

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

1140'S, 970'W

At proposed prod. zone

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

24 miles Southeast of Blanco, NM

## 15. DISTANCE FROM PROPOSED\*

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

150

## 16. NO. OF ACRES IN LEASE

Unit

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.

970

## 19. PROPOSED DEPTH

7300'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6516'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" &     | 4 1/2"         | 10.5#&11.6#     | 7300'         | 1186 cu.ft. - 3 stages  |
| 7 7/8"       |                |                 |               |                         |

Stage #1 - 395 cu.ft. to cover Gallup formation.

Stage #2 - 425 cu.ft. to cover Mesa Verde formation.

Stage #3 - 426 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 12 is dedicated to this well.

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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

*D. G. Lisco*

TITLE

Drilling Clerk

DATE

2-1-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

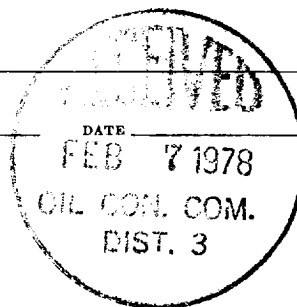
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*Ala*

\*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.

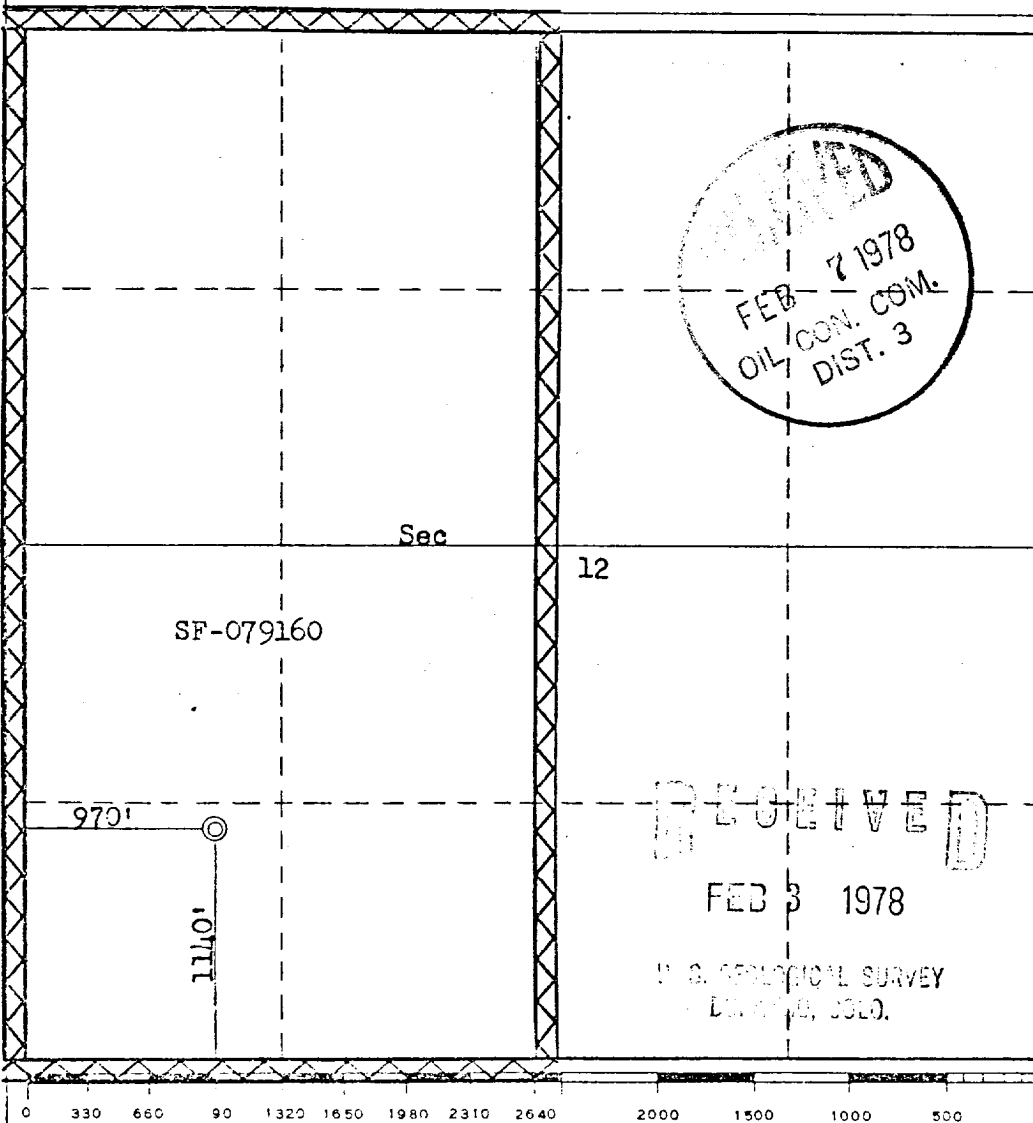
|   |                                      |                        |   |   |                        |
|---|--------------------------------------|------------------------|---|---|------------------------|
| Operator<br><b>El Paso Natural Gas Company</b>  |                                      |                        | Lease<br><b>Rincon Unit (SF-079160)</b> |   | Well No.<br><b>231</b> |
| Unit Letter<br><b>M</b>   | Section<br><b>12</b>                 | Township<br><b>26N</b> | Range<br><b>7W</b>                      | County<br><b>Rio Arriba</b>               |                        |
| Actual Footage Location of Well:<br><b>1140</b> feet from the <b>South</b> line and <b>970</b> feet from the <b>West</b> line |                                      |                        |   |   |                        |
| Ground Level Elev.<br><b>6516</b>   | Producing Formation<br><b>Dakota</b> |                        | Pool<br><b>Basin Dakota</b> /           | Dedicated Acreage:<br><b>320.00</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.*

*N. G. Luis*

Name  
**Drilling Clerk**

Position  
**El Paso Natural Gas Co.**

Company  
**February 1, 1978**

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  
**November 27, 1977**

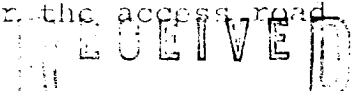
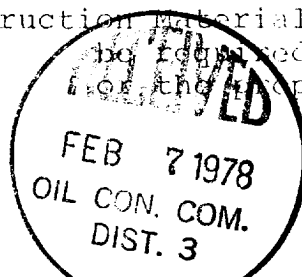
Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*

Certificate No.  
**3950**

Multi-Point Surface Use Plan

Rincon Unit #231

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 Gould Pass Water Well.
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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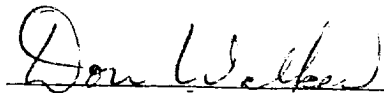
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the 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. Seed Mixture #1 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 gray (Federal Standard #595-36357)
11. Other Information - The terrain is rolling hills and sage brush flats. Cattle 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.

February 1, 1978



D. C. Walker  
Project Drilling Engineer

DCW:pb



February 1, 1978

Operations Plan - Rincon Unit #231

I. Location: 1140'S, 970'W, Section 12, T-26-N, R-7-W, Rio Arriba County, NM

Field: Basin Dakota

Elevation: 6516'GR

II. Geology:

|                           |            |          |               |       |
|---------------------------|------------|----------|---------------|-------|
| A. <u>Formation Tops:</u> | Surface    | San Jose | Menefee       | 4445' |
|                           | Ojo Alamo  | 2020'    | Point Lookout | 5027' |
|                           | Kirtland   | 2187'    | Gallup        | 6087' |
|                           | Fruitland  | 2554'    | Greenhorn     | 6929' |
|                           | Pic.Cliffs | 2755'    | Graneros      | 6988' |
|                           | Lewis      | 2825'    | Dakota        | 7084' |
|                           | Mesa Verde | 4404'    | Total Depth   | 7300' |

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

C. Coring Program: none

D. Natural Gauges: none

III. Drilling:

A. Mud Program: mud from surface to total depth.

IV. Materials:

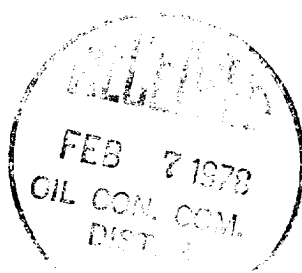
| A. Casing Program: | <u>Hole Size</u> | <u>Depth</u> | <u>Csg.Size</u> | <u>Wt.&amp;Grade</u> |
|--------------------|------------------|--------------|-----------------|----------------------|
|                    | 13 3/4"          | 200'         | 9 5/8"          | 32.3# H-40           |
|                    | 8 3/4"           | 5327'        | 4 1/2"          | 10.5# K-55           |
|                    | 7 7/8"           | 6500'        | 4 1/2"          | 10.5# KS             |
|                    | 7 7/8"           | 7300'        | 4 1/2"          | 11.6# KS             |

B. Float Equipment: 9 5/8" surface casing - Pathfinder guide shoe  
(Part No. 2006-1-010)

4 1/2" production casing - Baker guide shoe (Prod. #102-01) and  
4 1/2" self-fill insert valve (Prod. No. 177-13), two Baker multiple  
stage cementers (Prod. No. 200-03) equipped for three stage cementing.  
Set tool for second stage at 5327' and third stage at 2925'. Run 25  
Baker centralizers (Prod. No. 244-53) spaced as follows: one on  
each of the bottom 13 joints, one below and five above each stage  
tool spaced every other joint.

C. Tubing: 7300' of 2 3/8", 4.7#, J-55 ird 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.



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Operations Plan - Rincon Unit #231, cont'd.

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 2% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to the surface). WOC 12 hours. Test casing to 600 psi/30 minutes.

Production casing -

First stage (7 7/8" x 4 1/2") - use 135 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride. Mix with 8.3 gallons of water per sack for a slurry weight of 12.88 ppg, followed by 100 sks. of 50/50 Class "B" Pozmix, 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (345 cu.ft. of slurry, 25% excess to cover Gallup).

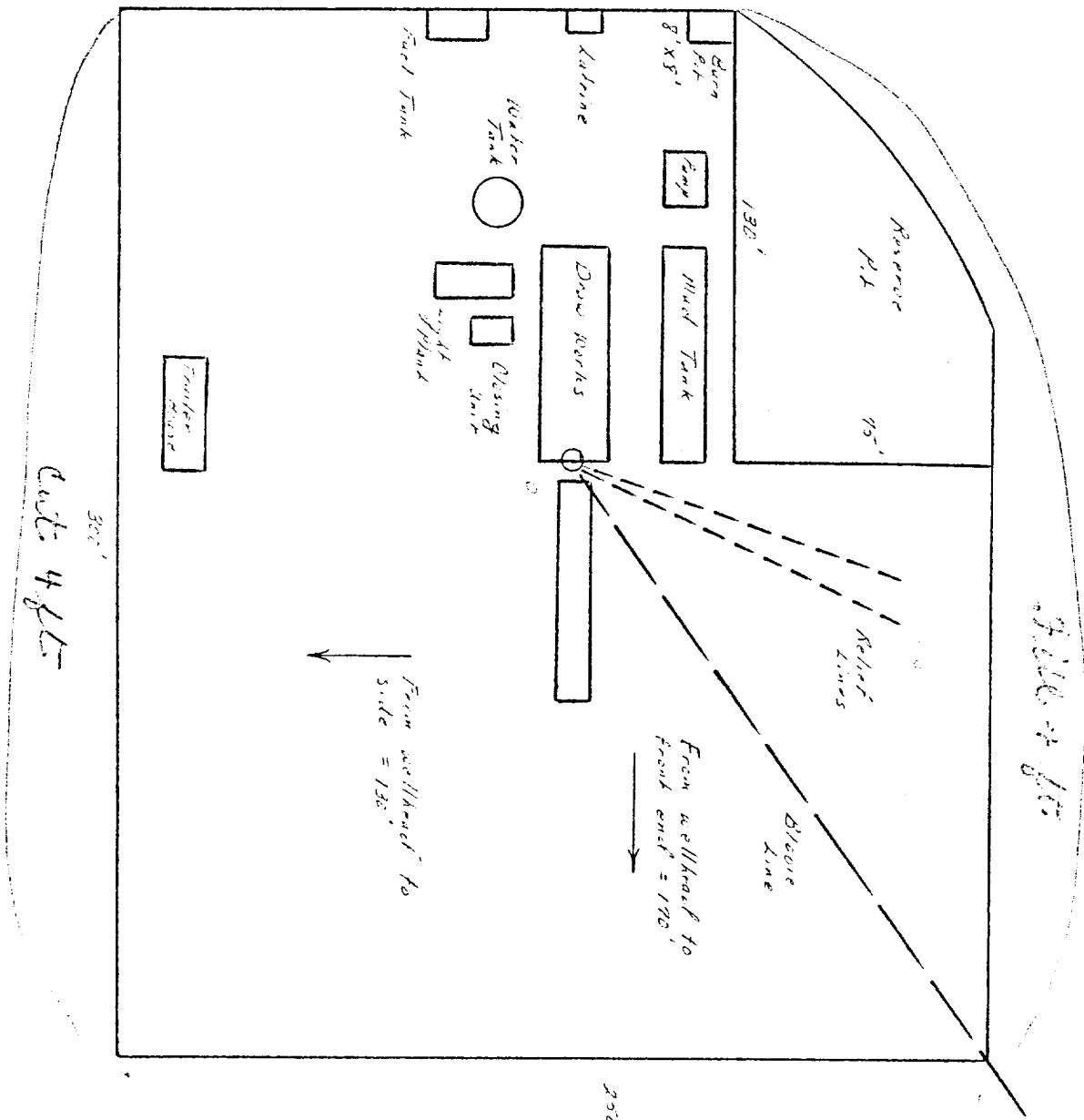
Second stage (8 3/4" x 4 1/2") - circulate hole for two hours. Cement with 262 sks. of 65/35 Class "B" with 6% gel and 2% calcium chloride mixed with 8.3 gallons of water per sack (425 cu.ft. of slurry, 50% excess to cover the Mesa Verde).

Third stage - circulate for two hours. Cement with 257 sks. of 65/35 Poz with 6% gel and 2% calcium chloride (416 cu.ft. of slurry, 50% excess to cover Ojo Alamo). WOC 18 hours. Run temperature survey after 8 hours.

DRR:pb



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

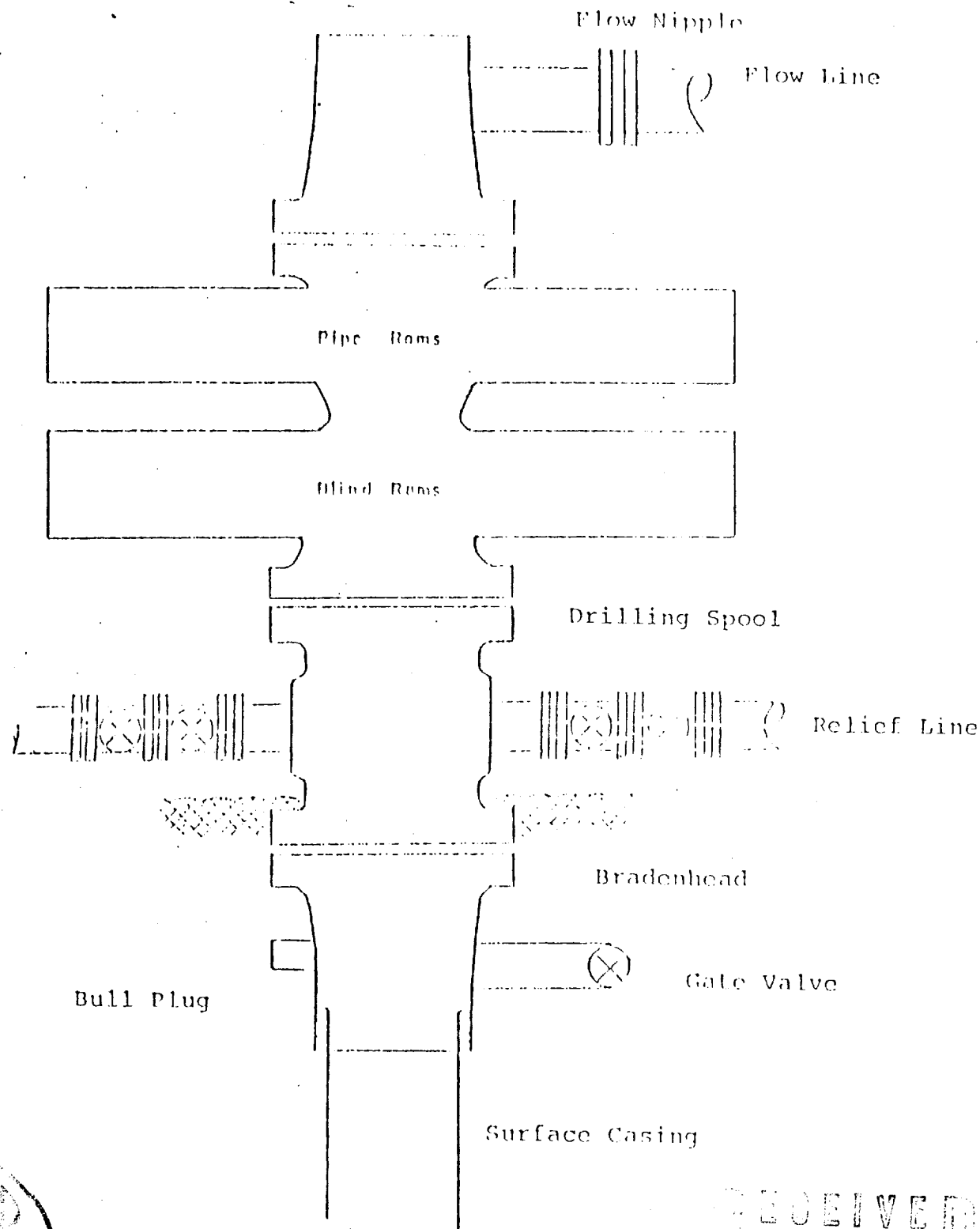


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Typical B.O.P. Installation  
for Dakota Well



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.

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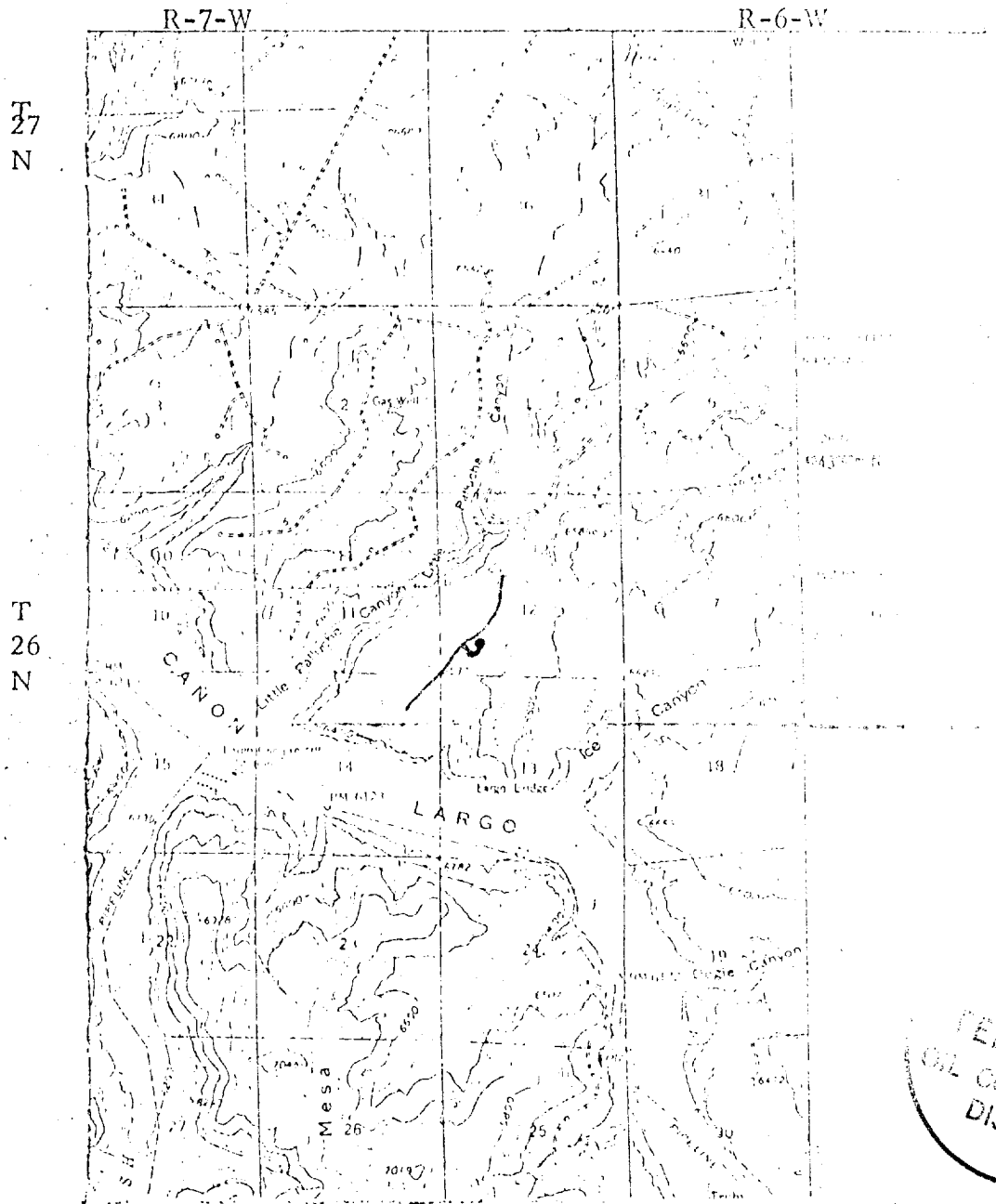
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EL PASO NATURAL GAS COMPANY

Rincon Unit #231

SESW 12 26-7



MAP #1

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LEGEND OF RIGHT-OF-WAYS

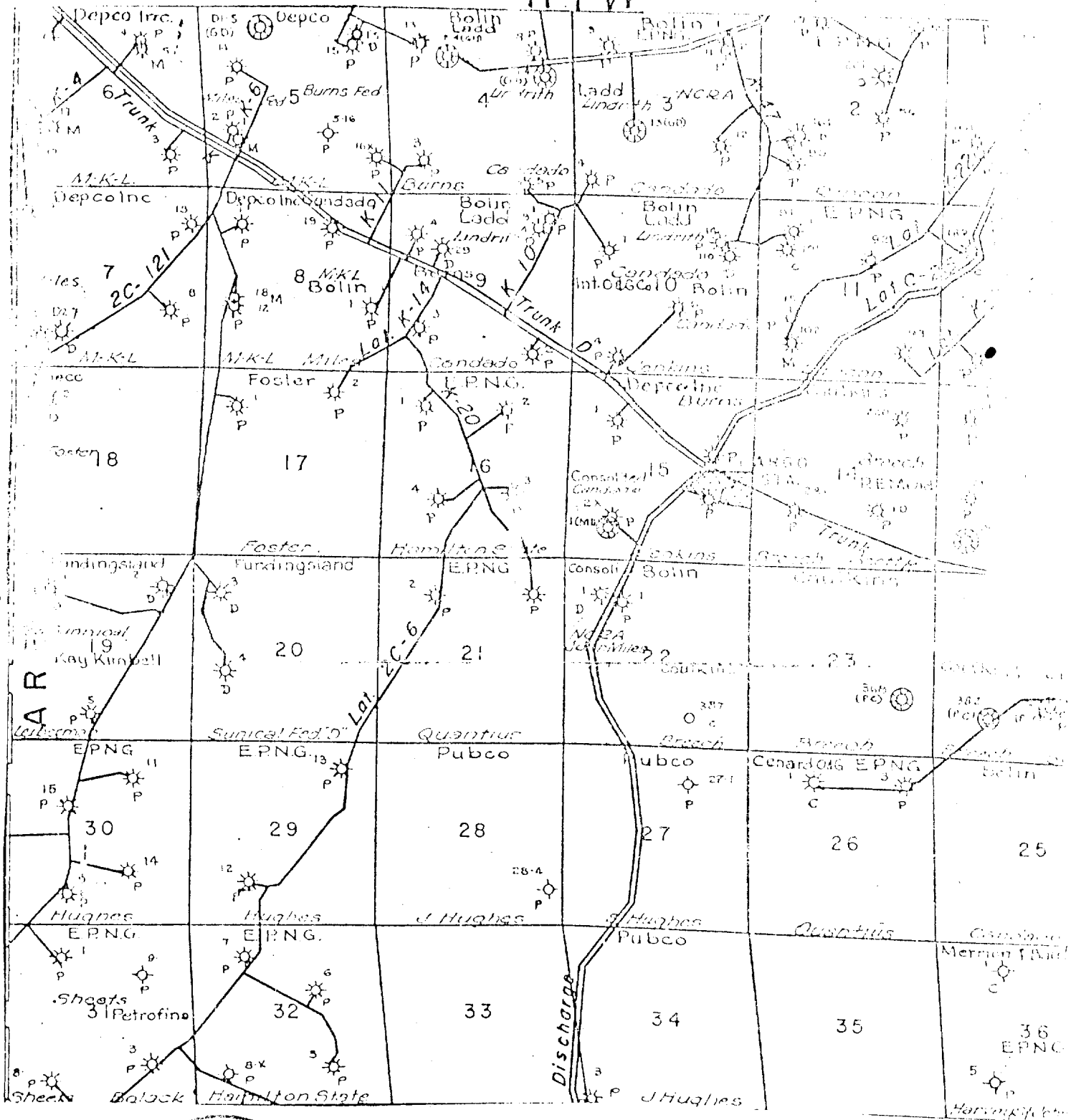
|                          |         |
|--------------------------|---------|
| EXISTING ROADS           | —       |
| EXISTING PIPELINES       | — + + + |
| EXISTING ROAD & PIPELINE | — + + + |
| PROPOSED ROADS           | —       |
| PROPOSED PIPELINES       | — + + + |
| PROPOSED ROAD & PIPELINE |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

# EL PASO NATURAL GAS COMPANY

Rincon Unit #231

SESW -26-7

R7W



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MAP #2

Proposed Location •