



Texaco Exploration and Production Inc

3300 N Butler
Farmington NM 87401

4-5-95
1119

January 23, 1995

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

RECEIVED

Attention: David Catanach

MAR 17 1995

RE: **Application for exception to NMOCD Rule 303-A: Downhole Commingle
of Jicarilla C No. 18: 1850' FNL & 790' FEL, Unit H,
Sec. 28-T25N-R5W, NMPM, Rio Arriba County, New Mexico**

Oil Conservation Division

Dear Mr. Catanach:

Texaco Exploration and Production Inc. respectfully requests approval to downhole commingle the Otero Chacra Gas Pool and the Otero Gallup Oil Pool within the referenced well. The subject well was originally completed in the Otero Gallup in October of 1958. In July of 1966 the well was plugged back and recompleted in the Otero Chacra. The Gallup was producing 3 BOPD and 40-50 MCFD and had cumulative production of 42 MBO and 231 MMCF immediately prior to the plug back. The Chacra zone is currently producing 27 MCFD. We propose to drill out the CIBP set between these zones and downhole commingle the remaining production. We plan on installing a plunger lift system. Please accept the attached information in your consideration of this matter. Downhole commingling will result in economic recovery of additional reserves from two marginally productive zones that would otherwise not be recovered.

If you have any questions concerning this matter please contact Mr. Mark Reinhold at (505) 325-4397, ext 19. Your attention to this matter is greatly appreciated.

Sincerely,

Ted A. Tipton
Operating Unit Manager

MRR/s

Attachments
NMOCD-Aztec
file

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: Jicarilla C
Well Number: 18
Well Location: 1850' FNL & 790' FEL, Unit H, Sec. 28
T25N-R5W, NMPM
Rio Arriba County, New Mexico
Pools to Commingle: Otero Chacra and Otero Gallup

(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 Form C-116 showing the amount of oil, gas and water produced from each zone.**

Attachment IV, dated September 8, 1965 is the last C-116 filed for Jicarilla C No. 18 prior to plug back in July of 1966. Cumulative Gallup production is 42 BO and 231 MMCF (state annual reports).

(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 which will permit a reasonable allocation of the commingled production to 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).**

Production decline curves for both zones attached (attachment V and VI).

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

Chacra and Gallup shut-in pressure data obtained from offset wells during recent (September 1994) packer leakage tests:

<u>Zone</u>	<u>Average, psig</u>	<u>Range, psig</u>	<u># of Wells Tested</u>
Chacra:	299	279-329	6
Gallup:	442	390-494	2

See attached Packer Leakage Tests - Attachment VII
Recent bottom hole pressure data on this well is not available.

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

The Chacra zone produces less than 0.5 BPD with very minimal condensate. A ported seating nipple and standing valve (ball and seat) will be installed above a production packer to prevent any buildup of Chacra fluids that might accumulate during an extended shut-in period from entering and logging off the Gallup interval (see wellbore diagram of proposed completion - attachment VIII). The Gallup zone was not producing any water prior to plug back. We also plan on installing a plunger lift system.

Application for Exception to Rule 303-Segregation of production from pools Requirements Continued.

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

<u>Current Otero Chacra Prod.</u>		<u>Anticipated Otero Gallup Production</u>	
Oil, BOPD	0	Oil, BOPD	3
Gas, MCFD	27	Gas, MCFD	40
Water, BWPD	0	Water, BWPD	0

The combined production from the Chacra and Gallup zones will be approximately 67 MCFD, 3 BOPD and 0 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 factors will be calculated as follows:

	<u>Gas</u>	<u>Oil</u>
Chacra	$27/(27+40)=40\%$	$0/(0+3)=0\%$
Gallup	$40/(27+40)=60\%$	$3/(0+3)=100\%$

The actual production data obtained prior to and following the commingling process will be presented to the Aztec NMOCD District office to arrive at allocation 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.**

Since we operate all wells located in offset spacing units no other operators have been

