

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 078389	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR El Paso Natural Gas Company		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR PO Box 990, Farmington, NM 87401		8. FARM OR LEASE NAME Lucerne A	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 990'S, 800'E At proposed prod. zone		9. WELL NO. #10	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Blanco Pictured Cliffs	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 4, T-31-N, R-10-W NMPM	
16. NO. OF ACRES IN LEASE		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160.00		13. STATE NM	
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS Rotary	
19. PROPOSED DEPTH 3190'		22. APPROX. DATE WORK WILL START*	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6134' GL			
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12 1/4"	8 5/8"	24.0#	120'
6 3/4"	2 7/8"	6.4#	3190'
		QUANTITY OF CEMENT	
		106 cu.ft. to circulate	
		575 cu.ft. to cover Ojo Alamo	

Selectively perforate and sandwater fracture the Pictured Cliffs 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.

The SE/4 of Section 4 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED A. G. Busco TITLE Drilling Clerk DATE 9-2-77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

OK

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY

SEP 2 1977

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

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

All distances must be from the outer boundaries of the Section.

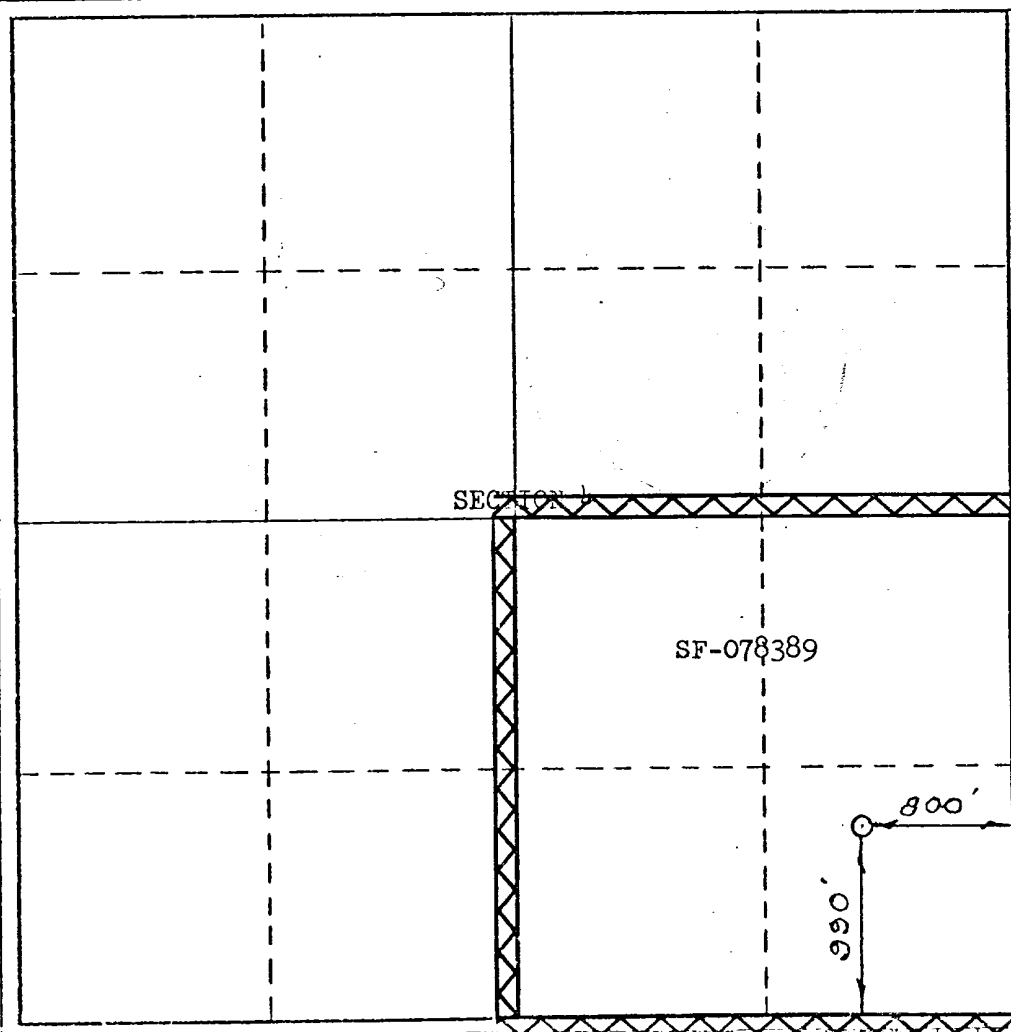
Operator: EL PASO NATURAL GAS COMPANY			Lease: LUCERNE A (SF-078389)		Well No. 10
Unit Letter P	Section 4	Township 31-N	Range 10-W	County SAN JUAN	
Actual Footage Location of Well: 990 feet from the SOUTH line and 800 feet from the EAST line					
Ground Level Elev. 6134	Producing Formation PICTURED CLIFFS		Pool BLANCO PICTURED CLIFFS		Dedicated Acreage: 160.00 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?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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

