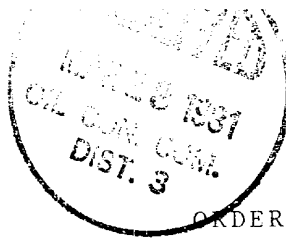


THE APPLICATION OF TENNECO OIL  
COMPANY FOR A DUAL COMPLETION



ORDER NO. MC-2773

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 112-A, Tenneco Oil Company made application to the New Mexico Oil Conservation Division on December 3, 1980, for permission to dually complete its Bunce Com No. 1 located in Unit C of Section 10, Township 29 North, Range 10 West, NMPM, San Juan County, New Mexico, in such a manner as to permit production of Bloomfield Chacra and Blanco Mesaverde Gas.

Now, on this 29th day of December, 1980, the Division Director finds:

- (1) That application has been filed under the provisions of Rule 112-A of the Division's Rules and Regulations;
- (2) That satisfactory information has been provided that all operators of offset acreage have been duly notified;
- (3) That no objections have been received within the waiting period as prescribed by said rule;
- (4) That the proposed dual completion will not cause waste nor impair correlative rights.
- (5) That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Tenneco Oil Company, be and the same is hereby authorized to dually complete its Bunce Com No. 1 located in Unit C of Section 10, Township 29 North, Range 10 West, NMPM, San Juan County, New Mexico, in such a manner as to permit production of Bloomfield Chacra and Blanco Mesaverde gas from parallel strings of tubing.


PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
JOE D. RAMEY  
Division Director

SEAL

OIL CONSERVATION COMMISSION  
Agua DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE Dec 9, 1980

RE: Proposed MC x  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated Dec 8, 1980  
for the Sonnet Oil Co. Bunce Com #1 10-29N-10W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Frank J. Lang

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Tenneco Oil Company</b>		County <b>San Juan</b>	Date <b>11/17/80</b>
Address <b>P.O. Box 3249 Englewood, Colorado 80155</b>		Lease <b>Bunce Com</b>	Well No. <b>#1</b>
Location of Well	Unit <b>C</b>	Section <b>10</b>	Township <b>29N</b>
			Range <b>10W</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_ ; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	<b>Bloomfield Chacra</b>		<b>Blanco Mesayerde</b>
b. Top and Bottom of Pay Section (Perforations)	<b>2802-2903'</b>		<b>3761-4305'</b>
c. Type of production (Oil or Gas)	<b>Yes</b>		<b>Yes</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>		<b>Flowing</b>

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Getty Oil Company, 3 Park Central, 1515 Arapahoe, Denver, Colorado 80202

El Paso Natural Gas Company P.O. Box 1492, El Paso, Texas 79978

El Pamco P. O. Box 14738 5900 Tramway Blvd N.E. Albuquerque, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_\_. If answer is yes, give date of such notification \_\_\_\_\_.

CERTIFICATE: I, the undersigned, state that I am the \_\_\_\_\_ of the \_\_\_\_\_ (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

5a. Indicate Type of Lease  
State  Fee

5. State Oil & Gas Lease No.  
NM 489

1a. TYPE OF WELL  
OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. TYPE OF COMPLETION  
NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  OTHER \_\_\_\_\_

7. Unit Agreement Name

8. Form or Lease Name  
Bunce Com

9. Well No.  
1

10. Field and Pool, or Wildcat  
Bloomfield Chacra

2. Name of Operator  
Tenneco Oil Company

3. Address of Operator  
P.O. Box 3249, Englewood, Colorado 80155

4. Location of Well  
UNIT LETTER C LOCATED 990 FEET FROM THE North LINE AND 1650' FEET FROM

THE West LINE OF SEC. 19 TWP. 29N RGE. 10W

12. County  
San Juan

15. Date Spudded 9/22/80 16. Date T.D. Reached 9/30/80 17. Date Compl. (Ready to Prod.) 11/13/80 18. Elevations (DF, RKB, RT, GR, etc.) 5521' gr. 19. Elev. Casinghead --

20. Total Depth 4675' 21. Plug Back T.D. 4627' 22. If Multiple Compl., How Many 2 23. Intervals Drilled By Rotary Tools 24. Rotary Tools 0'-TD 25. Cable Tools --

