

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24079

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
NM 03195A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sullivan

9. WELL NO.
1A

10. FIELD AND POOL, OR WILDCAT
Blanco Mesa Verde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 7, T-30-N, R-10-W
NMPM

12. COUNTY OR PARISH
San Juan

13. STATE
NM

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 289, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 1640'N, 1070'W
At proposed prod. zone same

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1070'

16. NO. OF ACRES IN LEASE 319.67

17. NO. OF ACRES ASSIGNED TO THIS WELL N/319.67

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 350'

19. PROPOSED DEPTH 5460'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6171'GL

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM

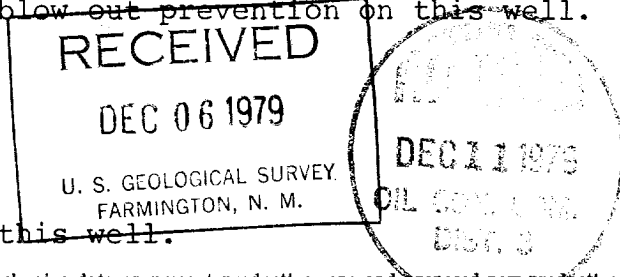
| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|-------------------------------|
| 13 3/4" | 9 5/8" | 36.0# | 200' | 224 cu.ft. to circulate |
| 8 3/4" | 7" | 20.0# | 3100' | 385 cu.ft. to cover Ojo Alamo |
| 6 1/4" | 4 1/2" liner | 10.5# | 2950-5460' | 438 cu.ft. to circ. liner |

Selectively perforate and sandwater fracture the Mesa Verde 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 N/2 of Section 7 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. Buico TITLE Drilling Clerk DATE 12-3-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ADDITIONAL WELL NEEDED FOR OIL TO NEW MEXICO ORDER R-1670-T.
U.S.G.S. RATIFICATION DATED FEBRUARY 22, 1979.
*See Instructions On Reverse Side



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

1980

Form C-102
Supersedes C-128
Effective 1-1-65

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

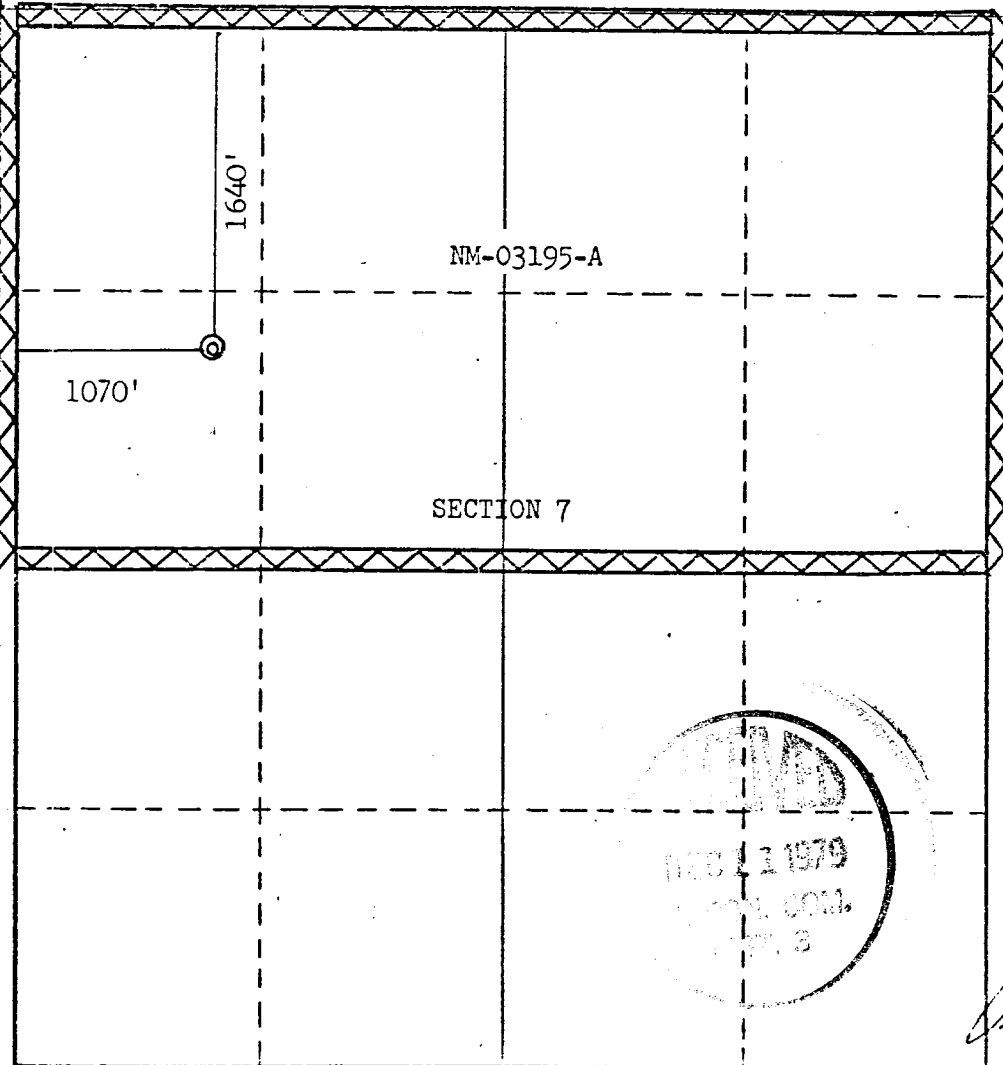
| | | | | |
|--|--|---------------------------------------|---|---------------------------|
| Operator EL PASO NATURAL GAS COMPANY | | Lease SULLIVAN (NM-03195-A) | | Well No. 1A |
| Unit Letter E | Section 7 | Township 30N | Range 10W | County SAN JUAN |
| Actual Footage Location of Well: 1640 feet from the NORTH line and 1070 feet from the WEST line | | | | |
| Ground Level Elev 6171 | Producing Formation MESA VERDE | Pool BLANCO MESA VERDE | Dedicated Acreage: 319.67 Acres | |

