

NEW MEXICO OIL CONSERVATION DIVISION

ALBUQUERQUE, NEW MEXICO 87103

June 27, 1994

11075

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

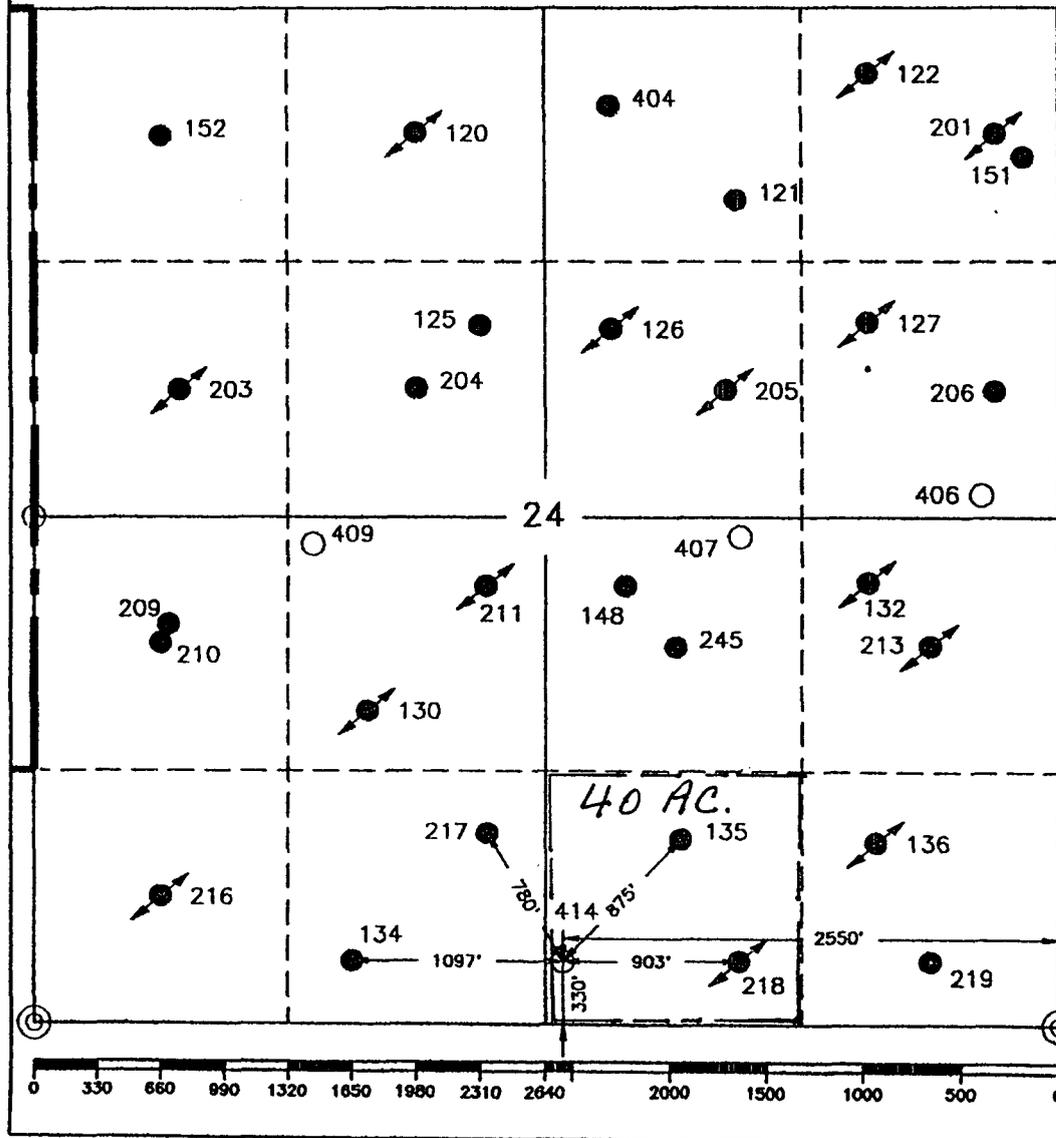
DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the section

