#### SUBMIT IN TRIPLICATE.

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

### UNITED STATES DEPARTMENT OF THE INTERIOR

30	0-045	- 2	2434
5. LI	EASE DESIGNAT	TION AND	SERIAL NO.

GEOLOGICAL SURVEY				SF 080597			
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK  6. IF INDIAN, ALLOTTEE OR TRIBE NAME					OR TRIBE NAME		
1a. TYPE OF WORK  DRI  b. TYPE OF WELL	LL K	DEEPEN 🗆	PLU	IG BACI	<b>k</b> 🗆	7. UNIT AGREEMENT NA	ME .
·	ELL K OTHER		SINGLE X	MULTIPLE ZONE	<u> </u>	S. FARM OR LEASE NAM	r.
2. NAME OF OPERATOR						Gartner	·
El Paso Na 3. ADDRESS OF OPERATOR	tural Gas Co	mpany				9. WELL NO.	
PO Box 990, Farmington, NM 87401  1A  10. FIELD AND POOL, OR WILDCAT						WILDCAT	
4. LOCATION OF WELL (Re At surface	eport location clearly and	in accordance with a	ny State requiremen	its.*)		Blanco Mes	a Verde
	1170'N, 18	40'W				11. SEC., T., R., M., OR BY AND SURVEY OR ARI	A .
At proposed prod. zon	e				.	Sec.28,T-3	0-N,R-8-W
14. DISTABLE IN MILES A	AND DIRECTION FROM NEAR	EST TOWN OR POST OF	Fice*			12. COUNTY OR PARISH	13. STATE
							NM
15. DISTANCE FROM PROPU LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig	INE, FT.	16	. No. OF ACRES IN	LEASE		F ACRES ASSIGNED HIS WELL	320.00
18. DISTANCE FROM PROPO TO NEAREST WELL, DI	OSED LOCATION* RILLING, COMPLETED,	19	. PROPOSED DEPTH	,		RY OR CABLE TOOLS	
OR APPLIED FOR, ON THI		<u> </u>	5530		Rotar	Y   22. APPROX. DATE WOR	K WILL START
6191'GL	,						·
23.	P	ROPOSED CASING .	AND CEMENTING	PROGRAM	M	t - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DI	PTH .		QUANTITY OF CEMEN	*
13 3/4"	9 5/8"	32.3#	200		224 cu.ft. to circulate		
8 3/4" 6 1/4"	4 1/2"	20.0# 10.5#	3290 3140-55		344 cu.ft. to cover Ojo Al 416 cu.ft. to fill to 3140		
	y perforate WP and 6000						
A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.							
This gas is dedicated. $ \sqrt{\text{MAR 29 1977}} $							
The W/2 of Section 28 is dedicated to this Well.							
			10	DIS	T. 3	EAD!	
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive sone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.							
SIGNED .	4. Luces	TITLE	Dril	ling (	Clerk	DATE March	<del>29, 197</del> 7
(This space for Federal or State office use)							
PERMIT NO APPROVAL DATE							
APPROVED BY	AL, IF ANY :	TITLE			<u> </u>	DATE	

\*See Instructions On Reverse Side

All distances must be from the outer boundaries of the Section. Operator Well No. Fl Paso Matural Gas Company (SF-080597) Gartner lA Unit Letter Section Township Range County 1:18 30N San Juan Actual Footage Location of Well: line and 1840 feet from the North West feet from the line Ground Level Elev. Producing Formation Dedicated Acreage: 6191 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 \_ ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of 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. 18401 Drilling Clerk Compony El Paso Natural Gas March 29, 1977 28 I hereby certify that the well location own on this plat was plotted from field SF-080597 notes of actual surveys made by me or is true and correct to the best of my knowledge and belief. Date Surveyed 28 7 777 Certificate No.

660

1320 1650

1980 2310

2000

1 500

1000

500

3950



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401 PHONE: 505-325-2841

#### Multi-Point Surface Use Plan Gartner #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.
- 2. 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 thirty feet (30') 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 well located Section 9, T-29-N, R-8-W (Manzaneras 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. 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 rocky ledges and high bluffs covered with cedar and pinon trees. Deer and coyote are on 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.

