

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-075-22706

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 El Paso Natural Gas Company

3. ADDRESS OF OPERATOR  
 PO Box 990, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface 955'S, 1460'E ✓  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approx. 15 miles NE of Aztec, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 955'

16. NO. OF ACRES IN LEASE Unit

17. NO. OF ACRES ASSIGNED TO THIS WELL 137.44

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2010'

19. PROPOSED DEPTH 3535'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6572'

22. APPROX. DATE WORK WILL START\*

5. LEASE DESIGNATION AND SERIAL NO.  
 SF 078389-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
 San Juan 32-9 Unit

8. FARM OR LEASE NAME  
 San Juan 32-9 Unit

9. WELL NO.  
 93

10. FIELD AND POOL, OR WILDCAT  
 Blanco Pictured Cliffs ✓

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 12, T-31-N, R-10-W NMPM Ext.

12. COUNTY OR PARISH San Juan

13. STATE NM

23. PROPOSED CASING AND CEMENTING PROGRAM

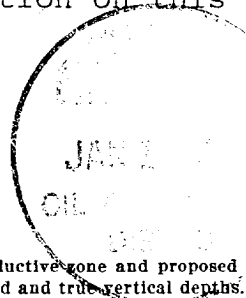
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	120'	106 cu.ft. to circulate
6 3/4"	2 7/8"	6.4#	3535'	569 cu.ft. to cover Ojo Alamo

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 12 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. Susco TITLE Drilling Clerk DATE January 16, 1978

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

*Handwritten signature*

\*See Instructions On Reverse Side

*Handwritten notes*

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.

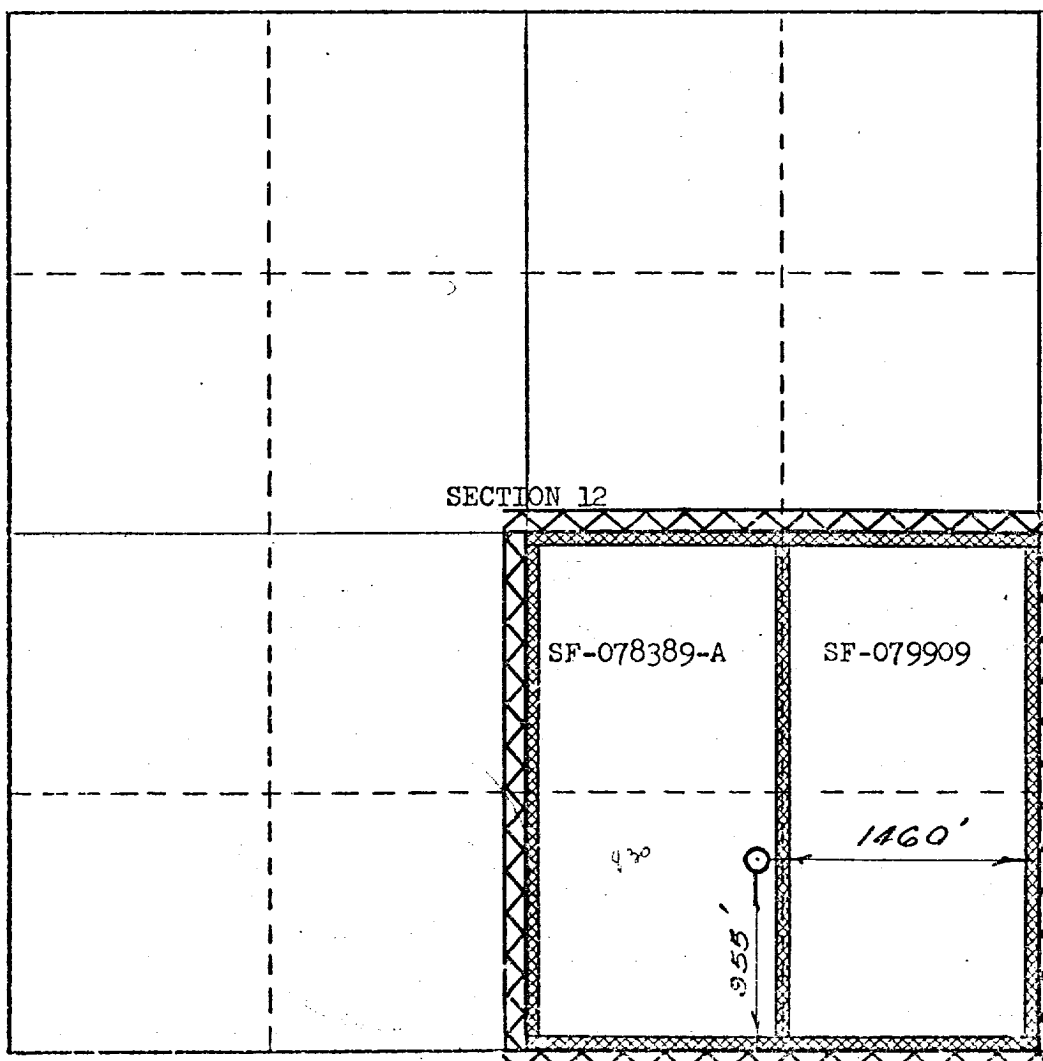
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>SAN JUAN 32-9 UNIT (SF-078389-A)</b>		Well No. <b>93</b>
Unit Letter <b>0</b>	Section <b>12</b>	Township <b>31-N</b>	Range <b>10-W</b>	County <b>SAN JUAN</b>
Actual Footage Location of Well: <b>955</b> feet from the <b>SOUTH</b> line and <b>1460</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>6572</b>	Producing Formation <b>PICTURED CLIFFS</b>	Pool <b>BLANCO PICTURED CLIFFS EXT.</b>	Dedicated Acreage: <b>137.44</b> 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 Unitization

