



Texaco Exploration and Production Inc

3300 N Butler  
Farmington NM 87401

4-5-95

1120

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

January 23, 1995

**RECEIVED**

MAR 17 1995

Attention: David Catanach

Oil Conservation Division

RE: **Application for exception to NMOCD Rule 303-A: Downhole Commingle  
of Jicarilla C No. 24: 1980' FNL & 1980' FWL, Unit F,  
Sec. 27-T25N-R5W, Rio Arriba County, New Mexico**

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 March of 1959. In May of 1966 the well was plugged back and recompleted in the Otero Chacra. The Gallup was producing 3 BOPD and 60-70 MCFD and had cumulative production of 23 MBO and 139 MMCF immediately prior to the plug back. The Chacra zone is currently producing 30 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: 24  
Well Location: 1980' FNL & 1980' FWL, Unit F, Sec. 27  
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. 24 prior to plug back in May of 1966. Cumulative Gallup production is 23 BO and 139 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	30	Gas, MCFD	60
Water, BWPD	0	Water, BWPD	0

The combined production from the Chacra and Gallup zones will be approximately 90 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	$30/(30+60)=33\%$	$0/(0+3)=0\%$
Gallup	$60/(30+60)=67\%$	$3/(0+3)=100\%$

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 notified of our desire to downhole commingle. An intent sundry was filed with the Bureau of Land Management, Albuquerque District Office, Rio Puerco Resource Area.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

