SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

HNITED STATES

DEPARTMENT OF THE INTERIOR						30-045 5. LEASE DESIGNATIO	- <u>23058</u>	
GEOLOGICAL SURVEY						SF 078502	. AND BERIAL NO.	
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					6. IF INDIAN, ALLOTT	EE OR TRIBE NAME		
	IILL 🖺	DEEPEN [PLU	G BAC	:K []	7. UNIT AGREEMENT	NAME
WELL	GAS OTHER		SINGLE ZONE	X	MULTIPI ZONE	LE []	8. FARM OR LEASE N Vandewart	
El Paso Na	tural Gas Com	pany		_			9. WELL NO.	
3. ADDRESS OF OPERATOR		2774 0746					4A	
	, Farmington,						10. FIELD AND POOL,	
At surface 1780'S, 1590'E At proposed prod. zone At proposed prod. zone At horse 1780'S, 1590'E At proposed prod. zone Blanco Mesa Verde 11. SEC., T., R., M., OR BLK. SeC. 13, T-29-N, R-8-W NMPM					DIV			
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POS	T OFFICE*				12. COUNTY OR PARIS	H 13. STATE
5 miles East of Blanco, NM San Juan NM						NM		
LOCATION TO NEARES PROPERTY OR LEASE	5. DISTANCE FROM PROPUSED* 16. NO. OF ACRES IN LEASE 17. NO.				OF ACRES ASSIGNED HIS WELL	320		
TO NEAREST WELL, I	TO NEAREST WELL DRILLING COMPLETED			Rotar	RY OR CABLE TOOLS			
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6829 GR								
23.	I	PROPOSED CASI	G AND CEM	ENTING	PROGRA	.м		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	DOT SI	ETTING DEF	TH		QUANTITY OF CEM	ENT
13 3/4"	9 5/8"	32.3#		200		224 c	u.ft. to ci	rculate
8 3/4"	7"	20.0#					ver Ojo Alan	
6 1/4"	4 1/2"line	r 10.5#	380	0-617	70'		u.ft.to fil	
	1	1	•			ı		

Selectively perforate and sandwater fracture the Mesa Verde formation.

A 3000 psi WP and 6000 psi blind and pipe rams will b				
This gas is dedicated.		610	(e)	
The E/2 of Section 13 is o	dedicated to th	is yell!		
N ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposione. If proposal is to drill or deepen directionally, government program, if any.				
signed D. D. Buisco	TITLE	rilling Clerk	DATE 5-22-78	
(This space for Federal or State office use)				
APPROVED BY	TITLE	DATE	DATE	
CONDITIONS OF APPROVAL, IF ANY:				

NEW MEXICO OIL CONSERVATION COMMISSION 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. Well No. EL PASO NATURAL GAS COMPANY VANDEWART A (SF-078502) 4A Unit Letter Section Township Range County J 29N 8w San Juan Actual Footage Location of Well: 1780 South 1590 feet from the East line and feet from the line Ground Level Elev. Producing Formation Pool Dedicated Acreage: 6829 Mesa Verde Blanco Mesa Verde 320.00 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? 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. Drilling Clerk Position El Paso Natural Gas May 22, 1978 Sec 13 I hereby certify that the well location SF-078502 shown on this plat was plotted from field notes of actual surveys made by me or 1590' under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed April 29% F.egistere.ig



P. O. BOX 990 FARMINGTON, NEW MEXICO 87491 PHONE: 505-325-2841

Multi-Point Surface Use Plan

Vandewart A #4A

- 1. Existing Road Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map.

 All existing and new roads will be properly maintained during the duration of this project.
- Planned Access Roads Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
- 3. Location of Existing Wells Please refer to Map No. 2
- 4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines Please refer to Maps No. 1 and No. 2.

 Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
- 5. Location and Type of Water Supply Water for the proposed project will be obtained from a water hole located at Manzaneras Water Well.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- Methods of Handling Waste Materials All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
- 8. Ancillary Facilities No camps or airstrips will be associated with this project.
- 9. Wellsite Layout Please refer to the attached Plat No. 1.
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #2 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted green (Federal Standard #595-34127)
- 11. Other Information The terrain is sandstone ledges and high hills with pinon and cedar growing. Deer graze the proposed project site.

- 12. Operator's Representative W. D. Dawson, Post Office Box 990, Farmington, New Mexico 87401
- 13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

May 22, 1978

D. C. Walker

Project Drilling Engineer

DCW:pb

Operations Plan Vandewart A #4A

I. Location: 1780'S, 1590'E, Section 13, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde <u>Elevation:</u> 6829'GR

II. Geology:

Α.	Formation Tops:	Surface	San Jose	Lewis	3745 '
	•	Ojo Alamo	2585 '	Mesa Verde	5170 '
		Kirtland	2695 '	Menefee	5340 '
		Fruitland	3265 '	Point Lookout	5720 '
		Pic.Cliffs	3545 '	Total Depth	6170 '

