



OIL CONSERVATION DIVISION

Texaco E & P

PO Box 730
Hobbs NM 88241-0730
505 393 7191

RECEIVED

June 27, 1994

JUN 27 1994 AM 8 50

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

Attention: Mr. David R. Catanach

Re: Exception to NMOC 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,

RS Pool

Russell Pool
Hobbs Area Engineer

MCA

attachments
Chrono

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

ATTACHMENTS

LOCATION PLATS
(Form C-102)

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the section

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

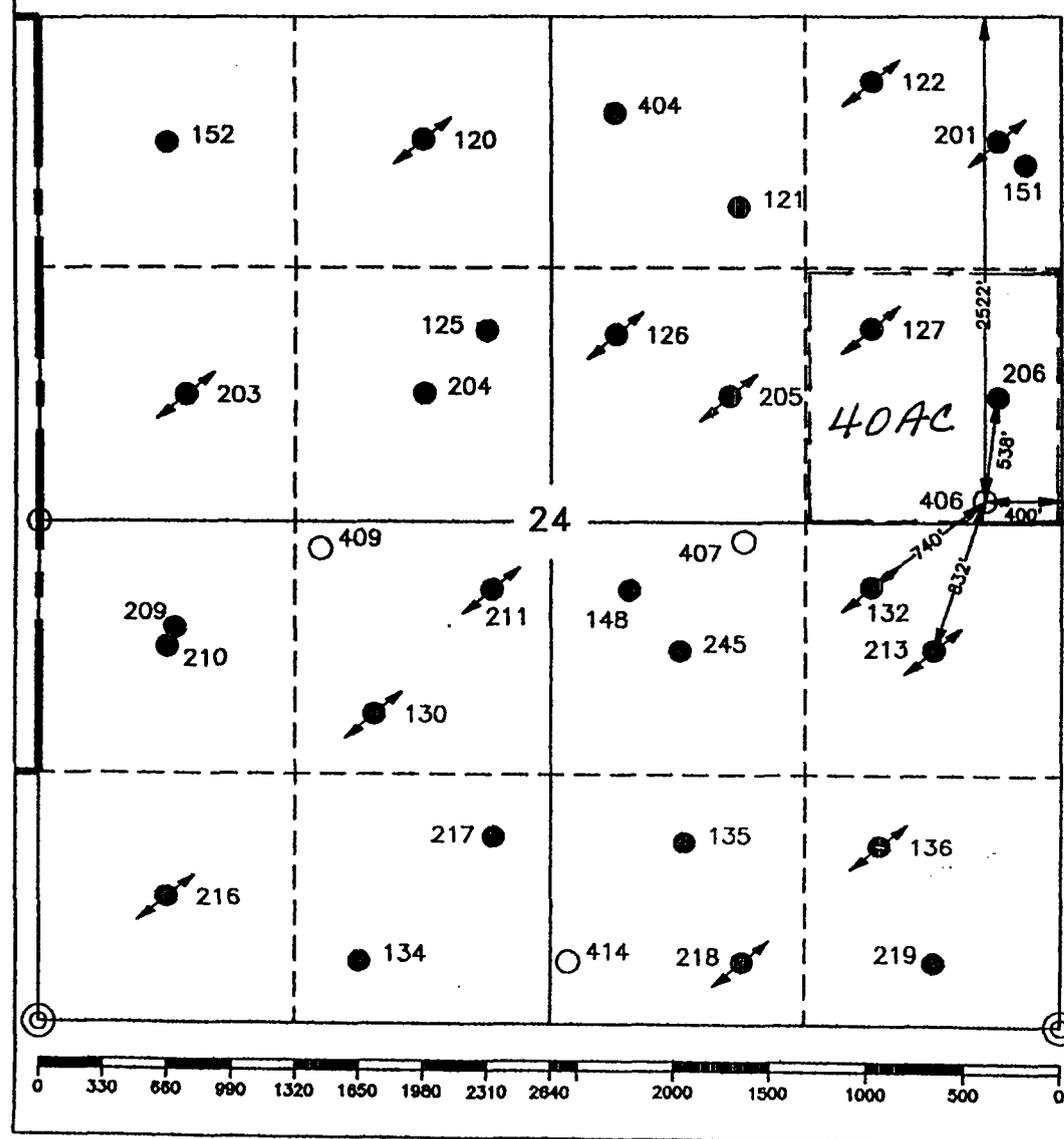
DISTRICT I
 P. O. Box 1980, Hobbs, NM 88240

