

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 079757A		
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 San Juan 29-4 Unit		
3. ADDRESS OF OPERATOR PO Box 289, Farmington, NM 87401			8. FARM OR LEASE NAME San Juan 29-4 Unit		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 1420'N, 2140'E At proposed prod. zone same			9. WELL NO. 24		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7 miles Northeast of Gobernador, NM			10. FIELD AND POOL, OR WILDCAT E. Blanco PC		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1420'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 8, T-29-N, R-4-W NMPM		
16. NO. OF ACRES IN LEASE unit			12. COUNTY OR PARISH Rio Arriba		
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE NM		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. .5 mile			19. PROPOSED DEPTH 4450'		
20. ROTARY OR CABLE TOOLS Rotary			21. APPROX. DATE WORK WILL START*		
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 7418' GL					

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#	200'	165 cu.ft.-circ.to surface
7 7/8"	4 1/2"	10.5#	4450'	387 cu.ft.-100% excess 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. DRILLING AND CEMENTING ARE SUBJECT TO THE REQUIREMENTS WITH ATTACHED "GENERAL REQUIREMENTS"

The location is unorthodox due to topography.

The NE/4 of Section 8 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 Al. G. Guisaco TITLE Drilling Clerk DATE 11-5-80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

NMOCC

*See Instructions On Reverse Side

APPROVED AS AMENDED
DATE AUG 11 1981 For JAMES F. SIMS DISTRICT ENGINEER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1

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

Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 29-4 UNIT (SF-079757-A)		Well No. 24
Unit Letter G	Section 8	Township 29N	Range 4W	County Rio Arriba	
Actual Footage Location of Well: 1420 feet from the North line and 2140 feet from the East line					
Ground Level Elev. 7418	Producing Formation Pictured Cliffs		Pool East 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 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.

NOTE:

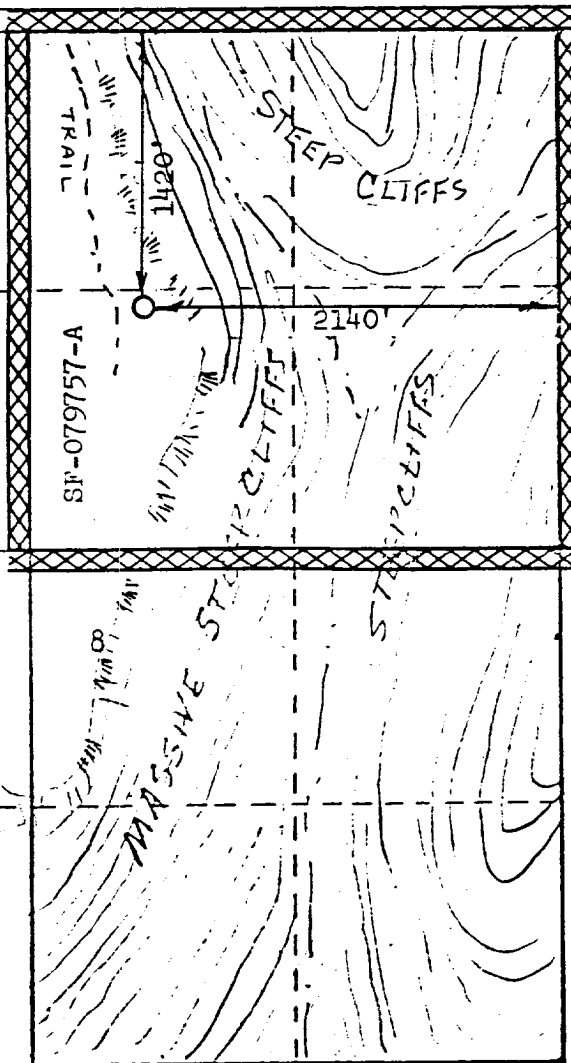
THIS PLAT IS REISSUED TO
SHOW MOVED LOCATION. 9-26-80

NOTE:

THIS PLAT IS REISSUED TO
SHOW CORRECTED ELEVATION.
9-30-80



Sec.



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

A. J. Brisco

Name

Drilling Clerk

Position

El Paso Natural Gas Co.

Company

November 5, 1980

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 17, 1980

Registered Professional Engineer
and Land Surveyor

Fred B. Kerr Jr.


Certificate No. 3950

3950

Multi-Point Surface Use Plan
San Juan 29-4 Unit #24

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 29-6 Water Well #1.
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,

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 with pinon, juniper, sage, oakbrush, and pine growing. Cattle, deer and elk are occasionally seen on the proposed project site.
12. Operator's Representative - D. R. Read, PO Box 289, 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.



