Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-22401

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]

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: 1850'S, 1000'E
At proposed prod. zone: same

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APR 24 1980
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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.: 110M

10. FIELD AND POOL, OR WILDCAT: Blanco Mesa Verde / Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec.31,T-29-N,R-7-W NMPM

12. COUNTY OR PARISH: Rio Arriba | 13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5.5 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): 1000'

16. NO. OF ACRES IN LEASE: unit

17. NO. OF ACRES ASSIGNED TO THIS WELL: E/320 & W/320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1800'

19. PROPOSED DEPTH: 7848'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6648'GR

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 1/4"	9 5/8"	40.0#	3735'	669 cu.ft.to cover Ojo Alamo
8 3/4"	7"	23.0#	3585-6123'	667 cu.ft. to circ. liner
6 1/4"	4 1/2"	11.6#	5973-7848'	327 cu.ft. to circ. liner

Selectively perforate and sandwater fracture the Mesa Verde and Dakota 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 E/2 of Section 31 is dedicated to this well.

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JUN 3 1980
OIL CON. DIV.
DIST. 3

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 Peggy Bradfield TITLE Drilling Clerk DATE April 23, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED
MAY 29 1980
JAMES F. SIMS
DISTRICT ENGINEER

NMOCC

*See Instructions On Reverse Side

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

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

Operator	Lease	Well No.
EL PASO NATURAL GAS COMPANY	SAN JUAN 29-7 UNIT (SF-078503)	110-Y E

Unit Letter	Section	Township	Range	County
I	31	29N	7W	Rio Arriba

Actual Footage Location of Well:
1850 feet from the South line and 1000 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6648	Mesa Verde-Dakota	Blanco Mesa Verde Basin Dakota	320.00 & 320.00 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

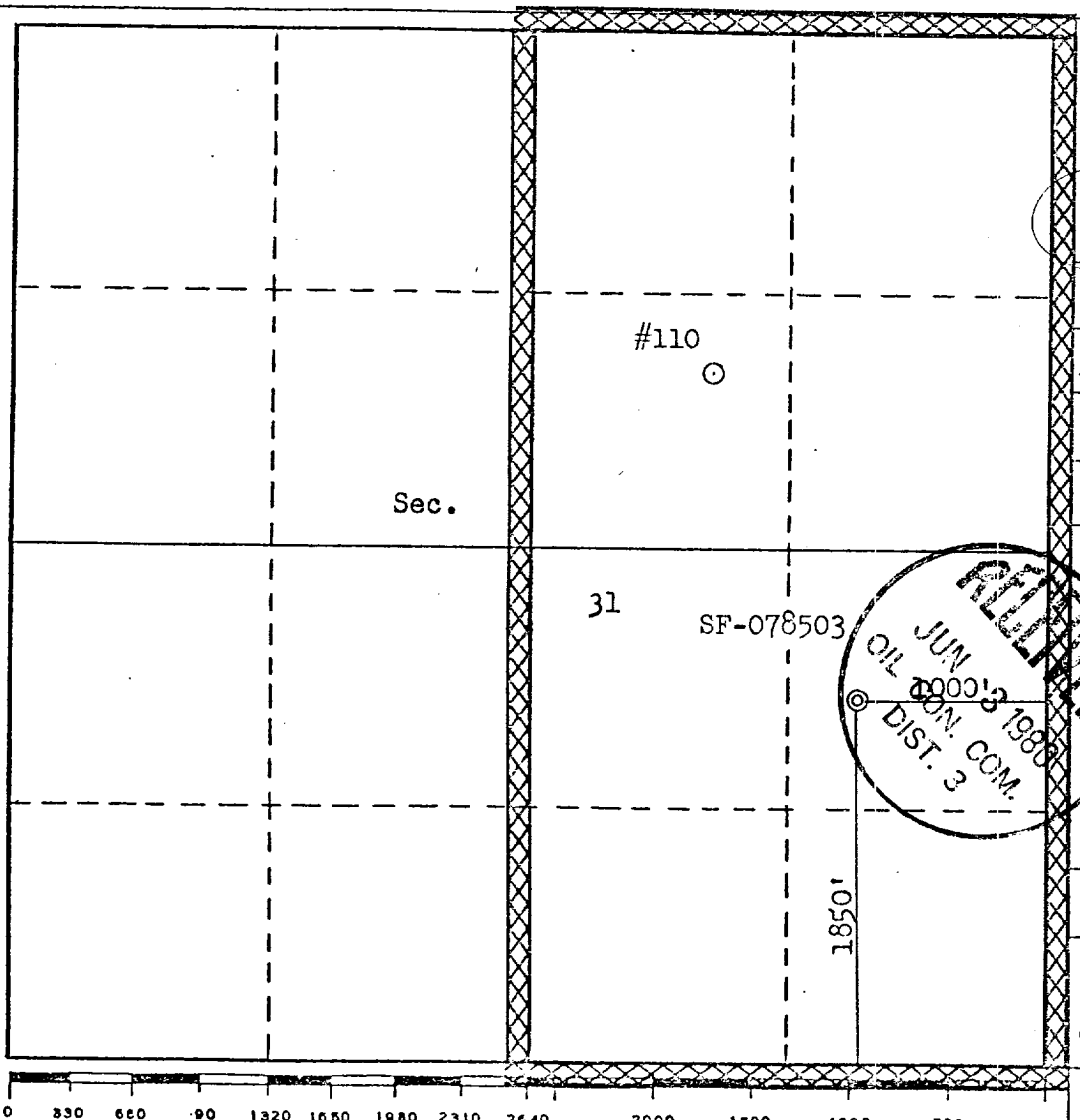
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.



RECEIVED
JUN 5 1980
OIL CON. COM.
DIST. 3

CERTIFICATION

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

Peggy Bradfield

Name: Drilling Clerk

Position: ElPaso Natural Gas Co.

Company: April 23, 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: March 13, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

1850 S 1000 W

EL PASO NATURAL GAS COMPANY

P. O. BOX [illegible]
FARMINGTON, NEW MEXICO 87401
PHONE: [illegible]

Well Name S. J. 29-7 Unit II 110 M

Location SE 31 29-7

Formation MV - DK

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

U. S. Forest Service	Date
Archaeologist	Date
Bureau of Indian Affairs Representative	Date
Bureau of Land Management Representative	Date 4/14/80
Barbara L. Conklin	4/14/80
U. S. Geological Survey Representative - AGREES TO THE FOOTAGE LOCATION OF THIS WELL.	Date

REASON:

Seed Mixture: II or I

Equipment Color: Brown

Road and Row: (Same) or (Separate)

Remarks:

C.C. to Dave Vilvin
Earl Mealer
John Ahlm

El Paso EXPLORATION COMPANY

P. O. BOX 289
FARMINGTON, NEW MEXICO 87401

PHONE: 505-325-2841

Multi-Point Surface Use Plan
san Juan 29-7 Unit #110M

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 rolling hills with sage, pinon, and juniper growing. Cattle and deer 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.

Don Read

D. R. Read
Project Drilling Engineer

Operations Plan
San Juan 29-7 Unit #110M

I. Location: 1850'S, 1000'E, Section 31, T-29-N, R-7-W, Rio Arriba County, NM

Field: Blanco Mesa Verde & Basin Dakota Elevation: 6648'GR

II. Geology:

A. Formation Tops:

Surface	San Jose	Menefee	5027'
Ojo Alamo	2390'	Point Lookout	5523'
Kirtland	2500'	Gallup	6630'
Fruitland	3039'	Greenhorn	7497'
Pic.Cliffs	3316'	Graneros	7553'
Lewis	3535'	Dakota	7690'
Mesa Verde	4955'	Total Depth	7848'

B. Logging Program: GR-Ind. and GR-Density at 6123' and Total Depth.

C. Coring Program: none

D. Natural Gauges: 4945',5015',5510',6125',6620',7485',7545',7680' 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 3735'. 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"	3735'	9 5/8"	40.0# N-80
8 3/4"	3585-6123'	7"	23.0# N-80
6 1/4"	5973-7848'	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.

