

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 30-039-2149-5 SF 078760
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, AKAOTILE OR TRIBE NAME
2. NAME OF OPERATOR Northwest Pipeline Corporation		7. UNIT AGREEMENT NAME Rosa Unit
3. ADDRESS OF OPERATOR P.O. Box 90 - Farmington, New Mexico		8. FARM OR LEASE NAME Rosa Unit
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1190' FSL & 1660' FWL At proposed prod. zone As above		9. WELL NO. 59
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1190'		11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA Sec. 25, T31N, R6W
16. NO. OF ACRES IN LEASE NA		12. COUNTY OR JURISDICTION Rio Arriba
17. NO. OF ACRES ASSIGNED TO THIS WELL W/320		13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA		14. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DT, RT, GR, etc.) 6404' GR		22. APPROX. DATE WORK WILL START* 10-28-77

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#	200'	125 sks.
8 3/4"	7"	20#	3746'	150 sks.
6 1/4"	4 1/2"	10.5#	3596-5856	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 W/2 of Section 25 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 J.P. Slattery TITLE Drilling Engineer DATE 8-10-77
(This space for Federal or State office use)

JPS/ch

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY*Okai*

*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.

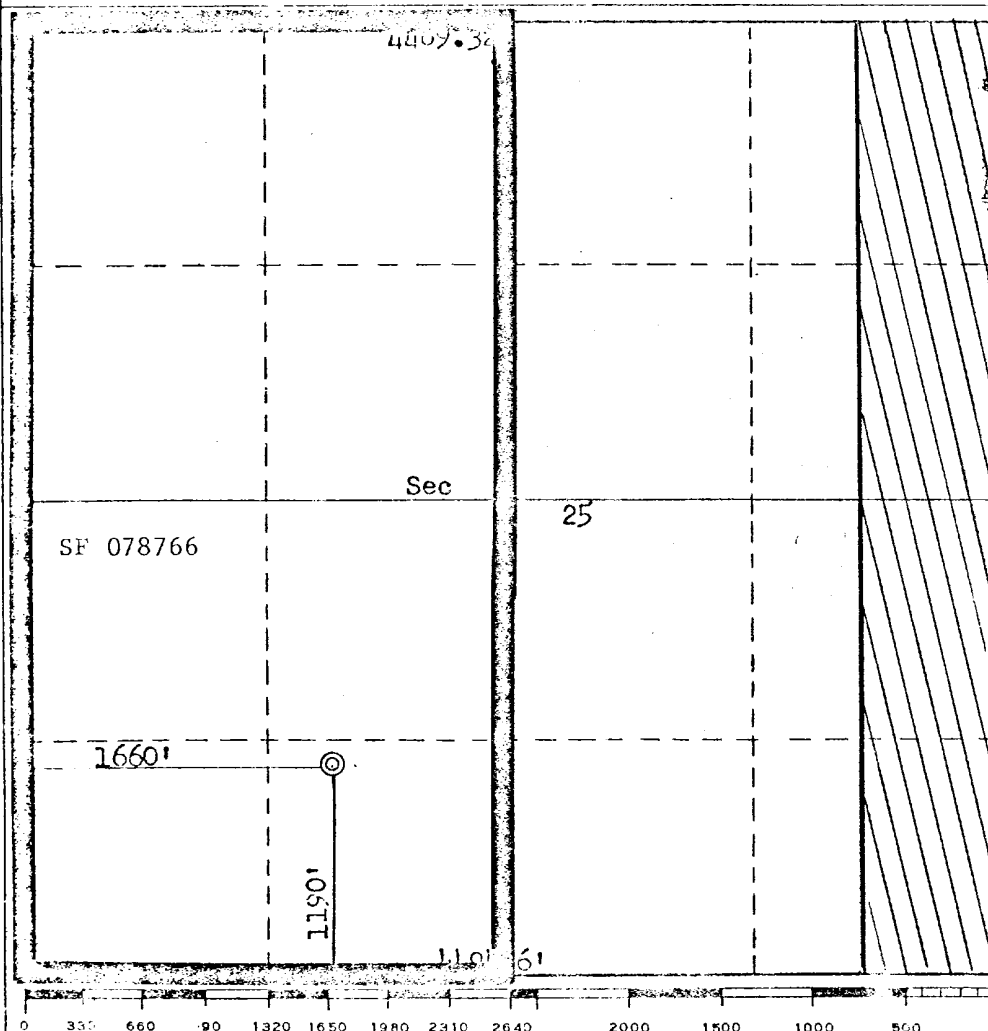
Operator Northwest Pipeline Corporation			Lease Rosa		Well No. 59
Unit Letter N	Section 25	Township 31N	Range 6W	County Rio Arriba	
Actual Footage Location of Well:					
1190 feet from the South line and 1660 feet from the West line.					
Ground Elev. Elev. 6404	Producing Formation Mesa Verde	Pool Blanco	Dedicated Acreage per Acre 320		

