Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22572

5. LEASE DESIGNATION AND SERIAL NO.: SF 078997

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

7. UNIT AGREEMENT NAME: San Juan 30-5 Unit

8. FARM OR LEASE NAME: San Juan 30-5 Unit

9. WELL NO.: #73

2. NAME OF OPERATOR: Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR: P.O. Box 90, Farmington, New Mexico 87401

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 900' FNL & 1760 FEL Section 10, T30N, R5W
At proposed prod. zone: Same as above

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 10, T30N, R5W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 25 Miles East of Navajo Dam

12. COUNTY OR PARISH: Rio Arriba

13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
900'	? N/A 2560	N/320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
4400'	8035'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6537' GR

22. APPROX. DATE WORK WILL START*: December 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3#	350'	115 sx
8-3/4"	7"	20#	3739'	140 sx
6-1/4"	4-1/2"	10.5# & 11.6#	8035'	360 sx

Selectively perforate and stimulate the 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 North half of Section 10 is dedicated to this well. Gas is dedicated.

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SEP 16 1980
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

RECEIVED
DEC 22 1980
OIL CON. COM.
DIST. 3

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 TITLE Drilling Engineer DATE 9-16-80
Paul C. Thompson

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED AS AMENDED

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DEC 22 1980
for JAMES F. SIMS
DISTRICT ENGINEER

*See Instructions On Reverse Side

PCT/djb

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

Form C-107
Revised 10-1-7

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

Operator	Lease	Well No.
NORTHWEST PIPELINE CORPORATION	SAN JUAN 30-5 UNIT	73

Unit Letter	Section	Township	Range	County
B	10	30N	5W	Rio Arriba

Actual Footage Location of Well:
900 feet from the North line and 1760 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
6537	Dakota	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).

NORTHWEST PIPELINE CORPORATION

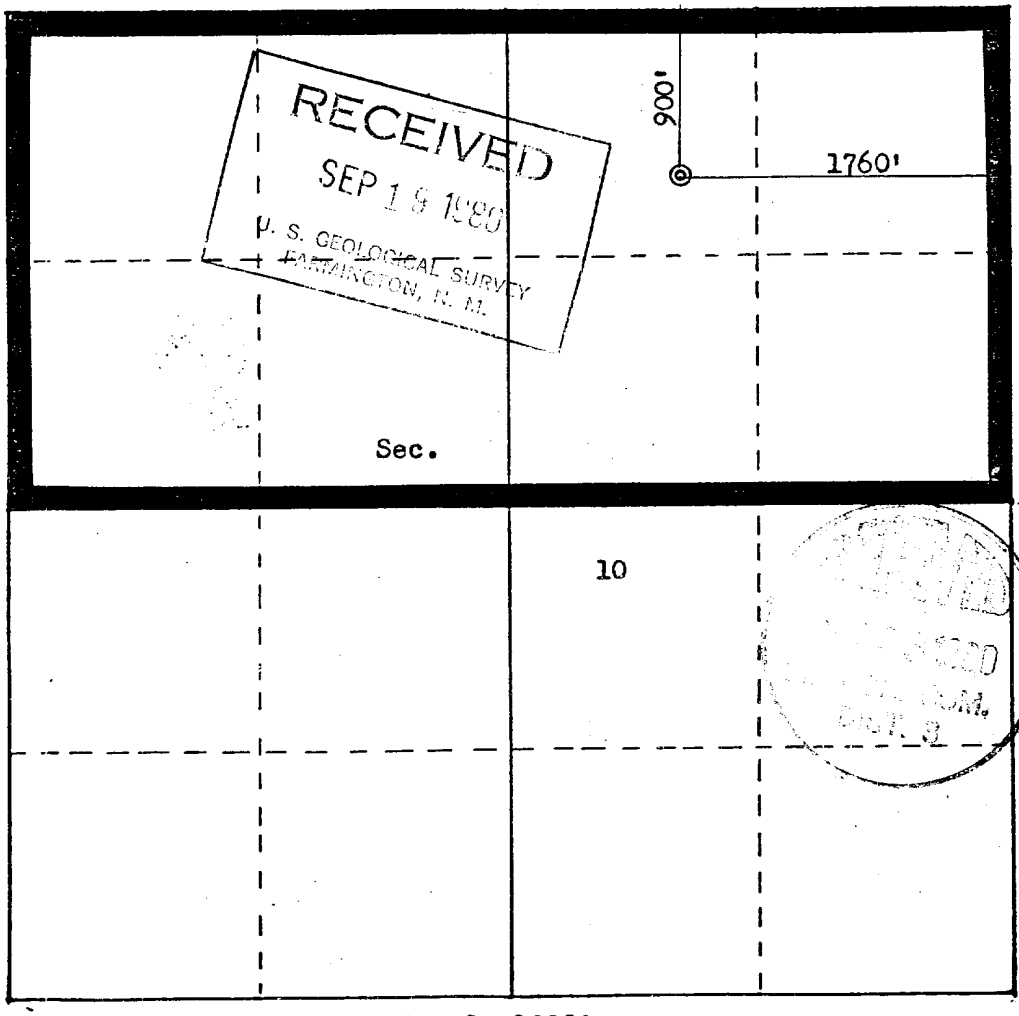
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