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5160', 5340', 5710' and at Total Depth.
 Also gauge any noticeable increase in gas. Record all gauges in
 daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3945'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
		13 3/4"	200'	9 5/8"	32.3# H-40
		8 3/4"	3945 '	7"	20.0# K-55
		6 1/4"	3800-6170 '	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 6170' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

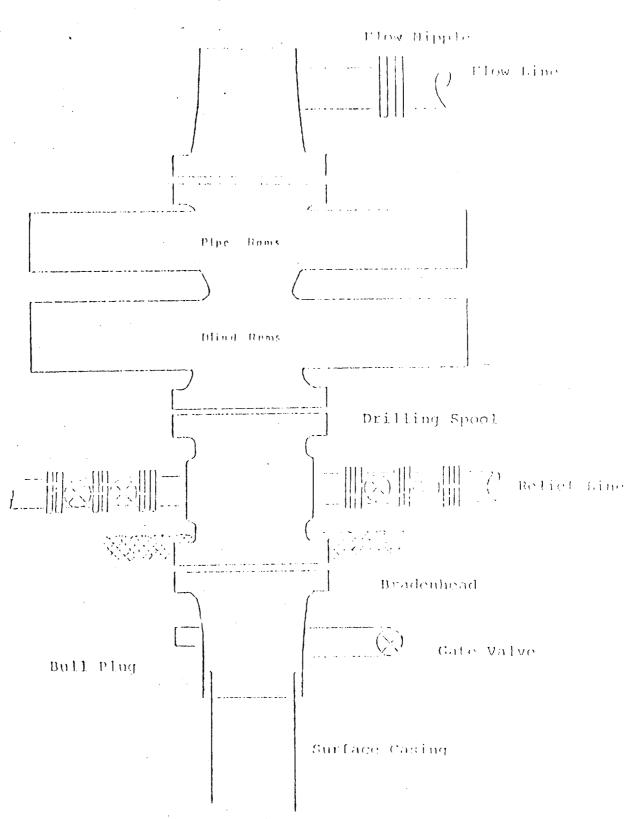
V. Cementing:

9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

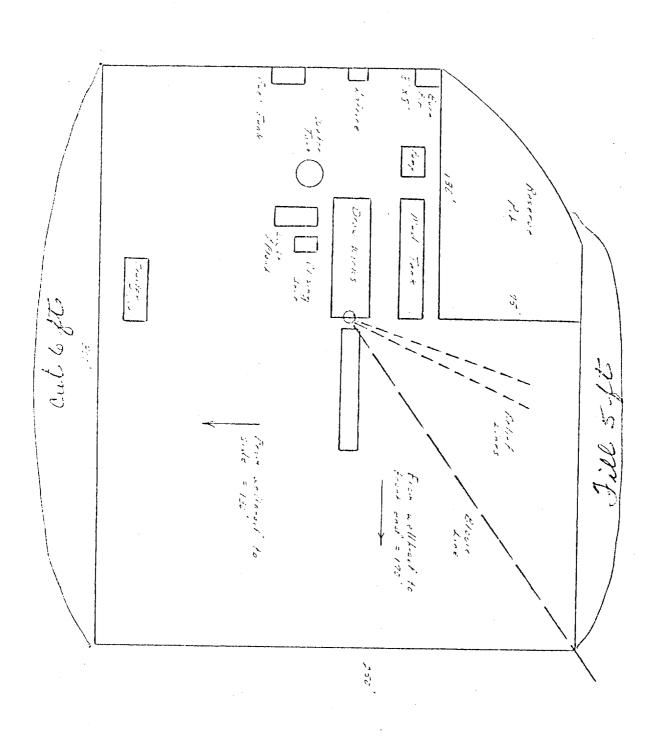
7" intermediate casing - use 116 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (306 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 300 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (417 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

Typical N.O.E. Installation for Mega Verde Well

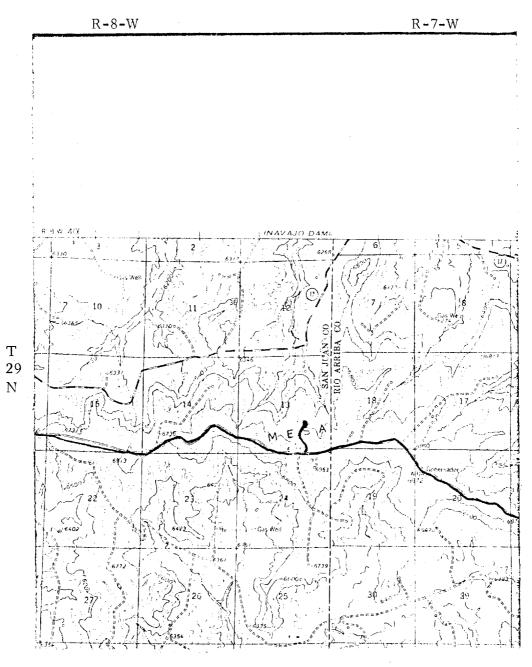


Series 900 Double Gate BOP, rated at 3000 psi Working Pressure When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line



The Paso Maderal Cas Company

EL PASO NATURAL GAS COMPANY Vandewart A #4A SE 13-29-8

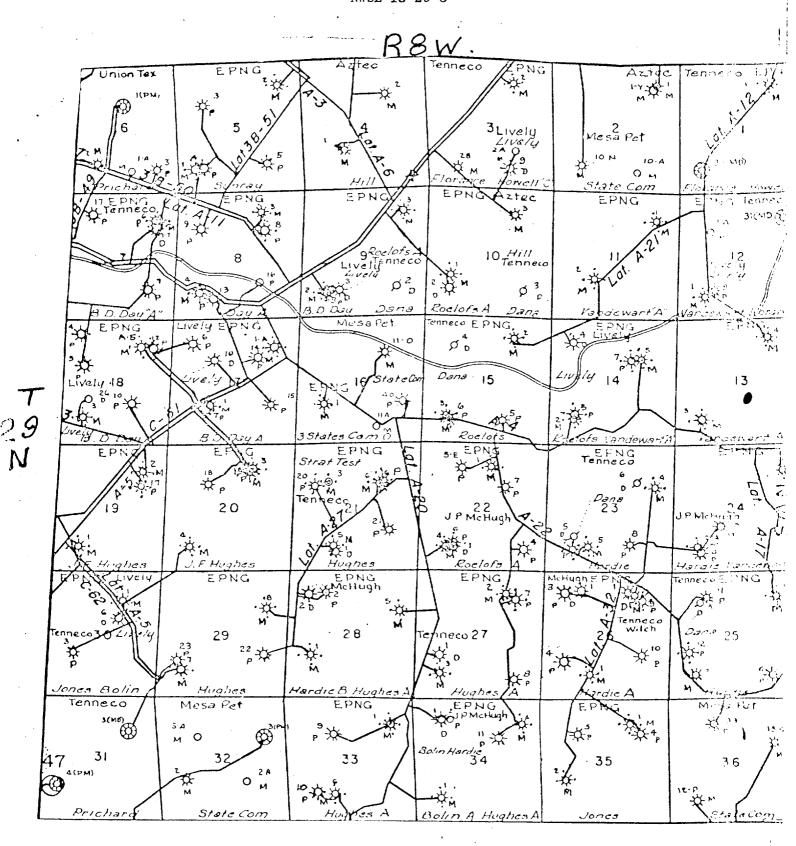


MAP #1

LEGEND OF RIGHT-OF-WAYS

	ROADS	EXISTING
IMES +++	PIPEL	EXISTING
e pipelind-++	ROAD ?	EXISTING
	ROADS	PROFOGED
		PROPOSED
& PLIEDING +++++	ROAD -	FROPOSED

EL PASO NATURAL GAS COMPANY • Vandewart A-#4 A NWSE 13-29-8



MAP #2 Proposed Location

er ven

No.

UNITED STATES

UNITED STATES DEPARTMENT OF THE INTERIOR	5. LEASE
	SF 078502
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
Do not use this form for proposals to drill or to deepen or plug back to a different eservoir. Use Form 9–331–C for such proposals.)	8. FARM OR LEASE NAME
1. oil gas well other	Vandewart A
	4A 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
2. NAME OF OPERATOR	10. FIELD OR WILDCAT NAME
FL PASO NATURAL GAS CO. 3. ADDRESS OF OPERATOR	Blanco MV
	11. SEC., T., R., M., OR BLK. AND SURVEY OR
BOX 289, FARMINGTON, NEW MEXICO 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA Sec. 13, T-29-N, R-8-W
helow)	NMPM
AT SURFACE: 1780'S, 1590'E	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	San Juan New Mexico
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
	6829 GL
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF ☐ ☐ ☐ ☐ ☐ ☐	그는 그는 그를 하고 있는 승리 유민주의
SHOOT OR ACIDIZE	- 기계
REPAIR WELL	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING 🔲	change on Form 9-330.)
MULTIPLE COMPLETE	그 그 그 이 지수 있는 그를 그렇게 하는 것은
CHANGE ZONES U	三十二十二十二 医乳腺管 化氯化甲基氯化二氯化
ABANDON*	
(Other)	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state	e all pertinent details, and give pertinent dates,
including estimated date of starting any proposed work. If well is d measured and true vertical depths for all markers and zones pertinen	irectionally drilled, give subsurface locations and
measured and true vertical depths for an markers and zones pertinon	
	선생활용했다. 홍수 최표했던
11/25/78: Spudded well. Drilled surface hole	
Ran 5 joints 9 5/8", 32.3# H-40 sur	
Cemented with 224 cu. ft. cement.	Circulated to surface. WOC
12 hours; held 600#/30 minutes.	Commence of the second
	/
	i vacation of the
	NEC AMPRELIES SEES

Subsurface Safety Valve: Manu. and Type ____ 18. I hereby certify that the foregoing is true and correct TITLE Drilling Clerk

(This space for Federal or State office use)

_ TITLE .