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Texaco Exploration and Production Inc

3300 N Butler
Farmington NM 87401

April 11, 1995

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87504

Attention: David Catanach

RE: Application for exception to NMOCD Rule 303-A: Downhole Commingle of
Lydia Rentz No. 7, 800' FNL & 1820' FWL, Unit C, Sec. 20-T25N-R3W,
NMPM, Rio Arriba County, New Mexico

Dear Mr. Catanach:

Texaco Exploration and Production Inc. respectfully requests administrative approval to downhole commingle the Blanco Mesaverde gas pool and the West Lindrith Gallup-Dakota oil pool within the referenced well. Approval of this application will require an exception to Rule 303-A. Please accept the attached information in your consideration of this matter. All offset operators were notified of this request by certified mail (copy of return receipt cards attached).

The subject well is currently dual completed in the referenced pools (see attached "current completion" wellbore diagram - attachment VII-A). The Gallup-Dakota is produces 6 BOPD, < 1 BWPD and 59 MCFD with plunger lift under a packer through a 2-3/8" tubing string. The Mesaverde interval has not produced since 1991. A separate string of 2-3/8" tubing is set in the Mesaverde. We plan to restore production in the Mesaverde interval by perforating additional pay and refracturing. We then propose to downhole commingle the two pools (see attached "proposed completion" wellbore diagram - attachment VII-B). If we continue to plunger lift the well, removal of the packer will provide greater annular storage capacity with greater energy for removal of liquids. If rod pumping becomes necessary, removal of the packer means the lower zone gas will not have to travel through the pump causing poor efficiency and gas locking. Production from both pools will be enhanced with either lift method.

Downhole commingling will not result in reservoir damage, waste of reserves or violation of correlative rights. If you have any questions concerning this matter please contact Mr. Mark R. Reinhold at (505) 325-4397, ext. 19. Your attention to this matter is greatly appreciated.

Sincerely,

Packed Hindi / TAT

Ted A. Tipton
Operating Unit Manager

MRR/s
Attachments
cc: NMOCD-Aztec
file

RECEIVED
APR 27 1995

OIL CON. DIV.
DIST. 3

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
I	C-102, Well location and acreage dedication plat - Blanco Mesaverde
II	C-102, Well location and acreage dedication plat - West Lindrith Gallup-Dakota
III	Offset Operators map
IV	C-115, Operator's Monthly Report (W. Lindrith Gallup-Dakota)
V-A	Decline Curve - Lydia Rentz #7 Gallup-Dakota
V-B	Decline Curve - Lydia Rentz #7 Mesaverde
VI	Northwest New Mexico Package Leakage Test - Lydia Rentz #7
VII-A	Wellbore Diagram - Current Completion
VII-B	Wellbore Diagram - Proposed Completion

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APR 27 1995
OIL CON. DIV.
DIST. 3

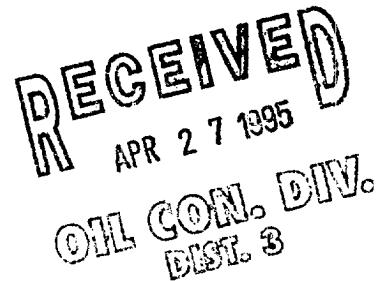
Application for Exception to Rule 303-Segregation of Production From Pools

- (1) **Name and address of the operator:** Texaco Exploration and Production Inc.
3300 N. Butler, Suite 100
Farmington, NM 87401

- (2) **Lease name, well number, well location, name of the pools to be commingled.**

Lease Name: Lydia Rentz
Well Number: 7
Well Location: 800' FNL & 1820' FWL, Unit C, Sec. 20
T25N-R3W, NMPM
Rio Arriba County, New Mexico

Pools to Commingle: Blanco Mesaverde Gas Pool and West Lindrith
Gallup Dakota Oil Pool



- (3) **A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.**
Attached (Attachment I, II, III)
- (4) **A current (within 30 days) 24-hour productivity test on Division C-116 showing the amount of oil, gas and water produced from each zone.**

The C-115 for Lydia Rentz No. 7 Gallup/Dakota production is attached (attachment IV). The Mesaverde completion in the Lydia Rentz No. 7 has not produced since 1991. Additional pay in the Mesaverde will be perforated and the interval will be refractured prior to downhole commingling. Following this workover, we expect the Mesaverde to produce 235 MCFD, 1 BOPD, and 1 BWPD.

- (5) **A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone for statistical purposes. (This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)**

Decline curves for the Gallup/Dakota and Mesaverde production from Lydia Rentz No.7 is attached (Attachments V-A, V-B, respectively).

