

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 ☐		5. LEASE DESIGNATION AND SERIAL NO. Jic. Cont. #120
b. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐		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 1180'S, 1740'W At proposed prod. zone same		9. WELL NO. 20
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) 1180'	16. NO. OF ACRES IN LEASE 2568.02	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. 1/2 mile	19. PROPOSED DEPTH 3470'	12. COUNTY OR PARISH Rio Arriba
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6839' GL		13. STATE NM
23. PROPOSED CASING AND CEMENTING PROGRAM		17. NO. OF ACRES ASSIGNED TO THIS WELL 160.00
20. ROTARY OR CABLE TOOLS Rotary		22. APPROX. DATE WORK WILL START*

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#	3470'	180 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 SW/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 N. P. Guisco TITLE Drilling Clerk DATE 5-18-79

(This space for Federal or State office use)

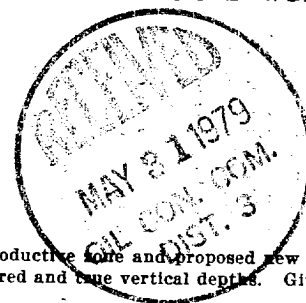
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

*See Instructions On Reverse Side



U. S. GEOLOGICAL SURVEY

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

Operator NORTHWEST PRODUCTION CORPORATION			Lease JICARILLA 120 "C" CONTRACT #120		Well No. 20
Unit Letter N	Section 32	Township 26N	Range 4W	County Rio Arriba	

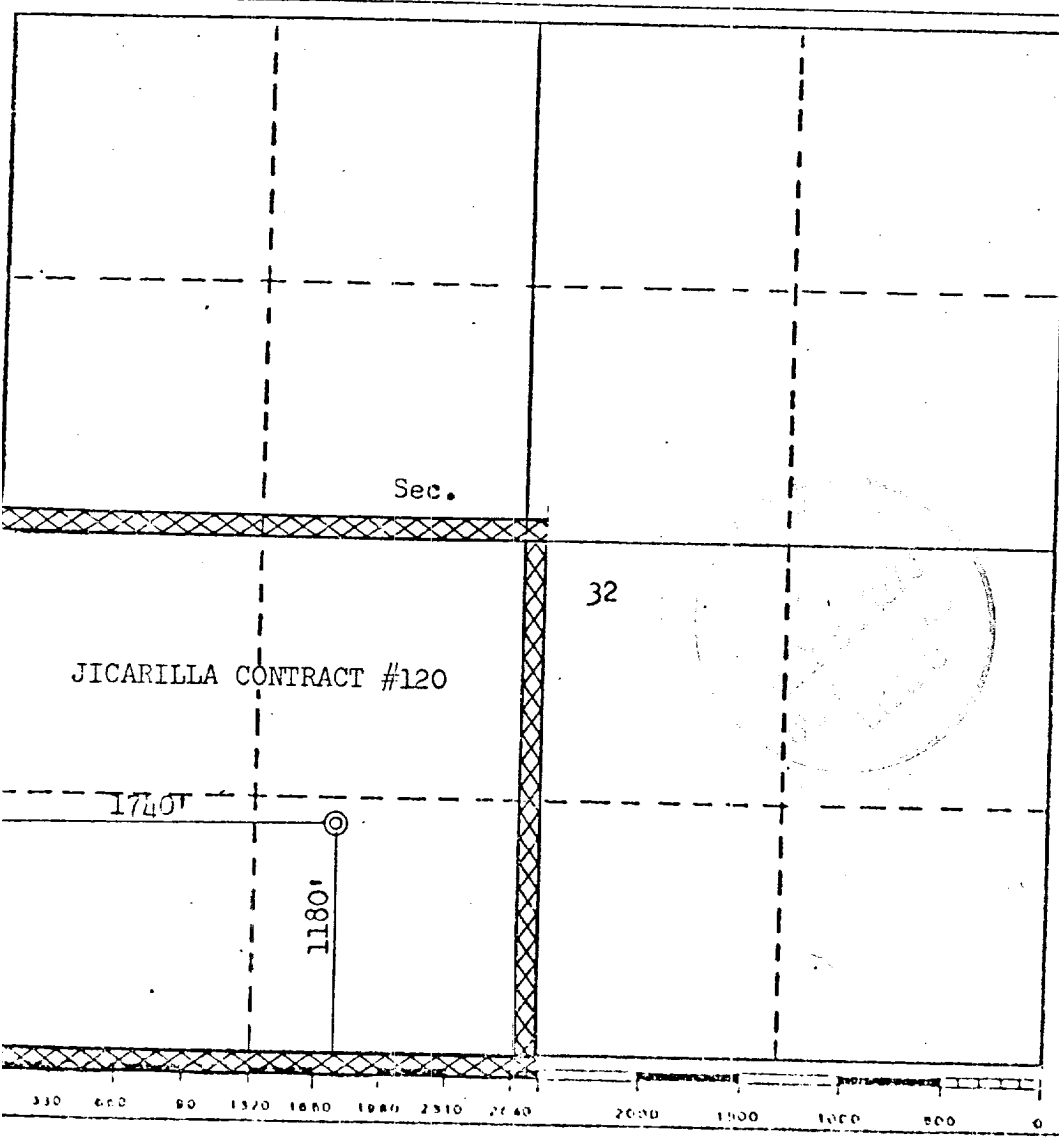
Actual Footage Location of Well: 1130 feet from the South line and 1740 feet from the West line			Ground Level Elev. 6839	Producing Formation Pictured Cliffs	Pool So. Blanco Pictured Cliffs	Dedicated Acreage: 160.00 Acres
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1. Outline the acreage dedicated 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 Division.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>W. G. Buies</i>	
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	<i>Frederick E. Kerr Jr.</i>
Certificate No.	3950

Multi-Point Surface Use Plan
7. cont'd.

Page Two

will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the reserve pit will be fenced until the liquids have had adequate time to dry. The location have had pit will not take to place until such time as the reserve pit can be properly covered over to prevent pit from carrying No earthen pits will be located on watershed. all 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. Please refer to the attached Plat No. 1.
9. Wellsite Layout - After completion of the proposed project, the location will be left in such a condition. 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 agency will be performed during the reseeding operation will be performed during the time period set forth by the regulatory body. The location set forth by the regulatory will be painted as designated by the responsible government agency.
10. Plans for Restoration of the Surface - There is cedar, sagebrush and grass growing. Cattle and deer are occasionally seen on the proposed project site.

Other Information -
Operator's Representative - W.D. Dawson, PO Box 990, Farmington, NM
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 are, to the best of my knowledge, true in this plan and that the statements made by El Paso proposed work associated with its performed operations and herein will be performed by El Paso and sub-Nat Company in conformity with this plan and sub-Nat conditions under which it is ar

A. Aimes
A. Aimes
ect Driller

May 18, 1979

Operations Plan - Jicarilla 120 C #120

I. Location: 1180'S, 1740'W, Section 32, T-26-N, R-4-W, Rio Arriba County, NM

Field: So. Blanco Pictured Cliffs

Elevation: 6849'GL

II. Geology:

A. Surface Formation: San Jose

Sub-surface Formation Tops:

Ojo Alamo	2880'	Pictured Cliffs	3325'
Kirtland	3005'	Lewis	3430'
Fruitland	3110'	Total Depth	3470'

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"	3470'	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

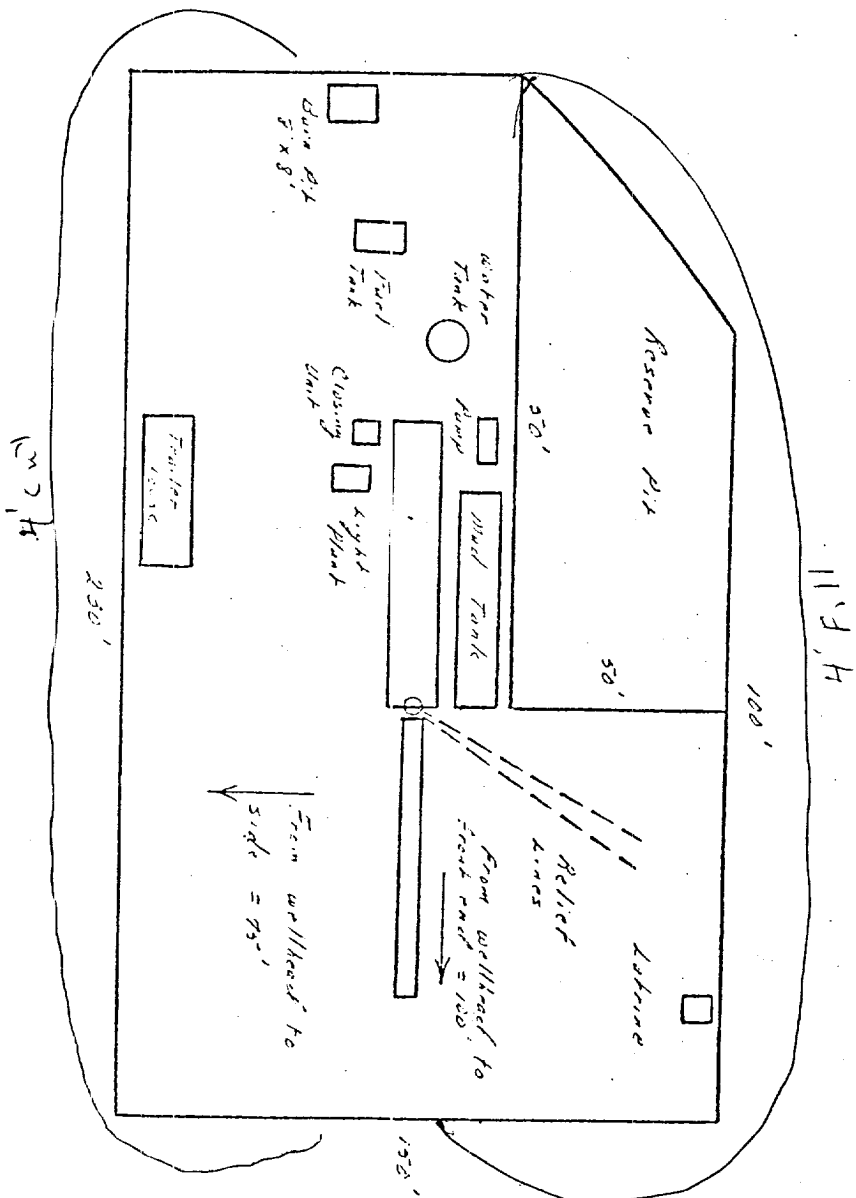
D. Wellhead Equipment: Larkin wellhead (fig. 75)

V. Cementing:

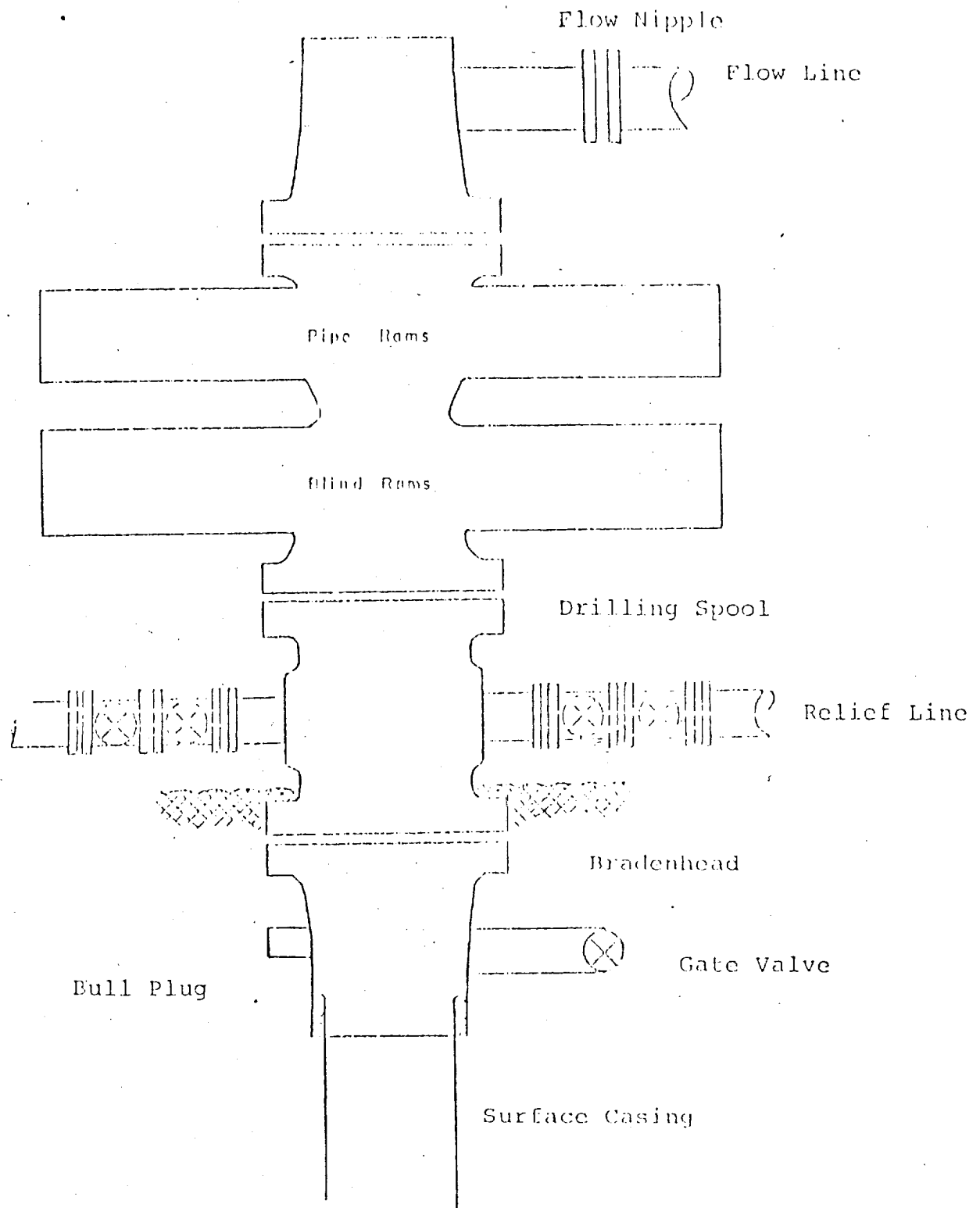
8 5/8" surface casing - 90 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (106 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing wellhead and BOP to 600#/30 minutes.

2 7/8" production - 60 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 (180 cu.ft. slurry, 50% excess to cover Ojo Alamo). Run temperature survey after 12 hrs.

El Paso Natural Gas Company
 Typical Location Plat for Pictured Cliffs Well

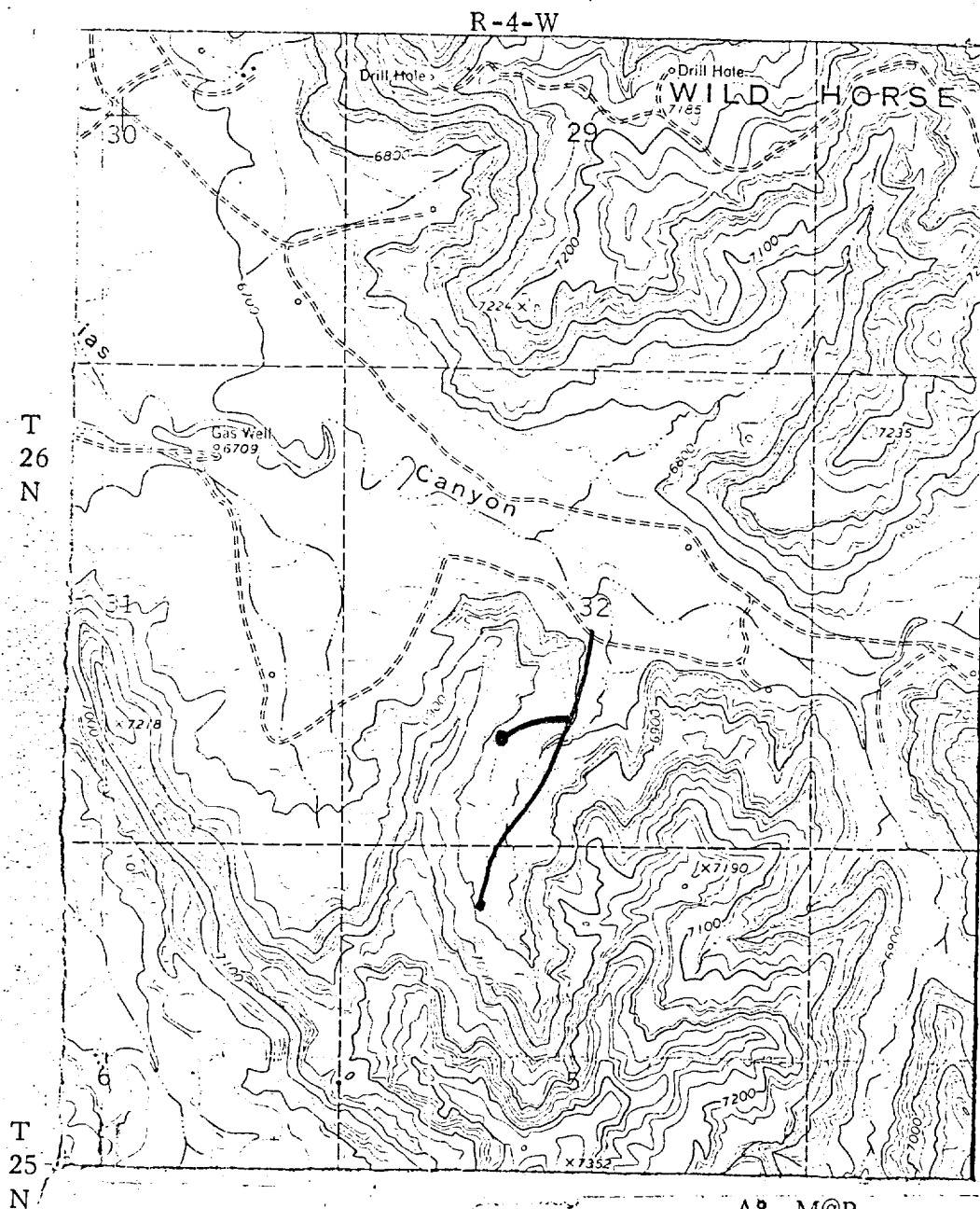


Typical Mud-Drilled B.O.P. Installation
for Pictored Cliffs Well



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

NORTHWEST PRODUCTION CORPORATION
 Jicarilla 120C #20
 SW 32-26-4



, A° M@P
 MAP #1

LEGEND OF RIGHT-OF-WAYS

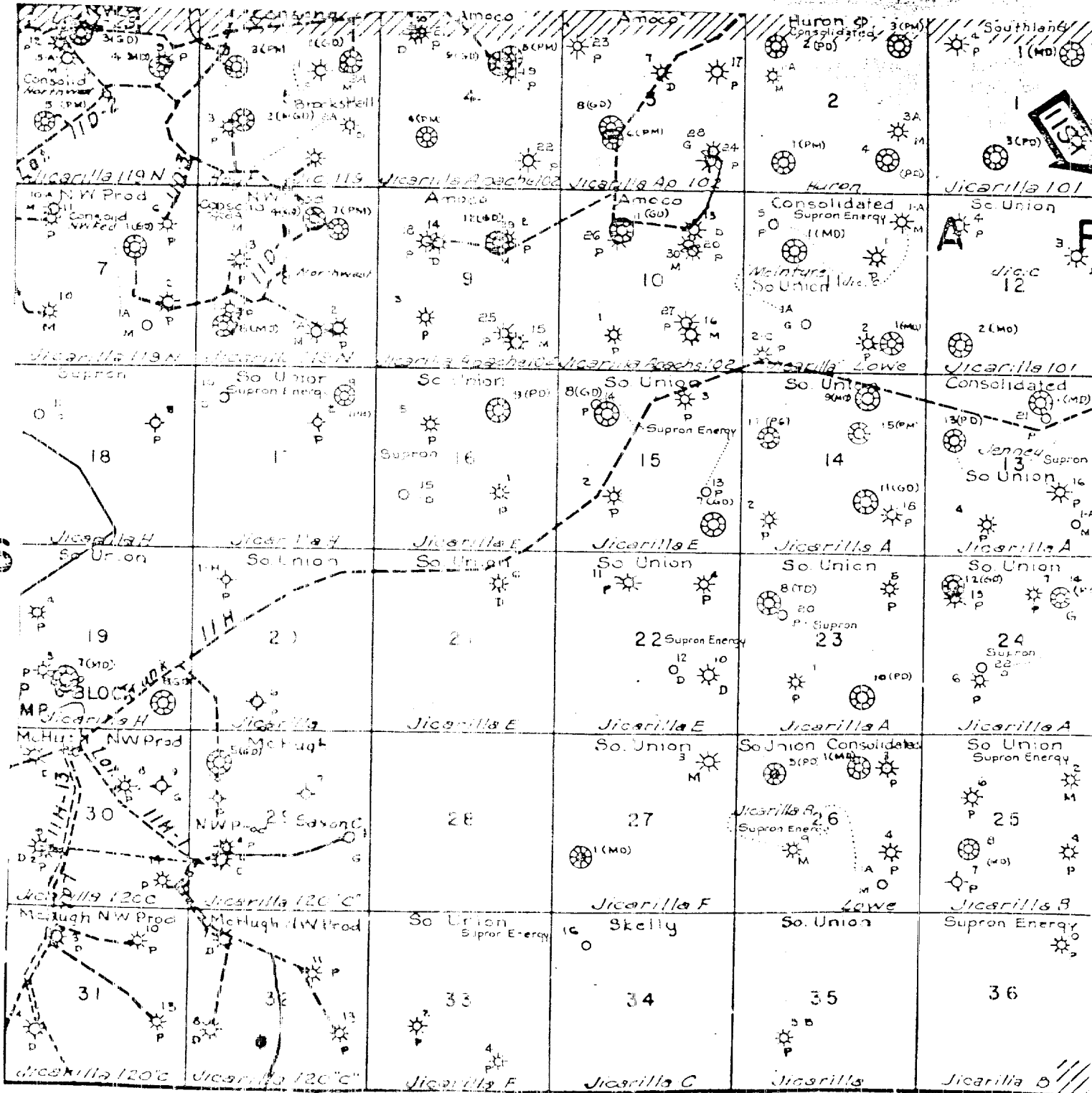
EXISTING ROADS	— — — —
EXISTING PIPELINES	+ + + +
EXISTING ROAD & PIPELINE	+ + + +
PROPOSED ROADS	— — — —
PROPOSED PIPELINES	+ + + +
PROPOSED ROAD & PIPELINE	+ + + +

NORTHWEST PRODUCTION CORPORATION

Jicarilla 120C #20

SW 32-26-4

R - 4 - W



MAP #2

Proposed Location