SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

	TED STATES FOR THE INTER	reverse si		36 639-01966
	GICAL SURVEY			5. LEASE DESIGNATION AND SERIAL NO. SF 078885
APPLICATION FOR PERMIT	O DRILL, DEEPE	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
DRILL S b. TYPE OF WELL OIL GAS WELL OTHER		PLUG BAC		7. UNIT AGREEMENT NAME Canyon Largo Unit S. FARM OR LEASE NAME
WELL WELL COTHER 2. NAME OF OPERATOR El Paso Natural Gas Com 3. ADDRESS OF OPERATOR		NE 13 ZONE		Canyon Largo Unit 9. WELL NO. 287
PO Box 289, Farmington, 4. Location of WELL (Report location clearly and	in accordance with any S	tate requirements.*)		10. FIELD AND POOL, OR WILL-CAT Basin Dakota
At proposed prod. zone same	300'W	-		11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA Sec. 3, T-25-N, R-6-1 NMPM
14. DISTANCE IN MILES AND DIBECTION FROM NEAR		*		12. COUNTY OR PARISH 13. STATE
20 miles North of Couns		OF ACRES IN LEASE	17 NO 01	Rio Arriba NM
LOCATION TO NEAREST PROPERTY OR LEASE LINI, FT. (Also to nearest drig. unit line, if any) 18. DISTANCE FROM PROPOSID LOCATION*	800'	Unit	то тн	IS WELL W/ 321.37
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	900'	7465 '	Rotar	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6750 GR				22. APPROX. DATE WORK WILL START*
23.	PROPOSED CASING AND	CEMENTING PROGRA	AM	
SIZE OF HOLE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT
13 3/4" 9 5/8" 8 3/4"&7 7/8" 4 1/2"	32.3# 10.5#&11.6#	200 ' 7465 '		u.ft. to circulate cu.ft 3 stages
lst stage - 380 cu.ft. 2nd stage - 570 cu.ft. 3rd stage - 456 cu.ft. Selectively perforate a	to cover Mesa to cover Ojo	a Verde Alamo	 e Dako	ta formation.
A 3000 psi WP and 6000 blind and pipe rams wil	psi test dou il be used fo	ble gate pre r blow out p	revent	ion on this well.
This gas is dedicated.	-			
The W/2 of Section 3 is IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If zone. If proposal is to drill or deepen directions preventer program, if any.	proposal is to deepen or p	olug back, give data on p	resent produ	
signed D. D. Luceo	TITLE	Drilling	Clerk	DATE NOV. 6, 1978
(This space for Federal or State office use)		APPROVAL DATE	···	
APPROVED BY	TITLE			DATE
of Frak				

EL PASO NATURAL GAS CONPANY Tamonthy 25-3 Temporal 25-4 T			All distances must be	from the outer bound	laries of the Section		
Prior Descript Countries of white part of the part of	·				GO UNIT (SF)	078885)	I
1800 test form, in SOUTH the word 1800 test form on WEST 1800 1800 1800 1800 1800 1800 1800 180	K	3			ł .	Rio Arriba	
Pool Park Process of Fermation Pool Basin Dakota Delicated Acroscoper 321.37 Across			TH line on	1800	foot foot the	WEST	1
1. Outline the acreage dedicated to the subject well by colored pencil or hackure marks on the plat below. 2. If more than one leane 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? Yes No If answer is "yes," type of consolidation If answer is "no," lis the owners and truct 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 CERTIFICATION I hereby certify that the information contained been if my knowledge and belief. Origin Spend by Origin Geleck Postion Fl Paso Natural Gas Co. Company Novembor 6, 1978 Date 1 hereby certify that the well location shown on this plat was plated to the left notes of actual curveys unde by the contained shown on this plat was plated for the left notes of actual curveys unde by the condition of the contained beautiful to the left of the left o	Ground Level Elev. 6750	Producing For		Pool			icated Acreage:
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SF 078885 Sec. 3 Application Commission Certify that the information contained herein is true and complete to the best of my knowledge and belief. Original Signed by Name Drilling Clerk Position El Paso Natural Gas Co. Company November 6, 1978 Date Commission	If answer i	is "no," list the o					. (Use reverse side of
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P. O. BOX 990 FARMINGTON, NEW MEXICO 87401 PHONE: 505-325-2841

Multi-Point Surface Use Plan Canyon Largo Unit #287

- 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 Gonzales 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,

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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 rolling hills and sagebrush flats with sagebrush growing. Cattle 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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1. 6 but small to a -

Operations Plan - Canyon Largo Unit #287

I. Location: 1840'S, 1800'W, Section 3, T-25-N, R-6-W, Rio Arriba County, NM

Field: Basin Dakota Elevation: 6750'GL

II. Geology:

Α.	Formation	Tops:	Surface	San Jose	Menefee	4583 '
			Ojo Alamo	2202'	Point Lookout	5118'
			Kirtland	2396'	Gallup	6132 '
			Fruitland	2639 '	Greenhorn	7042'
			Pic.Cliffs	2862'	Graneros	7100'
			Lewis	2932'	Dakota	7244'
			Mesa Verde	4482'	Total Depth	7465 '

B. Logging Frogram: Induction Electric and Gamma Ray Density at TD.

C. Coring: none

D. Samples: none

III. Drilling:

A. Mud Program: mud from surface to Total Depth.

IV. Materials:

A. Casing Program:	Hole Size	Depth	Csg.Size	Wt.&Grade
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	5820 '	4 1/2"	10.5# J-55
	7 7/8"	6500 '	4 1/2"	10.5# J-55
	7 7/8"	7465 '	4 1/2"	11.6# J-55

4 1/2" production casing - Howco guide shoe (Prod. No. 102-1) and self-fill insert valve (Prod. No. 177-13). Two Howco multiple stage cementers (Prod. No. 200-03) equipped for three stage cementing. Set tool for second stage at 5720' and tool for third stage at 3130'. Run 20 Howco centralizers (Prod. No. 200-03) spaced as follows: one on each of the bottom 8 joints, one below each stage tool and five above each stage tool spaced every other joint.

- C. Tubing: 7465' of 2 3/8", 4.7#, J-55 tubing with a common pump seating nipple and an expendable check valve with drill type guide.
- D. Wellhead Equipment: 10" 3000 x 9 5/8" WKM Brewster Type R casing head with 10" x 4 1/2" Type SA casing hanger, 10" 3000 x 6" 3000 Brewster xmas tree (Dwg. #1-004-78). Wellhead representative to set all slips.

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at 8 offermorest on the

V. Cementing:

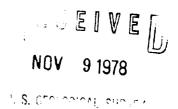
Surface casing (13 3/4" x 9 5/8") - use 190 sks. cf Class "B" cement with 1/4# gcl-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate). WOC 12 hours. Test to 600#/30 min.

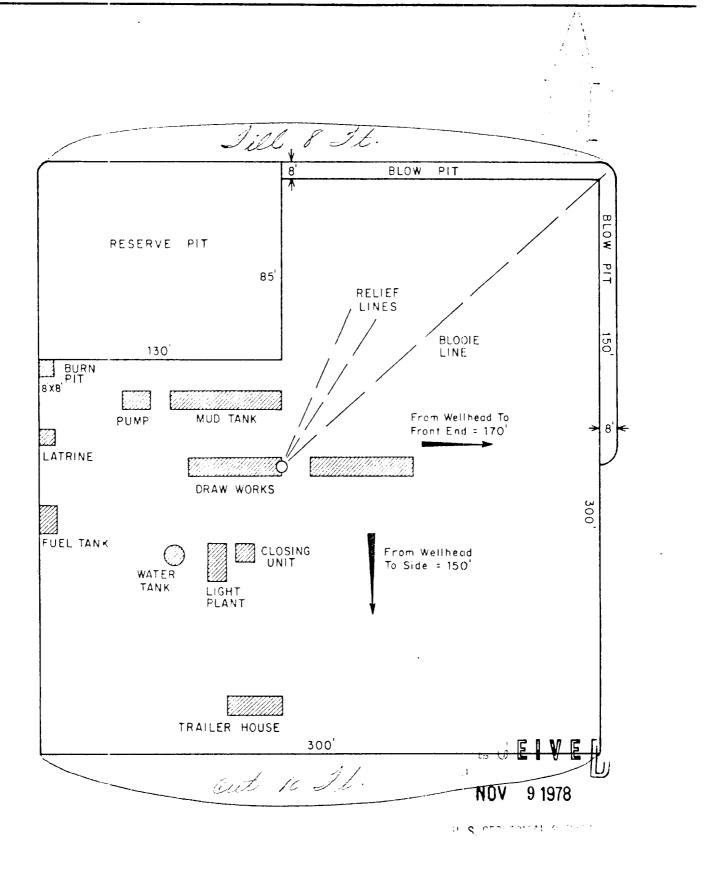
Production casing -

First stage (4 1/2" x 7 7/8") - use 149 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack followed by 100 sks. 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (380 cu.ft. of slurry, 25% excess to cover the Gallup).

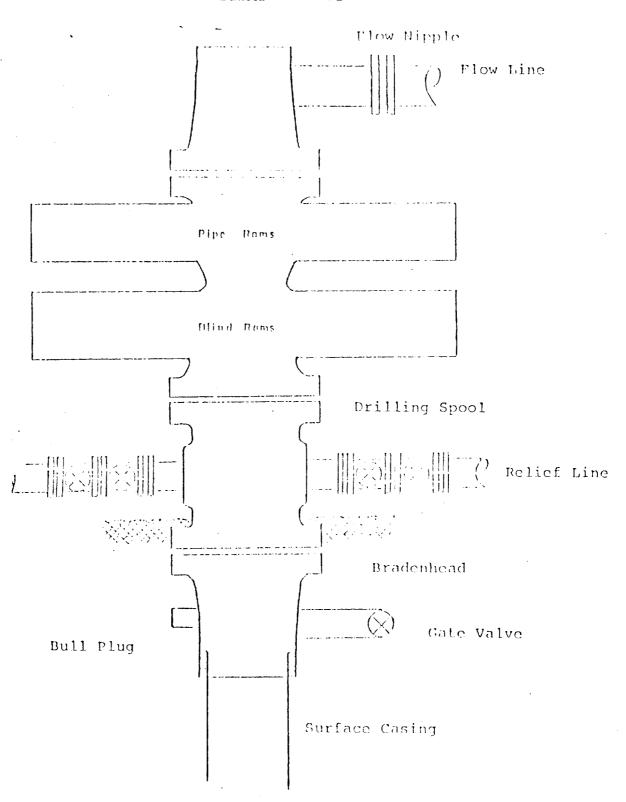
Second stage (4 1/2" x 8 3/4") - circulate mud for 2 hours, then cement with 352 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride and 8.3 gallons of water per sack (570 cu.ft. of slurry, 50% excess to cover the Mesa Verde).

Third stage (4 1/2" x 8 3/4") - circulate mud for 2 hours, then cement using 281 sks. 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack (456 cu.ft. of slurry, 60% excess to cover the Ojo Alamo). Run temperature survey on top stage only at 8 hours. WOC 18 hours.





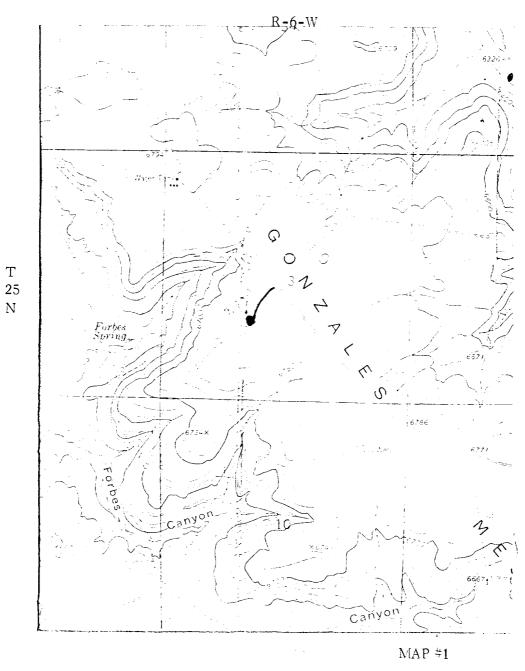
				ENG. REC.	DATE	El Paso Natural Gas Company	
				CHECKED CHECKED PROJ. APP:	8 ~16 -78	TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITI	E
FRT. S	EP. DATE	TO	W.O.	DESIGN		SCALE: 1" = 50' DWG.	REV



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 P. S. escape a blowie line.

EL PASO NATURAL GAS COMPANY Canyon Largo Unit #287 SW 3-25-6



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EXISTING ROADS
EXISTING PIPELINES

EXISTING PIPELINES ++++

EXISTING ROAD & PIPELINE++++

PROPOSED ROADS

PROPOSED PIPELINES ++++

PROPOSED ROAD & PIPELINE ++++

EL PASO NATURAL GAS COMPANY Canyon Largo Unit *287 SW 3-25-6

