Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-24541

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: USA-SF 079029
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]

7. UNIT AGREEMENT NAME: San Juan 32-8 Unit
8. FARM OR LEASE NAME: San Juan 32-8 Unit

2. NAME OF OPERATOR: Northwest Pipeline Corporation
9. WELL NO.: #12A

3. ADDRESS OF OPERATOR: P.O. Box 90, Farmington, New Mexico 87401
10. FIELD AND POOL, OR WILDCAT: Blanco MV/Basin DK

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1820' FNL & 790' FWL Sec 21 T31N R8W
At proposed prod. zone: Same as above

E

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 21 T31N R8W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 Miles North of Navajo Dam
12. COUNTY OR PARISH: San Juan
13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 790
16. NO. OF ACRES IN LEASE: N/A
17. NO. OF ACRES ASSIGNED TO THIS WELL: W/320 + W/320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: N/A
19. PROPOSED DEPTH: 8240'
20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6583' GR
22. APPROX. DATE WORK WILL START*: Sept 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	10-3/4"	40.5#	350'	110 sks
8-3/4"	7-5/8"	26#	3970'	260 sks
6-1/4"	5-1/2"	15.5#	8240'	300 sks

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

Selectively perforate and stimulate the Mesa Verde/Dakota Formation
Completion plans will be determined at Total Depth.

A BOP will be installed after the surface casing is set and cemented. All subsequent work will be conducted through the BOP's.

The west half of Sec 21 is dedicated to this well for Mesa Verde & Dakota

Gas is dedicated.

RECEIVED
SEP 4 1980
OIL CON. COM.
DIST. 3

This action is subject to administrative appeal pursuant to 30 CFR 290.

RECEIVED
JUN 2 ... 1980
U.S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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: Paul C. Thompson — Paul C. Thompson
TITLE: Drilling Engineer
DATE: June 5, 1980

(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

PT/dih

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

MAY 19 1980

Operator	Lease	Well No.
NORTHWEST PIPELINE CORPORATION	SAN JUAN 32-8 UNIT	12A

Unit Letter	Section	Township	Range	County
E	21	31N	8W	San Juan

Actual Footage Location of Well:
1820 feet from the North line and 790 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6583	Mesa Verde/Dakota	Blanco Mesa Verde/Basin Dakota	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

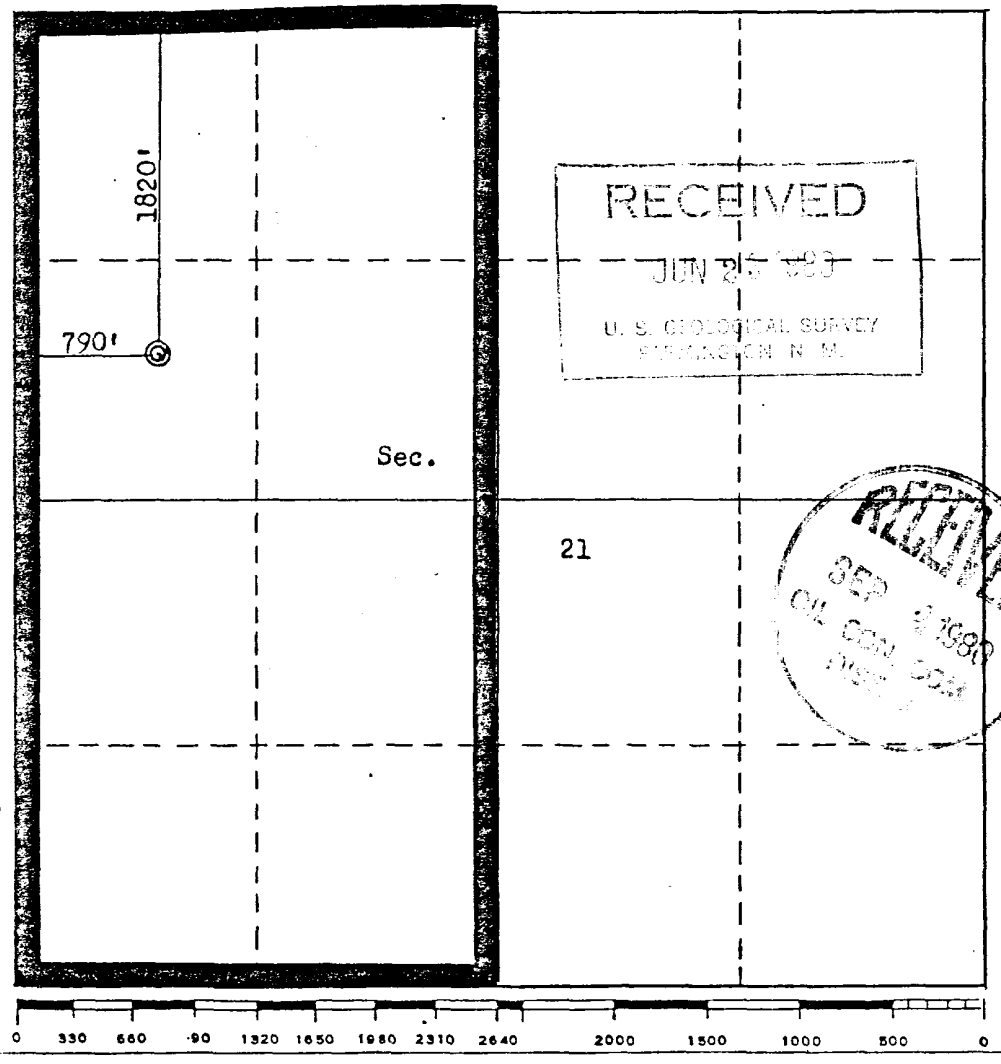
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation Unitization

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.

Paul C. Thompson

Name: Paul C. Thompson

Position: Drilling Engineer

Company: Northwest Pipeline Corp

Date: May 21, 1980

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 17, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Fred B. Kerr, Jr.

Certificate No. 3950

NORTHWEST PIPELINE CORPORATION

DRILLING PROGNOSIS

WELL NAME: San Juan 32-8 Unit #12A

DATE: June 16, 1980

I. LOCATION: 790' FWL & 1820' FNL
Sec 21 T31N R8W
San Juan Co., New Mexico

ELEVATION: 6583'GR

SURFACE: BLM

MINERALS: FED SF 079029

FIELD: Blanco Mesa Verde/Basin Dakota

II. GEOLOGY: Surface San Jose

A.

Formation:	Depth:	Formation:	Depth:
Ojo Alamo	2233'	Mancos	5942'
Kirtland	2341'	Gallup	7073'
Fruitland	3168'	Greenhorn	7843'
Pictured Cliffs	3471'	Graneros	7898'
Lewis	3770'	Dakota	8018'
Cliff House	5358'	Total Depth	8240'
Point Lookout	5739'		

B. Logging Program: Gamma Ray-Induction & Density at Total Depth

C. Natural Gauges: Gauge @ 5739', 7073', 7898', and at Total Depth. Record all gauges on daily drilling report and morning report. Gauge all noticeable increases in gas while drilling and report.

III. DRILLING:

A. Contractor:

B. Mud Program: Mud, water and gas will be furnished by Northwest Pipeline Corporation from surface to total depth.
a) From Surface to Intermediate casing depth to be drilled with mud.
b) From Intermediate casing to Total depth to be drilled with gas.

C. While drill pipe is in use the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. All tests will be reported in the Northwest Pipeline tour reports as to time and date.

IV. MATERIALS:

A. Casing Program:

Hole Size	Depth	Casing Size	Wt & Grade
12-1/4"	350'	10-3/4"	32.7# H-40 ST&C
9-7/8"	3970'	7-5/8"	24.0# H-40 ST&C
6-3/4"	8240'	5-1/2"	15.5# K-55 (to 6800')
		5-1/2"	17.0# K-55 (6800' to TD)

B. Float Equipment:
a) Surface Casing: 10-3/4" - Larkin Guide Shoe and self fill insert float valve.
b) Intermediate Casing: 7-5/8" - Dowell Guide Shoe and Dowell self fill insert float valve. Dowell centralizers five (5).
c) Production Casing: 5-1/2" - Larkin Geyser Shoe. Larkin Flapper type Float collar. Five (5) centralizers across Dakota, ten (10) across Mesa Verde.

C. Tubing:
8200' - 1-1/2", 2.9#, J-55, 10 RD EUE tubing with common seating nipple above bottom joint. Baker Model D Packer for 1-1/2" tubing with locator sub (DK).
5750' - 1-1/4", 2.33#, J-55, IJ tubing (MV).

D. Well Head Equipment: Dual completion X-mas tree assembly. Well head representative to set slips on intermediate & production strings.

V. CEMENTING:

A. Surface Casing: 10-3/4" - Use 110 sks of Class "B" cement with 1/4# gel flake per sk and 3% $CaCl_2$, (100% excess to circulate 10-3/4" casing). WOC 12 hrs. Test to 600 psi for 30 minutes.

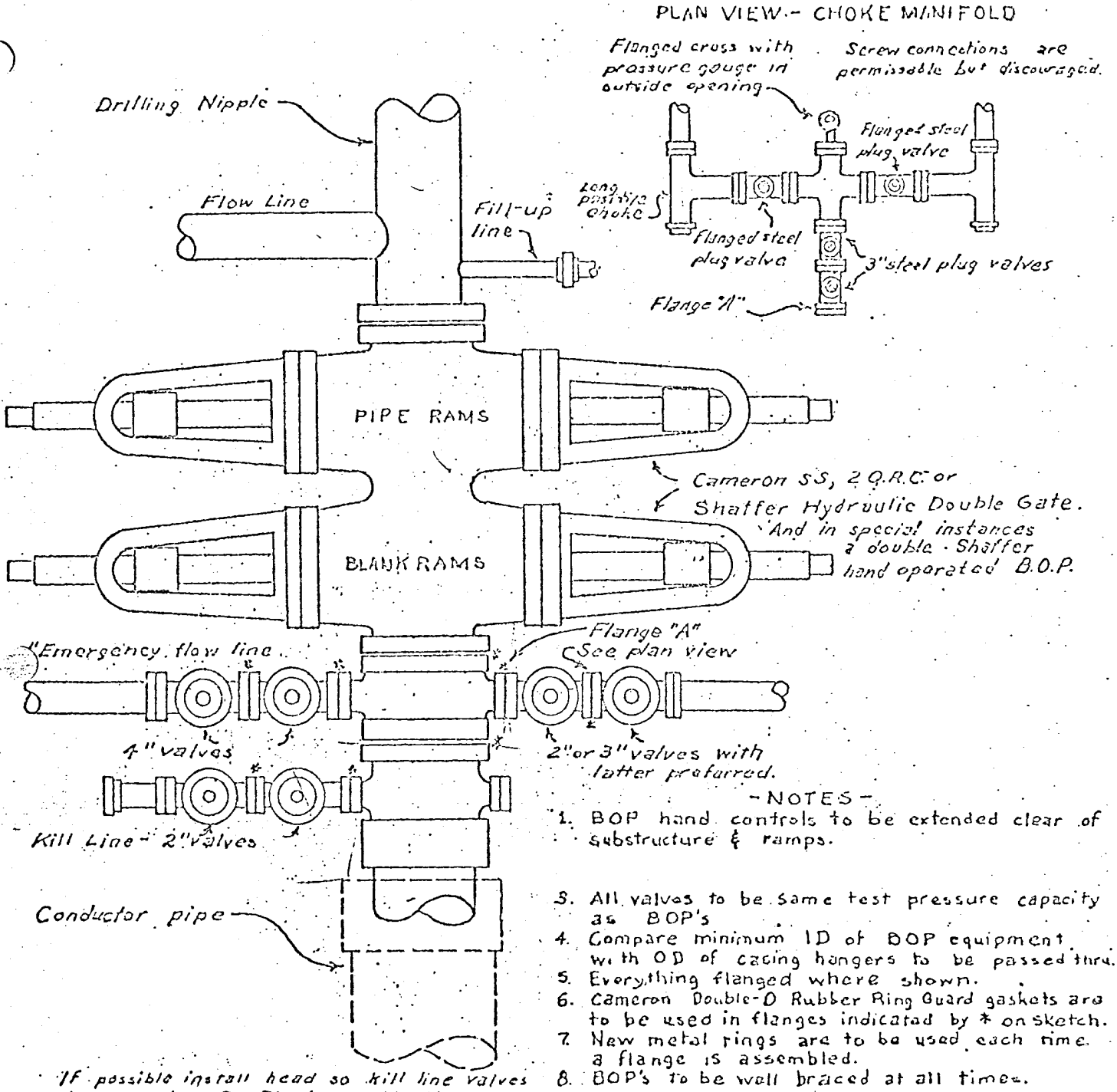
B. Intermediate Casing: 7-5/8" - Use 210 sks of 65/35 Class "B" poz with 12% gel & 15.52 gal of water per sk. Tail in with 50 sks of Class "B" with 2% $CaCl_2$ (596 cu.ft of slurry, 60% excess to cover Ojo Alamo). Use top rubber plug only. Run temp survey after 8 hrs. WOC 12 hrs. Test casing to 1200 psi for 30 min.

C. Production Casing: 5-1/2" - Precede cement with 40 bbls of water mixed with 4 sacks gel. Cement with 200 sks of Class "B" cement with 8% gel, 12-1/2# fine gilsonite per sk and 0.4% HR-4. Tail in with 100 sks Class "B" cement with 1/4# fine tuf-plug per sk and 0.4% HR-4 per sk. (535 cu.ft of slurry). (50% excess to fill to intermediate casing). Run temperature survey after 8 hrs. Perforate after 8 hrs.

F. H. Wood

MJT/djb

Originial: Well File
sc: Regular Distribution



If possible install head so kill line valves will be under BOP's for protection.
These valves to be kept closed after BOP's tested & kill line removed (by use of quick union) to fill-up line.
When used this way kill line must be high-pressure.

-NOTES-

1. BOP hand controls to be extended clear of substructure & ramps.
3. All valves to be same test pressure capacity as BOP's
4. Compare minimum ID of BOP equipment with OD of casing hangers to be passed thru.
5. Everything flanged where shown.
6. Cameron Double-D Rubber Ring Guard gaskets are to be used in flanges indicated by * on sketch.
7. New metal rings are to be used each time a flange is assembled.
8. BOP's to be well braced at all times.

SINGLE PIPE RAM BLOWOUT PREVENTOR HOOKUP

1. Existing Roads: See attached topographic map. All existing roads used, shall be maintained in a serviceable condition at all times during the drilling operation.

2. Planned Access Roads: See attached topographic map. Maximum grade is approximately 1%. The road surface will not exceed twenty feet in width. Upon completion of drilling operations the access road will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary. All activities will be confined to the access road and drill pad.

3. Location of Existing Wells: See attached topographic map.

4. Location of Tank Batteries; Production Facilities; and Production, Gathering and Service Lines: See attached topographic map for locations of existing and proposed gas gathering lines.

5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the Pine River.

6. Source of Construction Materials: No additional materials will be needed.

7. Methods for Handling Waste Disposal: All garbage, debris, and trash will be buried at least three feet deep. A portable toilet will be supplied for human waste. After drilling operations have been completed the reserve pit will be fenced and the liquid portion will be allowed to evaporate before the location is cleaned up and leveled. The earthen pits will not be located on natural drainages and will be constructed in such a manner so that they will not leak. Any evaporator pit containing toxic liquids will be fenced.

8. Ancillary Facilities: There will be no camps or airstrips associated with the drilling of this well.

9. Well Site Layout: See attached location layout sheet. Blank There will be a drainage ditch above the cut slope.

10. Plans for Restoration of the Surface: Upon completion of drilling, the location will be cleaned, and leveled so that no cut or fill banks will be steeper than 3:1.

    All of the area disturbed in connection with the drill site will be seeded as close as possible for any above ground equipment while still allowing for access to the equipment. Seeding will be done within one year after drilling is completed and during the period from July 1 through September 15. Seeding will be done with seed Mixture #1.

    All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site. For this well code number 595-34127, green.

11. Other Information: If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, then work will be suspended and the discovery will be reported to the District Manager of the BLM.

    All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation in the area, and if necessary an earthen screen will be constructed to protect the vegetation. All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

The area covered by the location and proposed access road is gently sloped with scattered brush and some grasses.

12. Operator's Representative: Paul Thompson - P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension # 115

13. Certification:

I hereby certify that I 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 Northwest Pipeline Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

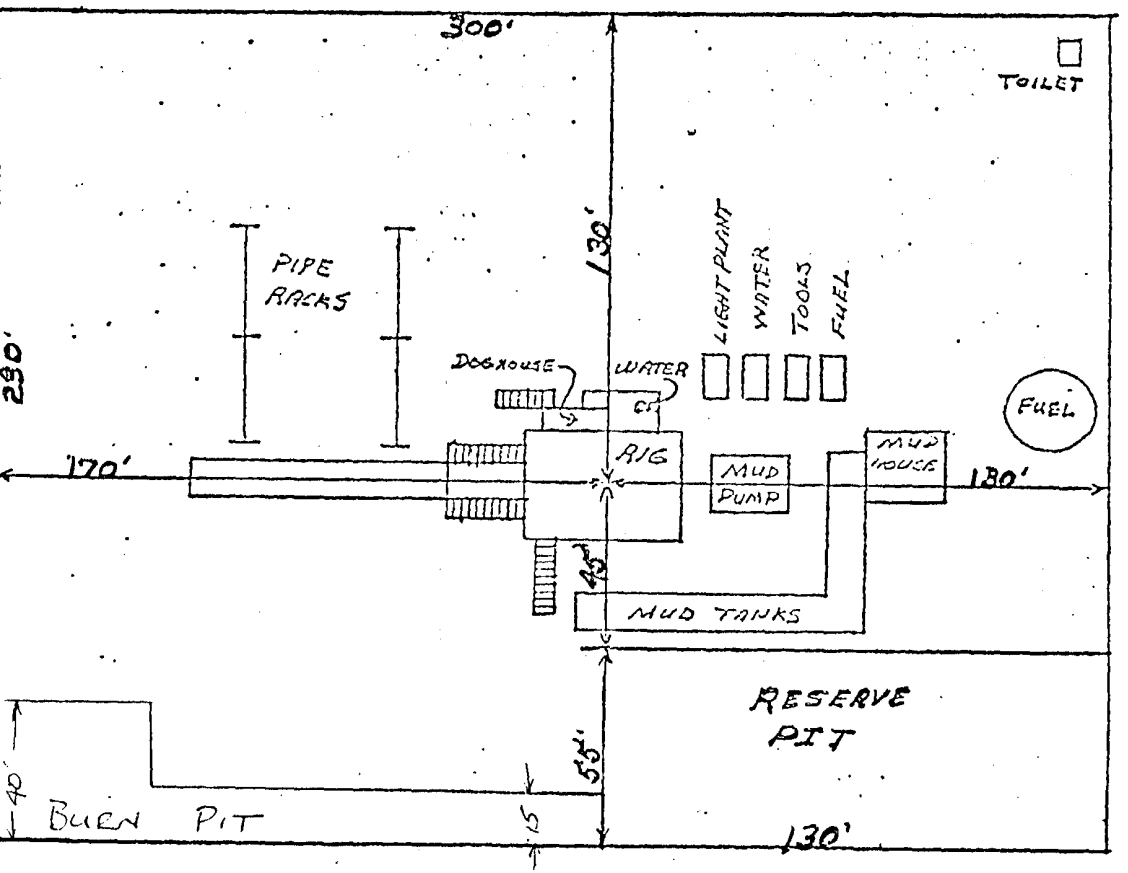
Paul C. Thompson

Paul Thompson
Drilling Engineer

WJB/ch

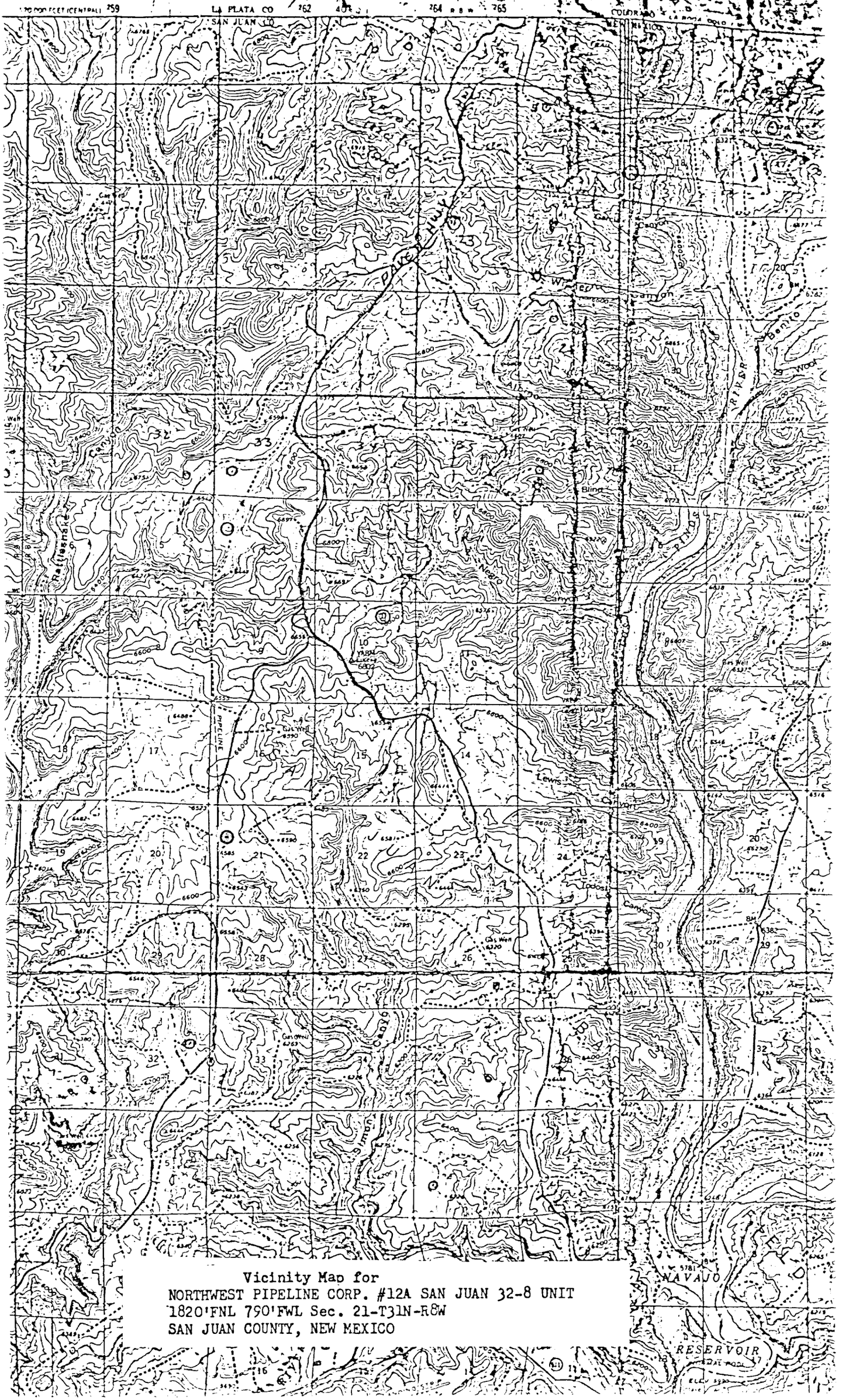
WEST PIPELINE CORPORATION

LOCATION LAYOUT SAN JUAN 32-8 UNIT #12A



DATE:

SCALE: 1 cm = 20'



Vicinity Map for
NORTHWEST PIPELINE CORP. #12A SAN JUAN 32-8 UNIT
1820'FNL 790'FWL Sec. 21-T31N-R8W
SAN JUAN COUNTY, NEW MEXICO