1a. TYPE OF WORK

SUBMIT IN TRIPLICATE*

Form approved.

(Other instructions on reverse side)

OR PLUG BACK

5. LEASE					
30 -	04	'Š	21	272	1
4,	uuset	Dureau	110.	14-11	Z4.U,

G. IF INDIAN, ALLOTTEE OR TRIBE NAME

SF 078049

7. UNIT AGREEMENT NAME

UNITED STATES							
DEPARTMENT	OF	THE	INTERIOR				

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN,

PLUG BACK DRILL 🖾 DEEPEN b. TYPE OF WELL SINGLE X MULTIPLE ZONE 8. FARM OR LEASE NAME WELL WELL X OTHER Hughes A 2. NAME OF OPERATOR 9. WELL NO. El Paso Natural Gas Company 3. ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT PO Box 990, Farmington, NM 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) Blanco Mesa Verde 11. SEC., T., R., M., OR BLK.

AND SURVEY OR AREA

Sec. 27, T-29-N, R-8-W 1070'N, 1806'W At proposed prod. zone, NMPM 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 12. COUNTY OR PARISH | 13. STATE San Juan NM 17. NO. OF ACRES ASSIGNED TO THIS WELL 15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, 16. NO. OF ACRES IN LEASE 320.00 (Also to nearest drlg, unit line, if any) 20. ROTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION®
TO NEAREST WELL, DESILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH

6639'GL

22. APPROX. DATE WORK WILL STARTS

	P	ROPOSED CASING AN	ID CEMENTING PROGR	AM
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEFTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3605'	307 cu.ft.to cover Ojo Alan
6 1/4"	4 1/2"line		3455-5945'	434 cu.ft.to fill to 3455'

5945'

Rotary

Selectively perforate and sandwater fracture the Mesa Verde formation.

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.

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

The W/2 of Section 27 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true Give blowout pr

preventer program, if any.				
81GNED D. Duces	TITLE	Drilling Clerk	DATE August 30, 19	3 77
(This space for Federal or State office use)				
PERMIT NO.		APPROVAL DATE	RECEIVED	
APPROVED BY	TITLE	<u> </u>	DATE	

Olas

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.					
Operator EL I	PASO NATURAL	GAS COMPANY	Lease HUGHES A	(SF-078049)	Well No. 3A
Unit Letter C	Section 27	Township 29-N	Range 8-W	County SA:	N JUAN
Actual Footage Loca 1070	tion of Well:	NORTH line and	1806 _{fee}	t from the WEST	line
Ground Level Elev. 6639	Producing For ME	mation SA VERDE	BLANCO MES		Dedicated Acreage: 320.00
1. Outline the	e acreage dedica	ted to the subject w	ell by colored pencil o	r hachure marks o	
2. If more the interest an	an one lease is d royalty).	dedicated to the wel	l, outline each and ide	ntify the ownershi	p thereof (both as to working
		ifferent ownership is mitization, force-pool		have the interests	of all owners been consoli-
Yes	☐ No If a	nswer is "yes;" type o	of consolidation		
		owners and tract desc	criptions which have ac	tually been conso	lidated. (Use reverse side of
No allowab					ommunitization, unitization,
iorced-pool sion.	ing, or otherwise)	or until a non-standar	d unit, eliminating suc	h interests, has be	een approved by the Commis-
		M -	1		CERTIFICATION
	70,	Я	1	1 here	by certify that the information con-
K	! 9	N	1	1 1	herein is true and complete to the
		R	1	best	of my knowledge and belief. Original Signed by
18	06'	🏻		Norme Dri]	D. G. Brisco Lling Clerk
	1		1	Position	
	 			Compan Augu	st 30, 1977
8				Date	
}		SECTION 27			
	i	$\mathbf{S} = \mathbf{S}$		1 1	eby certify that the well location
Sı	F-078049			notes	of actual surveys made by me or
			5 15	is tru	my supervision, and that the same me and correct to the best of my
}	+			know!	edge and belief.
· (≠ 3 9		· 	Date Sur	• -
X .	 	X		Register	LY 28, 1977 red Professional Engineer
S .	[] ,	B	. [and/or	and Surveyor
				Certific	1760

330 660



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

Multi-Point Surface Use Plan Hughes A #3A

- 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 in Manzanares 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 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 sand stone ledges covered with pinon and cedar trees. Deer and coyotes are occasionally seen on the proposed project sites.

- 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.

August 30, 1977

D. R. Read

Division Drilling Engineer

DRR: pb

Operations Plan Hughes A #3A

I. Location: 1070'N, 1806'W, Section 27, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde <u>Elevation:</u> 6639'GR

II. Geology:

Α.	Formation	Tops:	Surface	San	Jose	Lewis	3405'
		•	Ojo Alamo		2240'	Mesa Verde	4800'
		•	Kirtland		2390'	Menefee	5010'
			Fruitland		2955'	Point Lookout	5495'
			Pic.Cliffs		3240'	Total Depth	5945 '

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4790', 5000', 5485' 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 3605'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
	3	13 3/4"	200'	9 5/8"	32.3# H-40
		8 3/4"	3605'	7"	20.0# K-55
		6 1/4"	3455-59451	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: 5945' 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: $10" 900 \times 9 5/8"$ casing head. $10" 900 \times 6" 900 \times 10"$

Operations Plan - Hughes A #3A

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 72 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 100 sks. of Class "E" with 2% calcium chloride (307 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.

