SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

30 -035-2157

UNITED STATES DEPARTMENT OF THE INTERIOR

	3. LEASE DESIGNATION AND SERIAL NO.						
	NM 012671						
APPLICATION	6. IF INDIAN, ALLOTTEE OR TRIBE NAME						
1a. TYPE OF WORK DR	ILL X	DEEPEN 🗌	PLUG BA	ск 🗆	7. UNIT AGREEMENT NAME San Juan 29-6 Unit		
oir 🗀 c	AS YELL Y OTHER		NGLE MULTI	PLE _	8. FARM OR LEASE NAME		
2. NAME OF OPERATOR	San Juan 29-6 Unit						
Northwest Pip	eline Corporati	on					
F.O. Box 90	42A 10. FIELD AND POOL, OR WILDCAT						
A. LOCATION OF WELL (F. At surface 1490' FSL & 8 At proposed prod. 200 As Above	Blanco Mesa Verde 11. SEC, T., R., M., OR BLK. AND SURVEY OR ABEA SEC 25 T29N R6W						
	AND DIRECTION FROM NEA	REST TOWN OR POST OFFIC	R.*		12. COUNTY OF PARISH 13. STATE RIO Arriba NM		
15. DISTANCE FROM PROPOSED® LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 850			O. OF ACRES IN LEASE	TO T	OF ACRES ASSIGNED HIS WELL 233.88 RY OR CABLE TOOLS		
18. DISTANCE FROM PROPOSED LOCATIONS TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. N/A			19. PROPOSED DEPTH 20		Rotary		
21. ELEVATIONS (Show wh	nether DF, RT, GR, etc.)				22. APPROX. DATE WORK WILL START* 1/1/78		
23.	1	PROPOSED CASING AN	D CEMENTING PROGE	MAX			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF CEMENT		
12 1/4	0.5/9!!	32 3# 200' 1		125	125 eke		

Selectively perforate and stimulate the Mesa Verde formation.

4 1/2"

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 section 25 is dedicated to this well gas is dedicated.

20 #

10.5#

3870

3720-5939

150 sks

210 sks

present productive sone and proposed new productive IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give 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, TITLE Drilling Engineer Richardson (This space for Federal or State office use) APPROVAL DATE PERMIT NO. _ DATE APPROVED BY

CONDITIONS OF APPROVAL

8 3/4

6 1/4

*See Instructions On Reverse Side

		All distances m	ast be from the oute	r boundaries o	of the Section.		
Operator			Lease				Well No.
Northwest	Pipeline Co	rporation	San	Juan 29-6	o Unit		42A
Unit Letter	Section	Township	Ronge		County		
J	25	29N		6W	Rio	Arriba	
Actual Footage Loc	1			- C#	1,70	UTTTIC	
1490		South	860			Foot	
	feet from the	111	ne cand 850	fe	et from the	East	line
Ground Level Elev.	Producing F		Pool	D1		Į E	Dedicated Acreage:
6664	Mesa V	erae		Blanco			233.88 Acres
2. If more the interest ar3. If more the dated by cYes	an one lease ind royalty). an one lease of communitization, No If	different ownersh unitization, force answer is "yes,"	e well, outline ip is dedicated -pooling.etc? type of consolic	each and id to the well	entify the o	ownership the	plat below. reof (both as to working all owners been consoli- ed. (Use reverse side of
this form is No allowat	f necessary.) ole will be assig	ned to the well un	til all interests	have been	consolidat	ed (by comm	unitization, unitization,
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<u> </u>		4570.5				Fred B.	Kern Jr
						Certificate No.	
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OPERATIONS PLAN

San Juan 29-6 #42A

Rio Arriba

I. LOCATION: NW/4 SW/4 SEC 25 T29N R6W

LEASE NUMBER: NM 012671

FIELD: Blanco Mesa Verde

ELEVATION: 6664 GR.

II. GEOLOGY:

Formation Tops:

Ojo Alamo: Cliff House: 2676 5346 Kirtland: Menefee: 2839 5450 Fruitland: Point Lookout: 5739 3279 Pictured Cliffs: 3566 Total Depth: 5939

Lewis: 3670

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

Coring Program: None .

D. Natural Gauges: Gauge at last connection above 5450, 5739 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: 1-1-78 2 weeks

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

C. Mud Program:

a) Spud Mud: Water, lime and gel.

Surface to 3670

Viscosity: 32-38 sec/qt.Weight: 8.8-9.2 #/gal.

Water Loss: 8-20 cc Ph: 8.5-9.5

c) From 3670 to 3870

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

8.5-9.5

d) from 3870 to total depth with gas.

IV. MATERIALS:

Casing Program:

Hole Size	Depth O.H.	Casing Size	Wt. & Grade	Depth Set
12 14/"	200'	9 5/8"	32.3# H-40	2001
8 3/4"	3870'	7"	20# K-55	3870'
6 1/4"	2069	4 1/2"	10.5# K-55	3720-5939

Float Equipment:

Surface casing 9 5/8" - B & W Regular Pattern Shoe.

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.

- B. Float Equipment Continued
 Place float collar one joint above shoe.
 - 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: 5875', 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 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 gal. water per sack. Tail in with 50 sacks Class "B" with 2% CaCl (65% excess to cover Ojo Alamo). WOC 12 hours. Run temp. 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. Precede cmt. wi: a
 20 bbls. water mixed with 3 sks. gel (70% excess the
 circulate liner). Set liner pack off and reverse
 out excess cmt. 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 San Juan 29-6 Unit

Well Number 42A

- 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 bad..
- 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 burried 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 ν 11 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.

Multi-Point Surface Use Plan San Juan 29-6 Unit #42A Page 2

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 raod is gently sloped with scattered brush and some grasses.

12. Operator's Representative: D.E. Richardson, P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extinsion #38.

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.

1/-17-77 Date

D.E. Richardson Drilling Engineer

DER/ch