March 29, 1977

D. R. Read

Division Drilling Engineer

#### Operations Plan Gartner #1A

I. Location: 1170'N, 1840'W, Section 28, T-30-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde <u>Elevation</u>: 6201'DF

#### II. Geology:

A. Formation Tops:	Surface	San Jose	Lewis	3090'
_	Ojo Alamo	1760'	Mesa Verde	4565'
	Kirtland	1935'	Menefee	4710'
	Fruitland	2575 <b>'</b>	Point Lookout	5130'
	Pic.Cliffs	2940'	Total Depth	5530 <b>'</b>

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4555', 4700', 5120' 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 3290'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

A.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
		13 3/4"	Depth 200'	9 5/8"	32.3# H-40
		8 3/4"	3290'	7"	20.0# K-55
		6 1/4"	3140-5530'	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 T.I.W. liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 5530' 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.

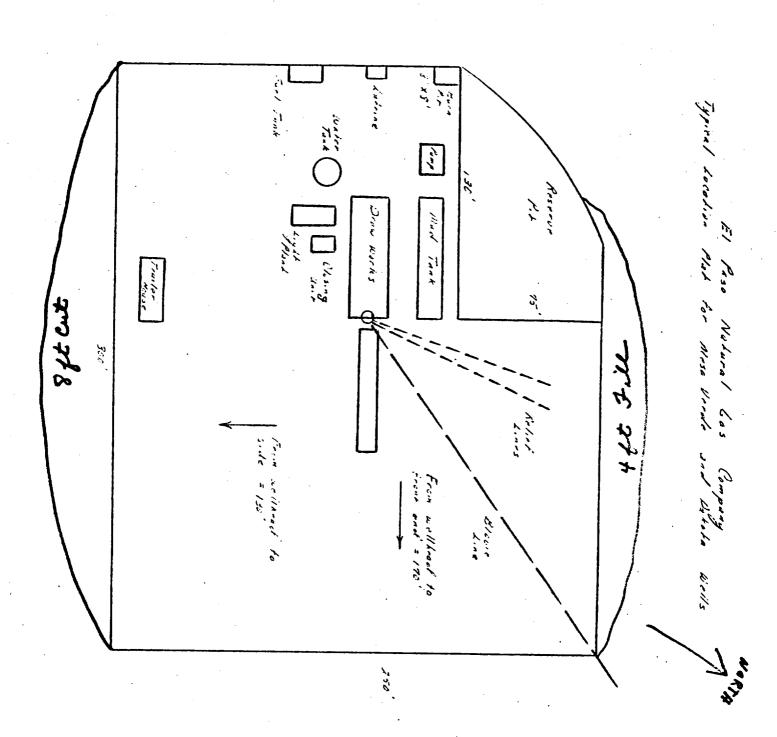
#### V. Cementing:

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.

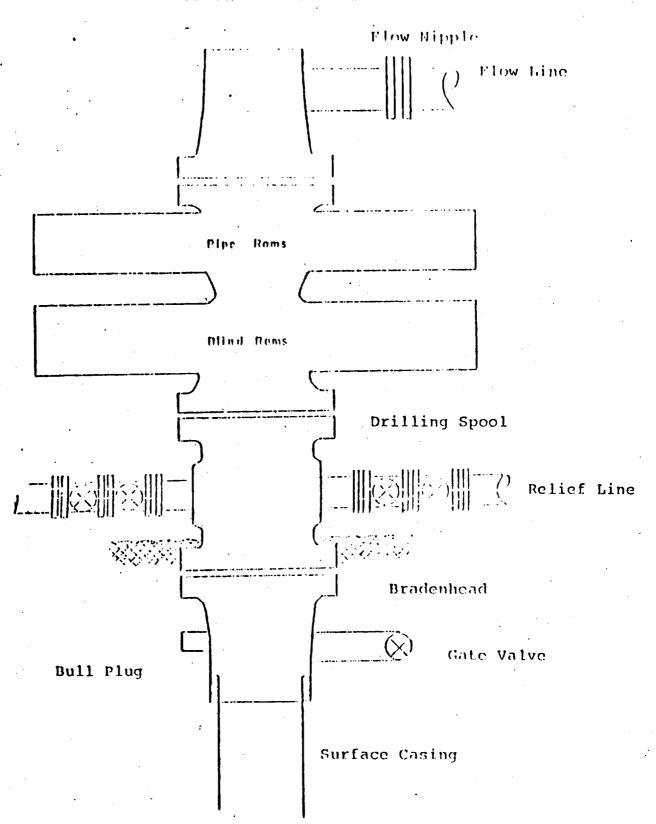
7" intermediate casing - use 86 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (344 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 23l sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (416 cu.ft. of slurry, 70% excess to circulate liner).

DRR:pb

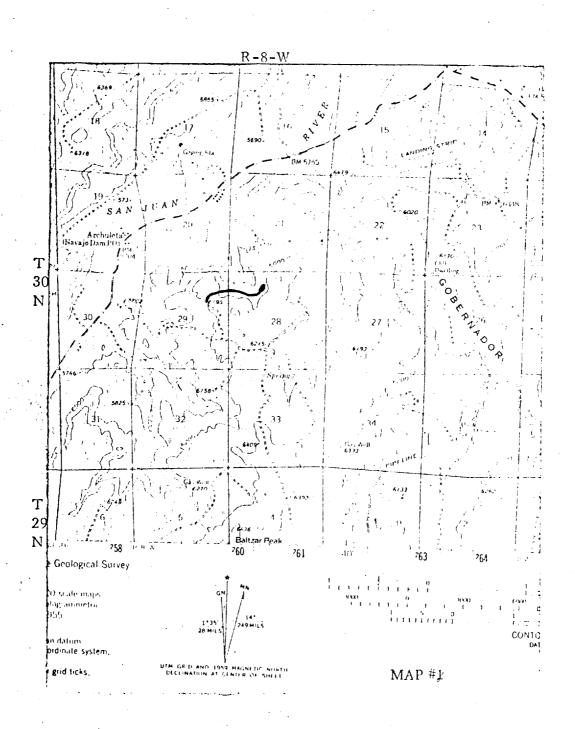


### Typical H.O.E. installation for Mesa Verde Well



Scries 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

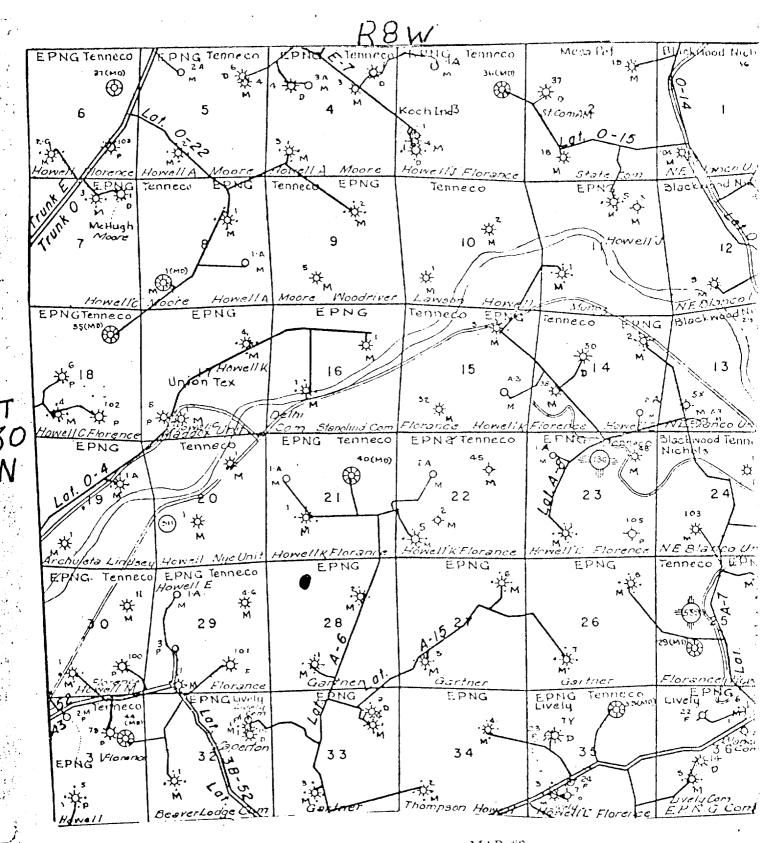
# EL PASO NATURAL GAS COMPANY GARTNER #1A NW 28-30-8



#### LEGEND OF RIGHT-OF-WAYS

EXISTING	ROADS	
EXISTING	PIPELIUMS	-+- +
EXISTING	ROAD ~ PIFELI	NE -++ +-
PROPOSED	ROADS	
FROFOGED	PIPELIPES	+++
PROPOSED	ROAD & PITELT	NE 1-1-

## EL PASO NATURAL GAS COMPANY : GARTNER #1A NW 28-30-8



MAP #2 Proposed Location