

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

800'S, 1560'E

At proposed prod. zone

same

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

8 miles South of Gobernador, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

880

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2640'

19. PROPOSED DEPTH

8605'

20. ROTARY OR CABLE TOOLS

Rotary

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

7368' 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'	276 cu.ft.circ.to surface
12 1/2"	9 5/8"	40.0#	4565'	444 cu.ft.cover Ojo Alamo
8 3/4"	7"	23.0#	4415-6955'	649 cu.ft.to circ. liner
6 1/4"	4 1/2"	11.6#	6805-8605'	313 cu.ft.to circ. liner

This action is subject to administrative
appeal pursuant to 25 C.F.R. 280.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.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

The S/2 of Section 10 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. Duiss

TITLE

Drilling Clerk

DATE

July 22, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

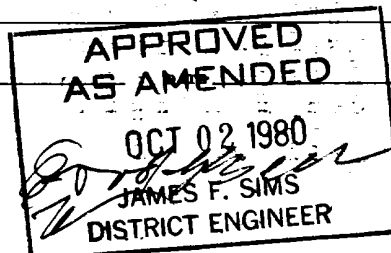
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

NMCCC



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

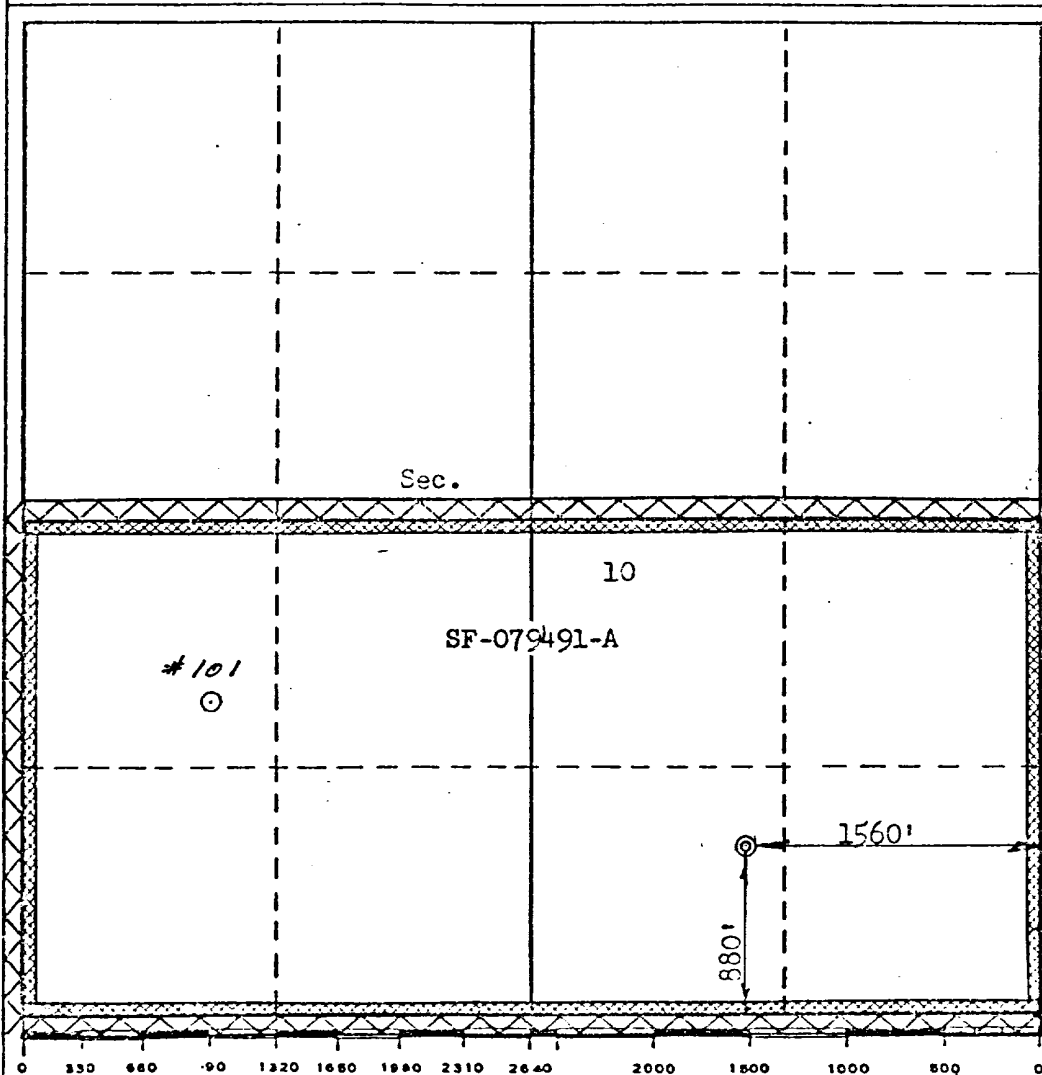
Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 27-5 UNIT (SF-079491-A)		Well No. 101E
Unit Letter 0	Section 10	Township 27N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 880 feet from the South line and 1560 feet from the East line					
Ground Level Elev. 7368	Producing Formation 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 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.