FORM C-128  
Revised 5/1/57

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

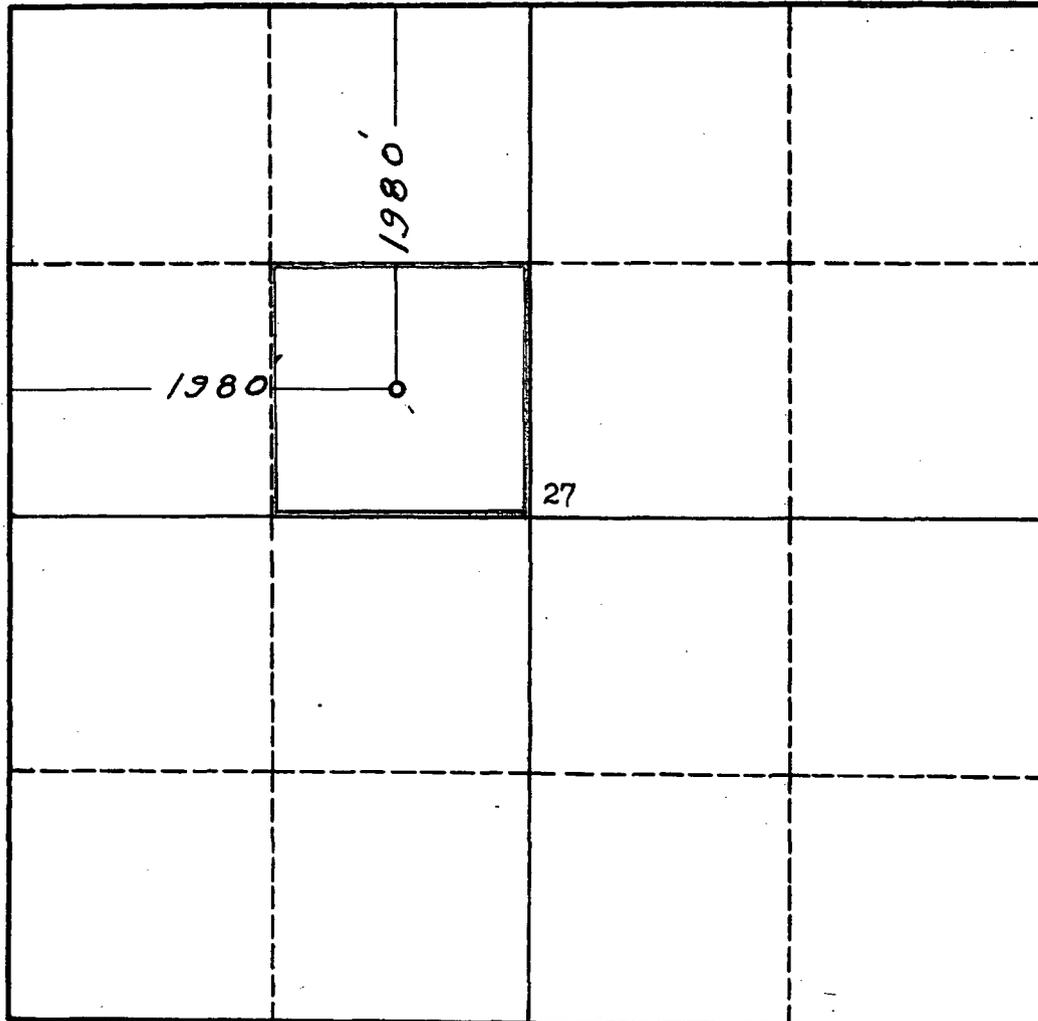
SECTION A

Operator <b>SKELLY OIL COMPANY</b>		Lease <b>JICARILLA</b>		Well No. <b>C-24</b>
Unit Letter <b>F</b>	Section <b>27</b>	Township <b>25 NORTH</b>	Range <b>5 WEST</b>	County <b>RIO ARRIBA</b>
Actual Footage Location of Well: <b>1980</b> feet from the <b>NORTH</b> line and <b>1980</b> feet from the <b>WEST</b> line				
Ground Level Elev.	Producing Formation <b>GALUP</b>	Pool <b>OTERO</b>	Dedicated Acreage: <b>40</b> Acres	

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES  NO \_\_\_\_ . ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
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:

Owner	Land Description

SECTION B



CERTIFICATION

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

Name
Position <b>District Superintendent</b>
Company <b>SKELLY OIL COMPANY</b>
Date <b>February 25, 1959</b>

REF. GLO PLAT DATED 4 NOV. 1882

I hereby 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 <b>23 February 1959</b>
Registered Professional Engineer and/or Land Surveyor <i>James P. Leese</i> <b>James P. Leese</b>
Certificate No. <b>1463</b>



