

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Northwest Pipeline Corp.

3. ADDRESS OF OPERATOR
P.O. Box 90, Farmington, N.M., 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 1450' FNL & 1055' FWL
At proposed prod. zone As above

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drg. unit line, if any) 1055'

16. NO. OF ACRES IN LEASE NA

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

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

19. PROPOSED DEPTH 4118

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7117' GR

22. APPROX. DATE WORK WILL START* Sept. 30, 1977

PROPOSED CASING AND CEMENTING PROGRAM

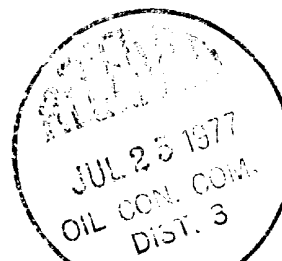
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	120	85 sks.
6 3/4"	2 7/8"	6.4#	4118	110 sks.

Selectively perforate & stimulate the Pictured Cliffs formation.

A BOP will be installed after the surface casing is set & cemented.
All subsequent work will be done through BOP.

The NW/4 of Section 32 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 July 12, 1977
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

*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.

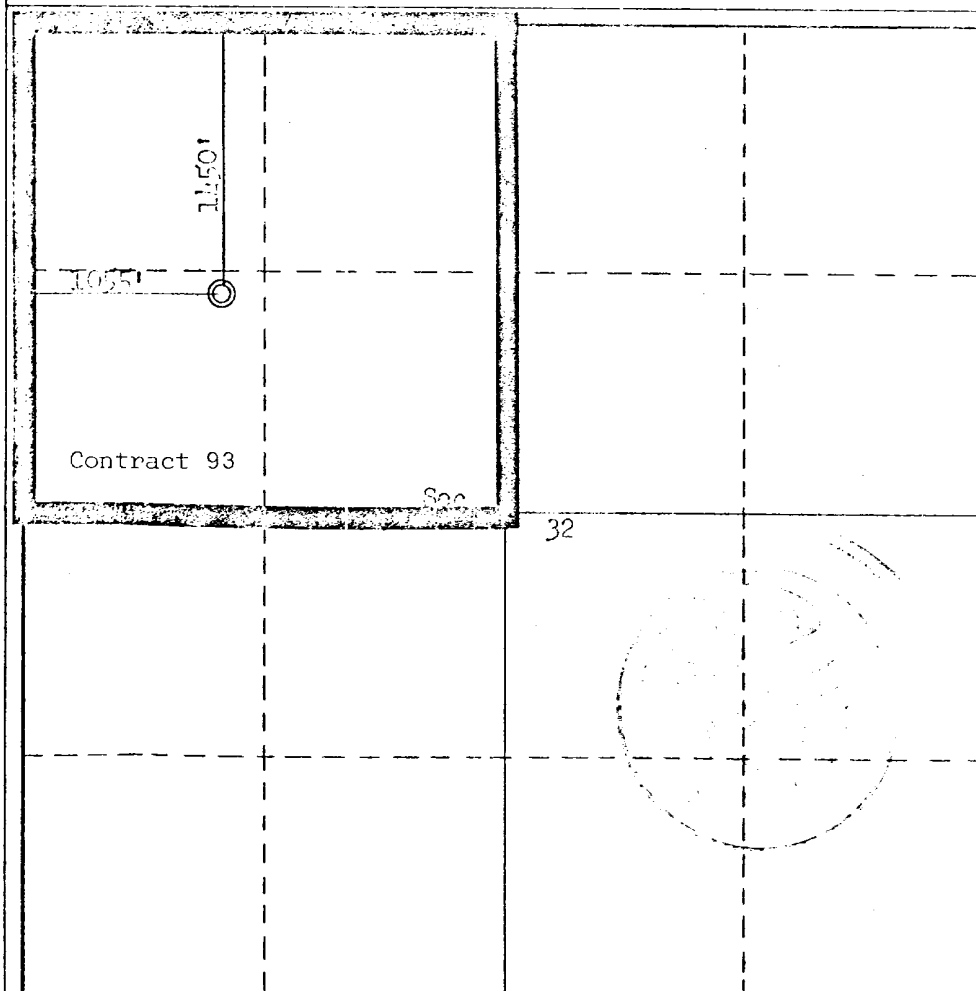
Operator Northwest Pipeline Corporation			Lease Jicarilla 93		Well No. 7
Unit Letter B	Section 32	Township 27N	Range 3W	County Rio Arriba	
Actual Footage Location of Well: 1150 feet from the North line and 1055 feet from the West line					
Ground Level Elev. 7117	Producing Formation Pictured Cliffs		Pool Gavilan	Dedicated Acreage: 160 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?

☐ 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

Position

Drilling Engineer

Company

Northwest Pipeline

Date

July 12, 1977

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

March 21, 1977

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No.

3950

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

OPERATIONS PLAN

Jicarilla 93 #7

I. LOCATION: NW/4, Sec. 32, T27N, R3W

LEASE NUMBER: Contract 93

FIELD: Gavilan Pictured Cliffs

ELEVATION: 7117 GR

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo: 3388
Kirtland: 3573
Frutland: 3719
Pictured Cliffs: 3875

Total Depth: 4118

B. Logging Program: I-ES and Density at T.D.

C. Coring Program: None

D. Testing Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities:

Sept. 30, 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 3450
Starloss: CMC mud
Viscosity: 25-30 sec/qt.
Weight: 8.9-9.0 #/gal.
Water Loss: 7-12 cc
Ph: 8.5-9.5

c) From 3450 to 4118
Starloss: CMC Hy-gel mud
Viscosity: 38-80 sec/qt.
Weight: 9.0-9.5 #/gal
Water Loss: 6-8 cc
Ph: 8.5-9.5

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"	120	8 5/8"	24# K-55	120
6 3/4"	4118	2 7/8"	6.4# K-55	4118

V. CEMENTING

A. Surface Casing 8 5/8" - Use 85 sks. Cl. "B" cmt. w/1/4# flocele/sk. & 3% calcium chloride (100% excess to circ.) WOC 12 hrs. Test surface csg. to 600 PSI for 30 min.

B. Production Casing 2 7/8" -Use 60 sks. 65/35 poz w/10% gel & 1/4 cu. ft. fine gilsonite/cu. ft. slurry & tail in/50 sks. Cl. "B" cmt. w/2% calcium chloride. WOC 12 hrs. Run temp. survey after 12 hrs.

JPS/dd

NORTHWEST PIPELINE CORPORATION

MULTI- POINT SURFACE USE PLAN

for the JICARILLA 93

Well Number 7

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 Jicarilla Tapacito Water Hole located in the SE/4 17, T26N, R4W.
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, 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.

7-12-77
Date

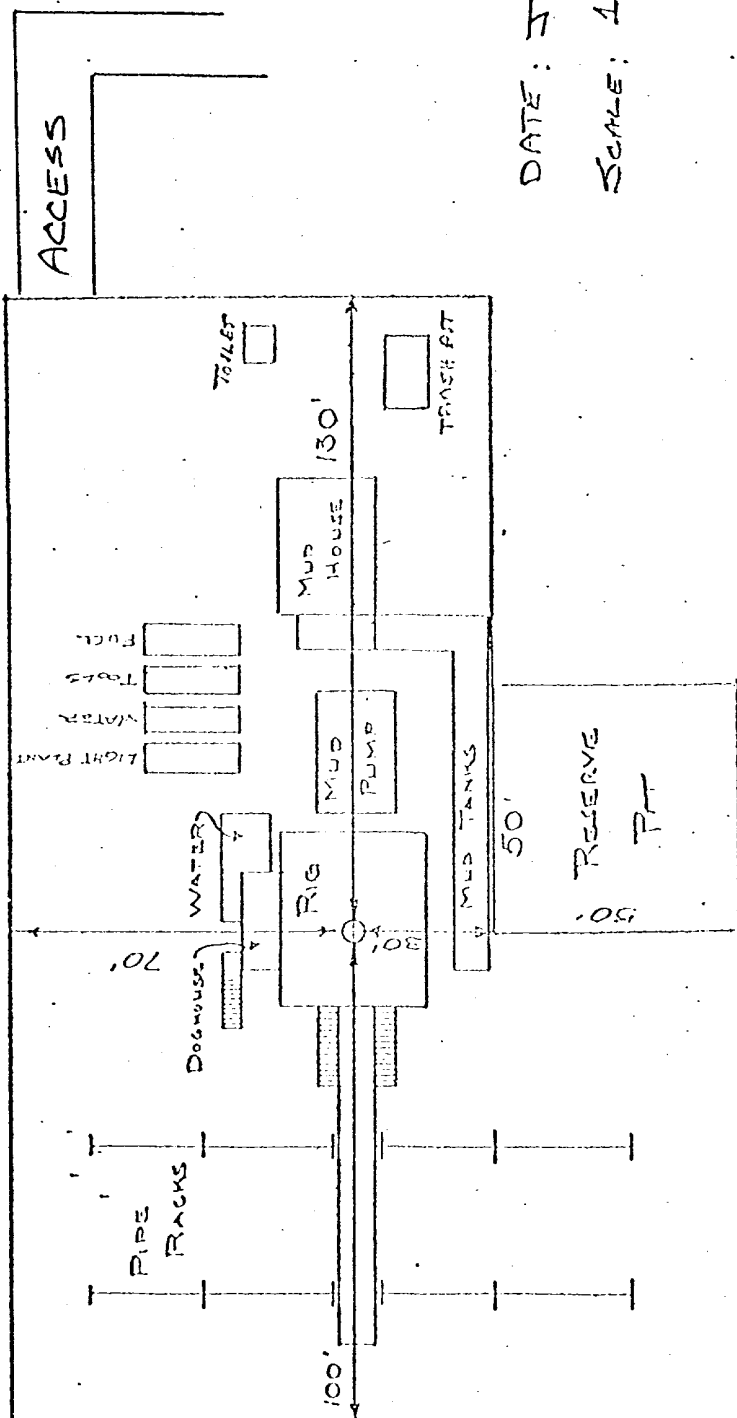
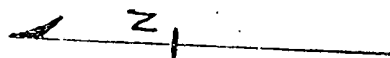
J.P. Slattery
J.P. Slattery
Drilling Engineer

JPS/dd

NORTH WEST PIPELINE CORPORATION

LOCATION LAYOUT

JICARILLA 93 #7



DATE: July 11, 1977

SCALE: 1cm = 20'