Name **D. G. Briscoe**
 Position **Drilling Clerk**
 Company **El Paso Natural Gas Co.**
 Date **September 2, 1977**

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/or Land Surveyor
[Signature]
 Certificate No. **1760**

Multi-Point Surface Use Plan

Lucerne A #10

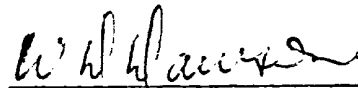
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the 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
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 #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 pinon and cedar 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.

September 1, 1977



W. D. Dawson
Chief Division Drilling Engineer

WDD:pb

September 1, 1977

Operations Plan - Lucerne A #10

I. Location: 990'S, 800'E, Section 4, T-31-N, R-10-W, San Juan County, NM

Field: Blanco Pictured Cliffs

Elevation: 6134'GR

II. Geology:

A. Surface Formation: Nacimiento

Sub-surface Formation Tops:

Ojo Alamo	1305'	Pictured Cliffs	2935'
Kirtland	1400'	Lewis	3150'
Fruitland	2475'	Total Depth	3190'

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>	<u>Depth</u>	<u>Csg.Size</u>	<u>Wt.&Grade</u>
	12 1/4"	120'	8 5/8"	24.0# J-55
	6 3/4"	3190'	2 7/8"	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)

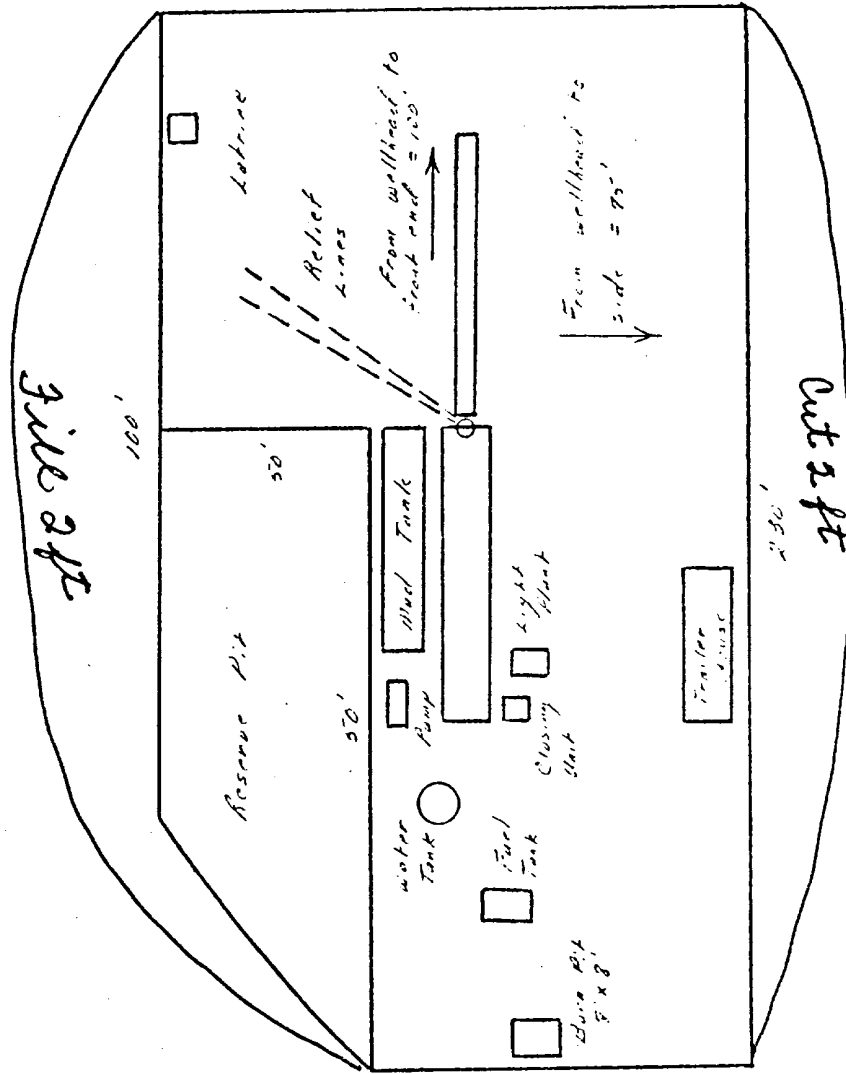
V. Cementing:

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 - 194 sks. 65/35 Class "B" Poz with 12% gel and 15.52 gallons water per sack followed by 50 sks. Class "B" neat cement (575cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs.