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 _____

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
J.P. Slatten
Position
Drilling Engineer
Company
Northwest Pipeline Corp.
Date
6-10-77

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
June 21, 1977
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No.
3950

OPERATIONS PLAN

Rosa Unit #59

I. LOCATION: SE/4 SE/4 Sec. 25, T31N, R6W

LEASE NUMBER: SF 078766

FIELD: Blanco Mesa Verde

ELEVATION: 6404' GR

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo:	2441'	Cliff House:	5366'
Kirtland:	2581'	Menefee:	5446'
Fruitland:	2996'	Point Lookout:	5656'
Pictured Cliffs:	3276'	Total Depth:	5856'
Lewis:	3546'		

B. Logging Program: Gamma Ray-Neutron at T.D.

C. Coring Program: None

D. Natural Gauges: Gauge at last connection above 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: Oct. 28, 1977

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 3546.

Viscosity: 32-38 sec/qt.

Weight: 8.8-9.2 #/gal.

Water Loss: 8-20 cc

Ph: 8.5-9.5

c) From 3546 to 3746

Viscosity: 36-45 sec/qt.

Weight: 8.5-9.5 #/gal.

Water Loss: 8-20 cc

Ph: 8.5-9.5

d) From 3746 to total depth with gas.

IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
12 1/4"	200'	9 5/8"	32.3# H-40	200'
8 3/4"	3746'	7"	20# K-55	3746'
6 1/4"	5856'	4 1/2"	10.5# K-55	3596-5856

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) central-
izers (Code #56011-070) spaced every other joint above the shoe.
Place float collar one joint above shoe.

B. Float Equipment Con't.

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

C. Tubing Program: 5800' 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 sks. Class "B" with 1/4# gel flake/sk. & 3% CaCl (100% excess to circulate). WOC 12 hrs. Test surface casing to 600 PSI for 30 minutes.

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

C. Production Liner 4 1/2" - Use 210 sks. Class "B" with 4% gel and 1/4 cu. ft. of fine Gilsonite/sk. Precede cement with 20 bbls water mixed with 3 sks. gel (70% excess to circulate liner). Set liner pack off & 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.

NORTHWEST PIPELINE CORPORATION

MULTI-POINT SURFACE USE PLAN

for the Rosa Unit

Well Number 59

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 San Juan 29-6 Unit Water Well located in the SW/4 28, T29N, R6W.
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 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: J.P. Slattery, P.O. Box 90 - Farmington, New Mexico, 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.