**MEXICO 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.

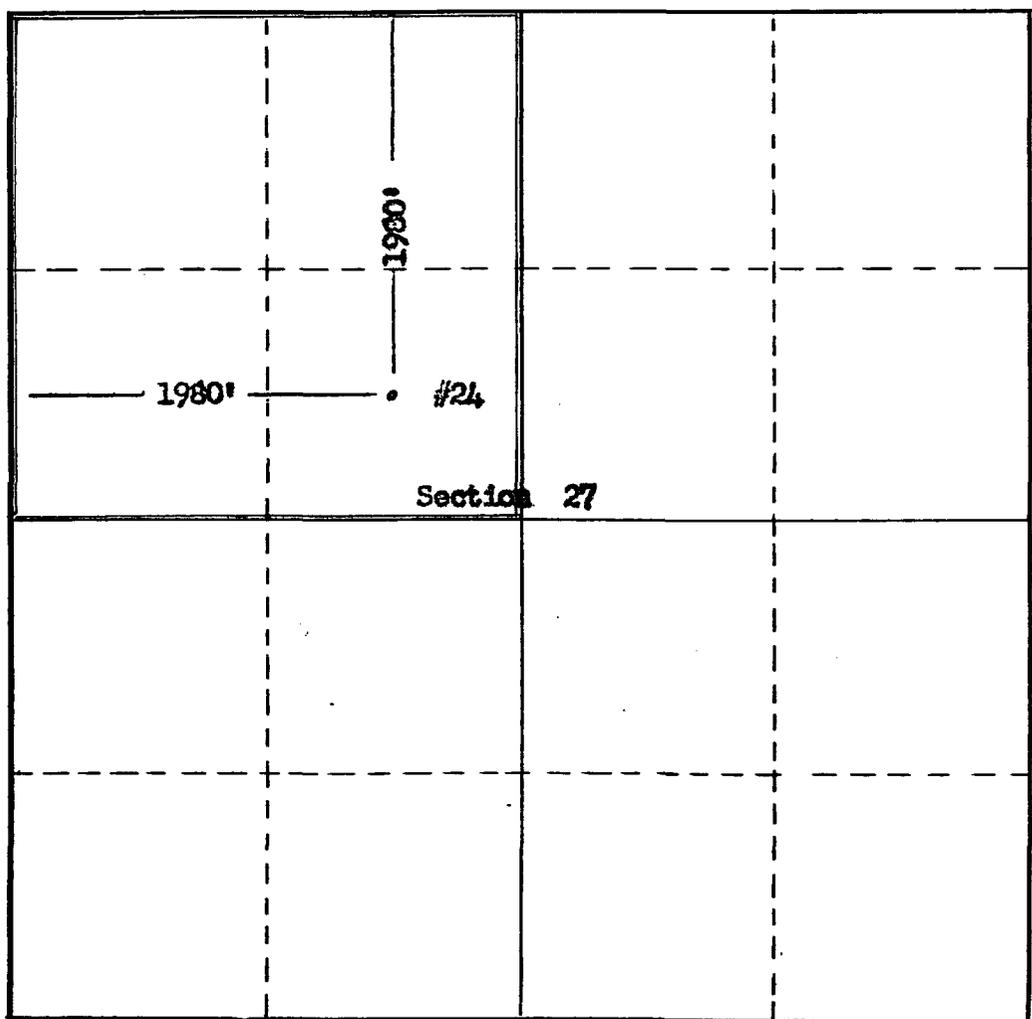
Operator <b>Skelly Oil Company</b>			Lease <b>Jicarilla "C"</b>			Well No. <b>24</b>		
Unit Letter <b>MP</b>	Section <b>27</b>	Township <b>25-N</b>	Range <b>5-W</b>	County <b>Rio Arriba</b>				
Actual Footage Location of Well: <b>1980</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line								
Ground Level Elev: <b>6671'</b>	Producing Formation <b>Chacra</b>		Pool <b>Otero Chacra</b>			Dedicated Acreage: <b>160</b> 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.*

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

Position  
**Dist. Superintendent**

Company  
**Skelly Oil Company**

Date  
**May 3, 1966**

*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 23, 1959**

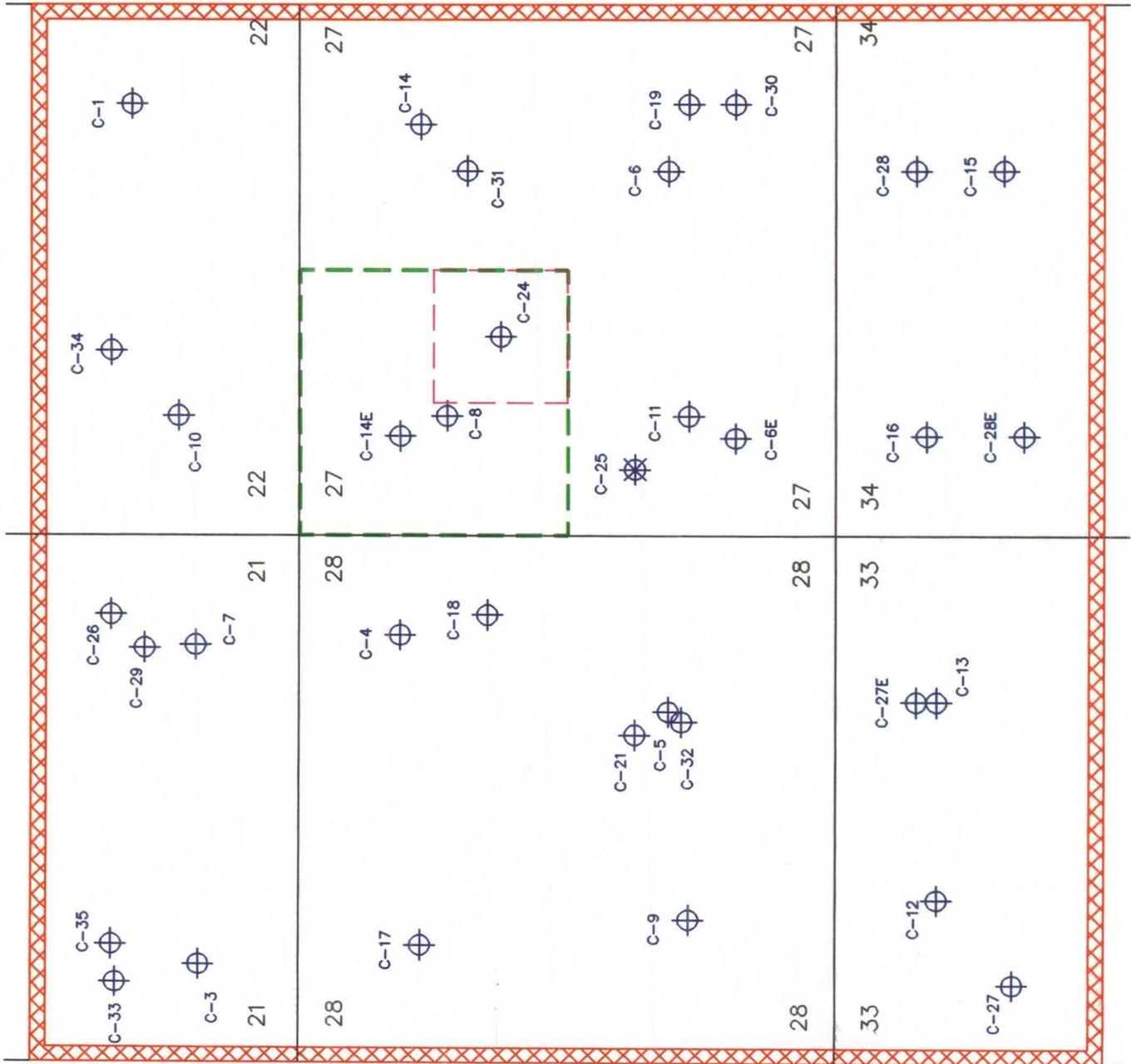
Registered Professional Engineer and/or Land Surveyor

Org.  
**Signed - James P. Loese**

Certificate No.  
**1463**



JICARILLA "C" LEASE



T25N, R5W

CONVENTIONAL WELL

OTERO GALLUP SPACING UNIT

OTERO CHACRA SPACING UNIT

TEXACO OPERATED LEASE BOUNDARY



FARMINGTON AREA  
MIDLAND DIVISION  
MIDLAND, TEXAS

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

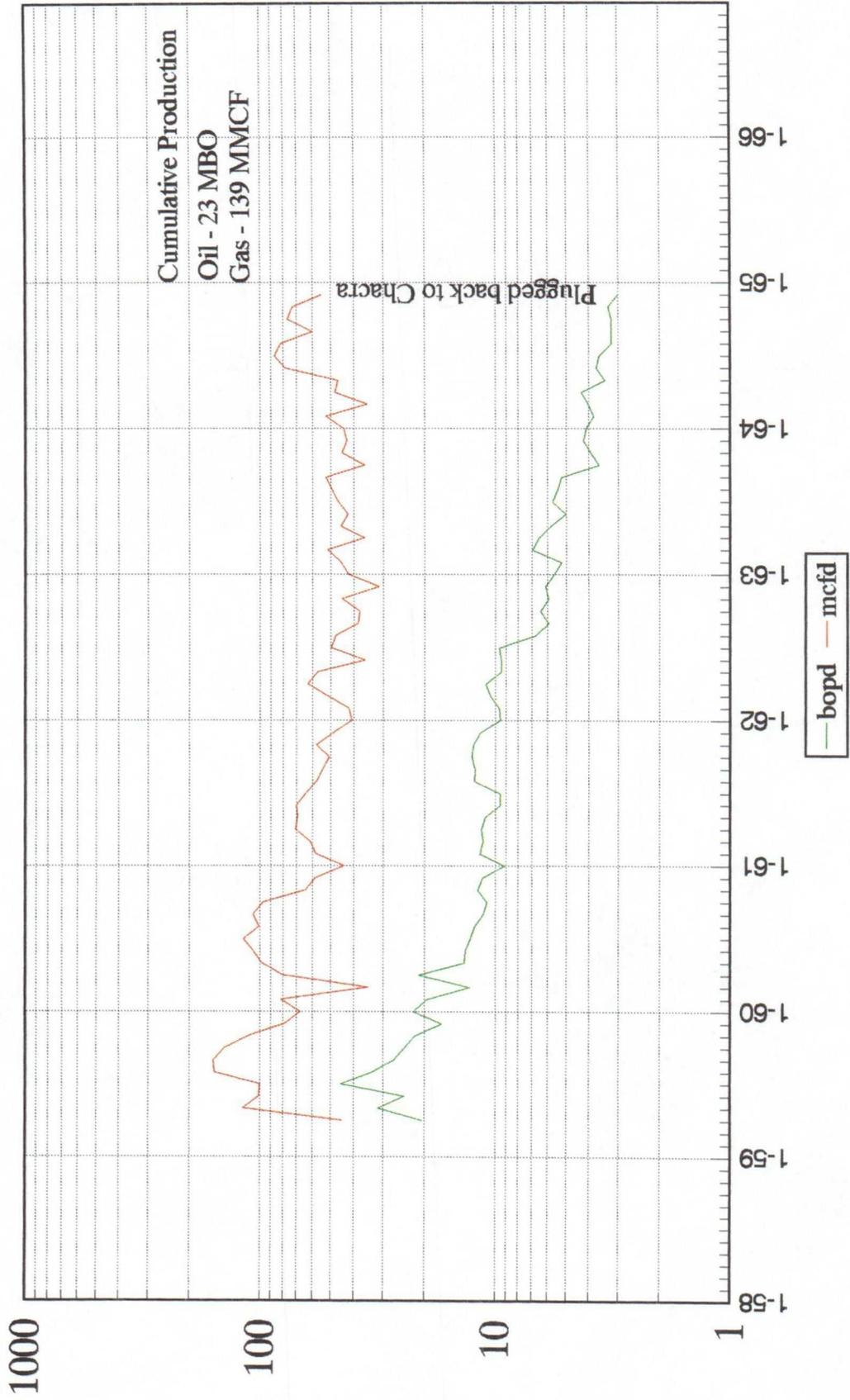
DATE: 1-95	BY: RSD	REVISED:
INTERVAL:	SCALE: 1" =	



