Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-24390

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: SF 078542

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: SAN JUAN 32-7 UNIT

8. FARM OR LEASE NAME: SAN JUAN 32-7

2. NAME OF OPERATOR: NORTHWEST PIPELINE CORPORATION

9. WELL NO.: 62

3. ADDRESS OF OPERATOR: P.O. BOX 90, FARMINGTON, NM 87401

10. FIELD AND POOL, OR WILDCAT: BASIN DAKOTA

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
M SEC. 27, T32N, R7W, 805' FWL; 970' FSL
At proposed prod. zone
SAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 27, T32N, R7W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 10 MILES SOUTH OF TIFFANY, COLORADO

12. COUNTY OR PARISH: ~~RIO ARRIBA~~ San Juan | 13. STATE: N.MEX.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 805'

16. NO. OF ACRES IN LEASE: N/A

17. NO. OF ACRES ASSIGNED TO THIS WELL: ~~320~~ S 313.48

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

19. PROPOSED DEPTH: 8250'

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6675' GR.

22. APPROX. DATE WORK WILL START*: JUNE 1, 1980

23. 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"	36.0#	350'	185 Sks CIRC
8 3/4"	7"	20#	3952'	175 Sks
6 1/4"	4 1/2"	10.5# & 11.6#	8250'	350 Sks

Selectively perforate and stimulate the Dakota formation. Completion plans will be determined at T.D.

A BOP will be installed after the surface casing is set and cemented. All subsequent work will be conducted through BOP's.

The south half of Section 27 is dedicated to this well. Gas is dedicated.

RECEIVED
JUN 10 1980
OIL CON. COM.
DIST. 3

APR 17 1980

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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 Paul C. Thompson — TITLE Drilling Engineer — DATE 3-27-80
Paul C. Thompson

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED
JUN 1980
JAMES F. SIMS
DISTRICT ENGINEER

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS". NMOCC

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
NORTHWEST PIPELINE CORPORATION	SAN JUAN 32-7 UNIT	62

Unit Letter	Section	Township	Range	County
M	27	32N	7W	San Juan

Actual Footage Location of Well:
970 feet from the South line and 805 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6675	DAKOTA	BASIN DAKOTA	S 313,48 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

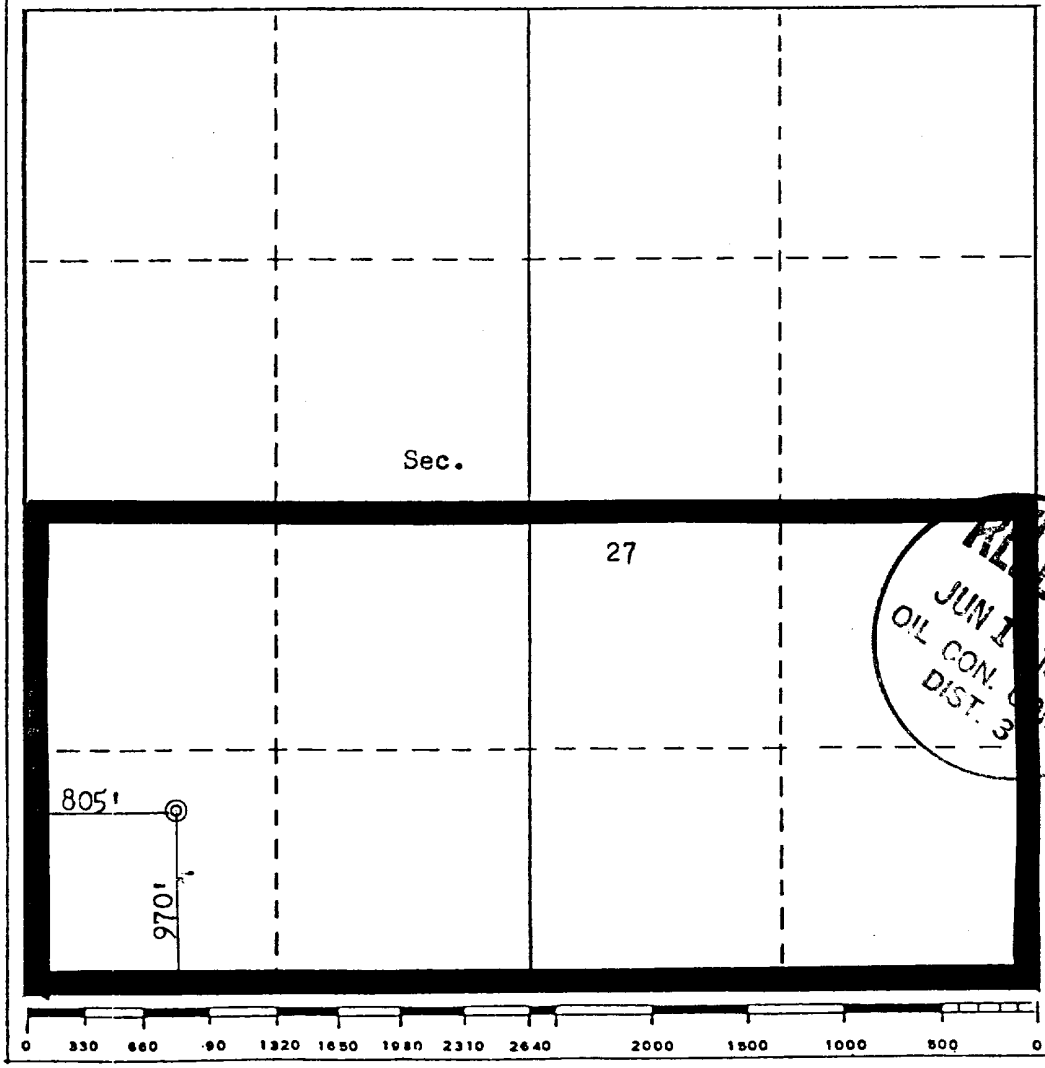
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation UNITIZATION

