1a. TYPE OF WORK

b. TYPE OF WELL

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

At proposed prod. zone

WELL

OIL

SUBMIT IN TRIPLICATE\*

(Othe

Form approved

			mpp.o.cu		
r instructions on		Budget	Bureau	No.	42-R1425.
reverse side)	50	TX	50	#-5	1700

UNITE	ED $S$	STATI	ES
DEPARTMENT	OF	THE	INTERIOR

**GEOLOGICAL SURVEY** 

DEEPEN

1470'

500'

APPLICATION FOR PERMIT TO DRILL, DEEPEN,

OTHER

PO Box 990, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

2020'S, 1470'W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

₹		30-639-21171
1		5. LEASE DESIGNATION AND SERIAL NO.
		SF 078503
OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
<u> </u>		
PLUG BAC	K 🗆	7. UNIT AGREEMENT NAME
		San Juan 29-7 Unit
Z ZONE		8. FARM OR LEASE NAME
		San Juan 29-7 Unit
		9. WELL NO.
		114
		10. FIELD AND POOL, OR WILDCAT
equirements.*)		Basin Dakota /
,	/	11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA
		Sec. 33, $T-29-N$ , $R-7-W$
		NMDM 12. COUNTY OR PARISH   13. STATE
		Rio Arriba  NM
ACRES IN LEASE		F ACRES ASSIGNED
Unit	~ ~ /	320.00
D DEPTH	20. вота	RY OR CABLE TOOLS
7816 <b>'</b>	Rota	ry

18. DISTANCE FROM PROPOSED LOCATION\*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6623'GR

(Also to nearest drig. unit line, if any)

DRILL 🗵

WELL X

El Paso Natural Gas Company

10 miles East of Blanco, NM

15. DISTANCE FROM PROPOSED\*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

22. APPROX. DATE WORK WILL START\*

23.

=

#### PROPOSED CASING AND CEMENTING PROGRAM

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#	3625	276 cu.ft.to cover Ojo Ala:
6 1/4"	4 1/2"	10.5#-11.6#	7816'	645 cu.ft.to fill to 3625'

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

Selectively perforate and sandwater fracture the Dakota

D١

well.

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

This gas is dedicated.

The W/2 of Section 33 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 proposed new productive zone. 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 24

eventer program, it any.			
BIGNED D. G. SHEZES	TITLE	Drilling Clerk	April 18,1978
(This space for Federal or State office use)			
PERMIT NO.		APPROVAL DATE	10 m
APPROVED BY	TITLE	:	7 A 6 1078

	<del></del>	An distances must b	e from the outer bounds:	ies of the Section.			
	Natural Gas Com	pany	Lease San Juan 2	9 <b>-7</b> Unit (	(SF-078503)	Well No.	
Unit Letter K	Section 33	Township 29N	Range . 7W	County Rio	Arriba		
Actual Foctage : 2020	Location of Well: feet from the So	nth v	a 11,70		**		
Ground Level El			P001	feet from the	West Dedi	line icated Acreage:	
6623	Dakota		Basi	n Dakota		320.00 Acres	
2. If more interest	<ol> <li>Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</li> <li>If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</li> </ol>						
dated by [X] Yes	y communitization, u	initization, force-poons . nswer is "yes;" type	of consolidation _	Unitizati	ion	Owners been consoli-	
No allov	vable will be assign	ed to the well until a or until a non-stand	all interests have b ard unit, eliminatin	een consolidat g such interest	ed (by communi s, has been app	itization, unitization, roved by the Commis-	
1470'	SF-078503	Sec 333			I hereby certify toined herein I best of my know  Name Drilling  Position El Paso  Company Apr  Date  I hereby certifor shown on this position under my super	Natural Gas Co.  il 18,1978  fy that the well location plot was plotted from field I surveys made by me or vision, and that the same priect to the best of my belief.	
0 330 660	90 1320 1650 198	n 2310 2640 20	00 1500 1000	500 0	Fred B. K		



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

#### Multi-Point Surface Use Plan San Juan 29-7 Unit #114

- 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 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.

- Methods of Handling Waste Materials All garbage and trash 7. 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)
- ll. Other Information The terrain is rolling hills covered with sagebrush. 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.

