#### SUBMIT IN TRIPLICATE\* (Other instructions on reverse side)

Form approved, Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

**GEOLOGICAL SURVEY** 

5. JANA	-045-22525 SE DESIGNATION AND SEBIAL NO.
NM	03562

							1			
APPLICATION	Y FOR PERMIT	TO DRILL, I	DEEPE	N, OR P	LUG E	BACK	6. of Indian,	ALLOTTEE	OR TRIBE NAM	K
IA. TYPE OF WORK  DRI  b. TYPE OF WELL	ILL 🕙	DEEPEN [		PLI	UG BA	ск 🗌	7. UNIT AGRE	EMENT N	ME	
OIL G. WELL W.  2. NAME OF OPERATOR	ELL X OTHER		811 20	NE X	MULTIP ZONE	LE _	Grambl			~
El Paso Na	atural Gas C	Company	Service Co.		N. A.		9. WELL NO.	rng c	<u> </u>	
BO DOY OG	) Parminata	- NM 07/	100	<u> </u>	7		4A		<u> </u>	
4. LOCATION OF WELL (R	), Farmingto				- 1		10. FIELD AND	-		/
At surface		95'W	in any si	ate requireme	m(s)		11. SEC., T., R	. M. OR B	Verde	_
At proposed prod. zon	e	- Tour					Sec.12	<b>,</b> T−30	)-N,R-1	0-W
4. DISTANCE IN MILES	AND DIRECTION FROM N	EAREST TOWN OR POS	T OFFICE	•	, e e e e e e e e e e e e e e e e e e e		12. COUNTY OF	PARISH	13. STATE	
			•	Same of the same o			San Ju	an	NM	
15. DISTANCE FROM PROPORTION TO NEAREST PROPERTY OR LEASE I (Also to nearest drip	r Ine. ft.		16. No.	OF ACRES IN	LEASE		F ACRES ASSIGNATION WELL	W /	294.98	
18. DISTANCE FROM PROPOSED LOCATION® TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.				19. PROPOSED DEPTH 20. ROTA 5910' Rotar			EY OR CABLE TO	OLS /	<del></del>	
21. ELEVATIONS (Show who	ether DF, RT, GR, etc.)					·	22. APPROX.	DATE WOI	EK WILL STAR	r.
23.		PROPOSED CASIN	NG AND	CEMENTING	PROGRA	AM	<u> </u>			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	оот	SETTING D	EPTH		QUANTITY	OF CEMEN	T	_
13 3/4"	9 5/8"	32.3#		200	) 1	224 c	u.ft. t	o cir	culate	_
8 3/4"	7"	20.0#		3635	5 '		u.ft.to			 Alamo
6 1/4"	4 1/2"lin	er 10.5#		3485-59	10'		u.ft.to			
Selectivel	y perforate	and sandw	ater	fractu	ire th	ne Mes	a Verde	form	ation.	

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.

AFR 1 9 1977

The W/2 of Section 12 is dedicated to this well.

11.5 IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to dril, or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any,

Drilling Clerk DATE April 19, 1977 (This space for Federal or State office use) PERMIT NO APPROVED BY . .. CONDITIONS OF APPROVAL, FIANY!

\*See Instructions On Reverse Side

NWU 3 267

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

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

All distances must be from the outer boundaries of the Section Well No. Operator EL PASO NATURAL GAS COMPANY GRAMELING C (NMO3562) Unit Lette: Section Township Range 30-N 10-W SAN JUAN Actual Footage Location of Well: NORTH feet from the Froguezing Permution MESA VERDE Ground Level Elev. Dedicated Activages 6544 BLANCO MESA VERDE 294.98 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 in interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been dated 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-THIS PLAT IS REISSUED TO REFLECT A MOVED LOCATION. CERTIFICATION I hereby certify that the information conreined herein is true and complete to the best of my knowledge and belief. 9951 D. C. Or 170 Name Posttion . . Company NM-03562 SECTIO I hereby certify that the well location shown to this plat was placed from field notes of actual surveys mode by me or under my supervision, and that the same is true and correct to the best of my SF-078200-A knowledge and belief. Date Sarveyed APRIL 7, 1977 Register i Professional Unitalier anazer Lac (Surveyor 1:760



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

#### Multi-Point Surface Use Plan Grambling C #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.
- 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 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 Hart Canyon 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. 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 green (Federal Standard #595 34127)
- 11. Other Information The terrain is sandstone ledges covered with cedar trees. Deer are occasionally seen 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.

