#### SUBMIT IN TRIPLECATES

Form approved. Budget Bureau No. 42-R1425.

(Other instructions en reverse side)

30 - 039 - 2/980 5. Lease designation and serial no. SF 078423

### UNITED STATES DEPARTMENT OF THE INTERIOR

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	GEOLO	GICAL SURVEY			0.0120
APPLICATION	FOR PERMIT	O DRILL, DEE	PEN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	LL *	DEEPEN	PLUG BAC	ж 🗆	7. UNIT AGREEMENT NAME San Juan 29-7 Unit
WELL W	AS OTHER		SINGLE X MULTIPIZONE ZONE		8. FARM OR LEASE NAME San Juan 29-7 Unit
	ural Gas Com	pany			9. WELL NO.
3. ADDRESS OF OPERATOR DO BOX 289	Farmington,	NM 87401	•		10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (R	eport location clearly and	in accordance with an	y State requirements.*)		Blanco Mesa Verde /
At surface  At proposed prod. zon	1640'S, 11	20'E		**	11. SEC., T., R., M., OR BLK. SeAD SUPPEROR 2 SEAN, R-7-W NMPM
	same	THE MOWN OR BOST OF	er o m å		12. COUNTY OR PARISH   13. STATE
	and direction from NEA 1theast of Ab	e's Store			Rio Arriba NM
15. DISTANCE FROM PROPORTION TO NEARES' PROPERTY OR LEASE I (Also to nearest dri	T Line, ft.	1120'	No. of acres in lease Unit	17. NO. (	OF ACRES ASSIGNED HIS WELL 320.00
18. DISTANCE FROM PROF. TO NEAREST WELL, D	POSED LOCATION* ORILLING, COMPLETED,	1600'	PROPOSED DEPTH 6060	20. ROTA Rotar	RY OR CABLE TOOLS
or applied for, on the 21. elevations (Show wh 6668 GL					22. APPROX. DATE WORK WILL START*
23.	1	PROPOSED CASING A	AND CEMENTING PROGRA	M.M.	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF COMENT
13 3/4"	9 5/8"	32.3#	200		u.ft. to circulate
8 3/4"	7"	20.0# r 10.5#	3810' 3660-6060'	304 c	u.ft.to cover Ojo Alam u.ft.to fill to 3660'
A 3000 psi blind and	WP and 6000 pipe rams wil	psi test do l be used f	ouble gate previous out provided the provide	venter event	equipped with tion on this well.  SELVE  CONDIC 12 1978  1. GEOLOGICAL SURVEY ductive some and praposed new productive and true vertical depths. Give blowout
The E/2 of	Section 17	is dedicated	to this well	ir cou	3 a aral 2010 H. SHBVEV
IN ABOVE SPACE DESCRIB zone. If proposal is to preventer program, if an	E PROPOSED PROGRAM: If drill or deepen direction my.	proposal is to deepen ally, give pertinent da	or plug back, give data on ta on subsurface locations a	resent pro	II. S. GEOLOGICAL SURVEY ductive some and prapaged new productive and true vertical depths. Give blowout
8IGNED	G. Busc	TITLE	Drilling		
(This space for Fed	eral or State office use)				
PERMIT NO.			APPROVAL DATE		
A DDD AUPA DU		TITLE			DATE
CONDITIONS OF APPRO	OVAL, IF ANY:				

of Frak

<del></del>		All distances must be	- 11 Old tite C	dter comidaties of	the Section.		
Operator Lease Well No.							
El Paso Natural Gas Company				San Juan 29-7 Unit (SF-078423) 44A			
Unit Letter	Section	Township		nge	County		ļ
I	17	29N		7W	Rio Arriba		
Actual Footage Location of Well:							
1640	feet from the S	outh line on	d 11:	20 feet	from the East	line	
Ground Level Elev.	Producing For		Pool			Dedicated Acreage:	
6668	Mesa Ve	rde		Blanco Mes	a Verde	320.00 -	Acres
Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.      If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).							
dated by c  XYes  If answer	ommunitization, v No If an is "no," list the	mitization, force-poonswer is "yes;" type	oling.etc	? olidation	Unitization	of all owners been c	
No allowal		or until a non-stand	ard unit,	eliminating suc		mmunitization, uniti n approved by the C	
	1					CERTIFICATION	
	       			       #44   ©	tained l	y certify that the information is true and completing knowledge and belief.	te to the
	+	🕅		-	Drill:	ing Clerk	
	1			 	<b>N</b>	so Natural Ga ber 7, 1978	s Co.
	i	K)	SF-	078423	Npecemi	ber /, 19/8	_
	.				Date		
		Sec X	$-\frac{1}{2}$	3 1 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7.		
		17	The second secon	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	shown notes of under n	oy certify that the well on this plat was plotted for actual surveys made law supervision, and that is and correct to the besidge and belief.	rom field by me or the same
11	1				Date Surv	heren	No.
	DEC 12 1978	×		12	Octo	ber 23, 1977	1. 146 ( )
IJ. S	s. GEOLOGICAL SUR Truss 20, colo	VEY	***	16	and/or L.		
0 330 660	90 1320 1650 19	80 2310 2640 2	2000 11	500 1000	Cestification 3950	ле лис.	S 12 8