Attachment V

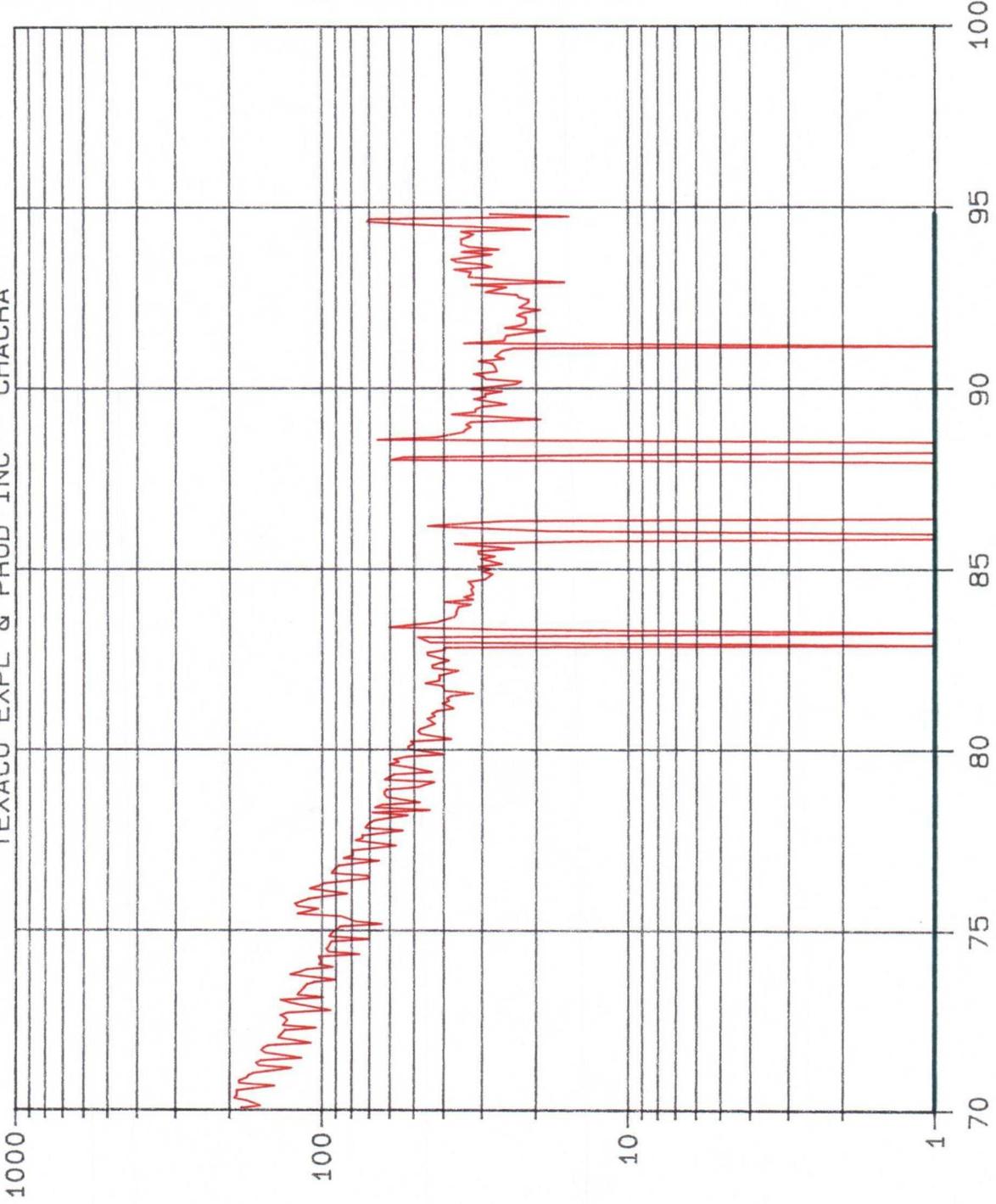
# Jicarilla C #24 Otero Gallup Production

From NMOCD Annual Reports



*Attachment VI*

JICARILLA C 000024 OTERO ( CHACRA ) CK  
 TEXACO EXPL & PROD INC CHACRA



— BOPD  
 — BFPD  
 — MCFPD

LEASE DATA  
 LSE 25N05W27F01  
 FLD 8054998  
 OPER 158628  
 ZONE  
 25N-5W-27  
 COUNTY 039  
 STATE 30

STATUS 10-94  
 CO 0 MBO  
 CG 734 MMCF  
 CW 0 MBW  
 BOPD 0  
 BFPD 0  
 MCFPD 28  
 WELLS 1  
 CI 0 MBWI  
 BWIPD 0

YEARS

*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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (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	<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)		REMARKS
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	
		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	<u>297</u>		. . . .
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

