

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-53875  
5. LEASE DESIGNATION AND SERIAL NO.  
NOO-C-14-20-5014

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Hosten Nez Began

9. WELL NO.

1

10. FIELD AND POOL, OR WELDCAT

Basin Dakota

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA

Sec. 13, T-25-N, R-9-W

NMPM

12. COUNTY OR PARISH

San Juan

13. STATE

NM

17. NO. OF ACRES ASSIGNED TO THIS WELL

320.00

19. PROPOSED DEPTH

6580'

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START

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 1075'S, 1450'E

At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
6 miles South of Ballard Station, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
1075

16. NO. OF ACRES IN LEASE  
160.00

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
3500

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6437'

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"	32.3#	200'	165 cu.ft. circ. to surface
7 7/8"	4 1/2"	11.6#&10.5#	6580'	1454 cu.ft. - 3 stages

- 1st stage - 352 cu.ft. to cover Gallup
- 2nd stage - 729 cu.ft. to cover Mesa Verde
- 3rd stage - 373 cu.ft. to cover Ojo Alamo

Selectively perforate and sandwater fracture the 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 S/2 of Section 13 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. Describe blowout preventer program, if any.

24. SIGNED A. G. Busco 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:

NMOCC

All distances must be from the outer boundaries of the Section

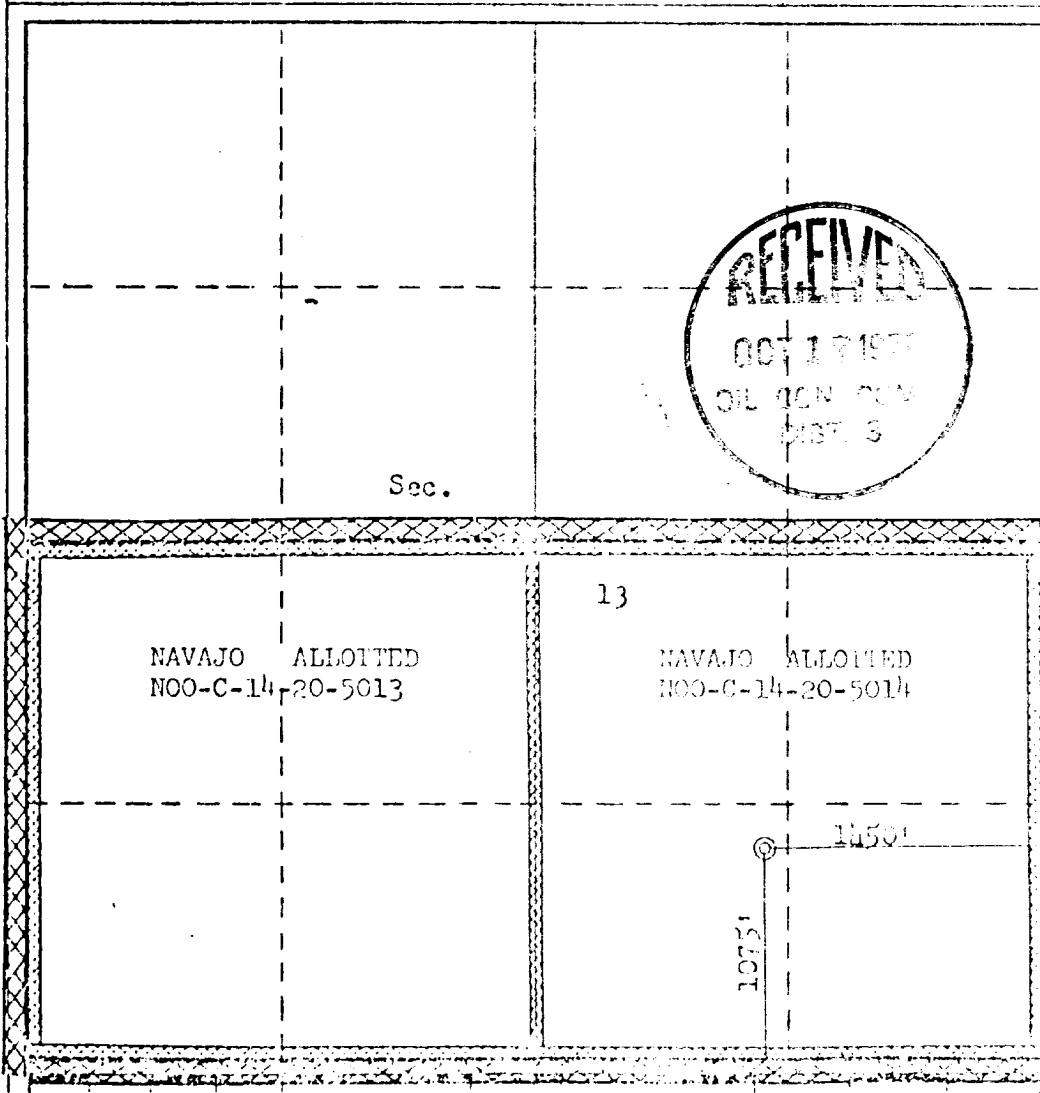
Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>(NAVAJO ALLOTTED) HOSTEEN NEZ BEGAY NOO-C-14-20-5014</b>		Well No. <b>1</b>
Unit Letter <b>0</b>	Section <b>13</b>	Township <b>25N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1075</b> feet from the <b>South</b> line and <b>1450</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6437</b>	Producing Formation <b>DAKOTA</b>		Pool <b>PASIN DAKOTA</b>	Estimated Acreage <b>320.00</b>	