- (6) **Estimated bottomhole pressure for each artificially lifted zone. A current (within 30 days) measured bottomhole pressure for each zone capable of flowing.**

The Mesaverde and Gallup/Dakota bottom hole pressure is estimated based on New Mexico Packer Leakage Test dated 9/94 Lydia Rentz No.7:

Mesaverde: 980 psig (Attachment VI)
Gallup/Dakota: 550 psig (Attachment VI)

Actual Mesaverde P_{BH} will be obtained using shut-in testing upon completion.

Application for Exception to Rule 303-Segregation of Production From Pools
Requirements Continued.

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the well-bore.

The fluids have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale. The major components of the produced waters are sodium, chlorides and bicarbonates. Several offsets are commingled in the proposed zones and no production problems have occurred.

- (8) A computation showing that the value of the commingled production will not be less than the sum of the individual streams.

<u>Current Gallup/Dakota Prod.</u>		<u>Anticipated Mesaverde Prod.</u>	
Oil, BOPD	6	Oil, BOPD	1
Gas, MCFD	59	Gas, MCFD	235
Water, BWPD	1	Water, BWPD	1

The combined production from the Gallup/Dakota and Mesaverde formations will be approximately 294 MCFD, 7 BOPD, and 2 BWPD.

- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula.

Using our anticipated rates as shown in item #8 as an example, allocation will be calculated as follows:

	<u>Gas</u>	<u>Oil</u>	<u>Water</u>
Mesaverde	$235/294=80\%$	$1/7=14\%$	$1/2=50\%$
Gallup/Dakota	$59/294=20\%$	$6/7=86\%$	$1/2=50\%$

The actual production data obtained prior to and following the commingling process will be presented to the Aztec NMOCD District office to arrive factors for splitting the future production stream.

- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

All offset operators have been notified. Please find attached, signed return receipt cards from each operator (Attachment VIII). A BLM Sundry (Form 3160-5) has been submitted for approval.

All distances must be from the outer boundaries of the Section.

Attachment I

Operator GETTY OIL COMPANY			Lease LYDIA RENTZ		Well No. 7
Well Letter C	Section 20	Township 25N	Range 3W	County Rio Arriba	

Actual Footage Location of Well:

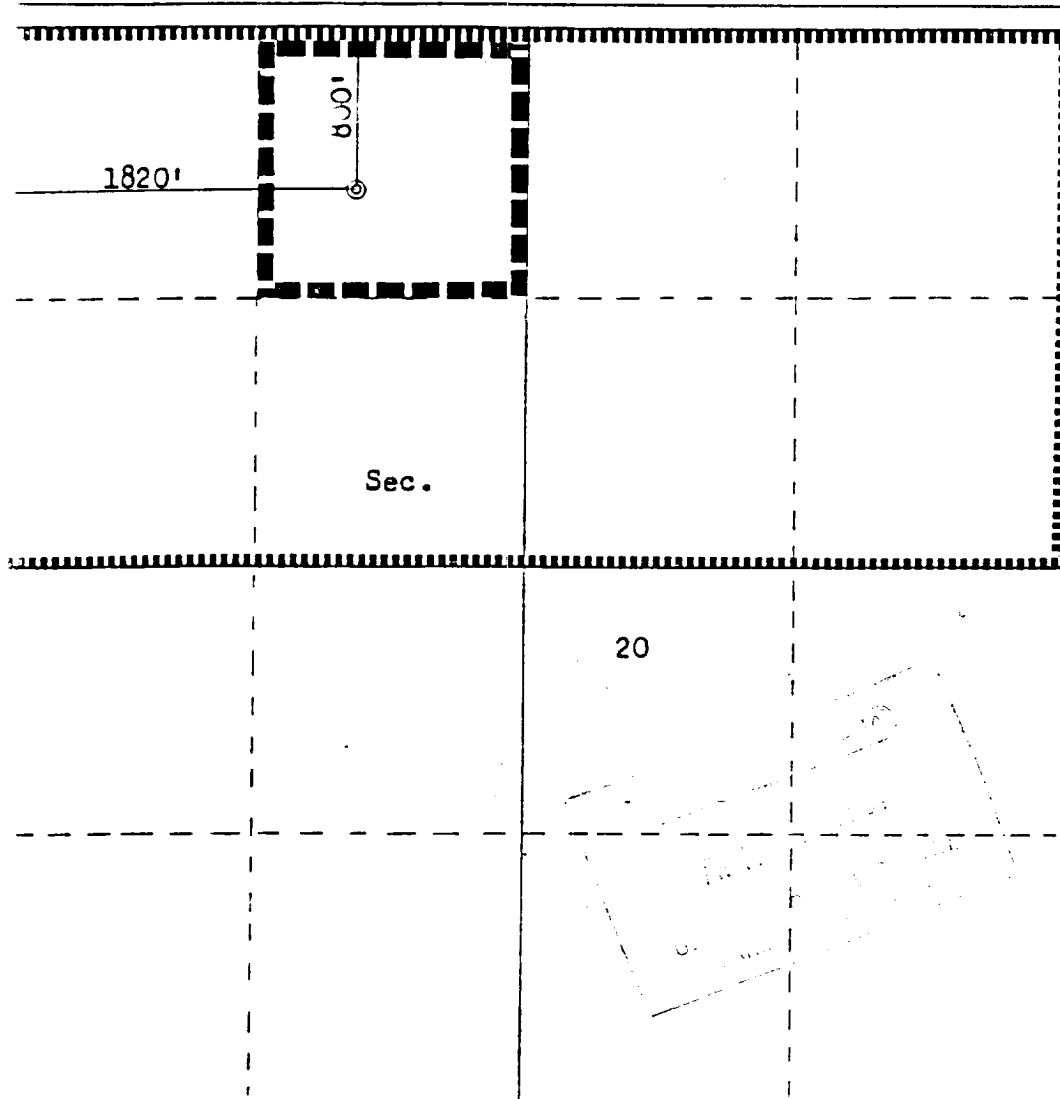
800	feet from the	North	line and	1820	feet from the	West	line
Sound Level Elev. 7222	Producing	Mesaverde	Pool	Blanco	<i>2/1/87 abolished</i>		Dedicated Acreage:
		Gallup - Dakota	<i>now</i>	Ojito			320 <i>140</i> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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).
3. If more than one lease of different ownership is dedicated to the well, have the interests 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 interests, has been approved by the Commission.



Scale: 1"=1000'

CERTIFICATION

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

Name
W. Kendrick
Position
Agent
Company
Getty Oil Company
Date
April 6, 1981

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 27, 1982
Registered Professional Engineer and Land Surveyor
Fred B. Herr Jr.
Fred B. Herr Jr.
Certificate No. 3950

NE MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION . LAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Attachment II

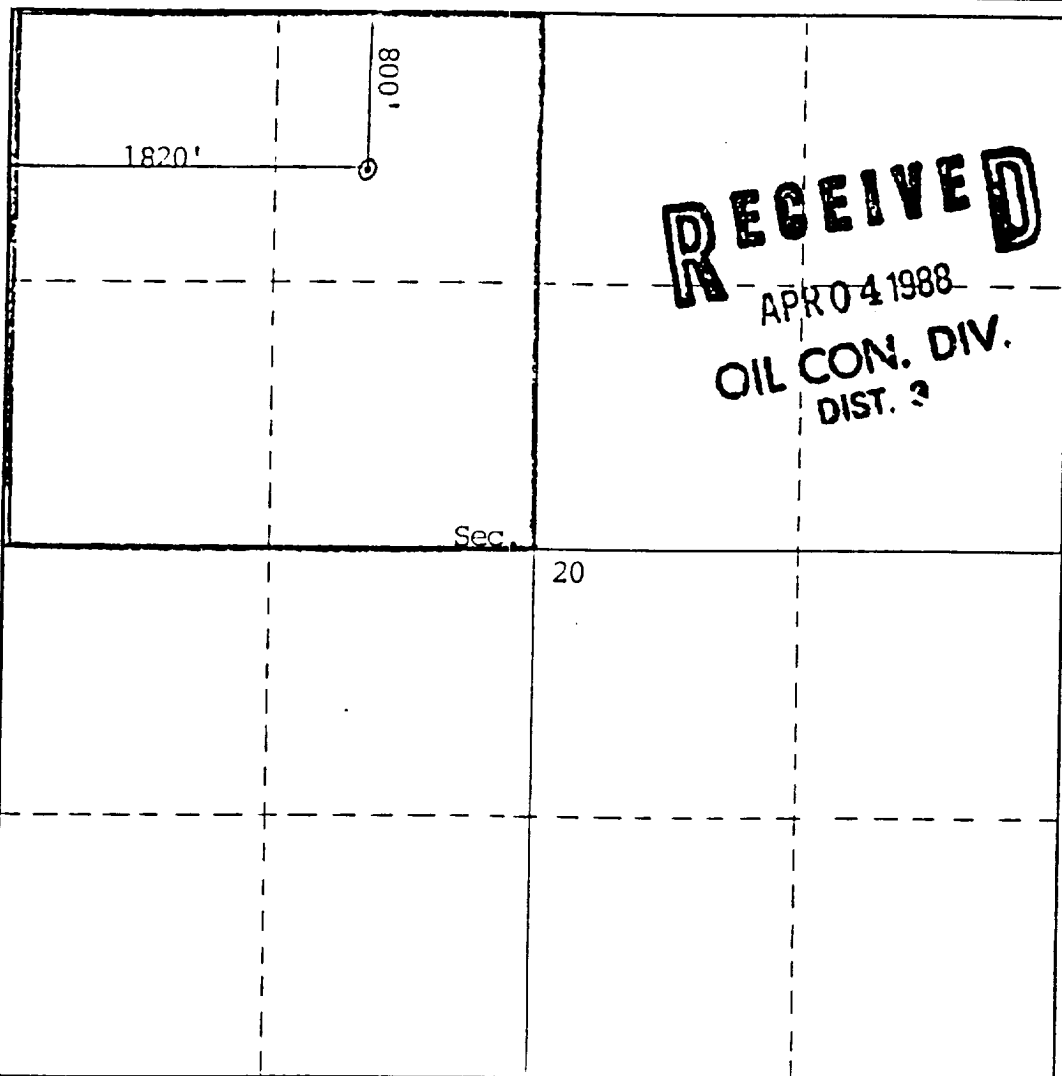
Operator TEXACO Inc.			Lease Lydia Rentz		Well No. 7
Unit Letter C	Section 20	Township 25N	Range 3W	County Rio Arriba	
Actual Footage Location of Well:					
800 feet from the North line and		1820 feet from the West line			
Ground Level Elev. 7222'	Producing Formation Gallup Dakota	Pool Lindrith Gallup/Dakota West	Dedicated Acreage: 160 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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).
3. If more than one lease of different ownership is dedicated to the well, have the interests 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 interests, has been approved by the Commission.



CERTIFICATION

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

Mark L. Kame for Alan A Kleier

Name
Area Superintendent
Position
Texaco Inc.
Company
March 31, 1988
Date

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 **FOUR CORNERS AREA** my knowledge and belief.

APR 11 1988

Date Surveyed	AAK	HRS	1/8
Registered Professional Engineer and/or Land Surveyor	384	FILE	2
Certificate No.	RET 101	FILE	2

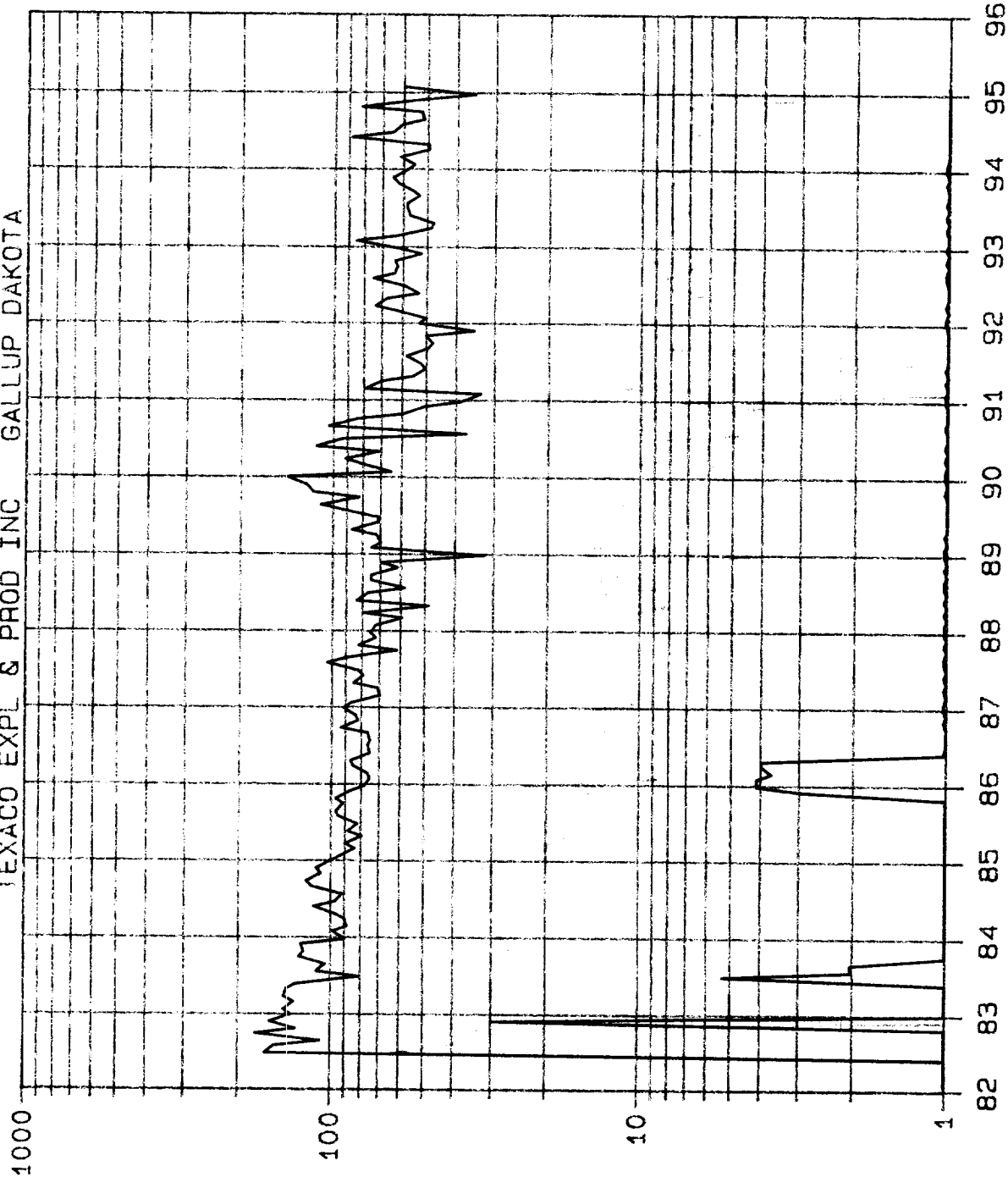
OFFSET OPERATORS
LYDIA RENTZ # 7
SEC. 20 T25N / R03W

TEXACO 18	TEXACO 17	CURTIS J. LITTLE, OIL & GAS 16
	SCHALK DEVELOPMENT CO.	
TEXACO 19	● LYDIA RENTZ #7 TEXACO 20	ELLIOT OIL CO, INC 21
TEXACO 30	TEXACO 29	ELLIOT OIL CO, INC 28

LEASE TOTAL

Attachment V-A

LYDIA RENTZ 000007 LINDRITH WEST (GALLUP DAKOTA) GD
TEXACO EXPL & PROD INC GALLUP DAKOTA



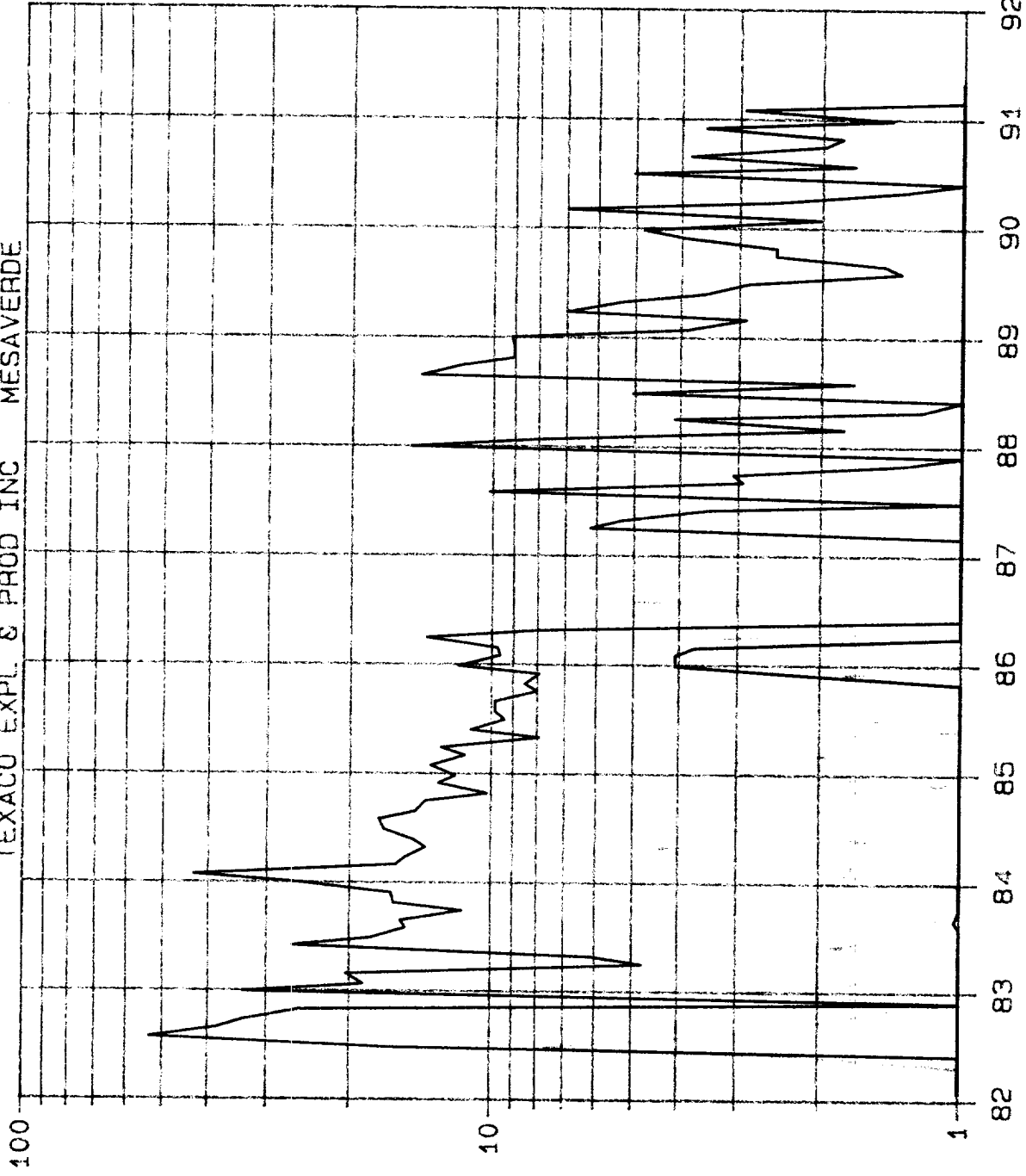
LEASE DATA
LSE 25N03W20C0
FLD 8044442
OPER 158628
ZONE
25N-3W-20
COUNTY 039
STATE 30