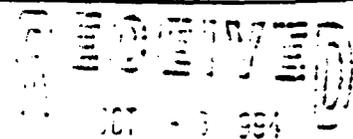
Commenced at (hour, date)*			Zone producing (Upper or Lower)		REMARKS
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	
		Upper Completion	Lower completion		
9-9-94	24 HRS.	92	265		BOTH ZONES SHUT IN
9-10-94	48 HRS.	95	289		. . . .
9-11-94		100	291		. . . .
9-12-94	72 HRS.	104	293		. . . .
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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (Yes or No)

FLOW TEST NO. 1

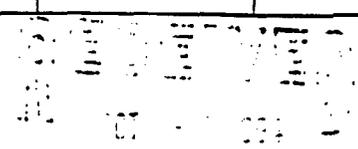
Commenced at (hour, date)*				Zone producing (Upper or Lower)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower completion		
9-9-94	24 HRS.	154	84		BOTH ZONES SHUT IN
9-10-94	48 HRS.	157	170		. . . .
9-11-94		160	226		. . . .
9-12-94	72 HRS.	163	240		. . . .
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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (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. MEDIUM (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)		REMARKS
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	
		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 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-f*

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	OTERO CHARCA	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	284		. . . .
9-16-94	168 HRS.	111	46		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	112	42		UPPER SHUTIN : LOWER FLOWING

Production rate during test

Oil \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas \_\_\_\_\_ MCFPD: Tested thru (Office 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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (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	309		. . . .
9-16-94	168 HRS.	140	114		UPPER SHUT IN; LOWER FLOWING
9-17-94	192 HRS.	140	112		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	Stablized (Yes or No)
Lower Completion	Hour, Date shut-in	Length of time shut-in	Si press. psig	Stablized (Yes or No)

*Attachment VII-k*

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

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.	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

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 VIII-a

11/12/94



## JICARILLA C No. 24 Current Completion

API #30-039-05826  
COMPL DATE 3-13-59

LOCATION:  
1980' FNL & 1980' FWL  
SW/NE, Sec. 27, T25N, R5W  
Rio Arriba County, NM

