

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

30-045-23851

5. LEASE DESIGNATION AND SERIAL NO.
SF 078390A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Hardie D

9. WELL NO.
1A

10. FIELD AND POOL, OR WILDCAT
So. Blanco Pic. Clif
Blanco Mesa Verde

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
Sec. 12T-8N, R-8-W
NMPM

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
13 3/4"	9 5/8"	36.0#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3385'	296 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2" liner	10.5#	3235-5670'	425 cu.ft. to circ. liner

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 S/2 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 D. G. Busico TITLE Drilling Clerk DATE 9-20-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY :

additional well needed, pursuant to the above order. ok Encl
 The following is being filed: *See Instructions On Rev
 Voluntary 10/1/1999 MV NW152 NMOC
 with 10/1/1999

***See Instructions On Reverse Side**

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

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

Operator El Paso Natural Gas Company			Lease Hardie "D" (SF 078390-A)		Well No. 1A
Unit Letter 0	Section 12	Township 28-N	Range 8-W	County San Juan	

Actual Well Location of Well:

1120 feet from the **South** line and **1750** feet from the **East** line

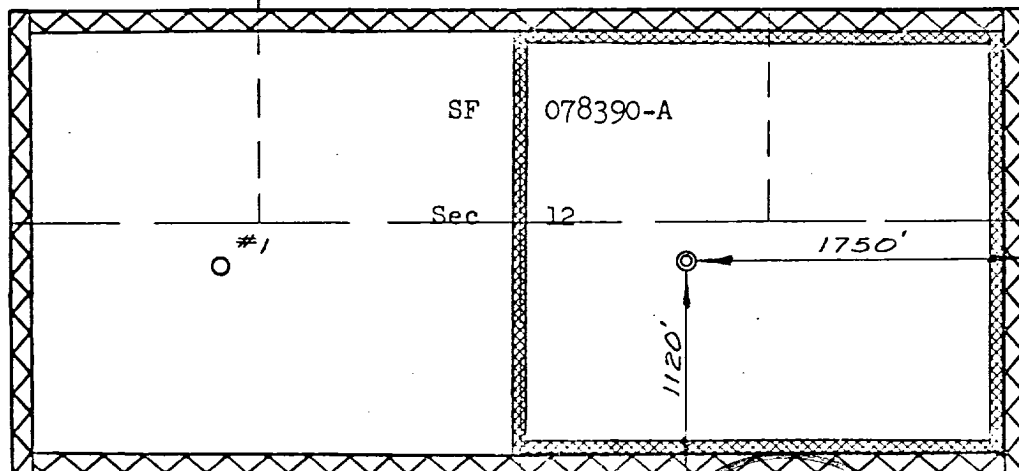
Ground Level Elev. 6410	Producing Formation Mesa Verde-Pictured Cliffs	Pool Blanco Mesa Verde	Dedicated Acreage: 294.72 & 147.84
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1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than 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 _____

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. Suico

Name

Drilling Clerk

Position

El Paso Natural Gas Co.

Company

September 20, 1979

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

January 12, 1977

Registered Professional Land Surveyor and/or Land Surveyor

Certificate No.

1760

Multi-Point Surface Use Plan

Hardie D #1A

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 Manzaneras 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 and sandstone with pinon and cedar growing. Sheep 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.



L. A. Aimes
Project Drilling Engineer

September 20, 1979

Operations Plan
Hardie D #1A

I. Location: 1120'S, 1750'E, Section 12, T-28-N, R-8-W, San Juan County, NM

Field: So.Blanco PC & Blanco MV

Elevation: 6410'GL

II. Geology:

A. Formation Tops:	Surface	San Jose	Lewis	3182'
	Ojo Alamo	2072'	Mesa Verde	4556'
	Kirtland	2195'	Menefee	4774'
	Fruitland	2679'	Point Lookout	5220'
	Pic.Cliffs	3037'	Total Depth	5670'

B. Logging Program: GR-Ind. and GR-Density at Total Depth.
I-ES and GR-Density at 3385'

C. Coring Program: none

D. Natural Gauges: 4545', 4765', 5210' 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 3385'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt.&Grade</u>
	13 3/4"	200'	9 5/8"	36.0# K-55
	8 3/4"	3385'	7"	20.0# K-55
	6 1/4"	3235-5670'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - cement guide shoe.

7" intermediate casing - cement guide shoe and self-fill insert float valve, 5 stabilizers every other joint above shoe. Run float two joints above shoe.

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

C. Tubing: 5670' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.
3235' of 1 1/4", 2.33# J-55 IJ tubing with a common pump seating nipple above a perforated joint plugged on bottom. Isolate producing formations with a packer.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 2000 x 6" 2000 dual tubing head. 10" x 7" casing hanger.

Operations Plan - Hardie D #1A

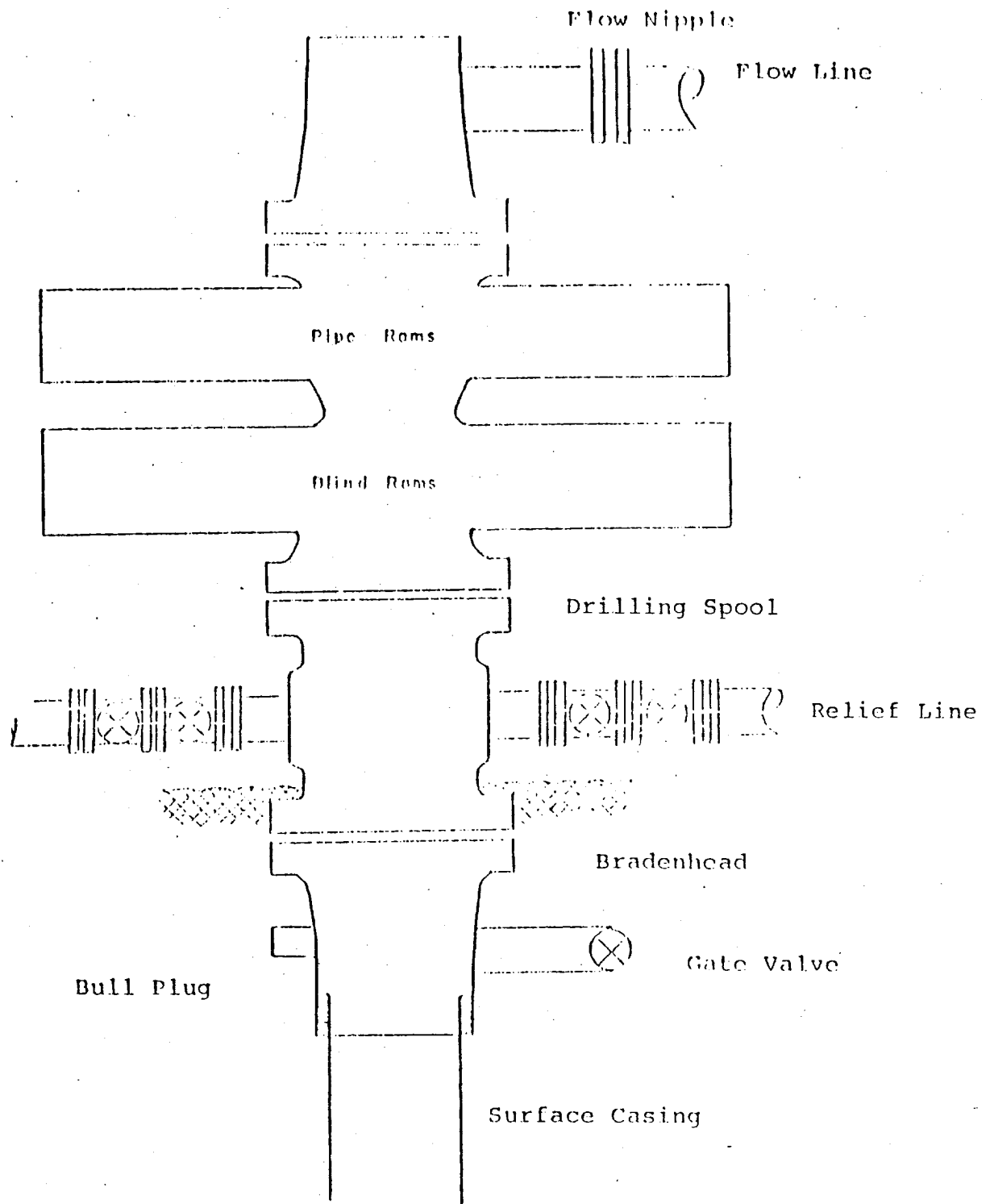
V. Cementing:

9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 110 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (296 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.

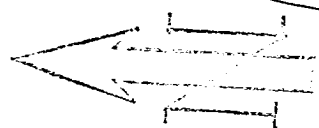
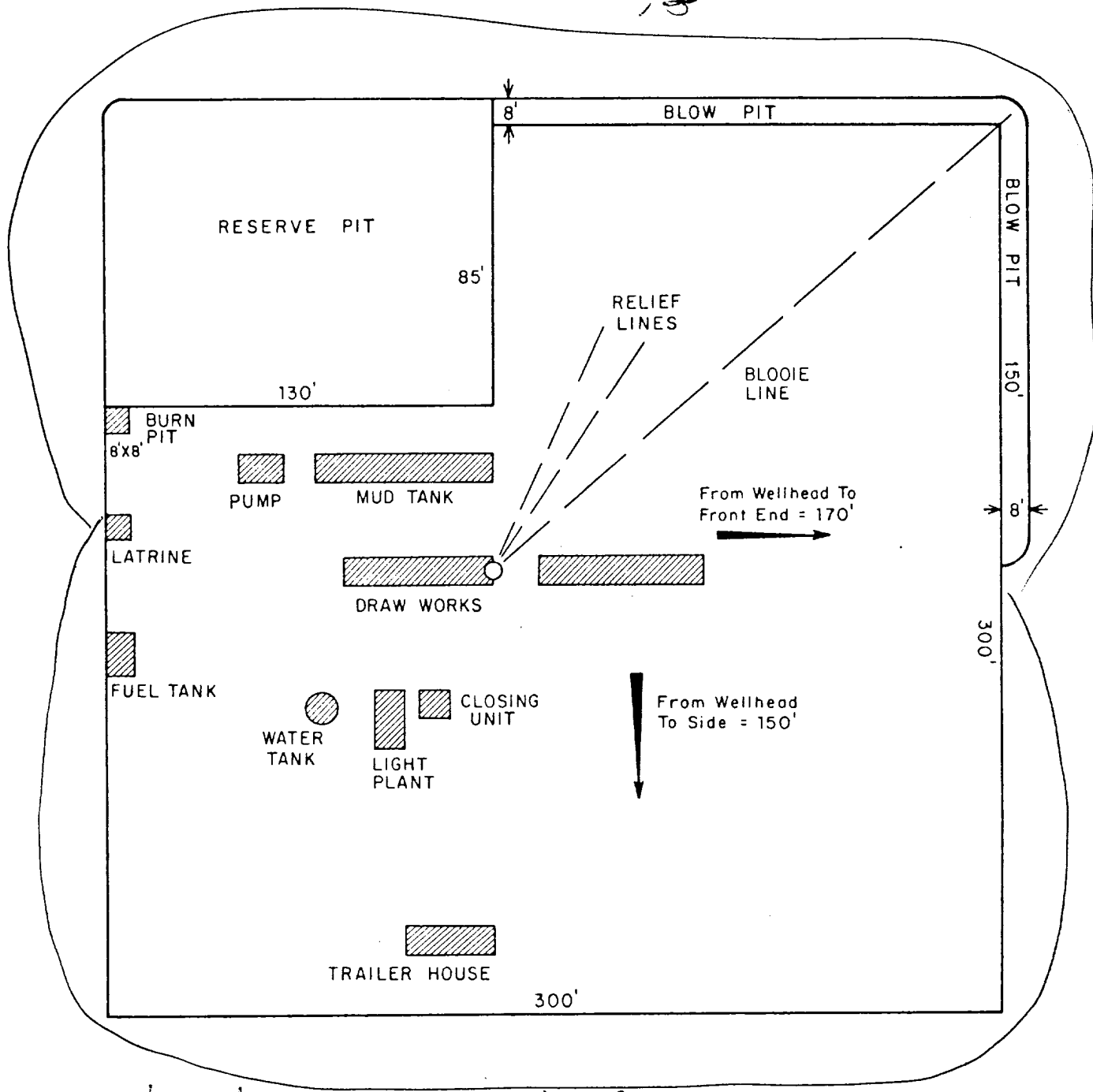
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 306 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (425 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

Typical B.O.P. Installation
for Mesa Verde Well



10" 900 x 9 5/8" casing head
10" 900 x 6" 900 xmas tree

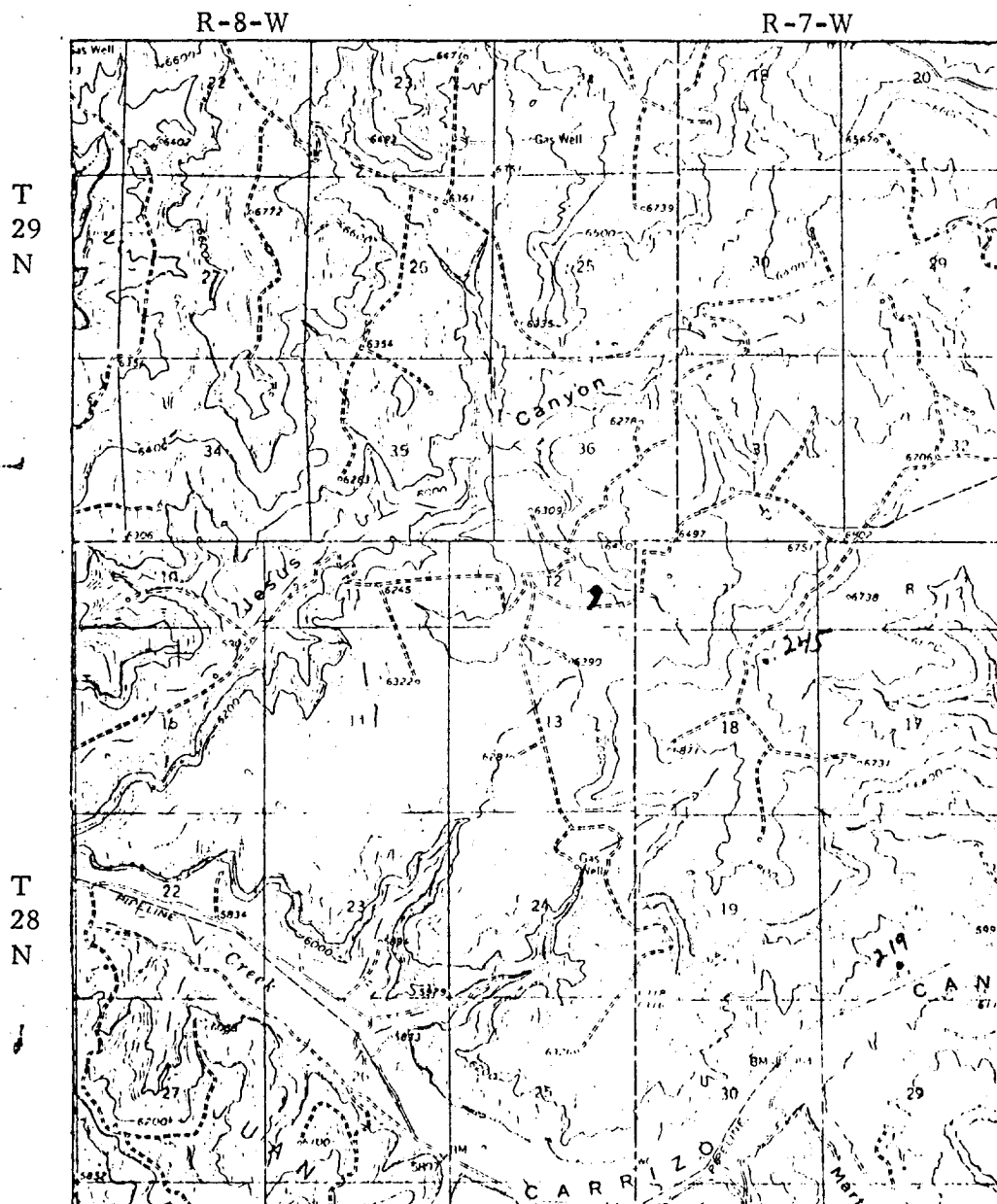
11' 1/2", S



8' 1/2", S

<table border="1"> <tr> <td>PRT.</td> <td>SEP.</td> <td>DATE</td> <td>TO</td> <td>W.O.</td> </tr> <tr> <td colspan="5">PRINT RECORD</td> </tr> </table>					PRT.	SEP.	DATE	TO	W.O.	PRINT RECORD					ENG. REC.		DATE		<div style="text-align: center;"> <p>El Paso Natural Gas Company</p> <p>TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE</p> </div>	
					PRT.	SEP.	DATE	TO	W.O.											
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HARDIE D #1A
SE 12-28-8

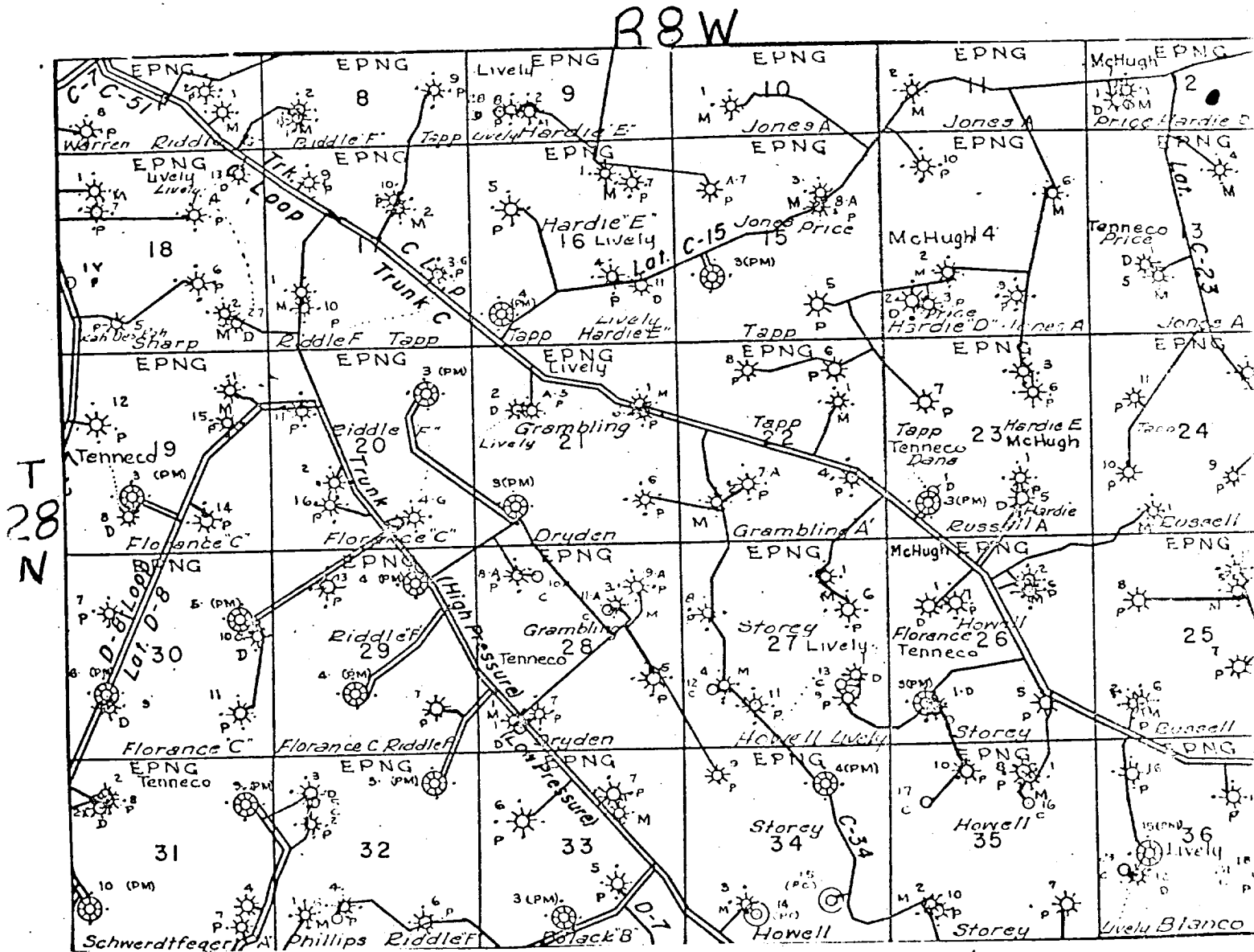


MAP No. 2

LEGEND OF RIGHT-OF-WAYS

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

EL PASO NATURAL GAS COMPANY
Hardie D #1A
SESE 12-28-8



MAP #2

Proposed Location