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. Brisco**

Drilling Clerk  
Position

**El Paso Natural Gas Co.**  
Company

**January 16, 1978**  
Date

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  
**SEPTEMBER 22, 1977**

Registered Professional Engineer  
and/or Land Surveyor

*David A. [Signature]*

Certificate No. **1760**

0 330 660 990 1320 1650 1980 2310 2640 2970 3300

Multi-Point Surface Use Plan

San Juan 32-9 Unit #93

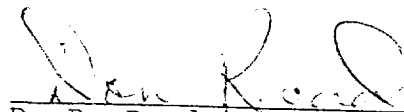
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the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

January 13, 1978



D. R. Read  
Division Drilling Engineer

DRR:pb

Operations Plan - San Juan 32-9 Unit #93

I. Location: 955'S, 1460'E, Section 12, T-31-N, R-10-W, San Juan County, NM

Field: Blanco Pictured Cliffs Ext.                      Elevation: 6572'GL

II. Geology:

A. Surface Formation:        San Jose

Sub-surface Formation Tops:

Ojo Alamo	1670'	Pictured Cliffs	3392'
Kirtland	1765'	Lewis	3495'
Fruitland	3000'	Total Depth	3535'

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.&amp;Grade</u>
	12 1/4"	120'	8 5/8"	24.0# J-55
	6 3/4"	3535'	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

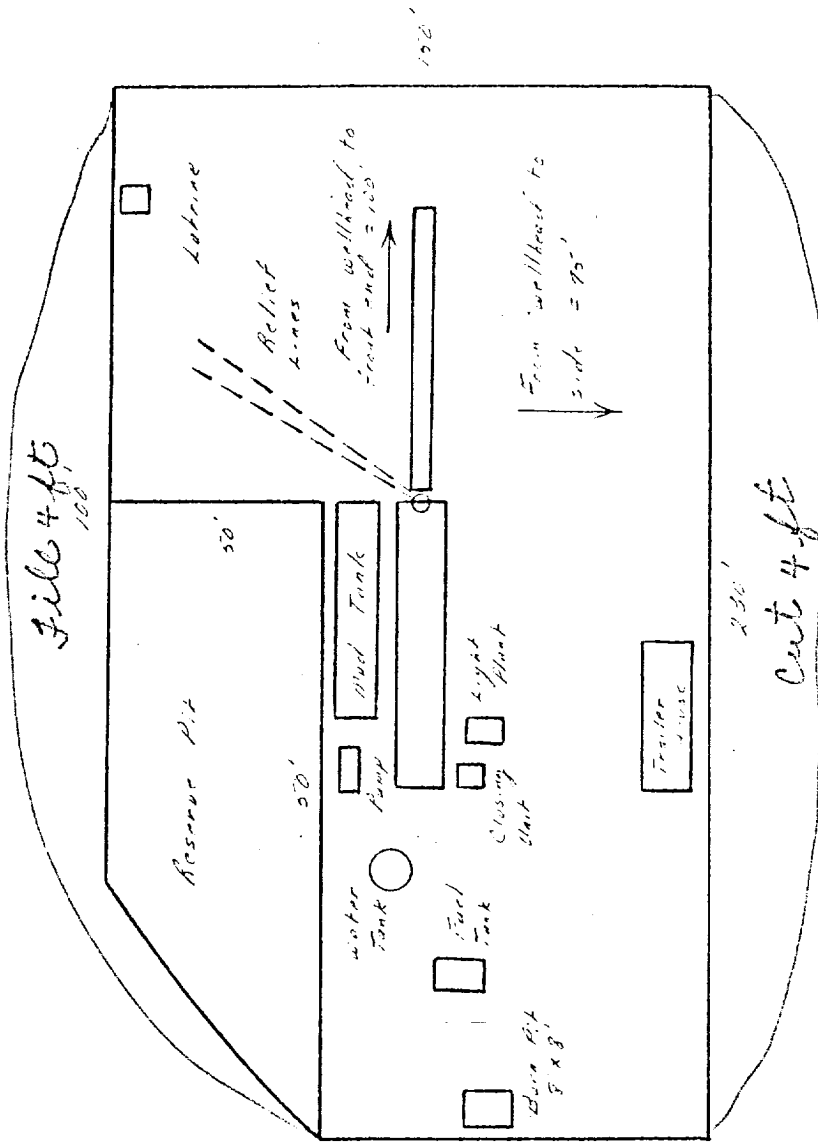
D. Wellhead Equipment: Larkin wellhead (fig. 75)