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.



RECEIVED
JUN 1 1980
OIL CON. COM.
DIST. 3

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Paul C. Thompson

Name: PAUL C. THOMPSON

Position: DRILLING ENGINEER

Company: NORTHWEST PIPELINE CORP.

Date: 4-11-80

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: February 25, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

NEW MEXICO FRED B. KERR, JR.

DRILLING PROGNOSIS

San Juan 32-7 Unit #62 Date: April 14, 1980

I. Location: 805' FWL & 970' FSL
Sec. 27, T32N, R7W
Rio Arriba County, NM

Field: Basin Dakota Elevation: 6675'GR.

II. Geology:

A.

Formation	Depth	Formation	Depth
Ojo Alamo:	2588'	Point Lookout:	5905'
Kirtland:	2732'	Mancos:	6070'
Fruitland:	3017'	Gallup:	6820'
Pictured Cliffs:	3565'	Greenhorn:	7975'
Lewis:	3752'	Graneros:	8033'
Cliff House:	5597'	Dakota:	8135'
		Total Depth:	8250'

B. Logging Program: I-ES with SP and Gamma Ray and Neutron-Density with Gamma Ray at Intermediate casing depth. Gamma Ray-Induction & Density at Total Depth.

C. Coring Program: None.

D. Natural Gauges: Gauge @ 5905', 6820', 8033', and @ total depth. Record all gauges on daily drilling report and morning report. Gauge all noticeable increases in gas while drilling and report.

III. Drilling:

A. Contractor:

B. Mud Program: Mud, water & gas will be furnished by Northwest Pipeline Corporation from surface to total depth.

a) Spud Mud: Water, Gel, & Lime

b) Surface Casing to Intermediate casing depth: Water, Gel, Lime & Barite

c) From Intermediate casing depth to T.D. will be drilled with gas.

IV. Materials:

A. Casing Program:

Hole Size	Depth	Casing Size	WT & Grade		Depth Set
12-1/4"	350'	9-5/8"	36#	K-55	350'
8-3/4"	3952'	7"	20#	K-55	3952'
6-1/4"	8250'	4-1/2"	10.5#	K-55	0' - 6800'
		4-1/2"	11.6#	K-55	6800 - T.D.

B. Float Equipment:
Surface Casing: 9-5/8" - Larkin Guide Shoe and Self-fill insert flat valve.
Intermediate Casing: 7" Dowell Guide Shoe.
Dowell Self-fill insert float valve.
Dowell Centralizers (5).
Production Casing: 4-1/2" Larkin Geyser Shoe.
Larkin Flapper type float collar.