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date September 2, 1958

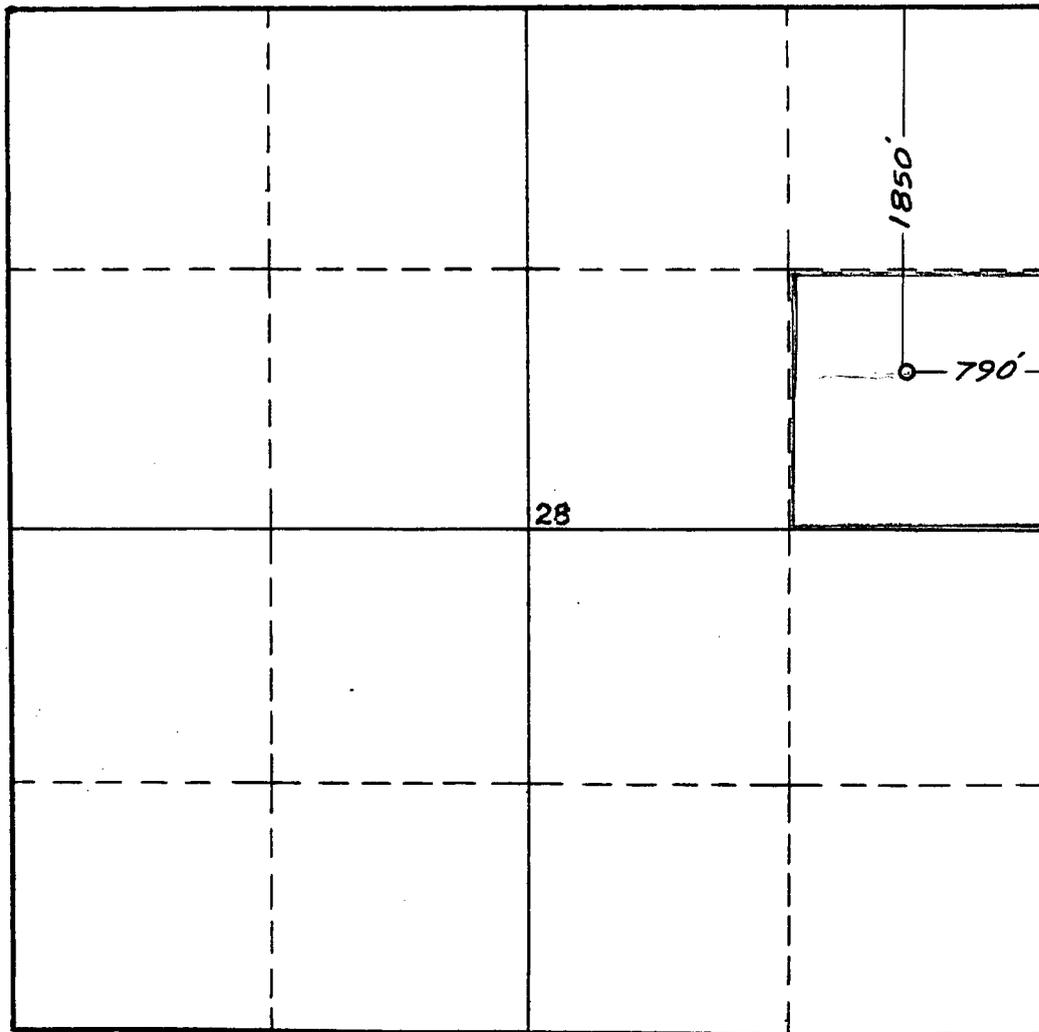
Operator SKELLY OIL COMPANY Lease JICARILLA
Well No. C-18 / Unit Letter H Section 28 Township 25 NORTH Range 5 WEST NMPM
Located 1850 Feet From THE NORTH Line, 790 Feet From THE EAST Line
County RIO ARriba G. L. Elevation * Dedicated Acreage 40 Acres
Name of Producing Formation Gallup Pool Undesignated

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes No .
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No . If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:
REF. GLO Plat dated: 4 November 1882

Owner

Land Description

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

SKELLY OIL COMPANY

(Operator)

(Signed) P. E. Cosper

(Representative)

Box 426, Farmington, New Mexico
Address

This is to certify that the well location shown on the plat in Section B 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 30 AUGUST 1958

James P. Leese
Registered Professional
Engineer and/or Land Surveyor.
JAMES P. LEESE

Certificate No. 1463

Attachment II

EXICO OIL CONSERVATION COMMISS. WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

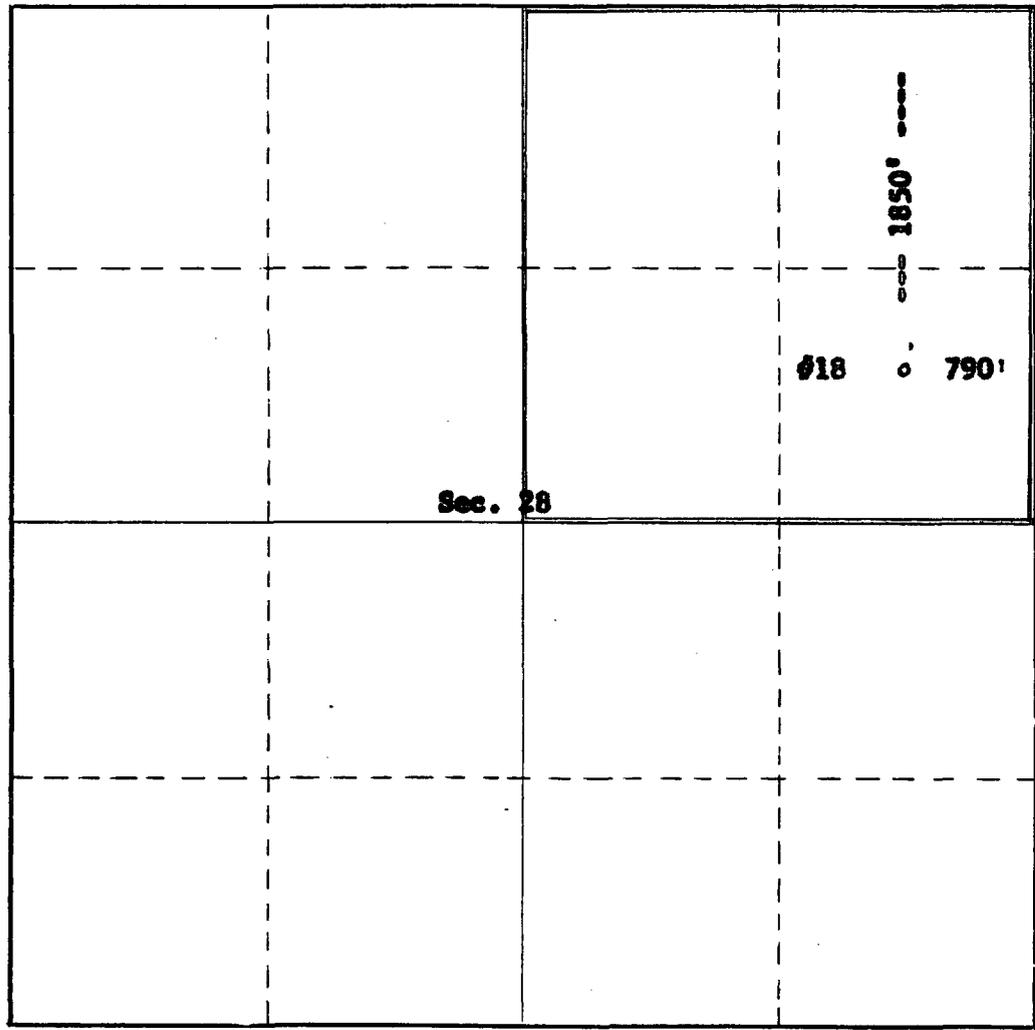
Operator Skelly Oil Company			Lease Jicarilla "C"			Well No. 187		
Unit Letter "H"	Section 28	Township 25-N	Range 5-W	County Rio Arriba				
Actual Footage Location of Well: 1850 feet from the North line and 790 feet from the East line								
Ground Level Elev: 6651' DF		Producing Formation Chesra		Pool Otero Chesra			Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.