DISTRICT II
 P. O. Drawer 00, Artesia, NM 86210

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

Operator TEXACO EXPLORATION AND PRODUCTION Inc.		Lease COOPER JAL UNIT		Well No. 406
Unit Letter H	Section 24	Township 24 South	Range 36 East	County Lea
Actual Footage Location of Well: 2522' feet from the North line and 400' feet from the East line				
Ground level Elev. 3303'	Producing Formation Tansil, Yates, 7RVRS; 7RVRS, Queen		Pool Jalmat; Langlie Mattix	Dedicated Acreage: 40 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

Sheet Lea Co. FB. 11, Pg. 2

INDIVIDUAL WELL DATA
SHEETS

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. 406
Proposed Location : Unit Letter H, 2522' FNL, 400' FEL 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	312 psia (Pres from # 208 PBU)	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 (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
TOTAL SINGLE COMPLETION REVENUES			\$285.50

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	32 BOPD
Gas	27 MCFPD	20 MCFPD	47 MCFPD
Water	81 BWPD	165 BWPD	246 BWPD

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	\$ 89.00
TOTAL ESTIMATED DAILY REVENUES			617.00

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

CASING PROGRAMS
(C-101s)

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

¹ Operator Name and Address TEXACO EXPLORATION & PRODUCTION INC. P.O. Box 3109, Midland Texas 79702		² OGRID Number 022351
		³ API Number
⁴ Property Code	⁵ Property Name COOPER JAL UNIT	⁶ Well No. 406

⁷ Surface Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
H	24	24-S	36-E		2522	NORTH	400	EAST	LEA

⁸ Proposed 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
⁹ Proposed Pool 1 ..					¹⁰ Proposed Pool 2 ..				

¹¹ Work Type Code N	¹² WellType Code O	¹³ Rotary or C.T. R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation GR-3303'
¹⁶ Multiple No	¹⁷ Proposed Depth 3750'	¹⁸ Formation ..	¹⁹ Contractor	²⁰ Spud Date 7/1/94

²¹ 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

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% 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; LANGLEIE MATTIX/7RVRS, QUEEN FORMATIONS. REQUEST TO DOWN-HOLE COMMINGLE IS BEING FILED.

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

²³ 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 / JPH*

Printed Name C. P. Basham

Title Drilling Operations Mgr.

Date 6/14/94

Telephone 688-4620

OIL CONSERVATION DIVISION

Approved By:

Title:

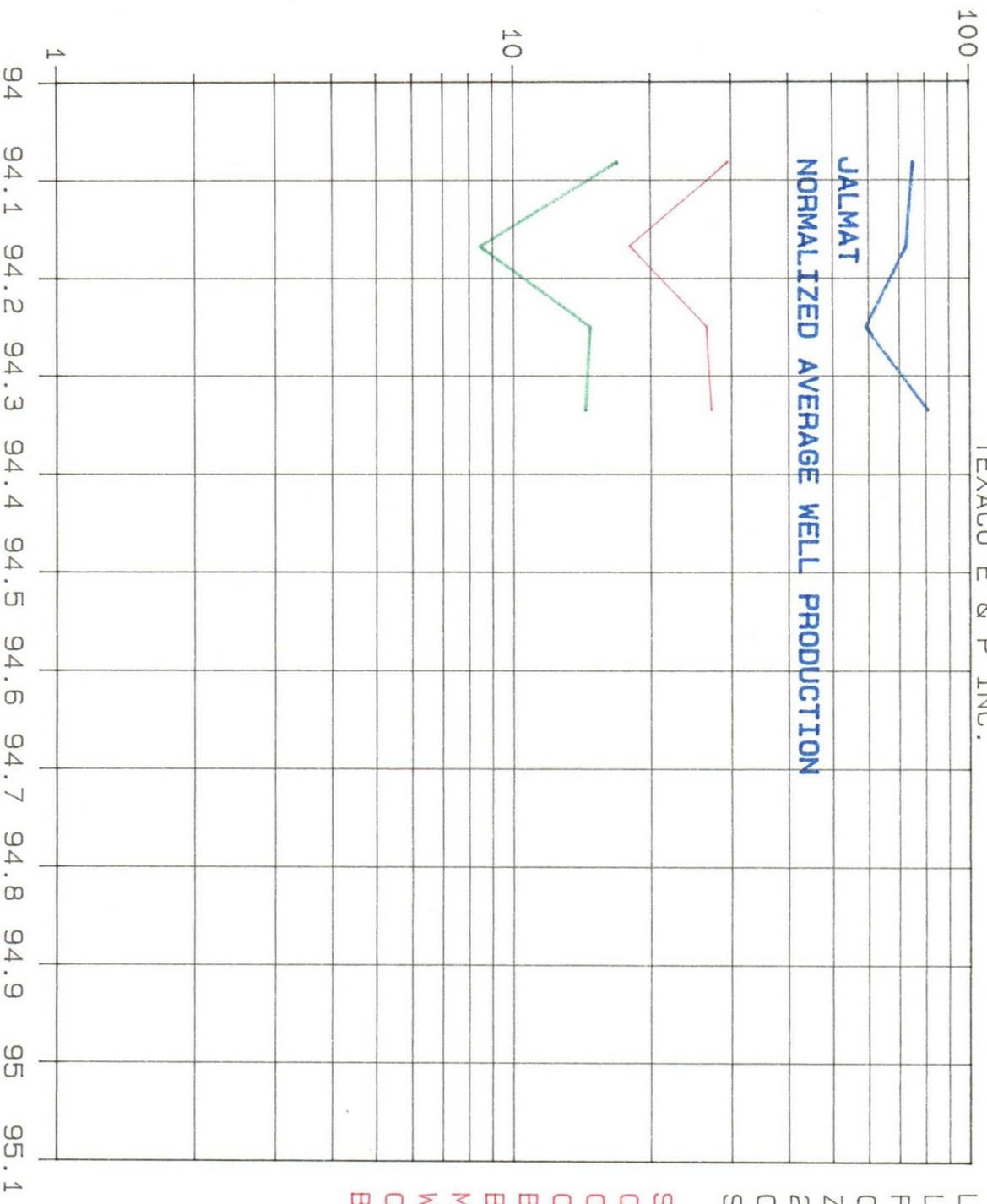
Approval Date:

Expiration Date:

Conditions of Approval:
Attached

NORMALIZED PRODUCTION
PLOTS

COOPER JAL UNIT 400 - 405 JALMAT (TAN/YTS/7 RVRS)
 TEXACO E & P INC.



JALMAT
 NORMALIZED AVERAGE WELL PRODUCTION

BOPD BWPD MCFPD

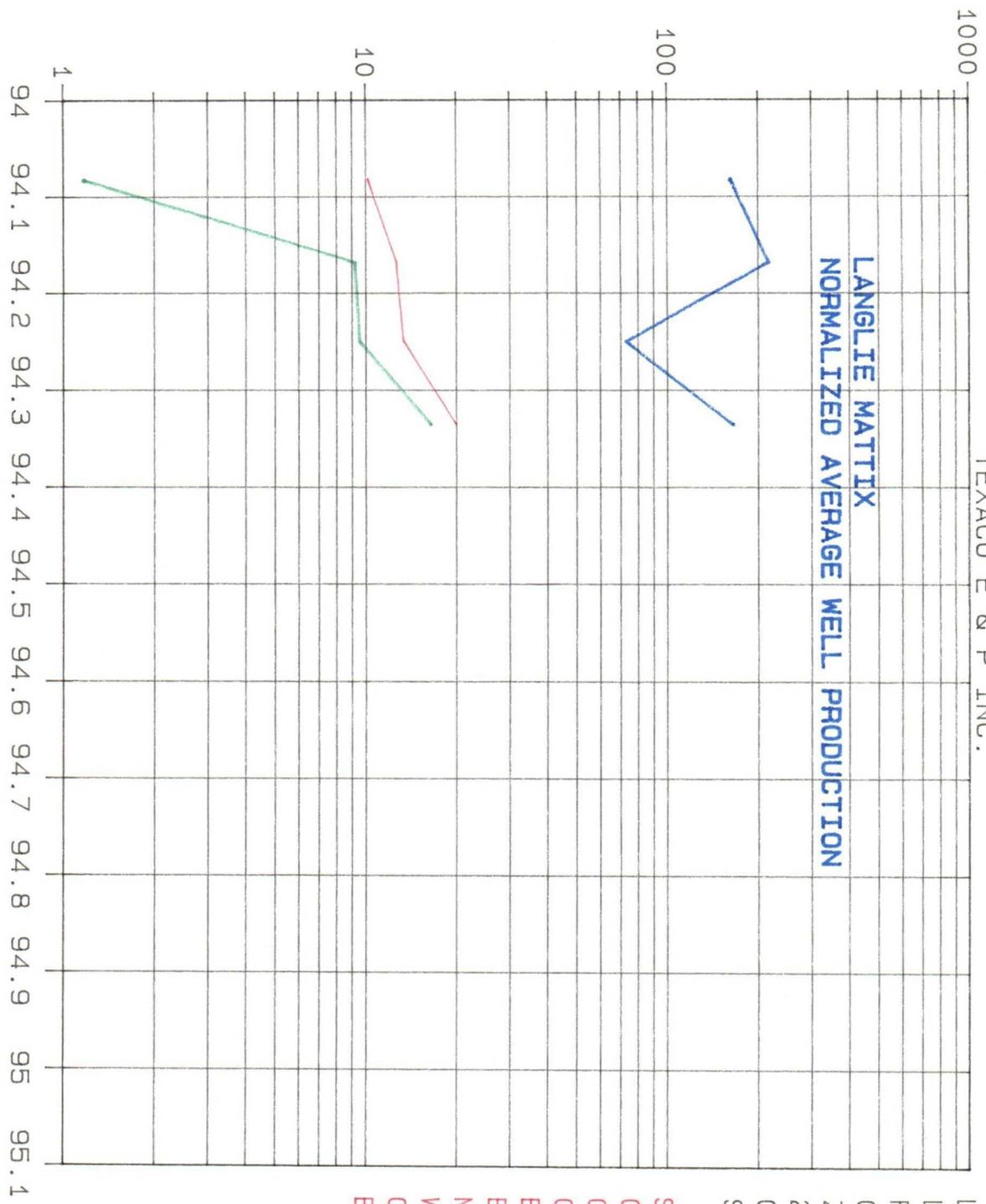
YEARS

LEASE DATA
 LSE
 FLD
 OPER 8333331
 ZONE JM
 24S-36S & 37S-
 COUNTY
 STATE

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

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

LANGLIE MATTIX
 NORMALIZED AVERAGE WELL PRODUCTION



BOPD BWPD MCFPD

LEASE DATA
 LSE
 FLD
 OPER 8333331
 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

YEARS

STATEMENT OF NOTIFICATION

LIST OF 40-ACRE OFFSET OPERATORS TO PROPOSED WELLS

OPERATORS OTHER THAN TEXACO E & P :

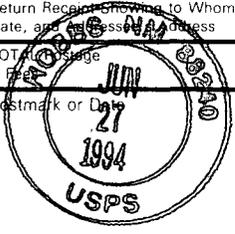
406 : NONE
 407 : NONE
 409 : NONE
 414 : NONE
 419 : NONE

P 309 859 129



**Receipt for
 Certified Mail**

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

Sent to BLM	
Street and No.	
P.O., State and ZIP Code Box 177B, Carlsbad, NM 88220	
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 Recipient's Address	
TOTAL Postage & Fees	\$ 2.44
Postmark or Date 	

PS Form 3800, June 1991

OIL CONSERVATION DIVISION
RECEIVED
'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
#414-0	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:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed