

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24391

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF 078472		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR NORTHWEST PIPELINE CORPORATION			7. UNIT AGREEMENT NAME SAN JUAN 32-7 UNIT		
3. ADDRESS OF OPERATOR P.O. BOX 90, FARMINGTON, NM 87401			8. FARM OR LEASE NAME SAN JUAN 32-7		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface SEC. 28, T32N, R7W, 1795 FNL, 1575 FEL At proposed prod. zone SAME			9. WELL NO. 63		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 10 MILES SOUTH OF TIFFINY, COLORADO			10. FIELD AND POOL, OR WILDCAT BASIN DAKOTA		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1575'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC. 28, T32N, R7W		
16. NO. OF ACRES IN LEASE N/A			12. COUNTY OR PARISH RIO ARriba		
17. NO. OF ACRES ASSIGNED TO THIS WELL N 320			13. STATE N.Mexico		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.			20. ROTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6650 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"	32.3 #	350	185 Sks
8 3/4"	7 "	20 #	3927	175 Sks
6 1/4"	4 1/2"	10.5# & 11.6#	8220	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 north half of Section 28 is dedicated to this well. Gas is dedicated.

RECEIVED

APR 18 1980

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.RECEIVED
JUN 10 1980
OIL CON. COM.
DIST. 3

APR 17 1980

U. S. GEOLOGICAL SURVEY

IN 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:

NMOCC

*See Instructions On Reverse Side

DEVELOPMENT AND REVENUE ARE
SUBJECT TO REGULATIONS WITH ATTACHED
"GENERAL REQUIREMENTS"

ok Zull

APPROVED
AS AMENDED
DATE
James F. Smith
DISTRICT ENGINEER

**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.

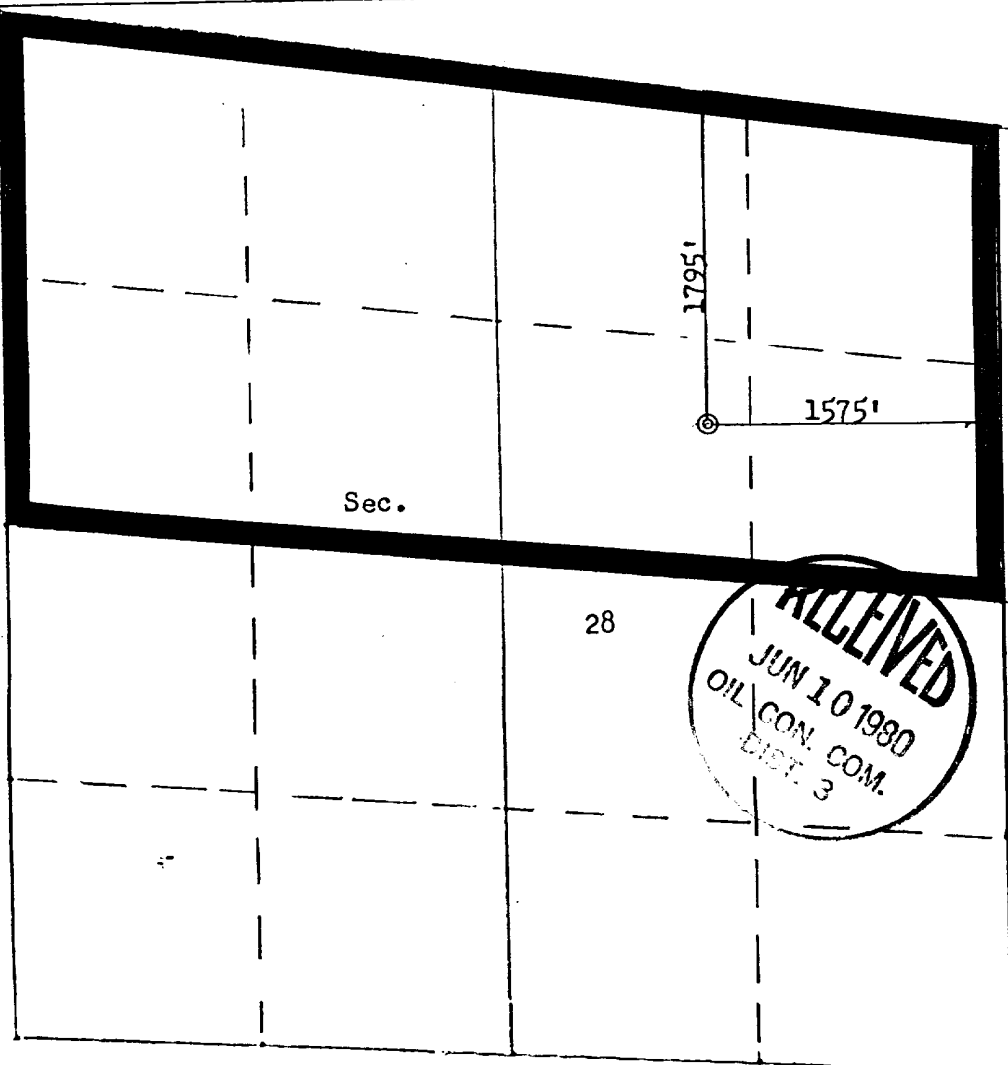
Operator NORTHWEST PIPELINE CORPORATION			Lease SAN JUAN 32-7 UNIT		Well No. 63
Unit Letter G	Section 28	Township 32N	Range 7W	County San Juan	
Actual Footage Location of Well:					
1795 feet from the North line and		1575 feet from the East line			
Ground Level Elev. 6650	Producing Formation Dakota	Pool Basin Dakota		Dedicated Acreage: 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?

