SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

30 - 045-227/9
5. LEASE DESIGNATION AND SEEIAL NO.

U. S. GEOLOGICAL STIPLE

SF 078046

APPLICATION	FOR PERMIT	TO DRILL, [DEEPI	N, OR PLUG B	ACK	G. IF INDIAN, ALLOTTEE OR TRIBE NAME	
A. TYPE OF WORK	L 🏝	DEEPEN [PLUG BAC		7. UNIT AGREEMENT NAME	
D. TYPE OF WELL OIL GA	s (TXT)			NGLE MULTIP	re 🗆	8. FARM OR LEASE NAME	
WELL WI	S.L. X OTHER					Hughes	
	atural Gas C	ompany				9. WELL NO.	
ADDRESS OF OPERATOR						6A	
PO Box 990), Farmingto	,	401			10. FIELD AND POOL, OR WILDCAT	
LOCATION OF WELL (Re	port location clearly an	d in accordance wit	th any ?	State requirements.*)		Blanco Mesa Verde 11. SEC., T., R., M., OR BLK.	
1821/5	1820.99,	1600 E				Sec. 21, T-29-N, R-8-W	
At proposed prod. zon	e					NMPM	
. DISTANCE IN MILES A	NO DIRECTION FROM NE	AREST TOWN OR POS	T OFFIC	E*		12. COUNTY OR PARISH 13. STATE	
. DISTANCE IN MISSIS.						San Juan NM	
DISTANCE FROM PROPO	SED*		16. N	O. OF ACRES IN LEASE		OF ACRES ASSIGNED HIS WELL	
PROPERTY OR LEASE L	INE, FT.				101	E 320.00	
(Also to nearest drig 8. DISTANCE FROM PROP	OSED LOCATION*		19. P	ROPOSED DEPTH	20. ROTARY OR CABLE TOOLS		
TO NEAREST WELL, DI OR APPLIED FOR, ON THE	RILLING, COMPLETED,		1	5670'	Rotai	ry	
. ELEVATIONS (Show who	ther DF, RT, GR, etc.)					22. APPROX. DATE WORK WILL START*	
6381'GL							
		PROPOSED CASI	NG AN	D CEMENTING PROGR.	AM		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER E		SETTING DEPTH	1	QUANTITY OF CEMENT	
13 3/4"	9 5/8"	32.3#		200'	224	cu.ft. to circulate	
8 3/4"	7"	20.0#		3360'	355 d	cu.ft.to cover Ojo Al	
6 1/4"	4 1/2"lir	er 10.5#	-	3210-5670'	429	cu.ft.to fill to 3210	
A 3000 ps	i WP and 600	00 psi tes	t do	ouble gate pr	evente	er equipped with ntion on this well.	
blind and	pipe rams v	in be us	eu i	.OI DIOW Out	preve	arcton on child well.	
					\$		
This gas	is dedicated	1.					
	 ·						
mb - 17/2 -	f Coation 2	is dodin	2+06	d to this wel	1		
The E/2 O	1 Section 2.	i is dedic	acec	1 to this wer	. 4	and a sphored new productive	
one. If proposal is to reventer program, if ar	drill or deepen direction	If proposal is to de onally, give pertine	epen or nt data	plug back, give data on on subsurface locations :	nd measure	ductive zone and proposed new productive ed and true vertical depths. Give blowout	
4. 1 C	1 1						
BIGNED A	Succo	т	ITLE	Drilling	_Cler	k DATE August 31,]	
(This space for Fed	eral or State office use)						
PERMIT NO.				APPROVAL DATE			
PERMIT NU.						RECEIVE	
APPROVED BY		т	TITLE			- Dire CALL IVE	
CONDITIONS OF APPRO	VAL, IF ANY:					CED a man	
	< /1 -					SEP 2 1977	
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_	l l	*Soo Inst	ruction	s On Reverse Side		U. S. GEDI DOLONIA	

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

1760

All distances must be from the outer boundaries of the Section. Well No. Operator L.ease 6A HUGHES (SF 078046) EL PASO NATURAL GAS COMPANY County Range Unit Letter Section 8-W SAN JUAN 29-N 21 Actual Footage Location of Well: 18211820.9 EAST 1600 SOUTH feet from the feet from the line and line Ground Level Elev. Producing Formation Dedicated Acreases BLANCO MESA VERDE 320.00 MESA VERDE 6381 Acres 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 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? If answer is "yes," type of consolidation _ ☐ No 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 Commission. CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
Original Signed by D. G. Brisco Drilling Clerk El Paso Natural Gas Cp. Company August 31, 1977 SF 078046 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or 1600 under my supervision, and that the same Is true and correct to the best of my knowledge and belief. Date Surveyed JULY 21, 1977 Registered Professional Engineer and Surveyor and/or

2000

1320 1650

1980

1500

1000



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

Multi-Point Surface Use Plan Hughes #6A

- 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.
- 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 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 The location clean-up adequate time to dry. 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 brown (Federal Standard #595 30318).
- 11. Other Information The terrain is rolling hills covered with cedar and pinon trees. 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.