A. G. Busco

Name
Drilling Clerk

Position
El Paso Natural Gas Co.

Company
July 22, 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
July 9, 1980

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.

3950

El Paso NATURAL GAS
COMPANY

P.O. BOX 1000
FARMINGTON, NEW MEXICO 87401
PHONE (505) 425-2241

Well Name S. J. 27-5 Unit #101 E
Location SE 10 27-5
Formation MV-DK

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

U. S. Forest Service
Ruth W. Anderson
Archaeologist

Date
7-14-80
Date

Bureau of Indian Affairs Representative
Rob Mank
Bureau of Land Management Representative

Date
7/14/80
Date

Barbara J. Conklin
U. S. Geological Survey Representative - AGREES
TO THE FOOTAGE LOCATION OF THIS WELL.

Date
7/14/80
Date

REASON:

Seed Mixture: I

Equipment Color: Brown

Road and Row: (Same) or (Separate)

Remarks:


12 Mile Tree North Side

C.C. to Dave Vilvin
Earl Mealer
John Ahlm

Multi-Point Surface Use Plan
San Juan 27-5 Unit #101E

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 27-5 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,
-

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, sage, billerbrush, mountain mahogany, and juniper growing. Cattle, deer and elk 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

Operations Plan - San Juan 27-5 Unit #101E

I. Location: 800'S, 1560'E, Section 10, T-27-N, R-5-W, Rio Arriba County, NM

Field: Blanco MV & Basin Dk

Elevation: 7368'GR

II. Geology:

A. Formation Tops:	Surface	San Jose	Menefee	6015'
	Ojo Alamo	3581'	Point Lookout	6354'
	Kirtland	3728'	Gallup	7585'
	Fruitland	3950'	Greenhorn	8293'
	Pic.Cliffs	4202'	Graneros	8353'
	Lewis	4368'	Dakota	8498'
	Mesa Verde	5870'	Total Depth	8605'

B. Logging Program: GR-Ind. and GR-Density at 6955' and TD.

C. Coring Program: none

D. Natural Gauges: 5860', 6005', 6345', 6955', 7575', 8280', 8340', 8470' 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 4565'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg.Size</u>	<u>Wt.&Grade</u>
	17 1/2"	200'	13 3/8"	48.0# H-40
	12 1/4"	4565'	9 5/8"	40.0# N-80
	8 3/4"	4415-6955'	7"	23.0# N-80
	6 1/4"	6805-8605'	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. Five 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: 8605' 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.

6800' 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: 13 3/8" 3000 x 1" 3000 dual tree, 13 3/8" 3000 x 13 3/8" casing head, 12" x 9 5/8" casing hanger.

V. Cementing:

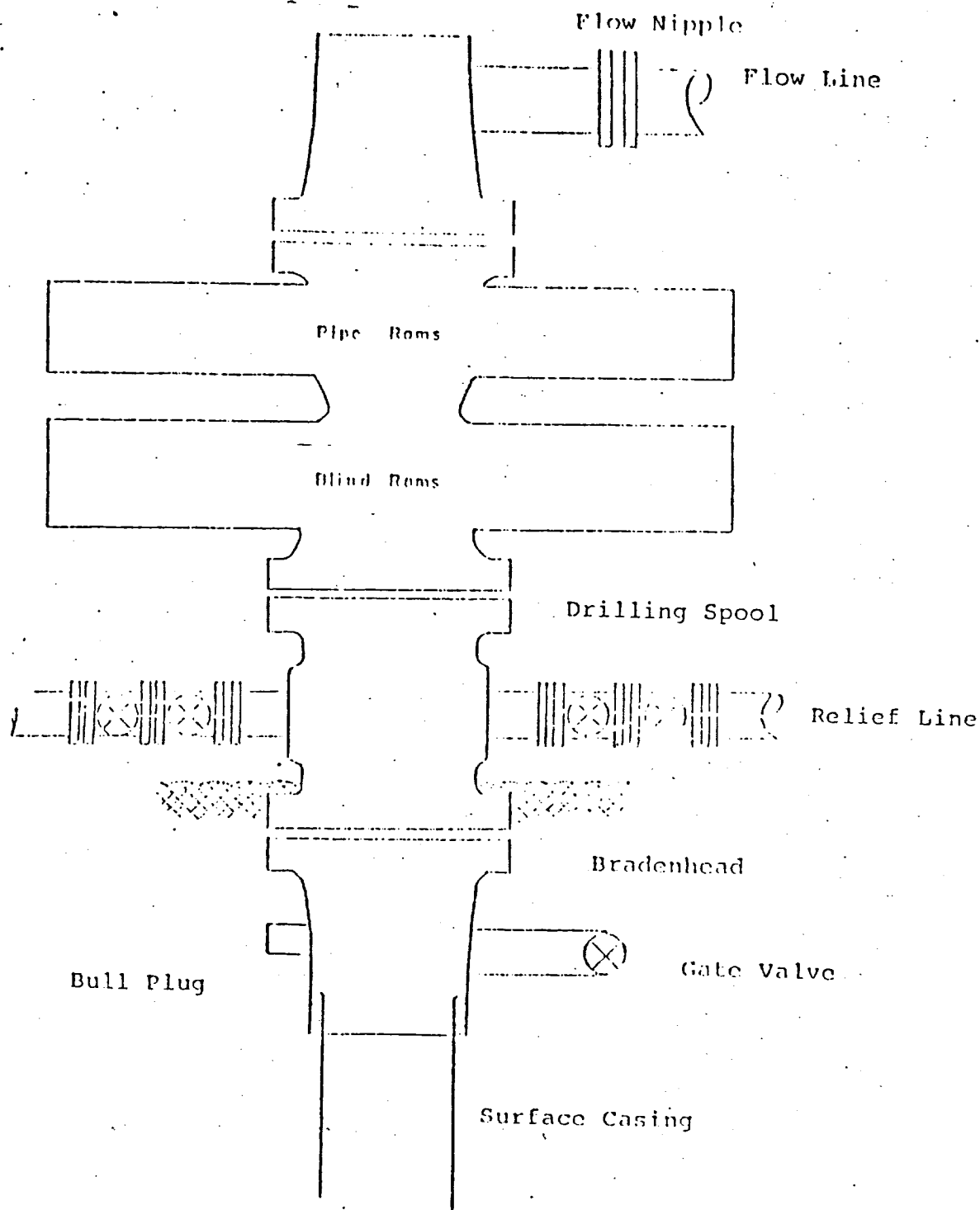
13 3/8" surface casing - use 236 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (276 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

9 5/8" intermediate casing - use 234 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 (444 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 468 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) (649 cu.ft. of slurry, 70% excess to circulate liner). WOC 12 hours. Test casing to 1200#/30 minutes.