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

#### Multi-Point Surface Use Plan San Juan 29-7 Unit #44A

- Please refer to Map No. 1 which shows Existing Road -1. 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.
- Please refer to Map No. 1. The grade of Planned Access Roads -2. 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 Drainage facilities may include erosion. 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.
- Location of Existing Wells Please refer to Map No. 2. 3.
- 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 Manzaneras Water Well.
- Source of Construction Materials No additional materials will be required to build either the access road or 6. the proposed location.
- Methods of Handling Waste Materials All garbage and trash materials will be put into a burn pit shown on the attached 7. 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,

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7. cont'd.

- 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 as designated by the responsible government agency 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 as designated by the responsible government agency.
- 11. Other Information The terrain is sandstone ledges and rolling hills with pinon and cedar growing. Deer and coyote are occasionally seen on the proposed project site
- 12. Operator's Representative W.D. Dawson, PO Box 990, Farmington, NM
- 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.

D. C. Walker

Project Drilling Engineer

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IJ. S. GEOLOGICAL SURVEY

## Operations Plan San Juan 29-7 Unit #44A

I. Location: 1640'S, 1120'E, Section 17, T-29-N, R-7-W, Rio Arriba County, NA

Field: Blanco Mesa Verde

Elevation: 6668'GL

#### II. Geology:

Α.	Formation	Tops:	Surface	San	Jose	Lewis	3608 <b>'</b>
		-	Ojo Alamo		2458'	Mesa Verde	5068 <b>'</b>
			Kirtland		2640'	Menefee	5268 <b>'</b>
			Fruitland		3108'	Point Lookout	5608 <b>'</b>
			Pic.Cliffs		3453'	Total Depth	6060 <b>'</b>

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5058', 5258', 5598' and at Total Depth.
  Also gauge any noticeable increase in gas. Record all gauges in
  daily drilling report and on morning report.

#### III. Drilling:

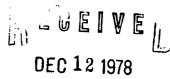
A. Mud Program: mud from surface to 3810'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
•	0001119 1 1 0 9 1 1 1 1 1	13 3/4"	200'	9 5/8"	32.3# H-40
		8 3/4"	3810'	7"	20.0# K-55
		6 1/4"	3660-6060'	4 1/2"	10.5# K-55

7" intermediate casing - Pathfinder guide shoe (Part #1003-1-007) and Pathfinder self-fill insert float valve (Part #2010-6-007), 5 Pathfinder stabilizers (Part #107-10) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner 4 1/2" liner hanger with neoprene packoff. Pathfinder geyser shoe (Part #2017-1-050) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 6060' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.
- 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 115 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 (304 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 240 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (422 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

