Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23856

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] 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, 1800'W
At proposed prod. zone same

5. LEASE DESIGNATION AND SERIAL NO.
SF 077942-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Huerfano Unit

8. FARM OR LEASE NAME
Huerfano Unit

9. WELL NO.
270

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec.7,T-26-N,R-10-W NMPM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
15 miles South of Bloomfield, NM

12. COUNTY OR PARISH: San Juan
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 800'

16. NO. OF ACRES IN LEASE: Unit

17. NO. OF ACRES ASSIGNED TO THIS WELL: W/ 318.08

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 500'

19. PROPOSED DEPTH: 6645'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6475'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'	183 cu.ft.circ. to surface
7 7/8"	4 1/2"	10.5#	6645'	1681 cu.ft. - 3 stages

1st stage - 353 cu.ft. to cover Gallup formation
2nd stage - 664 cu.ft. to cover Mesa Verde formation
3rd stage - 664 cu.ft. to cover Ojo Alamo formation

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 W/2 of Section 7 is dedicated to this well.

RECEIVED
SEP 28 1979
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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. Bruce 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:

RECEIVED
OCT 2 1979
OIL CON. COM.
DIST. 3

oh Frank

nmocc

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
EL PASO NATURAL GAS COMPANY	HUERFANO UNIT (SF-077942-A)	270

Unit Letter	Section	Township	Range	County
N	7	26-N	10-W	SAN JUAN

Actual Footage Location of Well:
800 feet from the SOUTH line and 1800 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6475	DAKOTA	BASIN DAKOTA	318.08 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

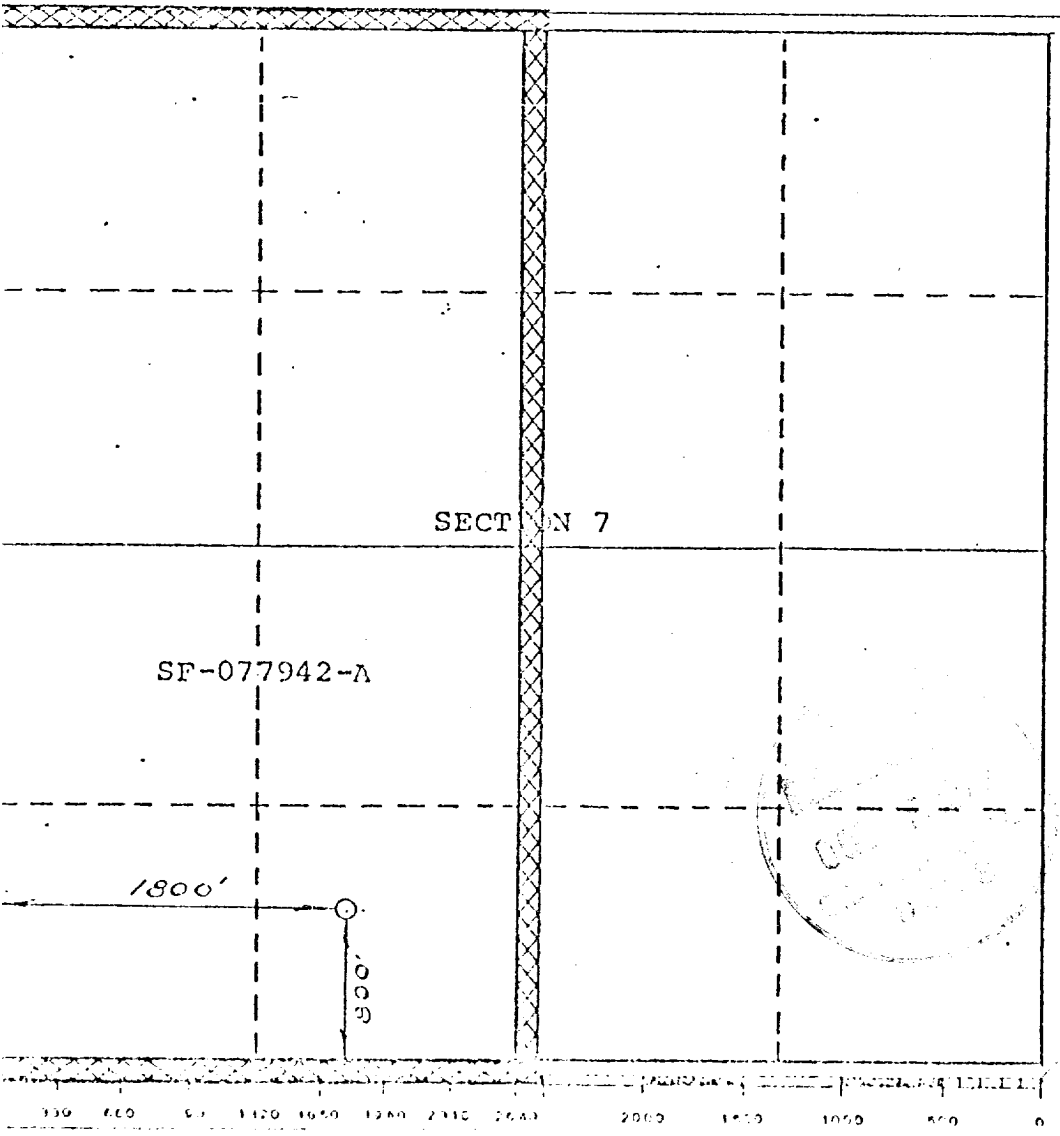
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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. Fuiss
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
MAY 10, 1974

Registered Professional Engineer and/or Land Surveyor

Certificate No. 1760

El Paso NATURAL GAS COMPANY

P. O. BOX 990
FARMINGTON, NEW MEXICO 87401
PHONE: 505-325-2841

Multi-Point Surface Use Plan
Huerfano Unit #270

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 #1.

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 flat and rolling sagebrush hills with grass and sagebrush growing. Cattle, deer and antelope are occasionally seen on the 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

September 20, 1979

Operations Plan - Huerfano Unit #270

I. Location: 800'S, 1800'W, Section 7, T-26-N, R-10-W, San Juan County, NM

Field: Basin Dakota Elevation: 6475'GR

II. Geology:

A. Formation Tops:

Surface	Nacimiento	Menefee	---
Ojo Alamo	897'	Point Lookout	4347'
Kirtland	1007'	Gallup	5427'
Fruitland	1682'	Greenhorn	6323'
Pic.Cliffs	1932'	Graneros	6387'
Lewis	2102'	Dakota	6496'
Mesa Verde	3547'	Total Depth	6645'

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

C. Coring: none

D. Samples: none

III. Drilling:

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

IV. Materials:

A. Casing Program:

Hole Size	Depth	Csg.Size	Wt.&Grade
13 3/4"	200'	9 5/8"	32.3# H-40
8 3/4"	5075'	4 1/2"	10.5# J-55
7 7/8"	6500'	4 1/2"	10.5# J-55
7 7/8"	6645'	4 1/2"	11.6# J-55

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

4 1/2" production casing - cement guide shoe and self-fill insert valve. Two multiple stage cementers equipped for three stage cementing. Set tool for second stage at 4975' and tool for third stage att 2200'. 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: 6645' of 2 3/8", 4.7#, J-55 tubing with a common pump seating nipple and an expendable check valve with drill type guide.

D. Wellhead Equipment: 10" 3000 x 9 5/8" casing head with 10" x 4 1/2" casing hanger, 10" 3000 x 6" 3000 xmas tree. Wellhead representative to set all slips.

Operations Plan - Huerfano Unit #270

V. Cementing:

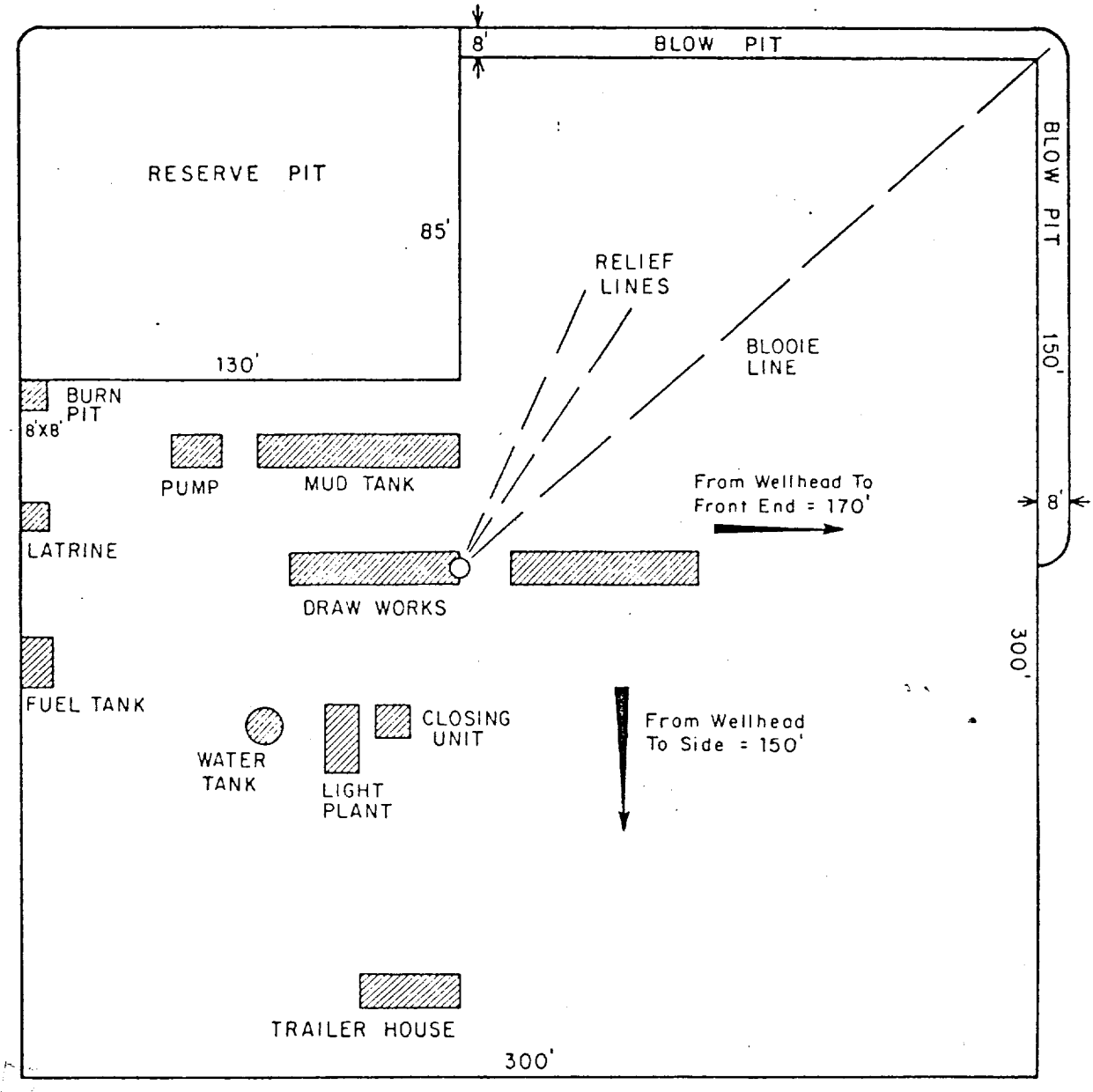
Surface casing (13 3/4" x 9 5/8") - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate). WOC 12 hours. Test to 600#/30 min.

Production casing -

First stage (4 1/2" x 7 7/8") - use 140 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack followed by 100 sks. 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (353 cu.ft. of slurry, 50% excess to cover the Gallup).

Second stage (4 1/2" x 8 3/4") - circulate mud for 2 hours, then cement with 410 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride and 8.3 gallons of water per sack (664 cu.ft. of slurry, 60% excess to cover the Mesa Verde).

Third stage (4 1/2" x 8 3/4") - circulate mud for 2 hours, then cement using 410 sks. 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack (664 cu.ft. of slurry, 60% excess to cover the Ojo Alamo). Run temperature survey on top stage only at 8 hours. WOC 18 hours.



PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

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

W.O.

El Paso Natural Gas Company

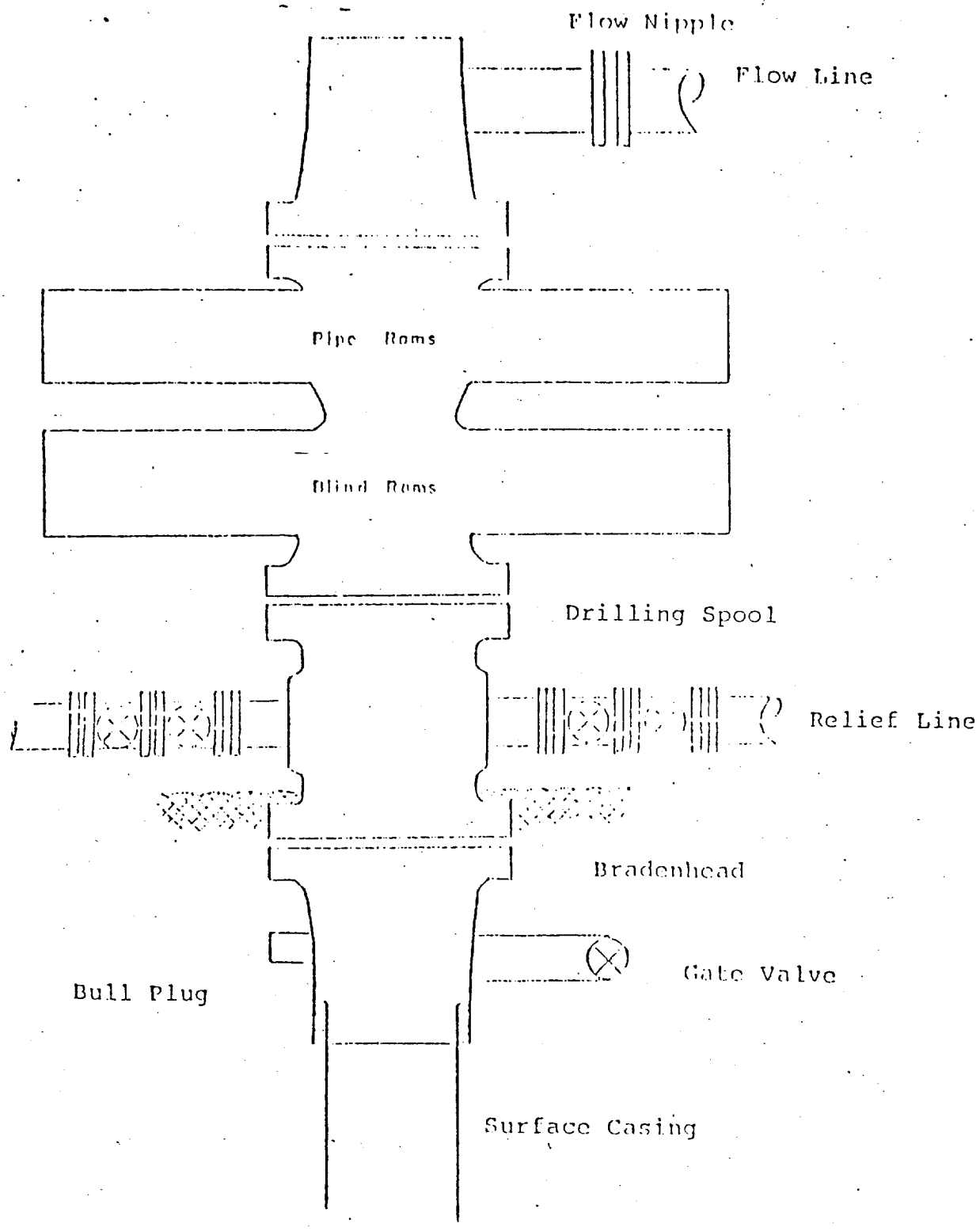
TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE

SCALE: 1" = 50'

DWG. NO.

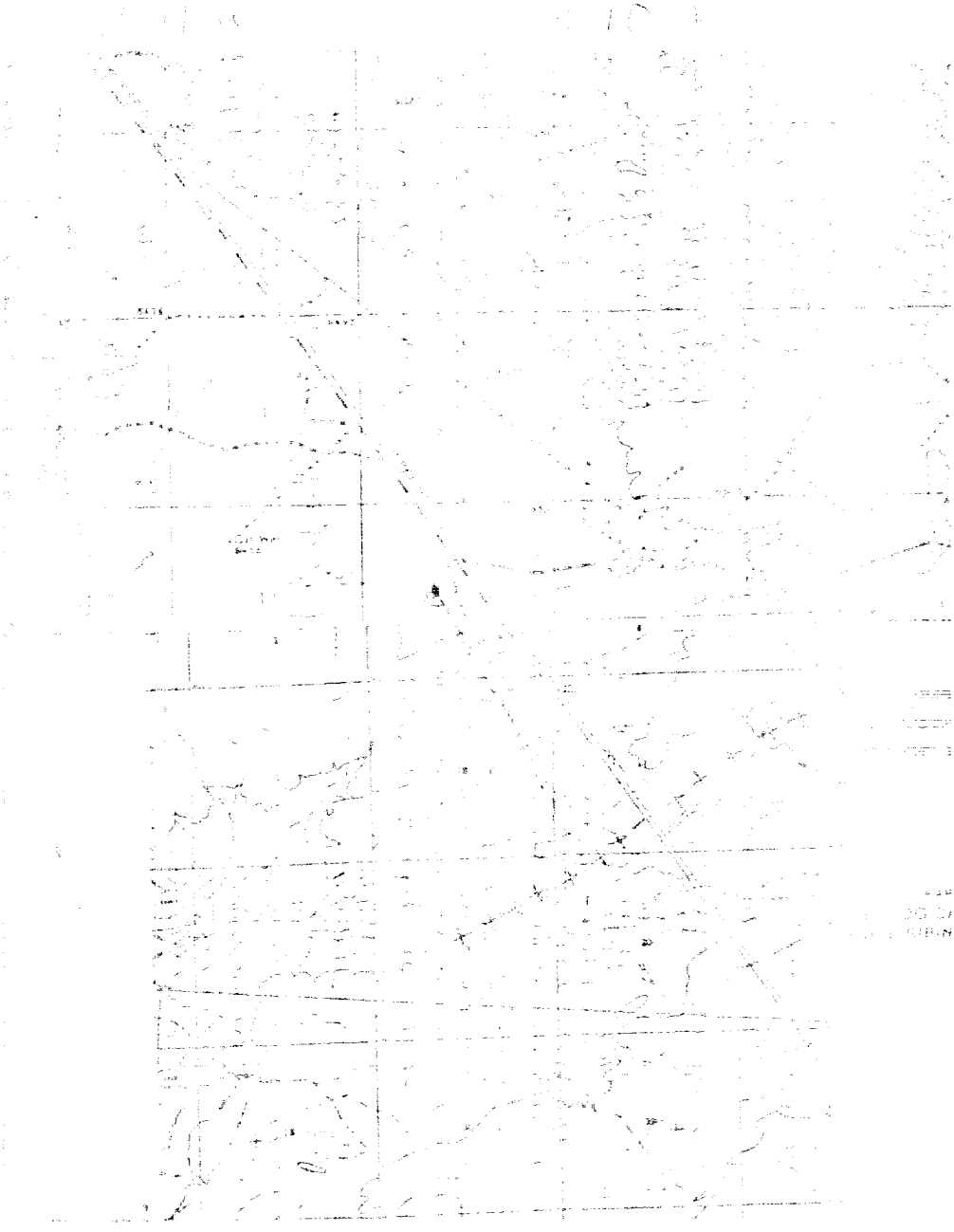
REV

Typical B.O.P. Installation
for Dakota Well



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

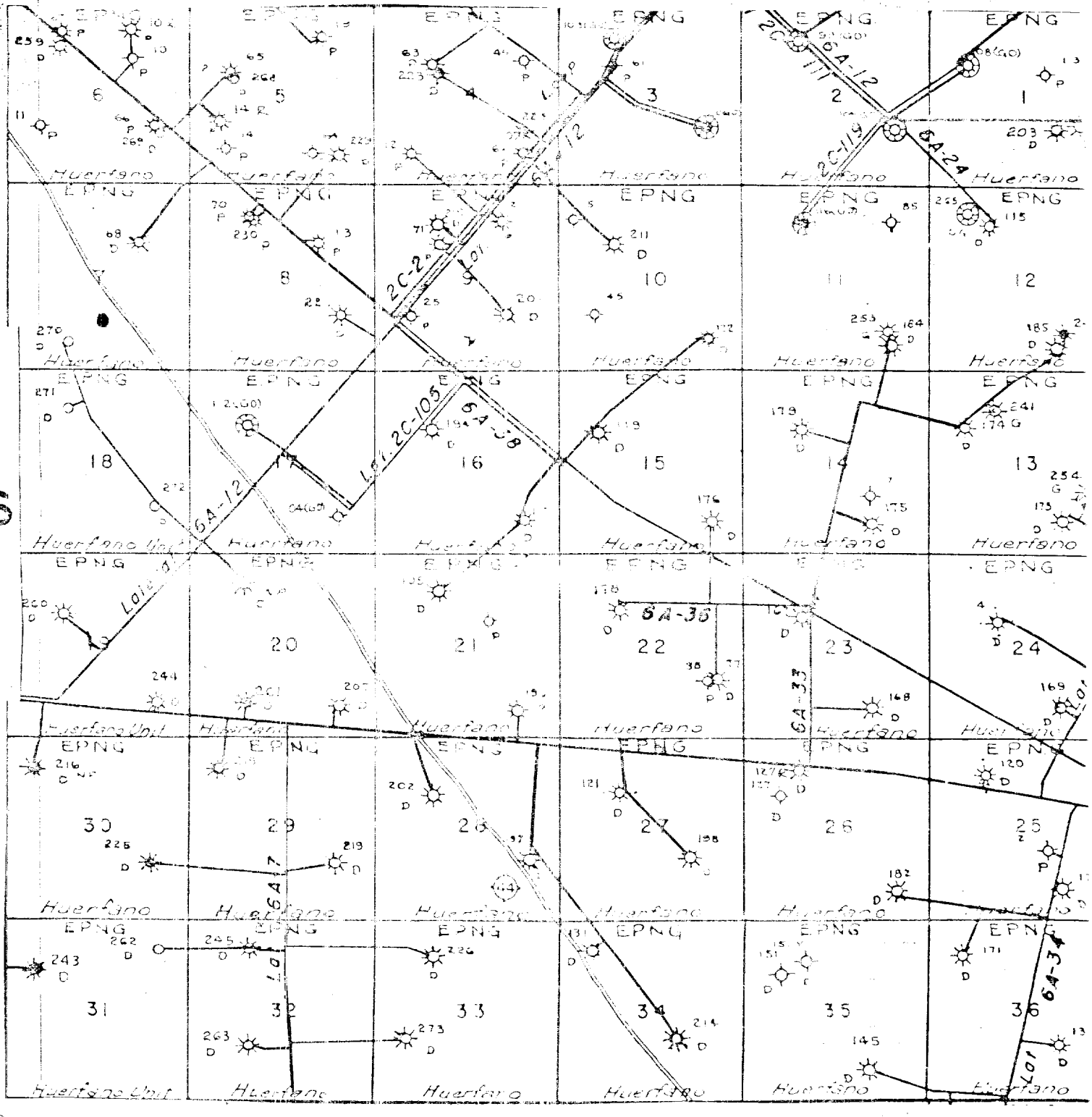
When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line.



El Paso Natural Gas Company
Huerfano Unit #270
SW 7-26-10

R-10-W

T 26 N



MAP 2

Proposed Location ●