C. Tubing: 7848' 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.

5973' 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:

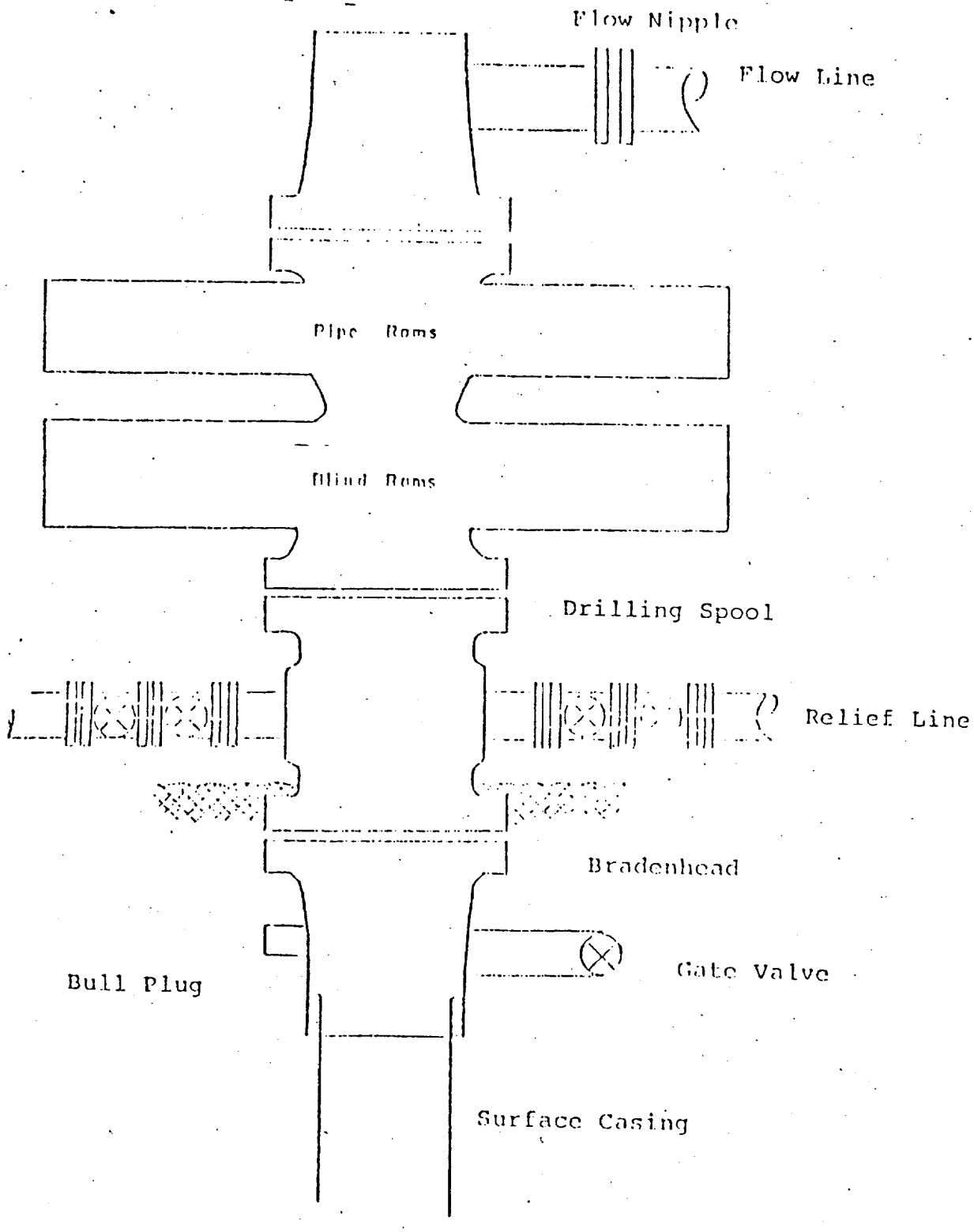
13 3/8" surface casing - use 236 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (278 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

9 5/8" intermediate casing - use 340 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 (669 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 480 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) (667 cu.ft. of slurry, 70% excess to circulate liner). WOC 12 hours. Test casing to 1200#/30 minutes.