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 well 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 Communitization

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 obtained herein is true and complete to the best of my knowledge and belief.

*A. G. Lisco*  
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 the 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 5, 1979  
Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.  
Certificate No. 1075

Well Name Hosteen No 2 Began #1  
Location NW SE 13 25-9  
Formation DK

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

U. S. Forest Service \_\_\_\_\_ Date \_\_\_\_\_

Earl Mealer  
Archaeologist \_\_\_\_\_ Date 9/29/75

Bureau of Indian Affairs Representative \_\_\_\_\_ Date \_\_\_\_\_

Bab Mad  
Bureau of Land Management Representative \_\_\_\_\_ Date 9/29/75

Dr. J. L. ...  
U. S. Geological Survey Representative \_\_\_\_\_ Date \_\_\_\_\_

AGREES TO THE FOOTAGE LOCATION OF THIS WELL. REASON: Well cannot be located any further west due to Blanco Wash.

Seed Mixture: \_\_\_\_\_

Equipment Color: Brown

Road and Row: (Same) or (Separate)

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Multi-Point Surface Use Plan

Hosteen Nez Begay #1

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 Huerfano Water Well #2.
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 material 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 sandy hills with sagebrush and greasewood growing. Cattle and sheep 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*

\_\_\_\_\_  
L. A. Aimes  
Project Drilling Engineer

October 5, 1979

Operations Plan - Hosteen Nez Begay #1

I. Location: 1075'S, 1450'E, Section 13, T-25-N, R-9-W, San Juan County, NM

Field: Basin Dakota

Elevation: 6437'

II. Geology:

A. Formation Tops:	Surface	Nacimiento	Menefee	2735'
	Ojo Alamo	1044'	Point Lockout	4215'
	Kirtland	1226'	Gallup	5340'
	Fruitland	1670'	Greenhorn	6176'
	Pic.Cliffs	1840'	Graneros	6227'
	Lewis	1960'	Dakota	6349'
	Mesa Verde	2695'	Total Depth	6580'

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"	6580'	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 4815' and tool for third stage at 2060'.  
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: 6580' 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 x 8" 2000 casing head x 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 - Hosteen Nez Begay #1

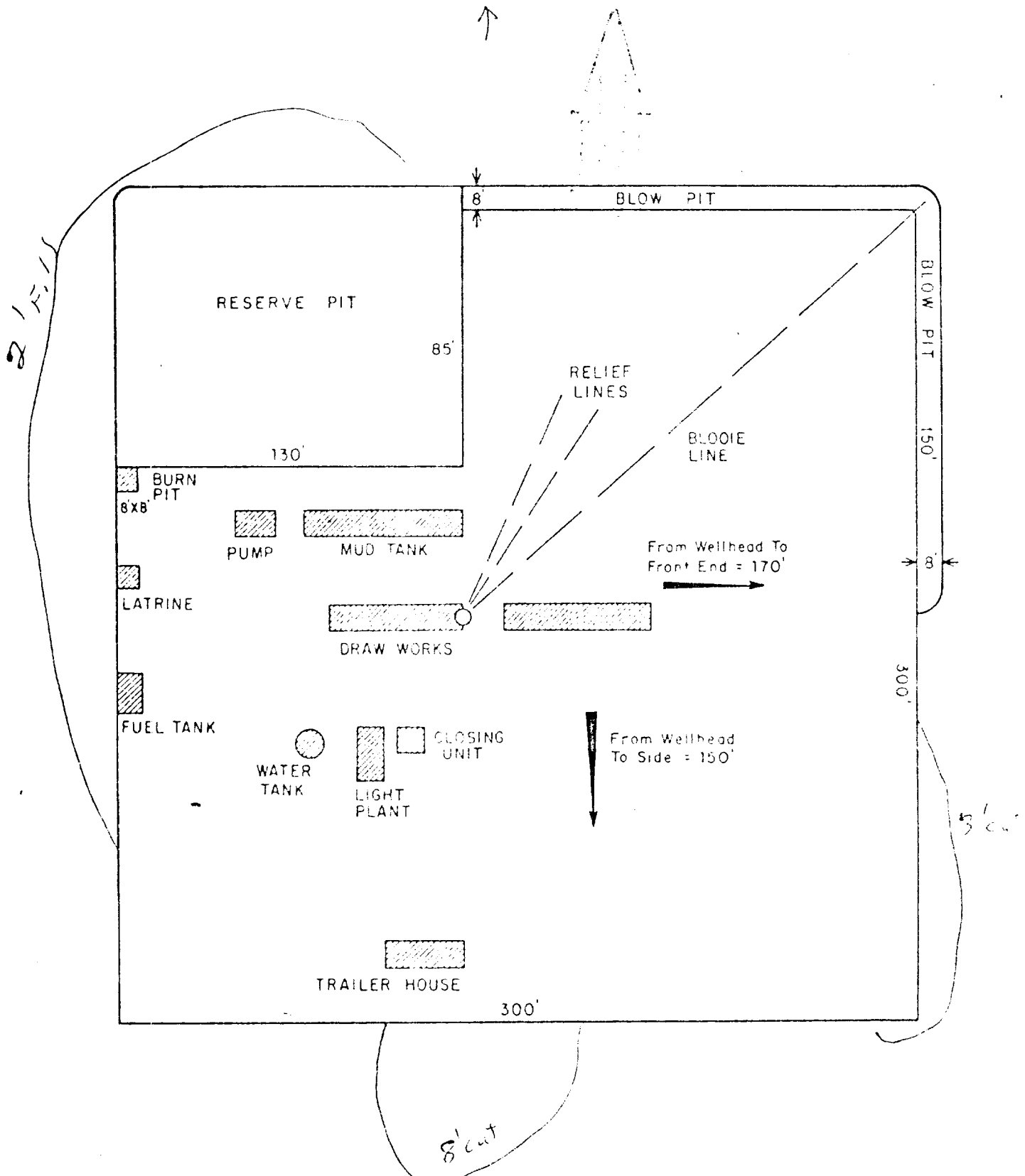
V. Cementing, cont'd.

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

First stage - use 155 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack followed by 80 sks. 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (352 cu.ft. of slurry, 50% excess to cover the Gallup).


Second stage - circulate mud for 2 hours, then cement with 450 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride and 8.3 gallons of water per sack (729 cu.ft. of slurry, 50% excess to cover the Mesa Verde).

Third stage - circulate mud for 2 hours, then cement using 230 sks. Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack (373 cu.ft. of slurry, 60% excess to fill to base of Ojo Alamo). Run temperature survey on top stage only at 8 hours. WOC 18 hours.



PRT.	SEP.	DATE	TO	W.O.

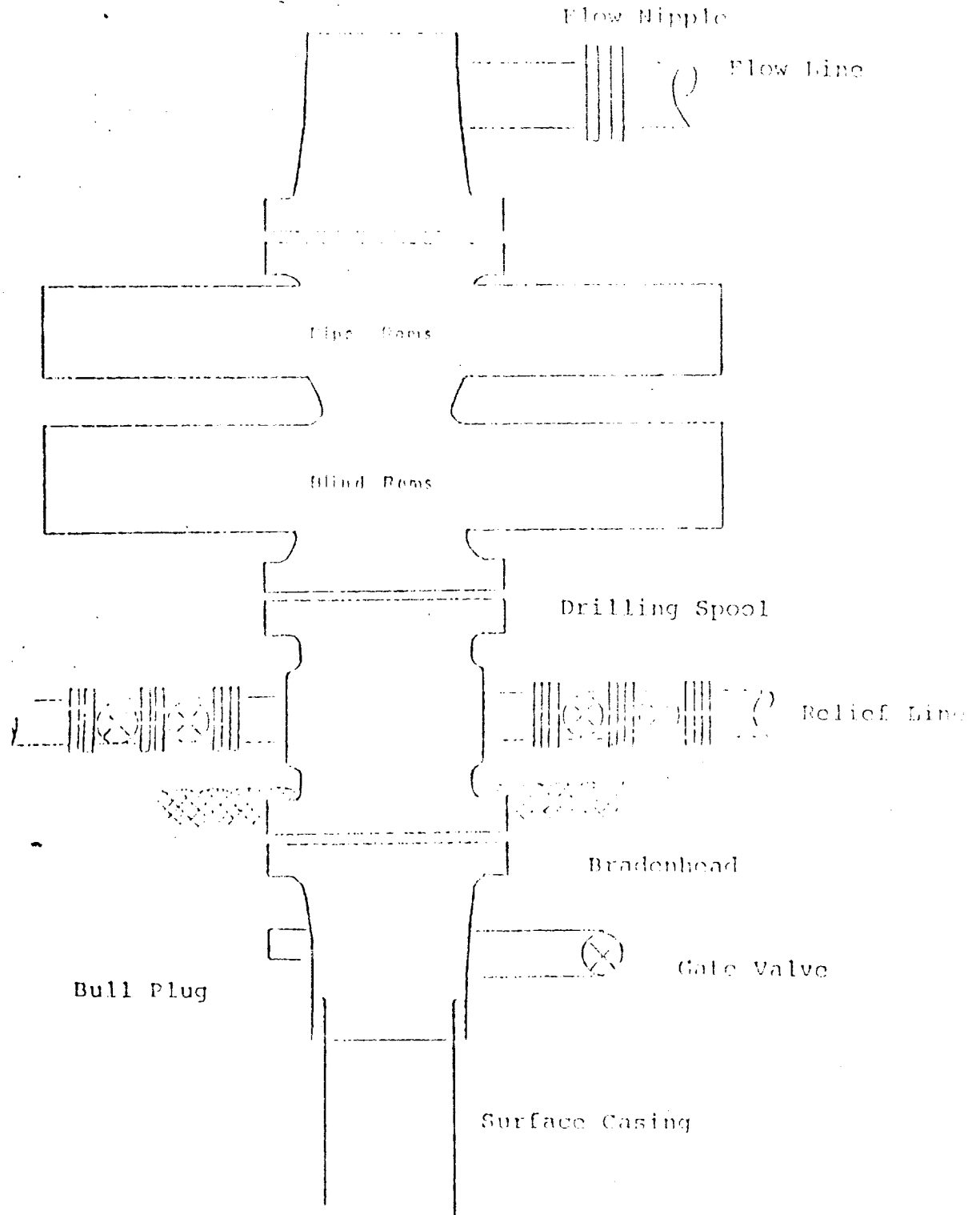
ENG. REC.	DATE
DRAWN	J. L. H. 8-16-78
CHECKED	
CHECKED	
PROJ. APP.	
DESIGN	


**El Paso Natural Gas Company**  
 TYPICAL LOCATION PLAT FOR  
 MESAVERDE OR DAKOTA DRILL SITE

SCALE: 1" = 50'      DWG. NO.      R.



Typical B.O.P. Installation  
for Dakota Well

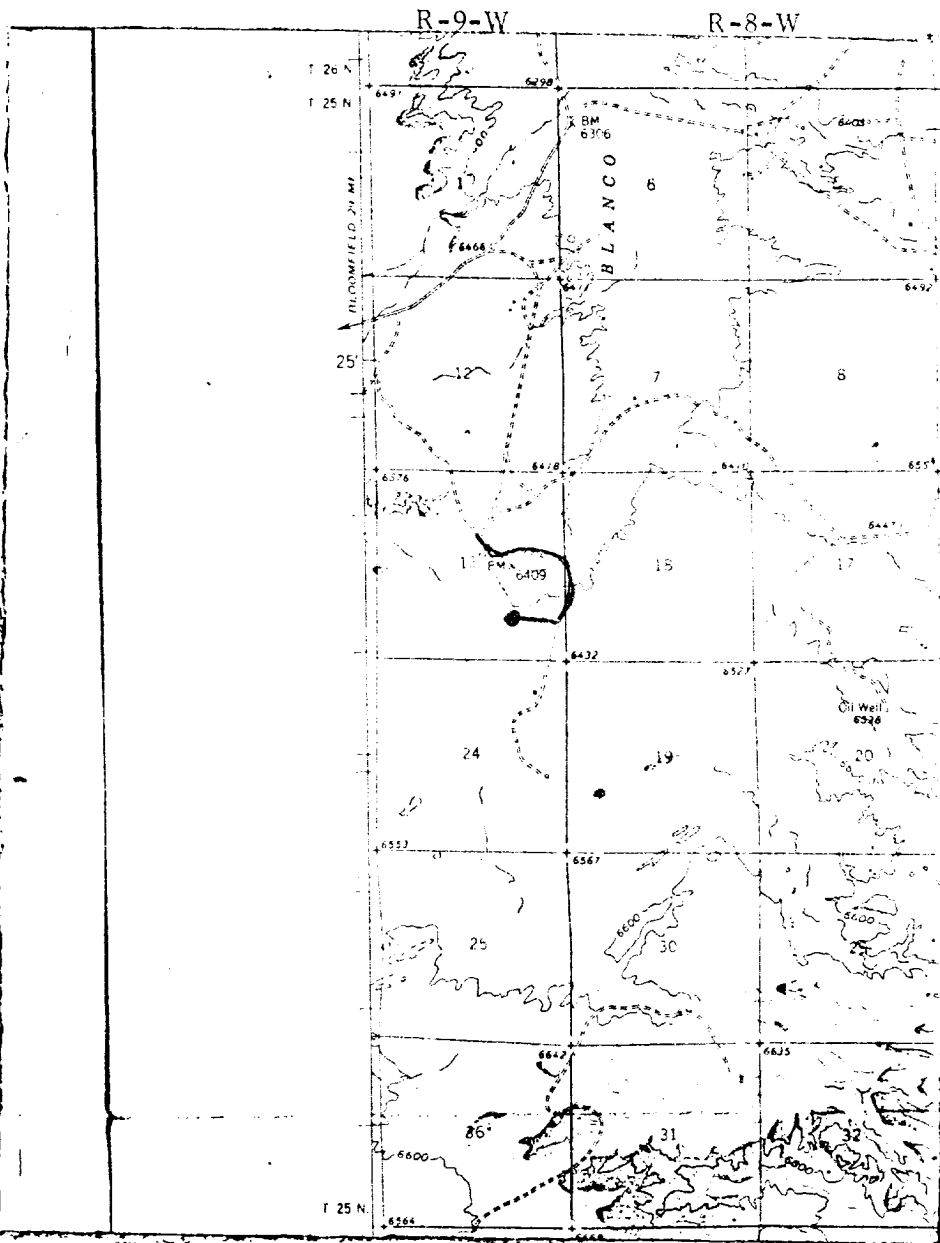


Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure

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.



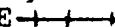
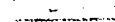
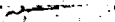
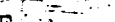
EL PASO NATURAL GAS COMPANY  
 Hosteen Nez Begay #1  
 SE 13-25-9

T  
 25  
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MAP #1

LEGEND OF RIGHT-OF-WAYS

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

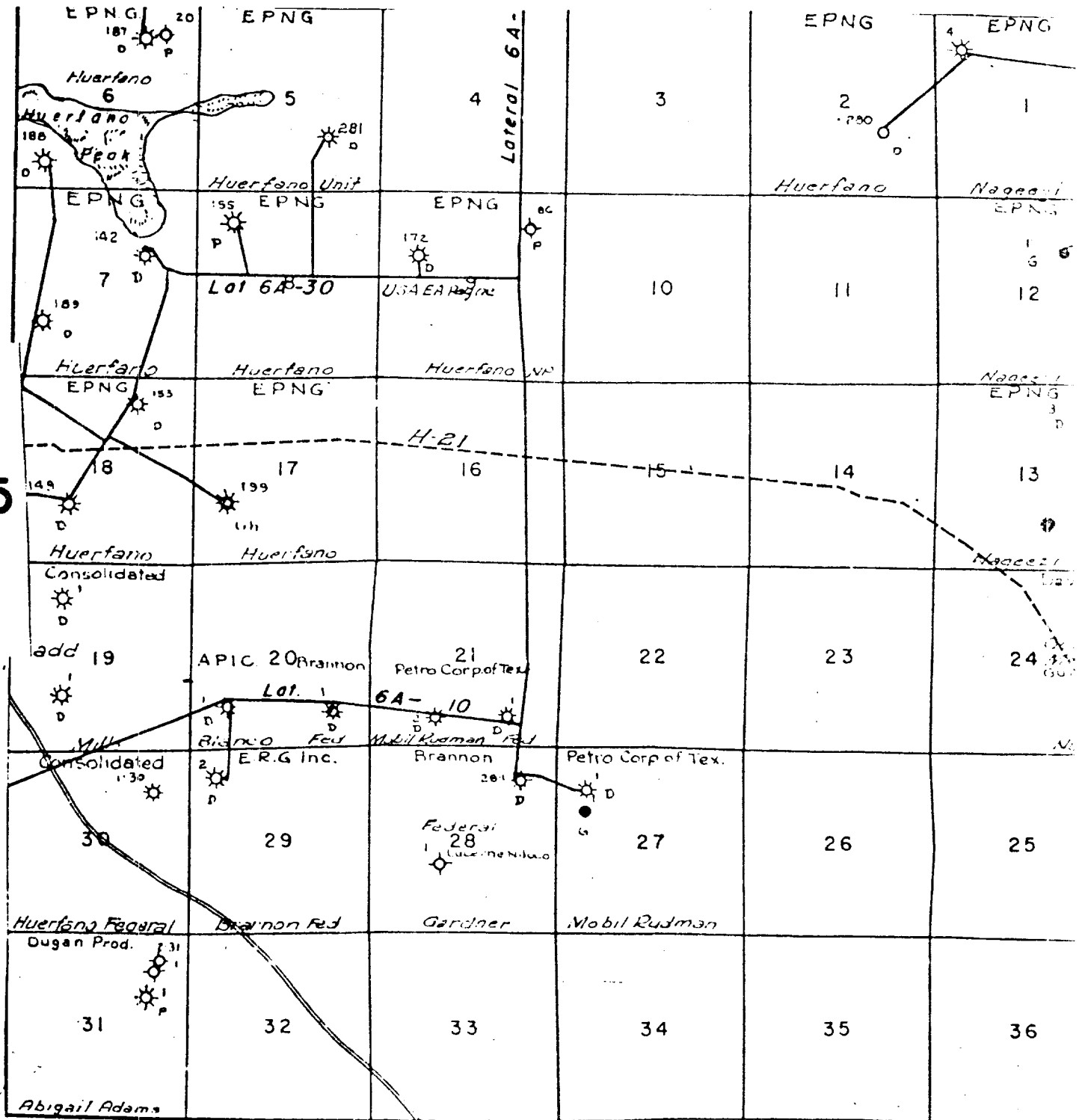
EL PASO NATURAL GAS COMPANY

Hosteen Nez Begay #1

SE 13-25-9

R-9-W

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MAP #2

Proposed Location