August 31, 1977

D. R. Read

Division Drilling Engineer

DRR:pb

Operations Plan Hughes #6A

I. Location: 1821'S, 1600'E, Section 21, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde <u>Elevation:</u> 6381'GR

II. Geology:

A.	Formation	Tops:	Surface	San	Jose	Lewis	3160'
		_	Ojo Alamo		1785'	Mesa Verde	4590'
			Kirtland		2135'	Menefee	4785'
			Fruitland		2725'	Point Lookout	5220 '
			Pic.Cliffs		3005'	Total Depth	5670'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4580', 4775', 5210' 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 3360'. Gas from intermediate casing to Total Depth.

IV. Materials:

A.	Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
	3	13 3/4"	Depth 200'	9 5/8"	32.3# H-40
		8 3/4"	3360'	7"	20.0# K-55
		6 1/4"	3210-5670'	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: 5670' 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.

Operations Plan - Hughes #6A, cont'd.

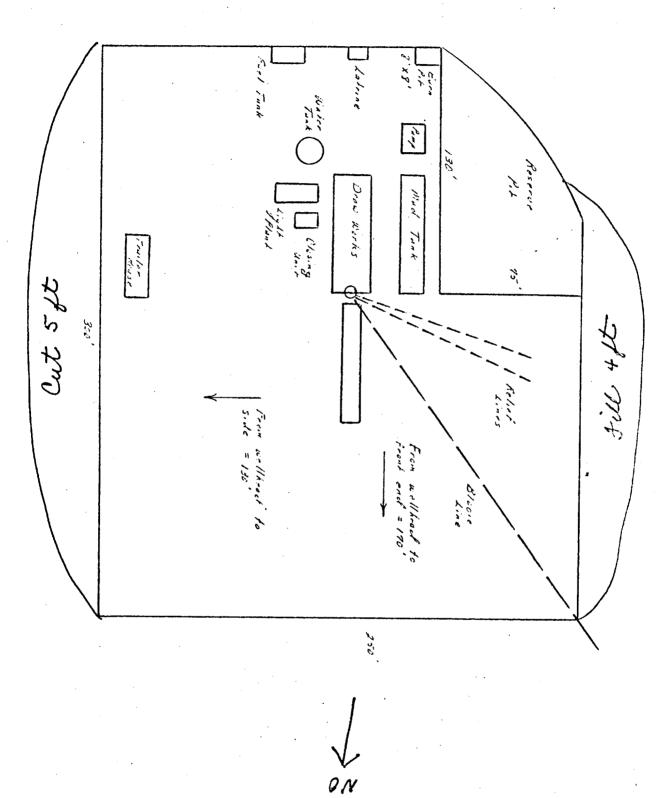
V. Cementing:

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 90 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 (355 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.

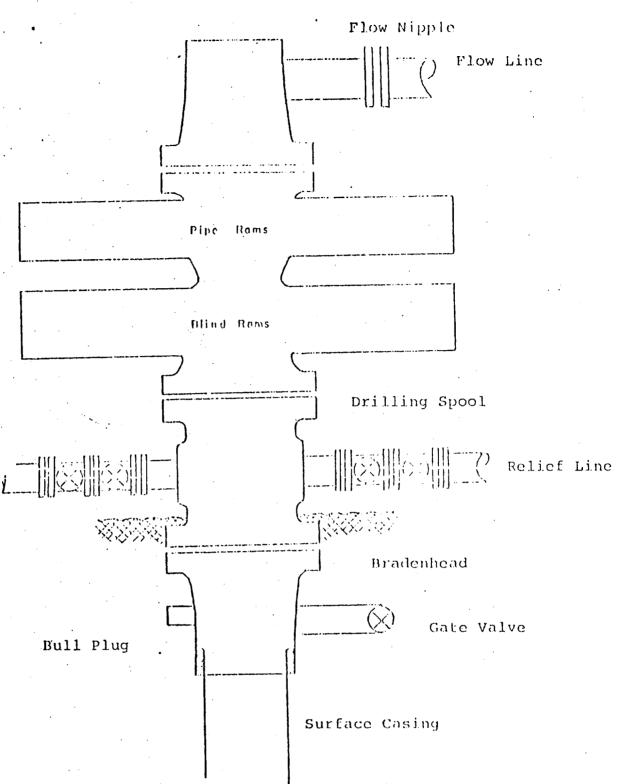
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 238 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (429 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

DRR:pb



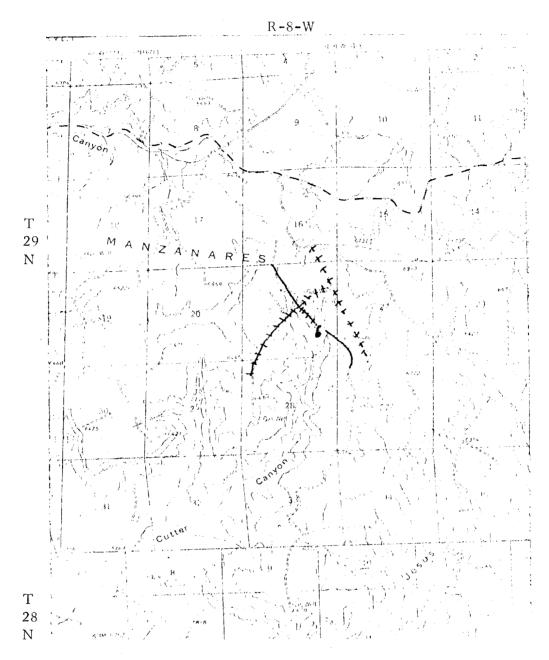
Typical Location Plat for Missa Verde and Lakata Wells

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8" Series 900 Double Gate BOP, rated at 3000 psi Working Pressure

EL PASO NATURAL GAS COMPANY Hughes #6A NESE 21-29-8

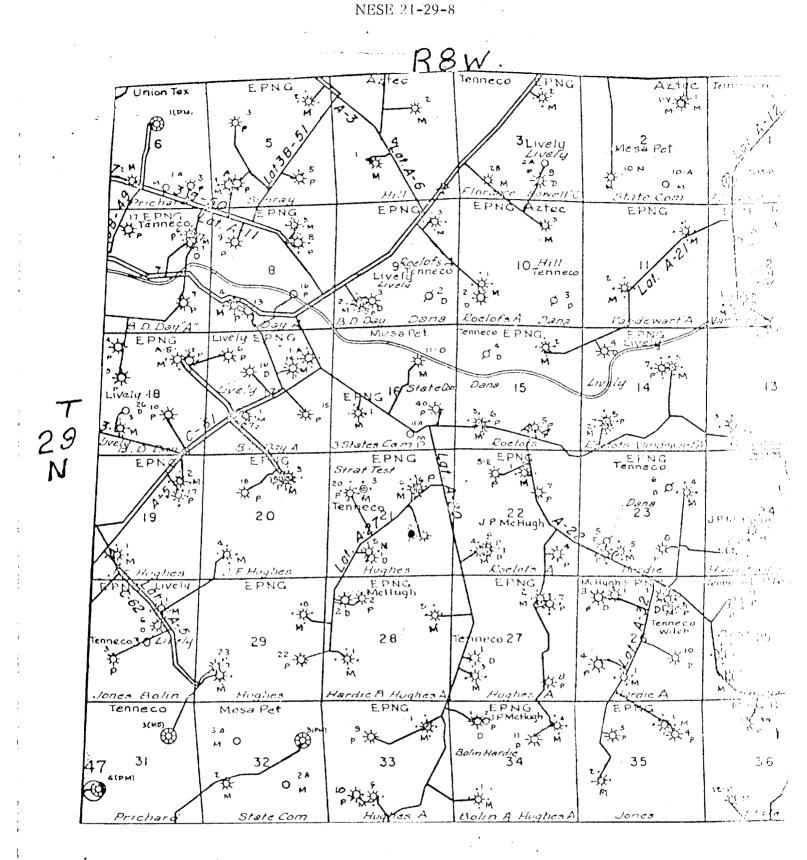


MAP #1

LEGEND OF PROGRESSION

EXISTING	ROADE			
	POPMAN'S	t-	+	1-
	ROAD & PETELLI	: - t	i -	
PROPOSE				
PROFOSED	LEPRETIES	+	+	+
TROPOGEO	BOAD A FORELLY	` -+	+	+

EL PASO NATURAL CAS COMPANY. Hughes #6A



MAP #2
Proposed Location