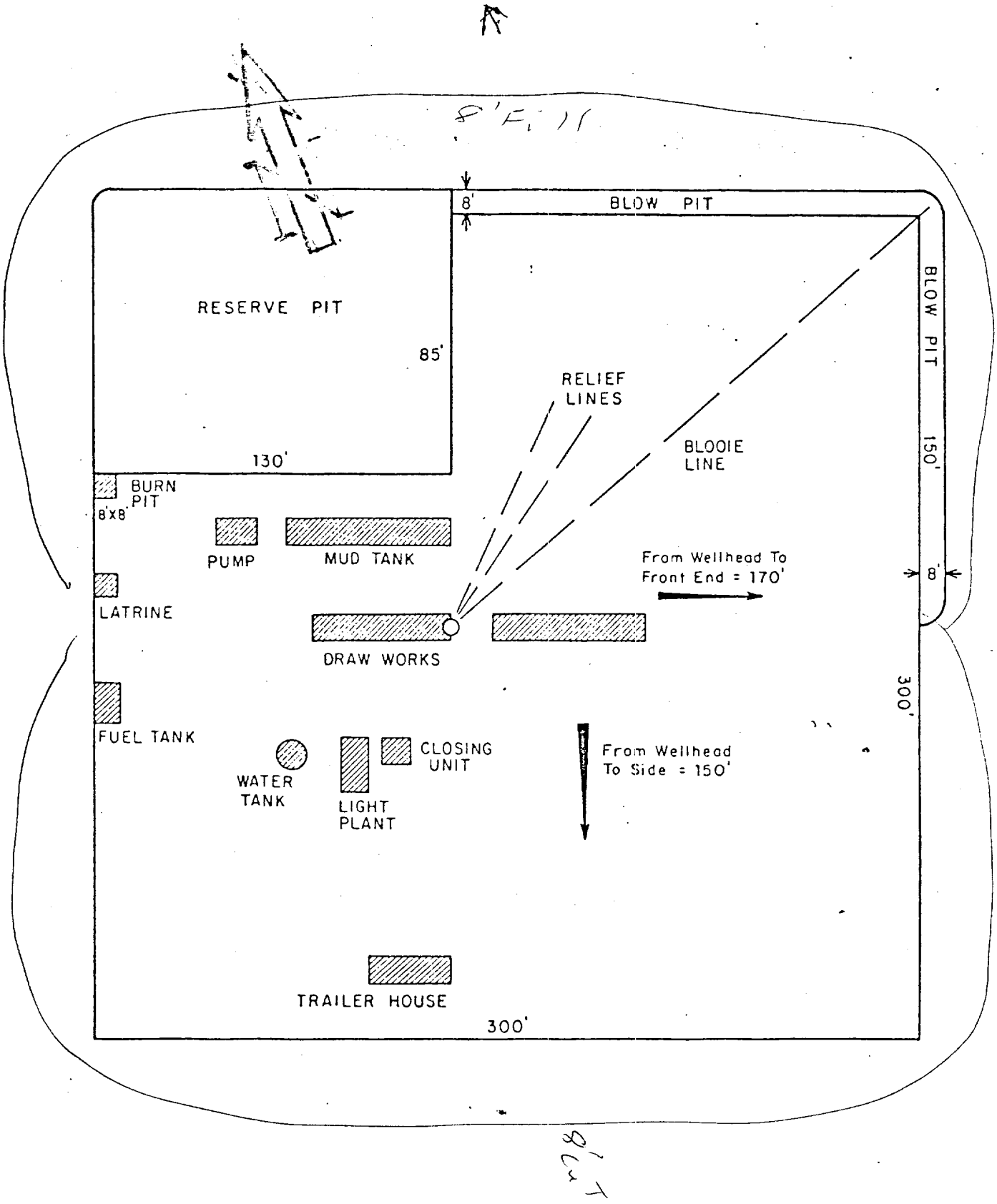
4 1/2" liner - precede cement with 40 bbls. gel water (4 sks. gel). Cement with 96 sks. Class "B" cement with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7 followed by 100 sks. Class "B" cement with 1/4# fine tuf-plug per sack and 0.4% HR-7 (327 cu.ft. of slurry, 70% excess to fill to circulate liner). WOC 18 hours.

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.



PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. REC.		DATE
DRAWN	J.L.H	8-16-78
CHECKED		
CHECKED		
PROJ. APP.		
DESIGN		

W.O.

