1a. TYPE OF WORK

b. TYPE OF WELL

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

At proposed prod. zone

6396'GL

OIL WELL

DRILL X

WELL X

El Paso Natural Gas Company

### SUBMIT IN TRIPLICATE\*

Form approved. Budget Bureau No. 42-R1425.

(Other instructions on reverse side)

- 045-22

DEPARTMENT OF THE INTERIOR	reverse side)
GEOLOGICAL SURVEY	
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR F	LUG BAC

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)
At surface 1750'N, 1500'W

OTHER

PO Box 990, Farmington, NM 87401

DEEPEN []

O. DEADE DESIGNATION AND BERIAL MY.
SF 078414A
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
Day
9. WELL NO.
1A
10. FIELD AND POOL, OR WILDCAT
Blanco Mesa Verde
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 17, T-29-N, R-8-W
NMPM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOW	12. COUNTY OR PARISH 13. STATE	
		San Juan NM
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL 320.00
18. DISTANCE FROM PROPOSED LOCATION* TO NEARESY WELL, DRILLING, COMPLETED, OB APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH 5690'	20. Rotary or cable tools Rotary
21 FIRVATIONS (Show whether DF, RT, GR, etc.)		22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENT				AM
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3375'	321 cu.ft.to cover Ojo Alamo
6 1/4"	4 1/2"line	r 10.5#	3225-5690'	429 cu.ft.to fill to 3225'

Selectively perforate and sandwater fracture the Mesa Verde formation.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention

This gas is dedicated.

Okal

The W/2 of Section 17 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposal. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical drill or deepen directionally. Give blowout

APPROVED BY	TITLE		RECEIVED	
PERMIT NO.		APPROVAL DATE		
(This space for Federal or State office use)				
BIGNED D. Ducco	_ TITLE _	Drilling_Clerk	DATE August 3.1, 1	L977
eventer program, if any.		·		

\*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVE

SEP 2 1977

## NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

1760

All distances must be from the outer boundaries of the Section. Lease DAY Operator (SF 078414-A) EL PASO NATURAL GAS COMPANY lA Township Unit Letter Section Range County 29-N 8-W SAN JUAN Actual Footage Location of Well: 1750 NORTH 1500 WEST feet from the feet from the line Ground Level Elev. Producing Formation Dedicated Acreage; Pool 6396 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? 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 Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the original Signed of belief. D. G. Brisco Drilling Clerk Position El Paso Natural Gas Co 1500' August 31, 1977 SECTEON 17 SF 078414-A I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or der my supervision, and that the some is true and correct to the best of my knowledge and belief. Date Surveyed JULY 19, 1977 Registered Professional Enginee

2000



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

#### Multi-Point Surface Use Plan Day #1A

- 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 in Manzaneras Mesa Water Well.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- 7. 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. When 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 gray (Federal Standard #595 36357).
- 11. Other Information The terrain is rolling hills and sand stone ledges covered with pinon and cedar trees.

  Cattle graze the proposed project site.

- 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.

August 31, 1977

D.R. Read

Division Drilling Engineer

DRR:pb

## Operations Plan Day #1A

I. Location: 1750'N, 1500'W, Section 17, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 6396'GR

#### II. Geology:

A.	Formation	Tops:	Surface	San Jose	Lewis	3175'
			Ojo Alamo	1950'	Mesa Verde	4635'
			Kirtland	2100'	Menefee	4785'
			Fruitland	2715'	Point Lookout	5241'
			Pic.Cliffs	3025'	Total Depth	5690 <b>'</b>

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4625', 4775', 5230' 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 3375'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
		13 3/4"	Depth 200'	9 5/8"	32.3 # H-40
		8 3/4"	3375'	7"	20.0# K-55
		6 1/4"	3225-5690'	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: 5690' 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.

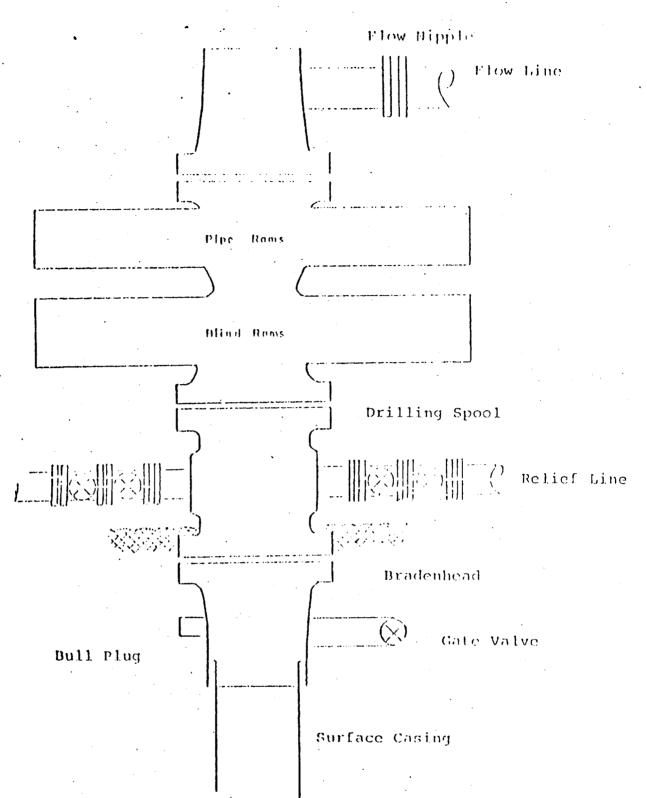
7" intermediate casing - use 77 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (321 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 238 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (429 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

DRR:pb

Fill 8 ft 8 X . B. Fuel Track 22 130' Drow Works Mud Tank Sweey ! sile eft Trus for 300 From wellhoard to Bloom cut 10 st

Typical Location Plat for Mosa Verde and Datata We



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

# EL PASO NATURAL GAS COMPANY Day "tA SENW 17-29-8

R-9-W

R-8-W

T UNITED STATES

THENT OF THE INTERIOR

GEOLOGICAL SURVEY

Storme L. 1911

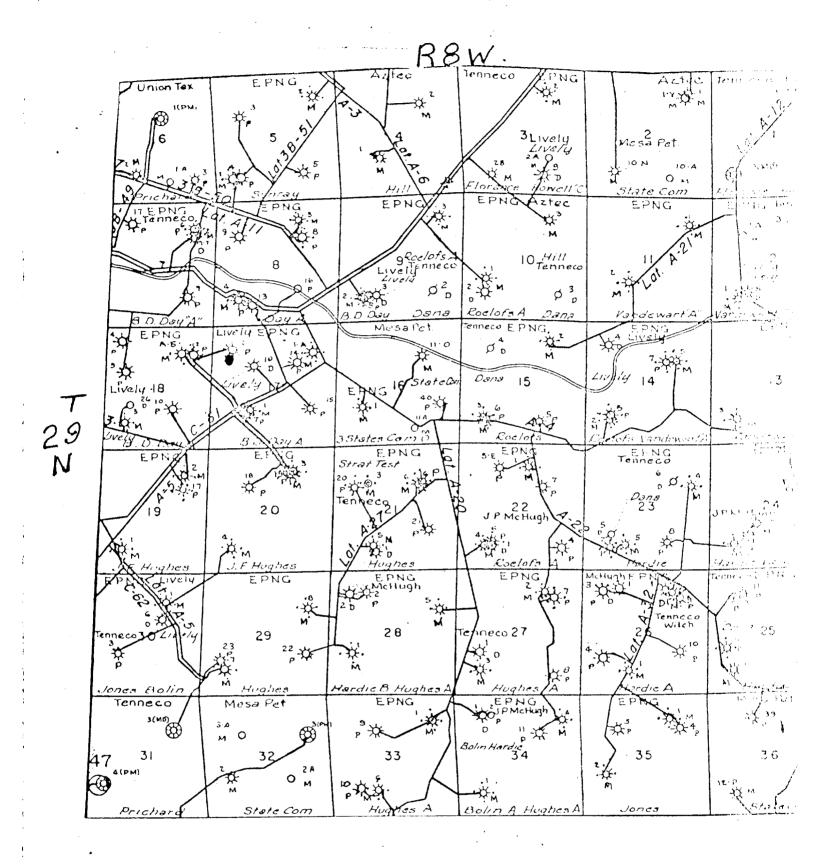
MAANAR ES

MANAR ES

#### MAP #1

LECTED OF DECEM-CY-MAYS

EXISTIMO	ROADS	
EXIGITAL	PERMIT	-++
MKIGTEG	RODD & ITIEL	[[4]]-t +-
PROFOGED	RCADS	<del></del>
PROPOSED	PITELLYES	+++
TROPOSES	EROPE TOTAL	1.700 <del>- 1- 1- 1-</del>



MAP #2

Proposed Location