

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22098

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF 080069		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" 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 29-5 Unit		
3. ADDRESS OF OPERATOR P.O. Box 90 - Farmington, N.M. 87401			8. FARM OR LEASE NAME San Juan 29-5		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1160' FSL & 950' FEL At proposed prod. zone			9. WELL NO. 97		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* NA			10. FIELD AND POOL OR WILDCAT Blanco Pictured Cliffs		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 950'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T29N, R5W		
16. NO. OF ACRES IN LEASE NA			12. COUNTY OR PARISH Rio Arriba		
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE New Mexico		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 500'+			19. PROPOSED DEPTH 3800'		
20. ROTARY OR CABLE TOOLS Rotary			21. APPROX. DATE WORK WILL START* July 30, 1979		
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 6818' GR			23. APPROX. DATE WORK WILL START* July 30, 1979		

PROPOSED CASING AND CEMENTING PROGRAM

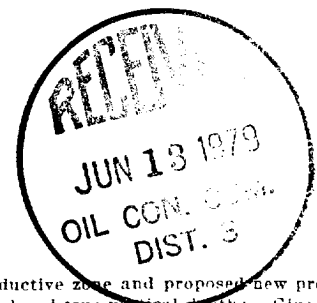
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	150'	90 sks.
6 3/4"	2 7/8"	6.4#	3900'	120 sks.

Selectively perforate and stimulate the Pictured Cliffs formation.

A BOP will be installed after the surface casing has been run and cemented.

All subsequent operations will be conducted through the BOP.

The SE/4 of Section 15 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 S. G. Katigis TITLE Production Engineer DATE 6/1/79
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

ok Fresh

*See Instructions On Reverse Side

RECEIVED

JUN 12 1979

GEOLOGICAL SURVEY

All distances must be from the outer boundaries of the Section.

Operator NORTHWEST PIPELINE CORPORATION			Lease SAN JUAN 29-5 UNIT		Well No. 97
Unit Letter P	Section 15	Township 29N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1160 feet from the South line and 950 feet from the East line					
Ground Level Elev. 6818	Producing Formation Pictured Cliffs		Pool GOBERNADOR Blanco	Dedicated Acreage: EXT 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 of them 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

William J. Billman
W.J. Billman

Position

Drilling Engineer

Company

Northwest Pipeline Corp.