El Paso Natural Gas Company

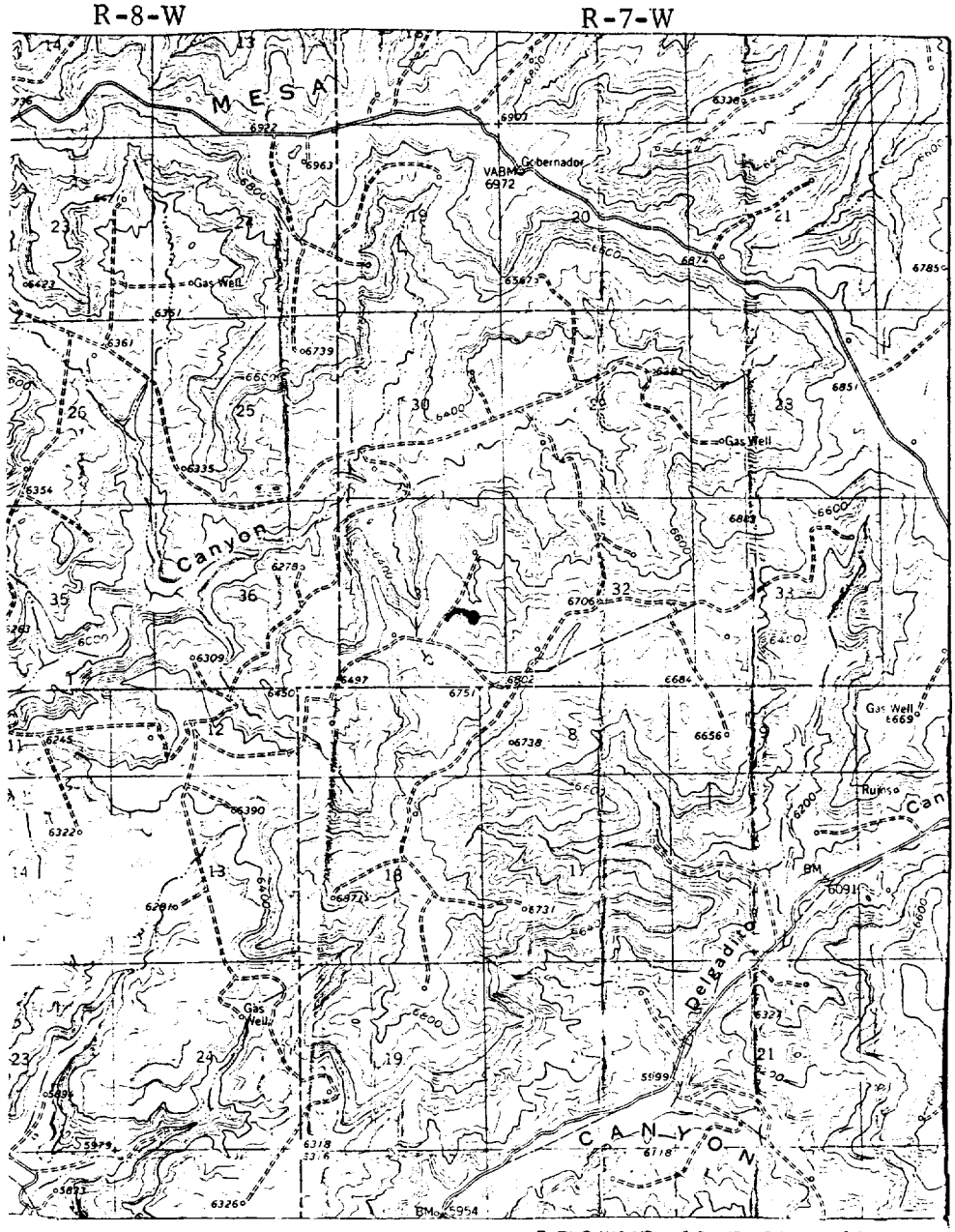
TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE

SCALE: 1" = 50'

DWG. NO.

