

Multi-Point Surface Use Plan
San Juan 28-7 Unit #198

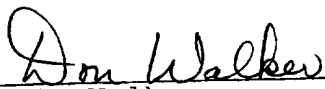
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the 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 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.
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,

1. The first part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

2. The second part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

3. The third part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

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 and sagebrush flats with sagebrush growing. Cattle graze 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. C. Walker
Project Drilling Engineer



October 6, 1978

Operations Plan - San Juan 28-7 Unit #198

I. Location: 1530'S, 1010'E, Section 12, T-27-N, R-7-W, Rio Arriba County, NM

Field: So. Blanco Pictured Cliffs

Elevation: 6617'GR

II. Geology:

A. Surface Formation: San Jose

Sub-surface Formation Tops:

Ojo Alamo	2490'	Pictured Cliffs	3257'
Kirtland	2640'	Lewis	3400'
Fruitland	2980'	Total Depth	3440'

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

C. Coring: none

D. Testing: none

III. Drilling:

A. Anticipated Starting Date and Duration of the Project:

1979 Drilling Program - approximately 4 days to complete.

B. Circulating Medium: Treated water and a low solids gel base mud will be used from surface to TD.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg. Size</u>	<u>Wt. & Grade</u>
	12 1/4"	120'	8 5/8"	24.0# J-55
	6 3/4"	3440'	2 7/8"	6.4# J-55

B. Float Equipment: 8 5/8" surface casing - cement guide shoe.

2 7/8" production casing - 10' shoe joint with notched collar for guide shoe and 2 7/8" latch down baffle on top. Two 3 1/16" balls and one 2 7/8" latch down plug.

C. Tubing: none

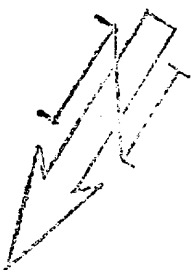
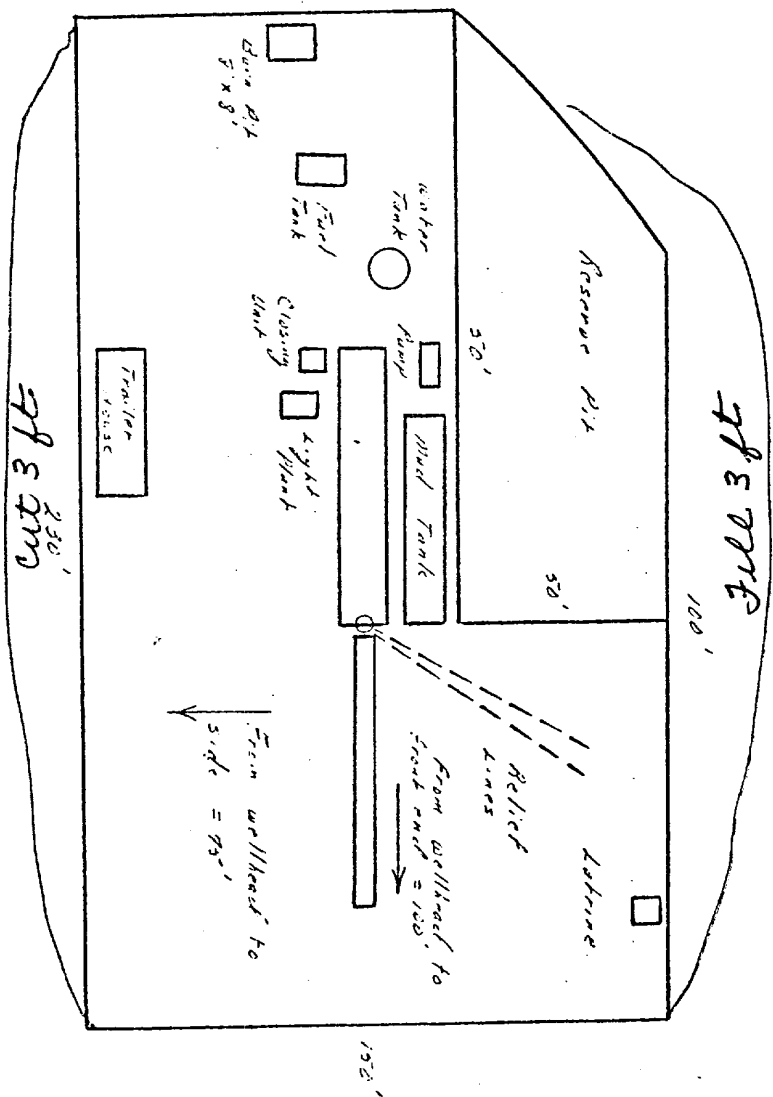
D. Wellhead Equipment: Larkin wellhead (fig. 75)

V. Cementing:

8 5/8" surface casing - 90 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (106 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing wellhead and BOP to 600#/30 minutes.

2 7/8" production - 128 sks. 65/35 Class "B" Poz with 6% gel, 2% CaCl₂, and 8.3 gallons water per sack followed by 70 sks. Class "B" neat cement (290 cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs.

El Paso Natural Gas Company
 Typical Location Plt for Pictured Plains Well

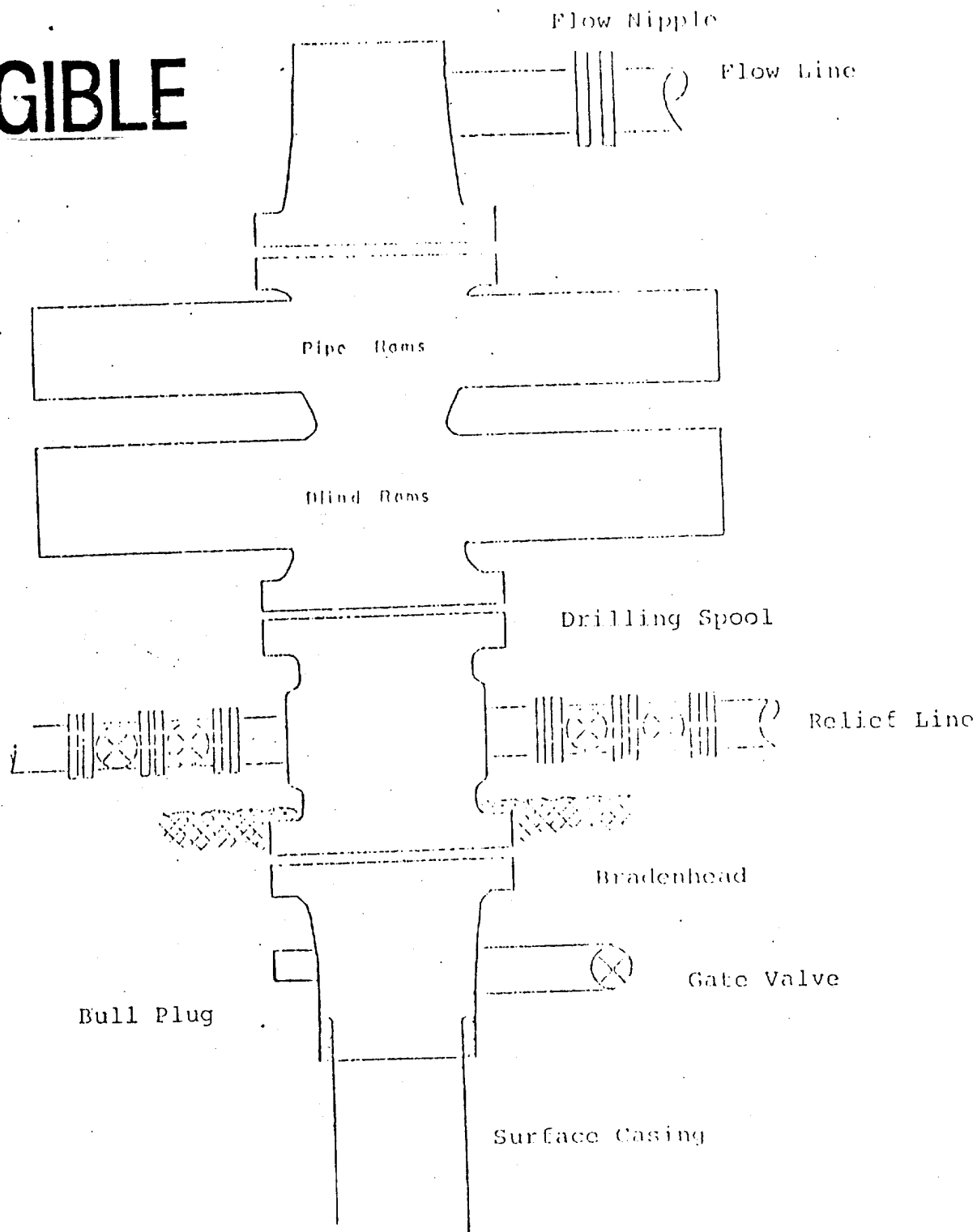


Scale: 1/2" = 20'



Typical Mud Drilled B.O.P. Installation
for Pictured Cliffs Well

ILLEGIBLE

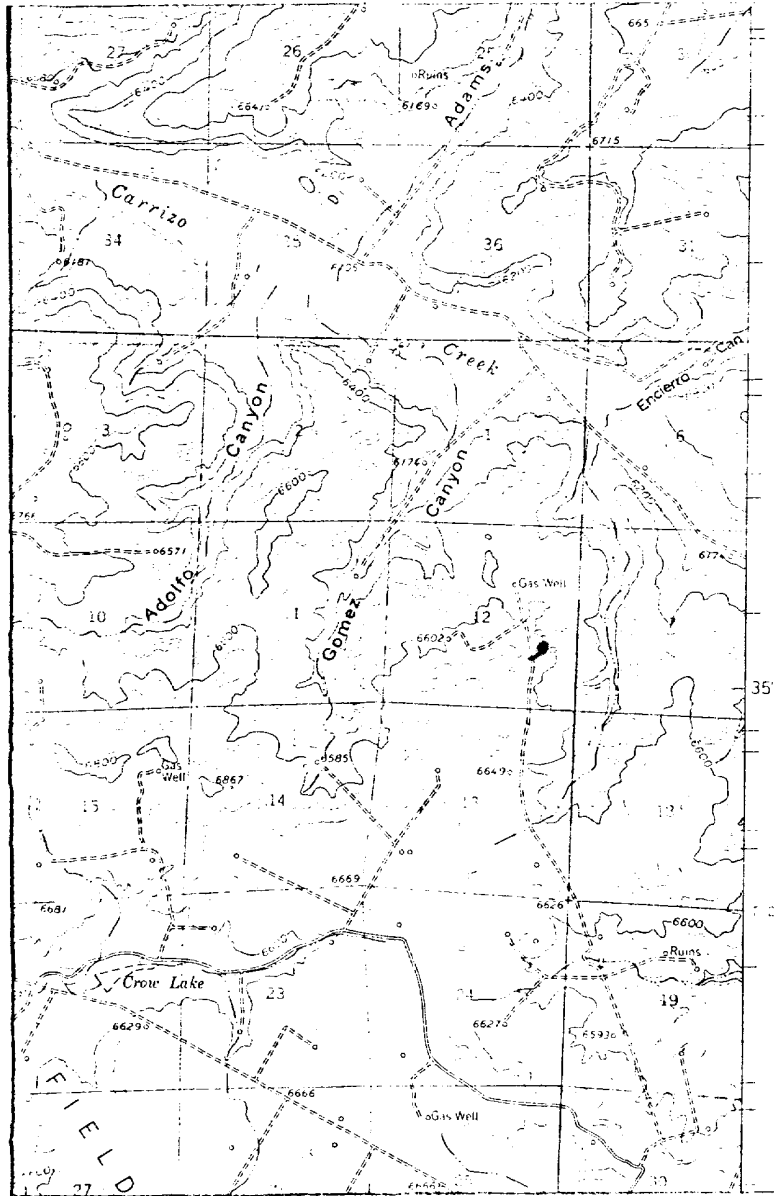


8" Series 900 Double Gate BOP, rated
at 3000 psi Working Pressure

EL PASO NATURAL GAS COMPANY
 San Juan 28-7 #198
 SE 12-27-7

R-7-W

T
27
N



Map #1

LEGEND OF RIGHT-OF-WAYS

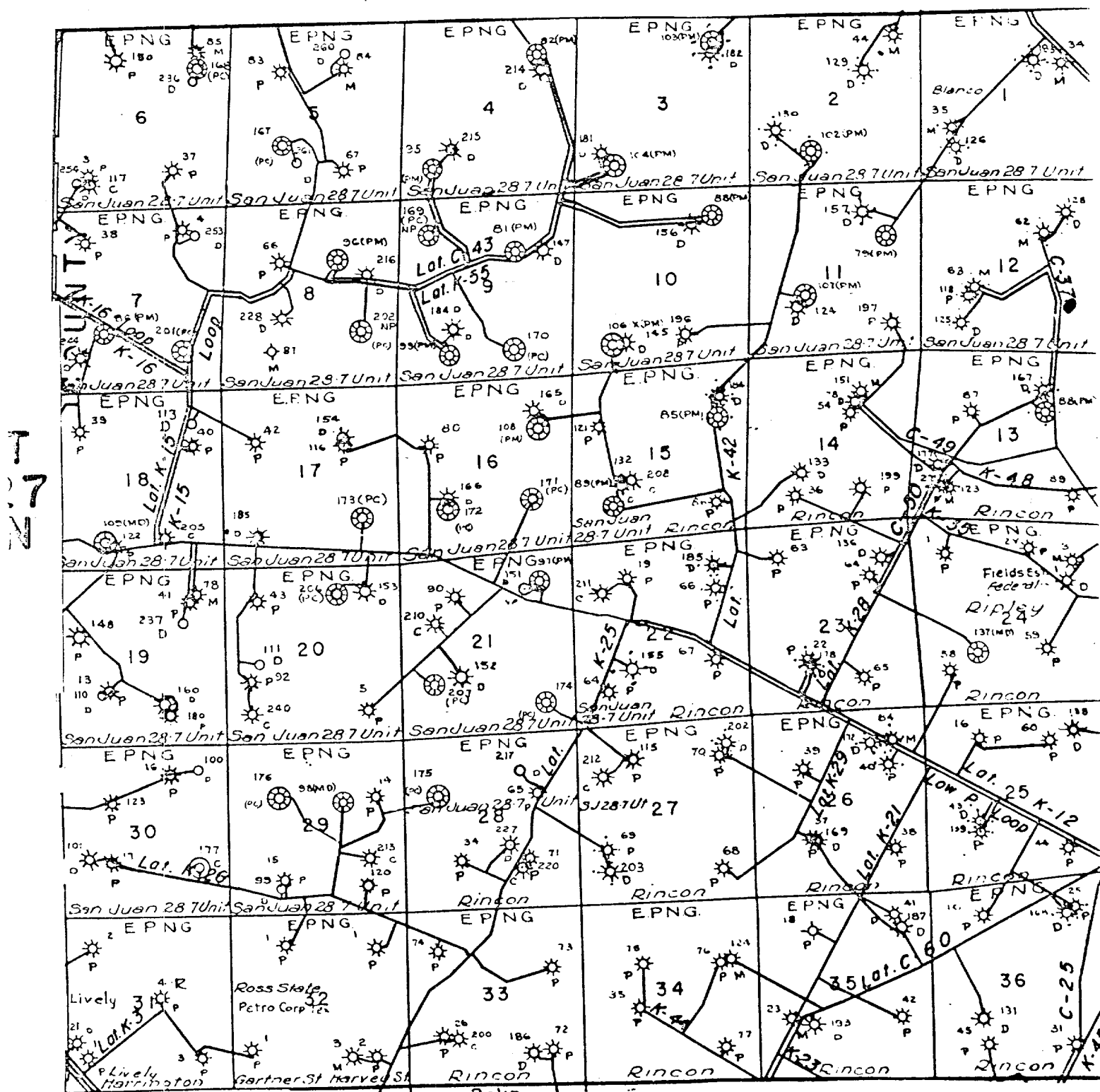
EXISTING ROADS	—————
EXISTING PIPELINES	+ + +
EXISTING ROAD & PIPELINE	+ + + ———
PROPOSED ROADS	- - - - -
PROPOSED PIPELINES	+ + +
PROPOSED ROAD & PIPELINE	+ + + - - -

EL PASO NATURAL GAS COMPANY

San Juan 28-7 #198

SE 12-27-7

R-7-W



Map #2.
Proposed Location

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