(ORIGINAL SIGNED) **H. E. ...**

Name
District Superintendent

Position
Skelly Oil Company

Company
July 6, 1966

Date

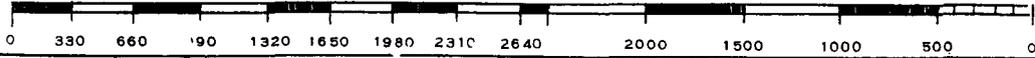
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
August 30, 1958

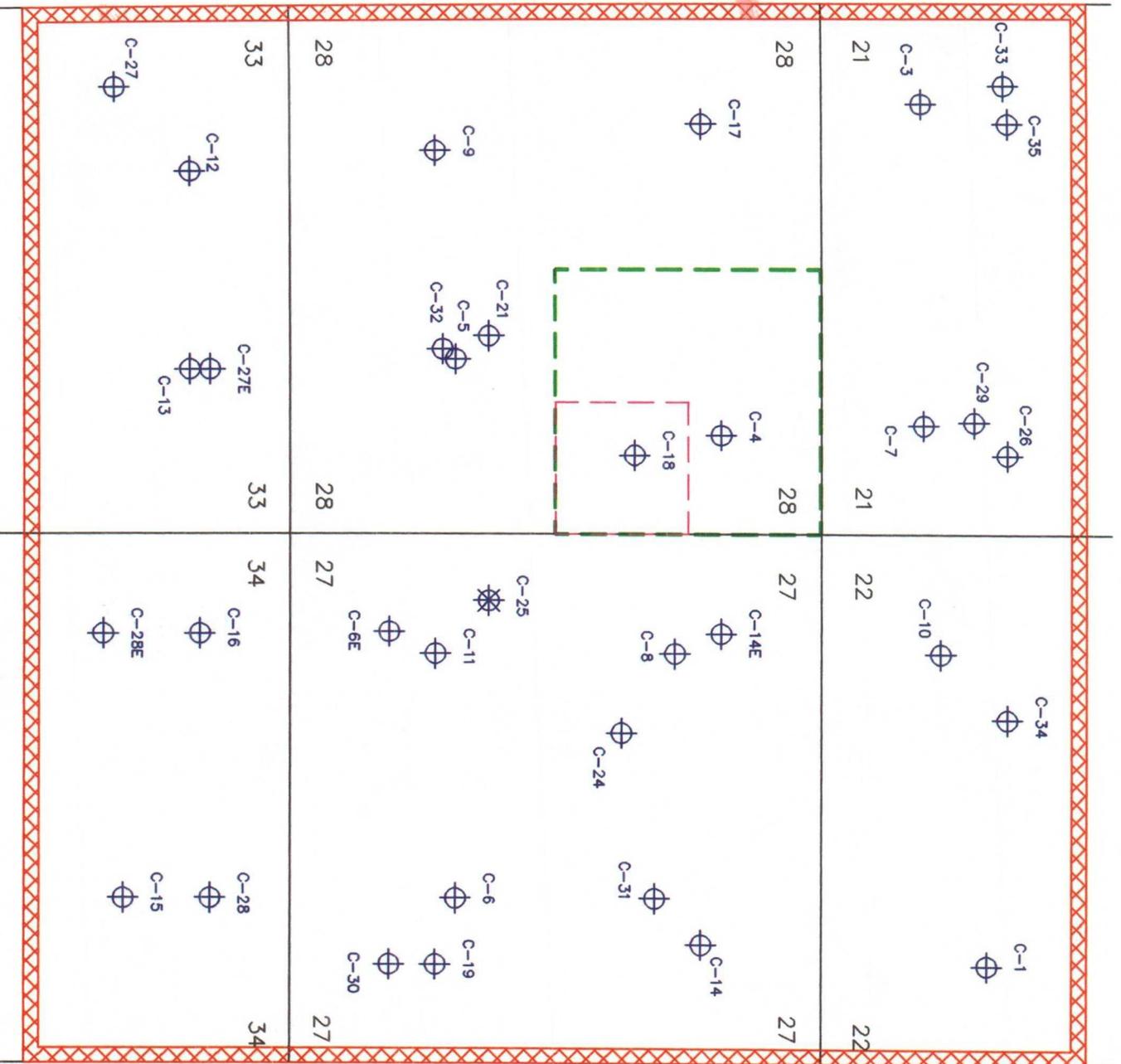
Registered Professional Engineer and/or Land Surveyor