L. A. Aimes
Project Drilling Engineer

Operations Plan
San Juan 29-4 Unit #24

I. Location: 1420'N, 2140'E, Section 8, T-29-N, R-4-W, Rio Arriba Co., NM

Field: E. Blanco PC

Elevation: 7418'GL

II. Geology:

A. Formation Tops:	Surface	San Jose	Pictured Cliffs	4110'
	Ojo Alamo	3600'	Lewis	4410'
	Kirtland	3715'	Total Depth	4450'
	Fruitland	3910'		

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

C. Coring: none

III. Drilling:

A. Mud Program: mud 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"	200'	8 5/8"	24.0# K-55
	7 7/8"	4450'	4 1/2"	10.5# K-55

B. Float Equipment: 8 5/8" surface casing - cement guide shoe

4 1/2" production casing - guide shoe and self-fill insert float valve on top of the shoe joint. Run 8 - 4 1/2" x 7 7/8" centralizers, one on each joint beginning with the shoe joint.

C. Tubing: 4450' of 1 1/4", EUE, 2.4# K-55 tubing

D. Wellhead Equipment: 8 5/8" x 4 1/2" 2000 psi wellhead with a 4 1/2" x 2 3/8" tubing head. 4 1/2" casing to be cut off 24" above csg. slips.

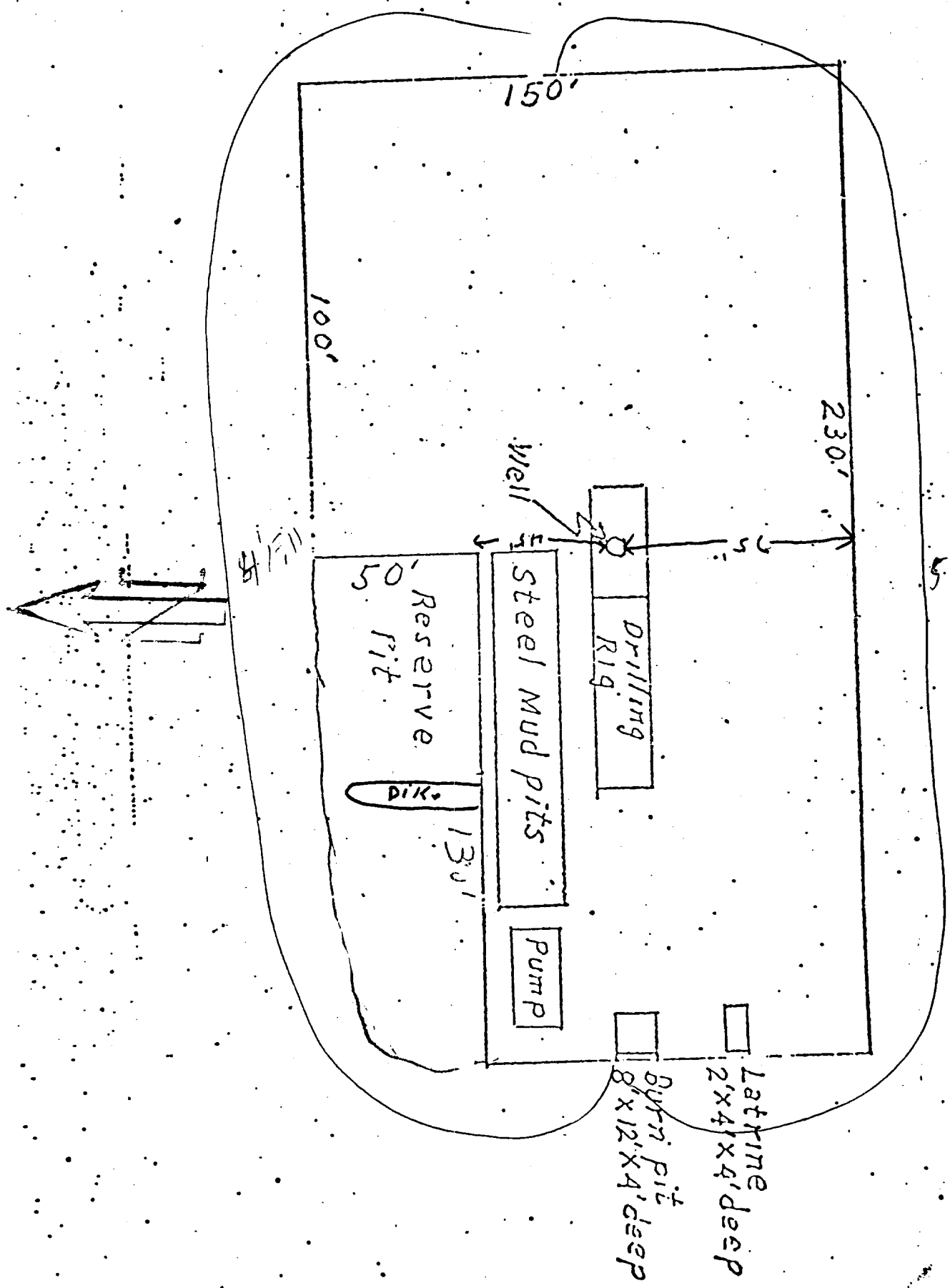
V. Cementing:

8 5/8" surface casing - 140 sks. Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (165 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing, wellhead and BOP to 600#/30 min.

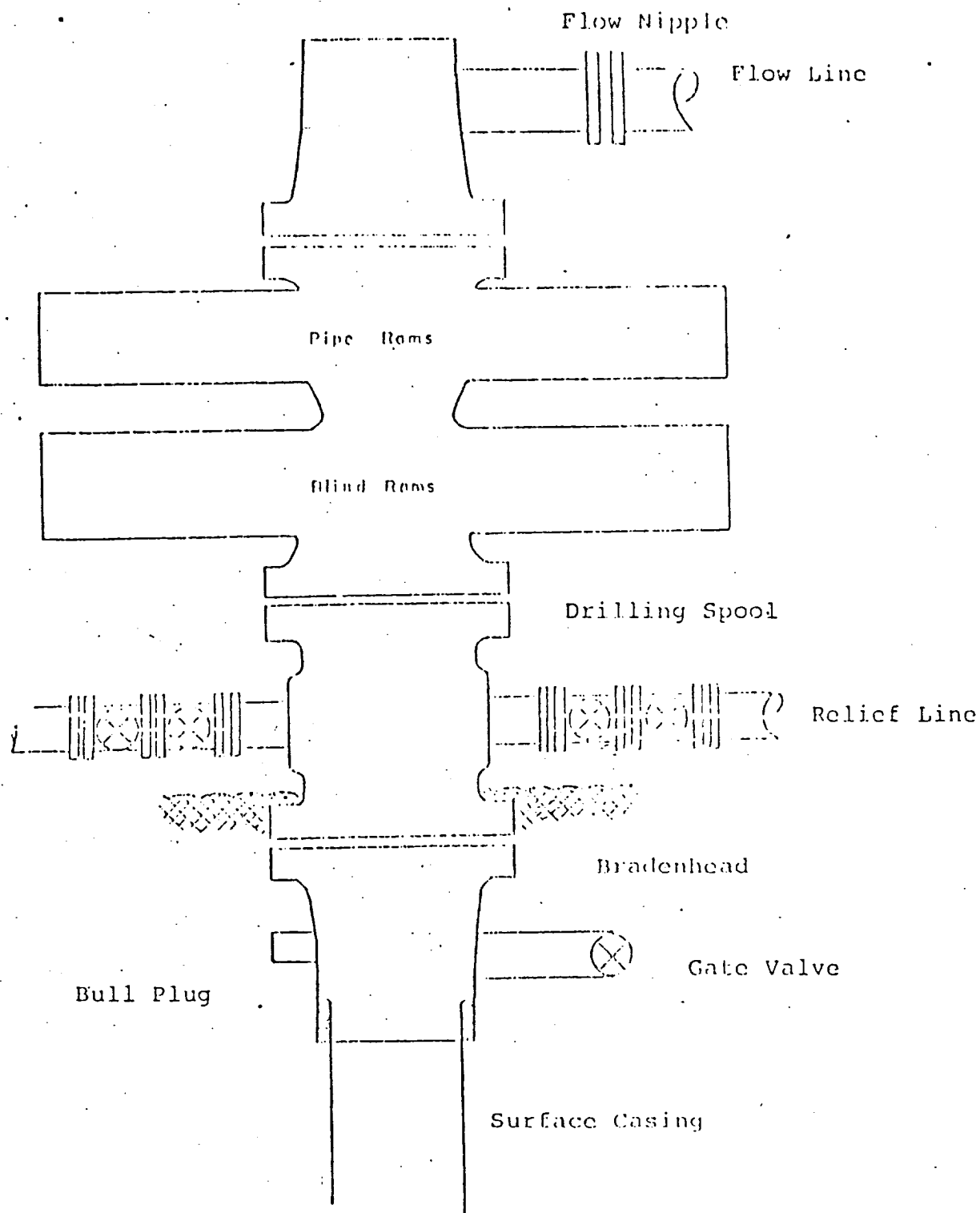
4 1/2" production casing - precede cement with 5 bbls. water. Cement with 181 sks. 65/35 Class "B" Poz with 6% gel and 8.3 gallons water/sk. followed by 75 sks. 50/50 Class "B" Poz with 2% gel (387 cu.ft. of slurry, 100% excess to cover Ojo Alamo). Spot 200 gallons 7 1/2% acetic acid on top of plugs. Run temperature survey after 12 hours.