STATUS 1-95
CO 64 MBO
CG 374 MMCF
CW 4 MBW
BOPD 6
BWPD 0
MCFPD 59
WELLS 1
CI 0 MBWI
BWIPD 0

YEARS

Attachment IV-B

LYDIA RENTZ 000007 BLANCO (MESAVERDE) MV
TEXACO EXPL & PROD INC MESAVERDE



LEASE DATA
LSE 25N03W20C00
FLD 8007074
OPER 158628
ZONE
25N-3W-20
COUNTY 039
STATE 30

STATUS 4-91
CO 6 MBO
CG 58 MCF
CW 0 MBW
BOPD 0
BOPD 0
MCFPD 0
WELLS 1
CI 0 MBWI
BWIPD 0

YEARS

Attachment VI

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC.Lease LYDIA RENTZWell
No. 7

Location

of Well: Unit C Sec. 20 Twp. '25N Rge. 3W County RIO ARRIBA

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (OIL OR GAS)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	BLANCO MESAVERDE	GAS	FLOW	TBG.
Lower Completion	LINDRETH GALLUP DAKOTA WEST	GAS	FLOW	TBG.

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, Date shut-in 11-91	Length of time shut-in	Si press. psig	Stabilized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stabilized (Yes or No)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)		LAPSE TIME SINCE*		PRESSURE	
				PROD. ZONE	
				REMARKS	
9-8-94				FARMINGTON AREA	
9-9-94	24 HRS.	980	390	BOTH ZONES SHUTIN	
9-10-94	48 HRS.	980	480		
9-11-94	72 HRS.	980	528		
9-12-94	96 HRS.	980	550	NOV 1 1994	
9-13-94	120 HRS.	980	333	UPPER SHUTIN LOWER FLOW 24 HRS	
9-14-94	144 HRS.	980	405	UPPER SHUTIN LOWER FLOW 24 HRS.	
9-15-94	168 HRS.	980	378	UPPER SHUTIN LOWER FLOW 24 HRS.	

Production rate during test

Oil _____ BOPD based on _____ Bbls. in _____ Hours _____ Grav _____ GOR _____

Gas _____ MCFPD; Tested thru (Orifice or Meter): _____

MID-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stabilized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stabilized (Yes or No)

RECEIVED
OCT 23 1994

OCT 1994



10/20/94

LYDIA RENTZ No. 7

API# 30 039 22733

CURRENT COMPLETION

LOCATION:

800' FNL & 1820' FWL
NE/NW, Sec. 20, T25N, R3W
Rio Arriba County

FORMATION TOPS:

Ojo Alamo 3250'
Kirtland 3390'
Pictured Cliffs 3696'
Chacra 4580'
Cliffhouse(MV) 5364'
Menefee(MV) 5477'
Pt. Lookout(MV) 5860'
Gallup 6988'
Greenhorn 7812'
Graneros 7863'
Dakota 7904'

SQZ'd Perfs 5370'-88'

MESA VERDE PERFS:

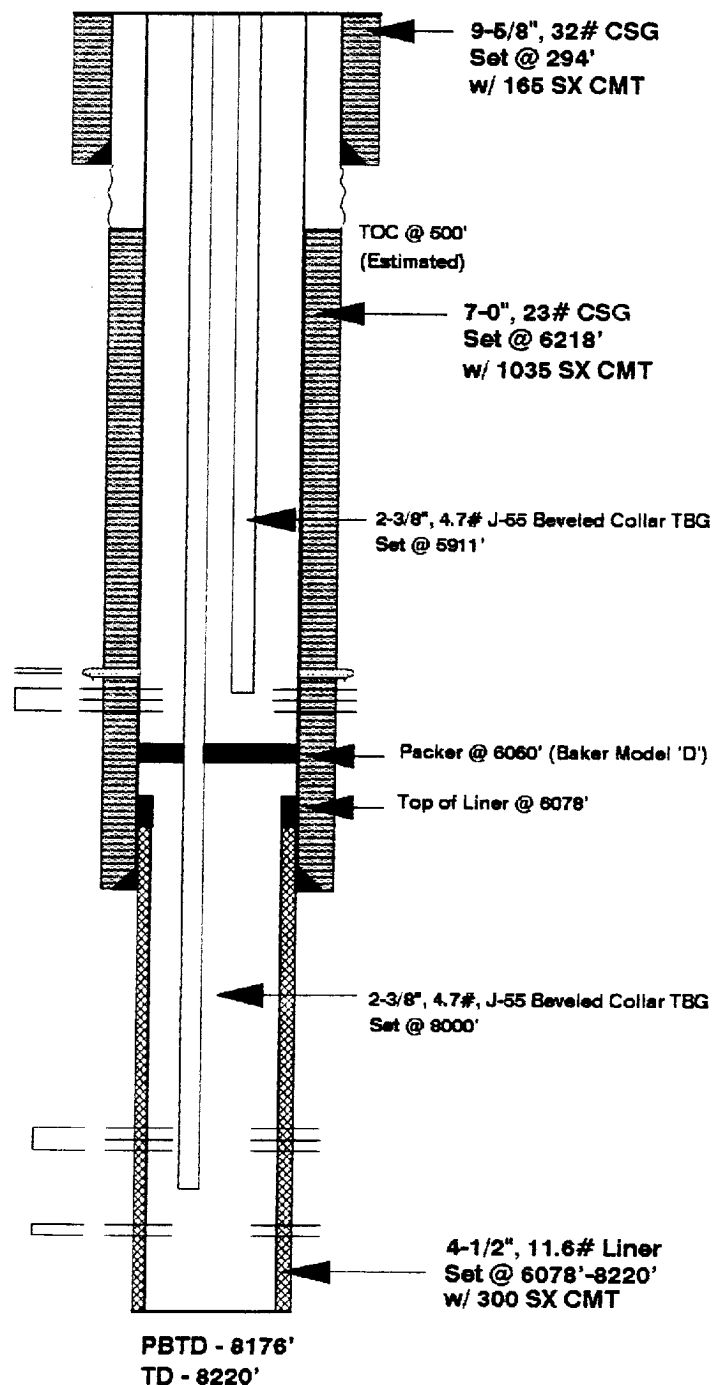
5874'-86' 5981'-86'
5891'-94'
1 JSP, 20 Shots

GALLUP PERFORATIONS:

7025'-33' 7156'-67'
7056'-68' 7174'-96'
7084'-88' 7211'-17'
7094'-7101'
1 SPF, 70 Shots

DAKOTA PERFORATIONS:

7914'-19', 8060'-34'
1 SPF, 29 Shots





LYDIA RENTZ No. 7

API# 30 039 22733

PROPOSED COMPLETION

LOCATION:

800' FNL & 1820' FWL
NE/NW, Sec. 20, T25N, R3W
Rio Arriba County

FORMATION TOPS:

Ojo Alamo 3250'
Kirtland 3390'
Pictured Cliffs 3696'
Chacra 4580'
Cliffhouse(MV) 5364'
Menefee(MV) 5477'
Pt. Lookout(MV) 5860'
Gallup 6988'
Greenhorn 7812'
Graneros 7863'
Dakota 7904'

PROPOSED PL LOOKOUT PERFS:

5805'-5986', 2 JSPF

SQZ'd Perfs 5370'-88'

MESA VERDE PERFS:

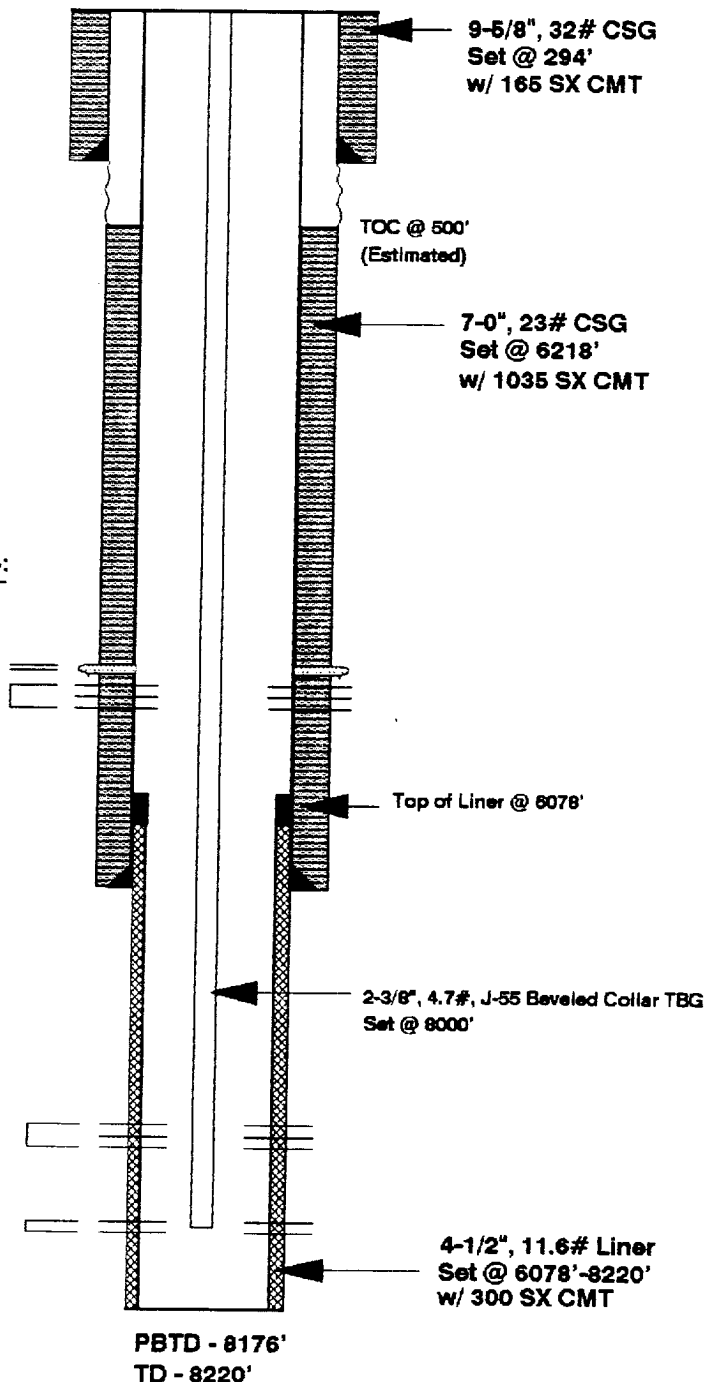
5874'-86' 5981'-86'
5891'-94'
1 JSP, 20 Shots

GALLUP PERFORATIONS:

7025'-33' 7156'-67'
7056'-68' 7174'-96'
7084'-88' 7211'-17'
7094'-7101'
1 SPF, 70 Shots

DAKOTA PERFORATIONS:

7914'-19', 8060'-84'
1 SPF, 29 Shots



Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
 2. ☐ Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:

ELIOT OIL CO.
Box 1355
Roswell NM
88202

4a. Article Number

P 337 994 934

4b. Service Type

- ☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

4-14-95

5. Signature (Addressee)

6. Signature (Agent)

[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
 2. ☐ Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:

SCHALK DEVELOPMENT CO.
PO Box 25825
ALBUQUERQUE, NM
87125

4a. Article Number

P 081 443 737

4b. Service Type

- ☐ Registered ☐ Insured
☐ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

4-14-95

5. Signature (Addressee)

6. Signature (Agent)

[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

3300 N Butler
Farmington NM 87401

April 11, 1995

Elliot Oil Co.
Box 1355
Roswell, NM 88202

RE: **Downhole Commingle
Lydia Rentz No. 7
800' FNL & 1820' FWL, Sec. 20-T25N-R3W, Unit C
Rio Arriba County, New Mexico**

Gentlemen:

As offset operator to the spacing unit for the referenced well, you are being notified of our request for an exception to NMOCD Rule 303-A. Texaco Exploration and Production Inc. proposes to downhole commingle the Blanco Mesaverde and the West Lindrith Gallup-Dakota pools within this wellbore.

If you have no objection to the above application please sign the waiver at the bottom of this letter and return it to this address. If no objection is received within 20 days of receipt of this letter, the Director may approve the proposed application. Your attention to this matter is greatly appreciated.

If you have any questions concerning this matter please contact Mr. Mark R. Reinhold at 505-325-4397 ext. 19.

Sincerely,

Packed Hindi / TAT

Ted A. Tipton
Operating Unit Manager
MRR/s

Attachments
cc: file

Waiver Approval:

Company: Elliott Oil Co.

BY: Fuller

DATE: 4/14/95

FARMINGTON AREA		
TAX	7-10	9/68
IN	113	113
IN		ERR
APR 17 1995		
	NEW	
	NRP	
	RFS	
	FILE	9/18
TL5	Return To	