Original Signed - James P. Lessor

Certificate No.
1463



JICARILLA "C" LEASE



ATTACHMENT III



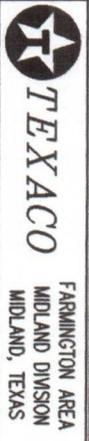
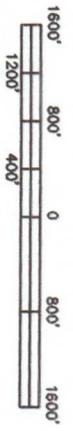
T25N, R5W

⊕ CONVENTIONAL WELL

⊕ OTERO GALLUP SPACING UNIT

⊕ OTERO CHAQRA SPACING UNIT

⊕ TEXACO OPERATED LEASE BOUNDARY



AREA: JICARILLA APACHE INDIAN RESERVATION
 RIO ARRIBA CO., NEW MEXICO
 DESCRIPTION: JICARILLA "C" LEASE
 T 25 N R 05 W
 OFFSET SPACING UNITS

DATE: 1-95	BY: RSD	REVISION:
INTERVAL:	SCALE: 1" = 1200'	

Operator		Pool		County		Completion		Special					
SEELY OIL COMPANY		OTAGO-OLLUP		HIC ABILE		Completion		Special					
Address		DRAMA 510 - FARMINGTON, NEW MEXICO		TYPE OF TEST - (X)		SCHEDULED							
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.	GAS M.C.F.
FARMING #1	2	B	2	2A	6A	30	14	24	0	41	12	11	916
FARMING #2	3	K	2	2A	6A	30	10	24	0	41	9	71	7,888
JICARILLA #1	4	F	12	20A	9A	37	6	24	0	42	14	93	6,642
JICARILLA #2	5	H	11	20A	9A	40	7	24	0	42	8	74	12,333
JICARILLA #3	6	P	12	20A	9A	45	13	24	0	42	6	196	17,000
JICARILLA #4	7	D	12	20A	9A	48	7	24	0	42	7	103	14,714
JICARILLA #5	8	H	12	20A	9A	38	8	24	0	42	9	103	11,666
JICARILLA #6	9	D	12	20A	9A	38	7	24	0	42	4	67	16,750
JICARILLA #7	10	D	12	20A	9A	36	7	24	0	42	9	65	7,222
JICARILLA #8	11	D	12	20A	9A	42	7	24	0	42	1	90	90,000
JICARILLA #9	12	D	6	20A	9A	38	2	24	0	42	7	75	10,714
JICARILLA #10	13	F	11	20A	9A	50	9	24	0	42	7	134	6,700
JICARILLA #11	14	D	11	20A	9A	37	24	24	0	42	20	33	2,538
JICARILLA #12	15	D	11	20A	9A	35	21	24	0	42	13	64	16,000
JICARILLA #13	16	H	28	20A	9A	45	9	24	0	42	4	53	13,750
JICARILLA #14	17	J	28	20A	9A	40	3	24	0	42	4	96	6,000
JICARILLA #15	18	H	13	20A	9A	40	11	24	0	42	16	69	6,908
JICARILLA #16	19	H	17	20A	9A	36	7	24	0	42	10	32	2,666
JICARILLA #17	20	L	17	20A	9A	36	10	24	0	42	10	83	8,300

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

No well will be assigned an allowable greater than the amount of oil produced on the official test. During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission. Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing. Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