24. Producing Interval(s), of this completion - Top, Bottom, Name  
2802-2903' Chacra

25. Was Directional Survey Made  
No

26. Type Electric and Other Logs Run  
CB/VDL, CD/CN, CPL, DS/TNDT, GR/IND

27. Was Well Cored  
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB. FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	273'	12-1/4"	300 sx CL-B w/2% CaCl <sub>2</sub>	
7"	23#	4673'	8-3/4"	1st stg 150 sx CL-B, 35 sx Lite W/CFR-2	
				2nd stg 380 sx Lite w/4% CFR-2	

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
1-1/4"	2876'	Various

31. Perforation Record (Interval, size and number)

2802-08'	11'	22 holes	2 JSPF
2888-93'			

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
2802-2903'	250 gals 15% HCL 600 gals 15% HCL 45 balls
	80,000 gals 70% quality foam
	80,000# 20/40 sand 600 bbls wtr

33. PRODUCTION

Date First Production 11/13/80 Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing Well Status (Prod. or Shut-in) Shut-in

Date of Test 11/13/80 Hours Tested 3 hrs. Casing Size 3/4" Prod'n. For Test Period Oil - Bbl. Gas - MCF Water - Bbl. Gas - Oil Ratio  
Q = 833

Flow Tubing Press. 50 PSI Casing Pressure 512 PSI Calculated 24-hour rate Oil - Bbl. Gas - MCF Water - Bbl. Oil Gravity - API (Corr.)  
AOF = 1207

34. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold Test Witnessed By \_\_\_\_\_

35. List of Attachments  
Electric logs forwarded by Schlumberger, Dresser Atlas, Blue Jet.

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Carley M. Hatten TITLE Asst. Div. Adm. Mgr. DATE 12/1/80

This form is to be filed with the appropriate District Office of the Commission not later than 30 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all observed and radio-actively logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths, in the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, forms at through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	0700'
T. Salt	T. Strawn	T. Kirtland-Fruitland	1584'
T. Salt	T. Aloka	T. Pictured Cliffs	1811'
T. Yates	T. Miss	T. Cliff House	3440'
T. 7 Rivers	T. Devonian	T. Menefee	3655'
T. Queen	T. Silurian	T. Point Lookout	4115'
T. Grayburg	T. Montoya	T. Mancos	
T. San Andres	T. Simpson	T. Gallup	
T. Clorieta	T. McKee	Base Greenhorn	
T. Padlock	T. Ellenburger	T. Dakota	
T. Blinberry	T. Gr. Wash	T. Morrison	
T. Tubb	T. Granite	T. Todito	
T. Drinkard	T. Delaware Sand	T. Entrada	
T. Abo	T. Bone Springs	T. Wingate	
T. Wolfcamp	T. Permian	T. Permian	
T. Cisco (Hough C)	T. Penn.	T. Penn. "A"	

OIL OR GAS SANDS OR ZONES

No. 1, from	2802'	to	2903'	No. 4, from
No. 2, from	3761'	to	4114'	No. 5, from
No. 3, from	4114'	to	4305'	No. 6, from

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from	to	feet.
No. 2, from	to	feet.
No. 3, from	to	feet.
No. 4, from	to	feet.

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation
300'	719'	419'	Ojo Alamo
1521'	1584'	63'	Kirtland
1584'	1701'	117'	Fruitland
1811'	1841'	40'	Pictured Cliffs
1850'	2451'	601'	Lewis
2800'	2920'	120'	Chacra
3440'	3660'	220'	Cliffhouse
3665'	3981'	316'	Menefee
4115'	TD	560'	Point Lookout

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

Revised 8-76

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease  
State  Free

5. State Oil & Gas Lease No.  
NM 489

1a. TYPE OF WELL  
OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. TYPE OF COMPLETION  
NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESRV.  OTHER \_\_\_\_\_

7. Unit Agreement Name

8. Farm or Lease Name  
Bunce Com

9. Well No.  
1

10. Field and Pool, or Wildcat  
Blanco Mesaverde

2. Name of Operator  
Tenneco Oil Company

3. Address of Operator  
P.O. Box 3249, Englewood, Colorado 80155

4. Location of Well  
UNIT LETTER C LOCATED 990 FEET FROM THE North LINE AND 1650 FEET FROM  
THE West LINE OF SEC. 19 TWP. 29N RGE. 10W