C. Tubing: 8200' of 2-3/8", 4.7#, J-55. 8 RD EUE tubing with common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks of Class "B" cmt with 1/4# gel flake per sk and 3% Calcium Chloride, (100% excess to circulate 9-5/8" casing). WOC 12 hrs. Test to 600 PSI for 30 min.

B. Intermediate Casing: 7" - Use 125 sks of 65/35 Class "B" pos with 12% gel and 15.52 gal of water per sk. Tail in with 50 sks of Class "B" with 2% Calcium Chloride (330 cu.ft. of slurry, 60% excess to cover Ojo Alamo). Use top rubber plug only. Run temperature survey after 8 hrs. WOC 12 hrs. Test casing to 1200 PSI for 30 min.

C. Production Casing: 4-1/2" - Precede cmt with 40 barrels of water mixed with 4 sks gel. Cmt with 250 sks of Class "B" cmt. with 8% gel, 12-1/2# fine gilsonite per sk and 0.4% HR-4. Tail in with 100 sks of Class "B" cmt. with 1/4# fine tuf-plug per sk. & 0.4% HR-4 per sk. (660 cu. ft. of slurry) (50% excess to fill to intermediate casing). Run temperature survey after 8 hrs. Perforate after 18 hrs.

PCT/fp

Paul C. Thompson

Paul C. Thompson

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the

San Juan 32-7 Unit

Well Number #62

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 Pine River.

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. Blank 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.

    All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

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: Paul Thompson - P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension # 115

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.