AUG 27 1980

☒ Yes ☐ No If answer is "yes," type of consolidation Unitization AND DRILLING
PRODUCTION

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.



Scale: 1"=1000'

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: August 28, 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.

REGISTERED LAND SURVEYOR
STATE OF NEW MEXICO

Date Surveyed: August 26, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

FORM 24-11

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR
P.O. Box 90, Barmington, New Mexico 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 900' FNL & 1760' FEL
AT TOP PROD. INTERVAL: Same as above
AT TOTAL DEPTH: Same as above

5. LEASE
SF-078997

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
San Juan 30-5 Unit

8. FARM OR LEASE NAME
San Juan 30-5 Unit

9. WELL NO.
#73

10. FIELD OR WILDCAT NAME
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 10, T30N, R5W

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6537' GR

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) Cement change			

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

We would like to change the Surface cement from 115 sacks to 185 sacks as reported on Application.

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FARMINGTON, N. M.

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DEC 23 1980
OIL CON. COM.
DIST. 3

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Donna Brace TITLE Production Clerk DATE Sept 19, 1980

APPROVED AS AMENDED
DEC 22 1980
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:
JAMES F. SIMS
DISTRICT ENGINEER

(This space for Federal or State office use)

CONFIDENTIAL

*See Instructions on Reverse Side

NORTHWEST PIPELINE CORPORATION

DRILLING PROGNOSIS

Well Name: San Juan 30-5 Unit #73 Date: September 16, 1980

I. LOCATION: 900' FNL & 1760' FEL
Section 10, T30N, R5W
Rio Arriba Co., N.M.

ELEVATION: 6537' GR

SURFACE: BLM
MINERALS: Fed SF 078997

FIELD: Basin Dakota

II. GEOLOGY: Surface - San Jose

A. Formation:

Formation:	Depth:	Formation:	Depth:
Ojo Alamo	2772'	Mancos	6039'
Kirtland	2860'	Gallup	6864'
Fruitland	3170'	Greenhorn	7754'
Pictured Cliffs	3330'	Graneros	7804'
Lewis	3539'	Dakota	7934'
Cliff House	5559'	Total Depth	8035'
Point Lookout	5754'		

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

C. Natural Gauges: Gauge @ 5559', 6864', 7934', and @ Total Depth. Record all gauges on daily drilling report and morning report. Gauge all noticeable increases in gas while drilling & report.

III. DRILLING:

A. Contractor:

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

C. While drill pipe is in use, pipe rams shall be actuated to test proper functioning not less than once each day. The blind rams shall be actuated to test proper functioning 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'	9-5/8"	36# K-55
8-3/4"	3739'	7"	20# K-55
6-1/4"	8035'	4-1/2"	10.5# K-55 (To 6800')
		4-1/2"	11.6# K-55 (6800' to TD)

B. Float Equipment:
a) Surface Casing: 9-5/8" - Larkin Guide Shoe and Self-fill insert float valve.
b) Intermediate Casing: 7" - Dowell guide shoe, Dowell self fill insert float valve. Dowell centralizers five (5).
c) Production Casing: 4-1/2" - Larkin Geyser Shoe. Larkin Flapper type float collar.

C. Tubing: 7985' of 2-3/8", 4.7#, J-55, 10 RD EUE tubing with common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. CEMENTING:

A. Surface Casing: 9-5/8" - Use 115 sks of Cl "B" cement with 1/4# gel flake per sack and 3% $CaCl_2$ (100% excess to circulate 9-5/8" casing). WOC 12 hrs. Test to 600 psi for 30 min.

