

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-035-21408
5. LEASE DESIGNATION AND SERIAL NO.

SF 078503

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. UNIT AGREEMENT NAME San Juan 29-7 Unit
2. NAME OF OPERATOR El Paso Natural Gas Company		8. FARM OR LEASE NAME San Juan 29-7 Unit
3. ADDRESS OF OPERATOR PO Box 990, Farmington, NM 87401		9. WELL NO. 112
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface M 1150'S, 800'W At proposed prod. zone		10. FIELD AND POOL, OR WILDCAT Basin Dakota
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 29, T-29-N, R-7-W NMPM
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 IV 320.00
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH 7570'	20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6326'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"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3265'	285 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2"	10.5#-11.6#	7570'	662 cu.ft. to fill to inter casing


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.

The gas is dedicated.

The W/2 of Section 29 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.  TITLE Drilling Clerk DATE May 11, 1977
(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

**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.

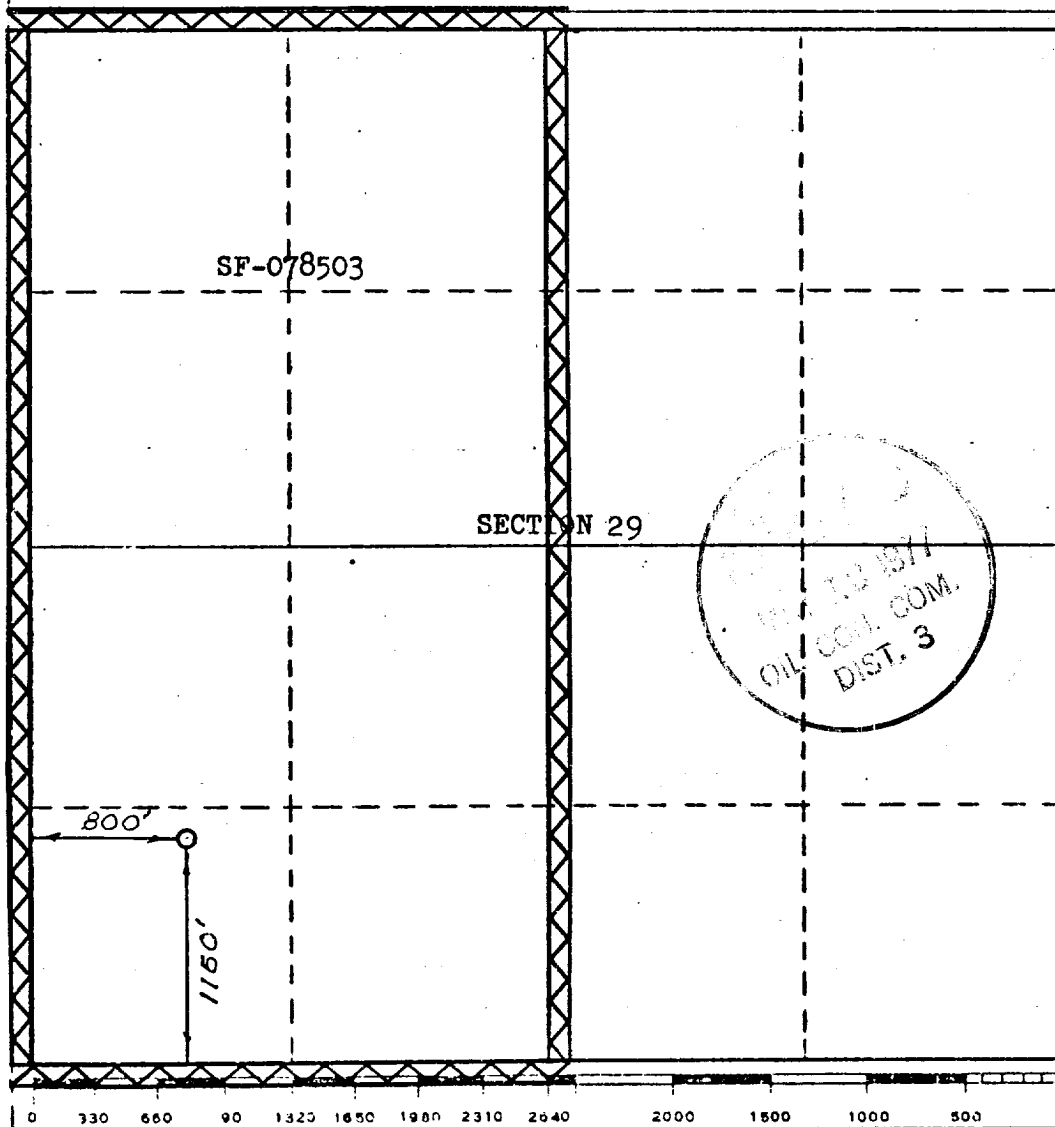
Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 29-7 UNIT (SF-078503)		Well No. 112
Unit Letter M	Section 29	Township 29-N	Range 7-W	County RIO ARriba	
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 1150 feet from the SOUTH line and 800 feet from the WEST line </div>					
Ground Level Elev. 6326	Producing Formation DAKOTA	Pool BASIN DAKOTA ✓		Dedicated Acreage: 320.00 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.	
<div style="text-align: center;"></div>	
Name	<u>R. J. Seadfield</u>
Position	<u>REGISTERED PROFESSIONAL ENGINEER</u>
Company	<u>SEADFIELD & ASSOCIATES</u>
Date	<u>MAY 12, 1977</u>
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	<u>MAY 4, 1977</u>
Registered Professional Engineer and/or Land Surveyor	
<div style="text-align: center;"></div>	
Certificate No.	<u>1760</u>