(Orig. signed by Frank Howard)
Sr. Production Engineer

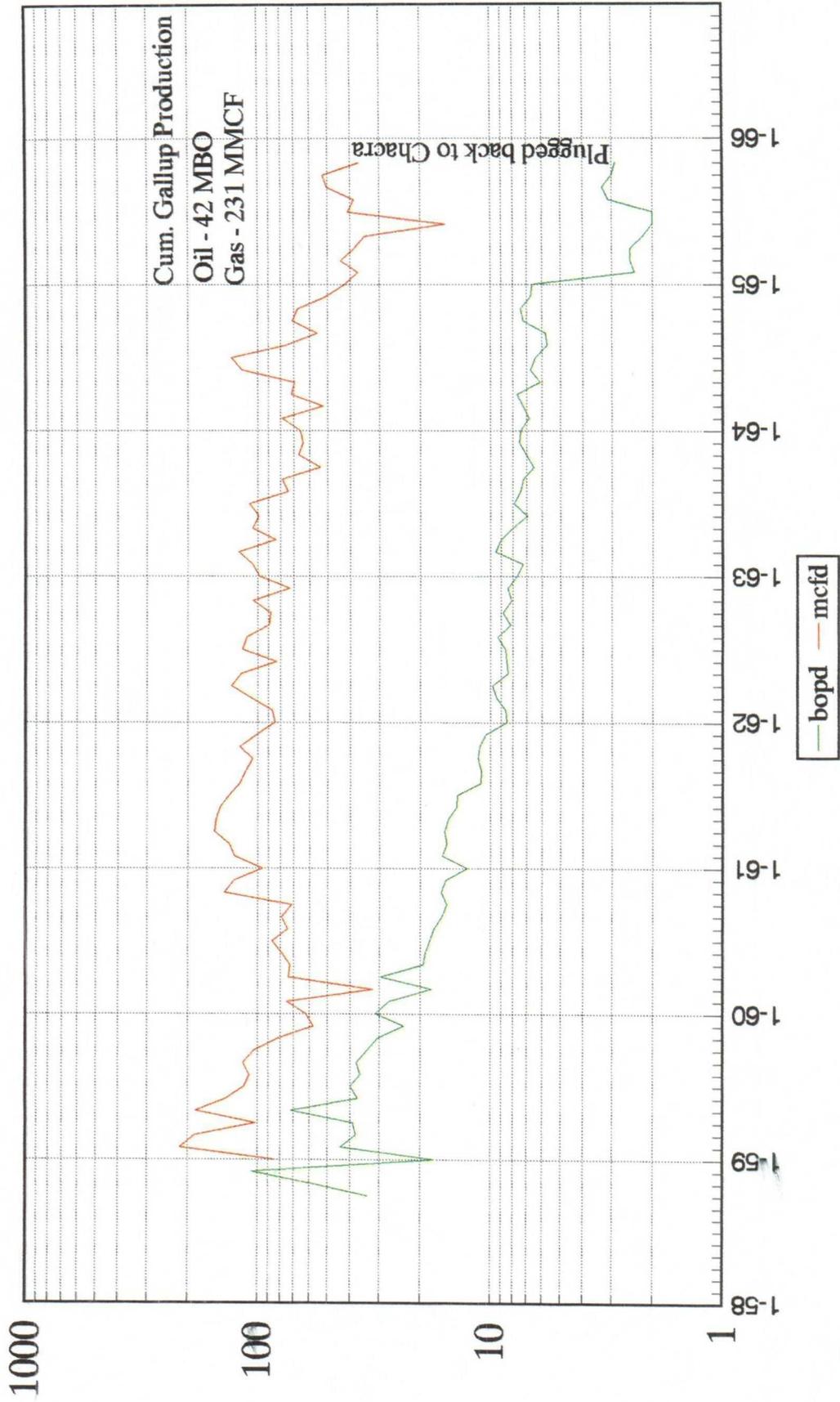
September 8, 1965

(Date)