Date

July 30, 1979

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

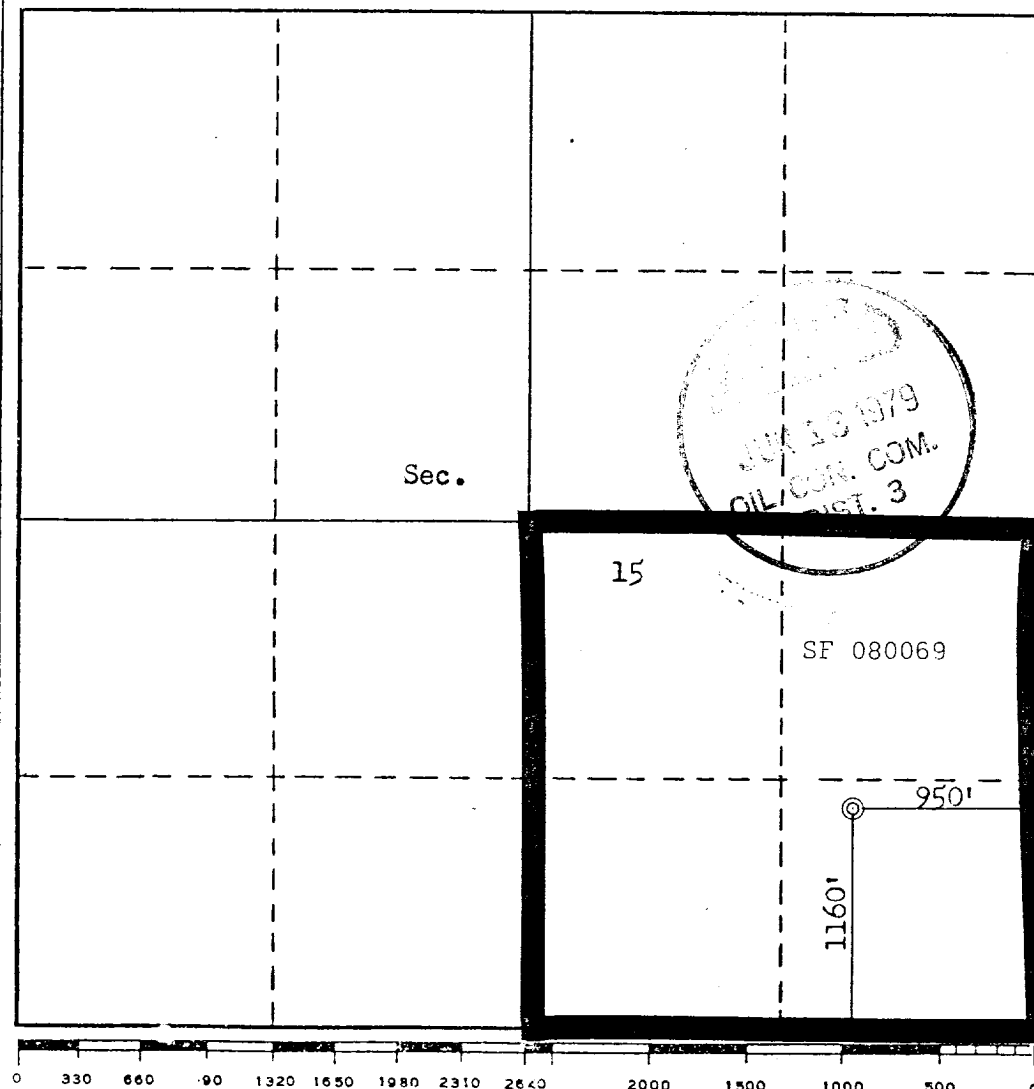
April 29, 1979

Registered Professional Engineer and/or Land Surveyor

Fred S. Kerr Jr.
Fred S. Kerr Jr.

Certificate No.

3950



OPERATIONS PLAN

San Juan 29-5 Unit #97

June 4, 1979

I. LOCATION: SE/4 SE/4 Sec. 15, T29N, R5W

LEASE NUMBER: SF 080069

FIELD: Blanco Pictured Cliffs

ELEVATION: 6818'

II. GEOLOGY:

A. Formation Tops	Depth:
Ojo Alamo	2897'
Kirtland	3128'
Fruitland	3477'
Pictured Cliffs	3787'
Total Depth	3800'

B. Logging Program: IES, CNL-FDC

C. Coring Program: None

D. Testing Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities: July 25, 1979, 2 weeks.

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 2950'.

Viscosity: 25-30 sec/qt.

Weight: 8.9-9.0 #/gal.

Water Loss: 7-12 cc

Ph: 8.5-9.5

c) From 2950' to Total Depth.

Viscosity: 38-60 sec/qt.

Weight: 9.0-9.5 #/gal.

Water Loss: 7-12 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"	150'	8 5/8"	24# K-55	150'
6 3/4"	3800'	2 7/8"	6.4# J-55	T.D.

V. CEMENTING:

- A. Surface Casing: 8 5/8" - Use 90 sks. Class "B" cement with 1/4# flocele per sack and 3% Calcium Chloride (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.
- B. Production Casing: 2 7/8" - Use 120 sacks 65/35 poz with 10% gel and 1/4 cu. ft. fine gilsonite per cu. ft. slurry and tail in with 50 sacks Class "B" cement with 2% Calcium Chloride. WOC 12 hours. Run temperature survey after 12 hours.

SGK/ch

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

for the

San Juan 29-5 Unit

Well #97

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 San Juan 29-6 Unit Water Well 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 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. Wall 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.

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: S.G. Katirgis, P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension #107.

