SUBMIT IN TEIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

30 - 039-31730

5. LEASE DESIGNATION AND SERIAL NO.

UNITED	STATES	,
DEPARTMENT OF	THE II	NTERIOR

GEOLOGICAL SURVEY			SF 079192			
APPLICATION	FOR PERMIT	TO DRILL, DEEP	EN, OR PLUG B	ACK	6. IF INDIAN, ALLOTT	EE OR TRIBE NAME
a. TYPE OF WORK DRIL	L Æ	DEEPEN [PLUG BAC	ск 🗆	7. UNIT AGREEMENT San Juan 2 8. FARM OR LEASE N	28-6 Unit
WELL WELL NAME OF OPERATOR	L K OTHER		ONE X ZONE		4	
	ral Cac Com	nanu			San Juan 2	28-6 Unit
El Paso Natu	ital Gas Con	грапу			14A	
PO Box 990, Farmington, NM 87401				10. FIELD AND POOL,	OR WILDCAT	
LOCATION OF WELL (Repo			State requirements.*)		Blanco Mes	sa Verde
GA Surface	-1450'N , 14	170 W			11. SEC., T., R., M., O	R BLK.
At proposed prod. zone	1680/N; 10	200/W	1W S			28-N,R-6-W
4. DISTANCE IN MILES AND	D DIRECTION FROM NEA	REST TOWN OR POST OFFIC	CE.		12. COUNTY OR PARIS	H 13. STATE
14 miles SE		NM		}	Rio Arriba	a NM
.5. DISTANCE FROM PROPOSE LOCATION TO NEAREST PROPERTY OR LEASE LIN (Also to nearest drig. 1	E, FT.	1450 16. N	o. of acres in lease Unit		OF ACRES ASSIGNED HIS WELL	320.00 -
8. DISTANCE FROM PROPOS TO NEAREST WELL, DRIL OR APPLIED FOR, ON THIS	ED LOCATION* LING, COMPLETED,	600' 19. P	6245 '	20. ROTAL	RY OR CABLE TOOLS	
1. ELEVATIONS (Show wheth 6774 GL	er DF, RT, GR, etc.)				22. APPROX. DATE V	VORK WILL START*
3.]	PROPOSED CASING AN	D CEMENTING PROGRA	M	1	
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#	3940'		cu.ft.to co	
6 1/4"	4 1/2"line	r 10.5#	3790-6245'	428	cu.ft.to fi	ill to 3940
A 3000 psi W	P and 6000 pe rams wil	psi test dou	fracture the	'enter	equipped v	vith

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

CONDITIONS OF APPROVAL, IF ANY:

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

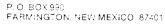
April 10,1978 Drilling Clerk (This space for Federal or State office use) PERMIT NO. APPROVED BY _ TITLE

*See Instructions On Reverse Side

IL & GEOLOGICAL SURVEY DURANGO, COLO.

APR 12 1978

All distances must be from the outer boundaries of the Section. Operator Well No. Fl Paso Natural Gas Company San Juan 28-6 Unit 111A Unit Letter 23N 17 6W Rio Arriba Actual Footage Location of Well: 1680 feet from the North 1000 line and feet from the West line Ground Level Elev. Producing Formation Pool Dedicated Acreage: 6741 Mesa Verde Blanco Mesa Verde 320.00 Acres 1. Outline the acreage dedicated to the subject well by colored pencil or hach ire 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? X Yes If answer is "yes," type of consolidation Unitization 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-MEN PLAT TO SHOW NEW LOCATION OF WELL CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Name Drilling Clerk 10001 Position El Paso Natural Gas Co. April 10, 1978 Sac SF-079192 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed, 1320 1650 1980 2310



Paso NATURAL GAS COMPANY PHONE: 505-325-2841

Multi-Point Surface Use Plan San Juan 28-6 Unit #14A

- 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
- Location of Tank Batteries, Production Facilities, and Production 4. 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.
- Location and Type of Water Supply Water for the proposed project 5. will be obtained from a water hole located at San Juan 28-6 Water Well.
- Source of Construction Materials No additional materials will 6. 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 #1 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 with railed pinon and cedar growing. Cattle 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.

April 6, 1978

D. C. Walker

Project Drilling Engineer

DCW:pb

Operations Plan San Juan 28-6 Unit #14A

I. <u>Location:</u> 1450'N, 1470'W, Section 17, T-28-N, R-6-W, Rio Arriba County, N!

Field: Blanco Mesa Verde <u>Elevation</u>: 6774'GL

II. Geology:

Α.	Formation	Tops:	Surface	San Jose	Lewis	3740'
			Ojo Alamo	2805 '	Mesa Verde	5340'
			Kirtland	2925 '	Menefee	5455 '
			Fruitland	3300 '	Point Lookout	5795 '
			Pic.Cliffs	3605 '	Total Depth	6245'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5330', 5445', 5785' 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 3940'. 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"	3940 '	7"	20.0# K-55
		6 1/4"	3790-6245'	4 1/2"	10.5# K-55