Attachment V

Jicarilla C #18 Otero Gallup Production

From NMOCD Annual Reports

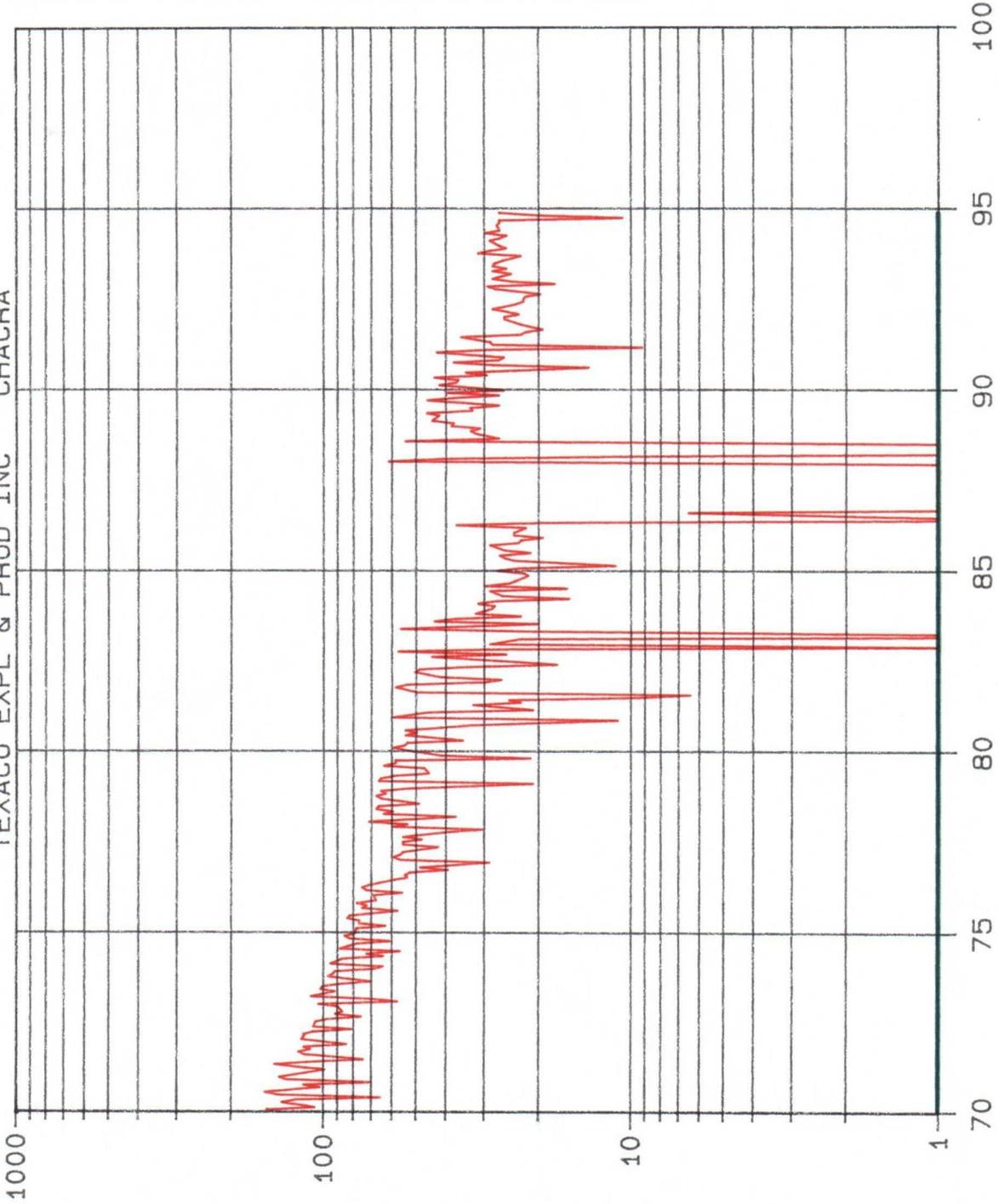


Attachment VI

JICARILLA C 000018 OTERO (CHACRA) CK
TEXACO EXPL & PROD INC CHACRA

LEASE DATA
LSE 25N05W28H01
FLD 8054998
OPER 158628
ZONE
25N-5W-28
COUNTY 039
STATE 30

STATUS 11-94
CO 0 MBO
CG 577 MMCF
CW 0 MBW
BOPD 0
BWPD 0
MCFPD 27
WELLS 1
CI 0 MBWI
BWIPD 0



Attachment VII-a

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 9

Location of Well: Unit K Sec. 28 Twp. 25N Rge. 5W 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 PICTURED CLIFFS SO.	GAS	SHUTIN	CSG.
Lower Completion	<u>OTERO CHACRA</u>	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	0	290		BOTH ZONES SHUT IN
9-10-94	48 HRS.	0	311		. . . .
9-11-94		0	327		. . . .
9-12-94	72 HRS.	0	328		. . . .
9-13-94	96 HRS.	0	329		. . . .
9-14-94	120 HRS.	0	329		. . . .
9-15-94	144 HRS.	0	330		. . . .
9-16-94	168 HRS.	0	330		UPPER SHUT IN: LOWER FLOWING
9-17-94	192 HRS.	0	<u>330</u>		UPPER SHUTIN : LOWER FLOWING

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)

Attachment VII-6

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 10

Location of Well: Unit M Sec. 22 Twp. 25N Rge. 5W 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 PICTURED CLIFFS SO.	GAS	SHUTIN	CSG.
Lower Completion	OTERO CHACRA	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	183	275		BOTH ZONES SHUT IN
9-10-94	48 HRS.	196	288		. . . .
9-11-94		200	291		. . . .
9-12-94	72 HRS.	203	293		. . . .
9-13-94	96 HRS.	206	295		. . . .
9-14-94	120 HRS.	208	296		. . . .
9-15-94	144 HRS.	210	297		. . . .
9-16-94	168 HRS.	211	95		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	212	97		UPPER SHUTIN : LOWER FLOWING

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)

Attachment VII-c

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 11

Location of Well: Unit L Sec. 27 Twp. 25N Rge. 5W 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 PICTURED CLIFFS SO.	GAS	SHUTIN	CSG.
Lower Completion	<u>OTERO CHACRA</u>	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

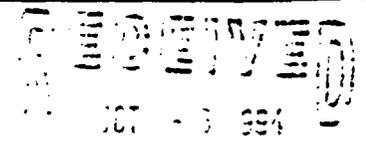
Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	92	265		BOTH ZONES SHUT IN
9-10-94	48 HRS.	95	289		. . . .
9-11-94		100	291		. . . .
9-12-94	72 HRS.	104	293		. . . .
9-13-94	96 HRS.	108	295		. . . .
9-14-94	120 HRS.	112	296		. . . .
9-15-94	144 HRS.	114	<u>296</u>		. . . .
9-16-94	168 HRS.	115	110		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	116	106		UPPER SHUTIN : LOWER FLOWING

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)



Attachment VII-d

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 13

Location of Well: Unit B Sec. 33 Twp. 25N Rge. 5W 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 PICTURED CLIFFS SOUTH	GAS	FLOW	CSG.
Lower Completion	<u>OTERO CHARCA</u>	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower) LOWER	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	154	84		BOTH ZONES SHUT IN
9-10-94	48 HRS.	157	170		. . . .
9-11-94		160	226		. . . .
9-12-94	72 HRS.	163	240		. . . .
9-13-94	96 HRS.	169	253		. . . .
9-14-94	120 HRS.	170	267		. . . .
9-15-94	144 HRS.	171	<u>279</u>		. . . .
9-16-94	168 HRS.	172	32		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	172	37		UPPER SHUTIN : LOWER FLOWING

