Form 9-331C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23141

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Northwest Pipeline Corporation

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1120' FNL & 860 FEL
A
At proposed prod. zone: As Above

5. LEASE DESIGNATION AND SERIAL NO.: SF 079029

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

9. WELL NO.: 39

10. FIELD AND POOL, OR WILDCAT: Blanco Mesa Verde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC 3 T31N, R8W

12. COUNTY OR PARISH: San Juan

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: NA

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 860'

16. NO. OF ACRES IN LEASE: NA

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320.57

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

19. PROPOSED DEPTH: 6134'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6723' GR

22. APPROX. DATE WORK WILL START*: 9/1/78

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"	36#	200'	125 sks
8-3/4"	7"	20#	4030'	150 sks
6-1/4"	4-1/2"	10.5#	3880'-6134'	210 sks

Selectively perforate and stimulate the Mesa Verde Formation.

A BOP will be installed after the surface casing has been run and cemented. All subsequent operations will be conducted through the BOP.

The E/2 of SEC 3 is dedicated to this well. Gas is dedicated.

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 D.E. Richardson TITLE Drilling Engineer DATE 7-7-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

RECEIVED
JUL 10 1978
U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

Operator	Lease	Well No.
NORTHWEST PIPELINE CORPORATION	San Juan 32-8 Unit	32

Unit Letter	Section	Township	Range	County
A	3	31N	8W	San Juan

Actual Footage Location of Well:
1120 feet from the North line and 860 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage
6723	MESA VERDE	Blanco Mesa Verde	320.57 Acres

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

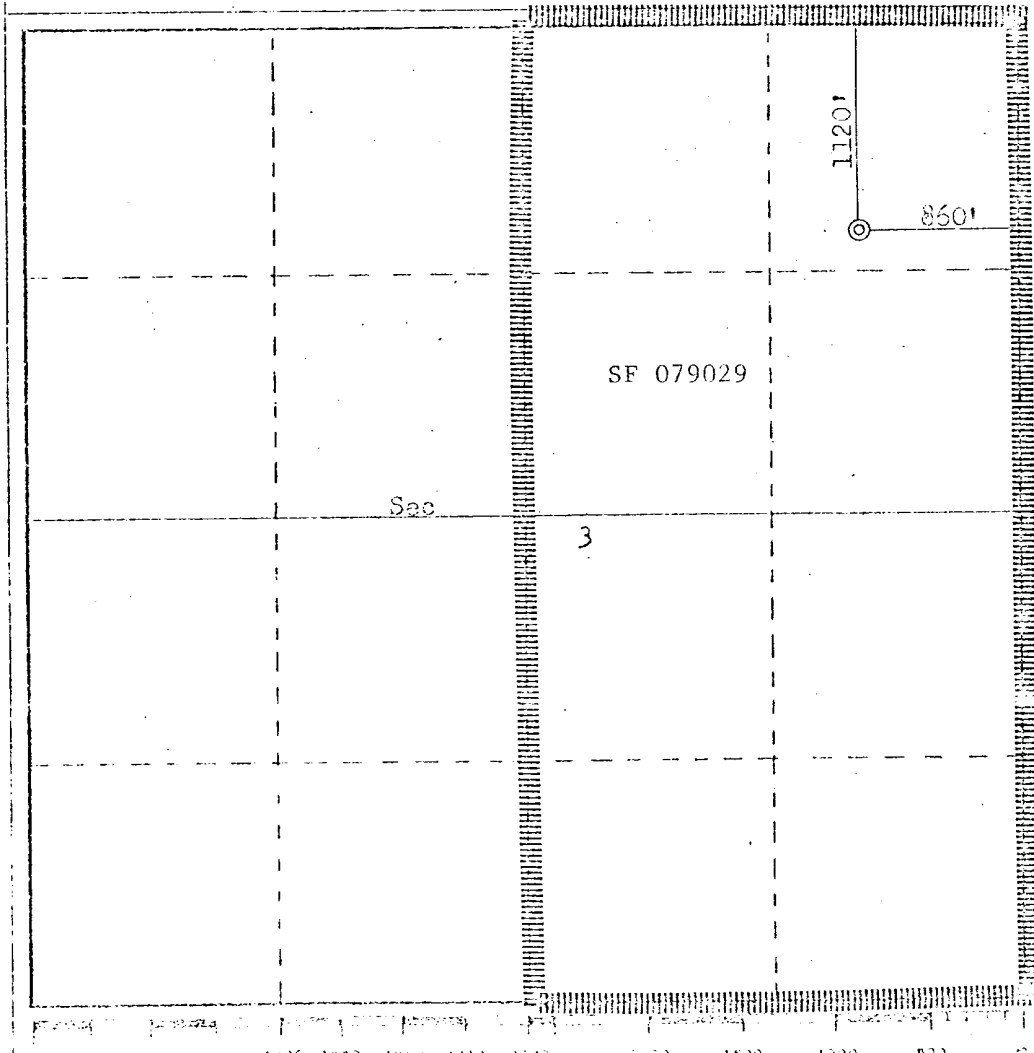
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Name: D.E. Richardson

Position: Drilling Engineer

Company: Northwest Pipeline Corp.

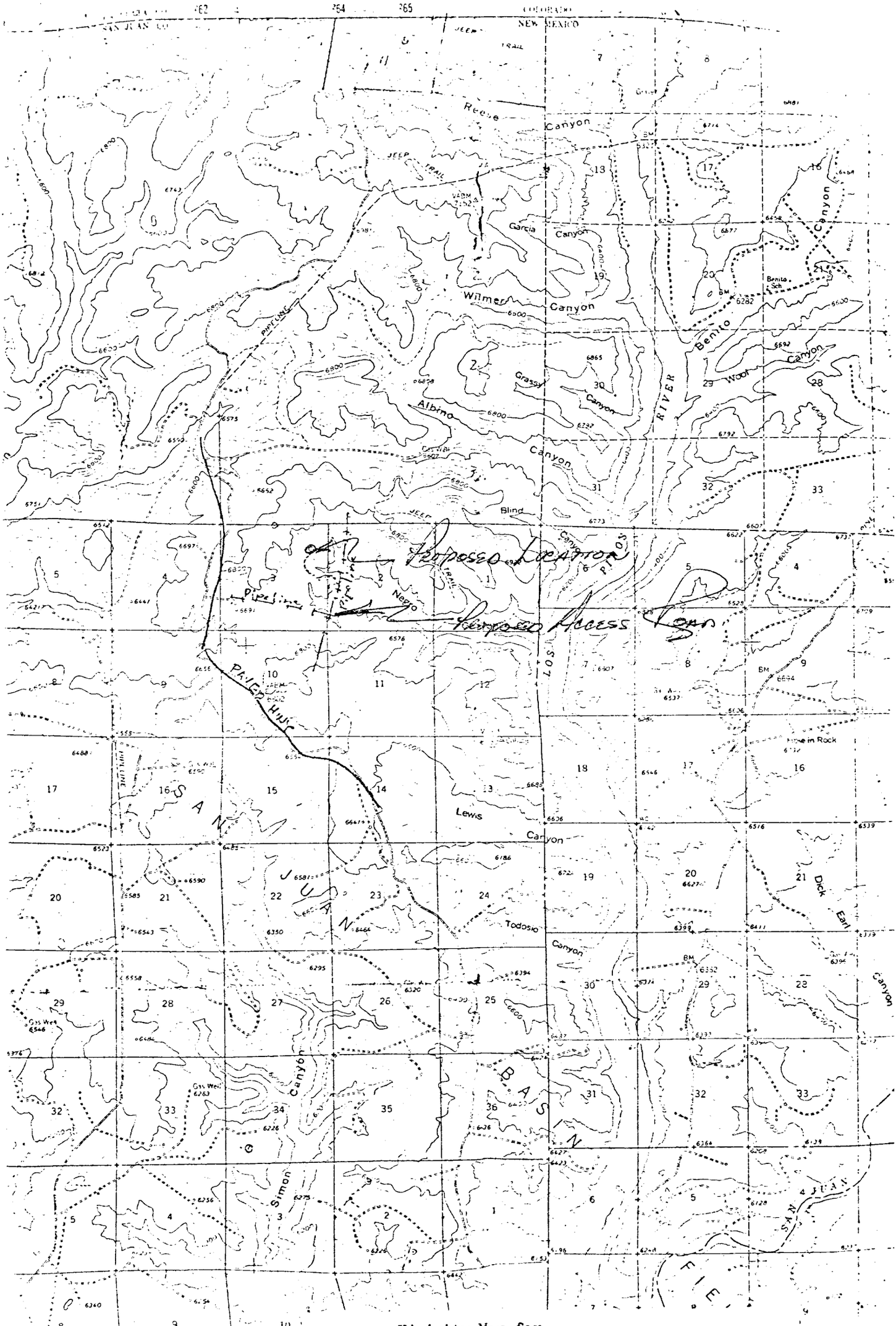
Date: 7/6/78

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.

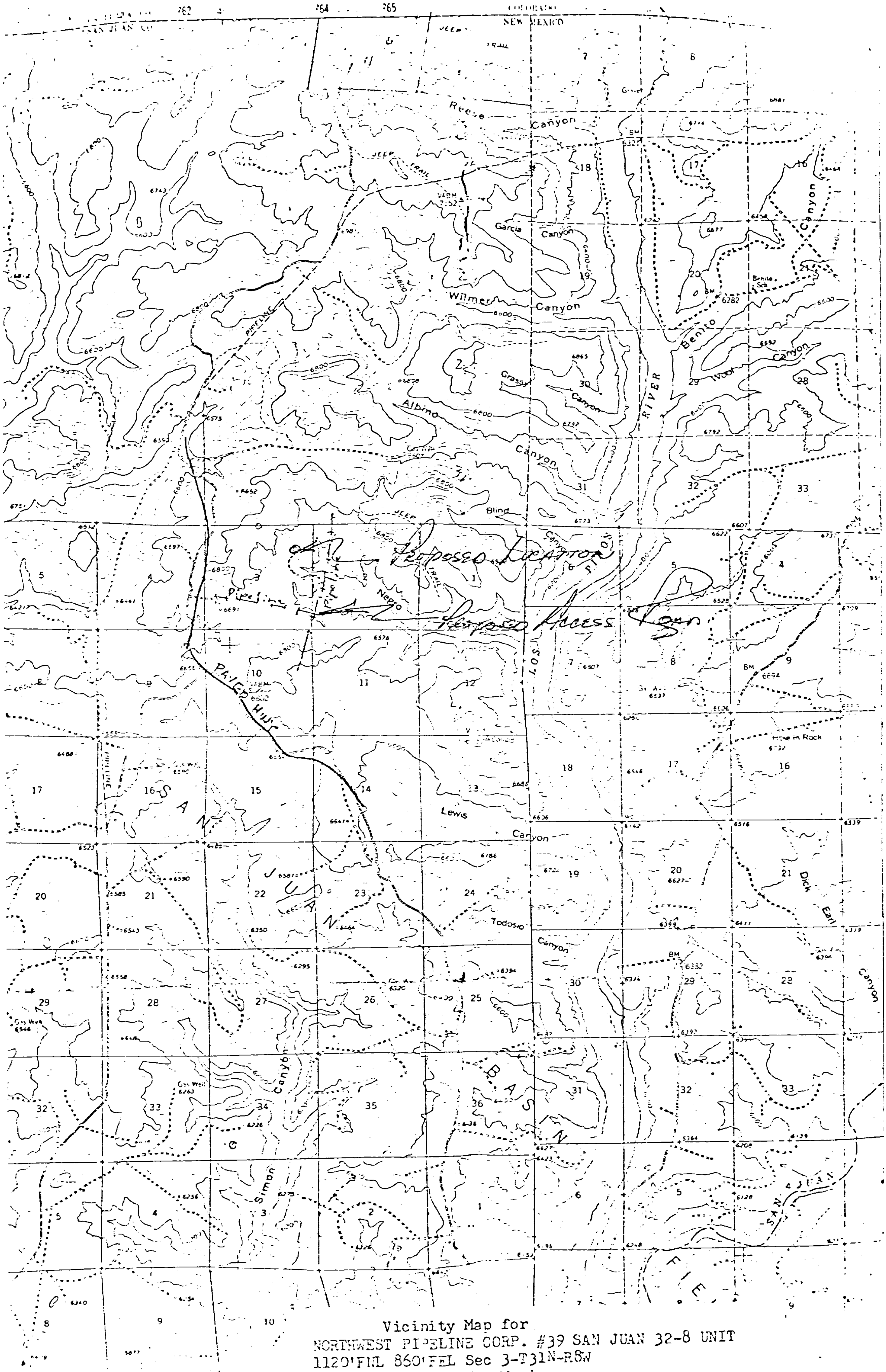
Date Surveyed: July 1, 1978

Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.