8-10-17

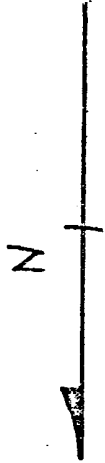
Date

J.P. Slattery

J.P. Slattery

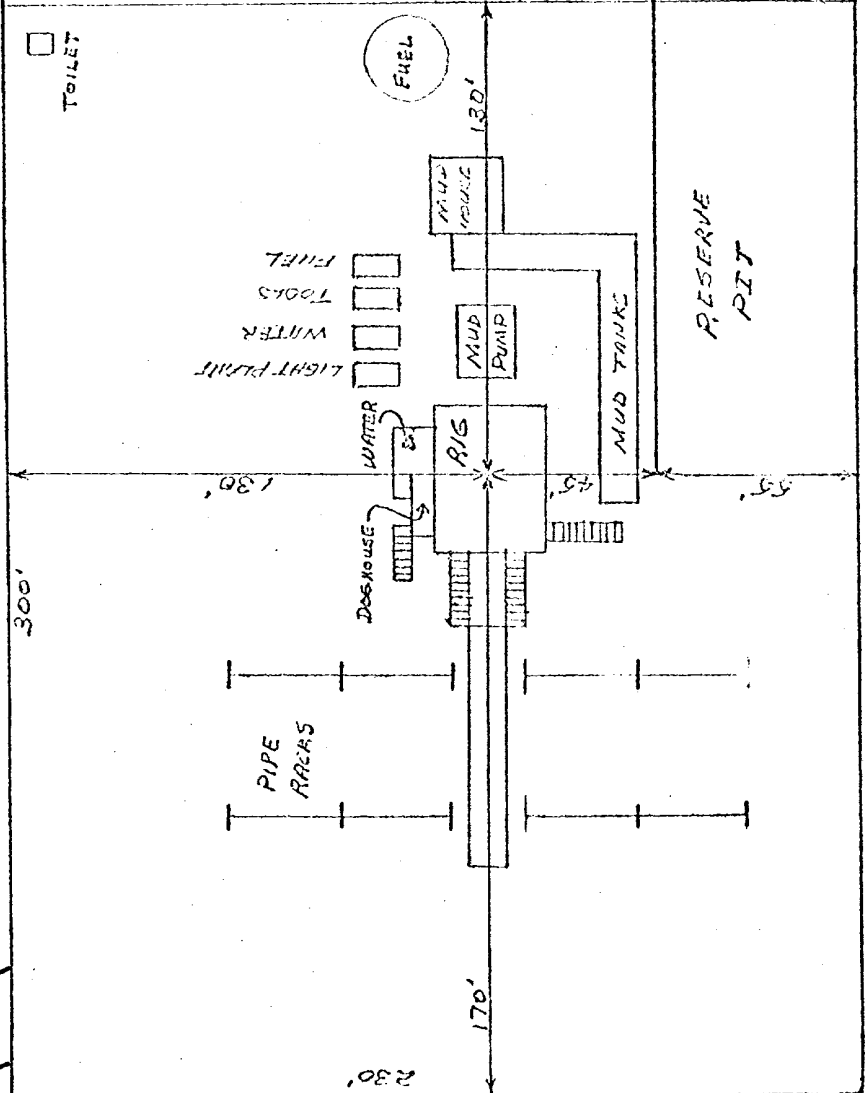
Drilling Engineer

NORTHWEST Pipeline Corporation
 ROSA UNIT #59



ACCESS

300'