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 _____

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.

J. G. Buice
Name
Drilling Clerk

Position
El Paso Natural Gas Co.

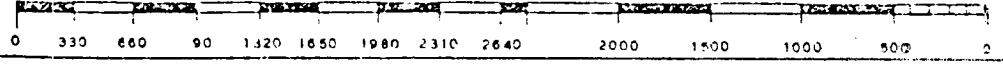
Company
December 3, 1979

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
12/3/79

Mark
[Signature]





El Paso NATURAL GAS COMPANY

EL PASO NATURAL GAS COMPANY
FARMINGTON, NEW MEXICO 87401
PHONE 505-435-2000

Well Name Sullivan #1A
Location NW 7 30-10
Formation MV

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

U. S. Forest Service
D. H. Fied
Archaeologist

Date
10/4/79
Date

Bureau of Indian Affairs Representative
Bob Marler?
Bureau of Land Management Representative

Date
10/4/79
Date

A Stamp
U. S. Geological Survey Representative - AGREES
TO THE FOOTAGE LOCATION OF THIS WELL.
REASON:

10/4/79
Date

Seed Mixture: II

Equipment Color: Brown

Road and Row: (Same) or (Separate)

Remarks: _____

C.C. to Dave Vilvin
Earl Mealer
John Ahlm



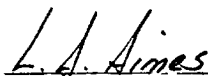
Multi-Point Surface Use Plan

Sullivan #1A

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 reseeded operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeded 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 ridge of a hill with pinon and juniper growing. Deer and cattle are seen occasionally 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
Sullivan #1A

I. Location: 1640'N, 1070'W, Section 7, T-30-N, R-10-W, Rio Arriba County, NM

Field: Blanco Mesa Verde

Elevation: 6171'GL

II. Geology:

| | | | | |
|--------------------|------------|------------|---------------|-------|
| A. Formation Tops: | Surface | Nacimiento | Lewis | 2903' |
| | Ojo Alamo | 1404' | Mesa Verde | 4362' |
| | Kirtland | 1455' | Menefee | 4439' |
| | Fruitland | 2318' | Point Lookout | 5011' |
| | Pic.Cliffs | 2737' | Total Depth | 5460' |

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

C. Coring Program: none

D. Natural Gauges: 4350', 4430', 5000' 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 3100'. 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" | 36.0# H-40 |
| | 8 3/4" | 3100' | 7" | 20.0# K-55 |
| | 6 1/4" | 2950-5460' | 4 1/2" | 10.5# K-55 |

B. Float Equipment: 9 5/8" surface casing - cement guide shoe.

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

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff.
Geyser shoe and flapper type float collar

C. Tubing: 5460' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.

D. Wellhead Equipment: 10" 2000 x 9 5/8" casing head. 10" 2000 x 6" 2000 xmas tree.



Operations Plan - Sullivan #1A

V. Cementing:

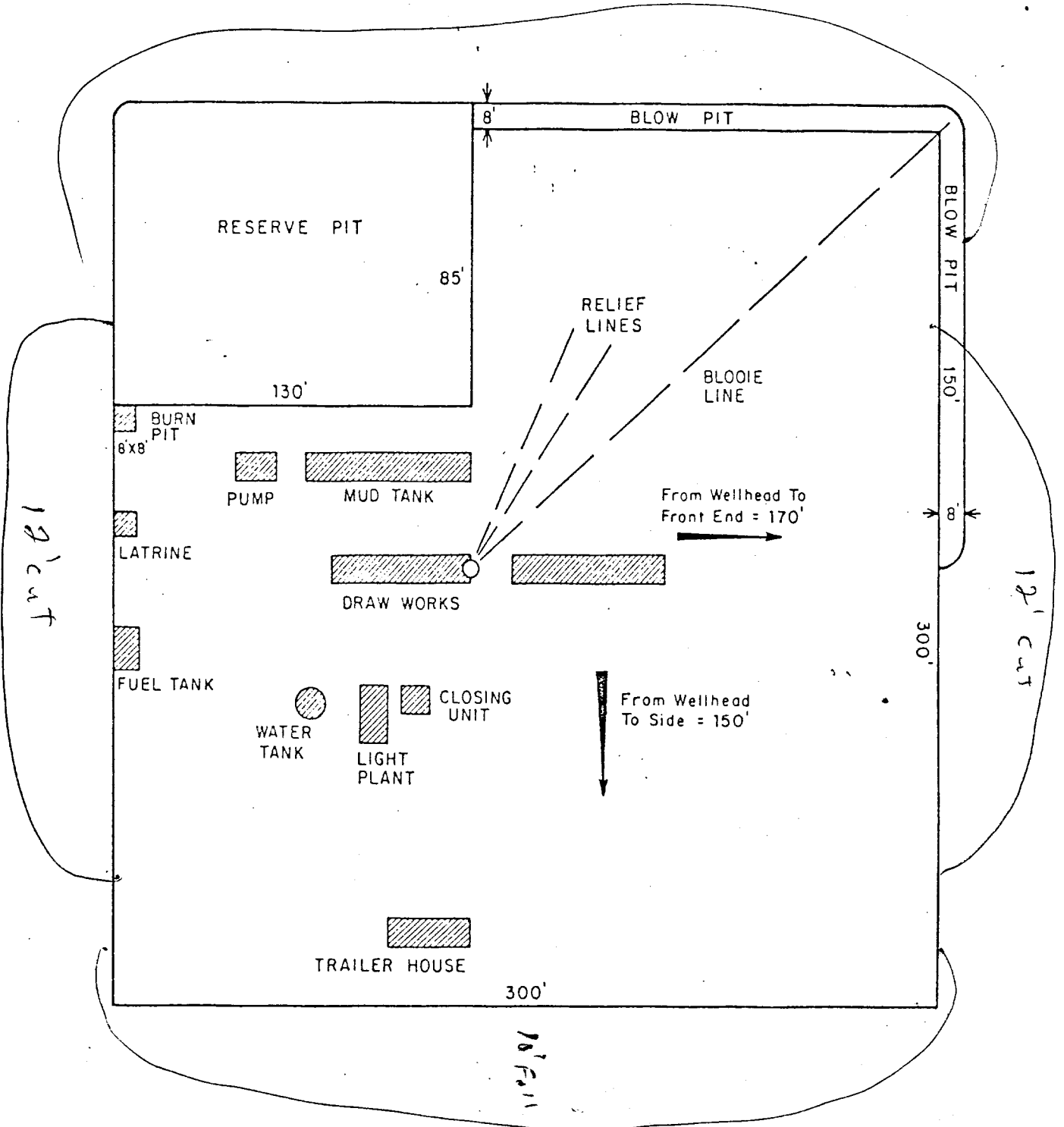
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 165 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (385 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" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 315sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (438 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.