11. County  
San Juan

15. Date Spudded 9/22/80 16. Date T.D. Reached 9/30/80 17. Date Compl. (Ready to Prod.) 11/13/80 18. Elevations (DF, RKB, RT, GR, etc.) 5521' gr. 19. Elev. Casinghead --

20. Total Depth 4675' 21. Plug Back T.D. 4627' 22. If Multiple Compl., How Many 2 23. Intervals Drilled By Rotary Tools 0'-TD Cable Tools --

24. Producing Interval(s), of this completion - Top, Bottom, Name 3761-4305' Mesaverde 25. Was Directional Survey Made No

26. Type Electric and Other Logs Run CB/VDL, CD/CN, CPL, DS/TNDT, IND/GR 27. Was Well Cored No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB. FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	273'	12-1/4"	300 sx CL-B w/2% CACL <sub>2</sub>	
7"	23#	4673'	8-3/4"	1st stg 150 CL-B, 35 sx Lite w/CFR-2	
				2nd stg 380 sx Lite w/4% CFR-2	

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	4312'	

30. TUBING RECORD

31. Perforation Record (Interval, size and number)

Interval	Size	Number
3761-63'	4063-65'	4184-86'
3796-3800'	4114-17'	4193-94'
3850-56'	4135-38'	4273-75'
3879-82'	4146-48'	4304-05'
4010-17'	4152-60'	2 JSPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
3761-4065'	750 gals 7 1/2% DI-HCL 1000 gals
	15% HCL & 72 balls 1767' bbls
	1% KCL 65,000# 20/40 sand,
	500 gals 7 1/2% DI-HCL 1000 gals

33. PRODUCTION 15% HCL 1395 bbls 1% KCL wtr. 53,000#

Date First Production 11/13/80 Production Method (Flowing, gas lift, pumping - Size and type pump) 20/40 sand Flowing Well Status (Prod. or Shut-in) Shut in

Date of Test 11/13/80 Hours Tested 3 hrs. Choke Size 3/4" Prod'n. For Test Period Oil - Bbl. Gas - MCF Q = 1856 Water - Bbl. Gas - Oil Ratio

Flow Tubing Press. 124 PSI Casing Pressure 850 PSI Calculated 24-Hour Rate Oil - Bbl. Gas - MCF AOF = 1983 Water - Bbl. Oil Gravity - API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold Test Witnessed By

35. List of Attachments  
Electric logs forwarded by Dresser Atlas, Schlumberger, Blue Jet.

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Carley Stettin TITLE Asst. Div. Adm. Mgr. DATE 12/1/80

This form is to be filed with the appropriate Bureau Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, logs of through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anyh	3	T. Ojo Alamo	0700'
T. Canyon		T. Penn. "B"	
T. Salt		T. Penn. "C"	
T. Salt		T. Kirtland-Fruitland	1584'
T. Strawn		T. Penn. "D"	1811'
T. Aloka		T. Pictured Cliffs	3440'
T. Yates		T. Cliff House	3655'
T. 7 Rivers		T. Madison	4115'
T. Queen		T. Elbert	
T. Grayburg		T. McCracken	
T. San Andres		T. Ignacio Ortiz	
T. Glorieta		T. Granite	
T. Padlock		T. Base Greenhorn	
T. Blinberry		T. Ellenburger	
T. Gr. Wash		T. Dakota	
T. Morrison		T. Morrison	
T. Granite		T. Fort Ho	
T. Drinkard		T. Entrada	
T. Abo		T. Wingate	
T. Wolfcamp		T. Bone Springs	
T. Penn.		T. Chinle	
T. Cisco (Bough C)		T. Permian	
T. Penn.		T. Penn. "A"	

OIL OR GAS SANDS OR ZONES

No. 1, from	2802'	to	2903'	No. 4, from		to	
No. 2, from	3761'	to	4114'	No. 5, from		to	
No. 3, from	4114'	to	4305'	No. 6, from		to	

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from	_____	to	_____	feet.
No. 2, from	_____	to	_____	feet.
No. 3, from	_____	to	_____	feet.
No. 4, from	_____	to	_____	feet.