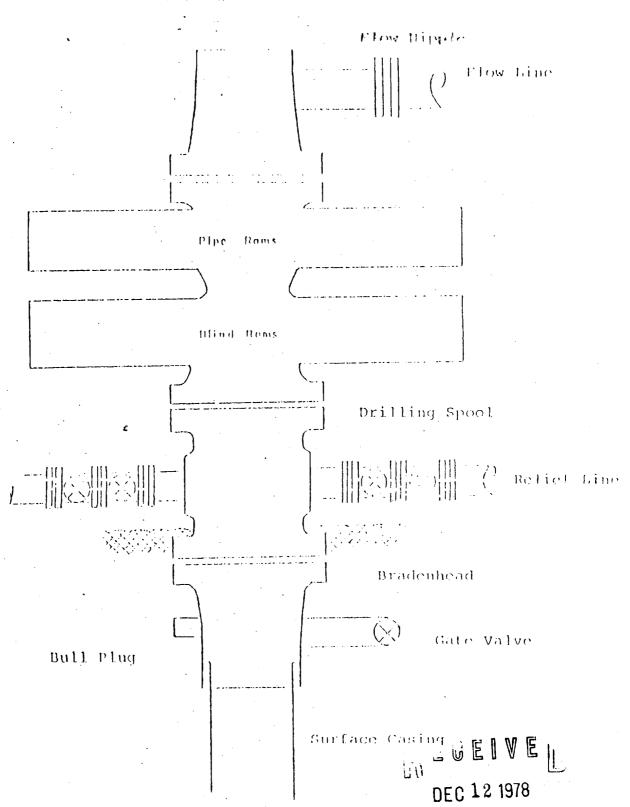


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U. S. GEOLOGICAL SURVEY

# Typical B.O.C. Abdiation Lor Moga Verde Well

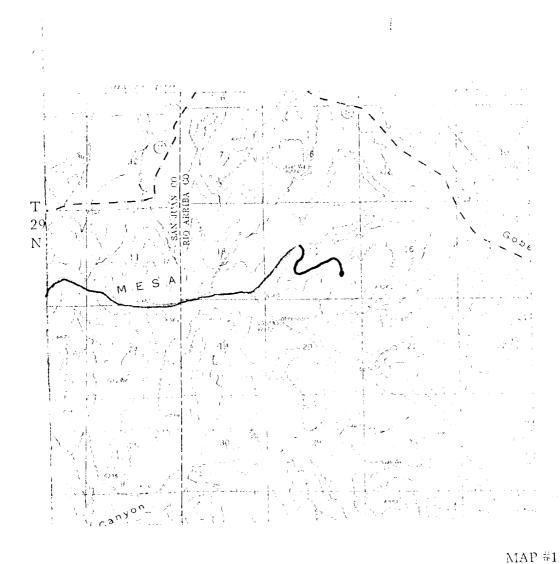


Series 900 Double Gate BOP, rated. S. GEOLOGICAL SURVEY at 3000 psi Working Pressure DOM 130, 6010 When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line.

## El Paso Natural Gas Company San Juan 29-7 Unit #44A NESE 17-29-7

R-8-W

R-7-W



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1). S. GEOLOGICAL SURVEY

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EXISTING ROADS

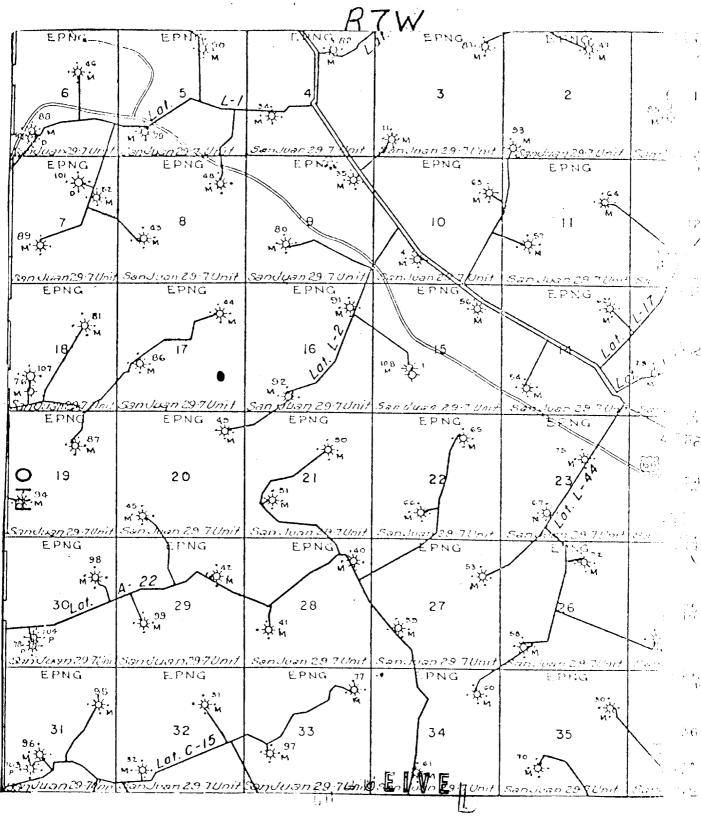
EXISTING PIFELINGS

EXISTING POACS

FROPOSED POINTER

PARTY OF THE PROPERTY OF

## El Paso Natural Gas Company San Juan 20-7 Unit #44A NESE 17-29-7



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MAP #2

U. S. GEOLOGICAL SURVEY

Proposed Location •