Operator TEXACO EXPLORATION AND PRODUCTION Inc.			Lease COOPER JAL UNIT		Well No. 414
Unit Letter O	Section 24	Township 24 South	Range 36 East	County Lea	
Actual Footage Location of Well: 330' feet from the South line and 2550' feet from the East line					
Ground level Elev. 3312'	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 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 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. 414**
Proposed Location : Unit Letter O, 330' FSL, 2550' 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	786 psia (Pres from # 230 PBU)	339 psia (Pres from #154 PBU)
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

DISTRICT I

W-2

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. 414

⁷ Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
O	24	24-S	36-E		330	SOUTH	2550	EAST	LEA

⁸ 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
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-3312'
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).

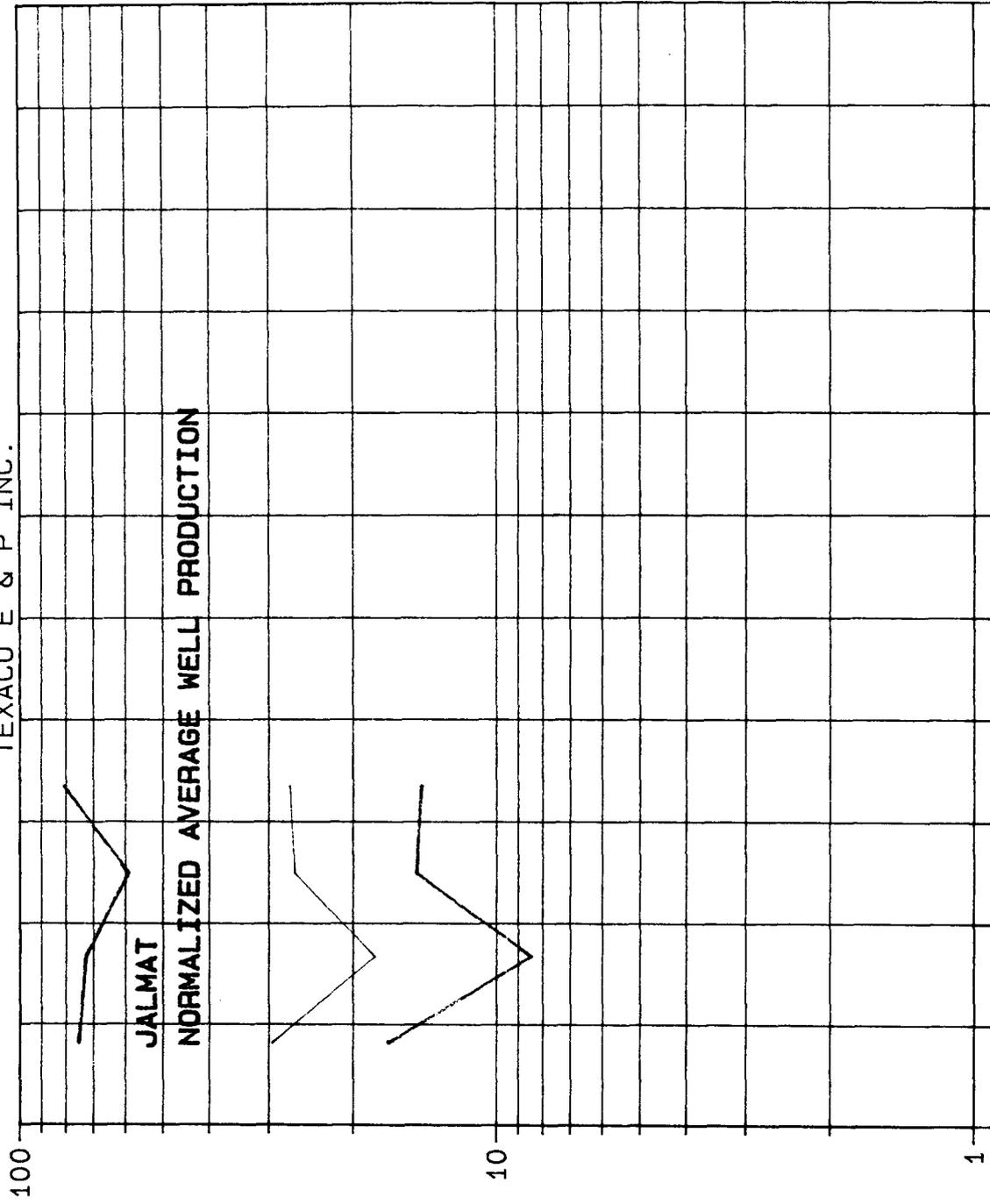
THERE ARE NO OTHER OPERATORS IN THIS QUARTER QUARTER SECTION.