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
300'	719'	419'	Ojo Alamo				
1521'	1584'	63'	Kirtland				
1854'	1701'	117'	Fruitland				
1811'	1841'	40'	Pictured Cliffs				
1850'	2451'	601'	Lewis				
2800'	2920'	120'	Chacra				
2440'	3660'	220'	Cliffhouse				
3665'	3981'	316'	Menefee				
4115'	TD	560'	Point Lookout				

TENNECO BUNCE COM 1  
Sec 19, T29N, R10W  
San Juan Co., N.M.

---

Getty Oil Company  
3 Park Central  
1515 Arapahoe  
Denver, Colorado 80202

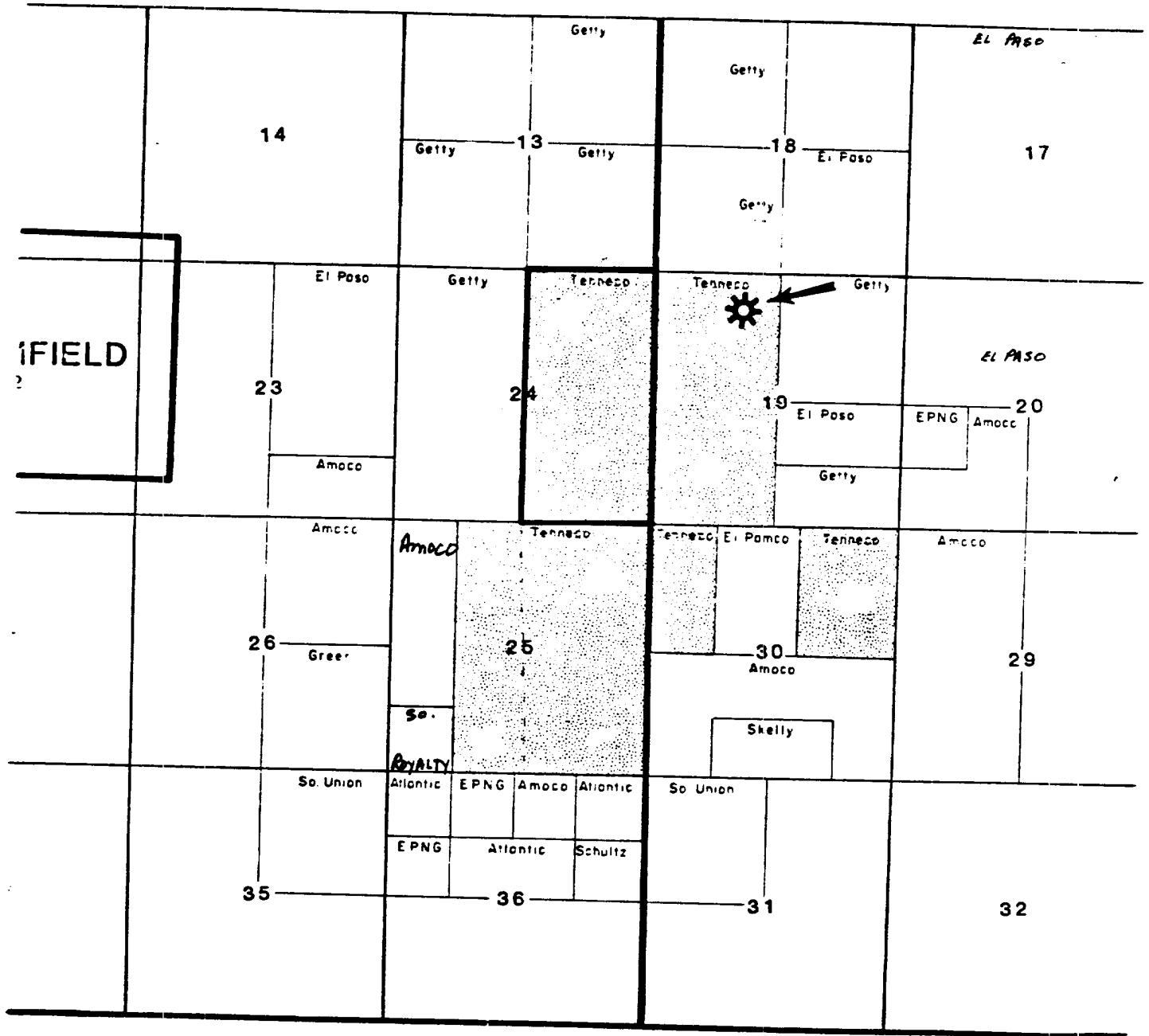
El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79978

