

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-039-21321  
5. LEASE DESIGNATION AND SERIAL NO.

SF 078925

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Canyon Largo Unit

8. FARM OR LEASE NAME

Canyon Largo Unit

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

Sec. 25, T-24-N. R-6-W

N. M. P. M.

12. COUNTY OR PARISH

Rio Arriba

13. STATE

N. M.

## 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

Box 990, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

965'N, 1160'E

At proposed prod. zone

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

15. DISTANCE FROM PROPOSED\*

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

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL  
320.018. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.19. PROPOSED DEPTH  
6780'

20. ROTARY OR CABLE TOOLS

Rotary

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

6646' GL

22. APPROX. DATE WORK WILL START\*

23.

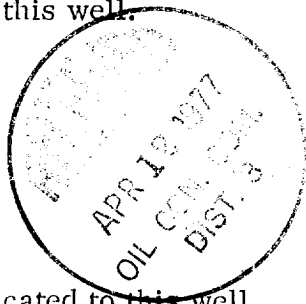
## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	32.3#	200'	224 cu. ft. to circulate
8 3/4"			5095'	
7 7/8"	4 1/2"	10.5 & 11.6#	6780'	1856 cu. ft. - 2 Stages

Selectively perforate and sand water fracture the Mesa Verde formation

A 3000 psi WP and 6000 psi test double gate preventor equipped with blind and pipe rams will be used for blow out prevention on this well.

The gas is dedicated



RECEIVED

APR 5 1977

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

The E/2 of Sec. 25 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. Buico*

TITLE

Drilling Clerk

DATE

4-5-77

(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

REKINGTON COPY

"APPROVAL TO FLARE GRANTED  
WHILE DRILLING AND TESTING."

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.

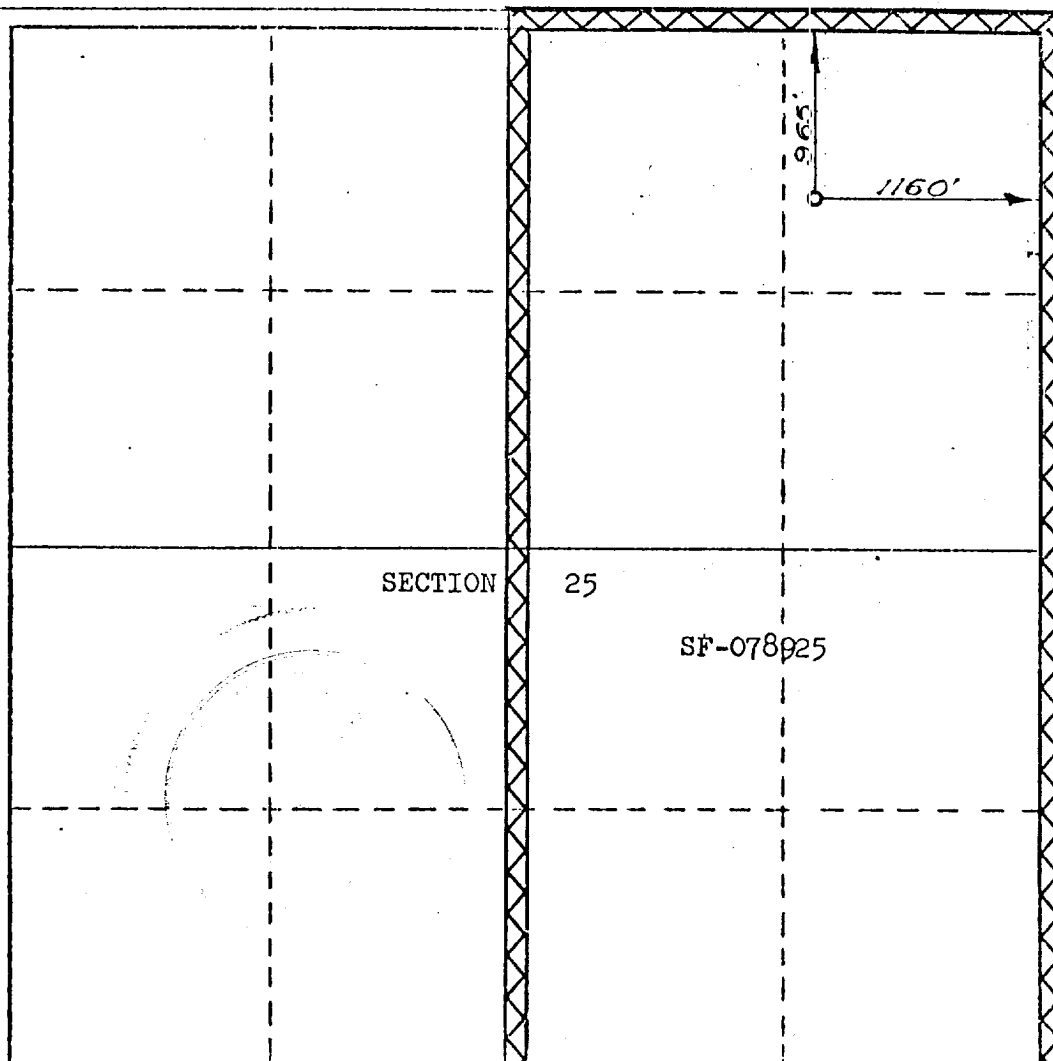
Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>CANYON LARGO UNIT (SF-078925)</b>		Well No. <b>6</b>
Unit Letter <b>A</b>	Section <b>25</b>	Township <b>24-N</b>	Range <b>6-W</b>	County <b>RIO ARriba</b>	
Actual Footage Location of Well: <b>965</b> feet from the <b>NORTH</b> line and <b>1160</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>6646</b>	Producing Formation <b>DAKOTA</b>		Pool <b>BASIN DAKOTA</b>		Dedicated Acreage: <b>320.0</b> 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. Buess*

Name

**Drilling Clerk**

Position

**El Paso Natural Gas Company**

Company

**April 5, 1977**

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

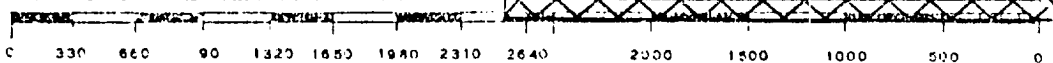
**MARCH 24, 1977**

Registered Professional Engineer and/or Land Surveyor

*[Signature]*

Certificate No.

**1760**



Multi-Point Surface Use Plan  
Canyon Largo Unit #6

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 a water hole located at Lindrith Station Water Hole
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 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. With seed mixture #1. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted Green - Federal Standard 595 34127
11. Other Information - The terrain is sand stone ledges and steep bluffs covered with sage brush and cedar trees. Deer and sheep graze the proposed project site.

12. Operator's Representative - W. D. Dawson, Post Office Box 990,  
Farmington, New Mexico 87401

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.

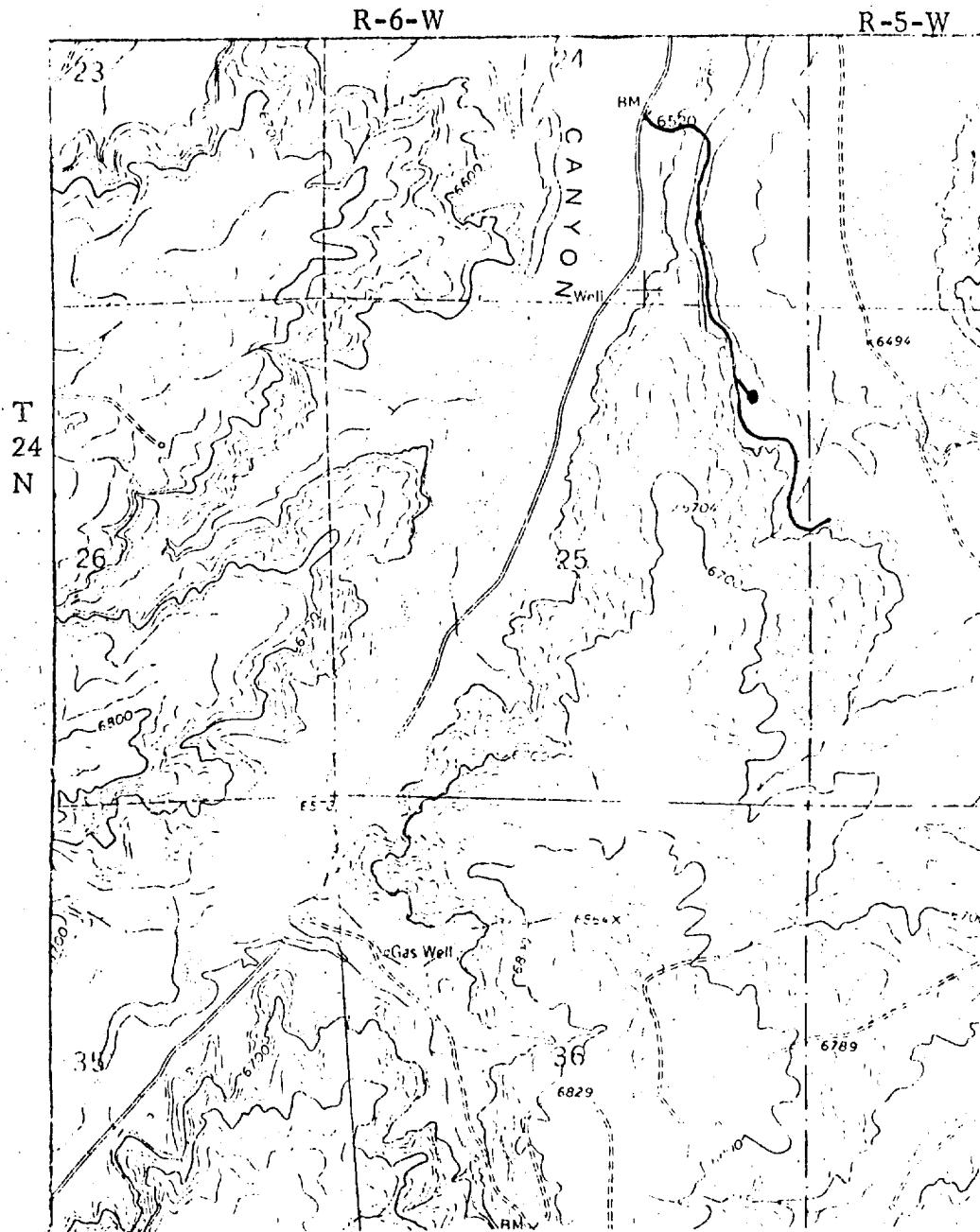


D. R. Read

Division Drilling Engineer

April 5, 1977

EL PASO NATURAL GAS COMPANY  
CANYON LARGO UNIT #6  
NE 25-24-6



MAP #1

LEGEND OF RIGHT-OF-WAYS

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

RGW



Proposed Location

Operations Plan - Canyon Largo Unit #6

I. Location: 965'N, 1100'E, Section 25, T-24-N, R-6-W, Rio Arriba County, New Mexico

Field: Basin Dakota

Elevation: 6646' GL

II. Geology:

A. Formation Tops:	San Jose	Surface	Mancos	4895
	Ojo Alamo	1785'	Gallup	5450'
	Kirtland	1830'	Greenhorn	6355'
	Fruitland	2015'	Graneros	6430'
	Pictured Cliffs	2190'	Dakota	6605'
	Lewis	2270'	Total Depth	6780'
	Mesa Verde	3690'		
	Point Lookout	4395'		

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

C. Coring Program: None

III. Drilling:

A. Mud Program: Mud from surfact to total depth.

IV. Materials

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt. &amp; Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	5095'		
	7 7/8"	6500'	4 1/2"	10.5# J-55
	7 7/8"	6780'	4 1/2"	11.6# J-55

B. Float Equipment: 9 5/8" Surface Casing - B-W guide shoe (Prod. #FC06)

4 1/2" Production Casing - Baker guide shoe (Prod. #102-01) and self-fill insert valve (Prod. #177-13). One Baker multiple stage cementer (Prod. #200-03) equipped for two stage cementing. Set tool for second stage at 4995'. Run 14 Baker Model "M" centralizers (Prod. 244-53) placed as follows: One on each of the bottom 8 joints, one below and five above stage tool spaced every other joint.

C. Tubing: 6780' of 2 3/8", 4.7#, J-55 tubing with a common pump seating nipple and a Baker expendable check valve with drill type guide.

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



Operations Plan - Canyon Largo Unit #6 (Cont'd.)

V. Cementing:

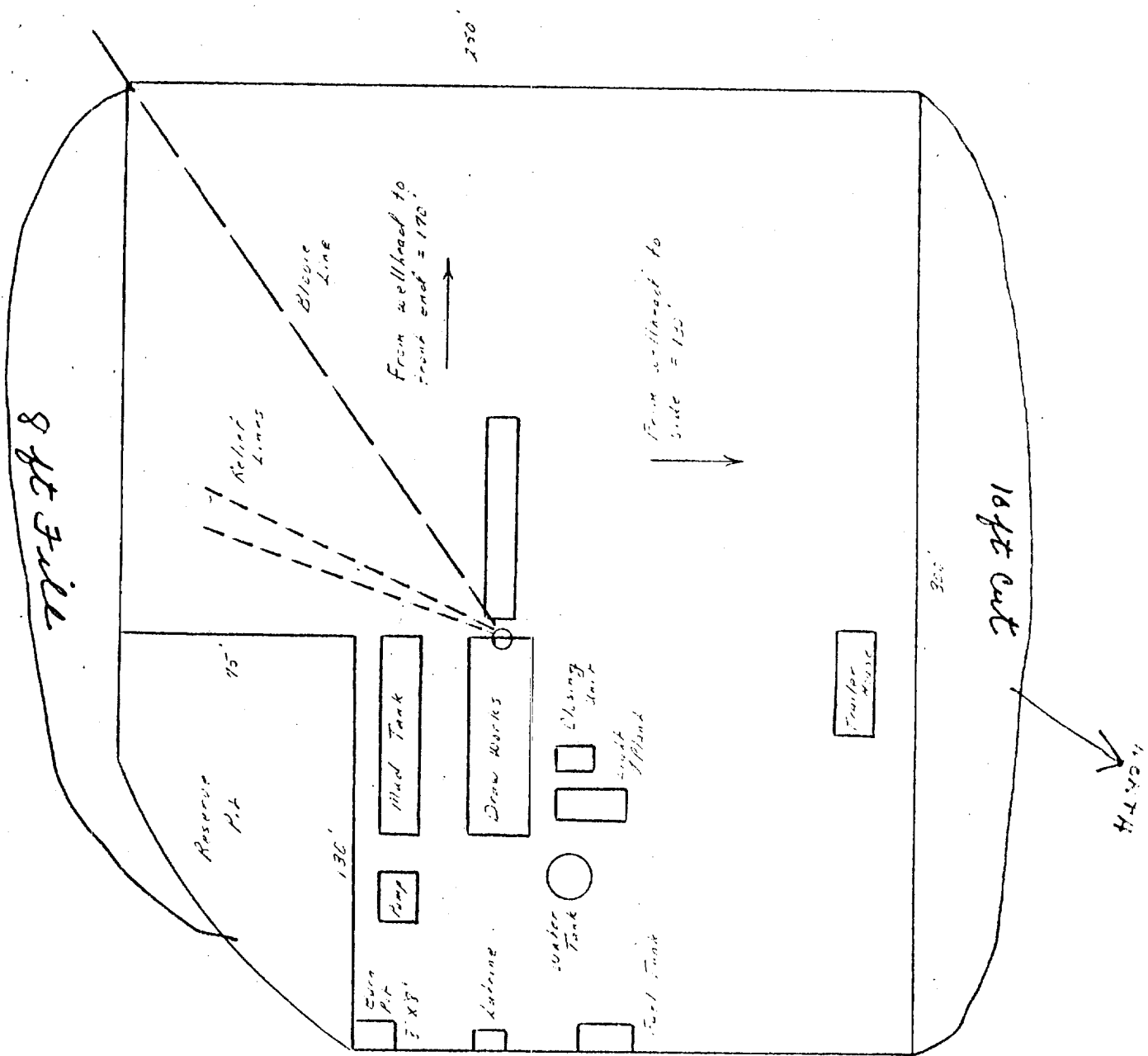
Surface casing (13 3/4" x 9 5/8" ) - Use 190 sacks of Class "A" cement with 1/4# gel flake per sack and 3% calcium chloride (224 cu. ft. of slurry, 100% excess to circulate to surface). W.O.C. 12 hours. Test casing to 600#/30 Minutes.

Production Casing -

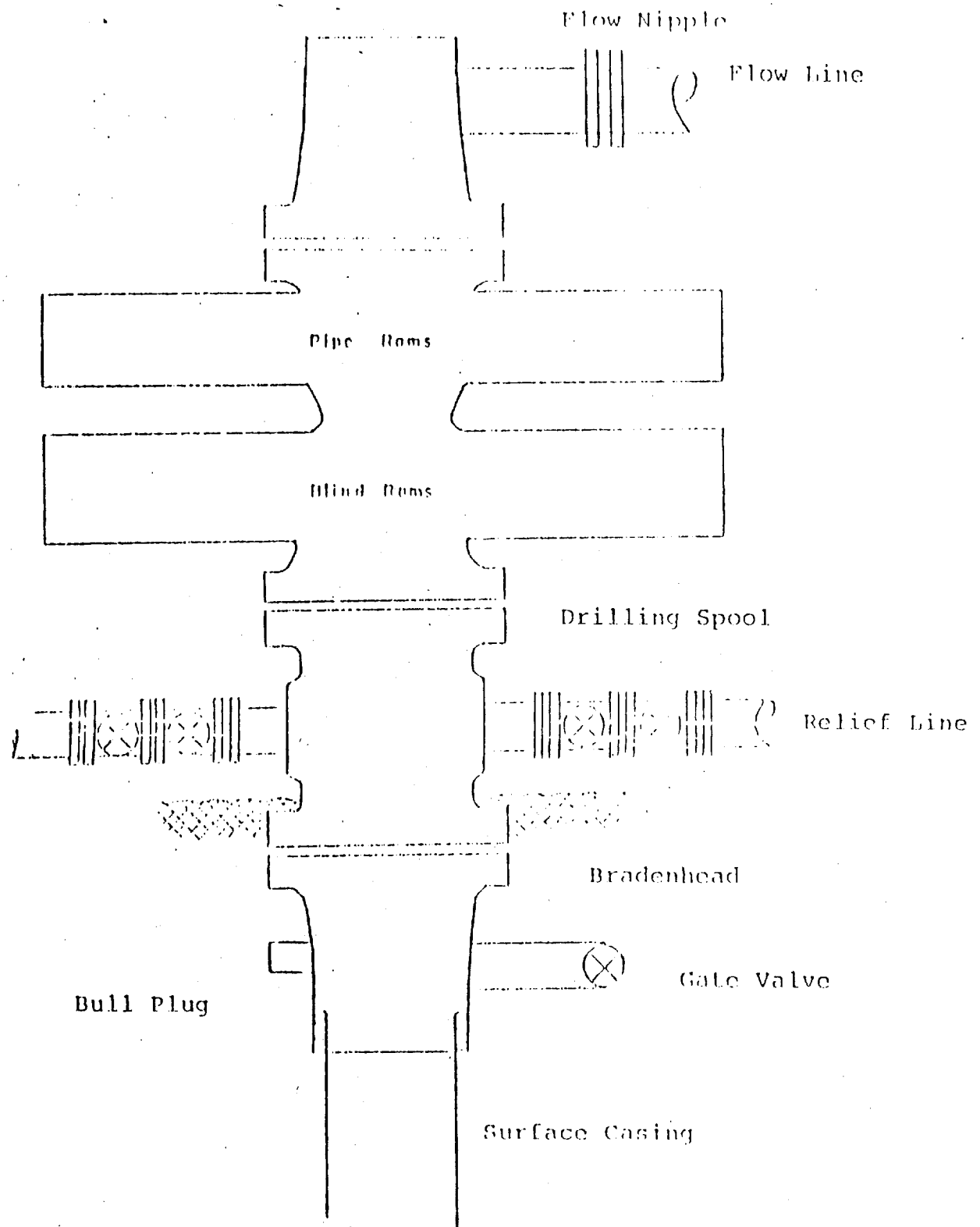
First Stage (4 1/2" x 7 7/8") = Use 96 sks. of 65/35 Class "B" Pozmix and 12% gel mixed with 15.52 gallons of water per sack for a slurry weight of 11.3 pounds per gallon, followed by 100 sacks of 50/50 Class "B" Pozmix, 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu. ft. (378 cu. ft. of slurry, 25% excess to cover Gallup).

Second Stage (4 1/2" x 8 3/4") - W.O.C. and circulate two hours. Cement with 564 sacks 65/35 Class "B" Pozmix and 12% gel, mixed with 15.52 gallons of water per sack for a slurry weight of 11.3# per gallon (1478 cu. ft. of slurry, 50% excess to cover Ojo Alamo). W.O.C. 18 hours. Run temperature survey after 8 hours.

El Paso Natural Gas Company  
 Typical Location Plot for those Vents and Data Wells



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.