** 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 <i>C.P. Basham / JPH</i> 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 <input type="checkbox"/>	

COOPER JAL UNIT 401 - 405 JALMAT (TAN/YTS/7 RVRs)
 TEXACO E & P INC.

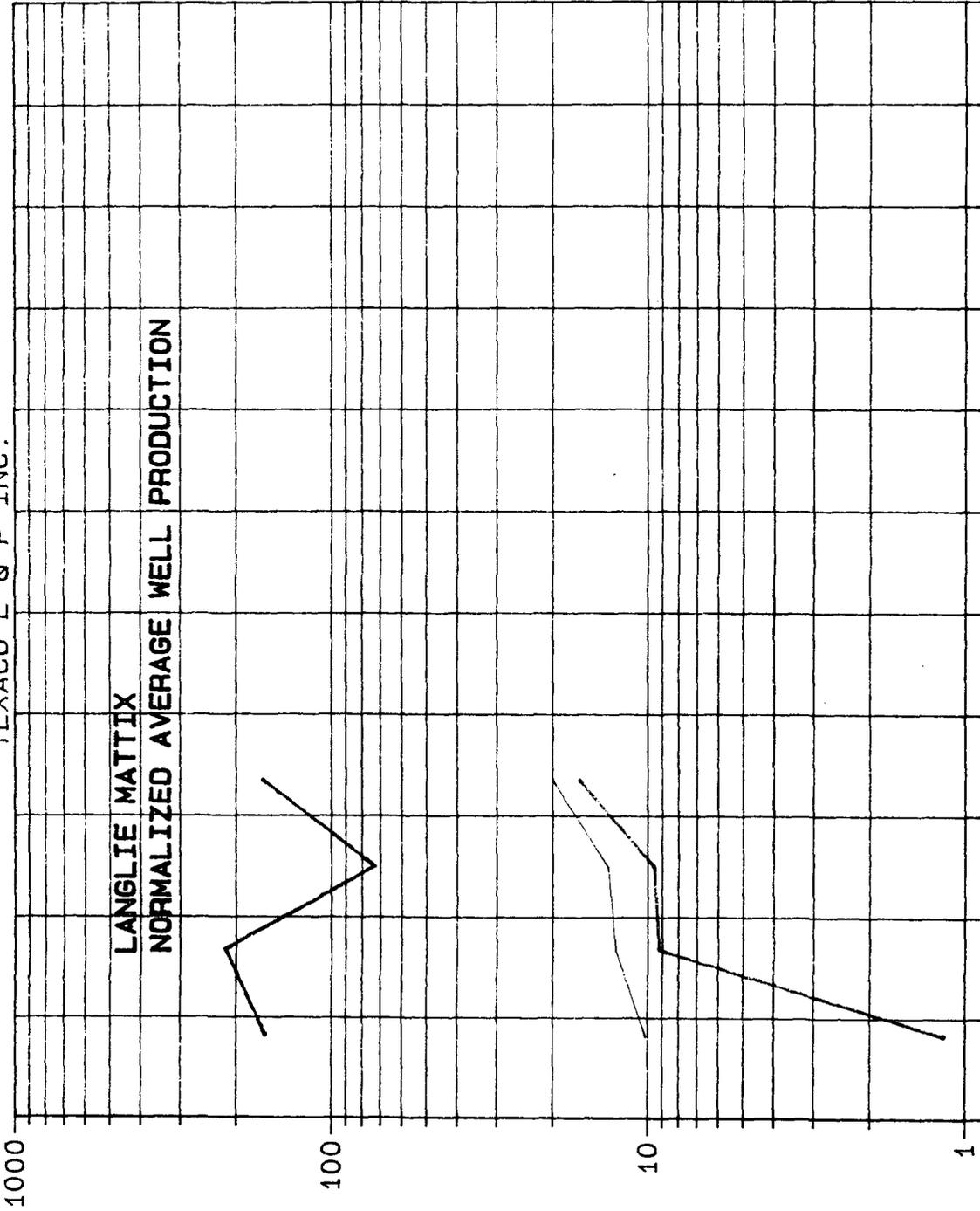


LEASE DATA
 LSE
 FLD
 OPER 833331
 ZONE JM
 24S-36S & 37S-
 COUNTY
 STATE
 STATUS 4-94
 CO 8 MBO
 CG 15 MMCF
 CW 43 MBW
 BOPD 72
 BWP 405
 MCFPD 136
 WELLS 5
 CI 0 MBWI
 BWIPD 0

— MCFPD
 — BWP
 — BOPD

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 MCF
 CW 92 MBW
 BOPD 83
 BFPD 825
 MCFPD 99
 WELLS 5
 CI 0 MBWI
 BWIPD 0

— MCFPD
 — BFPD
 — BOPD

YEARS

STATEMENT OF NOTIFICATION

LIST OF 40-ACRE OFFSET OPERATORS TO PROPOSED WELLS

OPERATORS OTHER THAN TEXACO E & P :

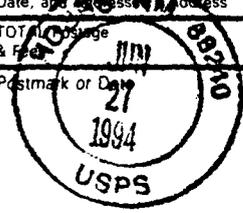
406 : NONE
 407 : NONE
 409 : NONE
 414 : NONE
 419 : NONE

P 309 854 129



Receipt for Certified Mail

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

Sent to BLM	
Street and No.	
P. O., State and Zip Code Box 1778, Grants, 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 Business Address	
TOTAL Postage & Fees	\$ 2.44
Postmark or Date 	

PS Form 3800, June 1991

RELEASE DATE 6/29/, 19 64.
WAITING PERIOD-20-DAYS

ADMINISTRATIVE ORDER DHC-1033

COMPANY.....; Texaco Exploration & Production Inc.
ADDRESS.....; P.O. Box 730
CITY, STATE, ZIP...; Hobbs, New Mexico 88241-0730