18 Fall



| | | | | |
|------|------|------|----|------|
| PRT. | SEP. | DATE | TO | W.O. |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

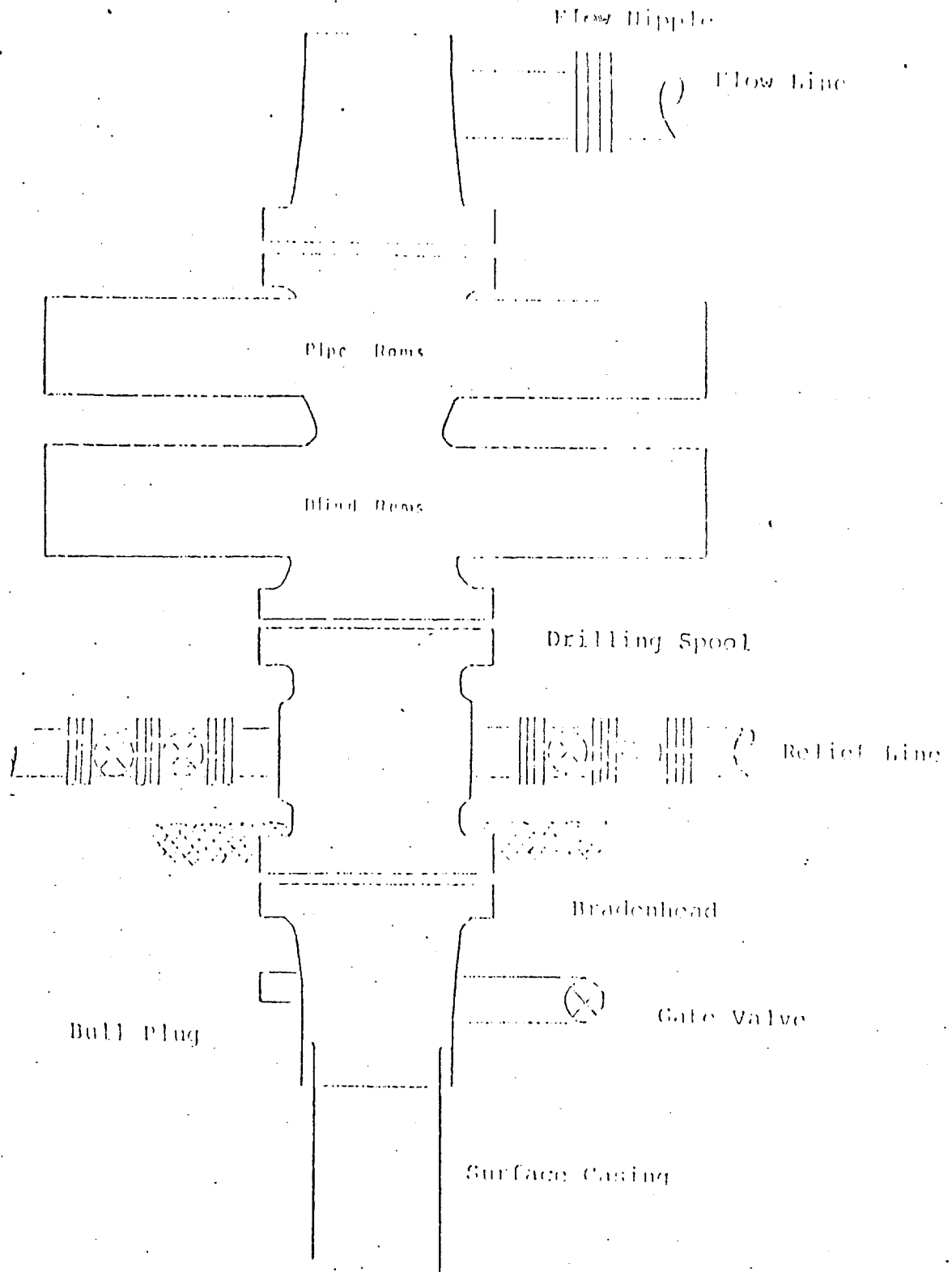
| | |
|--------------|---------|
| ENG. REC. | DATE |
| DRAWN J.L.H. | 8-16-78 |
| CHECKED | |
| CHECKED | |
| PROJ. APP | |
| DESIGN | |


El Paso Natural Gas Company
 TYPICAL LOCATION PLAT FOR
 MESAVERDE OR DAKOTA DRILL SITE

SCALE: 1" = 50'
 DWG. NO. _____
 RE _____



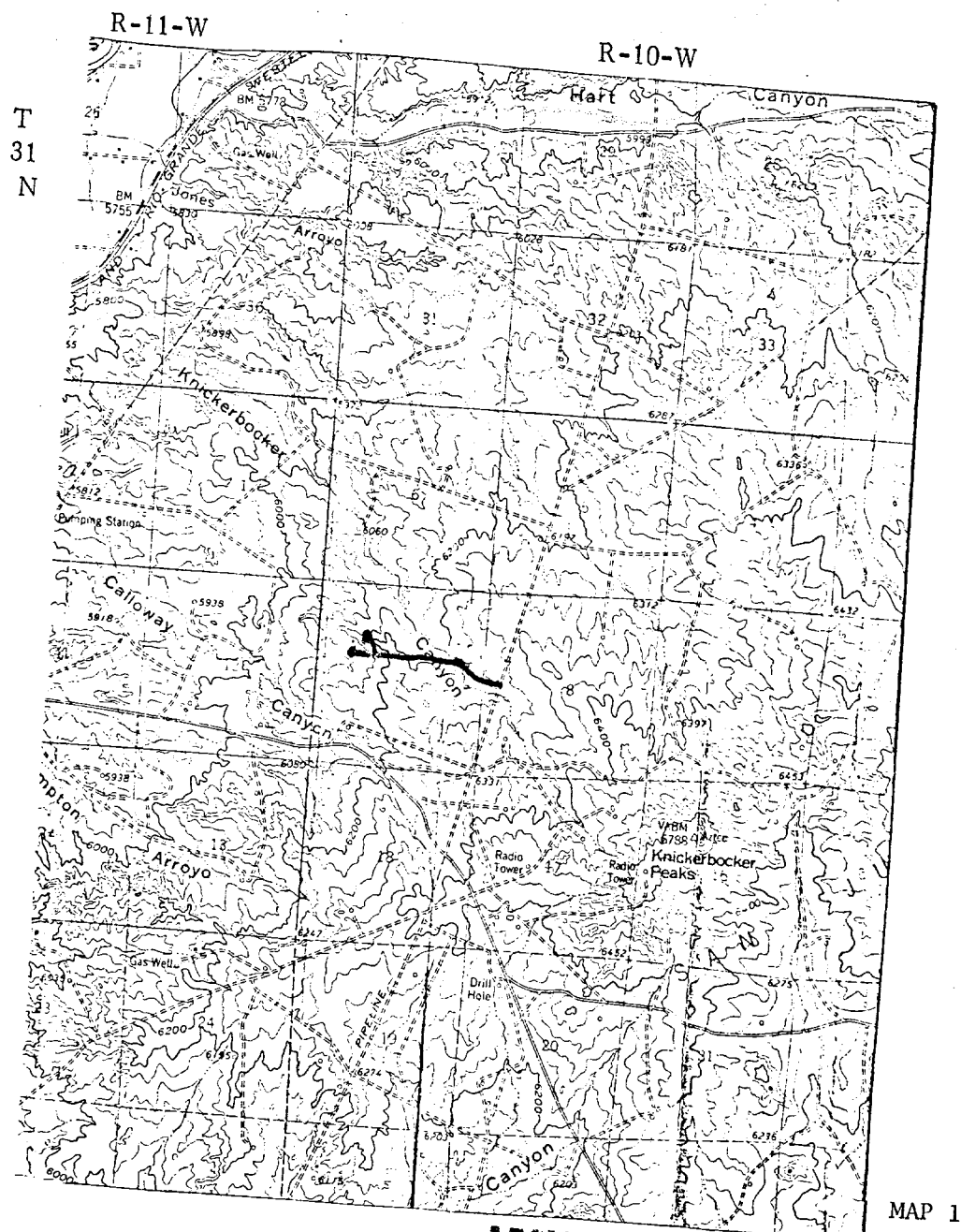
Typical B.O.P. Installation
for Mega Verde Well







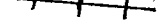

Series 900 Double Gate BOP, rated
at 3000 psi Working Pressure
When gas drilling operations begin a Shaffer type 50
or equivalent rotating head is installed on top of the
flow nipple and the flow line is converted into a blowie line



El Paso Natural Gas Company
 Sullivan #1A
 NW 7-30-10



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
 Sullivan #1A
 NW 7-30-10

R-10-W

T
30
N

