

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. Jic. Cont. #120
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Northwest Production Corporation		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR PO Box 289, Farmington, NM 87401		8. FARM OR LEASE NAME Jicarilla 120 C
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 1760'N, 790'W At proposed prod. zone same		9. WELL NO. 19
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 17 miles Northeast of Lindrith, NM		10. FIELD AND POOL, OR WILDCAT So. Blanco Pic. Cliffs
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	790'	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 32, T-26-N, R-4-W NMPM
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	800'	12. COUNTY OR PARISH Rio Arriba
16. NO. OF ACRES IN LEASE 2568.02	17. NO. OF ACRES ASSIGNED TO THIS WELL 160.00	13. STATE NM
19. PROPOSED DEPTH 3385'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6742' 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
12 1/4"	8 5/8"	24.0#	120'	106 cu.ft. circ. to surface
6 3/4"	2 7/8"	6.4#	3385'	249 cu.ft. to cover Ojo Alam

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 to this well.

The NW/4 of Section 32 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. Buisco TITLE Drilling Clerk DATE 5-18-79

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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

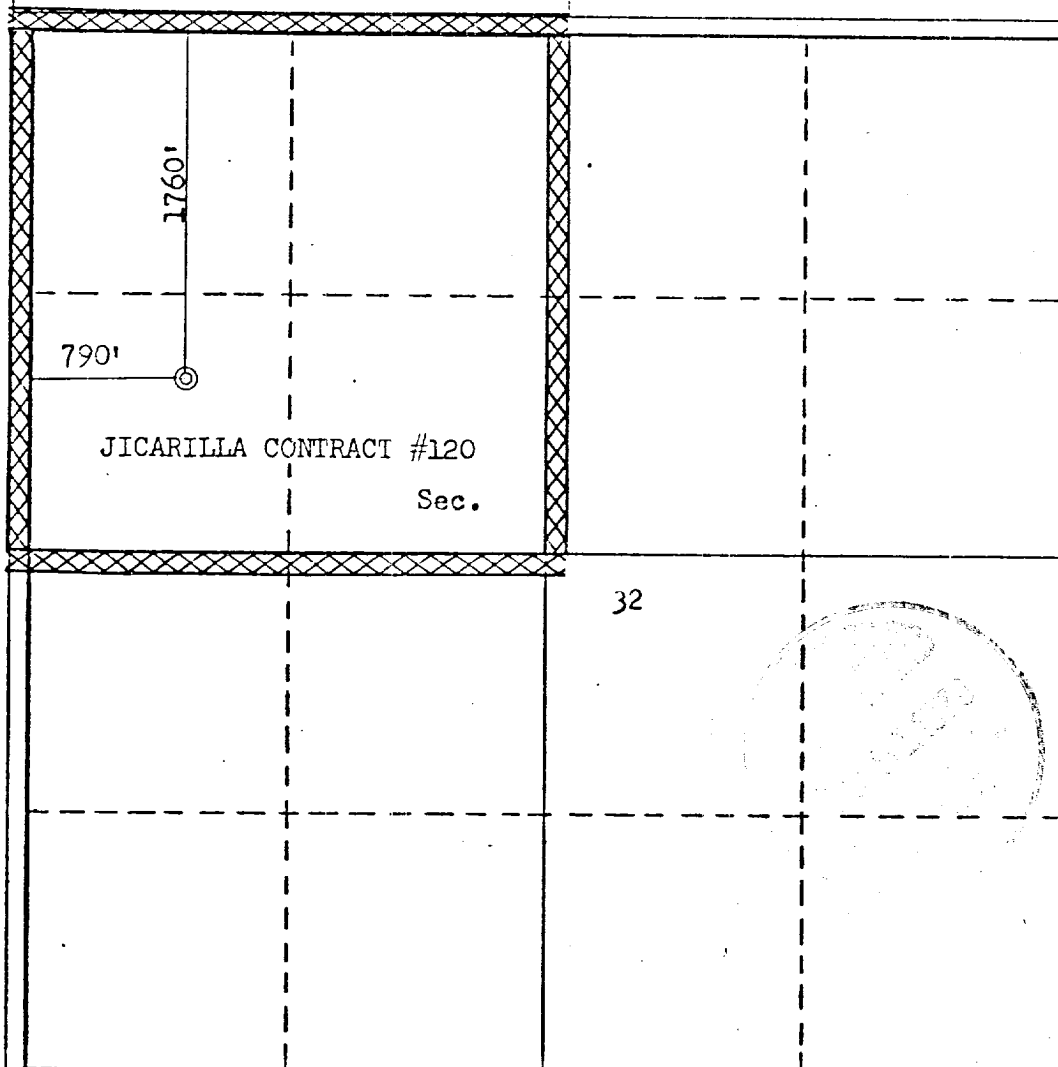
Operator NORTHWEST PRODUCTION CORPORATION		Lease JICARILLA 120 "C" CONTRACT #120		Well No. 19
Unit Letter E	Section 32	Township 26N	Range 4W	County Rio Arriba
Actual Footage Location of Well:				
1760 feet from the North line and 790 feet from the West line				
Ground Level Elev. 6742	Producing Formation Pictured Cliffs	Pool So. Blanco Pictured Cliffs	Dedicated Acreage: <input checked="" type="checkbox"/> 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 \_\_\_\_\_

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.

*D. P. Buico*

Name

Drilling Clerk

Position

Northwest Production Corp.

Company

5-18-79

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

May 3, 1979

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kerr, Jr.*

Fred B. Kerr, Jr.

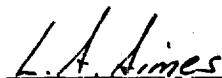
Certificate No.

3950 KERR, JR.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



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 sagebrush flats with sagebrush growing. Cattle and deer 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.



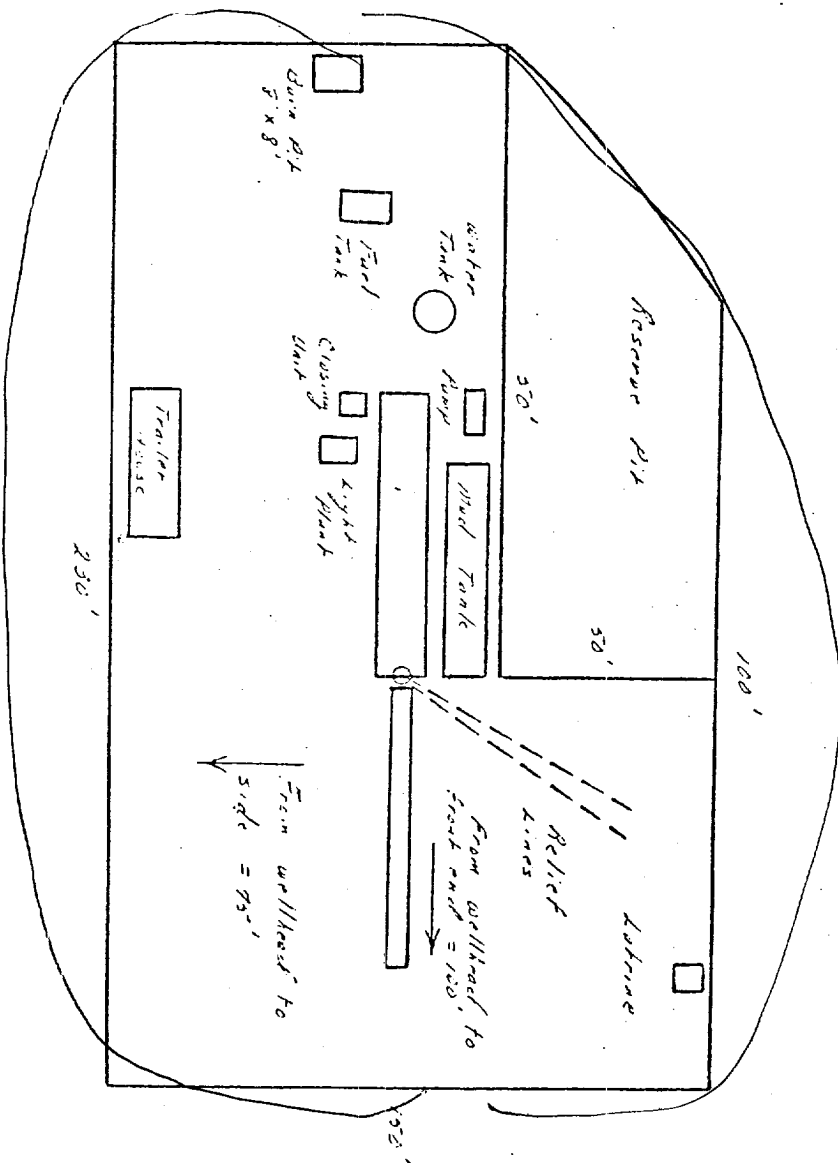
L. A. Aimes  
Project Drilling Engineer

## Operations Plan - Jicarilla 120 C #19

- I. Location: 1760'N, 790'W, Section 32, T-26-N, R-4-W, Rio Arriba County, NM  
Field: So. Blanco Pictured Cliffs Elevation: 6752'GL
- II. Geology:
- A. Surface Formation: San Jose
- Sub-surface Formation Tops:
- |           |       |                 |       |
|-----------|-------|-----------------|-------|
| Ojo Alamo | 2570' | Pictured Cliffs | 3232' |
| Kirtland  | 2712' | Lewis           | 3345' |
| Fruitland | 2960' | Total Depth     | 3385' |
- 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. &amp; Grade</u> |
|------------------|--------------|------------------|------------------------|
| 12 1/4"          | 120'         | 8 5/8"           | 24.0# J-55             |
| 6 3/4"           | 3385'        | 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 - 103 sks. 65/35 Class "B" Poz with 6% gel, 2% CaCl<sub>2</sub>, and 8.3 gallons water per sack followed by 70 sks. Class "B" neat cement (249 cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs.

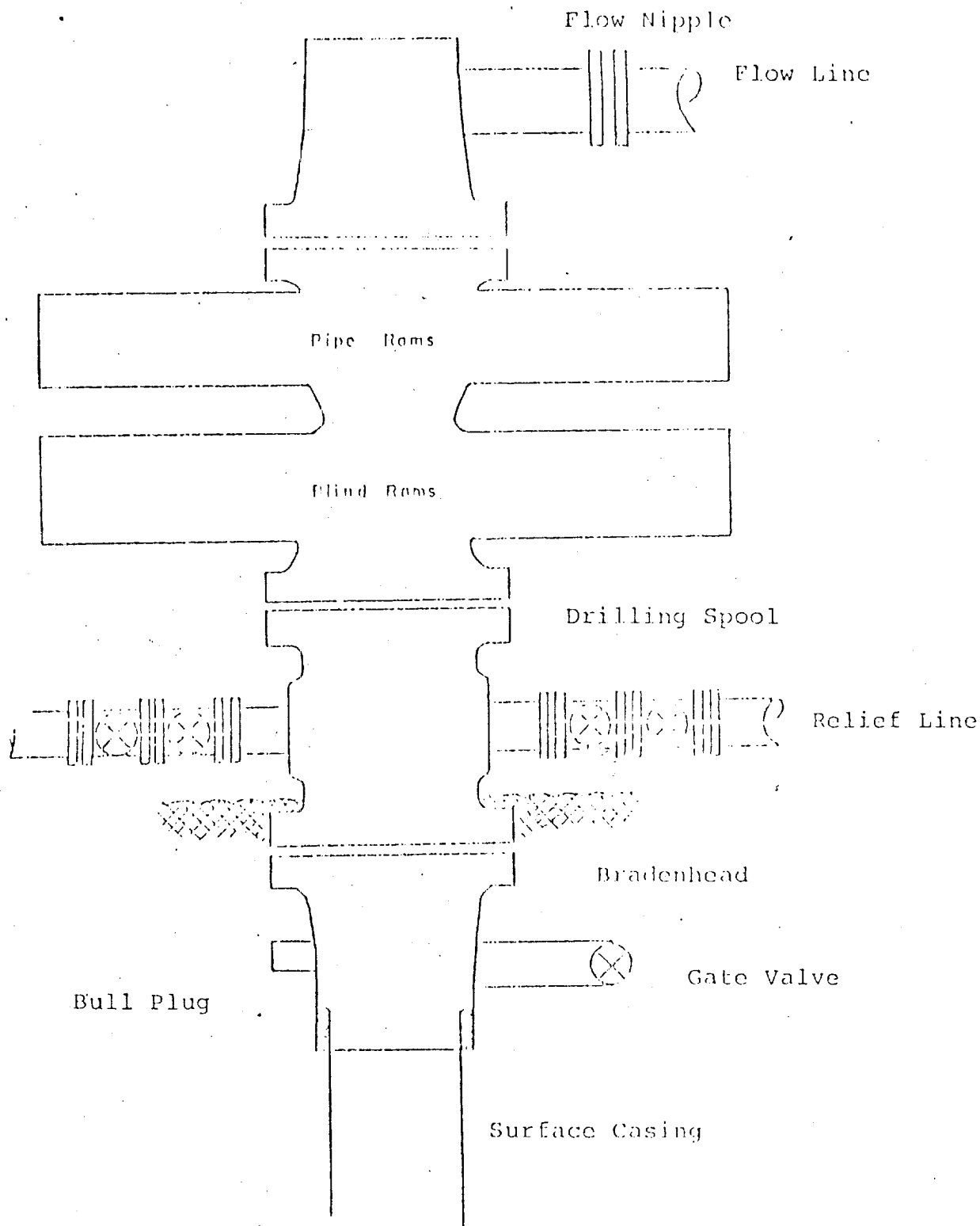
El Paso Natural Gas Company  
 Typical Location Plot for Pictured Bluffs Well