Certificate No. 3950



Vicinity Map for
NORTHWEST PIPELINE CORP. #39 SAN JUAN 32-8 UNIT
1120'FNL 860'FEL Sec 3-T31N-R8W
San Juan County, New Mexico



Vicinity Map for
NORTHWEST PIPELINE CORP. #39 SAN JUAN 32-8 UNIT
1120'FNL 860'FEL Sec 3-T31N-R8W
San Juan County, New Mexico

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 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. 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.

    When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation is 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.

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the San Juan 32-8 Unit

Well Number 39

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

12. Operator's Representative: D.E. Richardson, P.O. Box 90, Farmington, N.M., 87401, Phone: 327-5351 Extension 62.

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.

7/7/78
Date

D.E. Richardson
Drilling Engineer

DER/aa

OPERATIONS PLAN

San Juan 32-8 Unit #39 — July 7, 1978

I. LOCATION: NE/4 NE/4 SEC 3, T31N, R8W — ELEVATION: 6723' GR
San Juan County, New Mexico

FIELD: Blanco Mesa Verde

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo:	2389'	Cliff House:	5520'
Kirtland:	2448'	Menefee:	5616'
Fruitland:	3220'	Point Lookout:	5934'
Pictured Cliffs:	3595'	Total Depth:	6134'
Lewis:	3830'		

B. Logging Program: Gamma Ray Induction & Density at T.D.

C. Coring Program: None

D. Natural Gauges: Gauge at last connection above 5616', 5934' and at total depth. Gauge any noticeable increases in gas flow at depth other than those noted above.

III. DRILLING:

A. Anticipated starting date and duration of activities: 9/1/78 for 10 days.

B. BOP: Blind rams and pipe rams, 10', 900 series, double gate, rated at 3000 PSI.

C. Mud Program:

a) Spud Mud: Water, lime and gel.

b) Surface to 3830'

Viscosity:	32-38 sec/qt.
Weight:	8.8-9.2 #/gal.
Water Loss:	8-20 cc
Ph:	8.5-9.5

c) From 3830' to 4030'

Viscosity:	36-45 sec/qt.
Weight:	8.5-9.5 #/gal.
Water Loss:	8-20 cc
Ph:	8.5-9.5

d) From 4030' to total depth with gas.

IV. MATERIALS:

A. Casing Program:

Hole Size	Depth O.H.	Casing Size	Wt. & Grade		Depth Set
12-1/4"	200'	9-5/8"	32.3#	H-40	200'
8-3/4"	4030'	7"	20#	K-55	4030'
6-1/4"	4030'-T.D.	4-1/2"	10.5#	K-55	3880'-6134'

B. Float Equipment:

a) Surface casing 9-5/8" - B & W Reg. Pattern Shoe

b) Intermediate Casing 7" - Dowell guide shoe (Code #50101-070) and self fill insert float collar (Code #53003-070). Seven (7) centralizers (Code #56011-070) spaced every other joint above the shoe. Place float collar one joint above shoe.

B. Float Equipment cont.
c) Liner 4-1/2" - Larkin geyser shoe (Fig. 222) and Larkin flapper type float collar (Fig. 404). Brown liner hanger with neopreme pack off.

C. Tubing Program: 5900' of 2-3/8", 4.7#, EUE, K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

D. Well Head Equipment: Gray well head. Gray representative to set slips and make cut off.

V. CEMENTING:

A. Surface Casing 9-5/8" - Use 125 sacks of Class "B" with 1/4# gel flake per sack and 3% CaCl (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.

B. Intermediate Casing 7" - Use 100 sacks Class "B" 65/35 poz with 12% gel and 15.52 gallons water per sack. Tail in with 50 sacks Class "B" with 2% CaCl (65% excess to cover Ojo Alamo). WOC 12 hours. Run temperature survey after 8 hours. Test casing to 600 PSI.

C. Production Liner 4-1/2" - Use 210 sacks Class "B" with 4% gel and 1/4 cu. ft. of fine gilsonite per sack. Preceed cement with 20 barrels water mixed with 3 sacks gel (70% excess to circulate liner). Set liner pack off and reverse out excess cement. Run 6-1/4" bit to top of liner and pressure test (test 12 hours after plug is down). Lay down DP and run 3-7/8" bit on 2-3/8" EUE tubing to clean out liner. Perforate 18 hours after plug is down.

DER/aa