1cm = 20'
 8-10-77

284

25

285

R 6 W. R 5 W

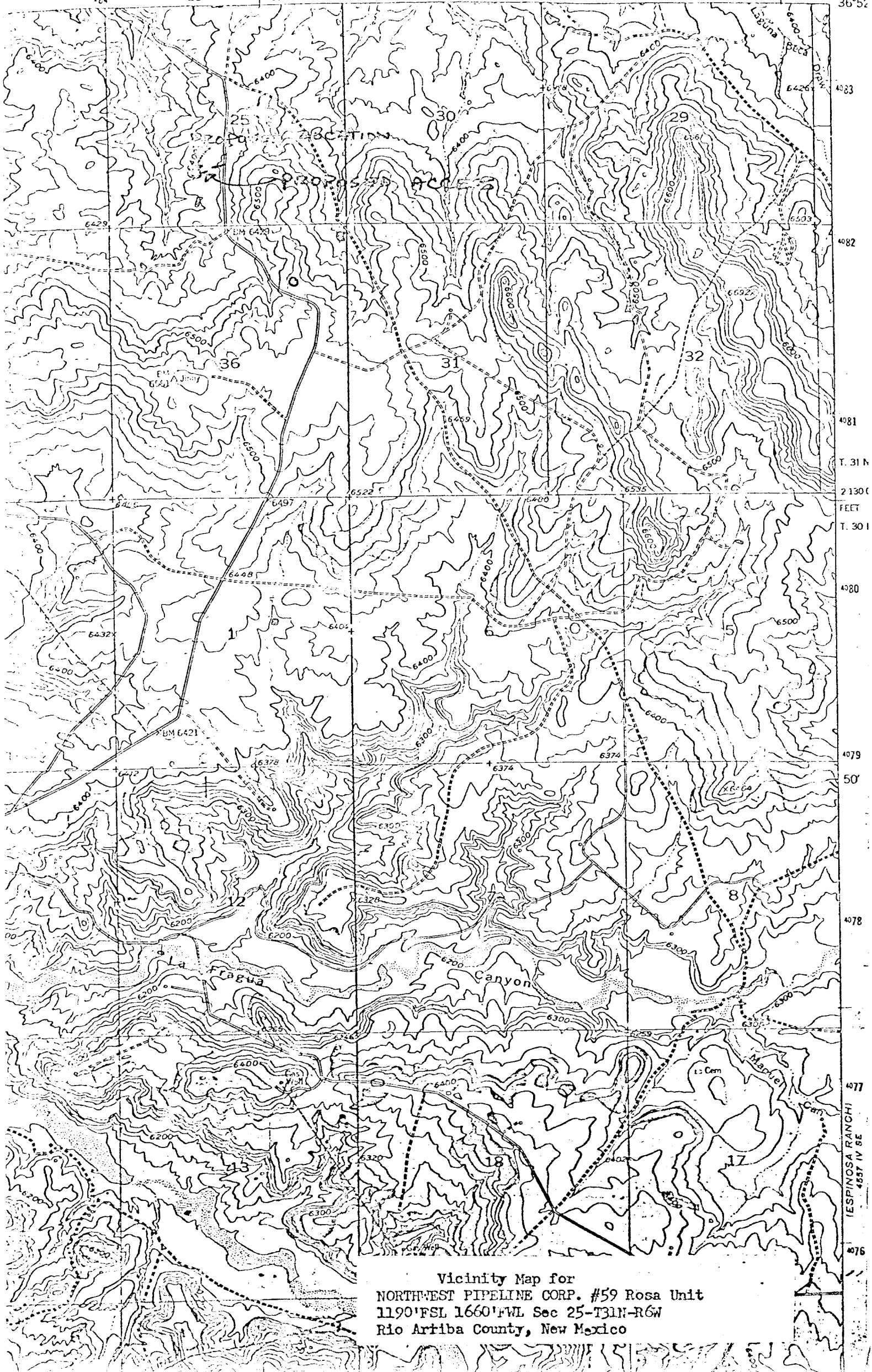
286

287

170 000 FEET

107 22 00

36°52'



4082

4081

T. 31 N

2 130 0

FEET

T. 30 1

4080

4079

50'

4078

4077

IESPINOSA RANCH

4557 N SE

4076

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 ☐ gas ☒ other ☐
well well

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: 1190' FSL & 1660' FWL
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) ☐

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐

5. LEASE
SF 078766

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Rosa Unit

8. FARM OR LEASE NAME
Rosa Unit

9. WELL NO.
59

10. FIELD OR WILDCAT NAME
Blanco Mesa Verde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 25 T31N R6W

12. COUNTY OR PARISH 13. STATE
Rio Arriba New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6404' 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.)*

It is planned to drill this well this year;
therefore, we request that our Application
for Permit to Drill be kept active.

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

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

SIGNED Production Clerk TITLE Production Clerk DATE April 2, 1979

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

APR 05 1979

*See Instructions on Reverse Side

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

Atal