10 F. 11



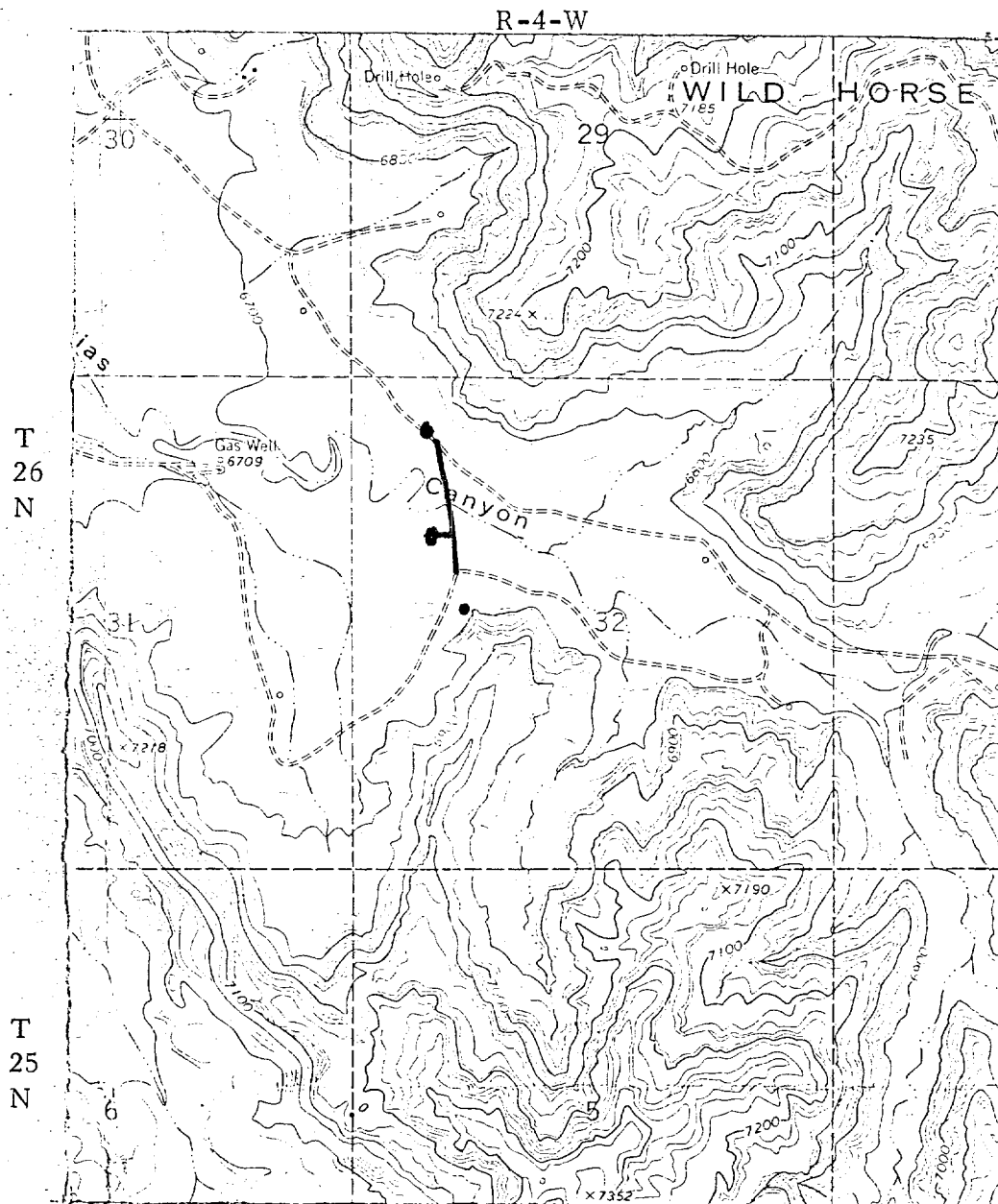
Scale: 1/2" = 20'

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



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

NORTHWEST PRODUCTION CORPORATION  
Jicarilla 120C #19  
NW 32-26-4



MAP #1

LEGEND OF RIGHT-OF-WAYS

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

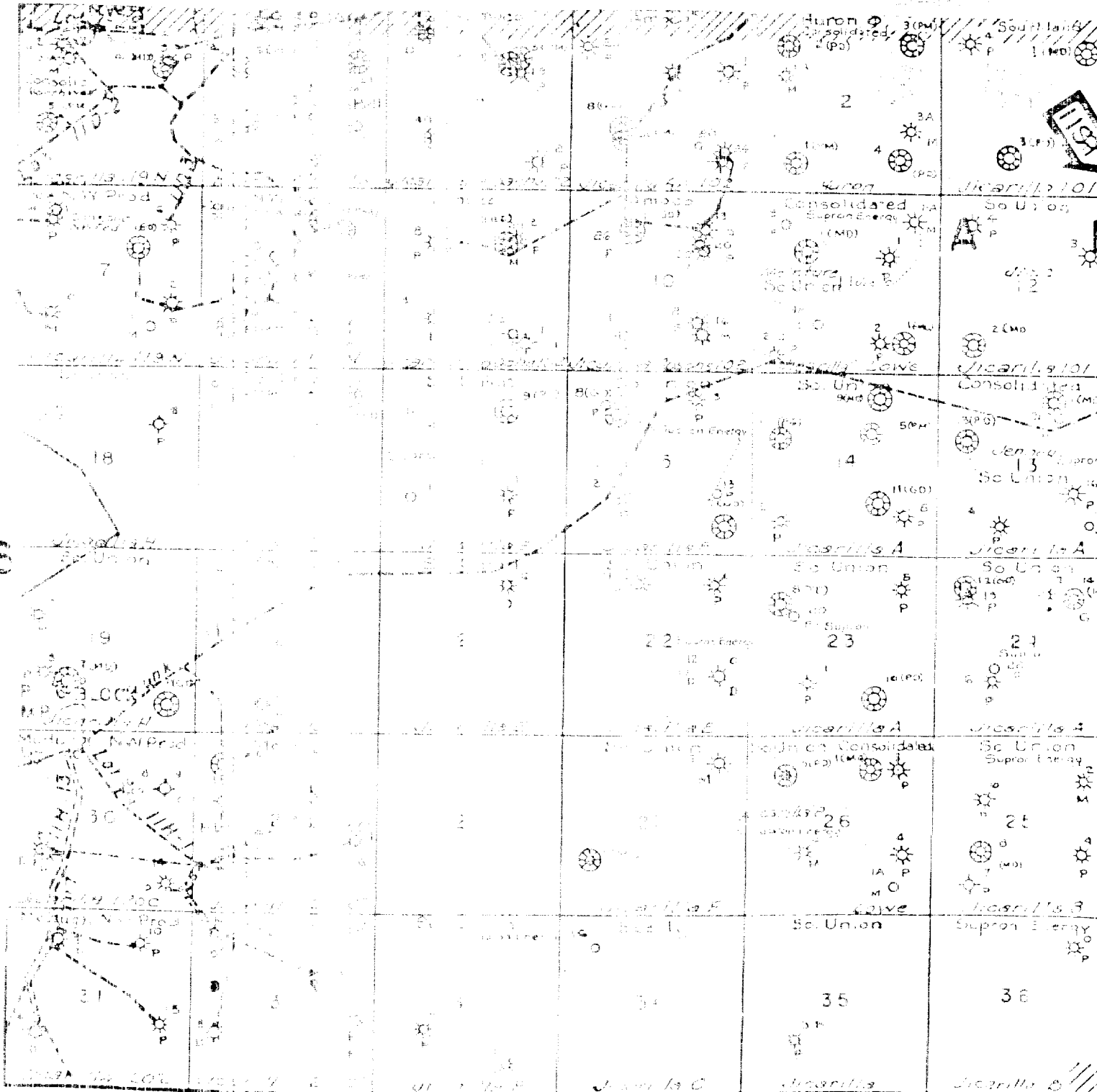


# ORTHOMER REPRODUCTION CORPORATION

File 120C #10

SV 32-26-4

R 4-W



MAP #2

Proposed Location -2