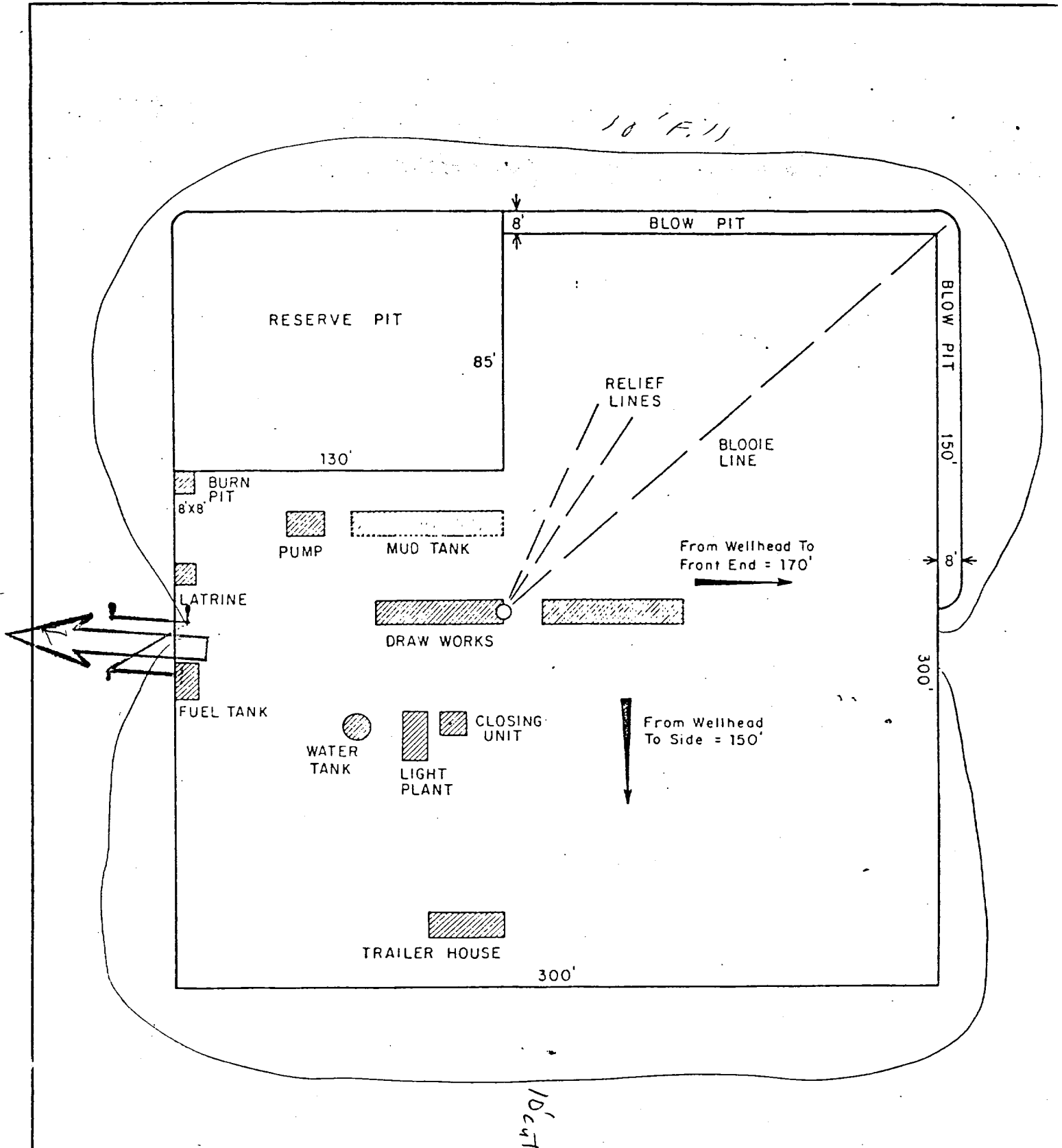
4 1/2" liner - precede cement with 40 bbls. gel water (4 sks. gel). Cement with 90 sks. Class "B" cement with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7 followed by 100 sks. Class "B" cement with 1/4# fine tuf-plug per sack and 0.4% HR-7 (313 cu.ft. of slurry, 70% excess to fill to circulate 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.



