SUBMIT IN TRIPLICATE.

Form approved. Budget Bureau No. 42-R1425.

(Other instructions on reverse side)

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

3	<u>o</u> .		03	9-	2	/	3	9	8	
5.	LEAS		DESIGN	MTION	AND	BE	BIA	L	NO.	
S	F	n	788	84						

APPLICATION	N FOR PERMIT T	O DRILL, DEEPE	N, OR PLUG E	BACK_	O. IF INDIAN, ALLOTTEE OR TRIBE NAME	
TYPE OF WORK	LL 🛭	DEEPEN	PLUG BA	ì	7. UNIT AGREEMENT NAME	
TYPE OF WELL			NGLE MULTI		Canyon Largo Unit 8. FARM OR LEASE NAME	
	ELL K OTHER		NE ZONE	<u> </u>		
AME OF OPERATOR					Canyon Largo Unit	
El Paso Na	atural Gas Co	mpany				
DDRESS OF OPERATOR					281 10. FIELD AND POOL, OR WILDCAT	
PO Box 990), Farmington	, NM 87401			So.Blanco Pic.Cliffs	
OCATION OF WELL (R	eport location clearly and	in accordance with any	tate requirements.		Otero Chacra of	
at nation.		1180'N, 1	840'W		AND SURVEY OR AREA	
t proposed prod. zor	ne e				Sec.15,T-25-N,R-6-W	
		THE HOUN OF BOOK OFFIC			12. COUNTY OR PARISH 13. STATE	
DISTANCE IN MILES	AND DIRECTION FROM NEAR	REST TOWN OR POST OFFIC	_			
		1 16. No	OF ACRES IN LEASE	17. NO. (Pio Arriba NM	
DISTANCE FROM PROPLOCATION TO NEARES	T	10	,, 02 11011111	TO T	HIS WELL	
PROPERTY OR LEASE (Also to nearest dri	g. unit line, if any)	10 5	ROPOSED DEPTH	20 ROTA	160.00	
DISTANCE FROM PROI	RILLING, COMPLETED,	19. P				
OR APPLIED FOR, ON TH	IIS LEASE, FT.		3690 '	Rota	1 22. APPROX. DATE WORK WILL START*	
ELEVATIONS (Show wh	ether DF, RT, GR, etc.)					
6650'GL						
	3	PROPOSED CASING AN	D CEMENTING PROGE	RAM		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	_	QUANTITI OF CEMENT	
13 3/4"	9 5/8"	32.3#	120'	142	cu.ft.to circulate	
8 3/4"	2 7/8"	6.4#	2830'	_456_	cu.ft.to cover Ojo A	
6 3/4"	2 7/8"	6.4#	36901	274	cu.ft.to cover Lewis	
Chacra for A 3000 ps. blind and	i WP and 6000	psi test do ll be used f	uble gate pr or blow out	revente prever	er equipped with ntion on this well.	
	is dedicated.				APR 2 7 1977 OIL COM. COM. DIST. 3	
	of Section 15					
ABOVE SPACE DESCRU ne. If proposal is for eventer program, if a	o drill or deepen direction	proposal is to deepen or ally, give pertinent data	plug back, give data on on subsurface locations	present pro and measur	eductive zone and proposed new productive red and true vertical depths. Give blowout	
BIGNED .	J. Lusco	TITLE	Drilling (Clerk	DATE April 25, 197	
(This space for Fed	deral or State office use)					
		•	APPROVAL DATE			
PERMIT NO.			VI.LUAND DYIE			
		TITLE			DATE	
CONDITIONS OF APPR	OVAL, IF ANY :	TITIE				
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Ol.	Cal					
	,					

All distances must be from the outer boundaries of the Section Well No. Lease Operator (SF-078884) 281 EL PASO NATURAL GAS COMPANY CANYON LARGO UNIT Township Section Range Unit Letter 6-W RIO ARRIBA 25-N Actual Footage Location of Well: 1840 1180 WEST NORTH feet from the feet from the line and Dedicated Acreage: 160.00 Ground Level Elev. Producing Formation P∞1 SO. BLANCO PICTURED CLIFFS OTERO CHACRA PICTURED CLIFFS-CHACRA 6650 Actes 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 _ Yes 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 1840 D. G. Brisco Position Company SF-078884 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 JANUARY 16, 1975 Registered Professional Engineer Certificate No.

1500

660

1000



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

and the

Multi-Point Surface Use Plan Canyon Largo Unit #281

- 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 at the Gonzales Mesa Water Well.
- 6. Source of Construction Materials No additional materials will 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 and sagebrush flats. Sagebrush and cedar trees grow on the site. 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 25, 1977

D. R. Read

Division Drilling Engineer

DRR:pb

Operations Plan - Canyon Largo Unit #281

I. Location: 1180'N, 1840'W, Section 15, T-25-N, R-6-W, Rio Arriba County, NM

Field:So.Blanco Pic.Cliffs & Otero Chacra

Elevation: 6660'DF

II. Geology:

A. Form	ation Tops:	Surface	San Jose	Lewis	2790'
		Ojo Alamo	1900'	Chacra	3495'
	•	Kirtland	2215'	Total Depth	3690'
		Fruitland	2440'	_	
		Pic.Cliffs	2670'		

B. Logging: Induction-Electric and Gamma Ray Density at Total Depth.

C. Coring: none

III. Drilling:

A. Anticipated starting date and durection of the project 1977 Drilling Program - approximately 6 days to complete.

B. Circulating medium - treated water and a low solids gel base mud will be used from surface to total depth.

IV. Materials:

A. Casing Program:	Hole Size	Depth	Csg.Size	Wt.&Grade		
	13 3/4"	120'	9 5/8"	32.3# H-40		
	8 3/4"	2830 '	2 7/8"	6.4# J-55		
	6 3/4"	3690'	2 7/8"	6.4# J-55		

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

2 7/8" production casing -

Chacra - 10' shoe joint with notched collar on bottom and latch down baffle on top. Use two 3 1/16" rubber balls and one Omega plug to displace cement. Use 3 1/4" I.D. plug contacter head. Run 7 centralizers, one on each of the bottom 7 joints.

Pictured Cliffs - all collars bevelled, 10' shoe joint with guide shoe on bottom and latch down baffle on top. Use two 3 1/16" rubber balls and one Omega plug to displace the cement. Use 3 1/4" I.D. plug container head. Run 12 rubber 2 7/8" x 4 1/8" turbilizers, 2 per joint from the bottom up.

- C. Tubing: none
- D. Wellhead Equipment: wellhead for 9 5/8" casing with dual 2 7/8" mandrels.

Operations Plan - Canyon Largo Unit #281

V. Cementing:

9 5/8" surface casing - 120 sks. Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (142 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

2 7/8" production casing -

Pictured Cliffs - use 151 sks. of 65/35 Class "B" Pozmix with 12% gel followed by 50 sks. Class "C" neat cement (456 cu.ft. of slurry, 50% excess to cover the Ojo Alamo). Spot 50 gallons of 7 1/2% acid on top of plug.

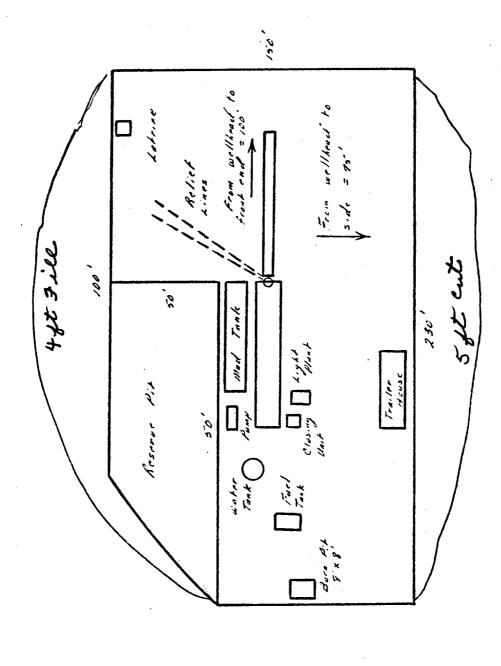
Chacra - use 73 sks. of 65/35 Class "B" Pozmix cement with 12% gel followed by 70 sks. of Class "C" neat cement (274 cu.ft. of slurry, 50% excess to cover the top of the Lewis). Spot 50 gallons of 7 1/2% acetic acid on top of plugs. Run temperature survey in Chacra after 12 hours. Check total depth in Pictured Cliffs string. WOC 18 hours.

Cement Chacra string first then the Pictured Cliffs string after plug is down on the Chacra.

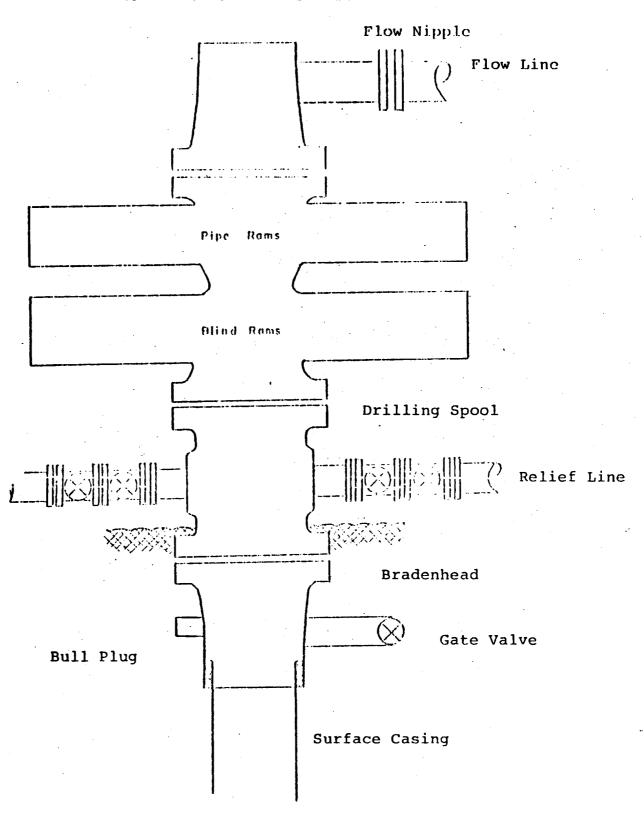
DRR:pb

Scale : 12" = 20'

El Paso Natural Gas Company
Typical Location Plot for Pictured Cliffs Well

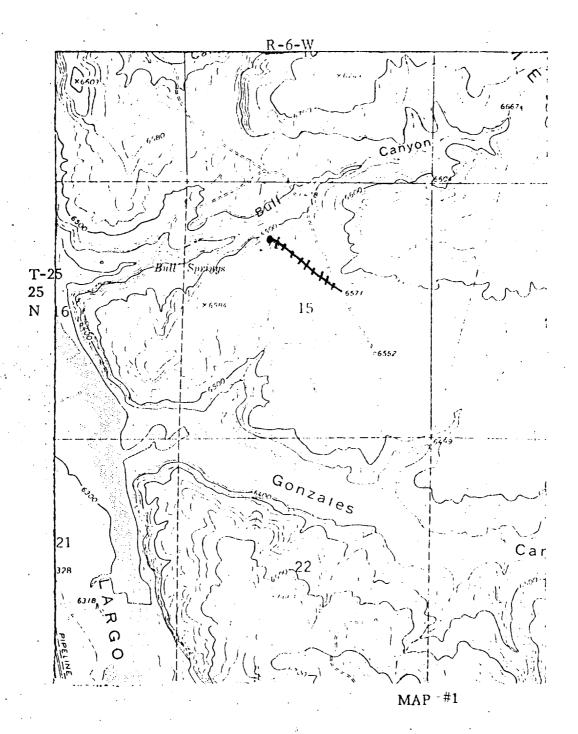


Typical Mud Drilled B.O.P. Installation for Pictured Cliffs Well



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

EL PASO NATURAL GAS COMPANY CANYON LARGO UNIT #281 NW 15-25-6



LEGEND OF RIGHT-OF-WAYS

EXISTING	ROADS			_
	PIPELINES	→ →		
EXISTING	ROAD & PITELIN	<u> </u>	 	-
PROPOSED	ROADS			
PROPOSED	PIPELIMES -	+ -	t	+
PROPOSED	ROAD & PIPELIE	⊞ →	+	+

EL PASO NATURAL GAS COMPANY. CANYON LARGO UNIT #281 NW 15-25-6

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MAP #2
Proposed Road & Location _____