

REHABILITATION AGREEMENT

Lease No.: SF078459; Well Name and No.: San Juan 32-7 Unit #32;
Location: SE 1/4 SW 1/4 Sec. 22, T. 32 N., R. 7 W.

Northwest Pipeline Corporation Oil Company intends to drill a well on surface owned by Tom Bolack. The lessee/operator agrees to complete the following rehabilitation work if the well is a producer:

☒ Yes ☐ No Maintain access road and provide adequate drainage to road.

☒ Yes ☐ No Reshape and reseed any area in excess of the pump and support facilities.

Other requirements: _____

The following work will be completed when the well is abandoned:

☒ Yes ☐ No Site will require reshaping to conform to existing topography.

☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to topography.

☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following seed mixture will be used:

Mixture #1

☒ Yes ☐ No Access road will be rehabilitated and reseeded using the same seed mixture as above.

☐ Yes ☒ No Access road will remain for landowner's use.

Other requirements: _____

Landowner

Name: Tom Bolack
Address: 1010 N. Dustin
City: Farmington
State: New Mexico
Telephone: _____
Date: September 10, 1976

Operator/Lessee

Name: Northwest Pipeline Corporation
Address: P.O. Box 90
City: Farmington
State: New Mexico
Telephone: 505/327-5351
Date: 9-10-76

☒ Yes ☐ No I certify rehabilitation has been discussed with the surface owner.

This agreement covers rehabilitation requirements only and does not affect any other agreements between the lessee/operator and surface owner.

OPERATIONS PLAN

San Juan 32-7 Unit #32

August 2, 1976

I. LOCATION: SW/4 Sec. 22, T32N, R7W

LEASE NUMBER: SF 078459

FIELD: Blanco Mesa Verde

ELEVATION: 6520' GR

II. GEOLOGY:

A. Formation Tops:

San Jose:	Surface:	Cliff House:	5410'
Ojo Alamo:	2336'	Menefee:	5492'
Kirtland:	2448'	Point Lookout:	5735'
Fruitland:	2955'	Total Depth:	5960'
Pictured Cliffs:	3360'		
Lewis:	3634'		

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

C. Coring Program: None

D. Testing Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities: September 15, 1976

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 3634'
Viscosity: 32-38
Weight: 8.8-9.2 #/gal.
Water Loss: 8-20 cc.
Ph: 8.5-9.5

(c) From 3634' to 3834'
Viscosity: 36-45 sec/qt.
Weight: 8.5-9.5 #/gal.
Water Loss: 6-12 cc
Ph: 8.5-9.5

(d) From 3834' 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"	36# H-40	200'
8 3/4"	3834'	7"	23# K-55	3834'
6 1/4"	3834'-T.D.	4 1/2"	10.5# K-55	3684'-5960'

OPERATIONS PLAN

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August 2, 1976

B. Tubing Program:

5910' 2 3/8" 4.7# K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

V. CEMENTING:

- A. Surface Casing 9 5/8" - Use 110 sacks of Class "B" with 1/4# gel flake per sack and 3% calcium chloride (100% excess to circulate). WOC 12 hours. Test surface casing 600 PSI for 30 minutes.
- B. Intermediate Casing - Use 120 sacks of Class "B" 65/35 poz with 12% gel and 15.52 gal. water per sack. Tail in w/50 sacks Class "B" with 2% calcium chloride 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 220 sacks of Class "B" with 4% gel & 1/4 cu. ft. fine Gilsonite per sack. Precede cement with 20 bbls. water mixed w/3 sxs. gel (70% excess to circulate liner). Set liner pack off & reverse out excess cement. Run 6 1/4" bit to top of liner & pressure test (test 12 hrs. after plug is down) Lay down DP & run 3 7/8" bit on & 2 3/8" EUE tubing to clean out liner. Perforate 18 hrs. after plug is down.

DHM/mag

xc

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the San Juan 32-7 Unit

Well Number 32

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. The pipeline will be constructed adjacent to the area cleared for the access road, where practicle.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the Los Pinos River near the La Boca Ranch.
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. Reseeding 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.

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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 agencies representative.

The area covered by the location and proposed access road is gently sloped scattered brush and some grasses, and a few trees.

12. Operator's Representative: D.H. Maroncelli, P.O. Box 90, Farmington, N.M. 87401, Phone: 327-5351 Extension 54.

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 sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

8-10-76

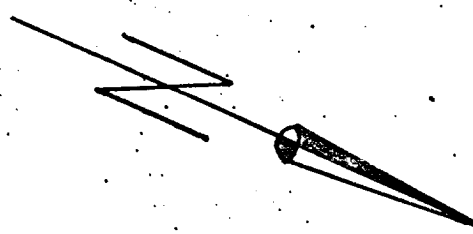
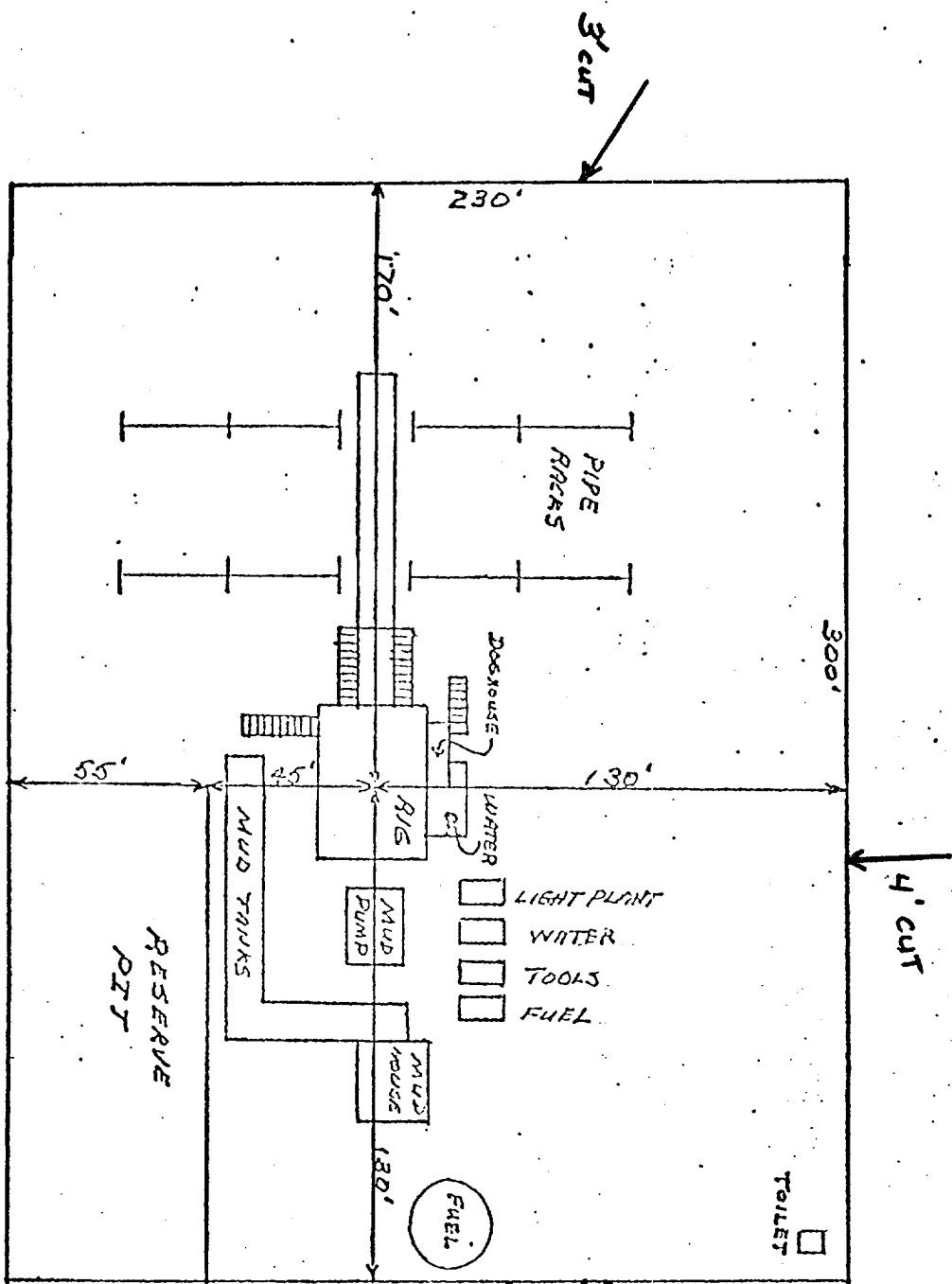
Date

D. H. Maroncelli

D.H. Maroncelli

Production Engineer

NORTHWEST PIPELINE CORPORATION
 LOCATION LAYOUT
 SAN JUAN 32-7 UNIT #32



3' CUT
 ACCESS ROAD & PIPELINE

DATE: 8-10-76
 SCALE: 1 CM = 20'