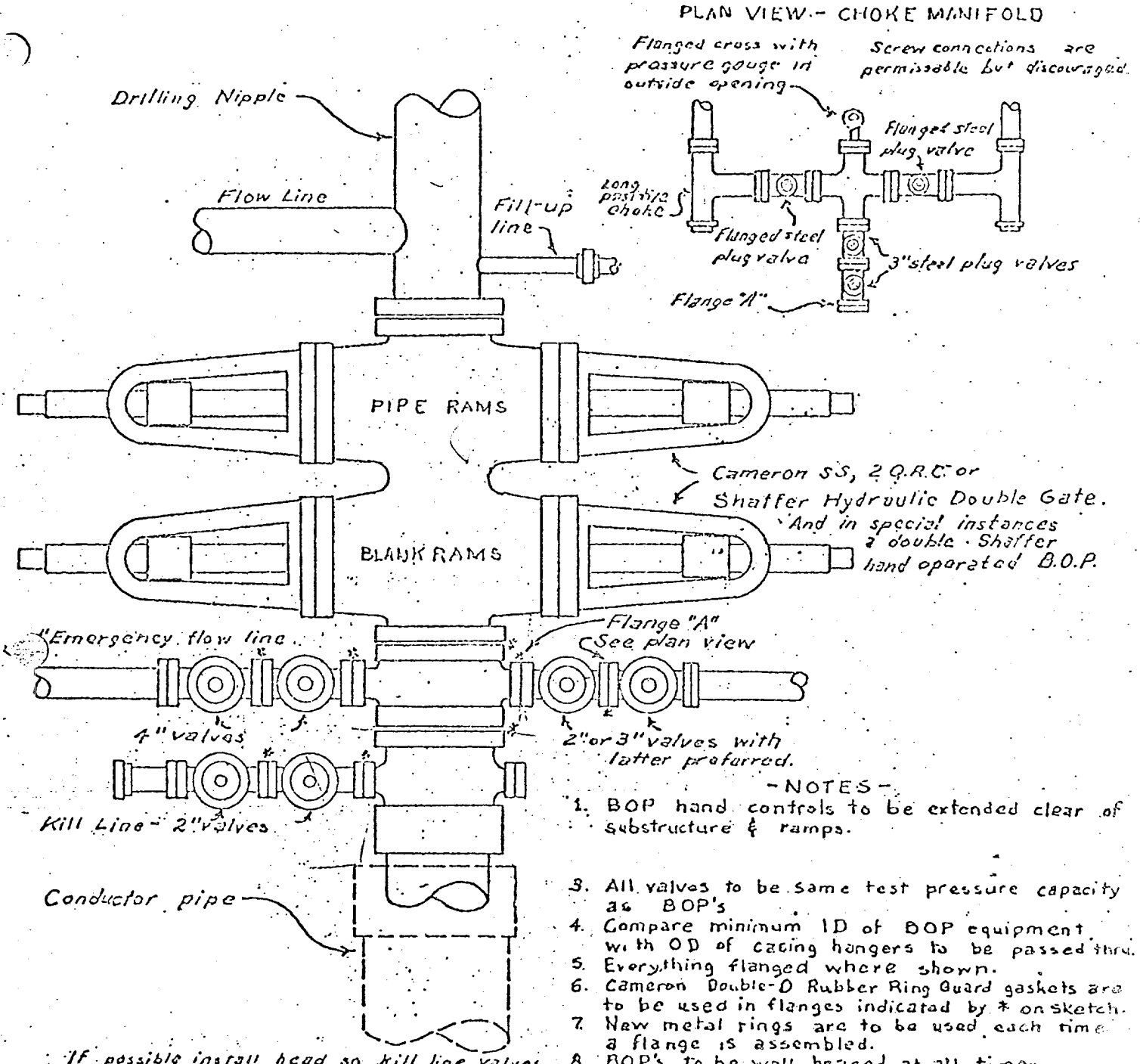
B. Intermediate Casing: 7" - Use 65 sks of 65/35 Class "B" poz with 12% gel and 15.2 gal of water per sk. Tail in with 75 sacks of Class "B" with 2% $CaCl_2$ (240 cu.ft of slurry, 65% excess to cover Ojo Alamo). Use top rubber plug only. Run tempreature survey after 8 hrs. WOC 12 hrs. Test casing to 1200 psi for 30 min.