El Pamco  
P. O. Box 14738  
5900 Tramway Blvd. N.E.  
Albuquerque, New Mexico



R 1 1 W

R 1 0 W



R 1 1 W

BUNCE Com - 1

R 1 0 W

- CHACRA

- MESAVERDE

⊗ - CHACRA/MESAVERDE DUAL

LEASE BUNCE Com

WELL NO. 1

9 5/8" "OD, 23 LB, K-55 CSG.W/ 300 SX

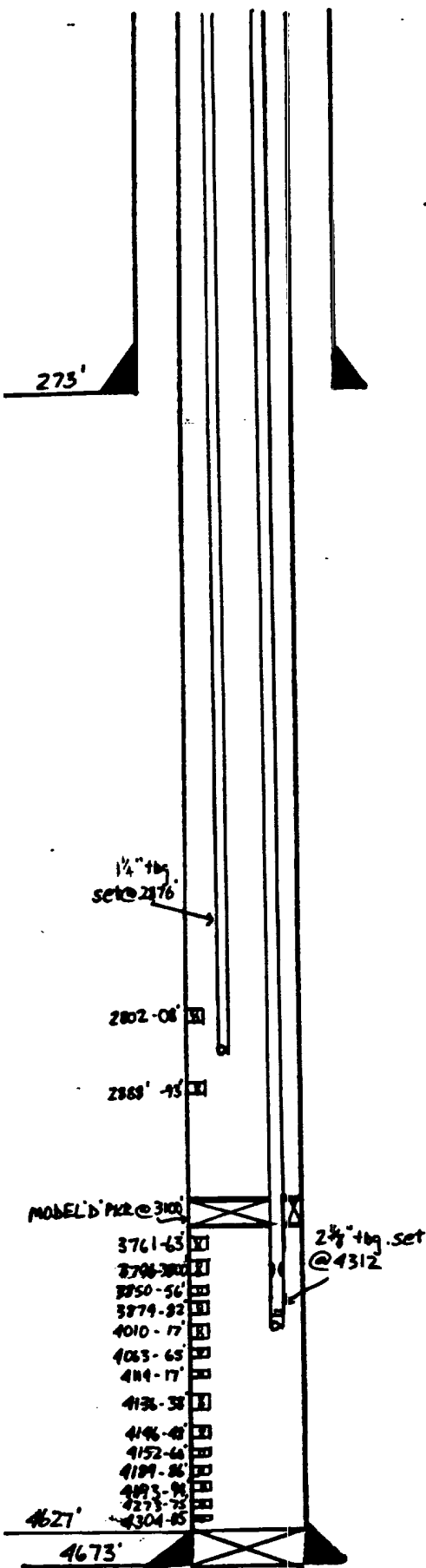
TOC @ Surface

7 "OD, 23 LB, K-55 CSG.W/ 185, 380 SX

TOC @ \_\_\_\_\_

**DETAILED PROCEDURE** (All depths are from Neutron Log)

1. MIRUSU. Remove WH. Install BOP.
2. RIH w/6-1/4" bit & 2-3/8" tbg. DO DV @ 3443'. RIH & tag PBSD. Circulate hole clean w/1% KCL wtr.
3. Pressure test csg to 2500 psi.
4. Spot 500 gal 7-1/2% DI HCL @ 4305'. POOH w/tbg.
5. Run GR/CCL/CBL over Mesaverde & Chacra.
6. Perforate Mesaverde Point Lookout as follows using 4" csg gun & 2 JSPF:
  - 4114-17', 3'
  - 4136-38', 2'
  - 4146-48', 2'
  - 4152-60', 8'
  - 4184-86', 2'
  - 4193-94', 1'
  - 4273-75', 2'
  - 4304-05', 1' Total 21', 42 holes
7. Acidize w/1000 gal 15% HCL & 63 balls.
8. Run junk bakset to PBSD.
9. Frac Point Lookout w/1% KCL water containing 20/40 sd as follows:
  - 465 BW PAD
  - 200 BW @ 1/2 ppg sd
  - 200 BW @ 1 ppg sd
  - 200 BW @ 1.5 ppg sd
  - 330 BW @ 2.0 ppg sd
  - 162 BW flush
  - Total sand = 53,000
  - Total water - 1395 BBLs
  - Desired Rate - 63 BPM
10. Lubricate in hole w/wireline set RBP. Set plug @ 4090".
11. Pressure test csg to 2500 psi.
12. RIH w/tbg. spot 750 gal 7-1/2% DI HCL @ 4065'. POOH w/tbg.
13. Perforate Mesaverde Menefee w/2 JSPF using 4" csg gun as follows:
  - 3698-3700', 2'
  - 3761-63', 2'
  - 3796-3800', 4'
  - 3850-56', 6'
  - 3879-82', 3'
  - 4010-17', 7'
  - 4063-65', 2' Total 26', 52 holes.
14. Acidize w/1000 gal 15% HCL & 78 balls.
15. RIH to 4075' w/junk basket.
16. Frac Menefee w/1% KCL wtr containing 20/40 sand as follows:
  - 540 BW PAD
  - 200 BW @ 0.5 ppg sd
  - 200 BW @ 1.0 ppg sd