☒ 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.



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 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

April 11 1980

Registered Professional Engineer and Land Surveyor

Fred B. Kertor
Fred B. Kertor

Certificate No. **3950**
F. B. KERR, JR.

DRILLING PROGNOSIS

San Juan 32-7 Unit #63

Date: April 11, 1980

I. Location: 1795' FNL & 1575' FEL
Sec. 28, T32N, R7W
Rio Arriba County, NMex.

Field: Basin Dakota

Elevation: 6650' GR.

II. Geology:

A.	<u>Formation</u>	<u>Depth</u>	<u>Formation</u>	<u>Depth</u>
	Ojo Alamo:	2563'	Point Lookout:	5880'
	Kirtland:	2707'	Mancos:	6045'
	Fruitland:	2992'	Gallup:	6795'
	Pictured Cliffs:	3540'	Greenhorn:	7950'
	Lewis:	3727'	Graneros:	8008'
	Cliff House:	5572'	Dakota:	8110'
			Total Depth:	8220'
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 @ 5880', 6795', 8008' and @ total depth. Record all gauges on daily drilling reports 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:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>WT & Grade</u>	<u>Depth Set</u>
12-1/4"	350'	9-5/8"	36# K-55	350'
8-3/4"	3927'	7"	20# K-55	3927'
6-1/4"	8220'	4-1/2"	10.5# K-55	0' - 6800'
		4-1/2"	11.6# K-55	6800' - TD

B. Float Equipment:

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

C. Tubing: 8170' of 2-3/8", 4.7#, J-55, 8 RD EUE tubing w/ common seating nipple above bottom joint.

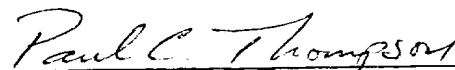
D. Well Head Equipment: Gray Tool Company drawing # E-5533, or equivalent. Well head representative to set slips on intermediate & Production strings.

V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks Cl "B" cmt w/ 1/4# gel flake/sk & 3% CaCl₂. (100% excess to circ 9-5/8" csg). WOC 12 hrs. Test to 600 PSI for 30 min.

B. Intermediate Casing: 7" - Use 125 sks of 65/35 Cl "B" poz w/ 12% gel & 15.52 gal of wtr per sk. Tail in w/ 50 sks of Cl "B" w/ 2% CaCl₂ (330 cu.ft of slurry, 60% excess to cover Ojo Alamo). Use top rubber plug only. Run temp survey after 8 hrs. WOC 12 hrs. Test csg to 1200 psi for 30 min.

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



F. H. Wood

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the

San Juan 32-7 Unit

Well Number #63

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. There will be a drainage ditch above the cut slope. *Blank*
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.

Multi-Point Surface Use Plan

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 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.

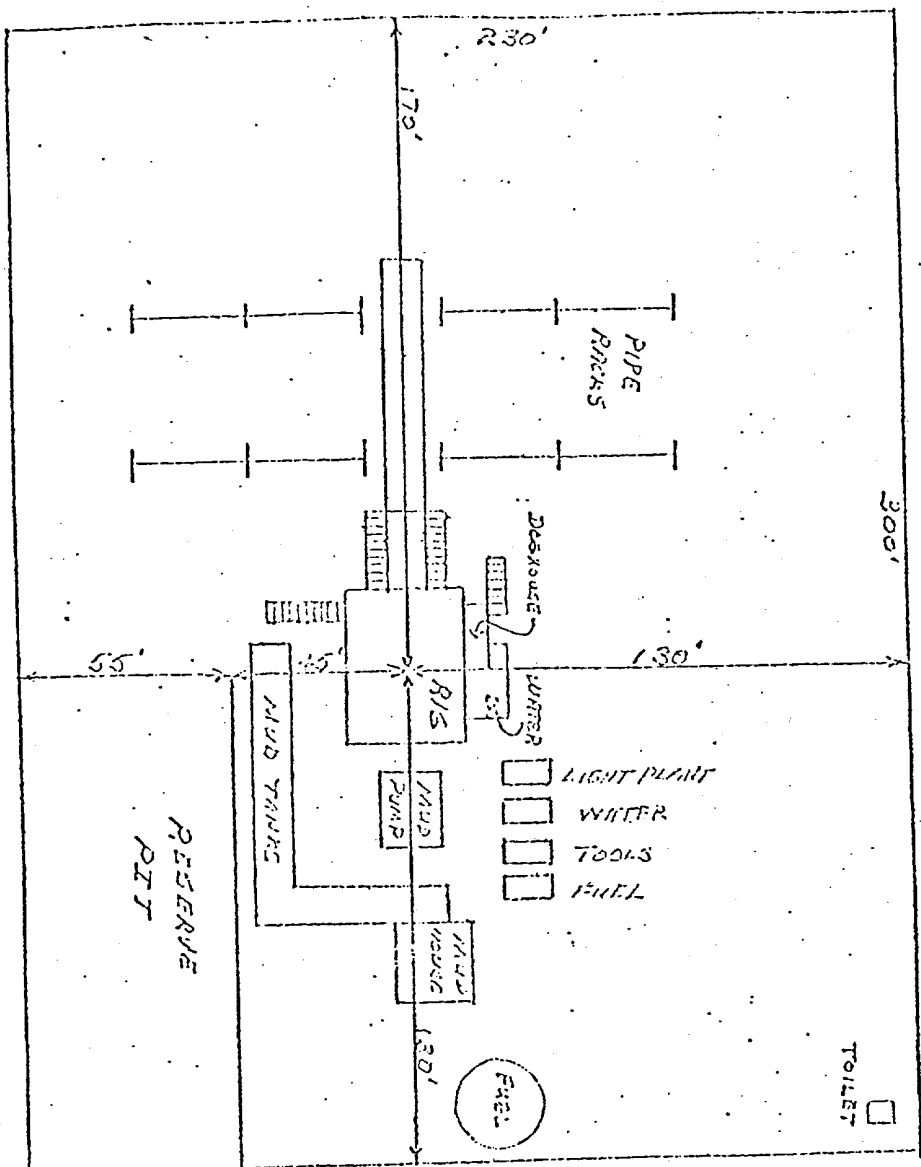
4-14-80
Date

Paul C. Thompson
Paul Thompson
Drilling Engineer

WJB/ch

NORTHWEST PIPELINE CONT.

SAN JUAN 32-7 #43



DATE.

SCALE: 1cm = 20'

OPERATIONS PLAN

I. Location: 1795' FNL & 1575' FEL
Sec. 28, T32N, R7W
Rio Arriba County, NMex.

Date: April 14, 1980
Lease Number: San Juan 32-7 #63

Field: Basin Dakota

Elevation: 6650' GR.