April 6, 1978

D. C. Walker

Project Drilling Engineer

DCW:pb

## Operations Plan San Juan 29-7 Unit #114

I. Location: 2020'S, 1470'W, Section 33, T-29-N, R-7-W, Rio Arriba County, NA

Field: Basin Dakota <u>Elevation:</u> 6623 GR

#### II. Geology:

Α.	Formation	Tops:	Surface	San Jose	Menefee	5180'
		*	Ojo Alamo	2400'	Point Lookout	5510 <b>'</b>
			Kirtland	2567 <b>'</b>	Gallup	6539 <b>'</b>
			Fruitland	3027'	Greenhorn	7488 <b>'</b>
			Pic.Cliffs	3336 <b>'</b>	Graneros	7543'
			Lewis	3425'	Dakota	7704'
			Mesa Verde	4988'	Total Depth	7816 <b>'</b>

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5510', 6530', 7543', 7704' 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 3625'. 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"	32.3# H-40
	8 3/4"	3625'	7"	20.0# K-55
	6 1/4"	6500'	4 1/2"	10.5# K-55
	6 1/4"	7816'	4 1/2"	11.6# K-55

- B. Float Equipment: 9 5/8" surface casing Pathfinder guide shoe (Part No. 2006-1-012).
  - 7" intermediate casing Pathfinder guide shoe (Part No. 1003-1-007) and Pathfinder self-fill insert float valve (Part No. 2010-6-007), 5 Pathfinder stabilizers (Part No. 107-10) every other joint above shoe. Run float two joints above shoe.
  - 4 1/2" production casing Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F)
- C. Tubing: 7816' of 1 1/2", 2.9#, J-55 lord 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: 3000 psi test tree. Wellhead representative to set all slips and cut off casing.

Operations Plan - San Juan 29-7 Unit #114

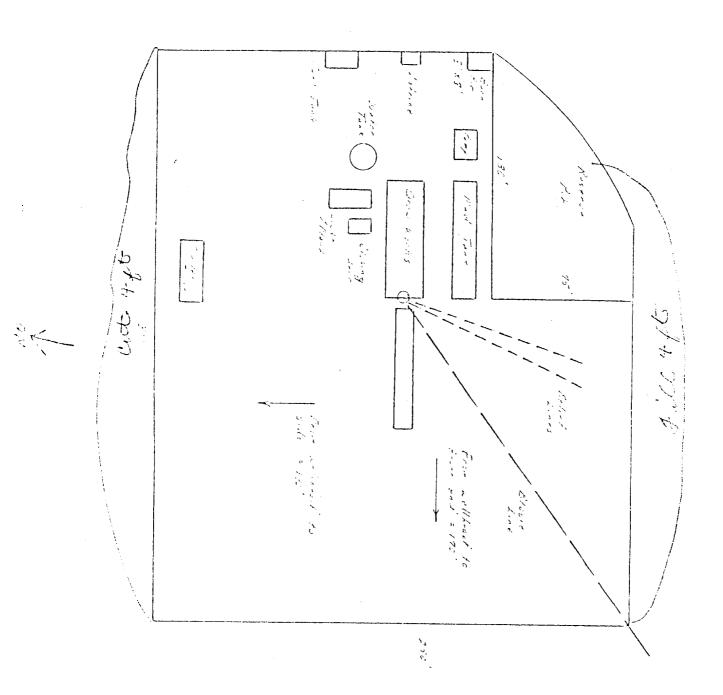
#### V. Cementing:

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.

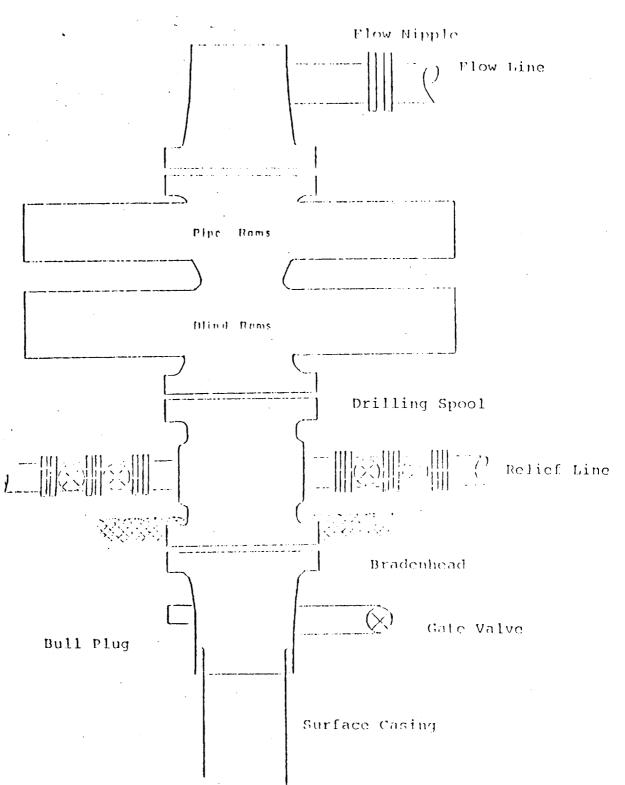
7" intermediate casing - use 98 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (276 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" production casing - precede cement with 40 bbls. of gel water (4 sks. gel) cement with 25l sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (645 cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.