C. Production Casing: 4-1/2" - Precede cement with 40 bbls of water mixed with 4 sks gel. Cement with 260 sks of Cl "B" cement with 8% gel, 12-1/2# fine gilsonite per sk and 0.4% HR-4. Tail in with 100 sks of Cl "B" cement with 1/4# fine tuf-plug per sack. (660 cu.ft of slurry), (50% excess to fill to intermediate csg). Run temperature survey after 8 hrs. Perforate after 18 hrs.

F. H. Wood

PCT/djb

Original: 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. Wall Site Layout: See attached location layout sheet.

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 the seed mixture recommednded by BLM.

    All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site.

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.

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

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.

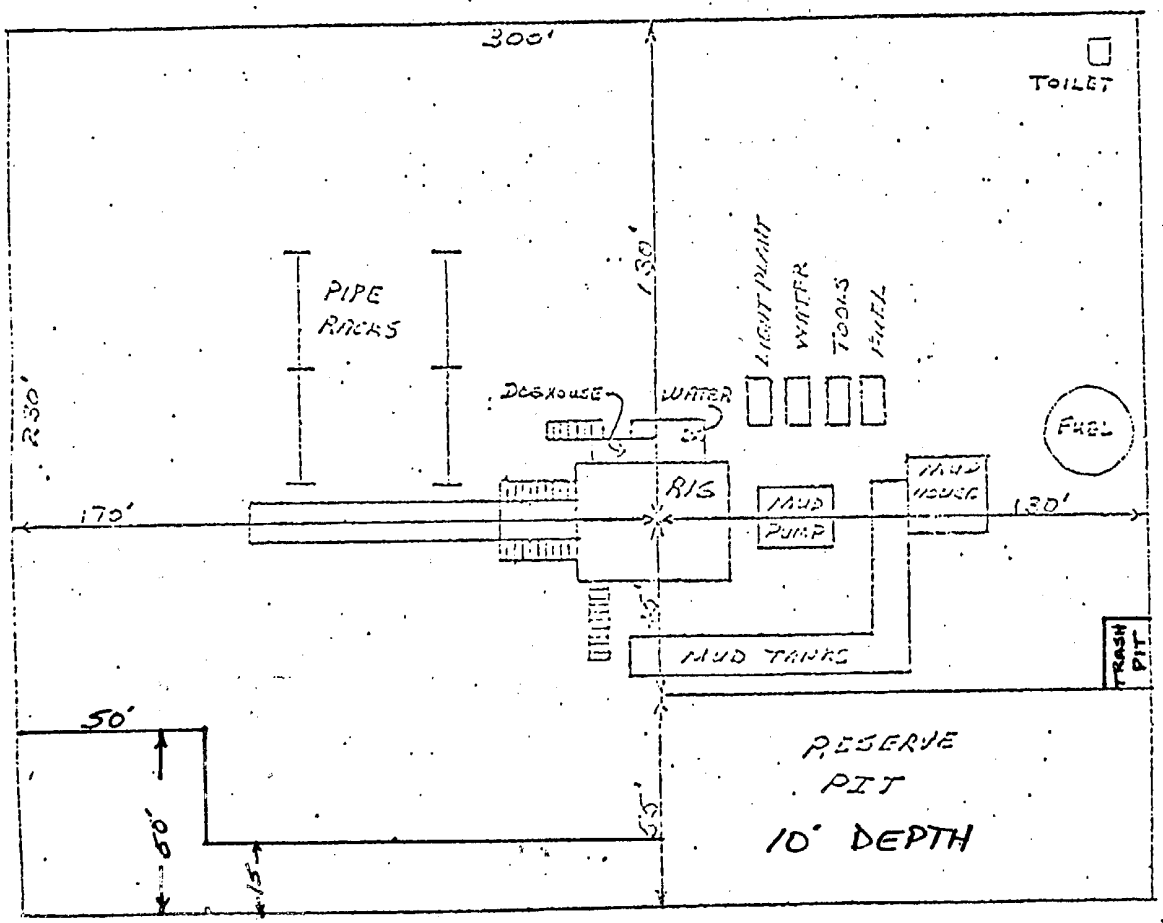
Paul C. Thompson
Drilling Engineer

PCT/djb

NORTHWEST PIPELINE CORP.