II. Geology:

A. Formation Tops	Depth	Formation	Depth
Ojo Alamo:	2563'	Point Lookout:	5880'
Kirtland:	2707'	Mancos:	6045'
Fruitland:	2992'	Gallup:	6795'
Pictured Cliffs:	3540'	Greenhorn:	7950'
Lewis:	3727'	Graneros:	8008'
Cliffhouse:	5572'	Dakota:	8110'
		Total Depth:	8220'

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 5880', 6795', 7669' 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
13-1/2"	350'	9-5/8"	36# K-55	350'
8-3/4"	3927'	7"	20# K-55	3927'
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: 8170' of 2-3/8", 4.7#, J-55, 8RD EUE tubing with a common seating nipple above bottom joint.

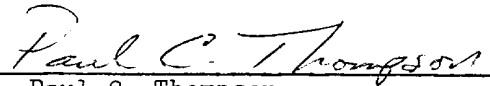
D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

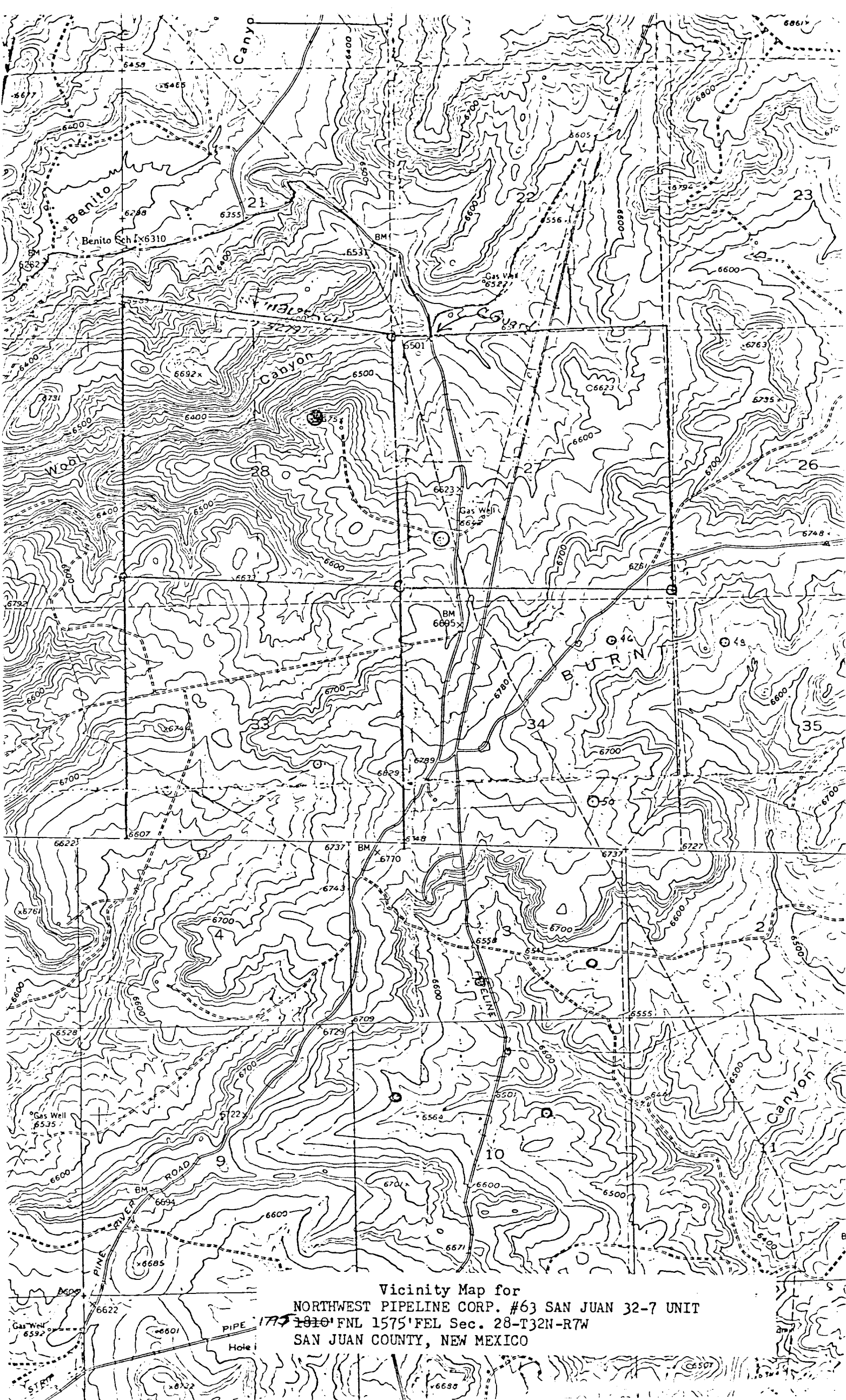
V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks of Cl "B" Cement with 1/4# gel flake per sk and 3% CaCl₂, (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 Cl "B" poz with 12% gel and 15.52 gals. of water per sk. Tail in w/50 sks Cl "B": with 2% CaCl₂ (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 Ci "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



