

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-03881  
5. LEASE DESIGNATION AND SERIAL NO.  
SF 078716A

## 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

1540'N, 1020'E

At proposed prod. zone

same

## 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

## 7. UNIT AGREEMENT NAME

## 8. FARM OR LEASE NAME

Hubbell

## 9. WELL NO.

3E

## 10. FIELD AND POOL, OR WILDCAT

Basin Dakota

## 11. SEC., T., R., M., OR BLK.

Sec. 18, T-29N, R-10-W  
NMMPM

## 12. COUNTY OR PARISH

San Juan

## 13. STATE

NM

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

3.5 miles east of Bloomfield, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

1020'

## 16. NO. OF ACRES IN LEASE

1263.4

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

E/ 320.85

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

1000'

## 19. PROPOSED DEPTH

6640'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5619'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
12 1/4"	8 5/8"	24.0#	200'	165 cu.ft.circ. to surface
7 7/8"	4 1/2"	11.6#	6640'	1267 cu.ft. - 3 stages

1st stage - 325 cu.ft. to cover Gallup  
2nd stage - 450 cu.ft. to cover Mesa Verde  
3rd stage - 492 cu.ft. to cover Ojo Alamo

Selectively perforate and sandwater fracture the Dakota formation.

A 3000 psi WD 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 18 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

*A. G. Buies*

TITLE

Drilling Clerk

DATE

10-11-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

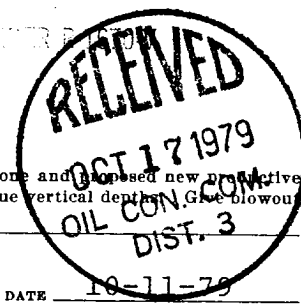
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side



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

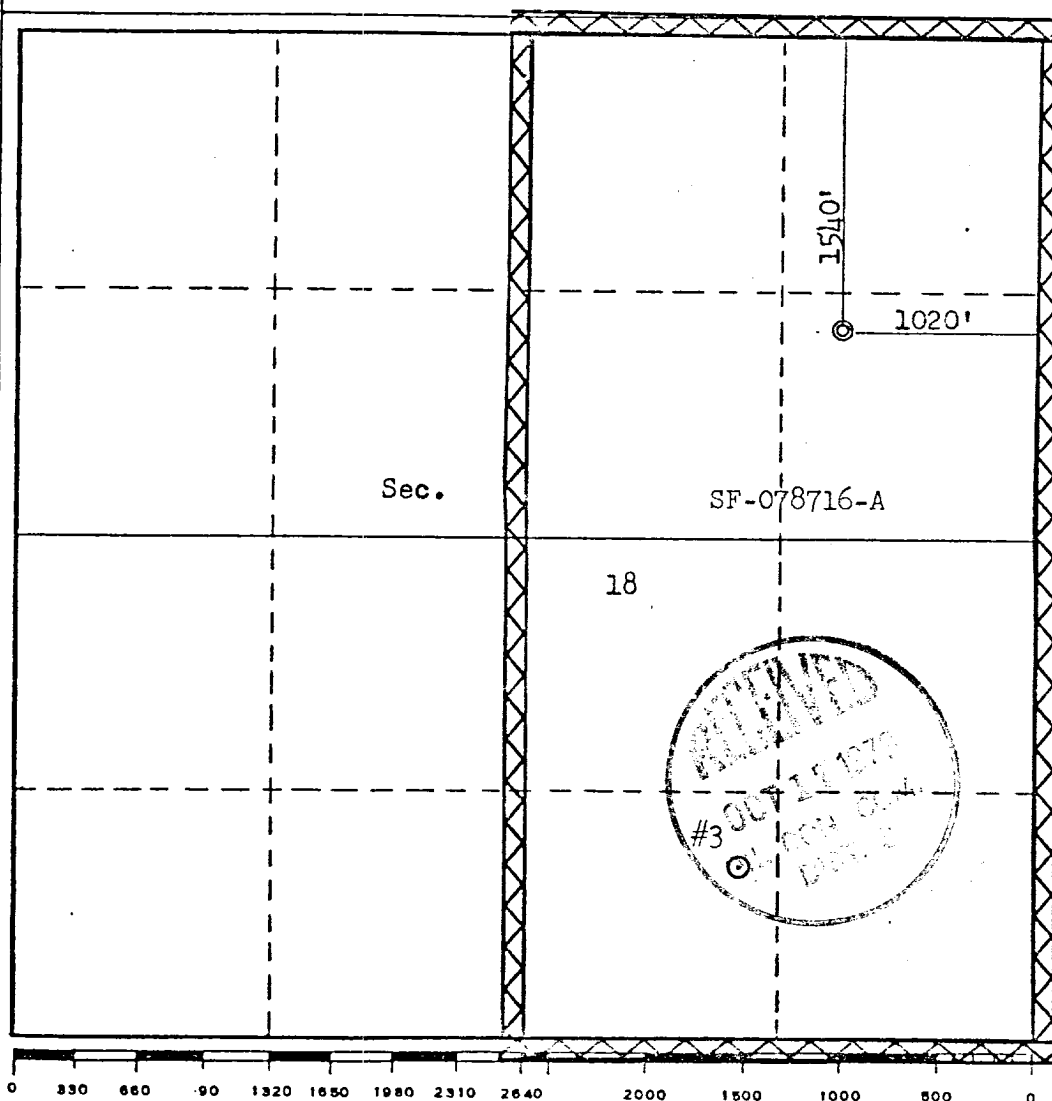
Operator EL PASO NATURAL GAS COMPANY			Lease HUBBELL (SF-078716-A)		Well No. 3-E
Unit Letter H	Section 18	Township 29N	Range 10W	County San Juan	
Actual Footage Location of Well: 1540 feet from the North line and 1020 feet from the East line					
Ground Level Elev. 5619	Producing Formation DAKOTA		Pool BASIN DAKOTA	Dedicated Acreage: 320.85 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.

*A. G. Quisenberry*

Name  
Drilling Clerk  
Position  
El Paso Natural Gas  
Company  
October 11, 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  
September 12, 1979  
Registered Professional Engineer  
and/or Land Surveyor


*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.  
Certificate No. 3950

## Multi-Point Surface Use Plan

### Hubbell #3E

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 Bloomfield Ditch.
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 reseedling operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseedling 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 grassy bottom land with sagebrush and cheat grass 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.



L. A. Aimes  
Project Drilling Engineer

October 11, 1979

Operations Plan- Hubbell #3E

I. Location: 1540'N, 1020'E, Section 18, T-29-N, R-10-W, San Juan County, NM

Field: Basin Dakota

Elevation: 5619'GL

II. Geology:

A. Formation Tops:	Surface	Nacimient	Menefee	3690'
	Ojo Alamo	825'	Point Lookout	4370'
	Kirtland	940'	Gallup	5498'
	Fruitland	1705'	Greenhorn	6245'
	Pic.Cliffs	1990'	Graneros	6304'
	Lewis	2075'	Dakota	6420'
	Mesa Verde	3553'	Total Depth	6640'

B. Logging Program: Induction Electric and Gamma Ray Density at TD.

C. Coring: none

III. Drilling:

A. Mud Program: mud from surface to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg.Size</u>	<u>Wt.&amp;Grade</u>
	12 1/4"	200'	8 5/8"	24.0# K-55
	7 7/8"	6640'	4 1/2"	10.5# K-55

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

4 1/2" production casing - guide shoe and self-fill insert valve  
Two multiple stage cementers equipped for three stage cementing.  
Set tool for second stage at 4870' and tool for third stage at 2175'.  
Run 20 centralizers spaced as follows: one on each of the bottom 8 joints, one below each stage tool, and five above each stage tool spaced every other joint.

C. Tubing: 6640' of 2 3/8", 4.7#, J-55 tubing, common pump seating nipple and Baker expendable check valve with drill type guide.

D. Wellhead Equipment: 8 5/8" 2000 casing head with 8" 2000 x 6" 2000 xmas tree.

V. Cementing:

Surface casing (12 1/4" x 8 5/8") - use 140 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (165 cu.ft. of slurry, 100% excess to circulate). WOC 12 hours. Test to 600#/30 min.

Operations Plan - Hubbell #3E

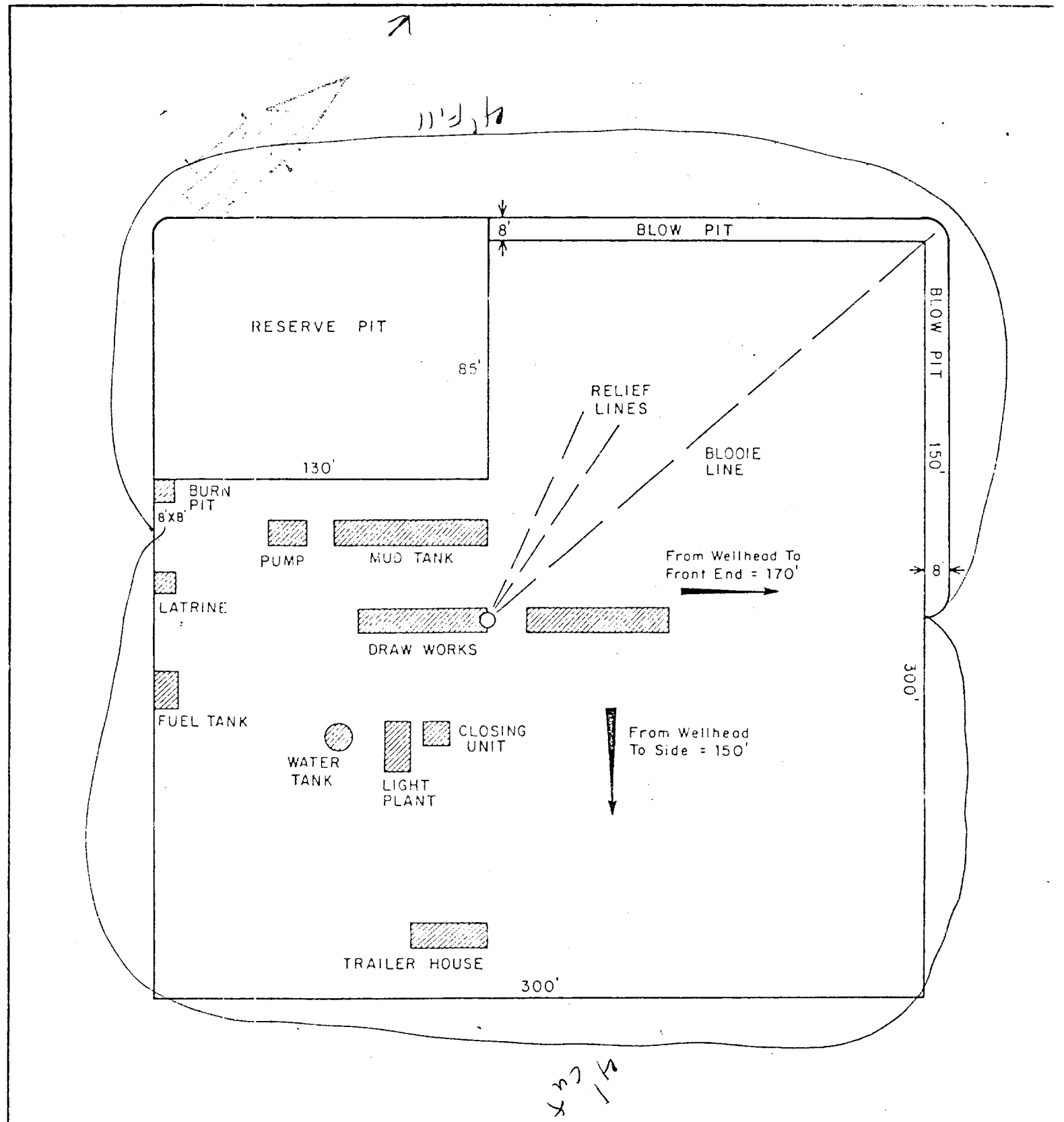
V. Cementing, cont'd.

Production casing - (7 7/8" x 4 1/2")

First stage - use 130 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack followed by 90 sks. 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (325 cu.ft. of slurry, 25% excess to cover the Gallup).

Second stage - circulate mud for 2 hours, then cement with 278 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride and 8.3 gallons of water per sack (450 cu.ft. of slurry, 50% excess to cover the Mesa Verde).

Third stage - circulate mud for 2 hours, then cement using 304 sks. Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack (492 cu.ft. of slurry, 60% excess to fill to top of Ojo Alamo). Run temperature survey on top stage only at 8 hours. WOC 18 hours.



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

PROPOSED ROAD &amp; PIPELINE



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