April 19, 1977

D. R. Read

Division Drilling Engineer

DRR:pb

## Operations Plan Grambling C #4A

I. Location: 935'N, 995'W, Section 12, T-30-N, R-10-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 6554'DF

#### II. Geology:

A.	Formation Tops:	Surface	San Jose	Lewis	3435'
		Ojo Alamo	2050'	Mesa Verde	4895'
		Kirtland	2085'	Menefee	<b>5095'</b>
		Fruitland	2890'	Point Lookout	5475'
		Pic.Cliffs	3275'	Total Depth	5910'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4885', 5085', 5465' 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 3635'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

A.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
		13 3/4"	200'	9 5/8"	$\overline{32.3} \# H-40$
		8 3/4"	3635'	7"	<b>20.0</b> # K-55
		6 1/4"	3485'-5910'	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: 5910' 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"  $900 \times 9 \frac{5}{8}$ " casing head. 10"  $900 \times 6$ "  $900 \times 10^{-1}$  xmas tree.

### V. Cementing:

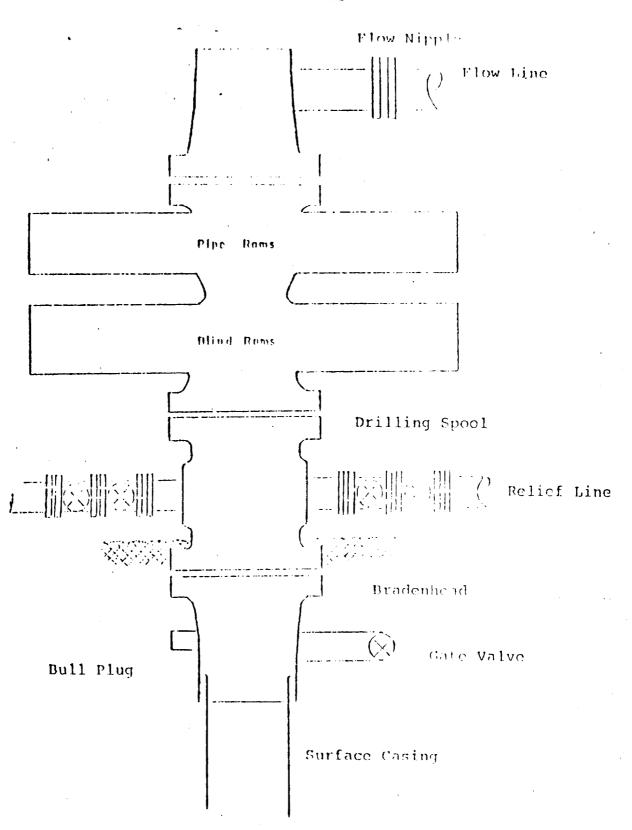
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 91 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 (357 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.

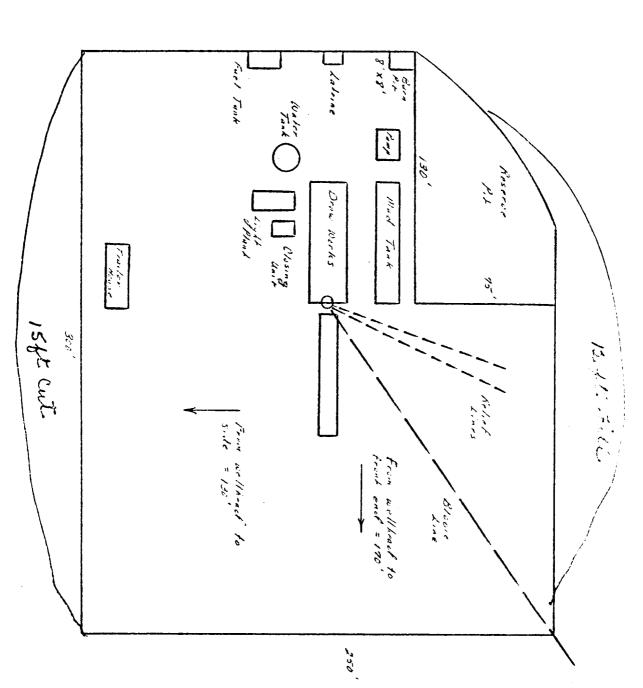
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 234 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (422 cu.ft. of slurry, 70% excess to circulate liner).