Vicinity Map for
NORTHWEST PIPELINE CORP. #63 SAN JUAN 32-7 UNIT
1810' FNL 1575' FEL Sec. 28-T32N-R7W
SAN JUAN COUNTY, NEW MEXICO

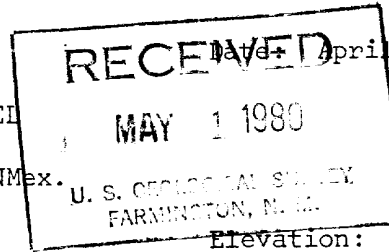
REVISED

DRILLING PROGNOSIS

San Juan 32-7 Unit #63

I. Location: 1795' FNL & 1575' FEL
Sec. 28, T32N, R7W
Rio Arriba County, NMex.

Field: Basin Dakota



Received April 11, 1980

Elevation: 6650' GR.

II. Geology: Surface: San Jose

- | A. <u>Formation</u> | <u>Depth</u> | <u>Formation</u> | <u>Depth</u> |
|---------------------|--------------|------------------|--------------|
| Ojo Alamo: | 2563' | Point Lookout: | 5880' |
| Kirtland: | 2707' | Mancos: | 6045' |
| Fruitland: | 2992' | Gallup: | 6795' |
| Pictured Cliffs: | 3540' | Greenhorn: | 7950' |
| Lewis: | 3727' | Graneros: | 8008' |
| Cliff House: | 5572' | Dakota: | 8110' |
| | | Total Depth: | 8220' |
- 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 @ 5880', 6795', 8008' and @ total depth.
Record all gauges on daily drilling reports 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:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>WT & Grade</u>	<u>Depth Set</u>
12-1/4"	350'	9-5/8"	36# K-55	350'
8-3/4"	3927'	7"	20# K-55	3927'
6-1/4"	8220'	4-1/2"	10.5# K-55	0' - 6800'
		4-1/2"	11.6# K-55	6800' - TD

B. Float Equipment:

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

C. Tubing: 8170' of 2-3/8", 4.7#, J-55, 8 RD EUE tubing w/ common seating nipple above bottom joint.

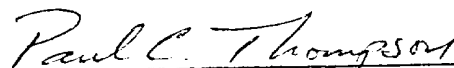
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V. Cementing:

A. Surface Casing: 9-5/8" - Use 185 sks Cl "B" cmt w/ 1/4# gel flake/sk & 3% CaCl₂. (100% excess to circ 9-5/8" csg). WOC 12 hrs. Test to 600 PSI for 30 min.

B. Intermediate Casing: 7" - Use 125 sks of 65/35 Cl "B" poz w/ 12% gel & 15.52 gal of wtr per sk. Tail in w/ 50 sks of Cl "B" w/ 2% CaCl₂ (330 cu.ft of slurry, 60% excess to cover Ojo Alamo). Use top rubber plug only. Run temp survey after 8 hrs. WOC 12 hrs. Test csg to 1200 psi for 30 min.

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



F. H. Wood

PLAN VIEW - CHOKE MANIFOLD

Flanged cross with pressure gauge in outside opening

Screw connections are permissible but discouraged.

Drilling Nipple

Flow Line

Fill-up line

Long post 1/2 choke

Flanged steel plug valve

Flanged steel plug valve

3" steel plug valves

Flange "A"

PIPE RAMS

BLANK RAMS

Cameron SS, 2 Q.R.C. or Shaffer Hydraulic Double Gate. And in special instances a double Shaffer hand operated D.O.P.

Flange "A" See plan view

Emergency flow line

4" valves

2" or 3" valves with latter preferred.

Kill Line - 2" valves

Conductor pipe

- NOTES -

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

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.

SINGLE PIPE RAM BLOWOUT PREVENTOR HOOKUP