PC check

5' cu

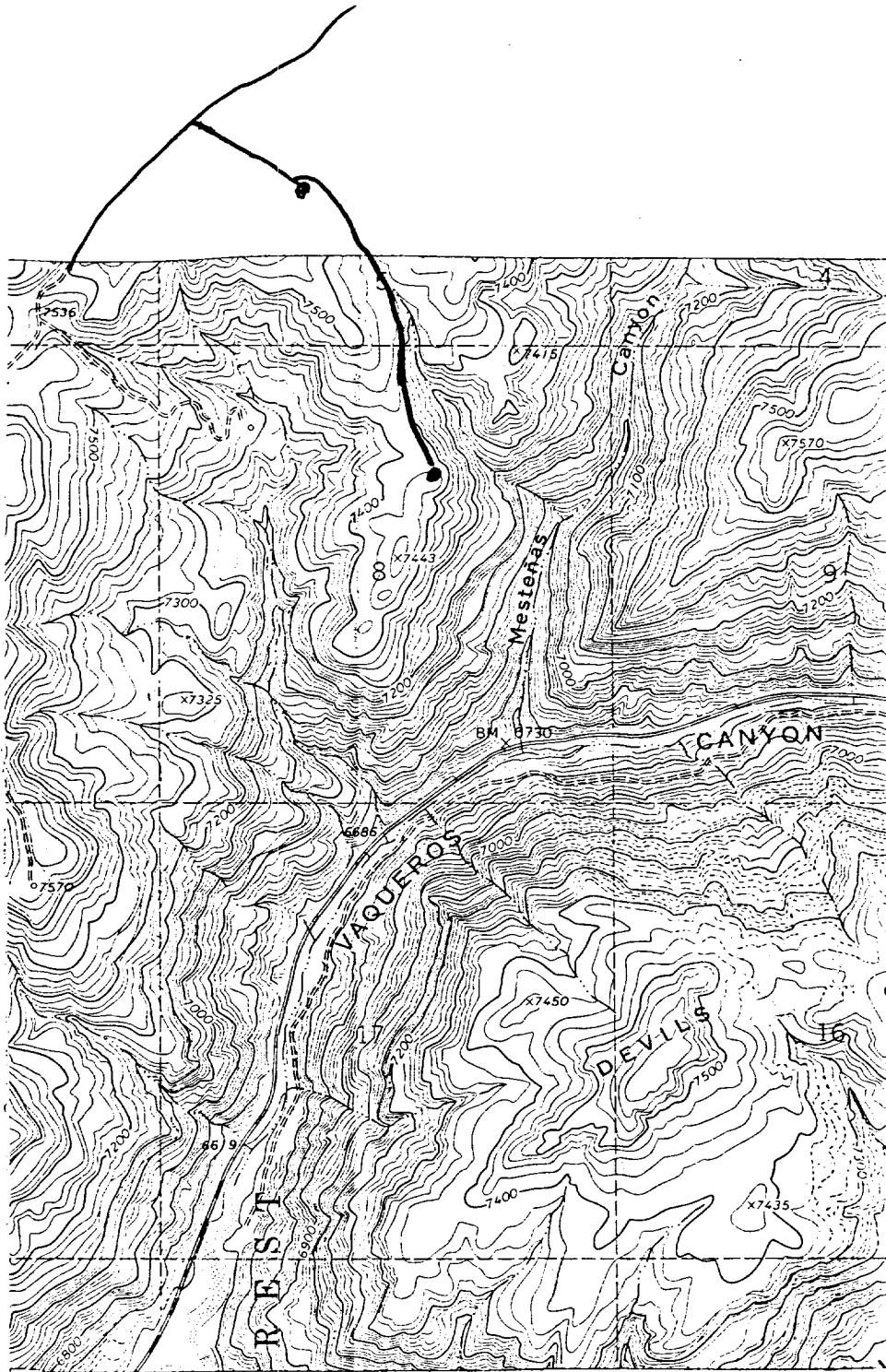


Typical Mud Drilled B.O.P. Installation
for Pictured Cliffs Well



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

El Paso Natural Gas Company
 San Juan 29-4 Unit #24
 NE 8-29-4

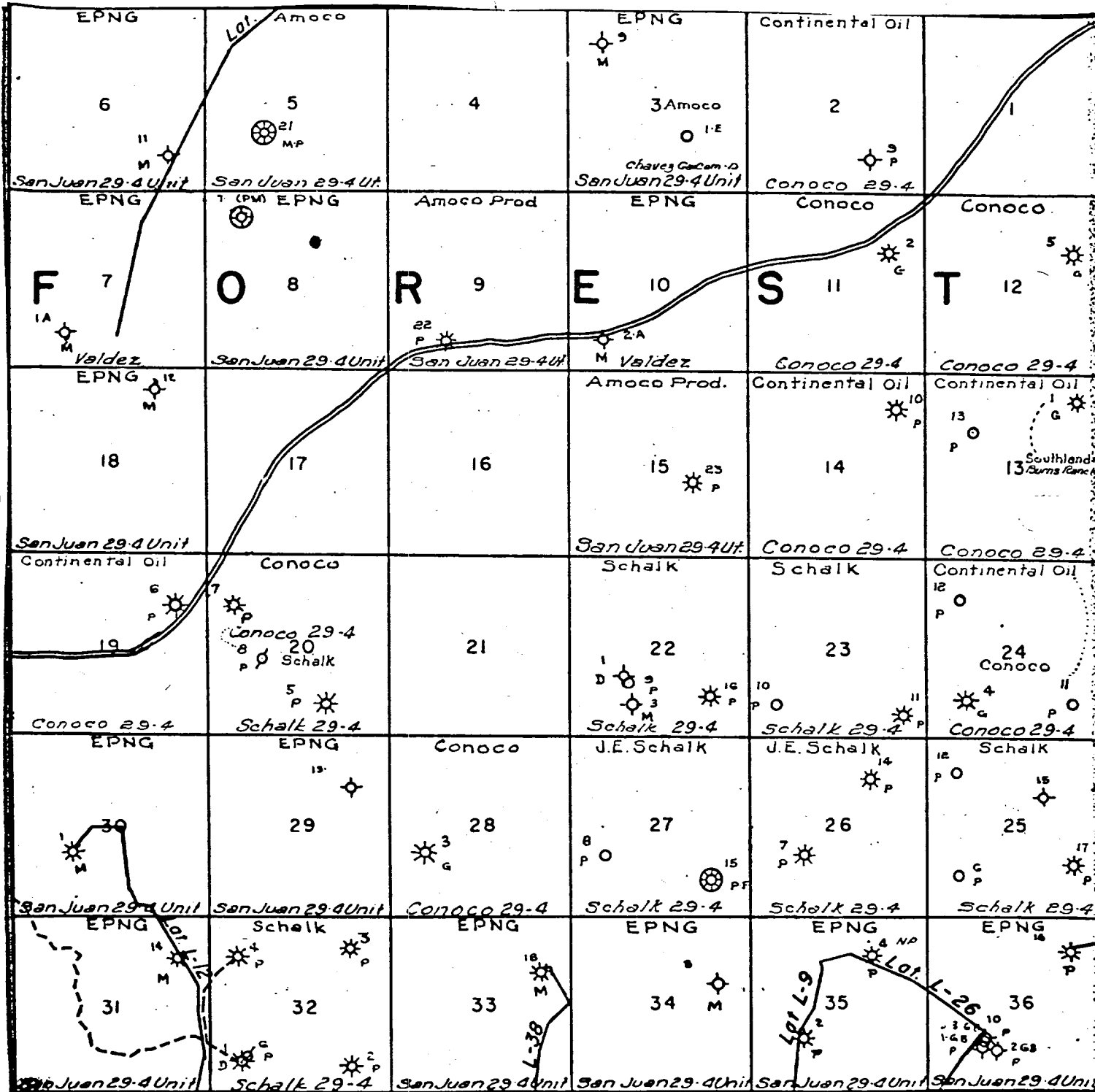


LEGEND OF RIGHT-OF-WAYS Map #1

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

El Paso Natural Gas Company
San Juan 29-4 Unit #24
NE 8-29-4

T
29
N



R-4-W