ATTENTION.....; Russell Pool
WELL NAME AND NUMBER; Coper Jal Unit Well No. 414
LOCATION; UNIT 0, SECTION 24, T-24 South, R-36 East,
NMPM, lea COUNTY, NEW MEXICO.
POOLS; Jalmat and Langlie-Mattix Pools

Gentlemen:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle the production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

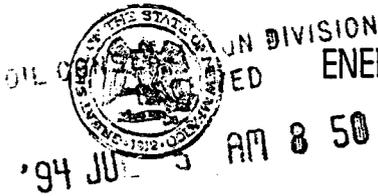
In accordance with the provisions of Division Rule No. 701(G)(4), the subject well is hereby authorized to produce at capacity, provided however, the well shall be maintained in a pumped off condition.

Allocation of production from the subject well shall be determined as follows:

- a) The applicant shall obtain a stabilized test rate from the Jalmat Pool prior to commingling;
- b) The applicant shall obtain a stabilized test rate from both the Jalmat and Langlie-Mattix Pools after commingling;
- c) The applicant shall utilize the test data to determine the correct allocation of production from each zone. The applicant shall submit the test data and proposed allocation to both the Santa Fe and Hobbs offices of the Division.

Pursuant to Rule 303-C-5, the commingling authority granted by this order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

xc: STATE LAND OFFICE _____ BLM _____ OCD- Hobbs



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:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed