## SUBMIT IN TRIPLICATE\*

Form approved.

(Other instructions on reverse side)

	Budget	Bureau	ı No.	42-R142	5.
30 5. LEAS	-09	S-	25	EBIAL NO.	a.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

U. S. GEOLOGICAL CHANGE

SF 078389

UNITE	ED S	STATI	ES
<b>DEPARTMENT</b>	OF	THE	INTERIOR

**GEOLOGICAL SURVEY** 

APPLICATION	I FOR PERMII I	O DRILL, L	JEEPE	IN, OR PLUG E	SACK		
1a. TYPE OF WORK  DRI	LL 🐔	DEEPEN [		PLUG BA	ск 🗌	7. UNIT AGREEMENT NAME	
OIL GAS WELL OTHER SINGLE X MULTIPLE ZONE						8. FARM OR LEASE NAME Lucerne 1	
2. NAME OF OPERATOR El Paso Na	tural Gas Cor	npany				9. WELL NO.	
3. ADDRESS OF OPERATOR						#7	
PO Box 990	, Farmington	, NM 874		tate requirements.*)	<del></del>	Blanco Pictured Clif	
1. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)  At surface 1550'N, 870'E  At proposed prod. zone					Sec. T. R. M., OR BLK. Sec. Y, Trosin, R-10-W NMPM		
14. DISTANCE IN MILES A	AND DIRECTION FROM NEAR	EST TOWN OR POS	T OFFICE			12. COUNTY OR PARISH 13. STATE San Juan NM	
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE I. (Also to nearest drig	INE, FT.					of acres assigned fhis well 159.30	
18. DISTANCE FROM PROP TO NEAREST WELL, DO OR APPLIED FOR, ON THE	OSED LOCATION* RILLING, COMPLETED,		19. PF	3210'	20. ROTA Rotar	RY OR CABLE TOOLS	
21. ELEVATIONS (Show who 6169 GL	ether DF, RT, GR, etc.)					22. APPROX. DATE WORK WILL START*	
23.	P	ROPOSED CASI	NG ANI	CEMENTING PROGR	RAM		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	700T	SETTING DEPTH		QUANTITY OF CEMENT	
12 1/4"	8 5/8"	24.0#		120'		cu.ft. to circulate	
6 3/4"	2 7/8"	6.4#		3210'	559 c	cu.ft. to cover Ojo Al	
A 3000 ps:	i WP and 6000	psi tes	t do	uble gate pr	revente	er equipped with	
blind and	pipe rams wi	ll be us	ed f	or blow out	prever	ntion on this well.	
This gas	is dedicated.						
The NE/4	of Section 9	is dedic	ated	to this wel	11.		
IN ABOVE SPACE DESCRIB	E PROPOSED PROGRAM; If drill or deepen directions	proposal is to de	enen or	nlug back, give data on	present pro	oductive zone and proposed new productive red and true vertical depths. Qive blowout	
preventer program, if an 24.	y. Ruica			Drilling	g Cler	k PATE 9-2-77	
(This space for Fed	eral or State office use)	*r	TITLE				
PERMIT NO.				APPROVAL DATE			
						KECEIVED	
APPROVED BY	VAL. IF ANY :	T	TITLE			i	
	01/0					SEP 2 1977	

\*See Instructions On Reverse Side

All distances must be from the outer boundaries of the Section. Well No. Operator (SF-078389) LUCERNE PASO NATURAL GAS COMPANY County Range Section Unit Letter 31-N 10-W SAN JUAN Actual Footage Location of Well: EAST 870 NORTH 1550 line line and feet from the feet from the Dedicated Acreage: Producing Formation PICTURED CLIFFS Pool Ground Level Elev. BLANCO PICTURED CLIFFS 159.30/ 6169 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 870 El Paso Natural Gas Co September 2, 1977 SF-078389 Date SECKTON 9 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 AUGUST 4, 1977 Registered Professional Engineer and/ar Land Surveyor Certificate No. 1760

2000

2310

1980

1320 1650

600



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

# Multi-Point Surface Use Plan Lucerne A #7

- 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 the Cedar Hill Ditch.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

## Page Two

#### Multi-Point Surface Use Plan

- 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 green (Federal Standard #595 34127).
- 11. Other Information The terrain is rolling hills covered with sage brush. 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.

September 1, 1977

W. D. Dawson

Chief Division Drilling Engineer

WDD:pb

## Operations Plan - Lucerne A #7

I. Location: 1550'N, 870'E, Section 9, T-31-N, R-10-W, San Juan County, NM

Field: Blanco Pictured Cliffs Elevation: 6169'GR

#### II. Geology:

A. Surface Formation: Nacimiento

Gut aunties Boumstion Monda

Sub-surface	rormation tops:		
Ojo Alamo	1375'	Pictured Cliffs	2965 <b>'</b>
Kirtland	1445'	Lewis	3170'
Fruitland	2550'	Total Depth	3210'
	<del>-</del>	•	

- B. Logging Program: Induction Electric and Gamma Ray Density at TD.
- C. Coring: none
- D. Testing: none

## III. Drilling:

A. Anticipated Starting Date and Duration of the Project:

1978 Drilling Program - approximately 4 days to complete.

B. Circulating Medium: Treated water and a low solids gel base mud will be used from surface to TD.

## IV. Materials:

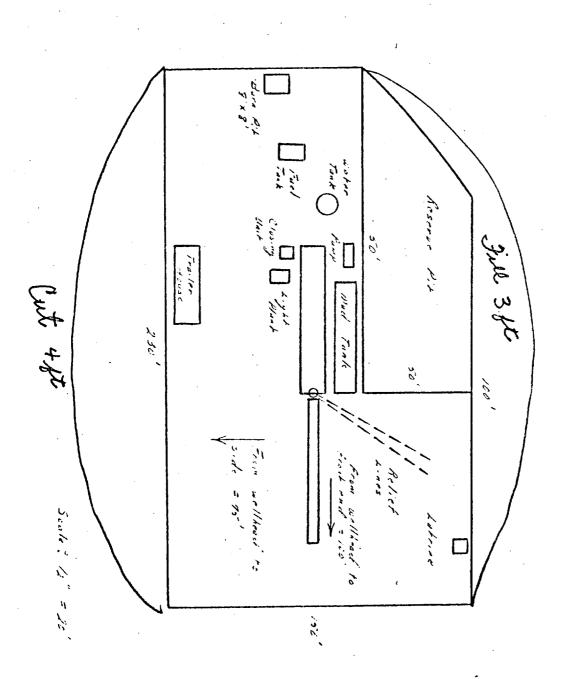
A.	Casing Program:	<u>Hole Size</u>	Depth	Csg.Size	Wt.&Grade
		12 1/4" 6 3/4"	120' 3210'	8 5/8" 2 7/8"	24.0# J-55 6.4# J-55

- B. Float Equipment: 8 5/8" surface casing cement guide shoe.
  - 2 7/8" production casing 10' shoe joint with notched collar for guide shoe and 2 7/8" latch down baffle on top. Two 3 1/16" balls and one 2 7/8" latch down plug.
- C. Tubing: none
- D. Wellhead Equipment: Larkin wellhead (fig. 75)

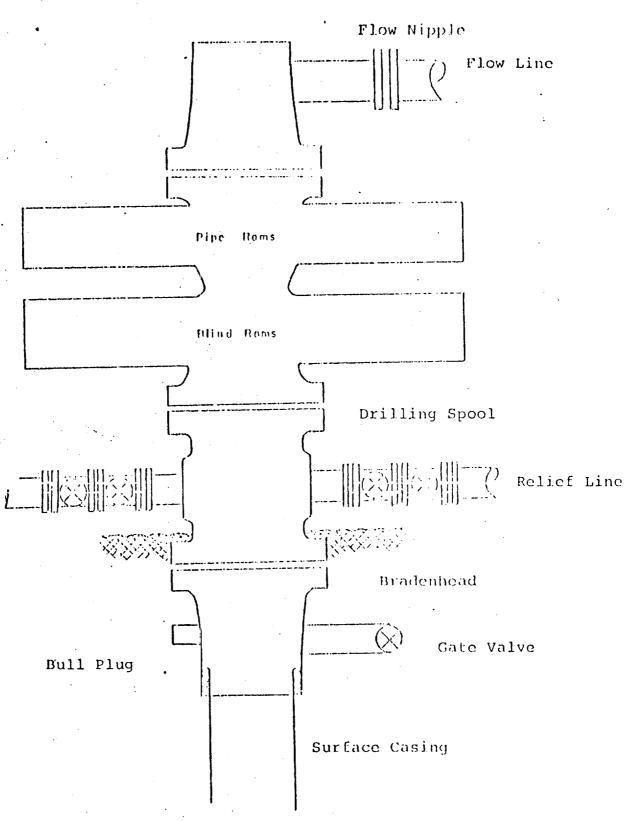
#### V. Cementing:

- 8 5/8" surface casing 90 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (106 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing wellhead and BOP to 600#/30 minutes.
- 2 7/8" production 188 sks. 65/35 Class "B" Poz with 12% gel and 15.52 gallons water per sack followed by 50 sks.Class "B" neat cement (559 cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs DRR:pb

1

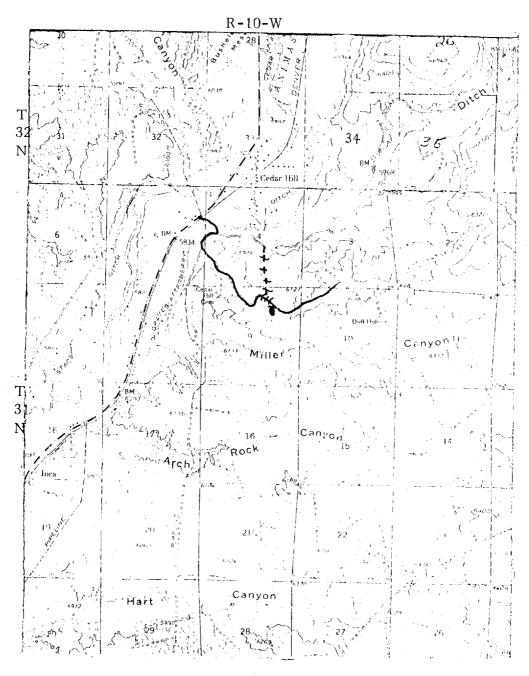


El Poso Natural Gas Company
Typical Location Plat for Pictured Clifts We



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

# EL PASO NATURAL GAS COMPANY Lucerne A #7 NE 9-31-10



MAP #1

## LEGEND OF RIGHT-OF-WAYS

EXISTING	ROADS	
EXISTING	PIPELINES	-+++-
EXISTING	ROAD & FIFELIN	E2 -+ - ++
PROPOSED	ROADS	-
PROPOSED	FIPELINES	+ + +
PROPOSED	ROAD & PITELI	

Amoco L I Palice Marcotleto. EPNG Lugerne A Koch Ind 13 Amoco EPNG EPNG EPNG 86 16 15 Koch Ind. Koch 19 Aztec 20 21 22 Ο, Crandall Atlantic Aztec Sounion EPNG EPNG EPNG 28 26 25 Delhi Atlant Atlantic 8

MAP #2