PRINT RECORD				ENG. REC.		DATE	
				DRAWN		J.L.H. 8-16-78	
				CHECKED			
				CHECKED			
				PROJ. APP.			
PRT.	SEP.	DATE	TO	W.O.	DESIGN		
						SCALE: 1" = 50'	
						DWG. NO.	
						R.	

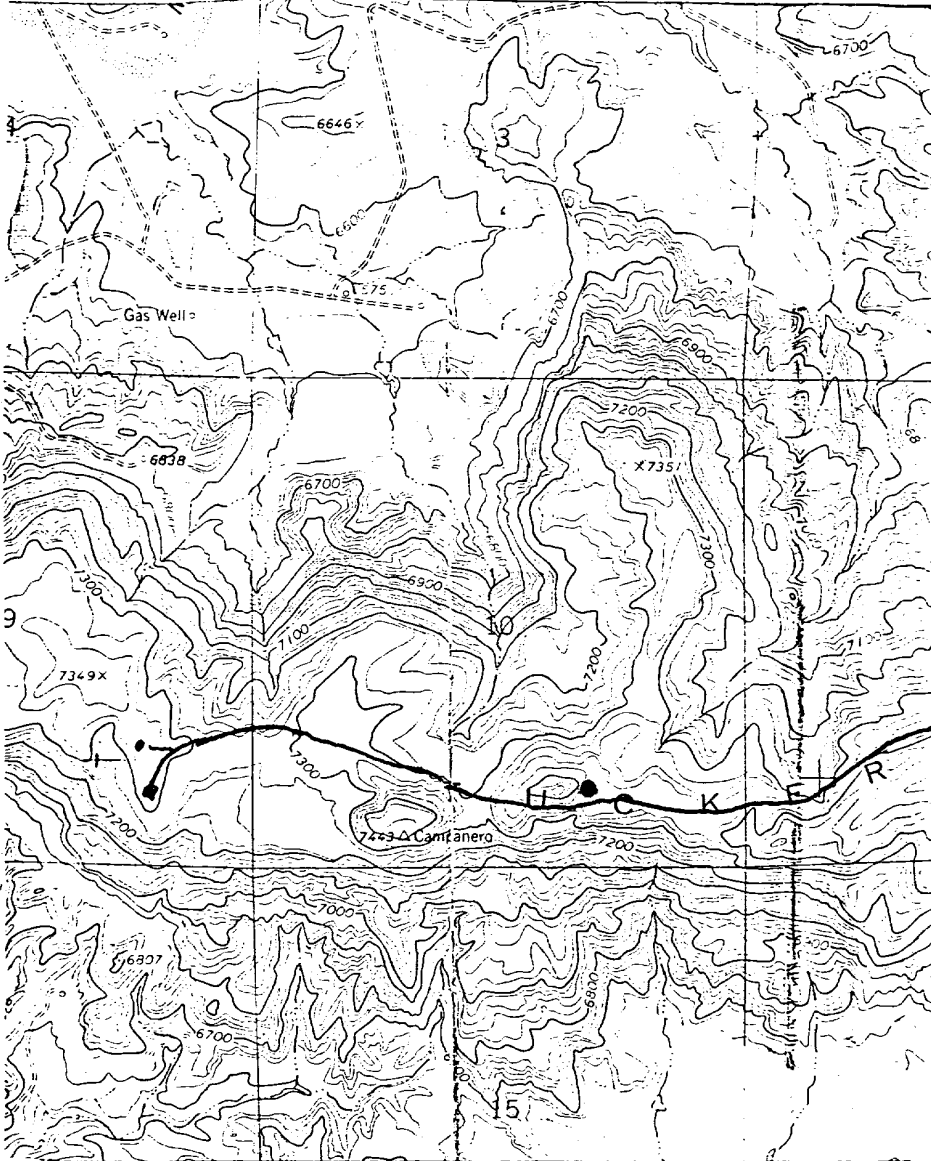
e El Paso Natural Gas Company

TYPICAL LOCATION PLAT FOR
MESAVERDE OR DAKOTA DRILL SITE

El Paso Natural Gas Company
 San Juan 27-5 Unit #101E(MD)
 SE 10-27-5

R-5-W

T
27
N

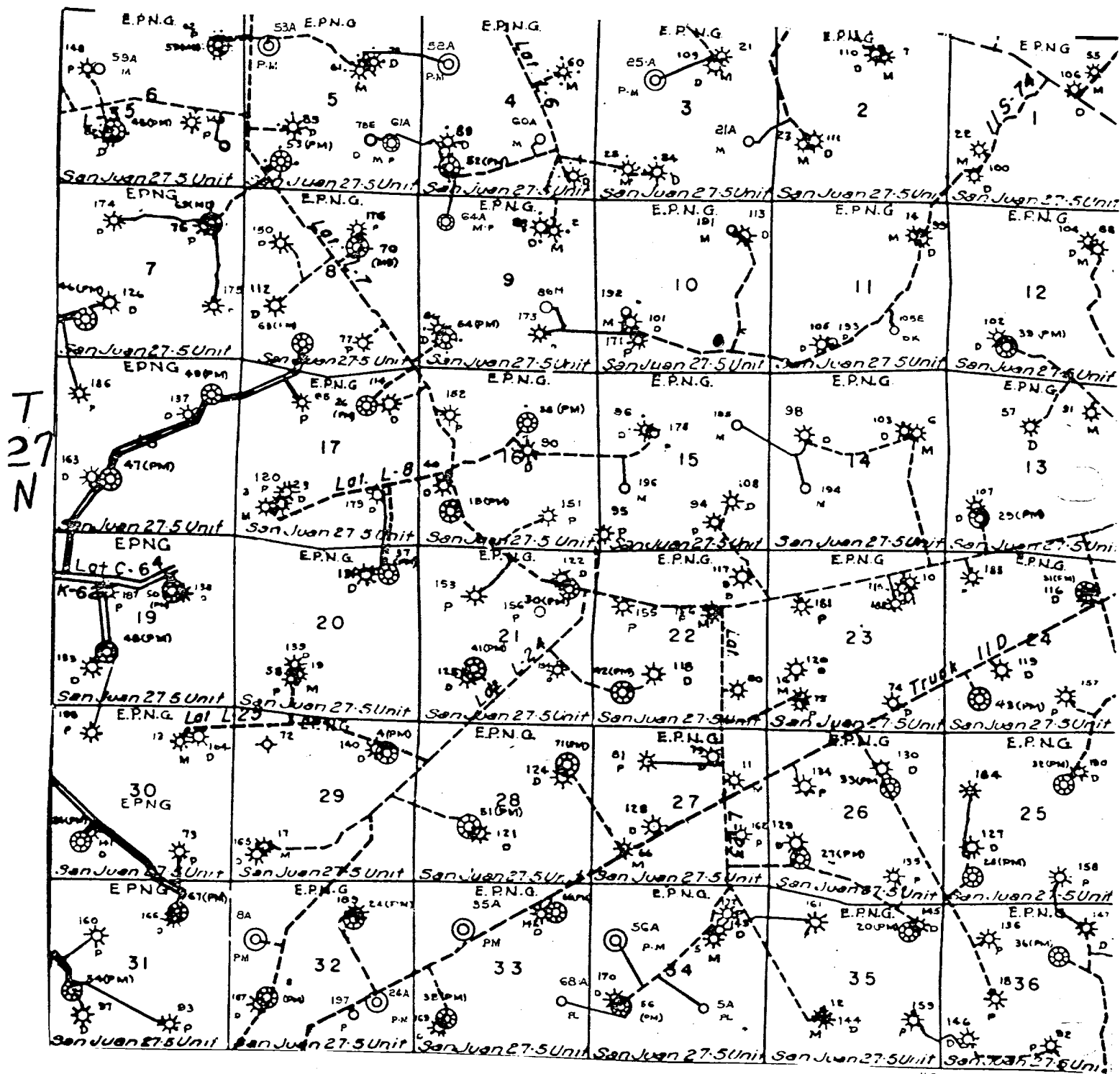


Map #1

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 27-5 Unit#101E(MD)
SE 10-27-5



R-5-W

MAP #2

Proposed Location •