

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24141

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
SF ~~079138~~ 078138

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Bruington

9. WELL NO.
1R

10. FIELD AND POOL, OR WILDCAT
Aztec Pictured Cliffs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 20, T-30-N, R-11-W
NMPM

12. COUNTY OR PARISH
San Juan

13. STATE
NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
2 miles south of Aztec, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
1120'

16. NO. OF ACRES IN LEASE
2000'

17. NO. OF ACRES ASSIGNED TO THIS WELL
160.00

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

19. PROPOSED DEPTH
2315'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5770' GL

22. APPROX. DATE WORK WILL START*

I

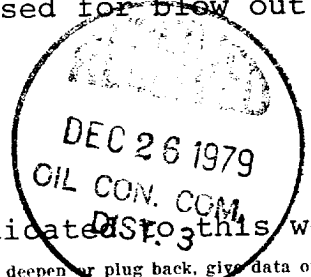
23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|-------------------------------|
| 12 1/4" | 8 5/8" | 24.0# | 120' | 106 cu.ft. circ. to surface |
| 6 3/4" | 2 7/8" | 6.4# | 2315' | 512 cu.ft. to cover Ojo Alamo |

Selectively perforate and sandwater fracture the Pictured Cliffs 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 SE/4 of Section 20 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 D. G. Lueco TITLE Drilling Clerk DATE 12-13-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

oh End

*See Instructions On Reverse Side

NMOCC

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102
 Supersedes C-128
 Effective 14-85

All distances must be from the outer boundaries of the Section.

| | | | | |
|--|----------------------|---------------------------------------|---------------------|---------------------------|
| Operator EL PASO NATURAL GAS COMPANY | | Lease BRUINGTON (SF-078138) | | Well No. 1R |
| Unit Letter I | Section 20 | Township 30N | Range 11W | County San Juan |

Actual Footage Location of Well:
1520 feet from the **SOUTH** line and **1120** feet from the **EAST** line

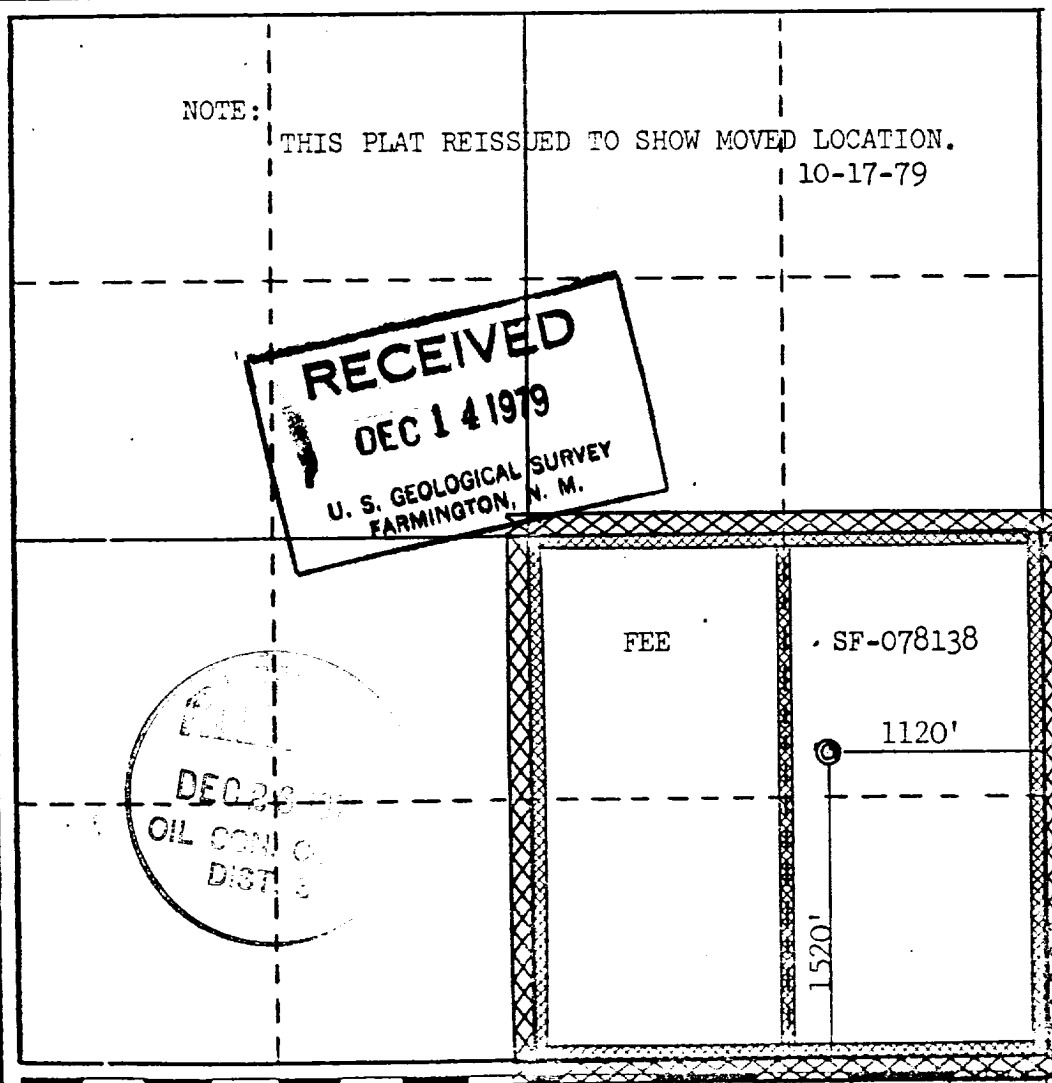
| | | | |
|-------------------------------------|---|--|---|
| Ground Level Elev. 5770.0 | Producing Formation PICTURED CLIFFS | Pool AZTEC PICTURED CLIFFS ✓ | Dedicated Acreage: 160.00 Acres |
|-------------------------------------|---|--|---|

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 Communitization

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.



NOTE: THIS PLAT REISSUED TO SHOW MOVED LOCATION.
 10-17-79

RECEIVED
DEC 14 1979
 U. S. GEOLOGICAL SURVEY
 FARMINGTON, N. M.

DEC 28 1979
 OIL CONSERVATION DISTRICT

CERTIFICATION

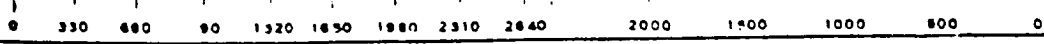
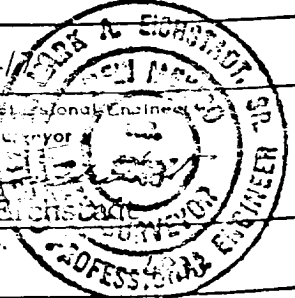
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

M. G. Biscoe

| |
|--|
| Name Drilling Clerk |
| Position El Paso Natural Gas Co. |
| Company December 13, 1979 |
| 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 9/24/79 |
| Registered Professional Engineer and/or Land Surveyor <i>Mark A. Eichstadt</i> |
| Certificate No. |



Well Name Bruington #1 R
Location SE 20 30-11
Formation PC

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

U. S. Forest Service
Dobson Ford
Archaeologist

Date
10/4/79
Date

Bureau of Indian Affairs Representative
Bob Mark
Bureau of Land Management Representative

Date
10/4
Date

Andy Stump
U. S. Geological Survey Representative - AGREES

Date
10-4-79
Date

TO THE FOOTAGE LOCATION OF THIS WELL.

REASON:

Seed Mixture: IF

Equipment Color: ~~Red~~ Green

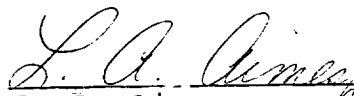
Road and Row: (Same) or (Separate)

Remarks: _____

Multi-Point Surface Use Plan
Bruington #1R

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 Animas River.
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, juniper, and rabbit brush growing. Cattle, deer and rabbits 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.



L. A. Aimes
Project Drilling Engineer

Operations Plan - Bruington #1R

I. Location: 1520'S, 1120'E, Section 20, T-30-N, R-11-W, San Juan County, NM

Field: Aztec Pictured Cliffs

Elevation: 5780'GR

II. Geology:

A. Surface Formation: Nacimiento

Sub-surface Formation Tops:

| | | | |
|-----------|-------|-----------------|-------|
| Ojo Alamo | 635' | Pictured Cliffs | 2100' |
| Kirtland | 805' | Lewis | 2275' |
| Fruitland | 1800' | Total Depth | 2315' |

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:

1980 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" | 2315' | 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

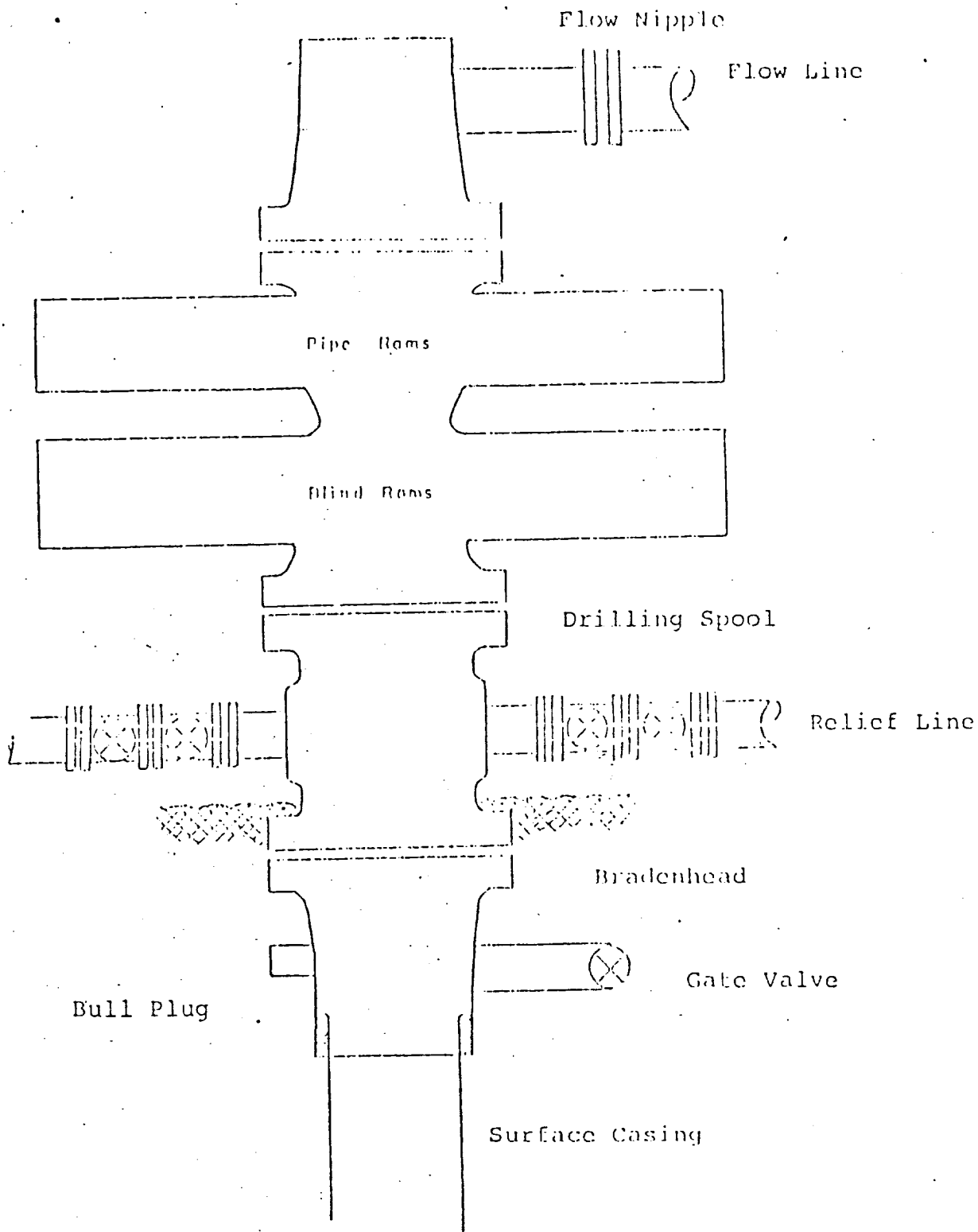
D. Wellhead Equipment: 8 5/8" x 2 7/8" 2000 psi WOG casing head.

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 - precede cement with 5 bbls. water. Cement with 265 sks. of 65/35 Class "B" Poz with 6% gel and 8.3 gallons water per sack followed by 65 sks. 50/50 Class "B" Poz with 2% gel (512cu.ft. of slurry, 50% excess to cover Ojo Alamo). Spot 50 gallons of 7 1/2% acetic acid on top of plugs. Run temperature survey after 12 hours.

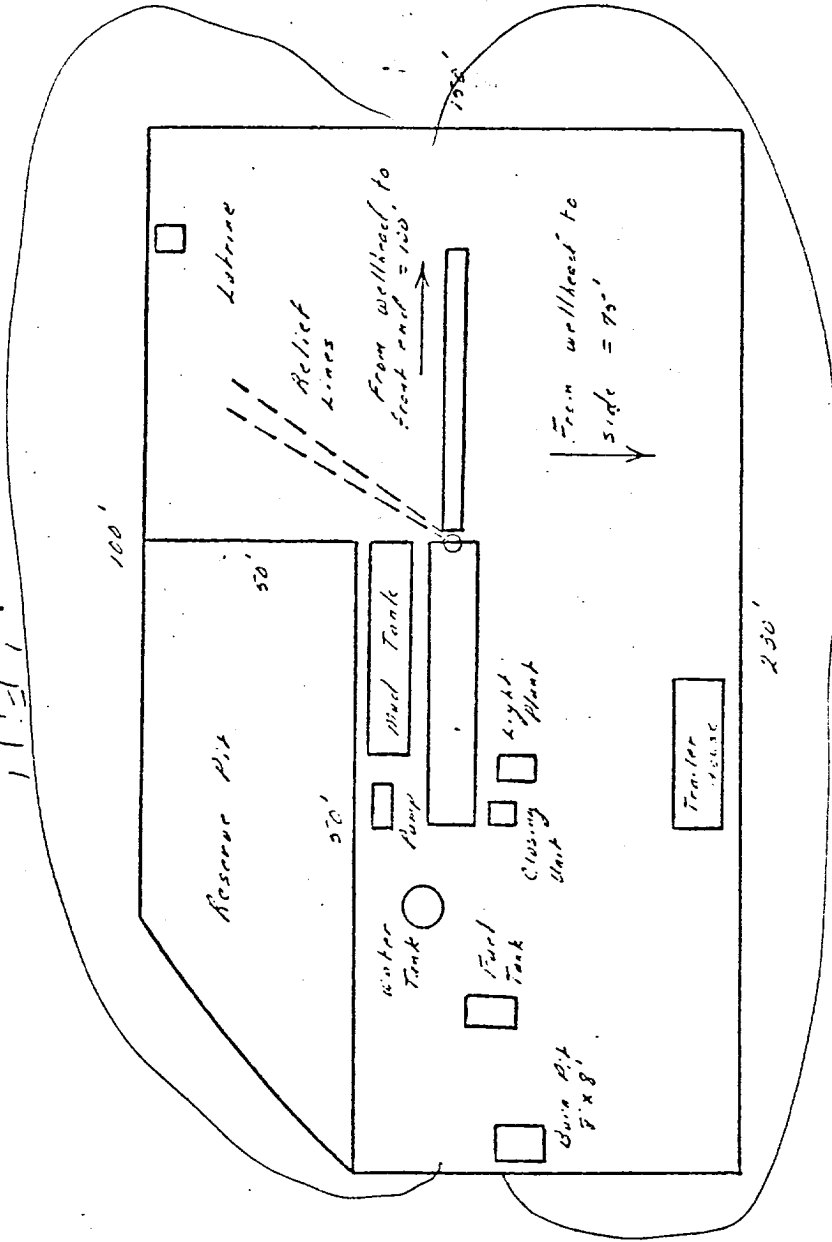
Typical Mud Drilled W.O.P. Installation
for Pictured Cliffs Well



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

El Paso Natural Gas Company
 Typical Location Plot for Pictured Chitt's Well

11111

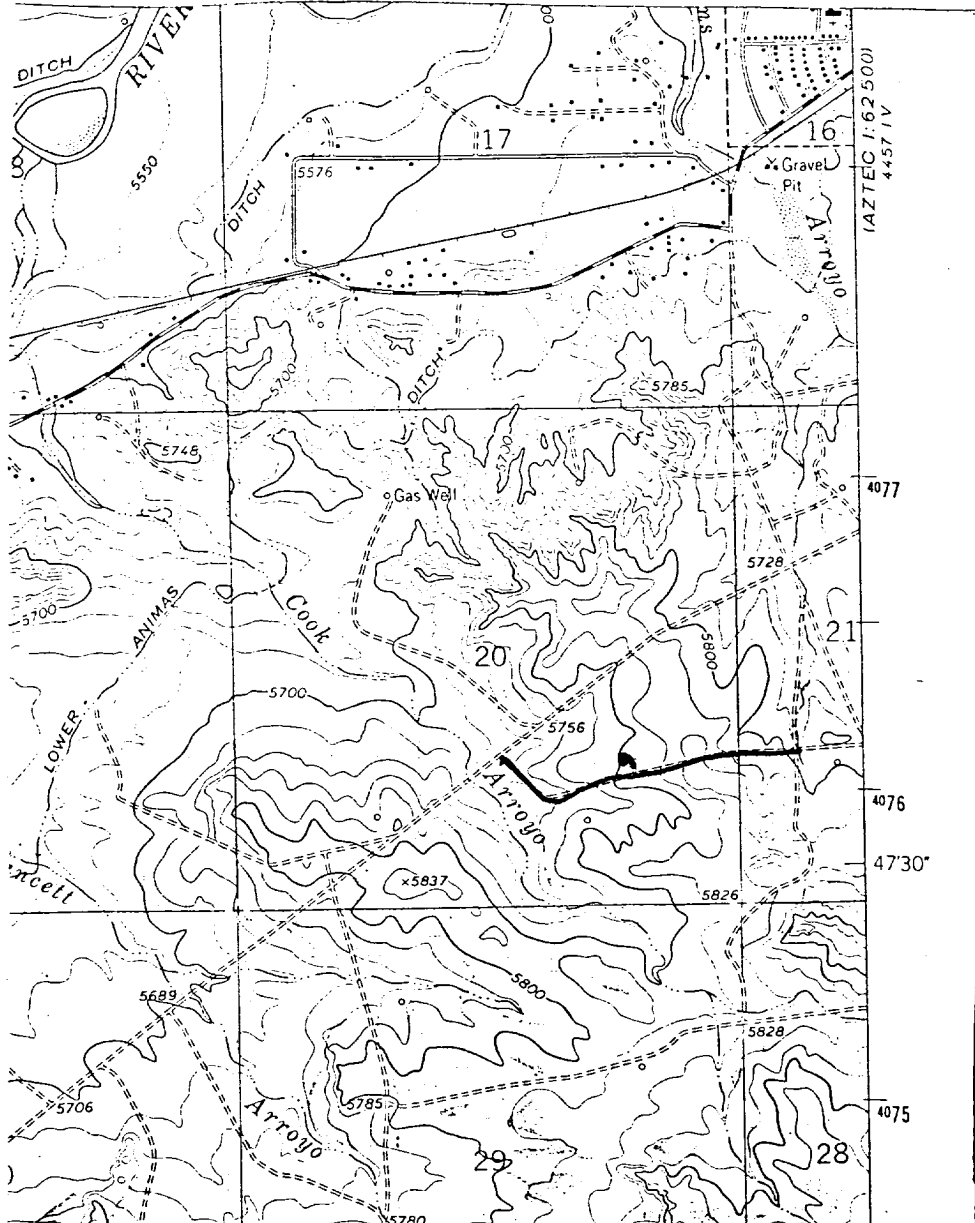


Scale: 1/2" = 20'

B' cut

El Paso Natural Gas Company
 Bruington #1R
 SE 20-30-11

R-11-W



T
30
N

MAP 1

LEGEND OF RIGHT-OF-WAYS

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