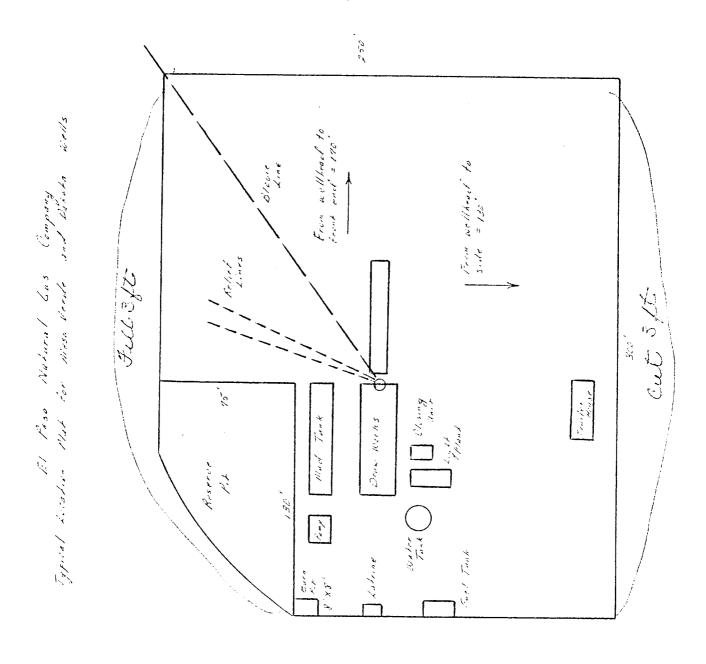
B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

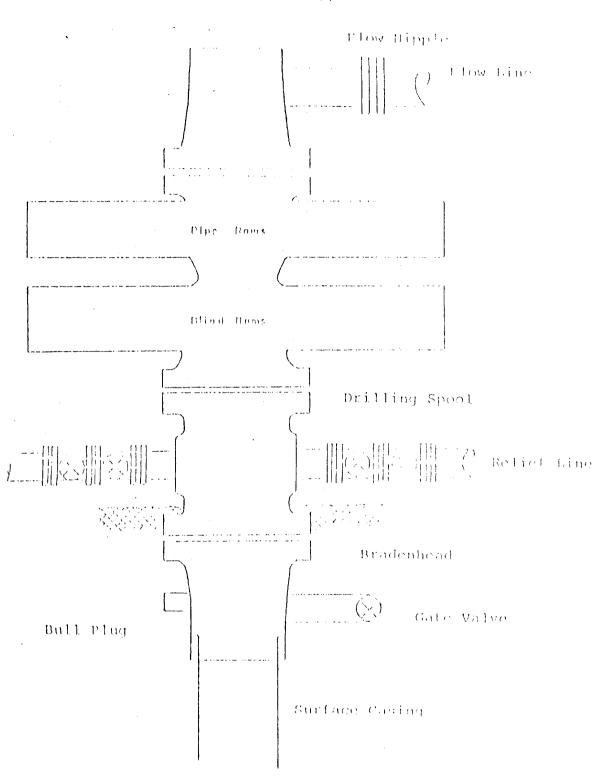
7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 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: 6245' 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.

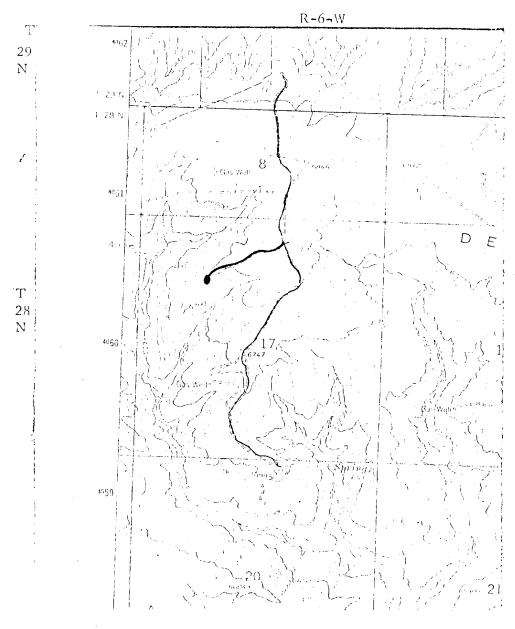
V. Cementing:

- 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 68 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 (233 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 308 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (428 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.





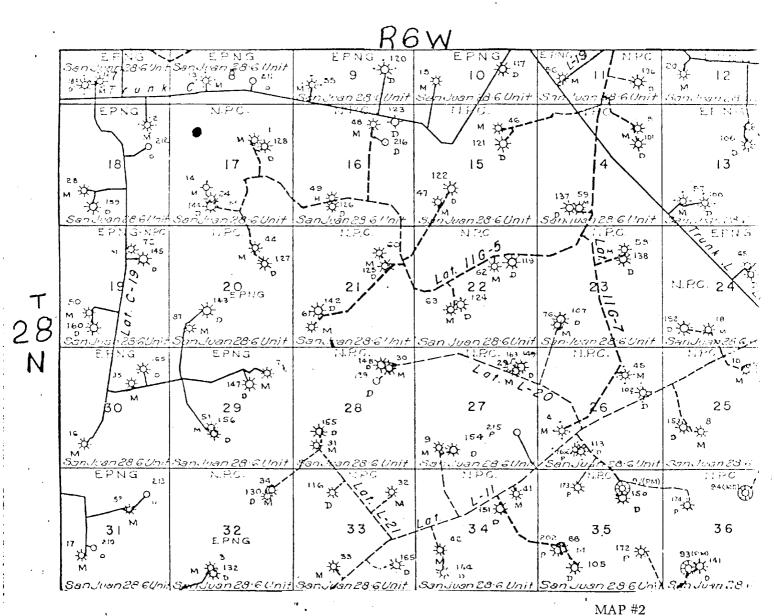
Series 300 Double Gate BOP, rated at 3000 psi Working Pressure When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line



MAP #1

LEGEND OF RIGHT-OF-WAYS

EXISTING	ROADS	
EXISTING	PIPELINES	-++ -
EXISTING	ROAD A PITELIN	D-1-4
PROPOSED	ROADS .	
PROPOSED	FIRELIUMG	+++
PROPOSED	ROAD A PITELIN	E



Proposed Location