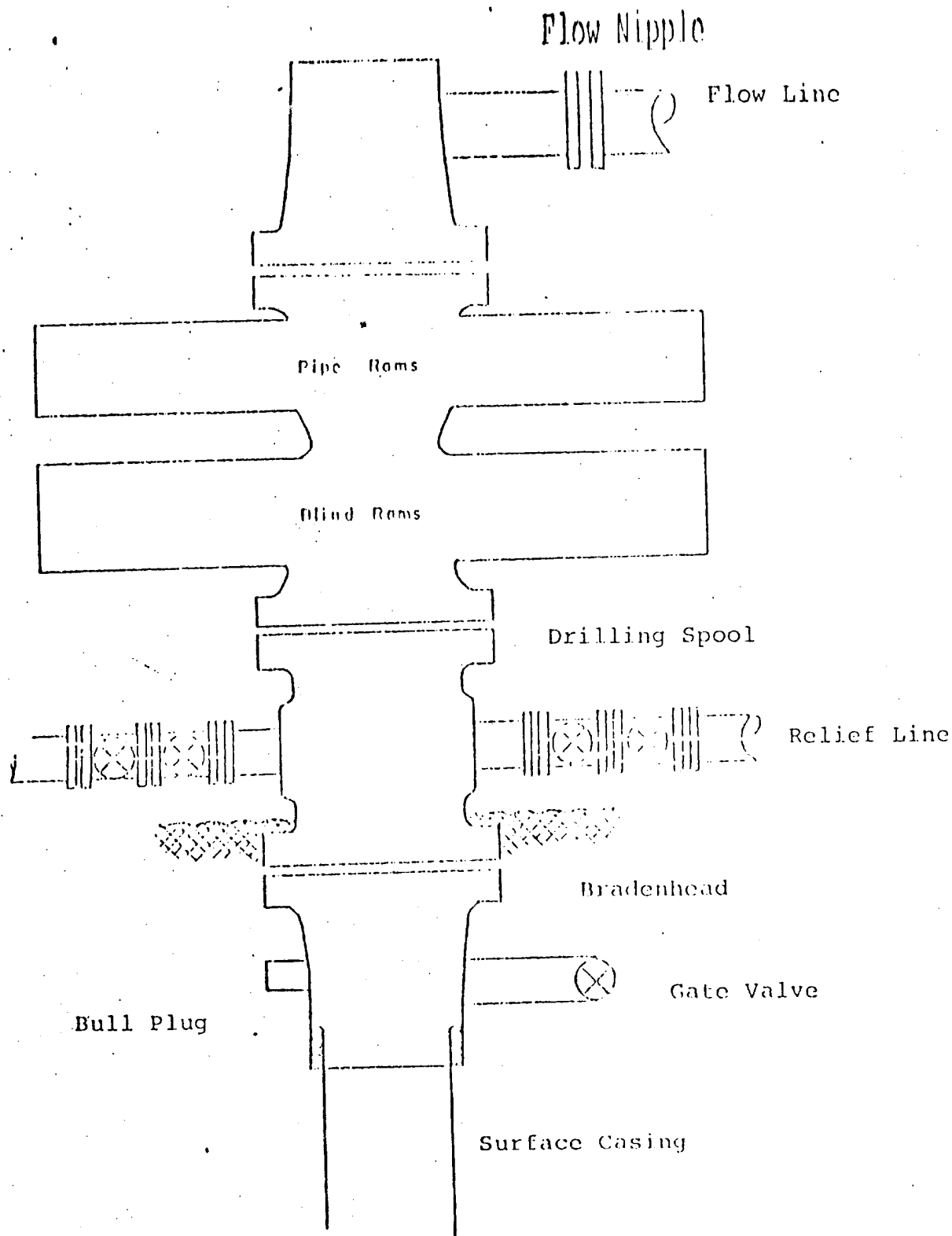
DRR:pb

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



Scale: 1/2" = 25'