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.

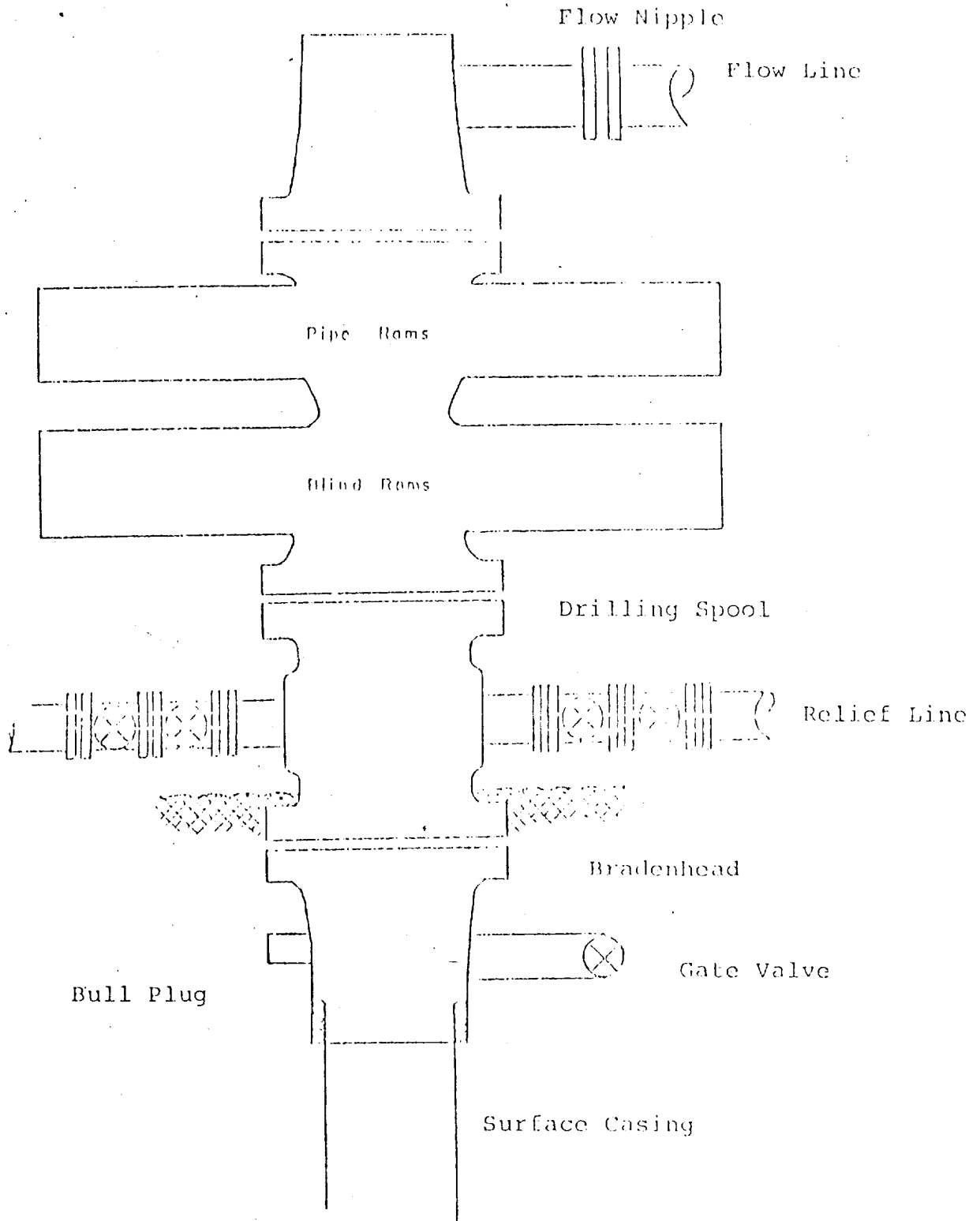
2 7/8" production - 315 sks. 65/35 Class "B" Poz with 12% gel and 15.52 gallons water per sack followed by 50 sks. Class "B" neat cement (569cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs

El Paso Natural Gas Company  
 Typical Location Plot for Pictured Chieft's Well



Scale: 1/4" = 20'

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



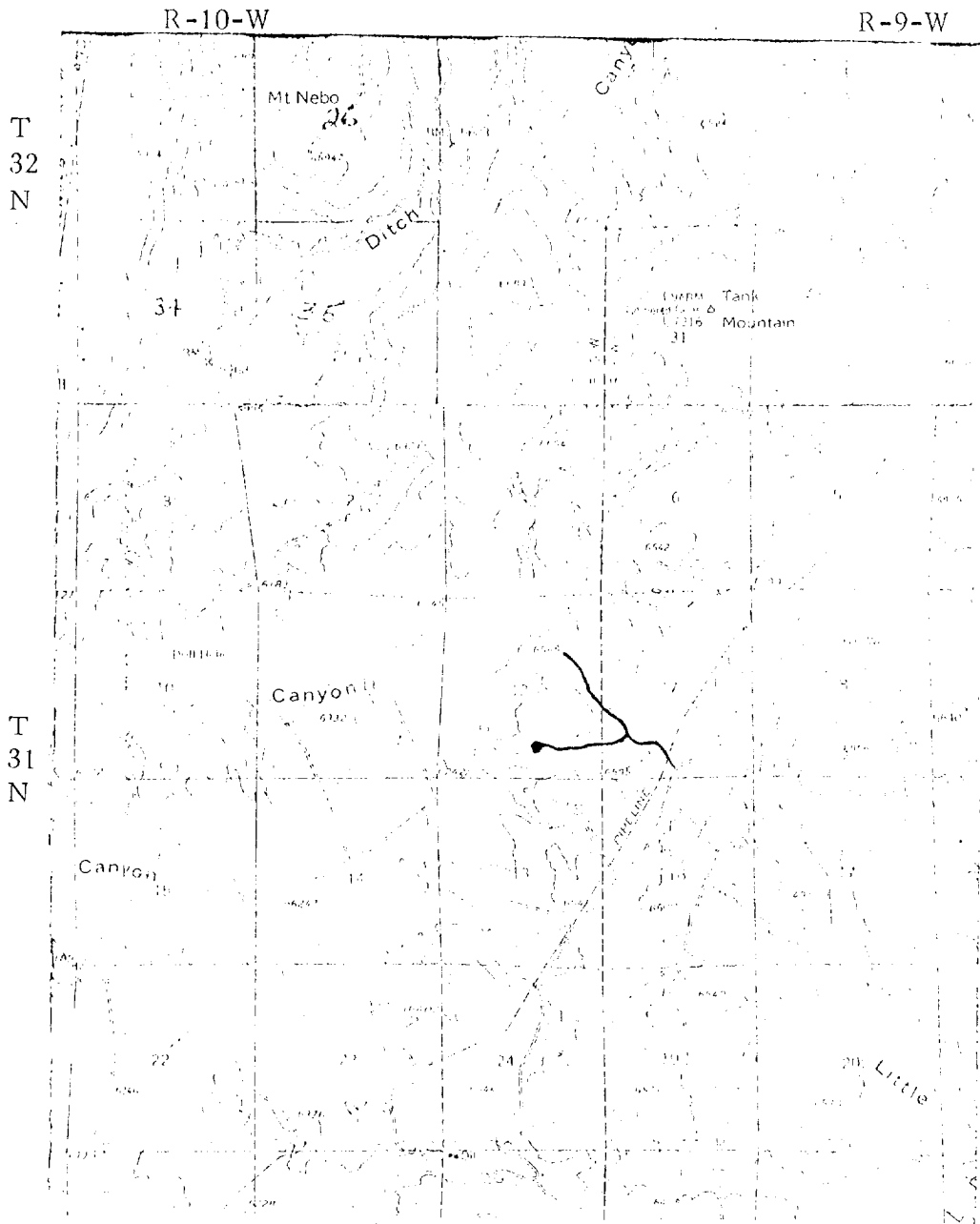
8" Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure



EL PASO NATURAL GAS COMPANY

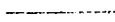
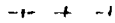
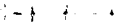

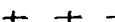

San Juan 32-9 Unit #93

SE 12-31-10



MAP #1

LEGEND

- EXISTENT ROADS 
- EXISTING INTERSECTIONS 
- EXISTING ROAD INTERSECTIONS 
- PROPOSED ROAD 
- PROPOSED INTERSECTIONS 
- PROPOSED ROAD INTERSECTIONS 

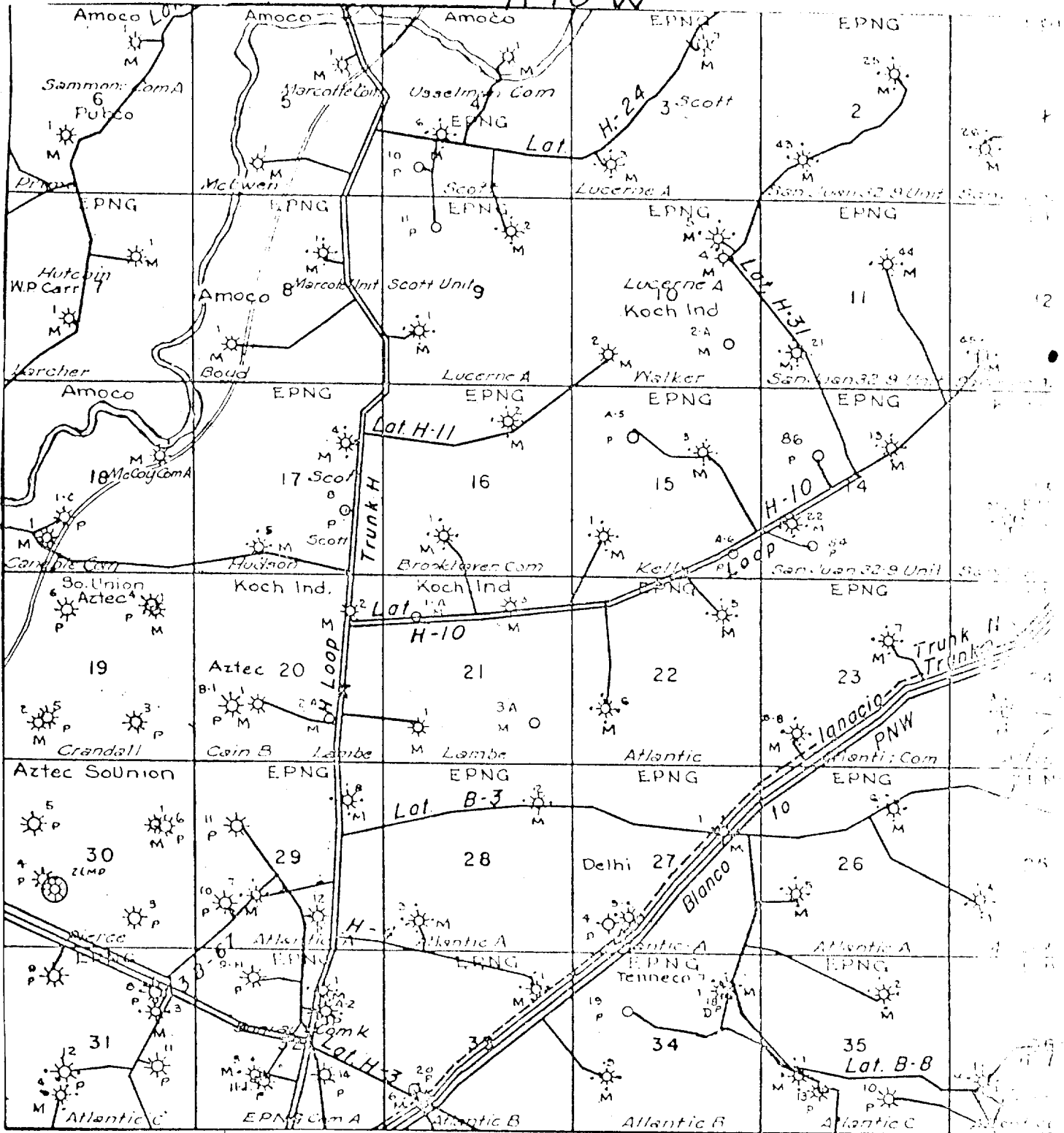
EL PASO NATURAL GAS COMPANY

San Juan 32-9 Unit #93

SE 12-31-10

R 10 W

T  
31  
N



MAP #2

Proposed Location