RE

EL PASO NATURAL GAS COMPANY
SAN JUAN 29-7 UNIT #110M (MD)
SE 31-29-7

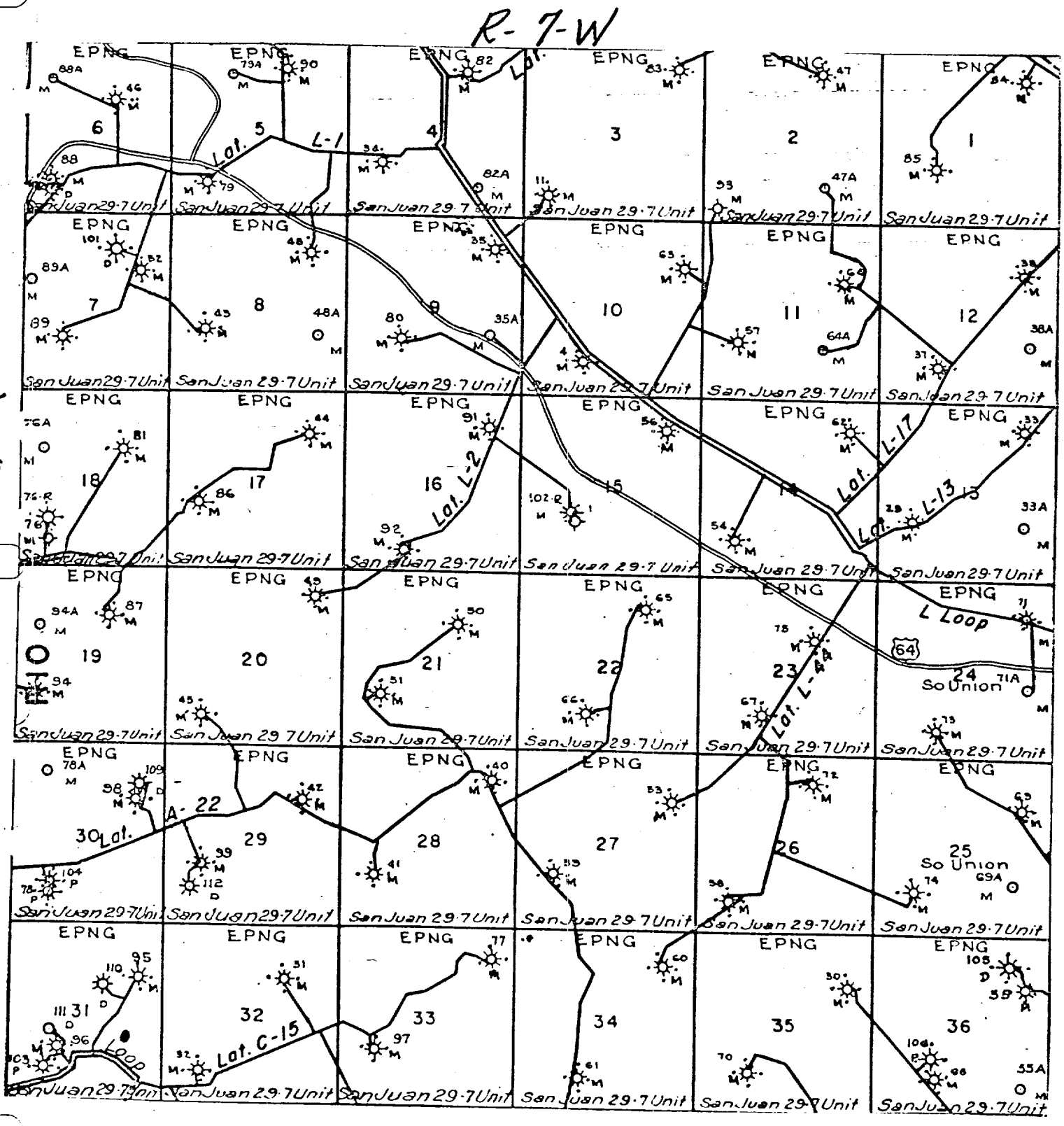


MAP #1

LEGEND OF RIGHT-OF-WAYS

EXISTING ROADS
EXISTING PIPELINES
EXISTING ROAD & PIPELINE
PROPOSED ROADS
PROPOSED PIPELINES
PROPOSED ROAD & PIPELINE

EL PASO NATURAL GAS COMPANY
San Juan 29-7 Unit #110 M (MD)
SE 31-29-7



MAP #2

Proposed Location ●