

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-24297

5. LEASE DESIGNATION AND SERIAL NO.  
SF 080376A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Sheets

9. WELL NO.

4

10. FIELD AND POOL OR WILDCAT  
Blanco PC Ext.

Basin Dakota

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

Sec. 28, T-31-N, R-9-W

NMPM

12. COUNTY OR PARISH

San Juan

13. STATE  
NM

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

1100'S, 1530'E

At proposed prod. zone

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

same

12 miles northwest of Abe's Store, NM

15. DISTANCE FROM PROPOSED\*

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

1100'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

158.82 159.82 &amp; 318.02

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

600

19. PROPOSED DEPTH

7611'

20. ROTARY OR CABLE TOOLS

Rotary

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

6191'GR

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"	36.0#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3412'	380 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2" liner	10.5# & 11.6#	3262-7611'	758 cu.ft. to circ. liner

Selectively perforate and sandwater fracture the Pictured Cliffs  
and Dakota formations.

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 28 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. Guico*

TITLE

Drilling Clerk

DATE

March 26, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

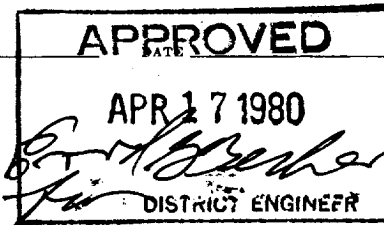
APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

NM0001

\*See Instructions On Reverse Side



All distances must be from the outer boundaries of the Section

Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>SHEETS (SF-080376-A)</b>		Well No. <b>4 (110)</b>
Unit Letter <b>0</b>	Section <b>28</b>	Township <b>31N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1100</b> feet from the <b>South</b> line and <b>1530</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6191</b>	Producing Formation <b>PICTURED DAKOTA - CLIFFS</b>		Pool <b>BLANCO PICTURED CLIFFS EXT. PASIN DAKOTA</b>		Dedicated Acreage: <b>159.82</b> & <b>318.02</b> Acres <b>158.82</b>
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>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).</p> <p>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?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes," type of consolidation _____</p> <p>If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					

	<b>CERTIFICATION</b>
	<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>A. H. Dices</i></p> <p>Name _____</p> <p><b>Drilling Clerk</b></p> <p>Position _____</p> <p><b>El Paso Natural Gas Co.</b></p> <p>Company _____</p> <p><b>March 26, 1980</b></p> <p>Date _____</p>
	<p>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 are true and correct to the best of my knowledge and belief.</p> <p><b>RECEIVED</b> <b>APR 18 1980</b> <b>CON. COM.</b> <b>DIST. 3</b></p> <p>Date Surveyed _____</p> <p><b>February 12, 1980</b></p> <p>Registered Professional Engineer and/or Land Surveyor</p> <p><i>Fred B. Kerr Jr.</i></p> <p><b>Fred B. Kerr Jr.</b></p> <p>Certificate No. _____</p> <p><b>3950</b></p>

**El Paso** NATURAL GAS  
COMPANY

El Paso Natural Gas Company  
FARMINGTON, NEW MEXICO 87401  
PHONE (505) 625-2541

Well Name Shots #4

Location SE 28 31-9

Formation PC - OK

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

U. S. Forest Service

Date

Dabney Ford  
Archaeologist

2/26/80  
Date

Bureau of Indian Affairs Representative

Date

Paul Marden  
Bureau of Land Management Representative

Date

Andy Stearns  
U. S. Geological Survey Representative - AGREES  
TO THE FOOTAGE LOCATION OF THIS WELL.

2/26/80  
Date

REASON:

Seed Mixture: IF

Equipment Color: GREEN

Road and Row: (Same) or (Separate)


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

C.C. to Dave Vilvin  
Earl Mealer  
John Ahim

Multi-Point Surface Use Plan  
Sheets #4

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 Pump Wash Hole #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 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 rolling hills with pinon, sage and juniper growing. Cattle and deer 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.

  
\_\_\_\_\_  
D. R. Read  
Project Drilling Engineer

Operations Plan  
Sheets #4

I. Location: 1100'S, 1530'E, Section 28, T-31-N, R-9-W, San Juan County, NM

Field: Basin Dakota-Blanco PC Ext.      Elevation: 6191'GR

II. Geology:

A. Formation Tops:	Surface	San Jose	Menefee	4567'
	Ojo Alamo	1727'	Point Lookout	5194'
	Kirtland	1792'	Gallup	6544'
	Fruitland	2705'	Greenhorn	7266'
	Pic.Cliffs	3016'	Graneros	7316'
	Lewis	3212'	Dakota	7462'
	Mesa Verde	4515'	Total Depth	7611'

B. Logging Program: GR-Ind. and GR-Density at total depth

C. Coring Program: none

D. Natural gauges: 4505', 4560', 5185' and at Total Depth.  
Also gauge any noticeable increase in gas. Record all gauges in morning report and daily drilling report.

III. Drilling:

A. Mud Program: mud from surface to 3412'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size:</u>	<u>Depth</u>	<u>Csg. Size</u>	<u>Wt. &amp; Grade</u>
	13 3/4"	200'	9 5/8"	36.0# K-55
	8 3/4"	3412'	7"	20.0# K-55
	6 1/4"	3262-6500'	4 1/2"	10.5# K-55
	6 1/4"	7611'	4 1/2"	11.6# K-55

B. Float Equipment: 9 5/8" surface casing - Pathfinder Texas pattern guide shoe (Part No.2006-1-012)

7" intermediate casing - Pathfinder guide shoe (Part.No.2003-1-007) and Howco self-fill insert float valve (Price Ref. 36A & 37)  
5 Pathfinder stabilizers (Part.No.107-10) one every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Geyser shoe and plug latch in collar assembly.

C. Tubing 7611' of 1 1/2", 2.9#, J-55, 10rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.  
3412' of 1 1/4", 2.33#, J-55, 10rd IJ tubing.

D. Wellhead Equipment: 3000 psi test tree. Wellhead representative to set all slips and cut off casing.

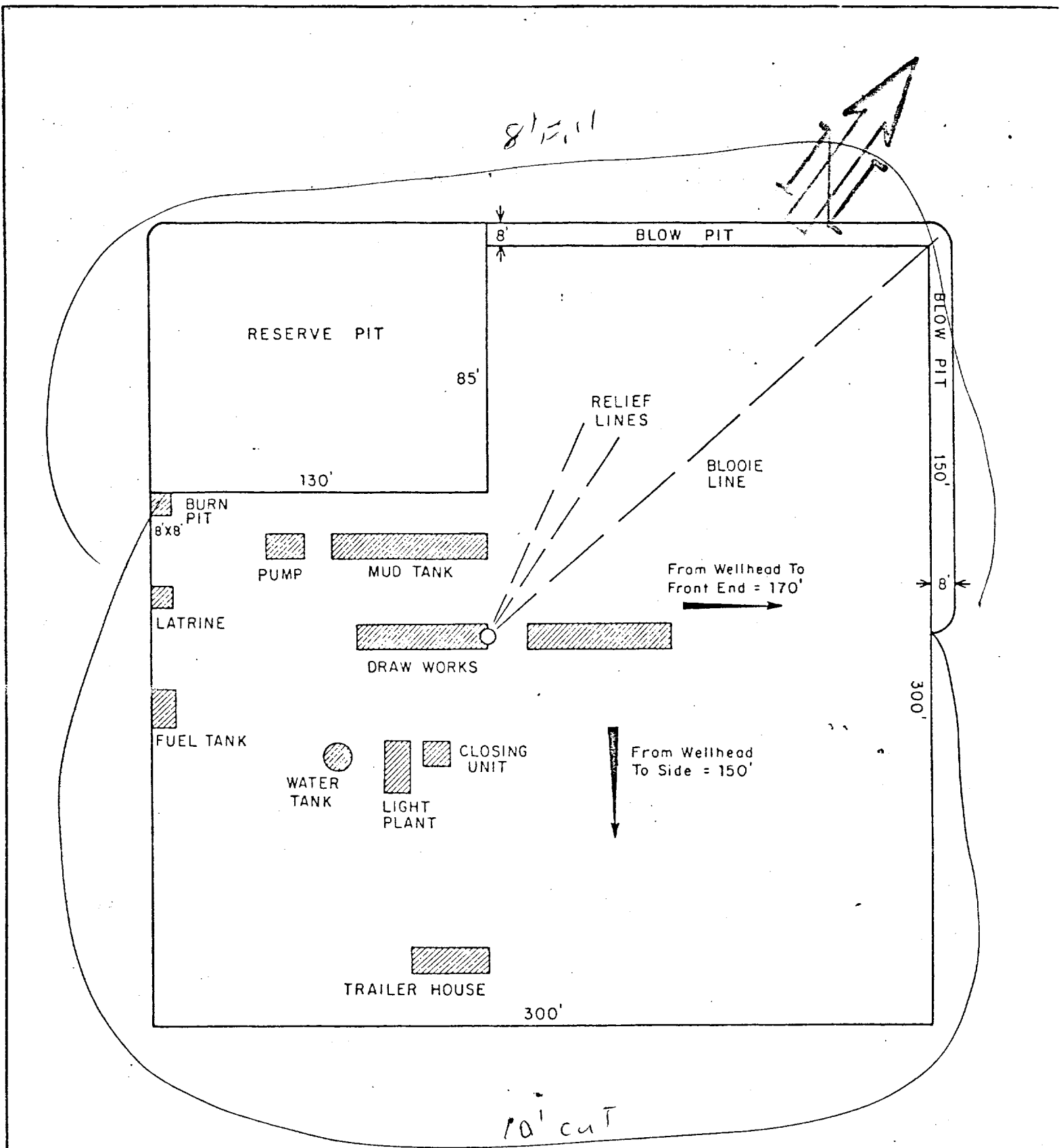
## Operations Plan - Sheets #4

### 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 162 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 (380 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.

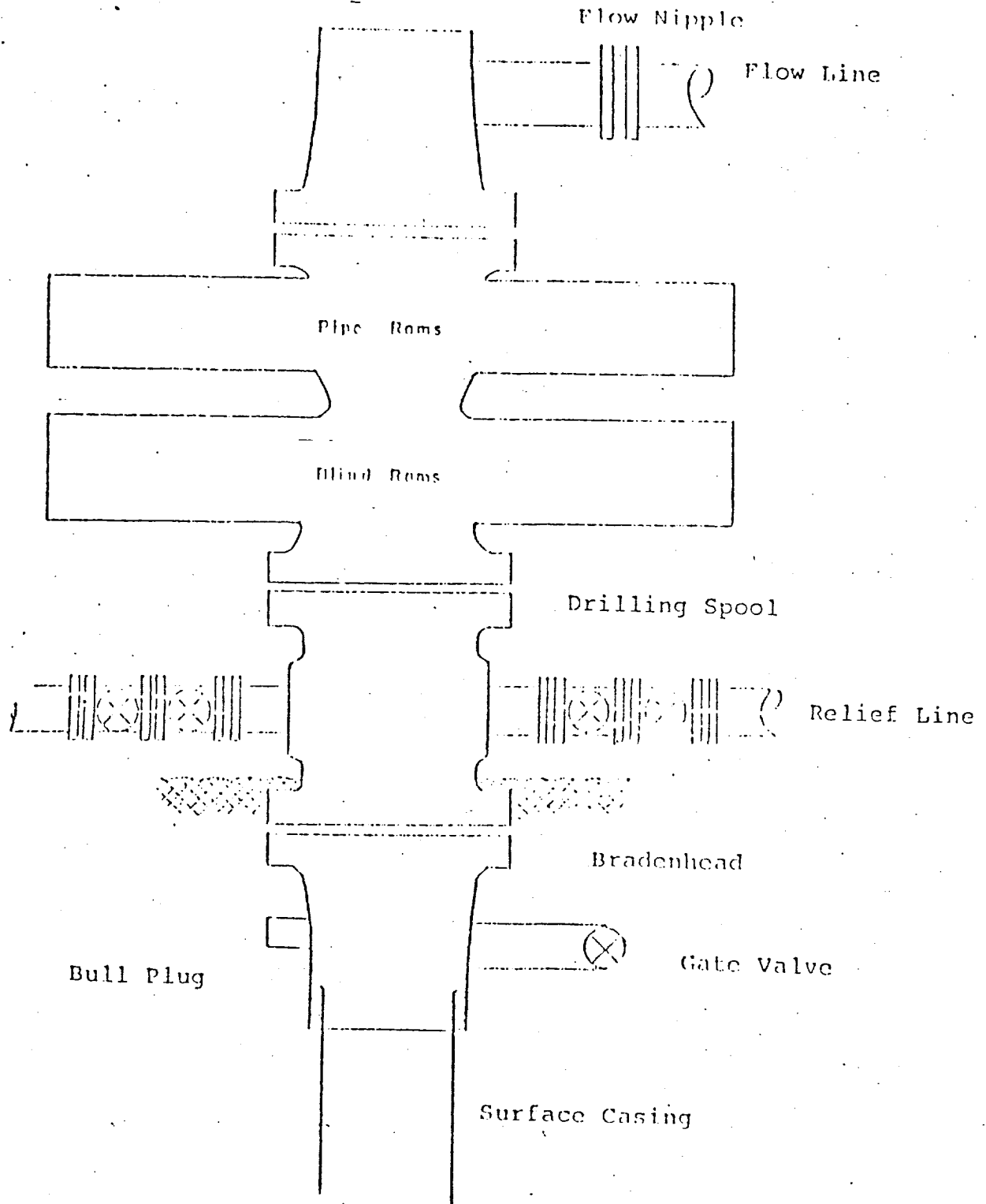
4 1/2" liner - precede cement with 40 bbls. of gel water (4 sks. gel) Cement with 290 sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (758 cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.



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



Typical B.O.P. Installation  
for Dakota Well



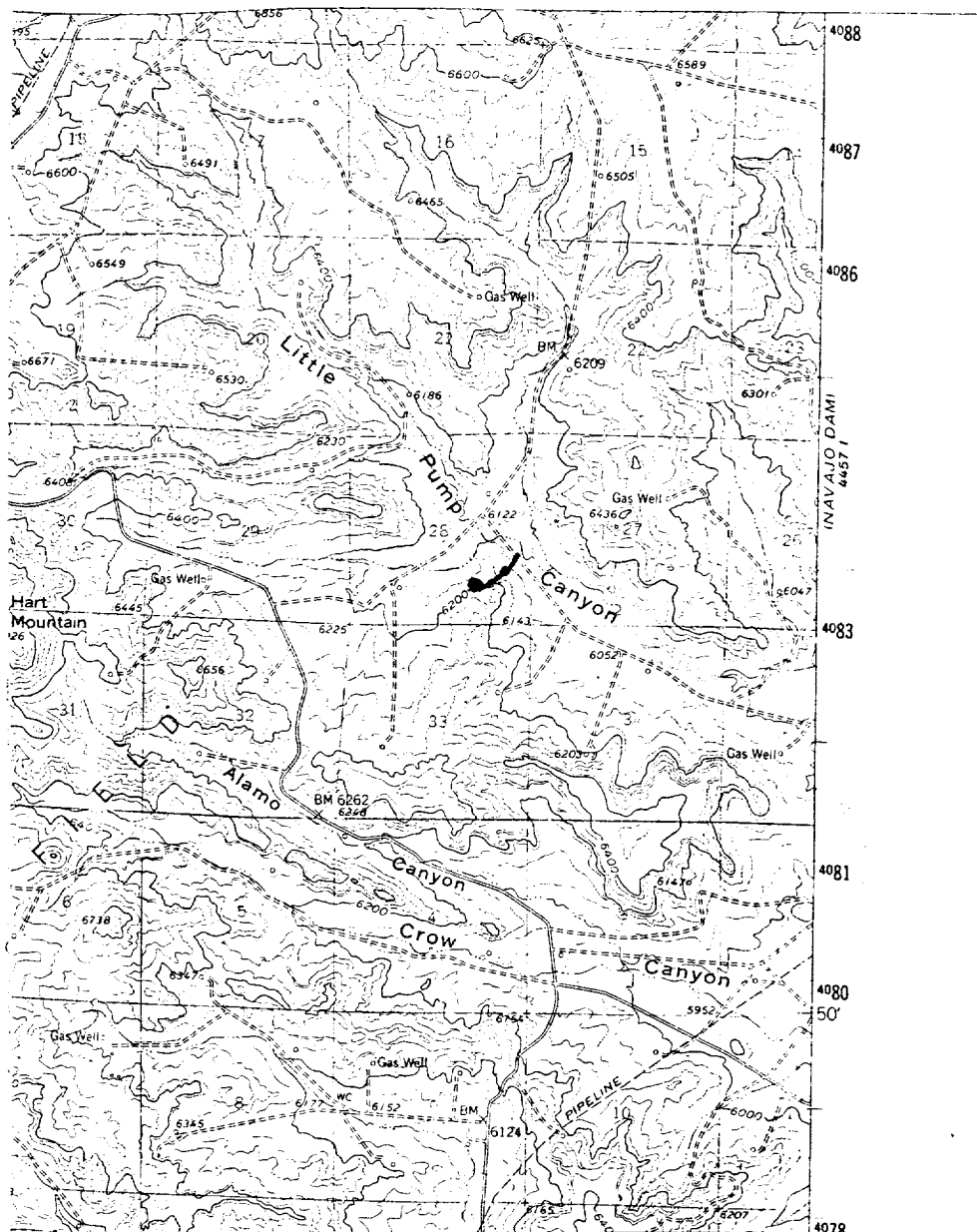
Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure

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.

Sheets #  
SE 28-31-9

T  
31  
N

T  
30  
N



MAP #1

EXISTING ROADS \_\_\_\_\_  
 EXISTING PIPELINES    +    +    +  
 EXISTING ROAD & PIPELINE    + + +  
 PROPOSED ROADS \_\_\_\_\_  
 PROPOSED PIPELINES    +    +    +  
 PROPOSED ROAD & PIPELINE    + + +

## EXISTING ROADS

## EXISTING PIPELINES

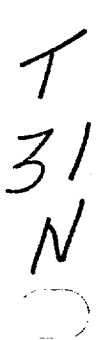
EXISTING ROAD & PIPELINE

## PROPOSED ROADS

## PROPOSED PIPELINES

PROPOSED ROAD &amp; PIPELINE

R-9-W



Proposed Location ●