

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 078543	
2. NAME OF OPERATOR Northwest Pipeline Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR P.O. Box 90, Farmington, New Mexico 87401		7. UNIT AGREEMENT NAME San Juan 32-7 Unit	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 790' FNL & 880' FEL Section 35, T32N, R7W At proposed prod. zone Same as above		8. FARM OR LEASE NAME San Juan 32-7 Unit	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 20 Miles South of Ignacio, Colorado		9. WELL NO. #69	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest orig. unit line, if any) 790'		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
16. NO. OF ACRES IN LEASE 953.48 N/A?		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 35, T32N, R5W	
17. NO. OF ACRES ASSIGNED TO THIS WELL N/320		12. COUNTY OR PARISH San Juan	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2500'		13. STATE New Mexico	
19. PROPOSED DEPTH 8300'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6730' 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#	4005'	140 SX
6-1/4"	4-1/2"	10.5# & 11.6#	8300'	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 35 is dedicated to this well.

Gas is dedicated.

RECEIVED  
SEP 19 1980

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposed to drill 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.

SIGNED <u>Paul C. Thompson</u>		TITLE <u>Drilling Engineer</u>		DATE <u>9-17-80</u>	
(This space for recording of other signatures)					
APPROVED					
PERMIT NO. <u>AF / MENDED</u>		APPROVAL DATE _____			
APPROVED BY <u>JAMES F. SIMS</u>		TITLE _____		DATE _____	
CONDITIONS <u>DEC 30 1980</u>					
DISTRICT ENGINEER					

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78STATE OF NEW MEXICO  
OIL AND MINERALS DEPARTMENT

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

Operator <b>NORTHWEST PIPELINE CORPORATION</b>		Lease <b>SAN JUAN 32-7 UNIT</b>		Well No. <b>69</b>
Unit Letter <b>B</b>	Section <b>35</b>	Township <b>32N</b>	Range <b>7W</b>	County <b>San Juan</b>
Actual Footage Location of Well:				
<b>860</b> feet from the <b>North</b> line and		<b>1570</b> feet from the <b>East</b> line		
Ground Level Elev: <b>6719</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320</b> Acres	

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

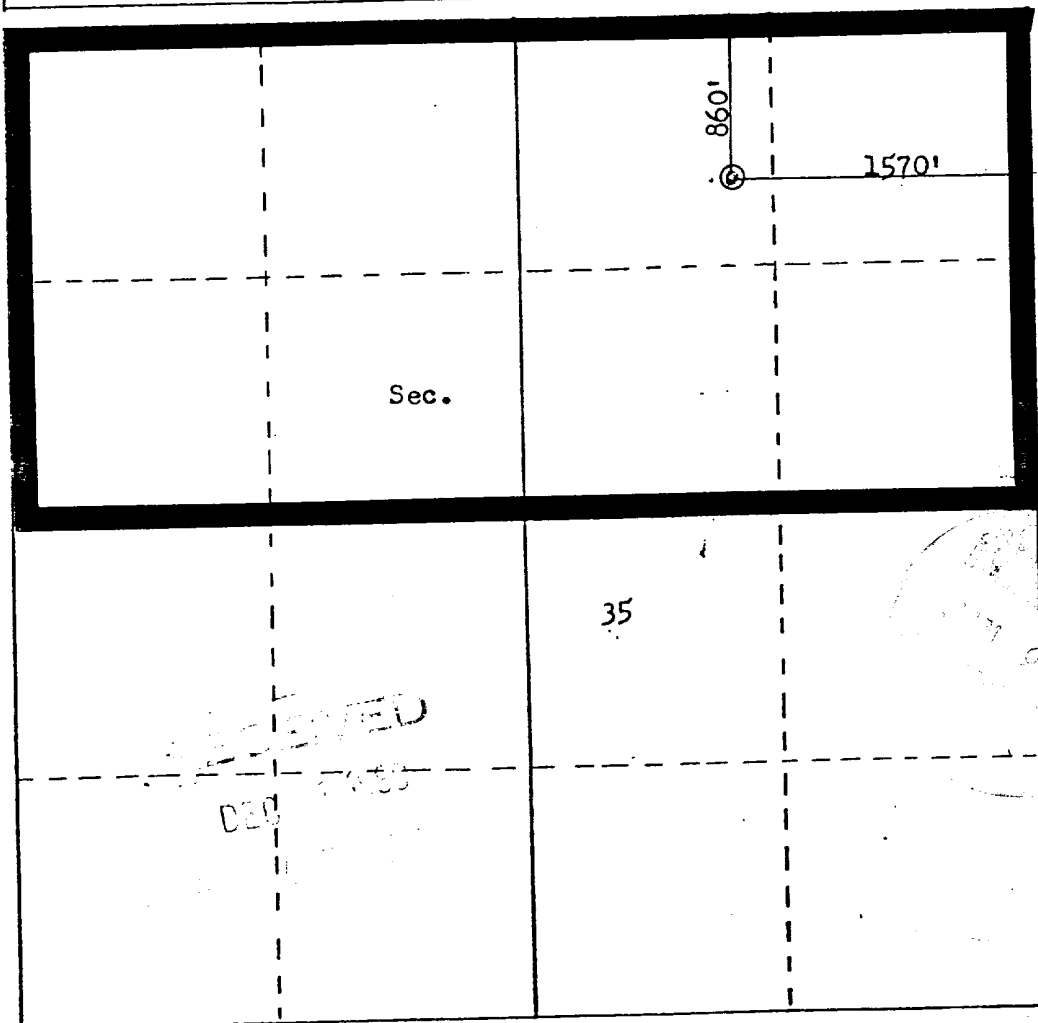
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 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.



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  
November 25, 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  
November 17, 1980

Registered Professional Engineer and Land Surveyor

*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.

Certificate No.  
3950

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, Farmington, New Mexico 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 860' FNL & 1570' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) Change Location

SUBSEQUENT REPORT OF:

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐

5. LEASE  
SF 078543

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
San Juan 32-7 Unit

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

9. WELL NO.  
#69

10. FIELD OR WILDCAT NAME  
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec 35 T32N R7W

12. COUNTY OR PARISH  
San Juan

13. STATE  
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
6719' GR

(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.)\*

This well location has been changed due to archaeological findings on location.

Old Location: 790' FNL & 880' FEL  
New Location: 860' FNL & 1570' FEL



Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Donna Grace TITLE Production Clerk DATE November 25, 1980

(This space for Federal or State office use)

APPROVED BY James P. Sims  
CONDITIONS OF APPROVAL, IF ANY:  
DISTRICT ENGINEER

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

NMOCC

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, Farmington, New Mexico 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 790' FNL & 880' FEL  
AT TOP PROD. INTERVAL: Same as above  
AT TOTAL DEPTH: Same as above

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 to 185 sacks as reported on Application.



Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

Set @ \_\_\_\_\_ Ft.

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

SIGNED Norma Grace TITLE Production Clerk DATE Sept 19, 1980

(This space for Federal or State office use)

APPROVED BY James F. Sims  
CONDITIONS AS AMENDED  
DEC 30 1980  
JAMES F. SIMS  
DISTRICT ENGINEER

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

NMOCC

# NORTHWEST PIPELINE CORPORATION

## DRILLING PROGNOSIS

Well Name: San Juan 32-7 Unit #69

Date: September 17, 1980

I. LOCATION: 790' FNL & 880' FEL  
Section 35, T32N, R7W  
San Juan Co., New Mexico

ELEVATION: 6730' GR

SURFACE: BLM  
MINERALS: Federal SF 078543

FIELD: Basin Dakota

### II. GEOLOGY: Surface - San Jose

<u>A. Formation:</u>	<u>Depth:</u>	<u>Formation:</u>	<u>Depth:</u>
Ojo Alamo	3038'	Mancos	6305'
Kirtland	3126'	Gallup	7130'
Fruitland	3436'	Greenhorn	8020'
Pictured Cliffs	3596'	Graneros	8070'
Lewis	3805'	Dakota	8200'
Cliff House	5825'	Total Depth	8300'
Point Lookout	6020'		

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

C. Natural Gauges: Gauge @ 5825', 7130', 8200', 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:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt &amp; Grade</u>
12-1/4"	350'	9-5/8"	36# K-55
8-3/4"	4005'	7"	20# K-55
6-1/4"	8300'	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: 8250' 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:

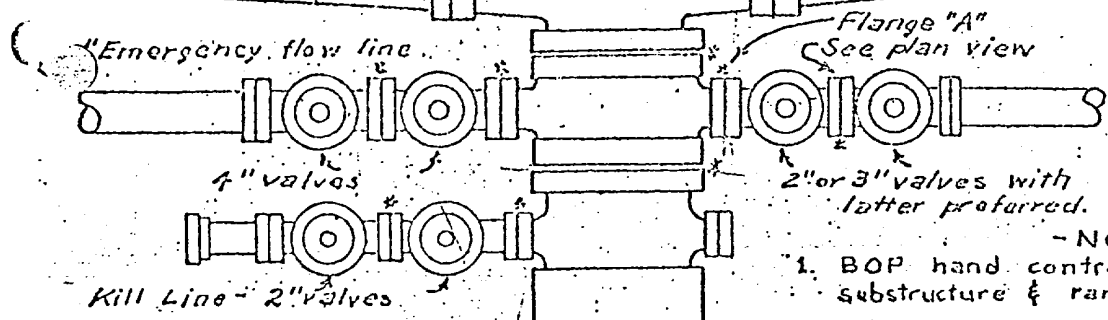
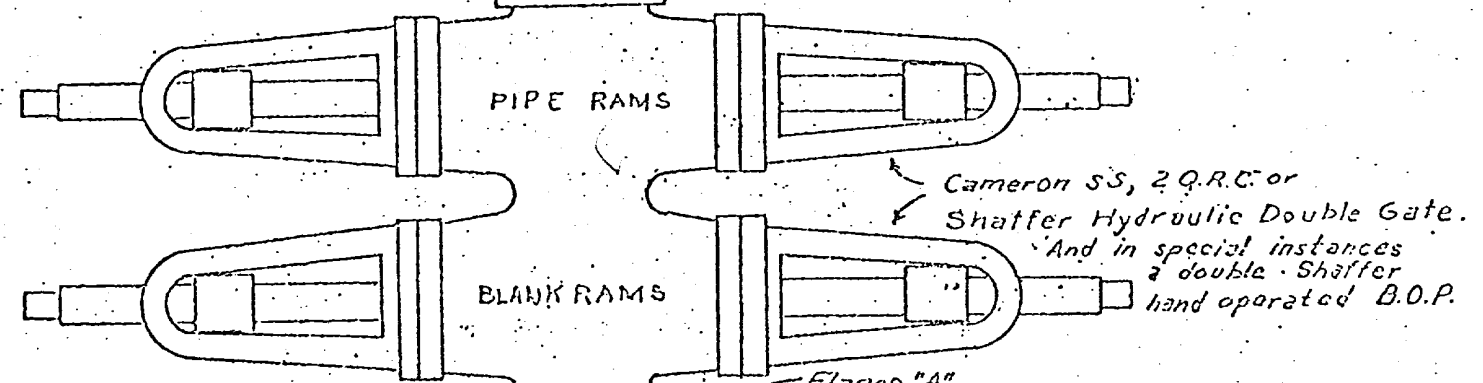
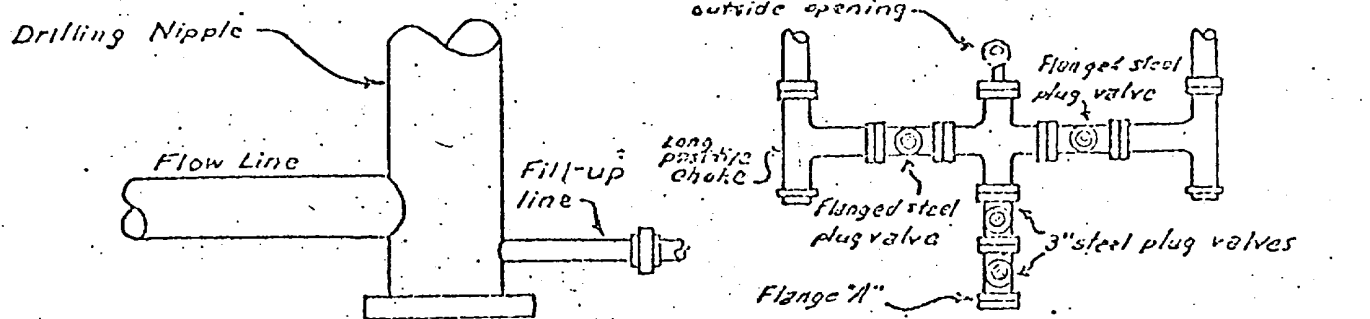
- A. Surface Casing: 9-5/8" - Use 115 sks of C1 "B" cement with 1/4# gel flake per sack and 3%  $\text{CaCl}_2$  (100% excess to circulate 9-5/8" casing). WOC 12 hrs. Test to 600 psi for 30 min.
- B. Intermediate Casing: 7" - Use 65 sks of 65/35 Class "B" poz with 12% gel and 15.2 gal of water per sk. Tail in with 75 sacks of Class "B" with 2%  $\text{CaCl}_2$  ( 240 cu.ft of slurry, 65% excess to cover Ojo Alamo). Use top rubber plug only. Run temperature 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 C1 "B" cement with 8% gel, 12-1/2# fine gilsonite per sk and 0.4% HR-4. Tail in with 100 sks of C1 "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