DRR:pb

# Typical B.O.P Installation for Mesa Verde Well

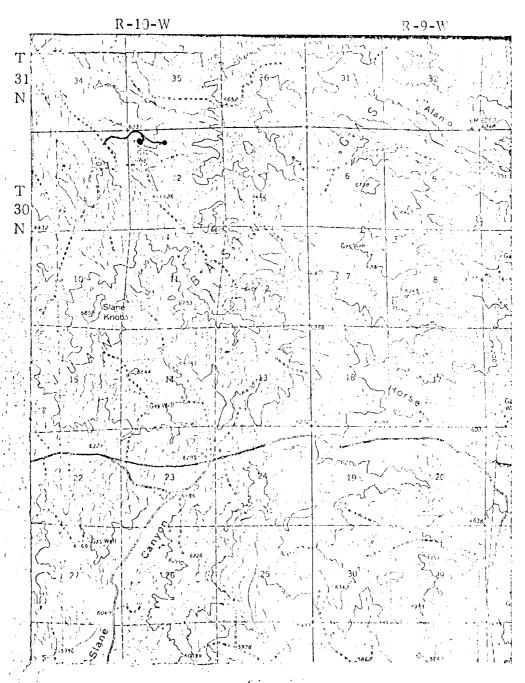


Series 900 Double Gate BOP, rated at 3000 psi Working Pressure When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line



If Paso Natural Las Company
Typical Location Plat for Missa Verde and Lakata Wells

## EL PASO NATURAL GAS COMPANY GRAMBLING C #4A NW 12-30-10

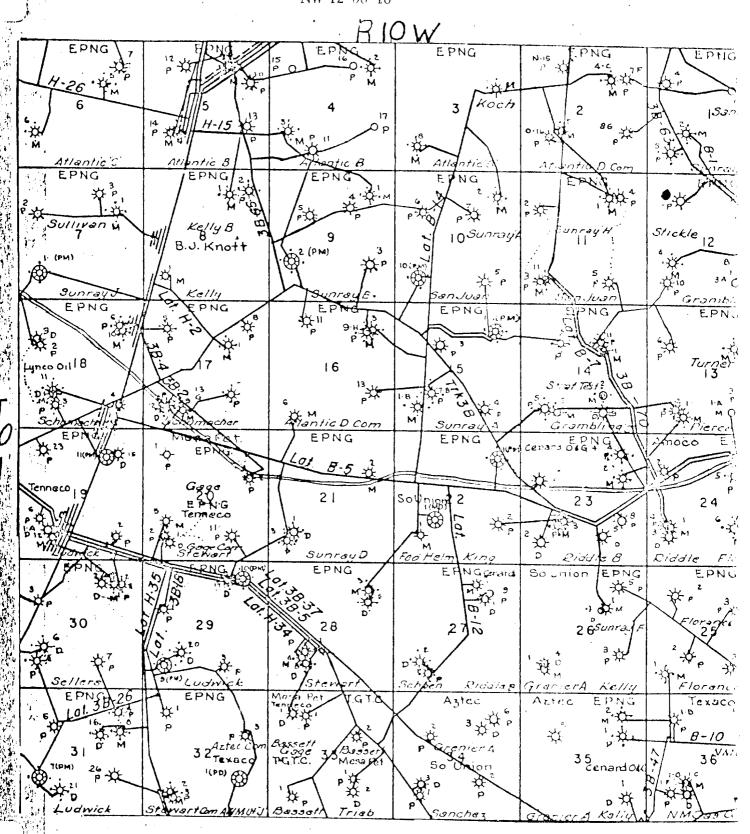


MAP #1

LEGEND OF RIGHT-OF-WAYS

E13 ++	-++- <del>-</del> +-
PIFELING-+t-	B-++
1773 + + +	+++
C PIDELLINE -++	E -++

### EL PASO NATUE ! GAS COMPANY, GRAMBLING C #4A NW 12-30-10



MAP #2 Proposed Location