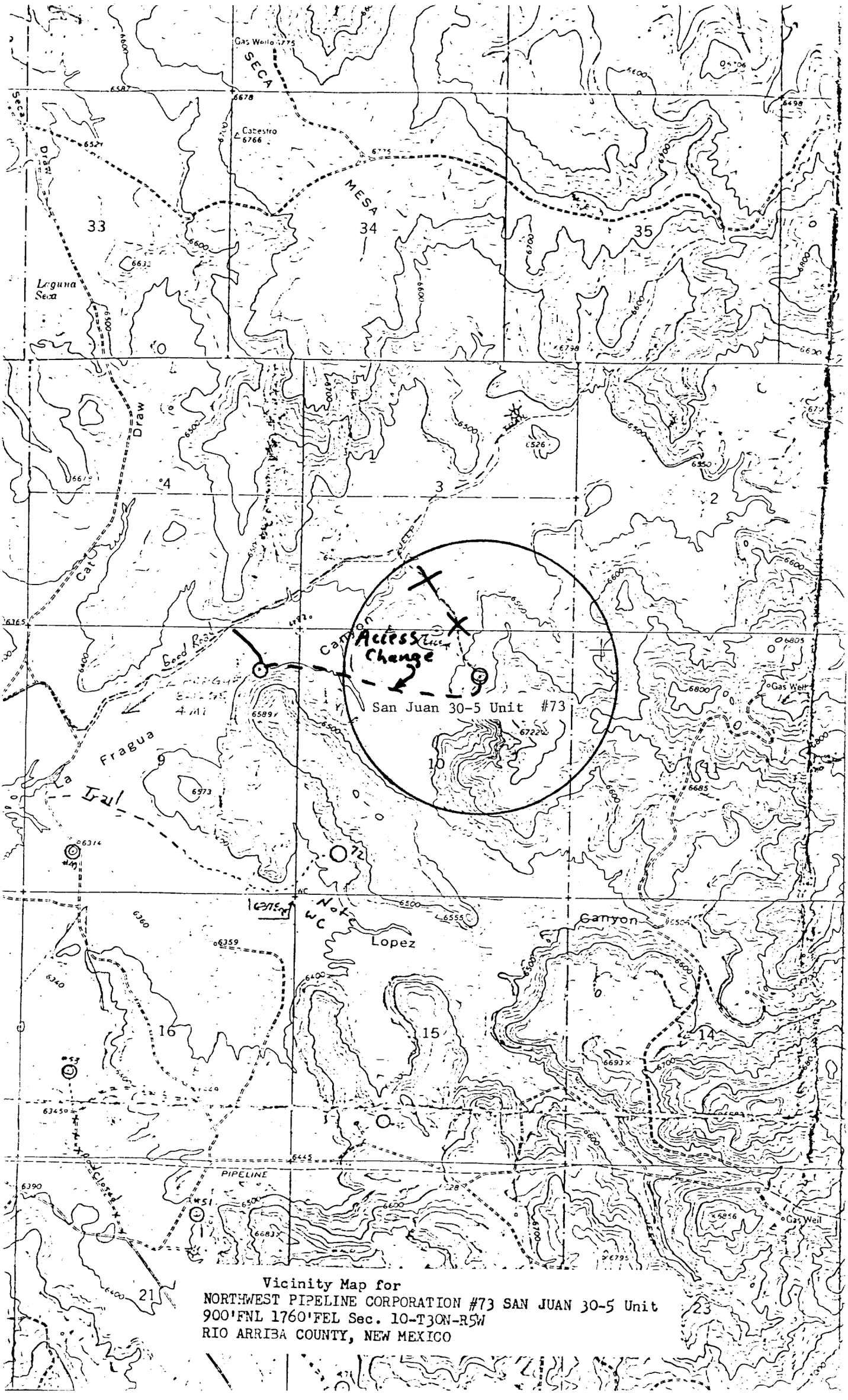
DAKOTAS & MESA VERDES

SAN JUAN 30-5 UNIT #73



DATE. 9/17/80

SCALE: 1cm = 20'



Vicinity Map for
NORTHWEST PIPELINE CORPORATION #73 SAN JUAN 30-5 Unit
900'FNL 1760'FEL Sec. 10-T30N-R5W
RIO ARRIBA COUNTY, NEW MEXICO