Multi-Point Surface Use Plan
San Juan 29-7 Unit #112

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 Manzaneras Mesa, Section 9, T-29-N, R-8-W.
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. Seed Mixture #2 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 green (Federal Standard #595-34127)
11. Other Information - The terrain is rolling hills and sandstone ledges covered with cedar and pinon trees. Cattle occasionally 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.

May 11, 1977



L. A. Aimes
Sr. Drilling Engineer

LAA:pb

May 11, 1977

Operations Plan
San Juan 29-7 Unit #112

I. Location: SW/4 Section 29, T-29-N, R-7-W, Rio Arriba County, NM

Field: Basin Dakota

Elevation: 6326'GL

II. Geology:

A. Formation Tops:	Ojo Alamo	2000'	Point Lookout	5168'
	Kirtland	2148'	Gallup	6298'
	Fruitland	2698'	Greenhorn	7195'
	Pic.Cliffs	2988'	Graneros	7260'
	Lewis	3065'	Dakota	7380'
	Mesa Verde	4633'	Total Depth	7570'

B. Logging Program: GR-Ind. and GR-Density at Total Depth.

C. Coring Program: none

D. Natural Gauges: 4745', 5168', 6298', 7380' and at Total Depth.
Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3265'. 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.&Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	3265'	7"	20.0# K-55
	6 1/4"	6500'	4 1/2"	10.5# K-55
	6 1/4"	7570'	4 1/2"	11.6# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - cement guide shoe and self-fill insert float valve; 5 B&W stabilizers every other joint above shoe. Run float two joints above shoe.

4 1/2" production casing - cement guide shoe and float collar

C. Tubing: 7570' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.

D. Wellhead Equipment: 3000 psi test tree.

Operations Plan - San Juan 29-7 Unit #112, cont'd.

