

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

PO Box 990, Farmington, NM 87401

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

At surface

1460'S, 1840'W

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

w/ 320.00

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

19. PROPOSED DEPTH

7173'

20. ROTARY OR CABLE TOOLS

Rotary

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

5998'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'	210 cu.ft. to circulate
8 3/4"	7"	20.0#	2965'	257 cu.ft. to cover Ojo Alam
6 1/4"	4 1/2"	10.5#&11.6#	7173'	646 cu.ft. to fill to 2965'

Selectively perforate and sandwater fracture the Dakota formation.

A 3000 psi WP and 600 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 21 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. Lucio*TITLE Drilling ClerkDATE February 14, 197

(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

OK

*See Instructions On Reverse Side

NEW XICO 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.

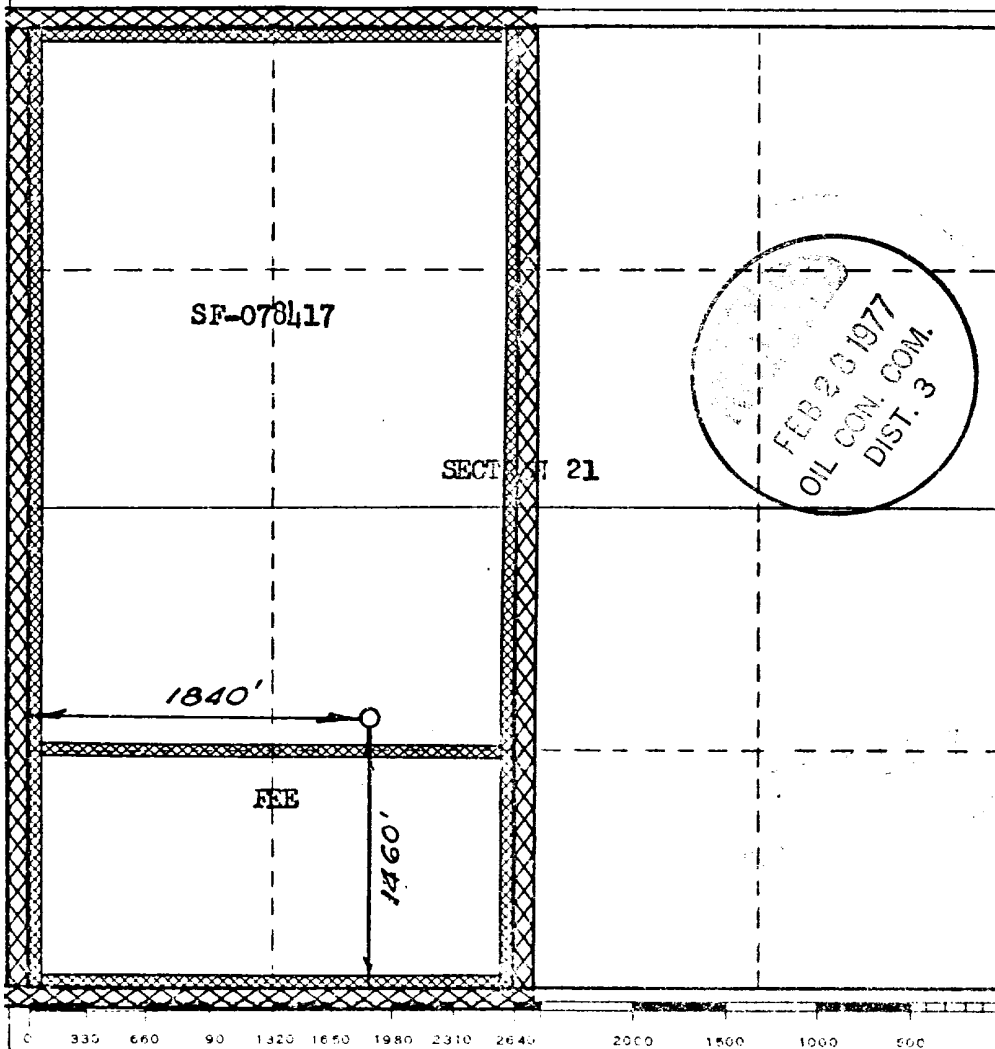
Operator EL PASO NATURAL GAS COMPANY		Lease SAN JUAN 28-7 UNIT (SF-078417)		Well No. 134
Unit Letter K	Section 21	Township 28-N	Range 7-W	County RIO ARriba
Actual Footage Location of Well: 1460 feet from the SOUTH line and 1840 feet from the WEST line				
Ground Level Elev. 5998	Producing Formation DAKOTA	Pool BASIN DAKOTA	Dedicated Acreage: 320.00 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

Original
D. C. Shaw

Name
Drilling Clerk
Position
El Paso Natural Gas Co.
Company
February 14, 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
DECEMBER 28, 1972

Signature of Engineer and of Land Surveyor

[Signature]
1760

Multi-Point Surface Use Plan
San Juan 28-7 Unit #134

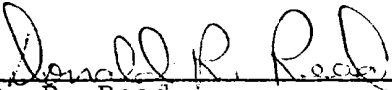
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
 2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed thirty feet (30') 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. 1
 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 and proposed 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 SWSW Section 21, T-28-N, R-7-W (Delgado Water Hole)
 6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
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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 brown.
11. Other Information - the terrain is sage brush flats and rock on the north side of the location. Sage brush and chico brush are the only vegetation growing. A few head of cattle graze on the grasses that surround 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.

February 14, 1977



D. R. Read
Division Drilling Engineer

pb

Operations Plan
San Juan 28-7 Unit #134

I. Location: Section 21, T-28-N, R-7-W, Rio Arriba County, NM

Field: Basin Dakota

Elevation: 5998'

II. Geology:

A. Formation Tops:	Ojo Alamo	1829'	Point Lookout	4848'
	Kirtland	1919'	Gallup	6070'
	Fruitland	2393'	Greenhorn	6596'
	Pic.Cliffs	2663'	Graneros	6848'
	Lewis	2765'	Dakota	7081'
	Mesa Verde	4291'	Total Depth	7173'

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

C. Coring Program: none

D. Natural Gauges: 4848', 6070', 6848', 7081' and at Total Depth.
All 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 2965'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt.&Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	2965'	7"	20.0# K-55
	6 1/4"	6500'	4 1/2"	10.5# K-55
	6 1/4"	7173'	4 1/2"	11.6# K-55

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

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

4 1/2" production casing - Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F)

C. Tubing: 7173' 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. Wellhead representative to set all slips and cut off casing.

Operations Plan - San Juan 28-7 Unit #134

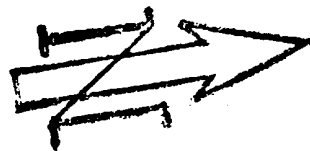
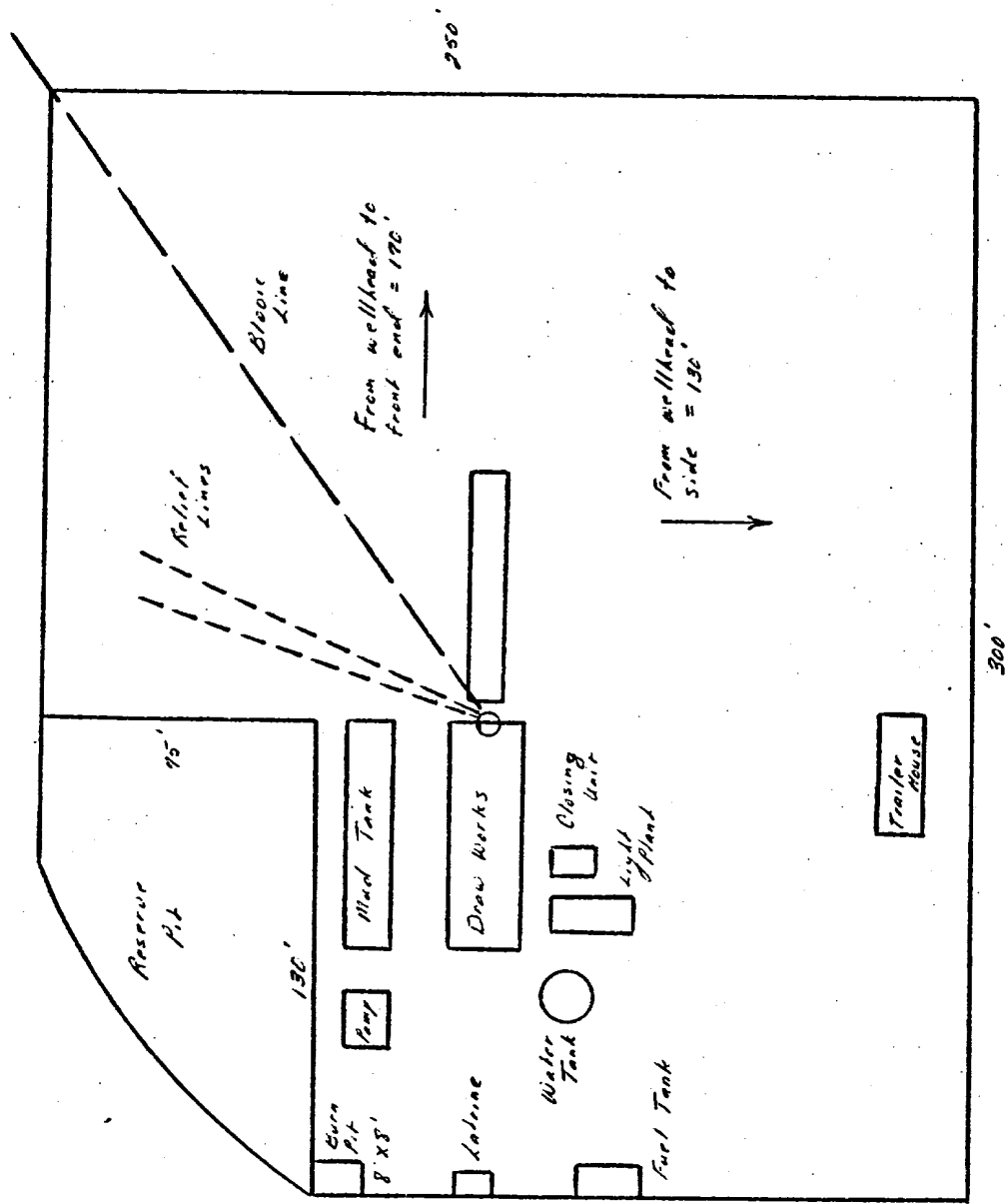
V. Cementing:

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 66 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 (257 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.

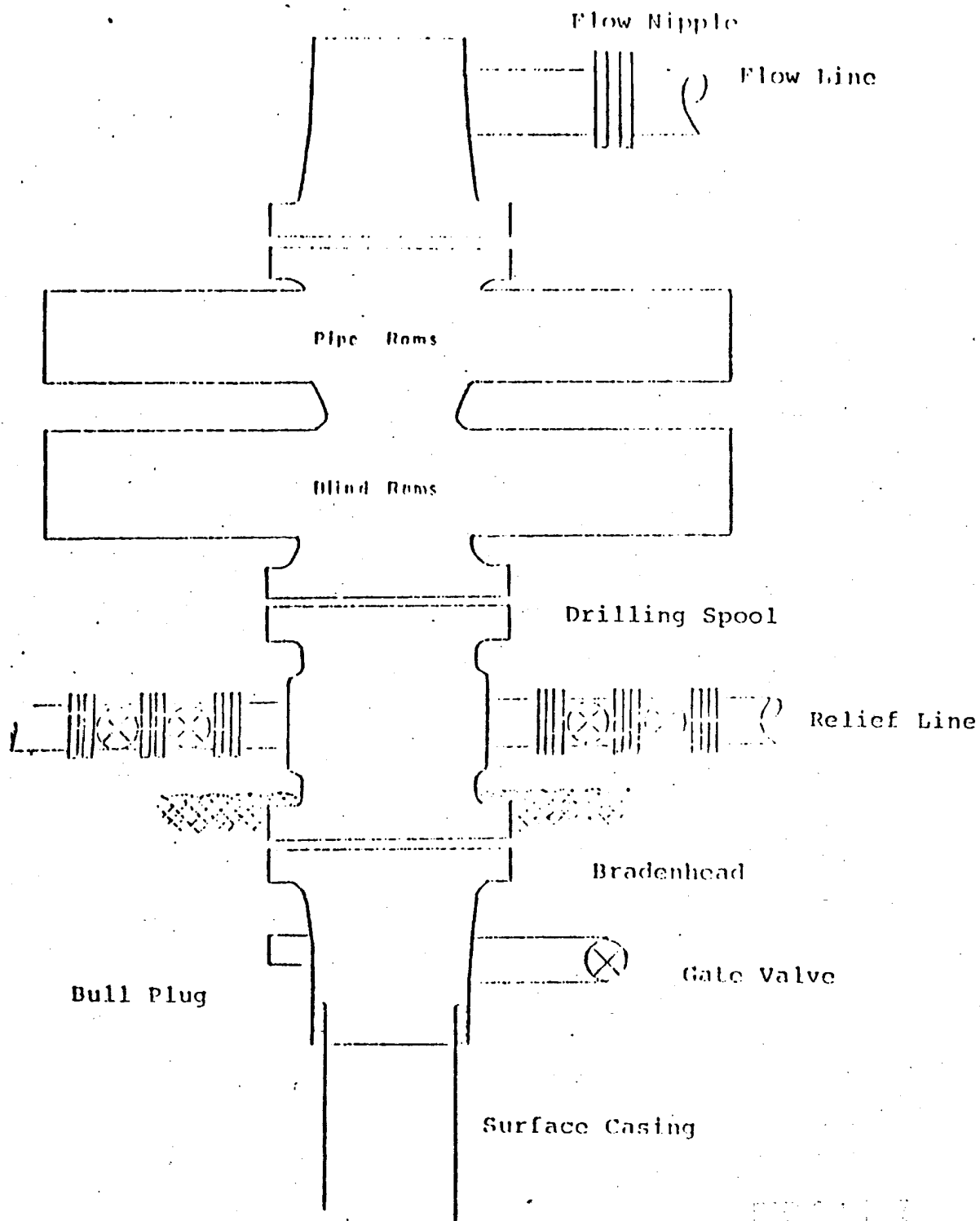
4 1/2" production casing - precede cement with 40 bbls. of gel water (4 sks. gel) cement with 246 sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (646 cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.

El Paso Natural Gas Company
Typical Location Plot for Mesa Verde and Dakota Wells



San Juan 28-7#134

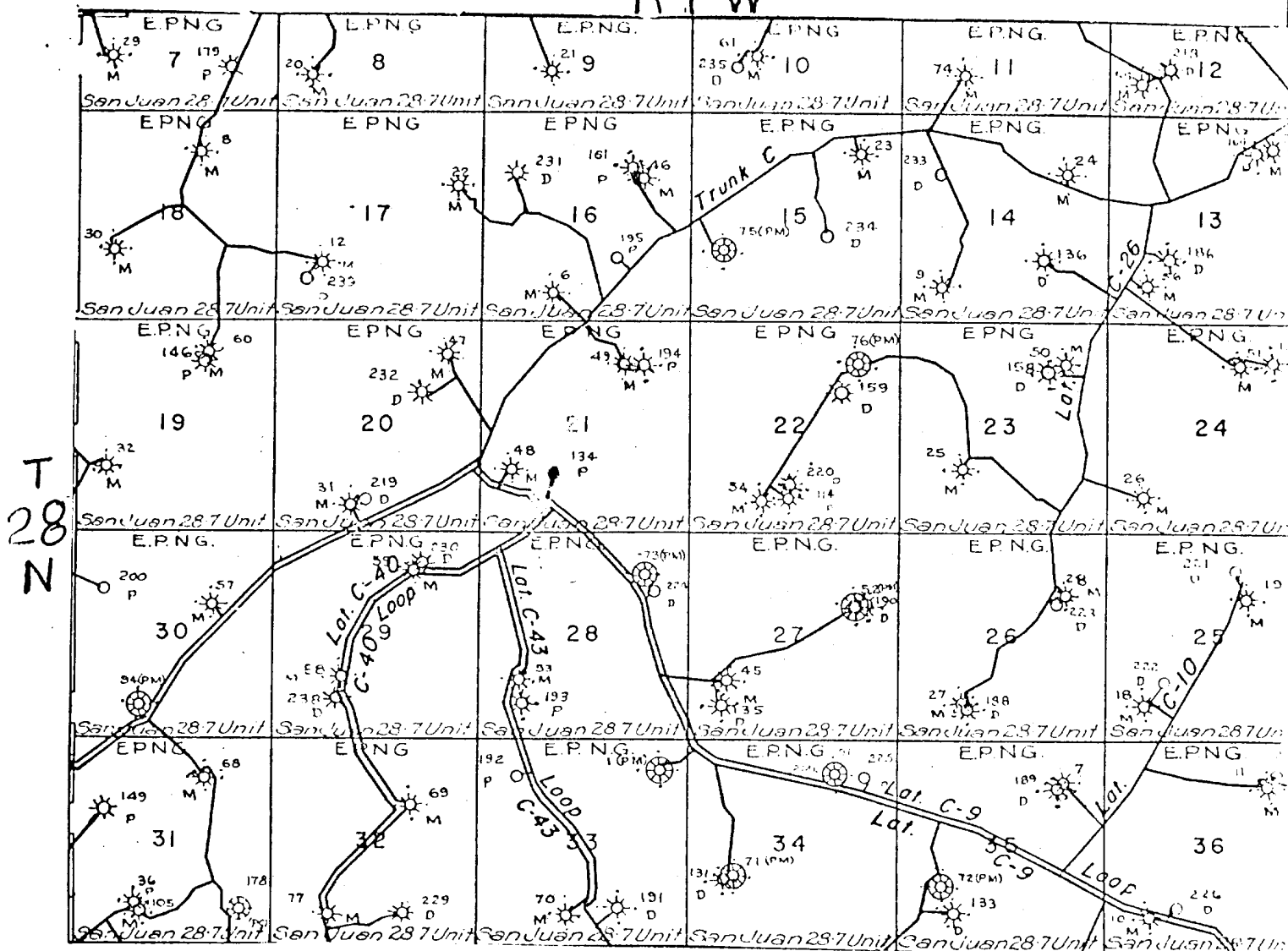
Typical B.O.P. Installation for Dakota Well



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
San Juan 28-7 Unit #134
NESW 21-28-7

R 7 W



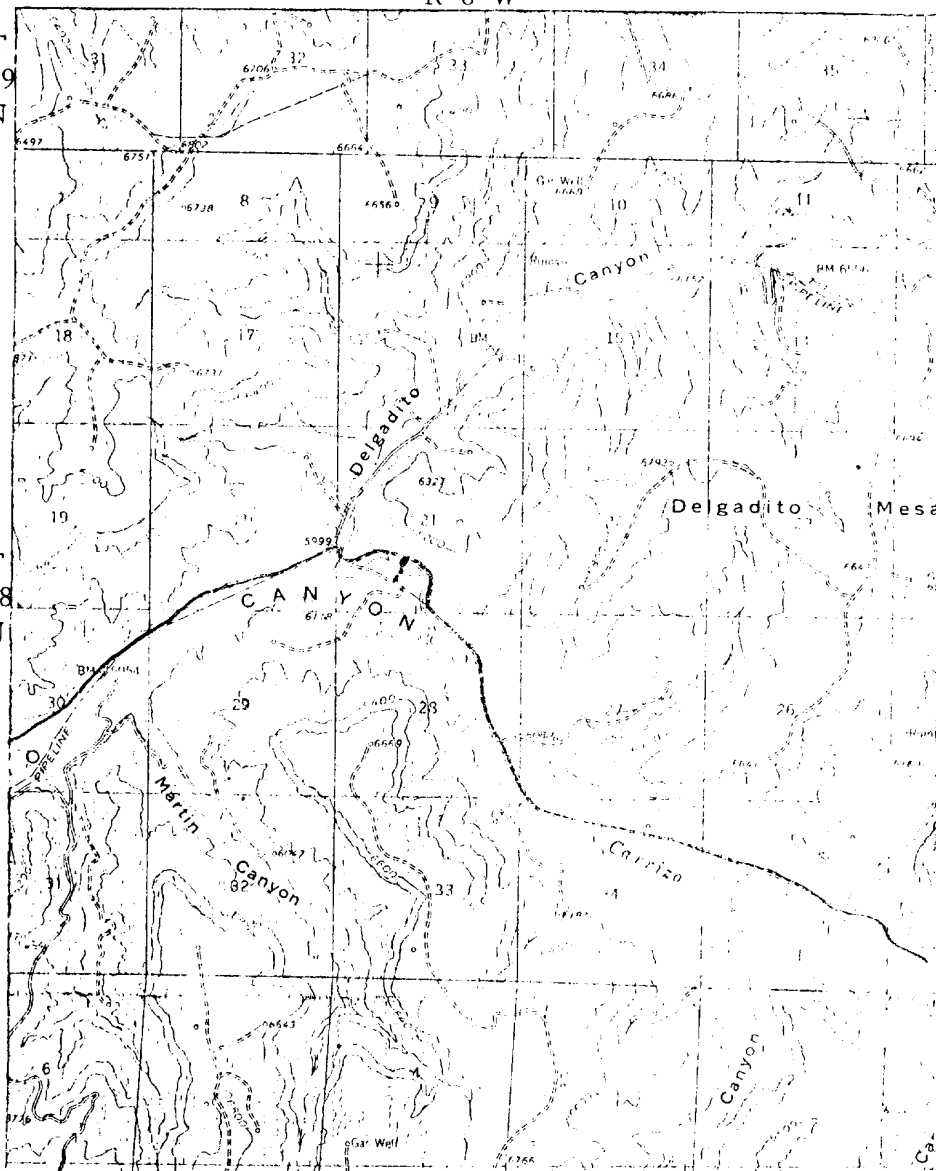
MAP NO. I

NESW 21-28-7

R-8-W

T
29
N

T
28
N



MAP #2

LOGGED ON RIGHT-OF-WAY

EXISTING ROADS	_____
EXISTING FENCELINES	-+ + +
EXISTING ROAD & FENCELINE	-+ + -
PROPOSED ROADS	_____
PROPOSED FENCELINES	-+ -+ -+ -
PROPOSED ROAD & FENCELINE	-+ + -