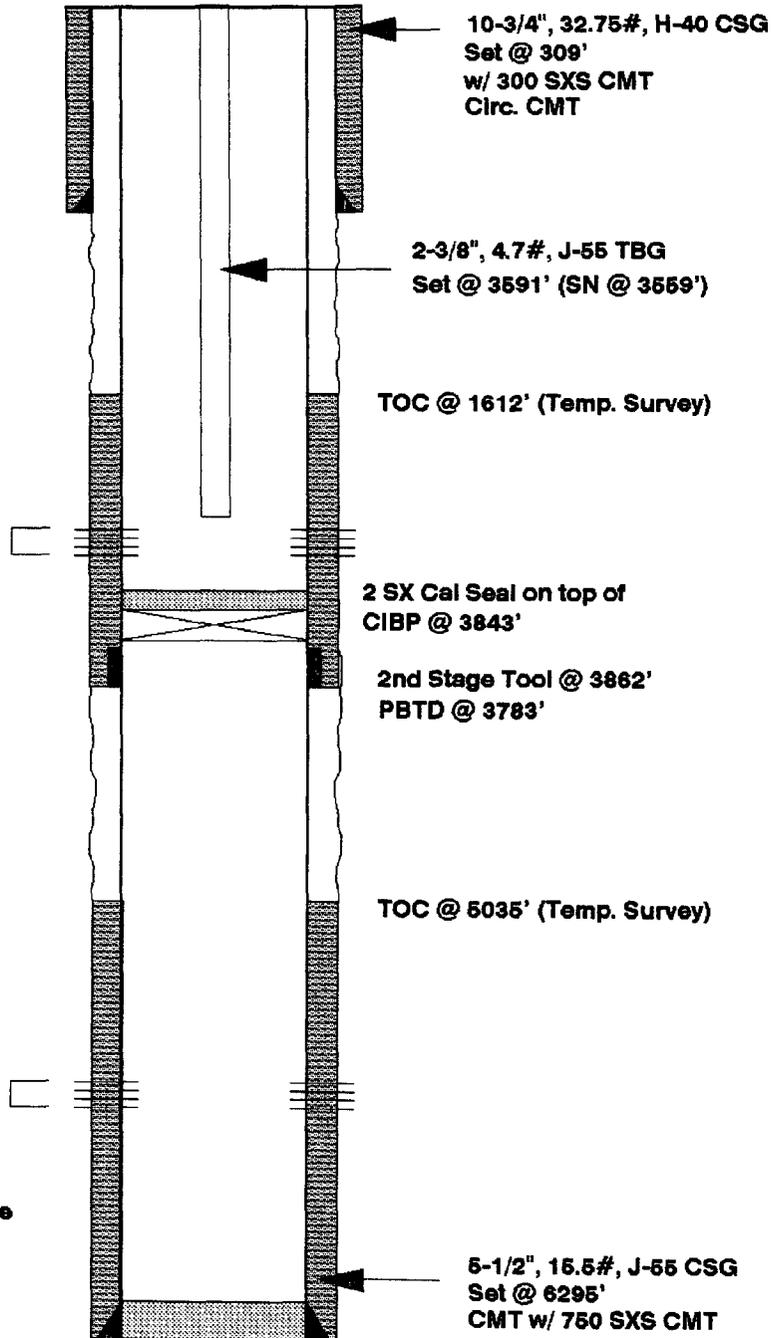
**CHACRA PERFS (5/66):**  
3622'-3628'  
3630'-3644'  
64 Shots, 4 SPF

Frac w/ 52,488 Gals. Water  
30,000# 40-60 Sand  
10,000# 20-40 Sand  
60 balls sealers

**FORMATION TOPS:**  
Pictured Cliffs 2733' (+3946)  
Lewis 2855' (+3824)  
Chacra 3602' (+3072)  
Pt. Lookout 4914' (+1765)  
Mancos 5150' (+1529)  
Gallup 6083' (+ 526)  
M. Gallup 6140' (+ 539)  
PBD 6255' (+ 424)  
TD 6300' (+ 379)

**GALLUP PERFORATIONS:**  
6111'-6119'  
6142'-6160'  
6173'-98'  
6211'-6219'  
4 SPF

Frac w/ 21,420 Gals. Lse. Crude  
15,225# 20-40 Sand  
70 balls sealers



Attachment VIII-b

11/12/94



JICARILLA C No. 24  
PROPOSED COMPLETION

API #30-039-05826  
COMPL DATE 3-13-59

LOCATION:  
1980' FNL & 1980' FWL  
SW/NE, Sec. 27, T25N, R5W  
Rio Arriba County, NM

**CHACRA PERFS (5/66):**  
3622'-3628'  
3630'-3644'  
64 Shots, 4 SPF  
Frac w/ 52,488 Gals. Water  
30,000# 40-60 Sand  
10,000# 20-40 Sand  
60 balls sealers

**FORMATION TOPS:**  
Pictured Cliffs 2733' (+3946)  
Lewis 2855' (+3824)  
Chacra 3602' (+3072)  
Pt. Lookout 4914' (+1765)  
Mancos 5150' (+1529)  
Gallup 6083' (+ 526)  
M. Gallup 6140' (+ 539)  
PBSD 6255' (+ 424)  
TD 6300' (+ 379)

**GALLUP PERFORATIONS:**  
6111'-6119'  
6142'-6160'  
6173'-98'  
6211'-6219'  
4 SPF

Frac w/ 21,420 Gals. Lse. Crude  
15,225# 20-40 Sand  
70 balls sealers