  - 200 BW @ 1.5 ppg sd
  - 480 BW @ 2.0 ppg sd
  - 145 BW flush
  - Total Sand - 65,500 # 20/40
  - Total Water - 1765 BBLs
  - Desired Rate - 78 BPM



DETAILED PROCEDURE (Page 2)

17. RIH w/2-3/8" tbg & 5-1/2" retrieving head. CO to RBP w/foam. Kill well. Latch & POOH w/RBP.
18. RIH w/tbg, S/N & pumpout plug. CO at least 100' below bottom perf. Land tbg @ 4250'. Kick around w/N<sub>2</sub>. Flow to clean up.
19. Kill well w/2% KCL water. RIH & tag bottom. CO fill if there is less than 50' of rathole. POOH w/tbg.
20. Set Model D pkr w/expendable plug @ 3100'. Drop 2 sx sand. Fill hole w/2% KCL water. Pressure test csg to 2500 psi.
21. Perforate Chacra w/2JSPF using 4" csg gun as follows:  
2888-2903', 15'  
2802-08', 6' Total 21', 42 holes.
22. RIH w/fullbore pkr & 2-3/8" tbg. Land pkr @ 2850'. Spot 250 gal 15% HCL in annulus. Set pkr. Acidize 2888' to 2903' down tbg w/600 gal 15% HCL acid & 45 balls. Breakdown & displace acid in annulus into perfs @ 2802-08'. RIH to knock off balls. POOH w/tbg & pkr.
23. Frac Chacra formation down csg w/70 quality foam using 2% KCL water and 20/40 sd as follows:  
20,000 gal PAD  
10,000 gal w/.5 ppg sd  
10,000 gal w/1.0 ppg sd  
10,000 gal w/1.5 ppg sd.  
25,000 gal w/2.0 ppg sd  
4,625 gal flush  
Totals: 80,000# 20/40 sd    80,000 gal foam    600 BW  
Desired Rate - 20 BPM
24. Flow back well after equipment leaves location.
25. Kill well w/2% KCL water.
26. RIH w/2-3/8" tbg w/F nipple & muleshoe on bottom. Position seal assembly and blast joints so the muleshoe will be in @ 4200' and the blast joints opposite the Chacra when the seal assembly lands.
27. CO to Model D pkr.
28. Knock out plug & land tbg.
29. RIH w/1-1/4" tbg & S/N and land @ 2900'.
30. NDBOP. NUWH.
31. Blow Chacra around w/N<sub>2</sub> & swab in Mesaverde.
32. Flow to clean up.
33. SI for AOF.