# ILLEGIBLE

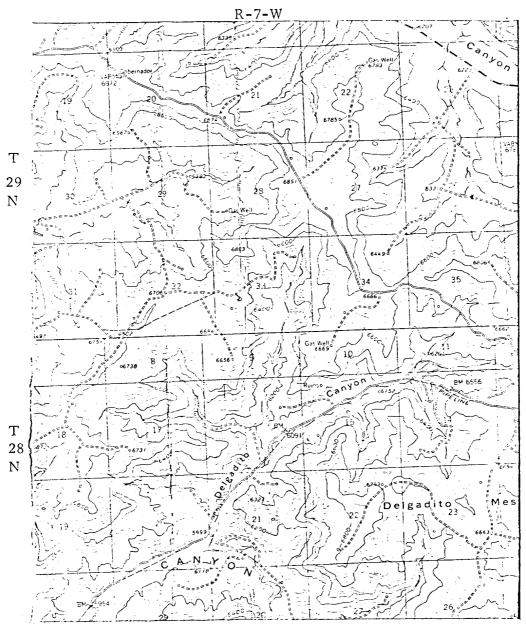


Typical deceding 1964 for Misa Goods and Winds to



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 San Juan 29-7 Unit #114 SW :33-29-7

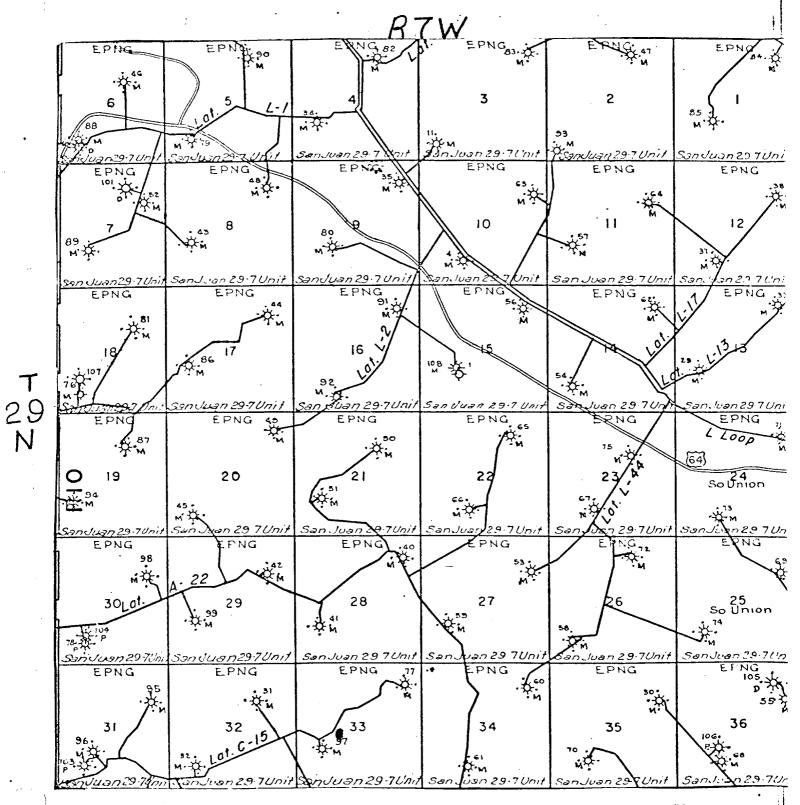


MAP #1

### LEGEND OF RIGHT-OF-WAYS

EXISTING	ROADS		_
EXISTING	PIPELINES	+++	
EXISTING	ROAD & PIPELIN	I-+	٠
PROPOSED	RCADS	<del></del>	-
FROPOSED	PIPELINES	+ +	+
PROPOSED	ROAD & PIPELIN	E -+-	+
	ROAD & PIPELIT		

EL PASO NATURAL GAS COMPANY San Juan 29-7 Unit #114 SW 33-29-7



MAP #2

Proposed Location •