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

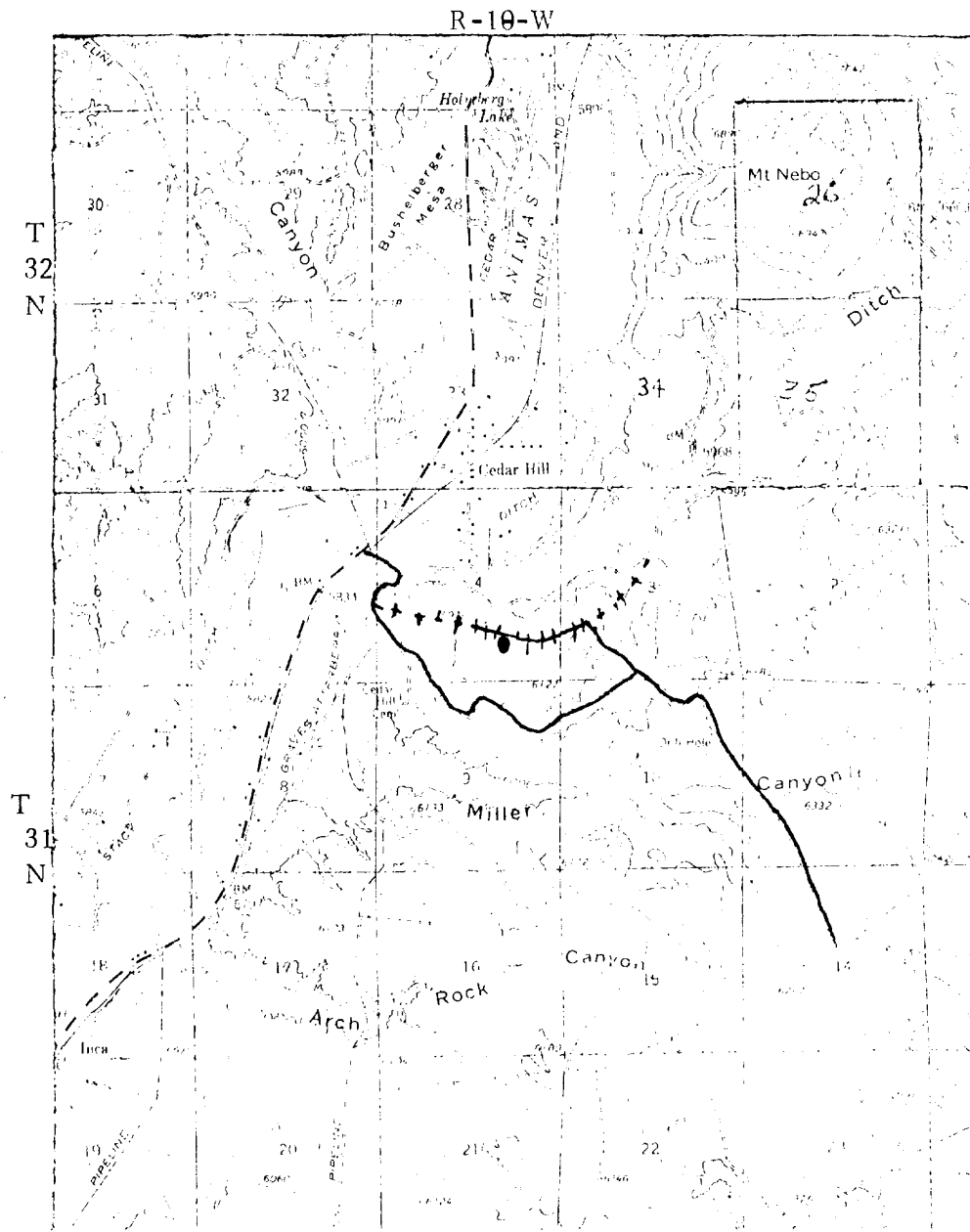


8" Series 900 Double Gate BOP, rated
at 3000 psi Working Pressure

EL PASO NATURAL GAS COMPANY

LUCERNE A #10

SE 4-31-10



MAP #1

LEGEND OF RIGHT-OF-WAYS

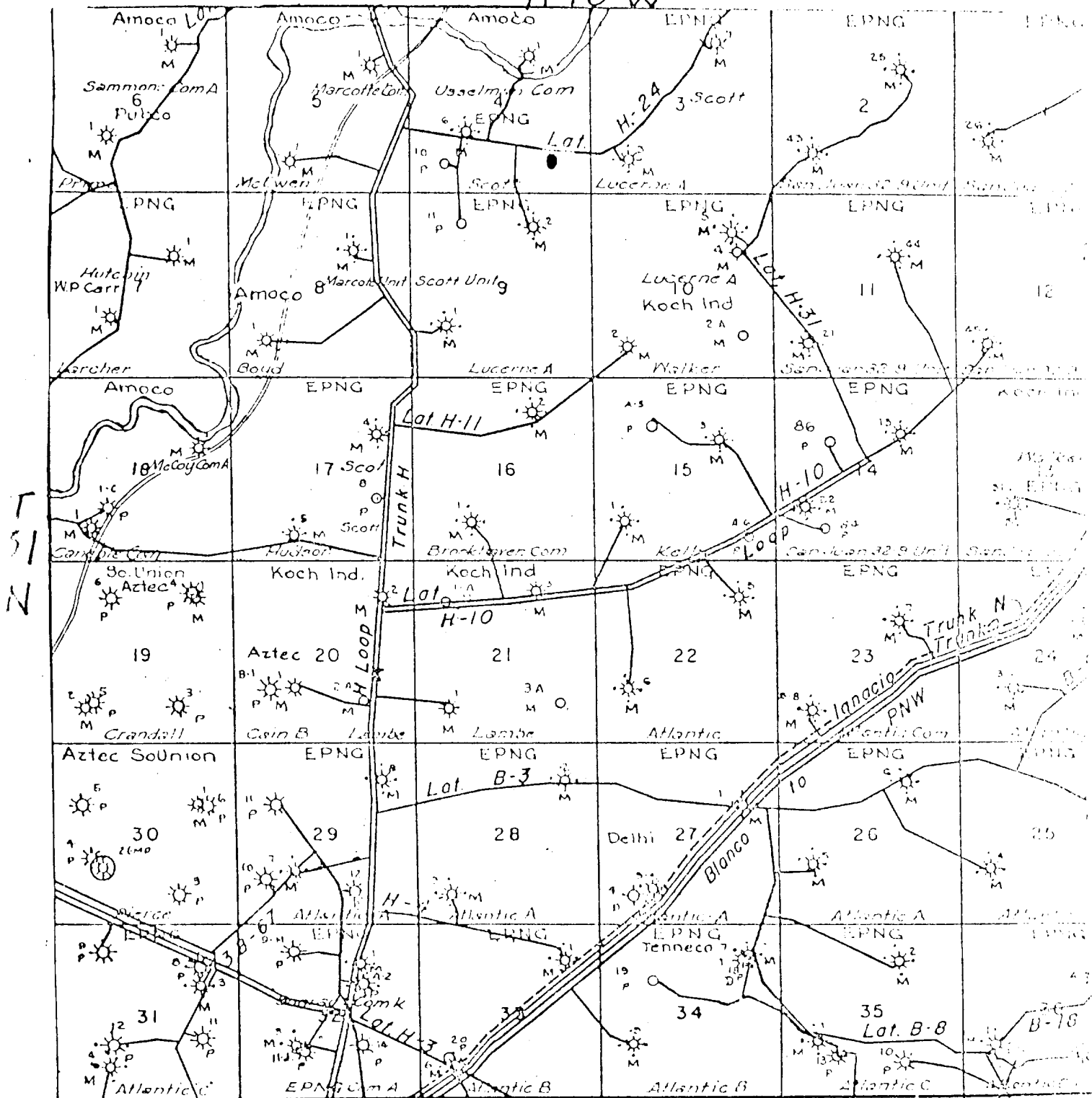
EXISTING ROADS	— — — — —
EXISTING PIPELINES	+ + + + +
EXISTING ROAD & PIPELINE	+ + + + +
PROPOSED ROADS	— — — — —
PROPOSED PIPELINES	+ + + + +
PROPOSED ROAD & PIPELINE	+ + + + +

El Paso Natural Gas Company

Lucerne A #10

SE 4-31-10

R 10 W



MAP #2

Proposed Location

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐

2. NAME OF OPERATOR
EL PASO NATURAL GAS CO.

3. ADDRESS OF OPERATOR
BOX 990, FARMINGTON, NEW MEXICO

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 990'S, 800'E
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other)	<input type="checkbox"/>	<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

4/8/78: Spudded well. Drilled surface hole.

4/9/78: Ran 3 joints 8 5/8", 24# K-55 surface casing, 132' set at 144'. Cemented with 148 cu. ft. cement. Circulated to surface. WOC 12 hours; held 600#/30 minutes.

5. LEASE
SF 078389

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
LUCERNE A

9. WELL NO.
10

10. FIELD OR WILDCAT NAME
BLANCO P.C.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4, T-31-N, R-10-W
NMPM

12. COUNTY OR PARISH
SAN JUAN

13. STATE
NEW MEXICO

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6134' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

RECEIVED

APR 18 1978

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

Subsurface Safety Valve: Manu. and Type

Set @

18. I hereby certify that the foregoing is true and correct

SIGNED A. D. Lucas TITLE Drilling Clerk DATE 4/14/78

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE