE

22 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% CACL<sub>2</sub> (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.

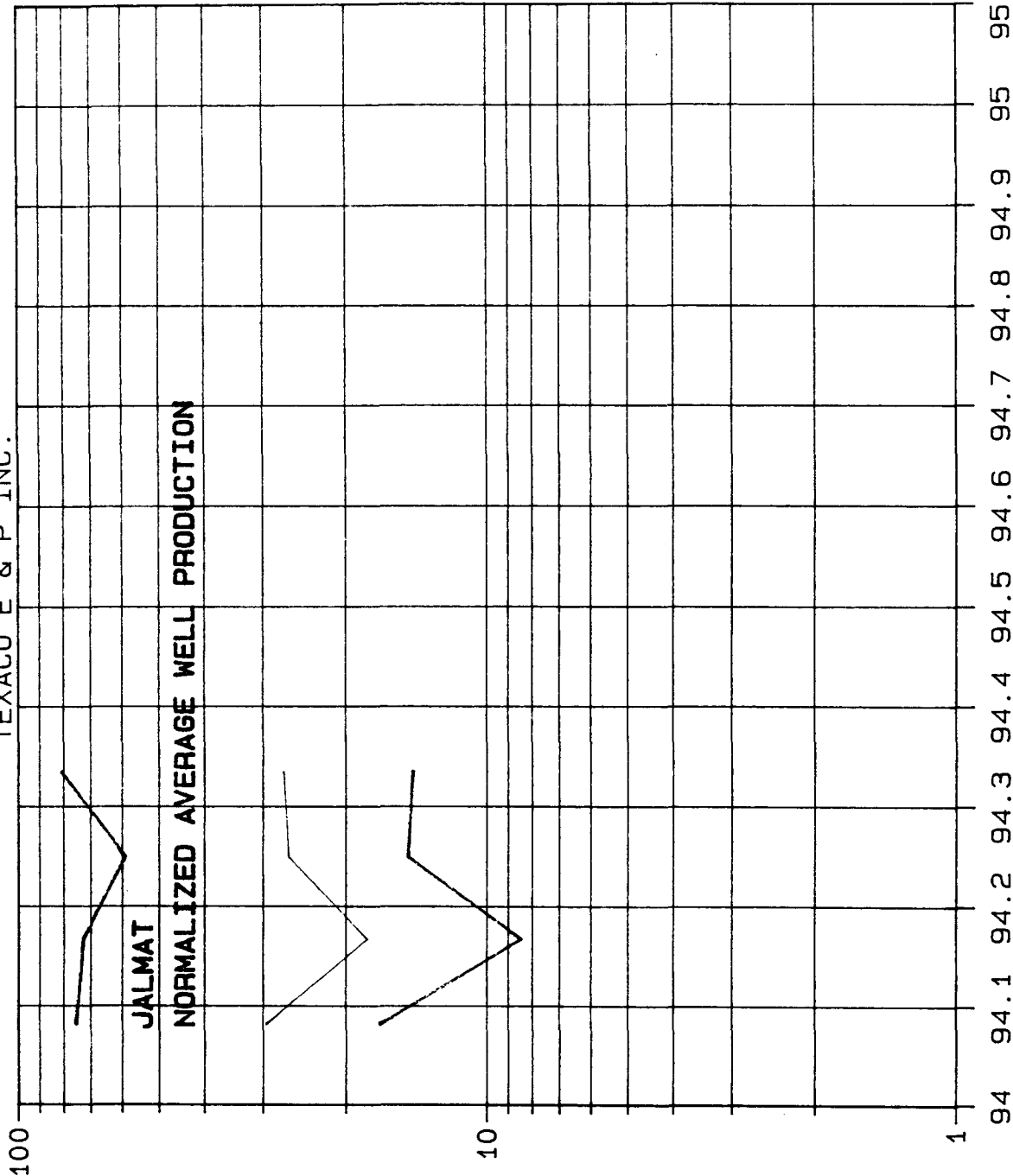
\*\* FIELD: JALMAT/TANSIL, YATES, 7RVRS FORMATIONS; LANGLEIE MATTIX/7RVRS, QUEEN FORMATIONS. REQUEST TO DOWN-HOLE COMMINGLE IS BEING FILED.

<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.		OIL CONSERVATION DIVISION	
Signature <i>C.P. Basham / SDH</i>			
Printed Name C. P. Basham		Approved By:	
Title Drilling Operations Mgr.		Title:	
Date 6/14/94		Approval Date:	Expiration Date:
Telephone 688-4620		Conditions of Approval: Attached <input type="checkbox"/>	



# COOPER JAL UNIT 401 - 405 JALMAT (TAN/YTS/7 RVR)

TEXACO E & P INC.



LEASE DATA

LSE

FLD

OPER 833331

ZONE JM

24S-36S & 37S--

COUNTY

STATE

MCFPD

BWPD

BOPD

STATUS 4-94

CO 8 MBO

CG 15 MMCF

CW 43 MBW

BOPD 72

BWPD 405

MCFPD 136

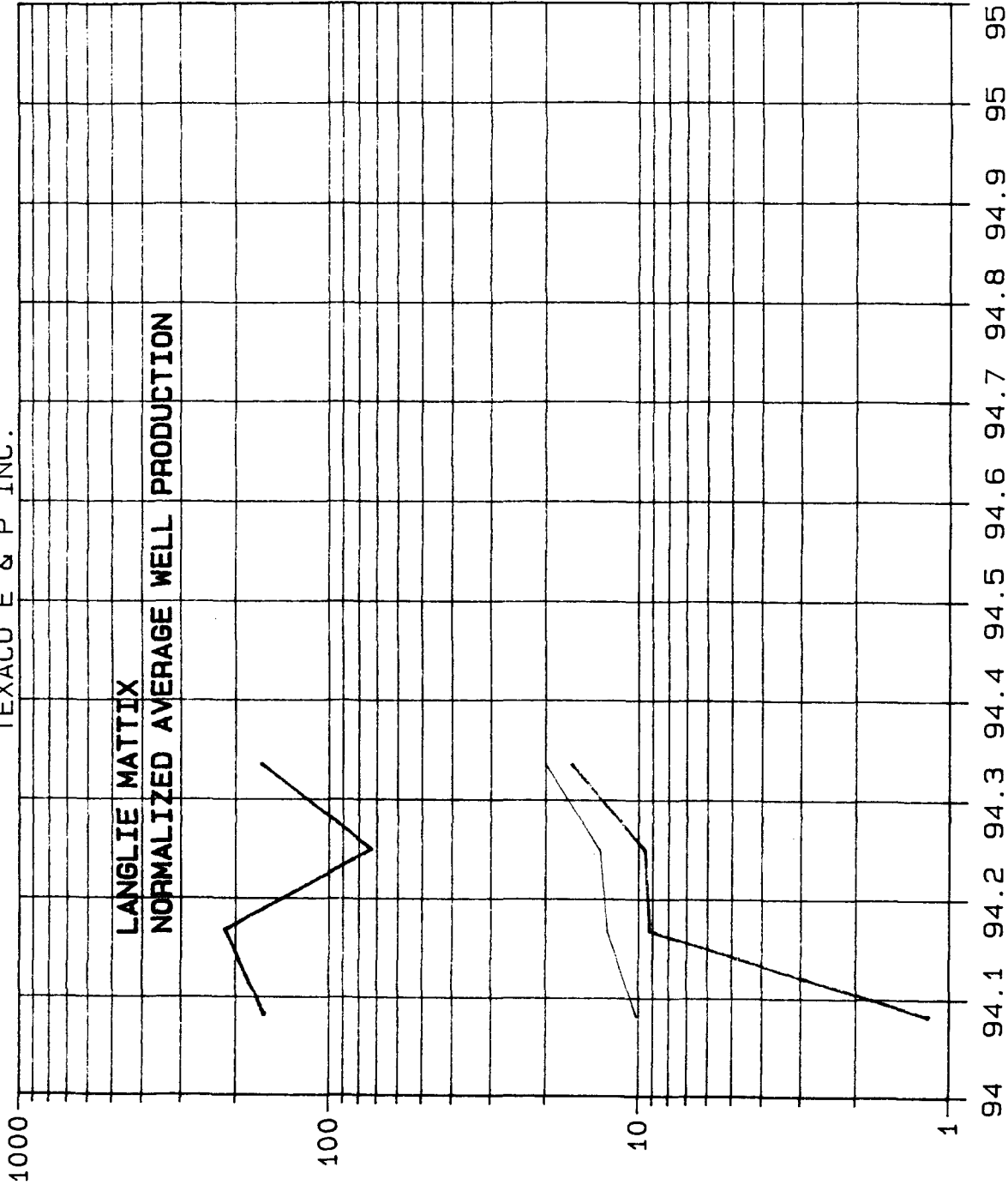
WELLS 5

CI 0 MBWI

BWIPD 0

YEARS

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



LEASE DATA

LSE

FLD

OPER 8333331

ZONE LM

24S-36S & 37S-

COUNTY

STATE

STATUS 4-94

CO 6 MBO

CG 8 MCF

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

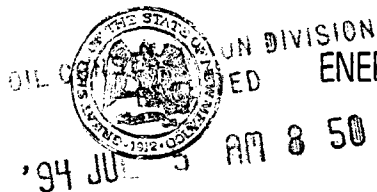


### Receipt for Certified Mail

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, Carlsbad, NM 88220</b>	
Postage	\$ <b>1.44</b>
Certified Fee	<b>1.00</b>
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Address	
TOTAL Postage & Fees	\$ <b>2.44</b>
Postmark or Date <b>27 1994</b> <b>USPS</b>	

PS Form 3800, June 1991



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:

I have examined the application for the:

#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

Texaco Expl & Prod Inc.

Cooper Jal Unit

Operator

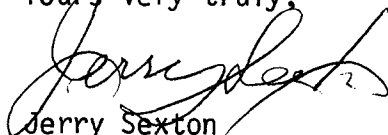
Lease & Well No. Unit

S-T-R

and my recommendations are as follows:

OK

Yours very truly,

  
Jerry Sexton  
Supervisor, District 1

/ed