V. Cementing:

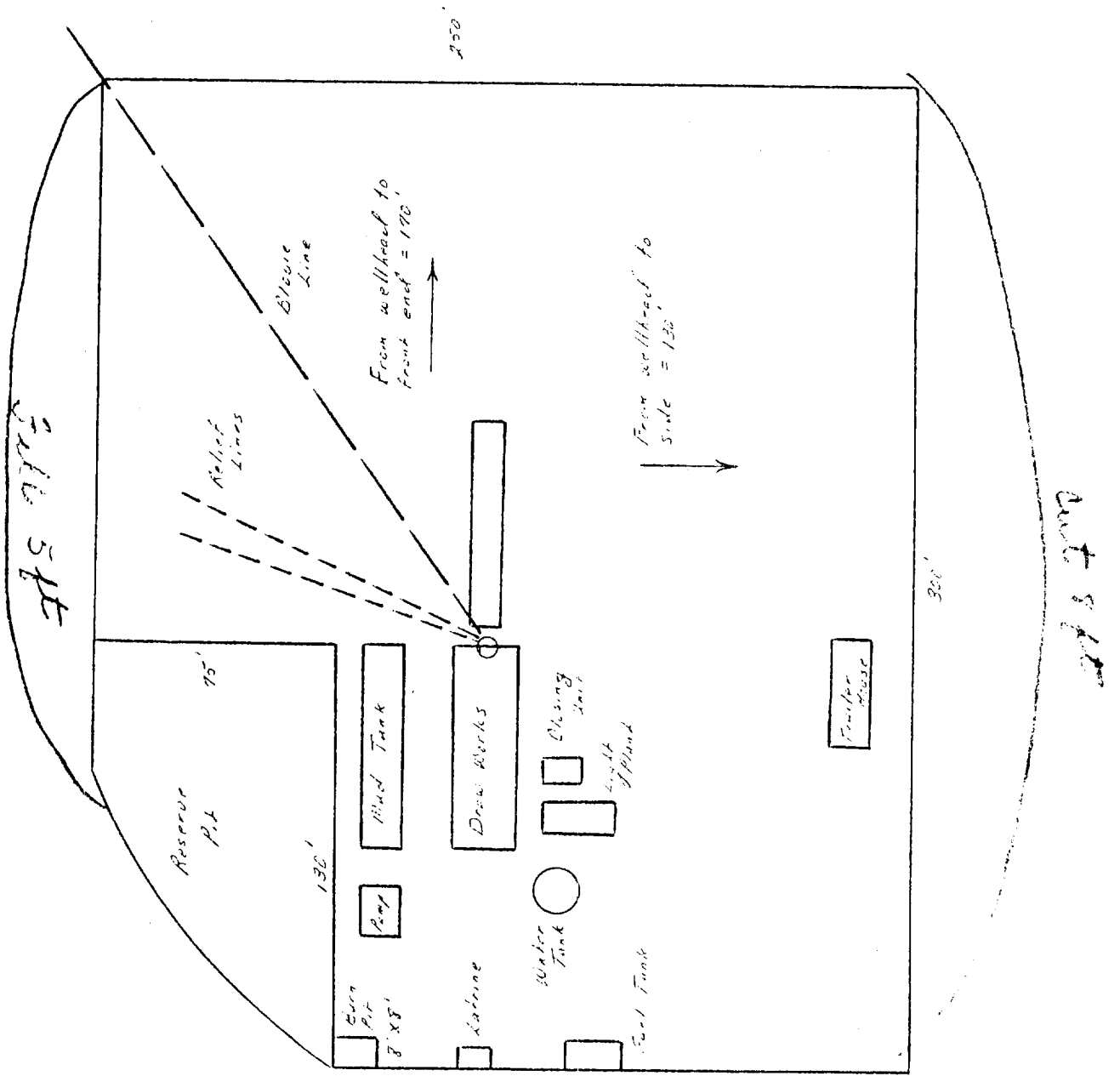
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 64 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 70 sks. of Class "B" with 2% calcium chloride (285 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.

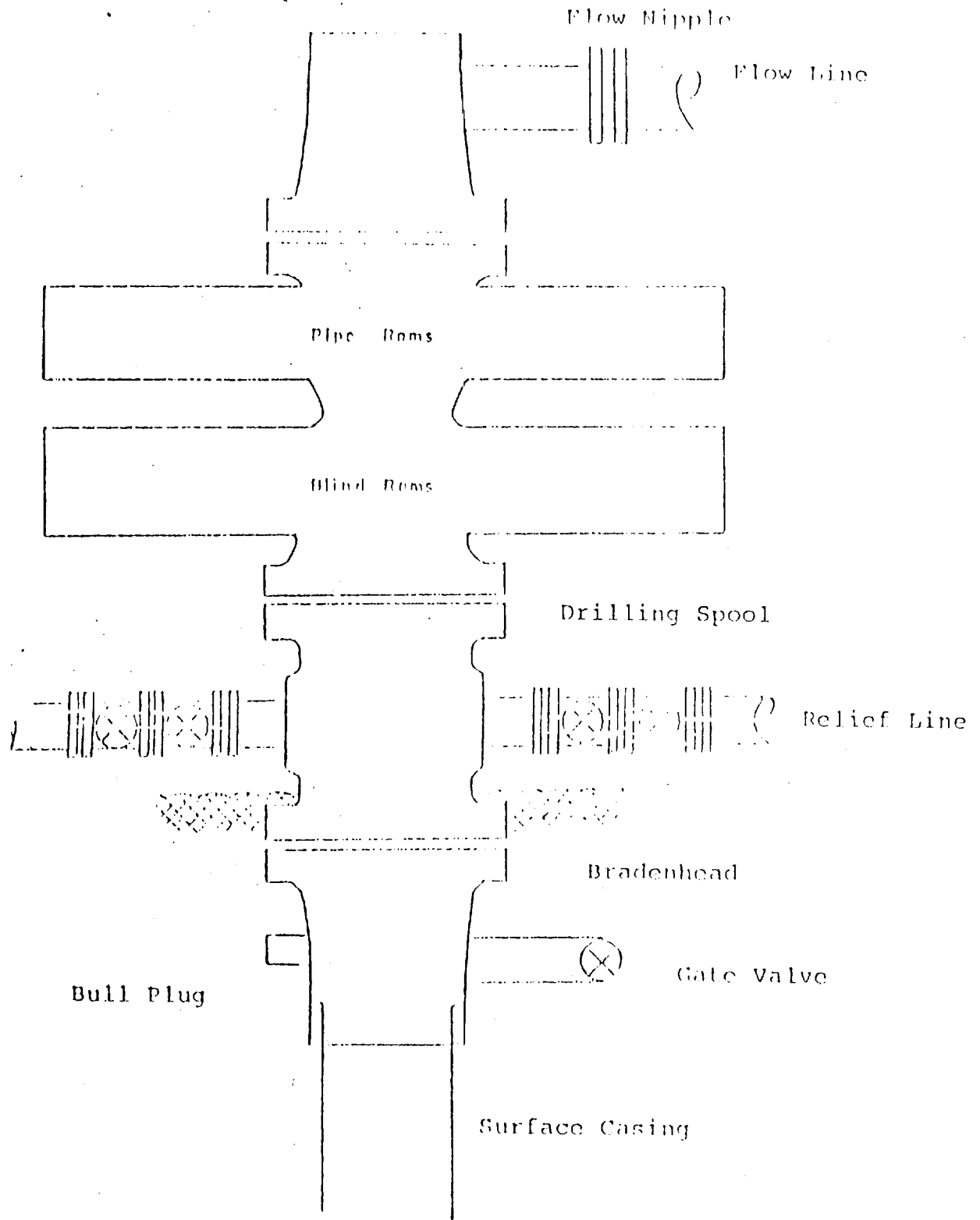
4 1/2" production casing - precede cement with 40 bbls. of gel water (4 sks. gel). Cement with 242 sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (662 cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.

LAA:pb

El Paso Natural Gas Company
 Typical Location Plot for Mesa Verde and Dakota Wells
 SAN JUAN 29-7 UNIT #112



Typical B.O.P. Installation
for Dakota Well



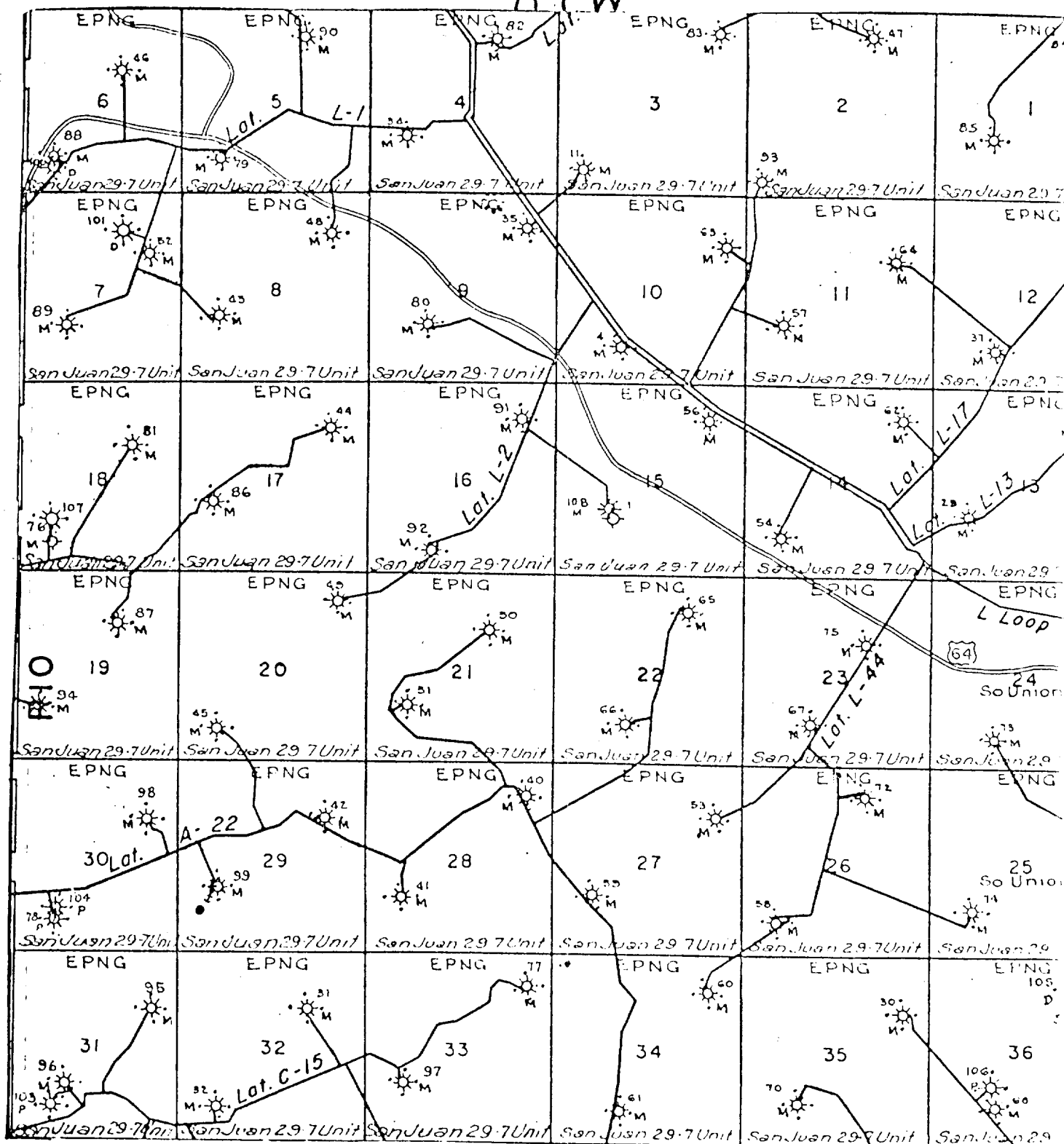
Series 900 Double Gate BOP, rated
at 3000 psi Working Pressure

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.

SW/4 Sec. 29, T-29-N, R-7-W

R7W

T
29
N



Proposed Location