\$IDETRACK

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

At proposed prod. zone

A TOPOP NI

BYNYX X

GAS X

Northwest Pipeline Corporation

APPLICATION FOR PERMIT TO DRILL, DEEPEN,

OTHER

LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface

P.O. Box 90, Farmington, New Mexico 87499

990' FSL & 990' FWL

Same

SUBMIT IN TRIPLICATE

OR PLUG BA

(Other instructions on

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

DEEPEN [

SW/SW

	5. LEASE DESIGNATION AND SERIAL NO.
	SF-078999
PLUG BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
PLUG BACK MULTIPLE ZONE	7. UNIT AGREEMENT NAME San Juan 31-6 Unit S. FARM OR LEASE NAME San Juan 31-6 Unit
rements.*)	9. WELL NO. #1 10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde 11. SEC., T., R., M., OR BLK.
	Sec. 35, T31N, R6W 12. COUNTY OR PARISH 13. STATE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE® | New Mexico |Rio Arriba Approximately 12 miles to Gobernador Camp NO. OF ACRES ASSIGNED 16. NO. OF ACRES IN LEASE 10. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) N/A 990' 20. ROTARY OR CABLE TOOLS 19. PROPOSED DEPTH 18. DISTANCE FROM PROPOSED LOCATION*
TO NEALEST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. Rotary 5875 1600' 22. APPROX. DATE WORK WILL START*

SINGLE ZONE

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6437 GR DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS POSED CASING AND CEMENTING PROGRAM

10-1-84 This action is subject to administrative

23. appeal pursuant to 30 CFR 290. SETTING DEPTH WEIGHT PER FOOT SIZE OF CASING SIZE OF HOLE "B" (206 cu.ft. C1 SX5875' <u>4-1/2"</u> 10.5# 6-1/4"

As Per Conversation with Earl Beecher 9-17-84 attached are the following:

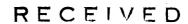
Original Approved APD

Operations Plan 2)

BOP Diagram 3)

Multi-point Surface Use Plan

Topographic Map



SEP 2 0 1984

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

OIL CON. DIV

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.		
SIGNED MAY TURNBAUAN	TITLE Senior Engineer	APPROVE'D84
(This space for Federal or State office use)		AS AMENDED
PERMIT NO.	APPROVAL DATE	OCI-12 1984
APPROVED BY	TITI.E	for his Keller
	0.0.0.01	TAREA MANAGER FARMINGTON RESOURCE AREA

MJT/1sm

*See Instructions On Reverse Side

Form 9-331a (Feb. 1951)

(SUBMIT IN TRIPLICATE)

Prod Dept. - 1
Region - 1
District - 2

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Office	Santa Fe				
Lease No					
Unit West	_				
Unit West	37 JUL	<u> </u>			

	AND REPORTS ON WELLS
NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
IOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
OTICE OF INTENTION TO CHANGE FEATIONARY	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMEN!
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	
(INDICATE ABOVE BY CHECK MA	RK NATURE OF REPORT, NOTICE, OR OTHER DATA)
	January 19, , 1953
	from S line and 990 ft. from W line of sec.
SW/4 SW/4 Sec. 35 318 (W Sec. and Sec. No.) (Twp.)	(Range) (Meridian)
(¼ Sec. and Sec. No.)	Mar Marien
Wildcat Rio Arres	inty or Subdivision) (State or Territory)
Ground	
he elevation of the derrick flood above sea	level is 6437 ft.
	TAILS OF WORK
	w sizes, weights, and lengths of proposed casings; indicate mudding jobs, cement- all other important proposed work)
Mesa Verde will be drilled wit	ley 5000' using mud. Set casing at top of pay h gas and cleaned out with gas after shot. D.
Rotary tools will be used to T	
Proposed Casing:	and cement to surface with approximately 200 ay and cement with approximately 200 sax.
Proposed Casing:	t and rement to surface with approximately 200
Proposed Casing: SMT 10-3/4" casing at 150 SMT 7" casing at top of p	t and rement to surface with approximately 200
Proposed Casing: SMT 10-3/4" casing at 150 SET 7" casing at top of p Location plat attached.	and cement to surface with approximately 200 ay and cement with approximately 200 sax.
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Proposed Casing: SMT 10-3/4" casing at 150 SET 7" casing at top of p Location plat attached. Lunderstand that this plan of work must receive appro	and cement to surface with approximately 200 ay and cement with approximately 200 sax. val in writing by the Geological Survey before operations may be commenced.
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Proposed Casing: SMT 10-3/4" casing at 150 SET 7" casing at top of p Location plat attached. Tunderstand that this plan of work must receive appro Company Phillips Petrolems Company Address P. C. Box 939	and cement to surface with approximately 200 ay and cement with approximately 200 sax. val in writing by the Geological Survey before operations may be commenced.
Proposed Casing: SET 10-3/4" casing at 150 SET 7" casing at top of p Location plat attached. Lunderstand that this plan of work must receive appro	and cement to surface with approximately 200 ay and cement with approximately 200 sax. val in writing by the Geological Survey before operations may be commenced.

Company Phillips Petroleum Company							
Lease					w	ell No	•••••
Sec. 3	5	, T	31 N.	, R.6.1	V.,	.N.M.P.1	<u> </u>
Location	9901	from	the Sou	th line	and	990! f	rom the
	West	line.	•				
Elevation.			643 /	Ungrade	a gro	ouna.	

Rio Arriba County				New Mexico						
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-9	96	<u> </u>								N
		990'-								

Scale-4 inches equal 1 mile.

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Charles Thinkler

Seal:

VAN.

Registered Professional Engineer and Land Surveyor. Charles J. Finklea N. Mex. Reg. No. 1302

Surveyed January 12 , 19 53.







UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
P. C. Box 965
Farmington, New Mexico

January 22, 1953

Phillips Petroleum Company P. O. Box 939 Aztec, New Mexico

Gentlemen:

Re: Santa Fe 078999

Receipt is acknowledged of your "Notice of Intention to Drill" dated January 19, 1953, covering your well No. 1-35 Mesa on the subject lease, in the SW_4^1 Sw $_7^1$ sec. 35, T. 31 N., R. 6 W., N. M. P. M., Rio Arriba County, New Mexico, Wildcat area.

Your proposed work is hereby approved subject to compliance with the provisions of the "Cil and Gas Operating Regulations" revised May 25, 1942, a copy of which will be sent to you on request, and subject to the following conditions:

- l. Drilling operations so authorized are subject to the attached sheet for general conditions of approval.
- 2. Furnish copies of all logs.

Very truly yours,

P. T. McGrath, District Engineer

PTMcGrath: jhb



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STACTOR (Trade, at the stationard)

WORKOVER PROGNOSIS

San Juan 31-6 Unit #1

7/18/84

LOCATION: SW/4 Sec. 35, T31N, R6W

Rio Arriba County

FIELD: Blanco Mesa Verde

ELEVATION: 6437' GR

TOTAL DEPTH: 5850'

PBTD INITIAL POTENTIAL: 386 MCF/D

<u>COMPLETED</u>: 7/24/53

TATTIAL FOTENTIAL: 386 MUF/D

CASING RECORD CASING SIZE WT. & GRADE DEPTH SET TOP CEMENT 10 3/4" 21.63# 1731 200 sx circ. 7" 20 & 23# J-55 5318' 300 sx 4540' DV-150 sx 26001

WELLHEAD EQUIPMENT: 10" 400 O.C.T. csg. head; 6" 600 O.C.T. tubing head

TUBING EQUIPMENT:

2 3/8" 4.7# J-55 EUE tubing set 0 5813'.

34951

FORMATION TOPS:

Ojo Alamo 2484' Cliff House 5342' Kirtland 2656' Menefee 5432' Fruitland 3044' Point Lookout 5666'

Lewis

LOGGING RECORD:

SP Res

STIMULATION:

Shot Open Hole (5318' - 5950') w/ 1228 qts. SNG

PRODUCTION HISTORY:

Well was shut-in on 7/24/53 upon completion, deemed non-commercial due to low productivity and left shut-in. Well never tied-in. 7/10/81 tbg. blew dead in less than one minute. Tbg = 103# Csg. = 620#.

RECOMMENDED WORKOVER PROCEDURE:

1. MOL & RU

- Lay relief lines and blow well down.
- Kill w/ wtr. if necessary.
- 4. Nipple up BOP on well head.
- 5. Pull tbg. If necessary, shoot off at approximately 5500'
- 6. Examine tbg. Order new string if required.
- 7. Locate 7" csg. shoe w/ CCL.
- 8. Set cmt. retainer approximately 150' above shoe (5170').
- 9. Circulate csg w/ wtr.

- 10. Squeeze btm. of 7" csg. and open hole w/ 125 sx Cl "B" w/ 4% gel and 12.5# gilsonite/sk. (Yield 1.79 cu.ft./sk., slurry wt. = 13.29 lbs./gal. cmt. vol. 223 cu.ft.). Tailed w/ 100 sx Cl "B" w/ 1% TK and 2% CaCl (Yield = 1.18 cu.ft./sk., slurry wt. = 17.5 lbs./gal., cmt. vol. = 118 ft.
- 11. Test 7" csg. to 800 psi for 1/2 hour.
- 12. If test indicates a leak, locate it w/ a retrievable packer and squeeze w/ l25 sx Cl "B" w/ 2% CaCl $_2$.
- 13. If no leak, perforate squeeze hole near top of Ojo Alamo and squeeze 7" annulus w/ 125 sx Cl "B" w/ 2% CaCl₂. Drill out and test to 800#.
- 14. Blow down w/ gas.
- 15. Drill cmt. retainer w/ gas. Test to 800 psi.
- 16. Drill cmt. to 10' below shoe (5330') w/ gas.
- 17. Sidetrack hole w/ core head and knuckle joint. Widen kick off point using hole opener and reamer. (5 $^{\circ}$ to 6 $^{\circ}$ over casing shoe deviation).
- 18. Drill side tracked hole (6-1/4") to 5875' w/ gas.
- 19. Run Induction, Neutron, Density and GR logs from TD to 7" shoe.
- 20. Run long string 4-1/2", 10.5#, K-55, ST&C to TD. Use Rector Geyser shoe (part #2017-1-050) and Rector Flapper type float collar (part #2008-2-000).
- 21. Cmt. w/ 115 sx C1 "B" w/ 4% gel & 12.5# gilsonite/sk. (Yield = 1.79 cu.ft./sk, slurry wt. = 13.29 lbs./gal., total cmt. vol. 206 cu.ft.). Precede cmt. w/ 20 brls. wtr. mixed w/ 2 sx. gel. Run temp survey after 8 hrs. WOC 18 hrs. before perforating. (70% excess to fill 500' above 7" csg. shoe).
- 22. PU 3-7/8" mill on 2-3/8" tbg. and clean out to FC. Fill annulus between 4-1/2" and 7" csg. Pressure test to 4000 psi.
- 23. Circulate hole w/ treated wtr. and spot 750 gal. 7-1/2% HCl across intervals to be perforated. TOH.
- 24. Run GR/CC1 and perforate as determined from new logs.
- 25. Establish an injection rate w/treated wtr. (.5 gal. FR/1000 gel) 60 BPM @ 2000# is expected. Pump 1000 gal. 15% HCl and drop one 7/8" (SG = 1.1) ball every 20 gal. Break down and ball off is possible. Total 50 balls.
- 26., Run wire line junk basket and retrieve or knock off balls.
- '27. Establish an injection rate and pump 10,000 gal. pad of slick water.

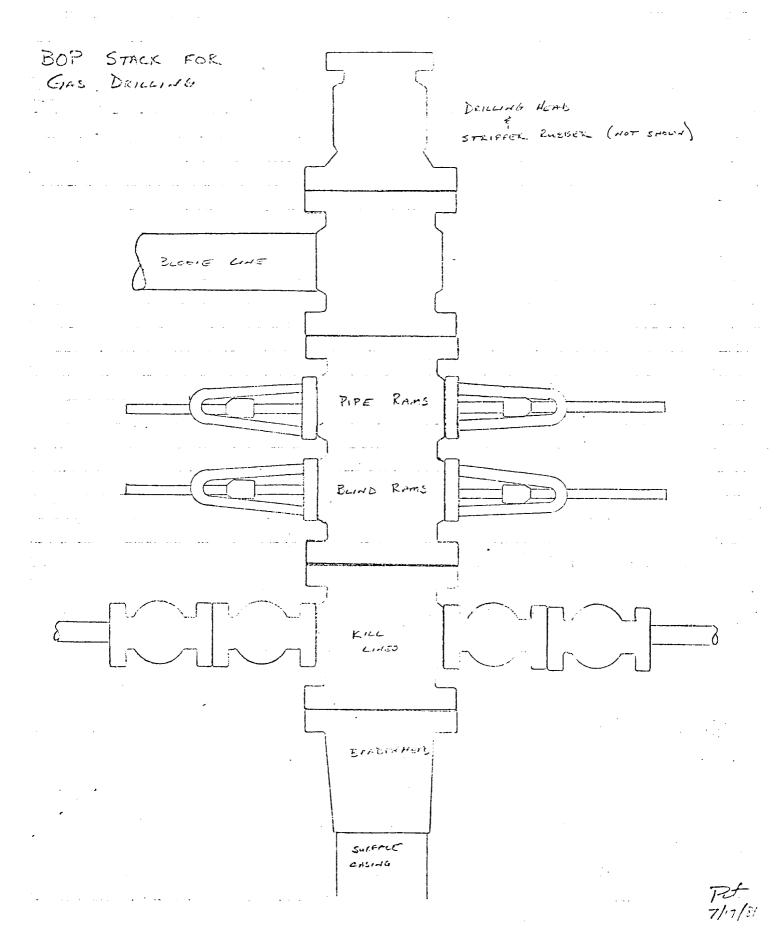
Workover Prognosis Page 3

- 28. Fracture w/ 80,000# 20/40 sand @ 1 ppg. Increase to 2 ppg w/ last 10,000#.
- 29. Flush to top perforations. Shut in and record pressure.
- 30. Run 2 3/8" EUE, 4.7# tbg. w/ expendable check, seating nipple combination on bottom of bottom jt. Blow well down and clean out below bottom perforations. Land tbg. and pump out expendable check valve. Kick well off through tbg. and gauge.

M.J. Turnbaugh

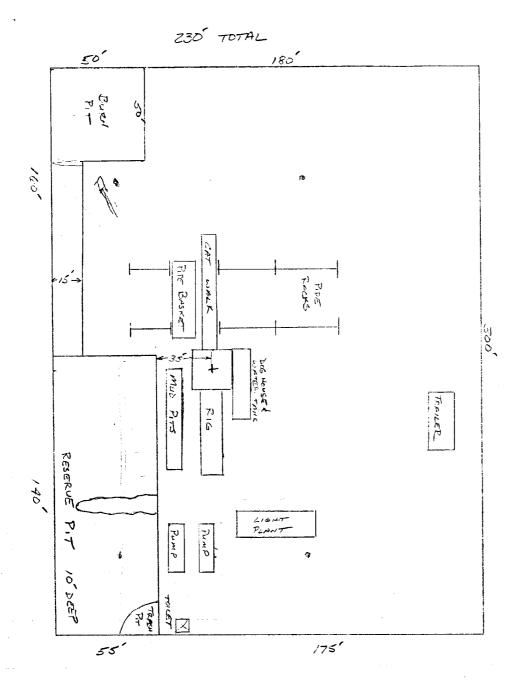
Sr. Production Engineer

MJT/aa



DAKOTA & MESA VERDE LOCATION LAY OUT

NORTHWEST FIREUME CORP



SCALE: ICM = ZOFF

to

NORTHWEST PIPELINE CORPORATION

MULTI-POINT SURFACE USE PLAN

SAN JUAN 31-6 UNIT #1

- 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 operations will be hauled from private sources.
- 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. Auxillary Facilities: There will be no camps or airstrips associated with the drilling of this well.
- 9. <u>Well Site Layout:</u> 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 then 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 specified by land use authorities.

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.

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; M.J. Turnbaugh, P.O. Box 90, Farmington, New Mexico 87499, 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.

9-13-34 Date

M.J. Turnbaugh Senior Engineer

MJT/1sm