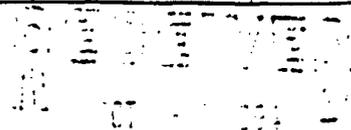
Production rate during test

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)



Attachment VII-e

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 14E

Location of Well: Unit D Sec. 27 Twp. 25N Rge. 5W County RIO ARRIBA

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (OIL OR GAS)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIA. (Tbg. or Csg.)
Upper Completion	<u>OTERO GALLUP</u>	OIL	FLOW	TRG
Lower Completion	BASIN DAKOTA	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	389	322		BOTH ZONES SHUT IN
9-10-94	48 HRS.	420	328		. . . .
9-11-94	72 HRS.	437	330		. . . .
9-12-94	96 HRS.	457	335		. . . .
9-13-94	120 HRS.	479	336		. . . .
9-14-94	144 HRS.	487	30		UPPER SHUT IN: LOWER FLOWING
9-15-94	168 HRS.	<u>494</u>	32		UPPER SHUTIN : LOWER FLOWING

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)

Attachment VII-1

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 15

Location of Well: Unit g Sec. 34 Twp. 25N Rge. 5W 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 PICTURED CLIFFS SOUTH	GAS	FLOW	CSG.
Lower Completion	<u>OTERO CHARCA</u>	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	85	277		BOTH ZONES SHUT IN
9-10-94	48 HRS.	89	279		. . . .
9-11-94		95	280		. . . .
9-12-94	72 HRS.	98	281		. . . .
9-13-94	96 HRS.	105	282		. . . .
9-14-94	120 HRS.	107	283		. . . .
9-15-94	144 HRS.	109	<u>284</u>		. . . .
9-16-94	168 HRS.	111	46		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	112	42		UPPER SHUT IN : LOWER FLOWING

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)

Attachment VII-g

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 17

Location of Well: Unit d Sec. 28 Twp. 25N Rge. 5W County RIO ARRIEA

	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 PICTURED CLIFFS SOUTH	GAS	FLOW	CSG.
Lower Completion	<u>OTERO CHARCA</u>	GAS	FLOW	TBG.

PRE-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)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper completion	Lower completion		
9-9-94	24 HRS.	135	294		BOTH ZONES SHUT IN
9-10-94	48 HRS.	137	299		. . . .
9-11-94		137	304		. . . .
9-12-94	72 HRS.	138	306		. . . .
9-13-94	96 HRS.	138	307		. . . .
9-14-94	120 HRS.	139	308		. . . .
9-15-94	144 HRS.	139	<u>309</u>		. . . .
9-16-94	168 HRS.	140	114		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	140	112		UPPER SHUT IN : LOWER FLOWING

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)

Attachment VII-b

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator TEXACO E & P INC. Lease JICARILLA C Well No. 27E

Location of Well: Unit B Sec. 33 Twp. 25N Rge. 5W 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	<u>OTERO GALLUP</u>	GAS	FLOW	TBG.
Lower Completion	BASIN DAKOTA	GAS	FLOW	TBG.

PRE-FLOW SHUT-IN PRESSURE DATA

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

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	279	702		BOTH ZONES SHUT IN
9-10-94	48 HRS.	320	718		. . . .
9-11-94		327	725		. . . .
9-12-94	72 HRS.	346	739		
9-13-94	96 HRS.	359	745		. . . .
9-14-94	120 HRS.	367	748		
9-15-94	144 HRS.	375	750		. . . .
9-16-94	168 HRS.	385	360		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	<u>390</u>	369		UPPER SHUTIN : LOWER FLOWING

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

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



JICARILLA C No. 18

Current Completion

API #30-039-05837
COMPL DATE 10-21-88

LOCATION:
1850' FNL & 790' FEL
SE/NE, Sec. 28, T25N, R5W
Rio Arriba County, NM
ELEVATION: 6651' DF

CHACRA PERFS (7/66):
3568'-76', 3580'-88'
64 Shots, 4 SPF

Frac w/ 43,780 Gals. Water
20,000# 20-40 Sand
20,000# 10-20 Sand

FORMATION TOPS:

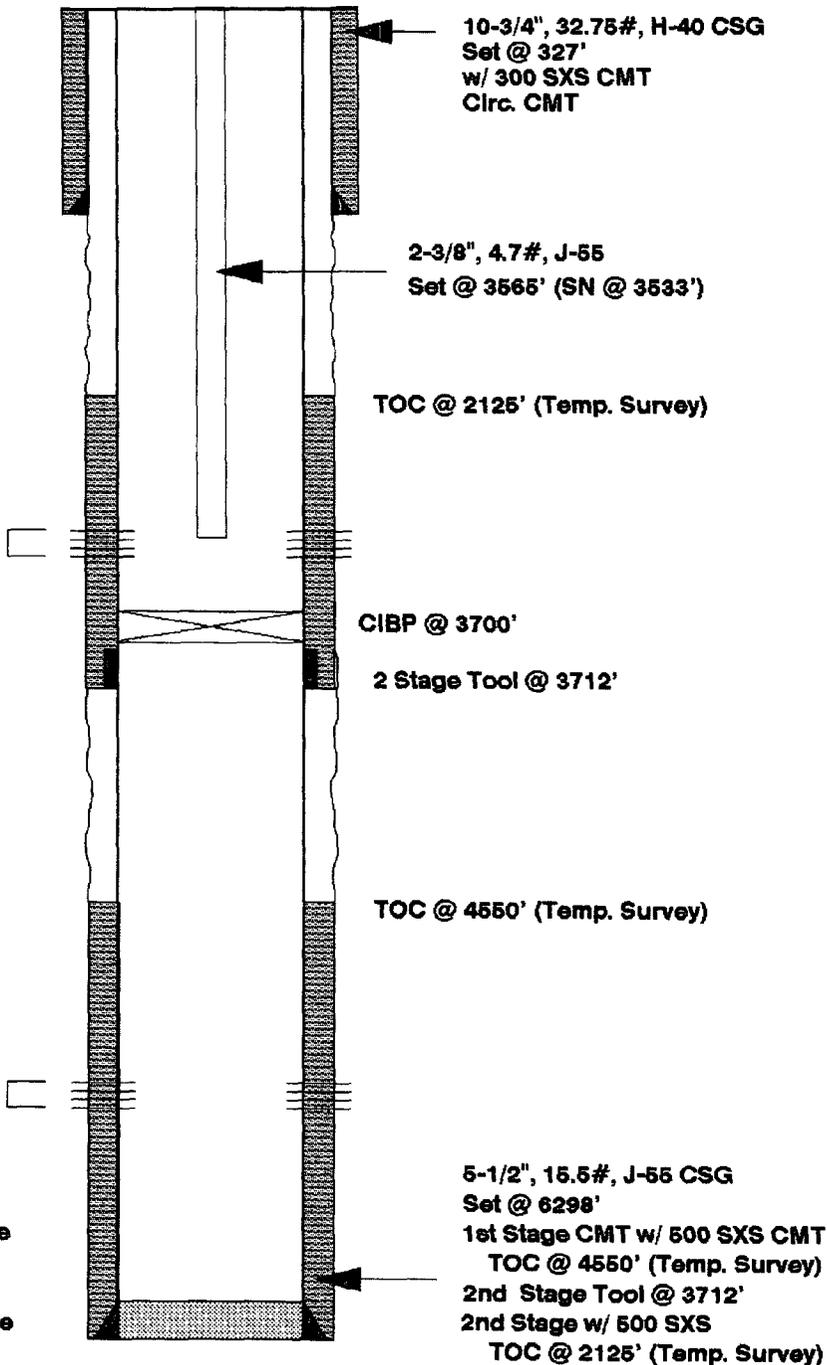
Pictured Cliffs 2693' (+3958)
Lewis 2788' (+3863)
Chacra 3551' (+3100)
Pt. Lookout 4896' (+1755)
Mancos 5100' (+1551)
U. Gallup 6092' (+ 559)
M. Gallup 6268' (+ 383)
L. Gallup 6300' (+ 351)
PBD 6248' (+ 403)
TD 6300' (+ 351)

GALLUP PERFORATIONS:

6092'-6110'
6120'-6155'
6160'-6168'
4 SPF

6135'-68'
Frac w/ 40,160 Gals. Lsa. Crude
15,000# 20-40 Sand

6092'-6168'
Frac w/ 21,924 Gals. Lsa. Crude
19,000# w/ 125 ball sealers



10-3/4", 32.75#, H-40 CSG
Set @ 327'
w/ 300 SXS CMT
Circ. CMT

2-3/8", 4.7#, J-55
Set @ 3565' (SN @ 3533')

TOC @ 2125' (Temp. Survey)

CIBP @ 3700'

2 Stage Tool @ 3712'

TOC @ 4550' (Temp. Survey)

5-1/2", 15.5#, J-55 CSG
Set @ 6298'
1st Stage CMT w/ 500 SXS CMT
TOC @ 4550' (Temp. Survey)
2nd Stage Tool @ 3712'
2nd Stage w/ 500 SXS
TOC @ 2125' (Temp. Survey)



JICARILLA C No. 18
PROPOSED COMPLETION

API #30-039-05837
 COMPL DATE 10-21-58

LOCATION:
 1850' FNL & 790' FEL
 SE/NE, Sec. 28, T25N, R5W
 Rio Arriba County, NM
 ELEVATION: 6651' DF

CHACRA PERFS (7/66):

3568'-76', 3580'-88'
 64 Shots, 4 SPF

Frac w/ 43,780 Gals. Water
 20,000# 20-40 Sand
 20,000# 10-20 Sand

FORMATION TOPS:

Pictured Cliffs 2693' (+3958)
 Lewis 2788' (+3863)
 Chacra 3551' (+3100)
 Pt. Lookout 4896' (+1755)
 Mancos 5100' (+1551)
 U. Gallup 6092' (+ 559)
 M. Gallup 6268' (+ 383)
 L. Gallup 6300' (+ 351)
 PBTB 6248' (+ 403)
 TD 6300' (+ 351)

GALLUP PERFORATIONS:

6092'-6110'
 6120'-6155'
 6160'-6168'
 4 SPF

6135'-68'
 Frac w/ 40,160 Gals. Lse. Crude
 15,000# 20-40 Sand

6092'-6168'
 Frac w/ 21,924 Gals. Lse. Crude
 19,000# w/ 125 ball sealers

