

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 080101	
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	
3. ADDRESS OF OPERATOR PO Box 289, Farmington, NM 87401		8. FARM OR LEASE NAME Tapp	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1500'S, 1100'E At proposed prod. zone same		9. WELL NO. 2A	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 8 miles southeast of Blanco, NM		10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1100'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 17, T-28-N, R-8-W NMPM	
16. NO. OF ACRES IN LEASE 472.88		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL E / 320.00		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 300'		19. PROPOSED DEPTH 4850'	
20. ROTARY OR CABLE TOOLS Rotary		21. APPROX. DATE WORK WILL START*	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5751' GL			
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
13 3/4"	9 5/8"	32.3#	200'
8 3/4"	7"	20.0#	2535'
6 1/4"	4 1/2" liner	10.5#	2385-4850'
			QUANTITY OF CEMENT
			224 cu.ft. to circulate
			290 cu.ft. to cover Ojo Alan
			430 cu.ft. to circ. liner

Selectively perforate and sandwater fracture the Mesa Verde 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 17 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 Sam Bradford TITLE Drilling Clerk DATE 7-26-79
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

ok Frank

nmcc

*See Instructions On Reverse Side

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JUL 27 1979
U.S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

RECEIVED
AUG 9 1979
OIL CON. COM.
DIST. 3

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

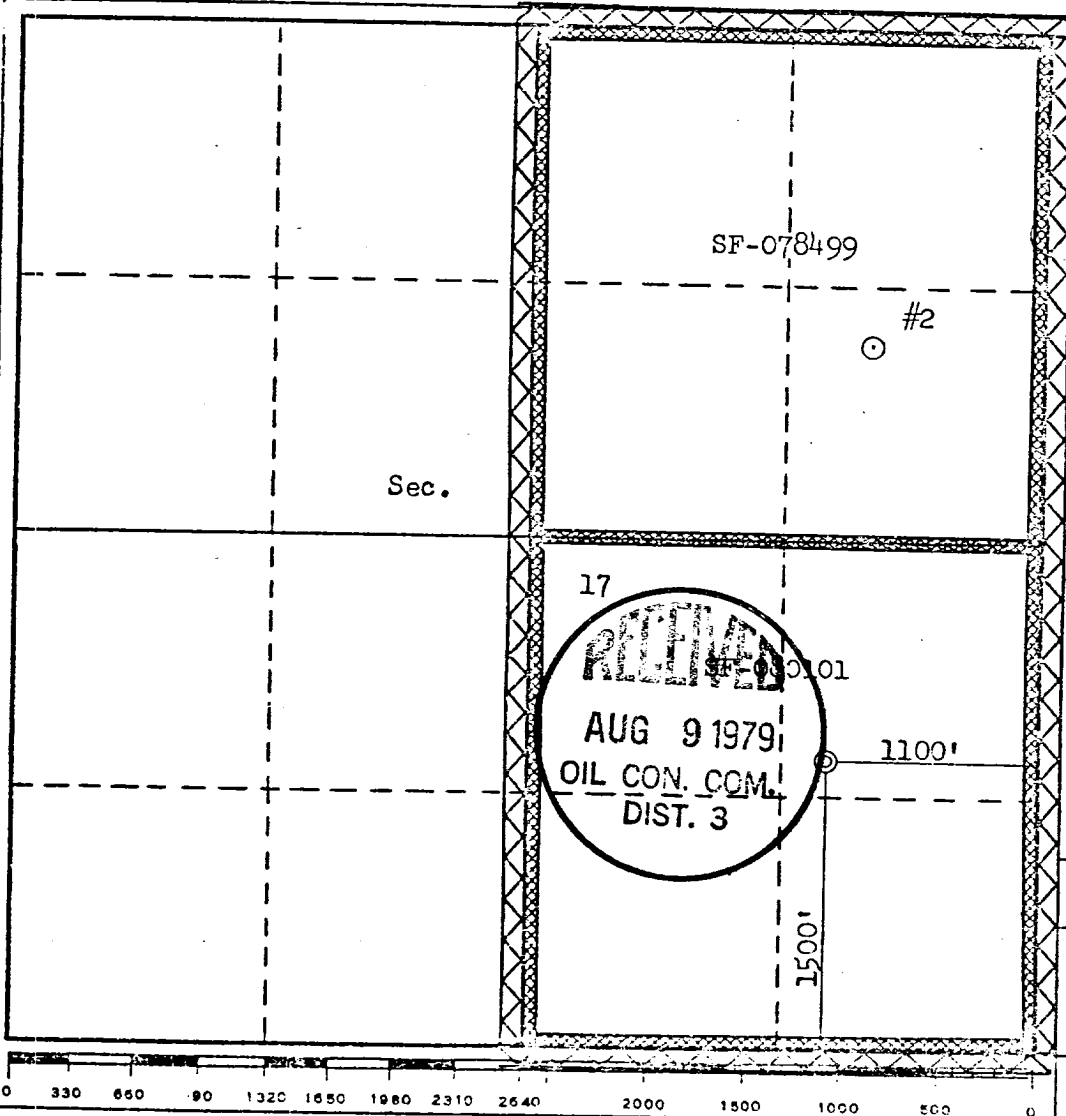
Operator EL PASO NATURAL GAS COMPANY			Lease TAPP (SF-080101)		Well No. 2A
Unit Letter I	Section 17	Township 28N	Range 8W	County San Juan	
Actual Footage Location of Well: 1500 feet from the South line and 1100 feet from the East line					
Ground Level Elev. 5751	Producing Formation Mesa Verde		Pool Blanco Mesa Verde	Dedicated Acreage: 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 _____

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.

Name _____
Position **Drilling Clerk**
Company **El Paso Natural Gas Co.**
Date **July 26, 1979**

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 **June 13, 1979**
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Certificate No. **3950**

Multi-Point Surface Use Plan

Tapp #2A:

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 Grambling 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,

July 26, 1979

Operations Plan
Tapp #2A

I. Location: 1500'S, 1100'E, Section 17, T-28-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde

Elevation: 5751'GL

II. Geology:

A. Formation Tops:	Surface	Nacimiento	Lewis	2335'
	Ojo Alamo	1253'	Mesa Verde	3817'
	Kirtland	1310'	Menefee	3911'
	Fruitland	1878'	Point Lookout	4396'
	Pic.Cliffs	2156'	Total Depth	4850'

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

C. Coring Program: none

D. Natural Gauges: 3790', 3885', 4390' 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 2535'. 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"	32.3# H-40
	8 3/4"	2535'	7"	20.0# K-55
	6 1/4"	2385-4850'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - B & W guide shoe
(Prod. No. FC 06-09611-0200)

7" intermediate casing - Pathfinder guide shoe (Part #1003-1-007) and Howco self-fill insert float valve (Price Ref.36A&37), 5 Pathfinder stabilizers (Part #107-10) every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (Fig.222) and Larkin flapper type float collar(fig.404 M&F).

C. Tubing: 4850' 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.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

Operations Plan - Tapp #2A

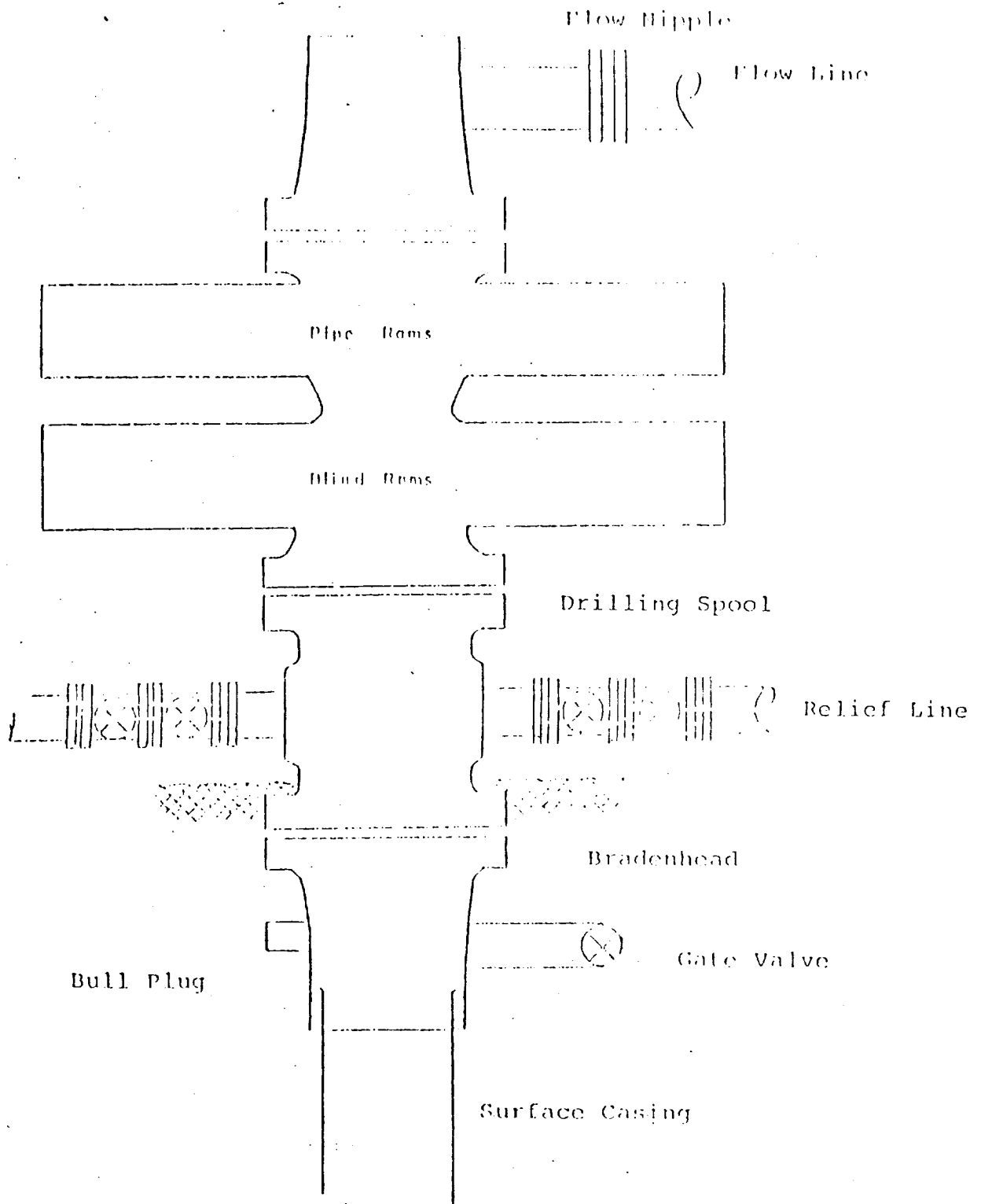
V. Cementing:

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 107 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 (290 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.

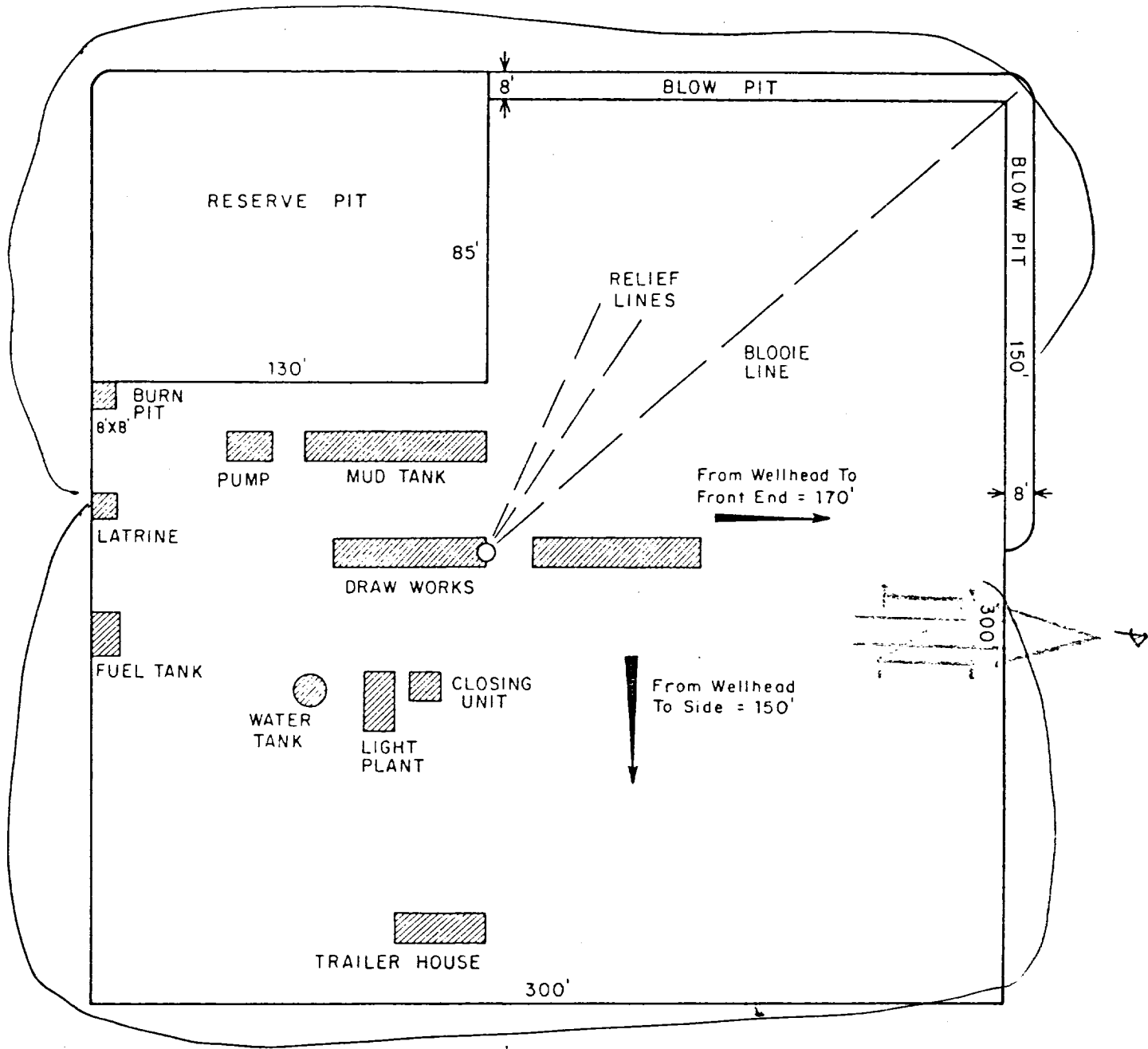
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 310 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (430 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

Typical B.O.P. Installation for Mesa Verde 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

3' Fall



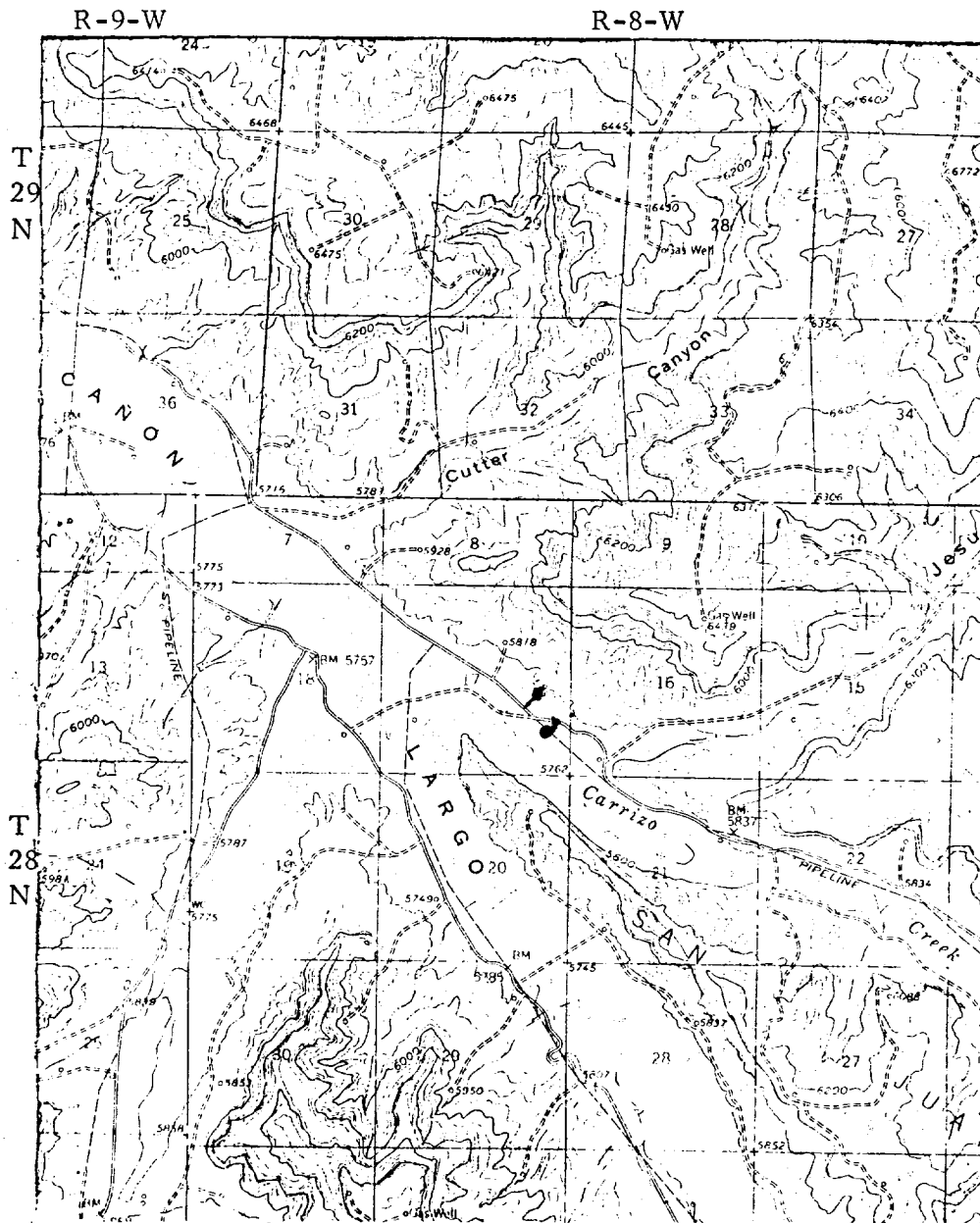
3' cut

					ENG. REC.		DATE		EI Paso Natural Gas Company TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE SCALE: 1" = 50'		DWG. NO.		REV.	
					DRAWN		J.L.H. 8-16-78							
					CHECKED									
					CHECKED									
					PROJ. APP.									
					DESIGN									
PRINT RECORD					W.O.									

EL PASO NATURAL GAS COMPANY

Tapp #2A

NESE 17-28=8



MAP #1

LEGEND OF RIGHT-OF-WAYS

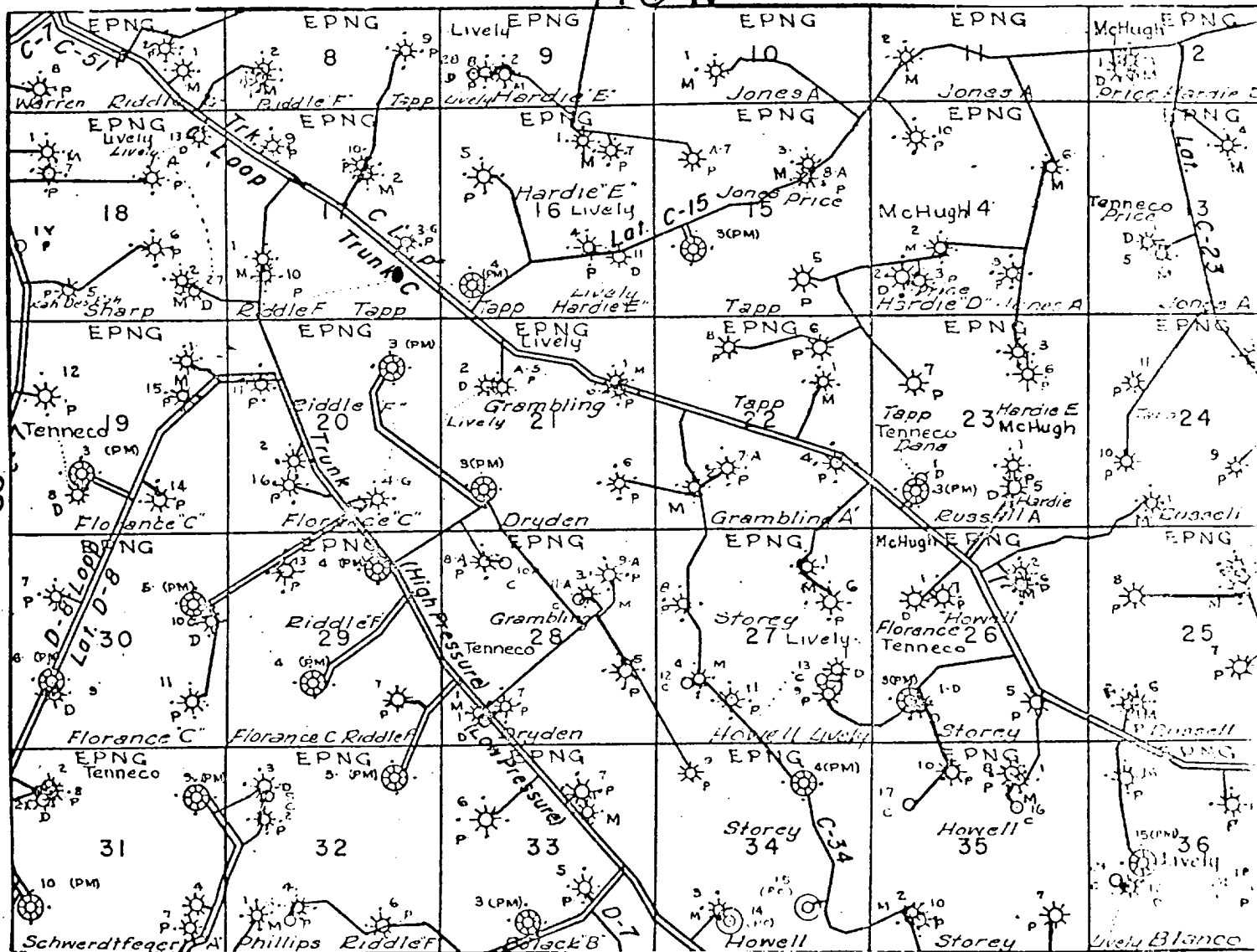
EXISTING ROADS	—————
EXISTING PIPELINES	+ + +
EXISTING ROAD & PIPELINE	-+ -+ -+
PROPOSED ROADS	—————
PROPOSED PIPELINES	+ + +
PROPOSED ROAD & PIPELINE	-+ -+ -+

EL PASO NATURAL GAS COMPANY

Tapp #2A
NESE 17-28-8

R8W

T
28



MAP #2

Proposed Location ●