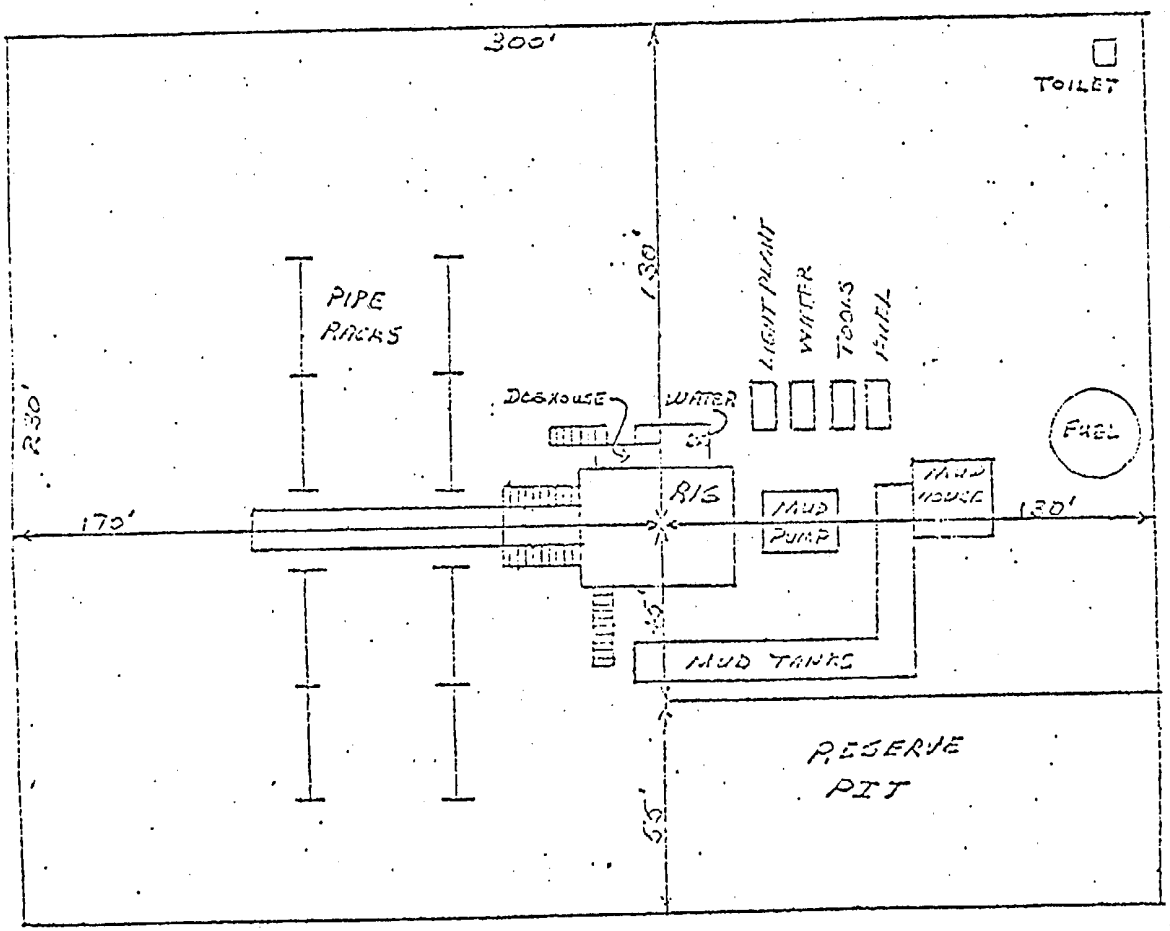
4-11-80
Date

Paul C. Thompson
Paul Thompson
Drilling Engineer

WJB/ch

NORTHWEST PIPELINE CORP.

SAN JUAN 32-7 #62



DATE.

SCALE: 1cm = 20'

OPERATIONS PLAN

Date: April 11, 1980

I. Location: 805' FWL & 970' FSL
Sec. 27, T32N, R7W
Rio Arriba County, NMex.

Lease Number: San Juan 32-7 #62

Field: Basin Dakota

Elevation: 6675' GR.

II. Geology:

A. Formation Tops

Formation	Depth	Formation	Depth
Ojo Alamo:	2588'	Point Lookout:	5905'
Kirtland:	2732'	Mancos:	6070'
Fruitland:	3017'	Gallup:	6820'
Pictured Cliffs:	3565'	Greenhorn:	7970'
Lewis:	3752'	Graneros:	8033'
Cliffhouse:	5597'	Dakota:	8135'
		Total Depth:	8250'

B. Logging Program: I-ES with SP and Gamma Ray and Neutron-Density with Gamma Ray at Intermediate casing depth. Gamma Ray-Induction & Density at Total Depth.

C. Coring Program: None.

D. Testing Program: Gauge at 5905', 6820', 8033', and Total Depth. Record all gauges on daily drilling report and morning report. Gauge all noticeable increases in gas while drilling and report.

III. Drilling:

A. B.O.P.: Blind rams and pipe rams, 10", 900 series, double gate, rated at 3000 PSI.

B. Mud Program: Mud, water & gas will be furnished by Northwest Pipeline Corporation from surface to total depth.

a) Spud Mud: Water, Gel, & Lime

b) Surface Casing to Intermediate casing depth: Water, Gel, Lime & Barite

c) From Intermediate casing depth to T.D. will be drilled with gas.

IV. Materials:

A. Casing Program:

Hole Size	Depth	Casing Size	WT & Grade	Depth set
12-1/4"	350'	9-5/8"	36# K-55	350'
8-3/4"	3952'	7"	20# K-55	3952'
6-1/4"	0'-6800'	4-1/2"	10.5# K-55	0-6800'
6-1/4"	6800'-T.D.	4-1/2"	11.6# K-55	6800'-T.D.

B. Float Equipment:
Surface: 9-5/8" - Larkin guide shoe and self fill insert float valve.
Intermediate: 7" - Dowell guide shoe, Dowell self filling insert float valve, Dowell centralizers five (5).
Production: 4-1/2"- Larkin Geyser shoe, Larkin flapper type float collar.

C. Tubing: 8200' of 2-3/8", 4.7#, J-55, 8RD EUE tubing with a common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks of Cl "B" Cement with 1/4# gel flake per sk and 3% $CaCl_2$, (100% excess to circulate 9-5/8" casing). WOC 12 hrs. Test to 600 PSI for 30 minutes.

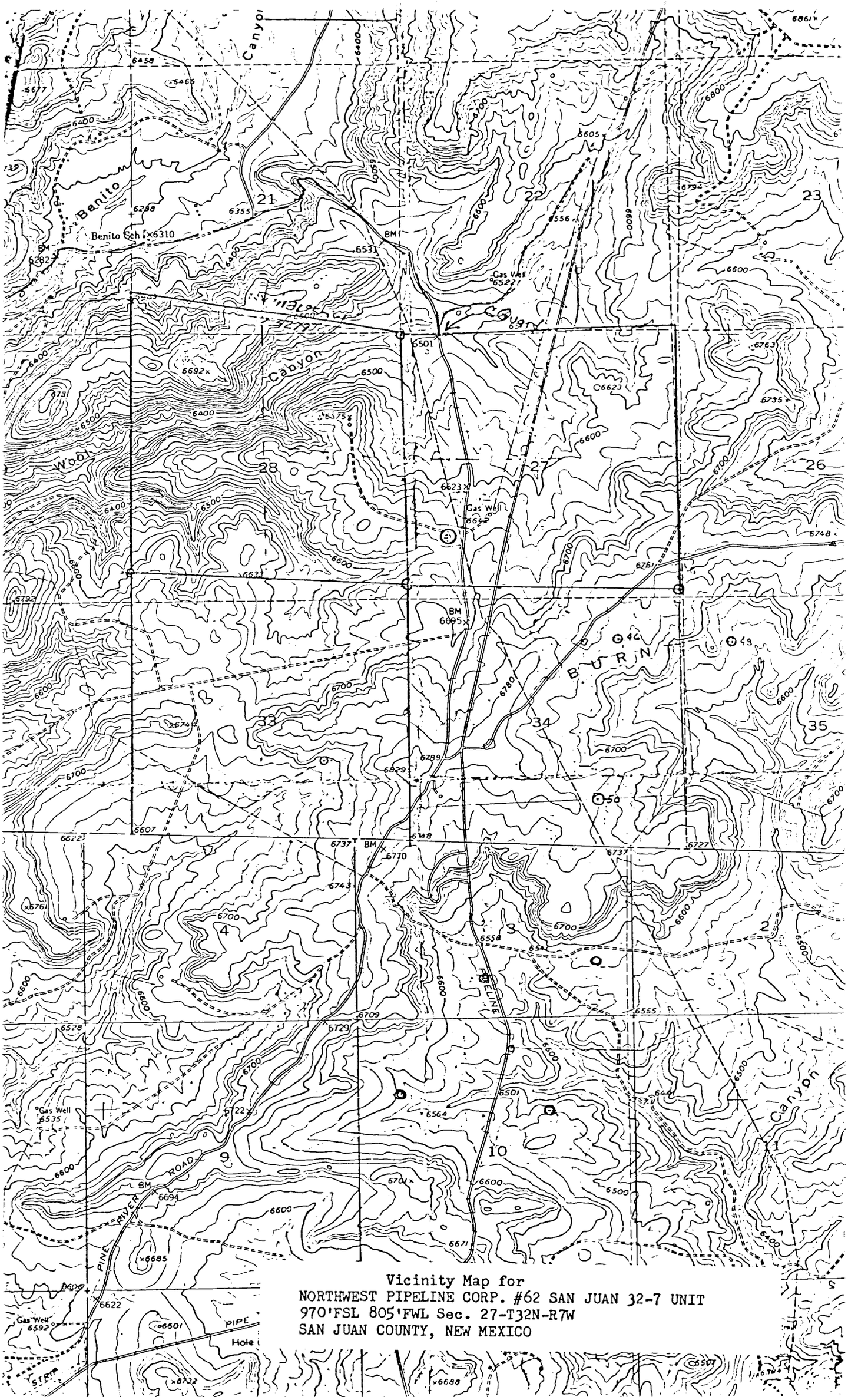
B. Intermediate Casing: 7" - Use 125 sks of 65/35 Cl "B" poz with 12% gel and 15.52 gallons of water per sk. Tail in w/50 sks Cl "B" with 2% $CaCl_2$ (350 cu.ft. of slurry,60% excess to cover Ojo Alamo). Use top rubber plug only. Run temperature survey after 8 hrs. WOC 12 hrs. Test casing to 1200 PSI for 30 minutes.

C. Production Casing: 4-1/2" - Precede cement with 40 barrels of water mixed with 4 sks gel. Cmt with 250 sks Cl "B" cmt with 8% gel, 12 1/2# fine gilsonite per sk and 0.4% Hr-4. Tail in w/100 sks of Cl "B" cmt with 1/4% fine tuf-plug per sk and 0.4% HR-4 per sk. Run temperature survey after 8 hrs. Perforate after 18 hrs.

Paul C. Thompson

Paul C. Thompson

PCT/fp



Vicinity Map for
NORTHWEST PIPELINE CORP. #62 SAN JUAN 32-7 UNIT
970'FSL 805'FWL Sec. 27-T32N-R7W
SAN JUAN COUNTY, NEW MEXICO

REVISED

DRILLING PROGNOSIS

San Juan 32-7 Unit #62 Date: April 14, 1980

I. Location: 805' FWL & 970' FSL
Sec. 27, T32N, R7W
Rio Arriba County, NM

Field: Basin Dakota Elevation: 6675'GR.

II. Geology: Surface: San Jose

A.

Formation	Depth	Formation	Depth
Ojo Alamo:	2588'	Point Lookout:	5905'
Kirtland:	2732'	Mancos:	6070'
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Lewis:	3752'	Graneros:	8033'
Cliff House:	5597'	Dakota:	8135'
		Total Depth:	8250'

B. Logging Program: I-ES with SP and Gamma Ray and Neutron-Density with Gamma Ray at Intermediate casing depth. Gamma Ray-Induction & Density at Total Depth.

C. Coring Program: None.

D. Natural Gauges: Gauge @ 5905', 6820', 8033', and @ total depth. Record all gauges on daily drilling report and morning report. Gauge all noticeable increases in gas while drilling and report.

III. Drilling:

A. Contractor:

B. Mud Program: Mud, water & gas will be furnished by Northwest Pipeline Corporation from surface to total depth.

a) Spud Mud: Water, Gel, & Lime

b) Surface Casing to Intermediate casing depth: Water, Gel, Lime & Barite

c) From Intermediate casing depth to T.D. will be drilled with gas.

C. While drill pipe is in use, pipe rams shall be actuated to test proper functioning not less than one each day.

Once each trip, the blind rams shall be actuated to test proper functioning.

Record all tests on Northwest Pipeline tour report, with time each test was conducted.

IV. Materials:

A. Casing Program:

Hole Size	Depth	Casing Size	WT & Grade		Depth Set
12-1/4"	350'	9-5/8"	36#	K-55	350'
8-3/4"	3952'	7"	20#	K-55	3952'
6-1/4"	8250'	4-1/2"	10.5#	K-55	0' - 6800'
		4-1/2"	11.6#	K-55	6800 - T.D.

B. Float Equipment:
Surface Casing: 9-5/8" - Larkin Guide Shoe and Self-fill insert flat valve.
Intermediate Casing: 7" Dowell Guide Shoe.
Dowell Self-fill insert float valve.
Dowell Centralizers (5).
Production Casing: 4-1/2" Larkin Geyser Shoe.
Larkin Flapper type float collar.

C. Tubing: 8200' of 2-3/8", 4.7#, J-55. 8 RD EUE tubing with common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks of Class "B" cmt with 1/4# gel flake per sk and 3% Calcium Chloride, (100% excess to circulate 9-5/8" casing). WOC 12 hrs. Test to 600 PSI for 30 min.

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C. Production Casing: 4-1/2" - Precede cmt with 40 barrels of water mixed with 4 sks gel. Cmt with 250 sks of Class "B" cmt. with 8% gel, 12-1/2# fine gilsonite per sk and 0.4% HR-4. Tail in with 100 sks of Class "B" cmt. with 1/4# fine tuf-plug per sk. & 0.4% HR-4 per sk. (660 cu. ft. of slurry) (50% excess to fill to intermediate casing). Run temperature survey after 8 hrs. Perforate after 18 hrs.

PCT/fp

Paul C. Thompson

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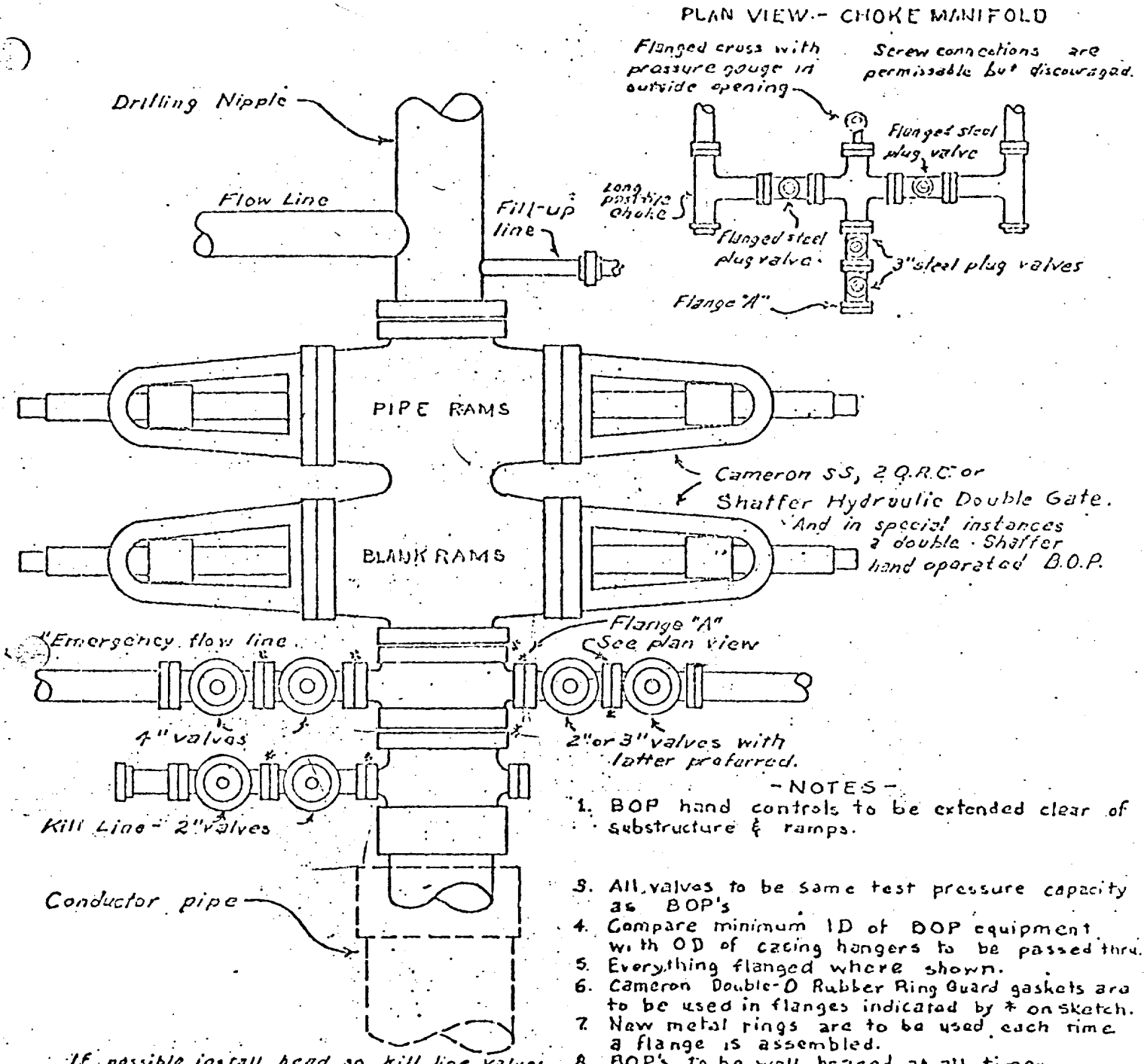

If possible install head so kill line valves will be under BOP's for protection. These valves to be kept closed after BOP's tested & kill line removed (by use of quick union) to fill-up line. When used this way kill line must be high-pressure.

- NOTES -

1. BOP hand controls to be extended clear of substructure & ramps.
3. All valves to be same test pressure capacity as BOP's
4. Compare minimum ID of BOP equipment with OD of casing hangers to be passed thru.
5. Everything flanged where shown.
6. Cameron Double-D Rubber Ring Guard gaskets are to be used in flanges indicated by * on sketch.
7. New metal rings are to be used each time a flange is assembled.
8. BOP's to be well braced at all times.

SINGLE PIPE RAM BLOWOUT PREVENTOR HOOKUP