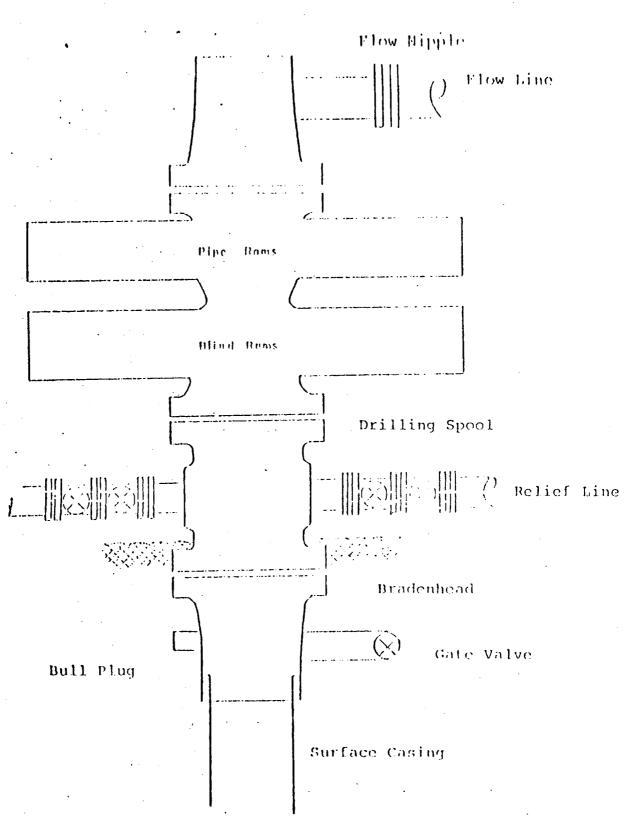
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 241 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (434 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

DRR:pb

8 X 2 , 8 Fuel Tunk 120% Roserve Draw Karks Mud Chaing 11 ... 3, at ye zie 4ft 300 From wellhood to From wellhoad to Block

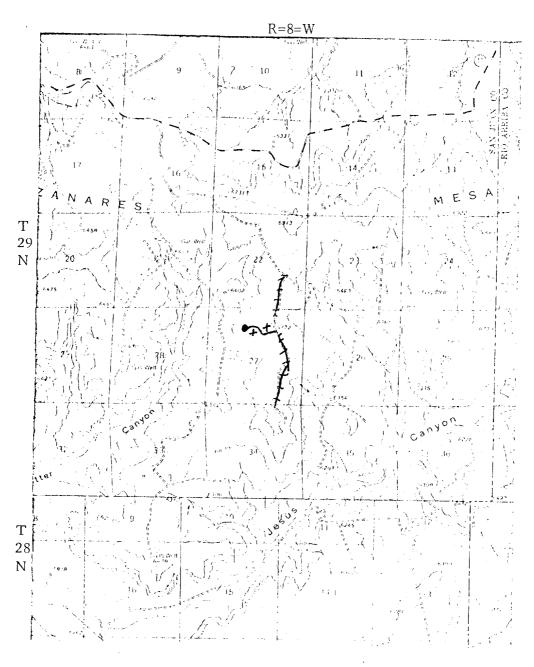
Typical Location Plat for Musa Verde and Datoks Wells

Typical B.O.P. Installation . Low 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

EL PASO NATURAL GAS COMPANY Hughes A #3 A NENW 27-29-8

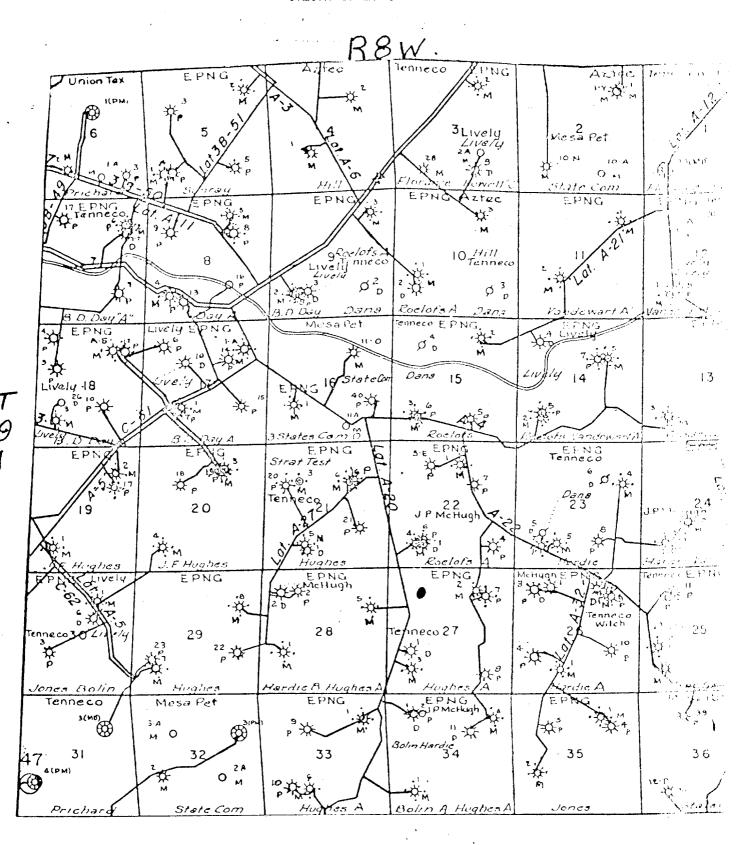


MAP #1

DEGEND OF RELEGE-OF-VAYS

	EXISTING	20/03			
٠	EXISTING	FIRELITYS		-+	
	EXISTIAG	ROAD - PILEL	11.11-1	÷	
	PROPOSED	ROVDG.			
	PROPOSED	PHELLING	-	+	+
	1567670	D1477 1 17 17 1	:	<u> </u>	

EL PASO NATURAL GAS COMPANY. Hughes A #3A NENW 27-29-8



MAP #2 Proposed Location