PLAN VIEW.- CHOKE MANIFOLD



- NOTES -

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

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.

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.
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 recommended 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.

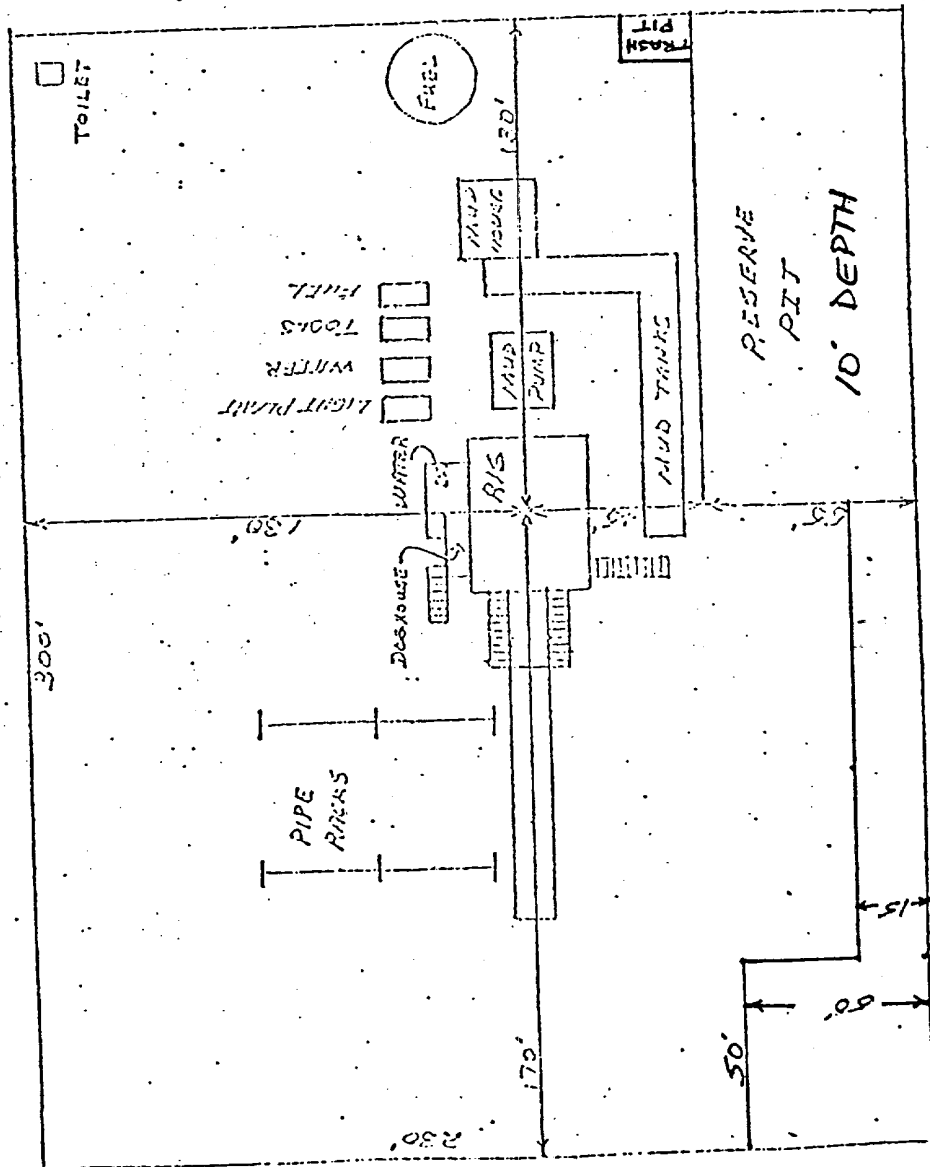
13. Certification:

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

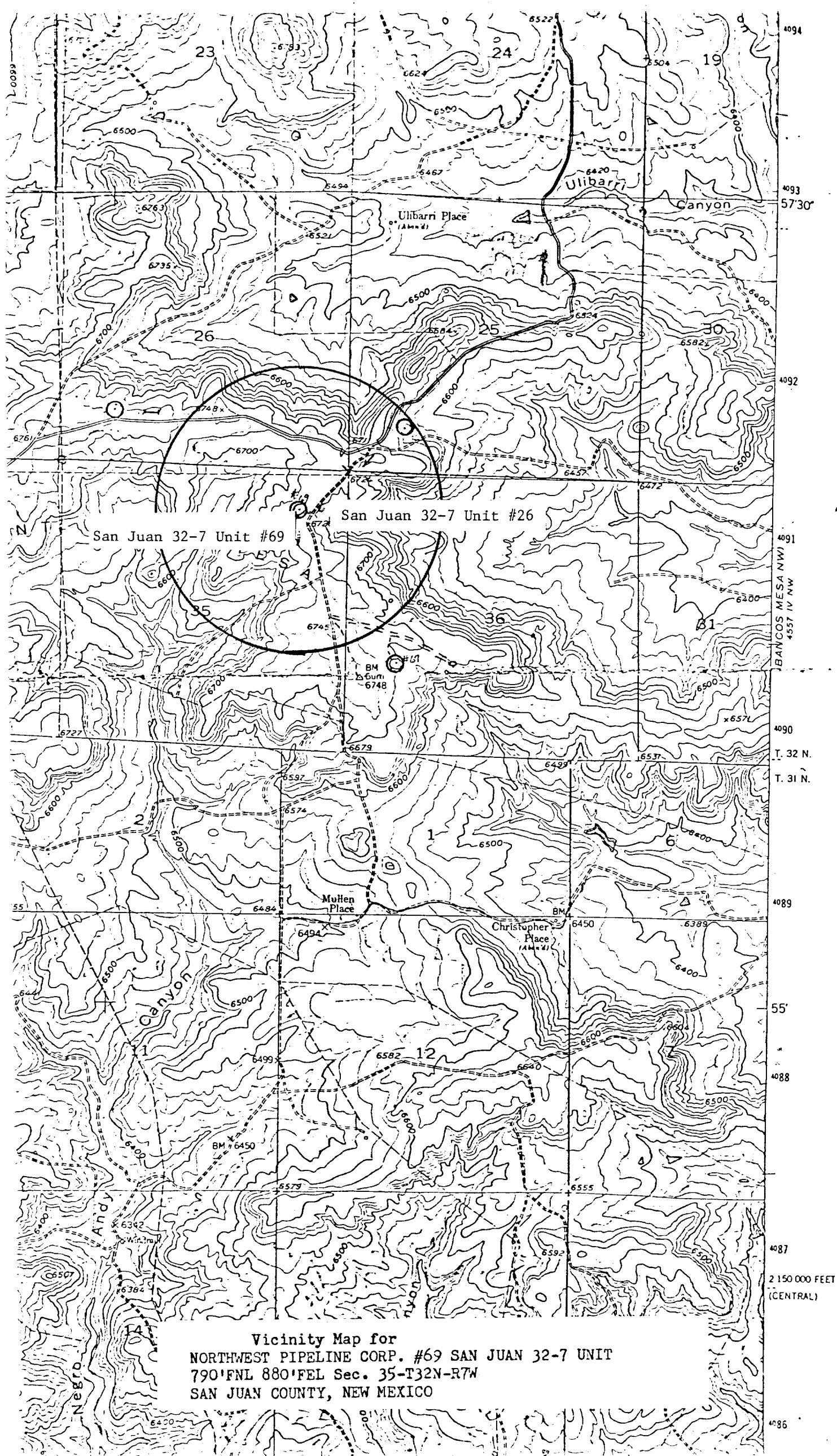
7

9

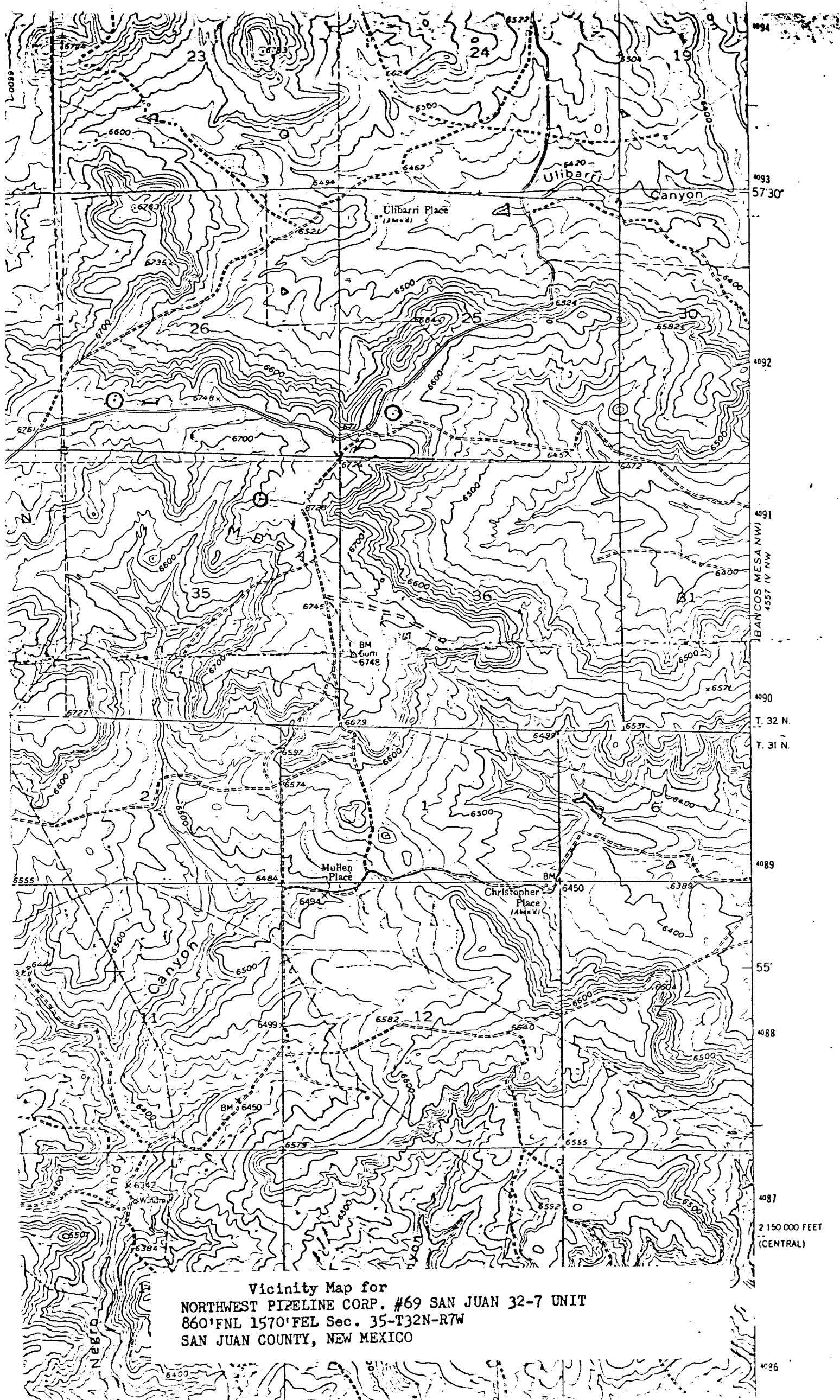


DATE. 9/17/80

SCALE: 1cm = 20



Vicinity Map for  
NORTHWEST PIPELINE CORP. #69 SAN JUAN 32-7 UNIT  
790'FNL 880'FEL Sec. 35-T32N-R7W  
SAN JUAN COUNTY, NEW MEXICO



Vicinity Map for  
NORTHWEST PIPELINE CORP. #69 SAN JUAN 32-7 UNIT  
860'FNL 1570'FEL Sec. 35-T32N-R7W  
SAN JUAN COUNTY, NEW MEXICO