

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-039-22424

## 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 289, Farmington, NM 87401

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface

790'N, 1530'W

At proposed prod. zone

same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

5 miles south of Navajo City, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

790'

## 16. NO. OF ACRES IN LEASE

1920.04 Unit

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320.00 W/320

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

2000'

## 19. PROPOSED DEPTH

8086'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6841' GL

## 22. APPROX. DATE WORK WILL START\*

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48.0#	200'	278 cu.ft.circ.to surface
12 1/2"	9 5/8"	40.0#	3990'	604 cu.ft.cover Ojo Alamo
8 3/4"	7"	20.0#	3840-6365'	646 cu.ft.to circ. liner
6 1/4"	4 1/2"	10.5#&11.6#	6215-8086'	336 cu.ft.to circ. liner

Selectively perforate and sandwater fracture the Mesa Verde and Dakota formations.

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 W/2 of Section 7 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

*D. G. Lucas*

TITLE

Drilling Clerk

DATE

May 12, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*ch 3rd*

\*See Instructions On Reverse Side

NM000

5. LEASE DESIGNATION AND SERIAL NO.

SF 078503

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

San Juan 29-7 Unit

8. FARM OR LEASE NAME

San Juan 29-7 Unit

9. WELL NO.

114M

10. FIELD AND POOL, OR WILDCAT

Blanco Mesa Verde  
Basin Dakota11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREASec. 33, T-29-N, R-7-W  
NMPM

12. COUNTY OR PARISH

13. STATE

Rio Arriba

NM

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

Form C-102

Revised 10-1-78

ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 29-7 UNIT (SF-078503)		Well No. 114M
Unit Letter C	Section 33	Township 29N	Range 7W	County Rio Arriba	
Actual Footage Location of Well: 790 feet from the North line and 1530 feet from the West line					
Ground Level Elev. 6841	Producing Formation MESA VERDE - DAKOTA		Pool BLANCO MESA VERDE BASIN DAKOTA	Dedicated Acreage: 320.00 & 320.00 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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  
AT REQUEST OF LAND  
DEPARTMENT. 5-19-80

## CERTIFICATION

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

*A. J. Guiss*

Name

Drilling Clerk

Position

El Paso Natural Gas Co.

Company

May 30, 1980

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

May 11, 1980

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kern*  
Fred B. Kern

Certificate No.

3950

7.90N 1530W

**El Paso** NATURAL GAS  
COMPANY

P.O. BOX 1000  
FARMINGTON, N.M. 87401-0100  
PHONE (505) 425-2041

Well Name S.J. 29-7 Unit # 114M

Location NW 33 29-7

Formation MV-DK

We, the undersigned, have inspected this location and road.

U. S. Forest Service

Date

Darby Ford  
Archaeologist

Date

Bureau of Indian Affairs Representative

Date

Bob By Mark  
Bureau of Land Management Representative

Date

Andrew I. Atum  
U. S. Geological Survey Representative - AGREES

Date

TO THE FOOTAGE LOCATION OF THIS WELL.

REASON:

Seed Mixture:

Equipment Color:

Road and Row: (Same) or (Separate)

Remarks:

C.C. to Dave Vilvin  
Earl Mealer  
John Ahim

Multi-Point Surface Use Plan  
San Juan 29-7 Unit #114M

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 Ridge Road 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 rock and rolling hills with sage, pinon, and juniper growing. Deer and 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. R. Read  
Project Drilling Engineer

May 30, 1980

Operations Plan  
San Juan 29-7 Unit #114-M

I. Location: 790'N, 1530'W, Sec. 33, T-29-N, R-7-W, Rio Arriba, NM

Field: Blanco Mesa Verde & Basin Dakota Elevation: 6841 GL

II. Geology:

A. Formation Tops:	Surface	San Jose	Menefee	5260'
	Ojo Alamo	2720'	Point Lookout	5765'
	Kirtland	2810'	Gallup	6770'
	Fruitland	3305'	Greenhorn	7737'
	Pic.Cliffs	3580'	Graneros	7791'
	Lewis	3790'	Dakota	7927'
	Mesa Verde	5210'	Total Depth	8086'

B. Logging Program: GR-Ind. and GR-Density at 6365' and Total Depth.

C. Coring Program: none

D. Natural Gauges: 5200', 5250', 5755', 6365', 6760', 7725', 7780', 7915',  
and at  
Total Depth. Also gauge any noticeable increase in gas. Record  
all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3990'. Gas from intermediate  
casing to Total Depth.

IV. Materials:

A. Casing Program:	Hole Size	Depth	Csg.Size	Wt.&Grade
	17 1/2"	200'	13 3/8"	48.0# H-40
	12 1/4"	3990'	9 5/8"	40.0# N-80
	8 3/4"	3840'-6365'	7"	23.0# N-80
	6 1/4"	6215'-8086'	4 1/2"	11.6# K-55

B. Float Equipment: 13 3/8" surface casing - guide shoe.

9 5/8" intermediate casing - guide shoe and differential automatic  
fill up float collar. Five stabilizers, one each on every other  
joint above shoe. Run float collar two joints above shoe.

7" liner - 7" liner hanger with neoprene packoff. Geyser shoe  
and flapper type float collar. Four centralizers, one each on  
every other joint above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Geyser  
shoe and flapper type float collar.

Operations Plan - San Juan 29-7 Unit #114-M

C. Tubing: 8086 of 2 3/8", 4.7#, J-55 EUE 8rd tubing open ended on bottom with common pump seating nipple and pump out plug one joint above bottom.

6365 of 1 1/2", 2.9#, J-55 EUE 10rd tubing with a perf sub and common pump seating nipple one joint above bottom. Bottom joint to be bull plugged.

D. Wellhead Equipment: 12" 3000 x 13 3/8" casing head. 12" 3000 x 10" 3000 dual xmas tree.

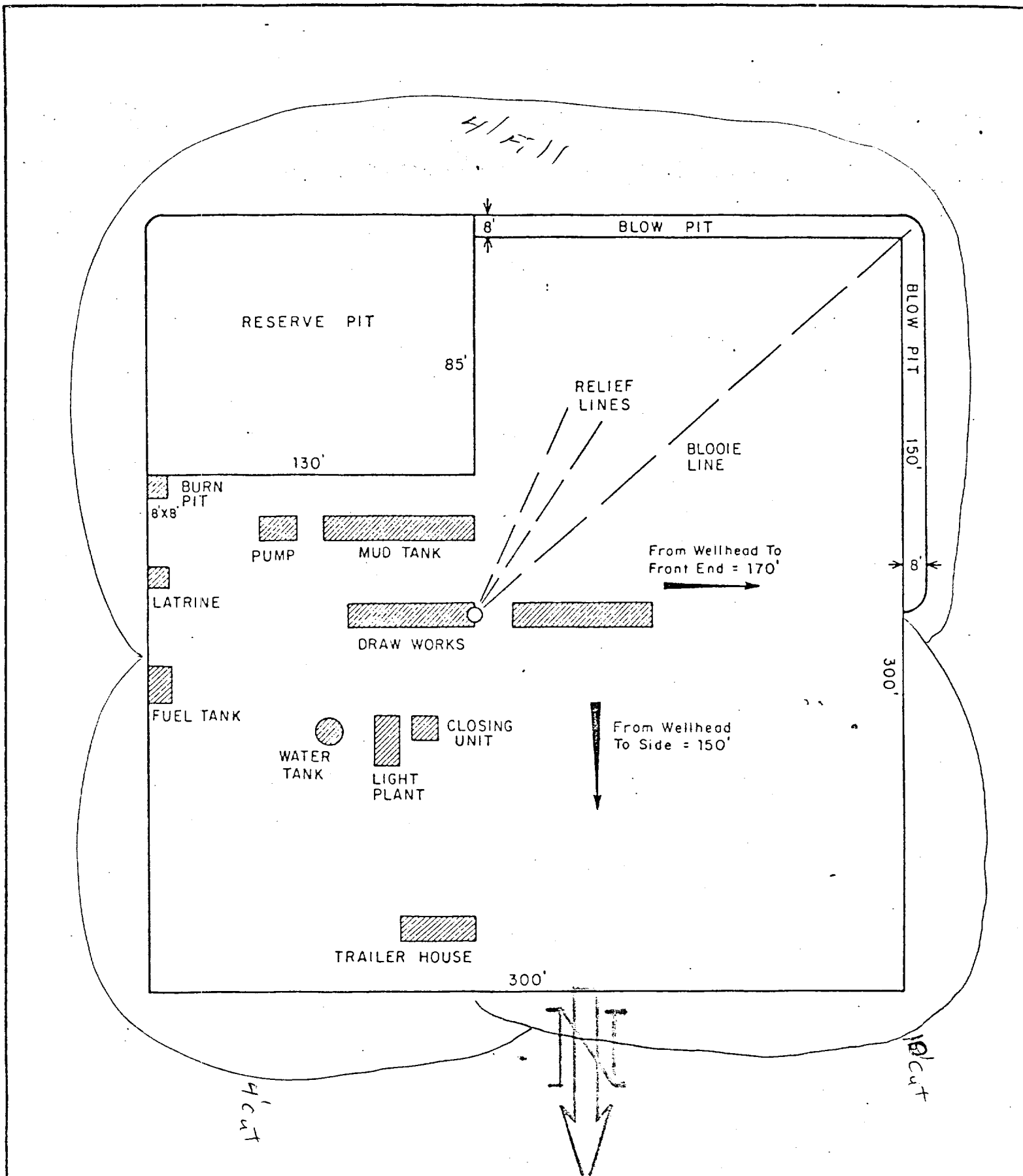
V. Cementing:

13 3/8" surface casing - use 236 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (278 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

9 5/8" intermediate casing - use 300 sks. 65/35 Class "B" Poz with 6% gel, 2% calcium chloride and 8.3 gallons water per sack followed by 100 sks. Class "B" neat with 2% calcium chloride (604 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

7" liner - precede cement with 30 bbls. gel water (3 sks. gel). Cement with 465 sks. 50/50 Class "B" Poz with 2% gel, 6.25# gilsonite, 1/4# flocele and 0.6% Halad-9 (or equivalent fluid loss additive) (646 cu.ft. of slurry, 70% excess to circulate liner). WOC 12 hours. Test casing to 1200#/30 minutes.

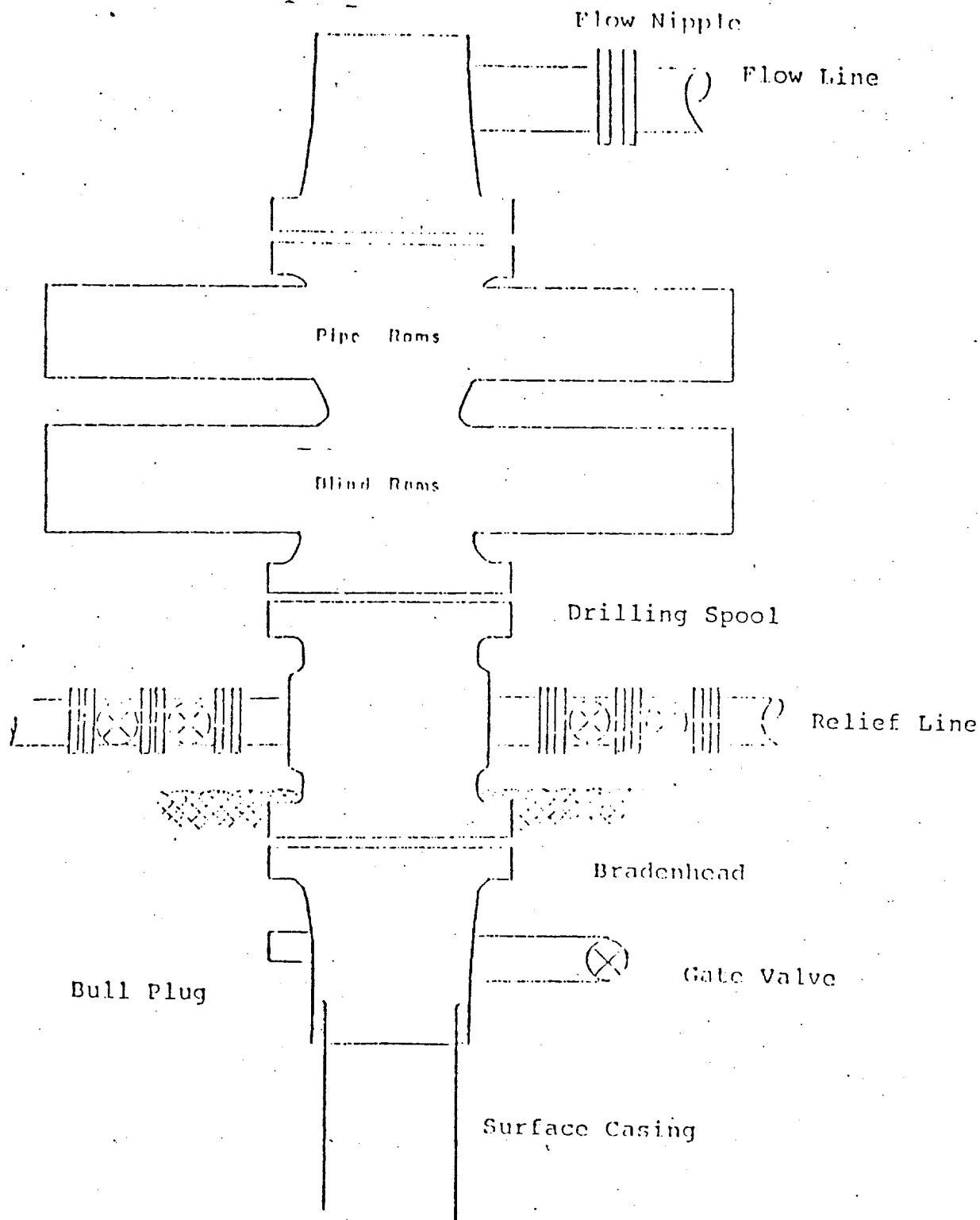
4 1/2" liner - precede cement with 40 bbls. gel water (4 sks. gel). Cement with 100 sks. Class "B" cement with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7 followed by 100 sks. Class "B" cement with 1/4# fine tuf-plug per sack and 0.4% HR-7 (336 cu.ft. of slurry, 70% excess to fill to circulate liner). WOC 18 hours.



PRT.			SEP.	DATE	TO	W.O.	ENG. REC.	DATE	<p><b>El Paso Natural Gas Company</b></p> <p>TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE</p> <p>SCALE: 1" = 50'</p> <p>DWG. NO.</p> <p>RE</p>
PRINT RECORD						W.O.	DRAWN J.L.H. 8-16-78 CHECKED CHECKED PROJ. APP DESIGN		



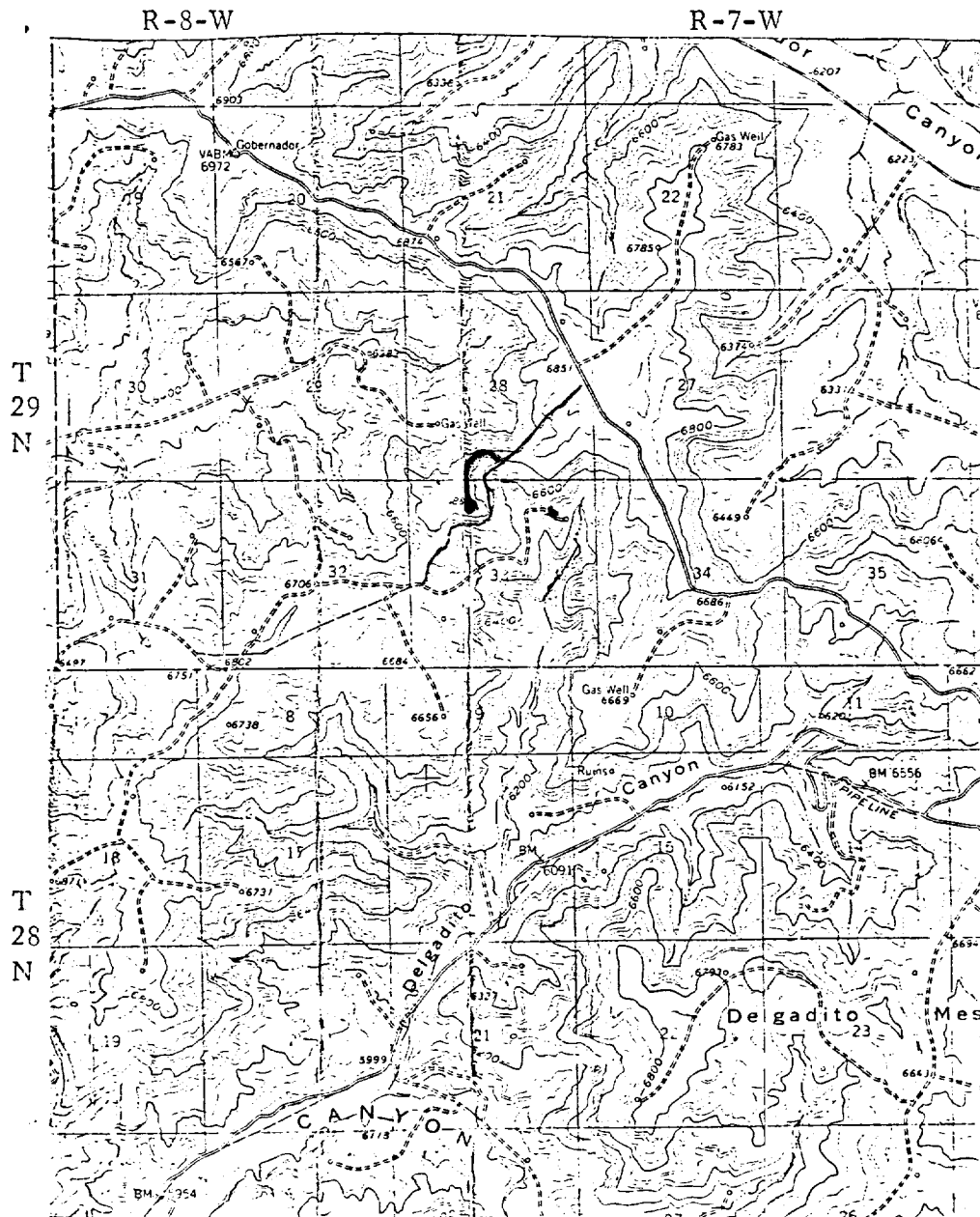
# Typical B.O.P. Installation for Dakota Well



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  
a blowie line.

EL PASO NATURAL GAS COMPANY  
 San Juan 29-7 Unit #114M (MD)  
 NW 33-29-7



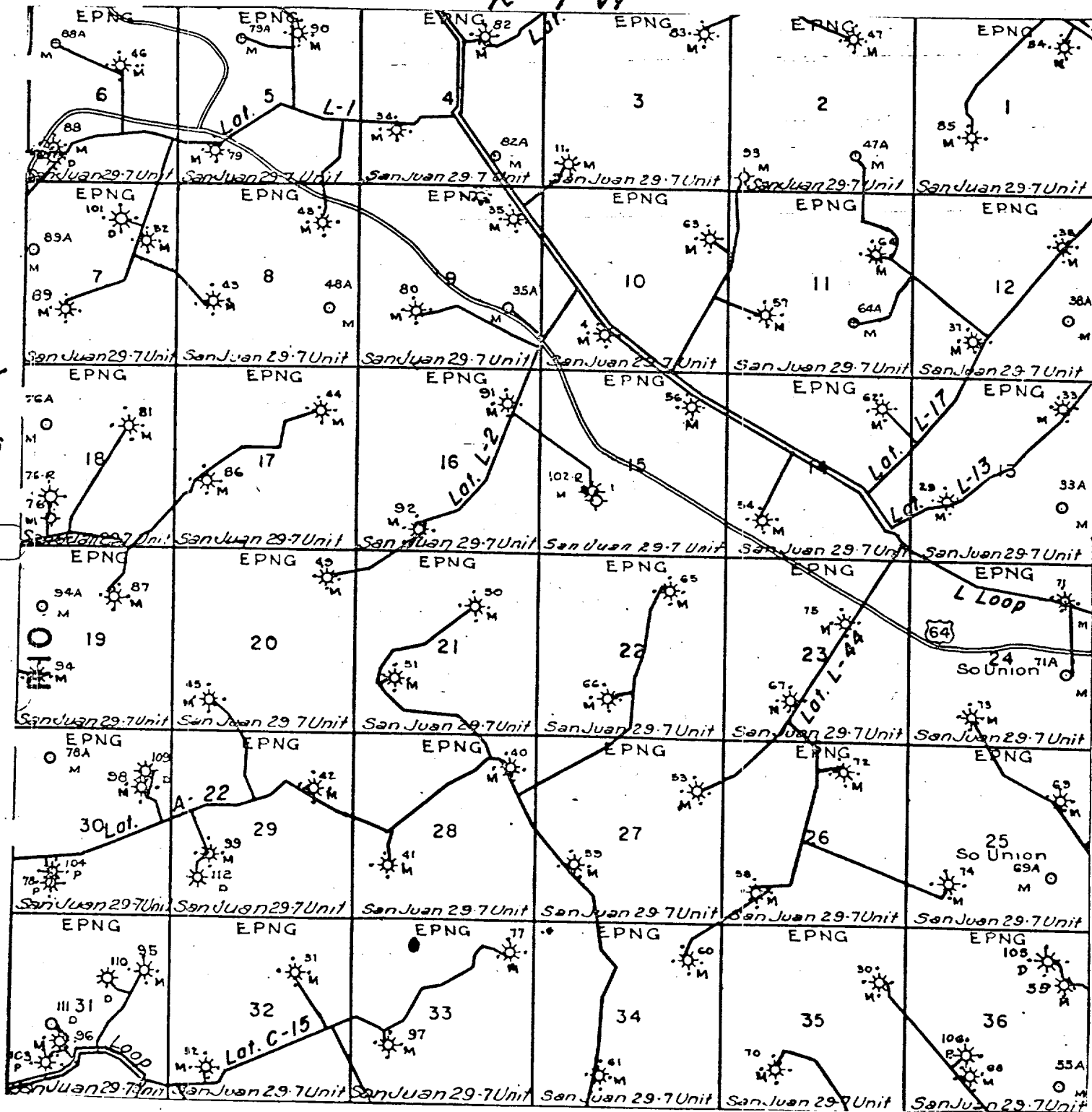
MAP #1

LEGEND OF RIGHT-OF-WAYS

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

NW 33-29-7

R-7-W

Proposed Location ☐