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.

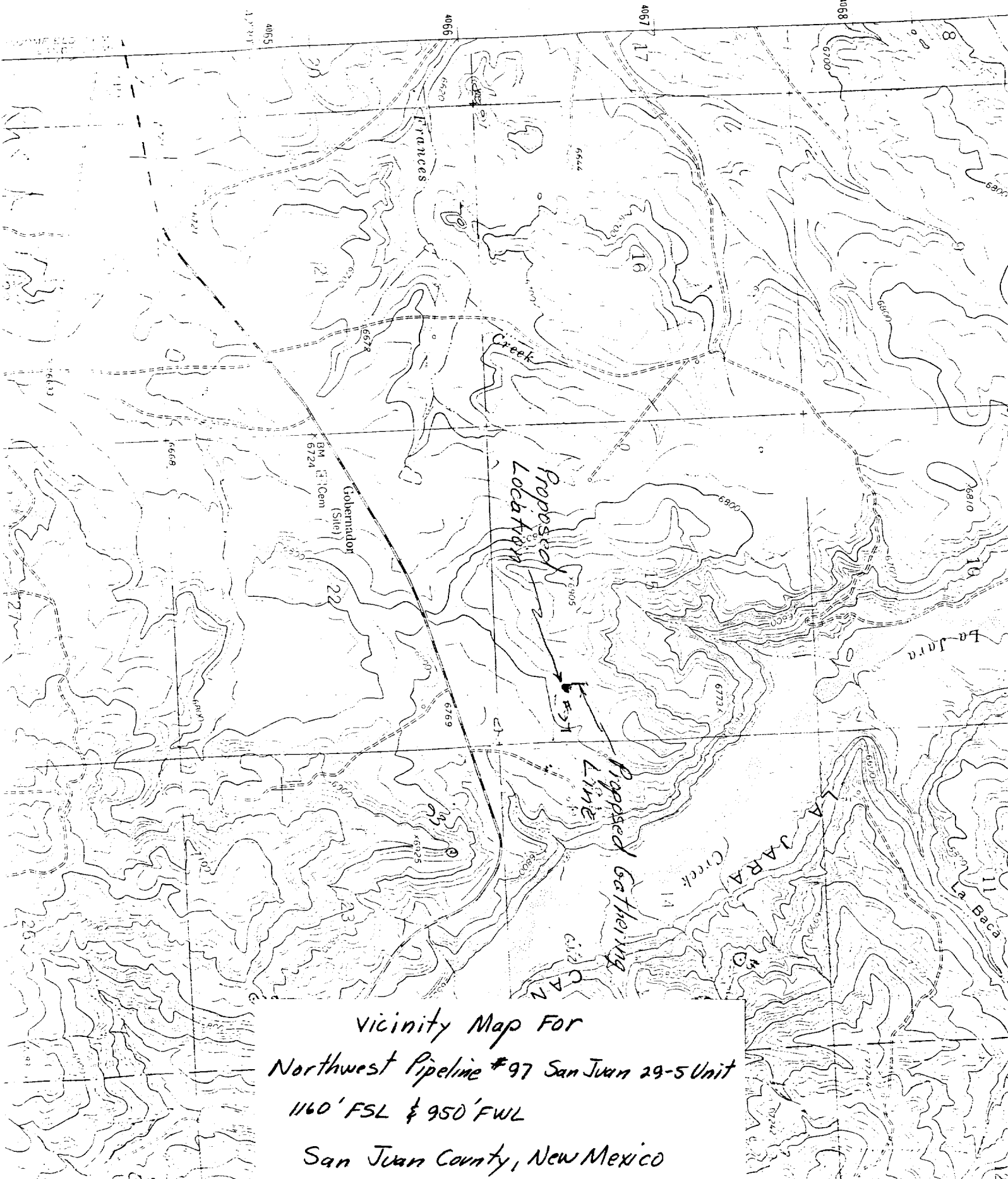
6-11-79

Date

S. Katirgis

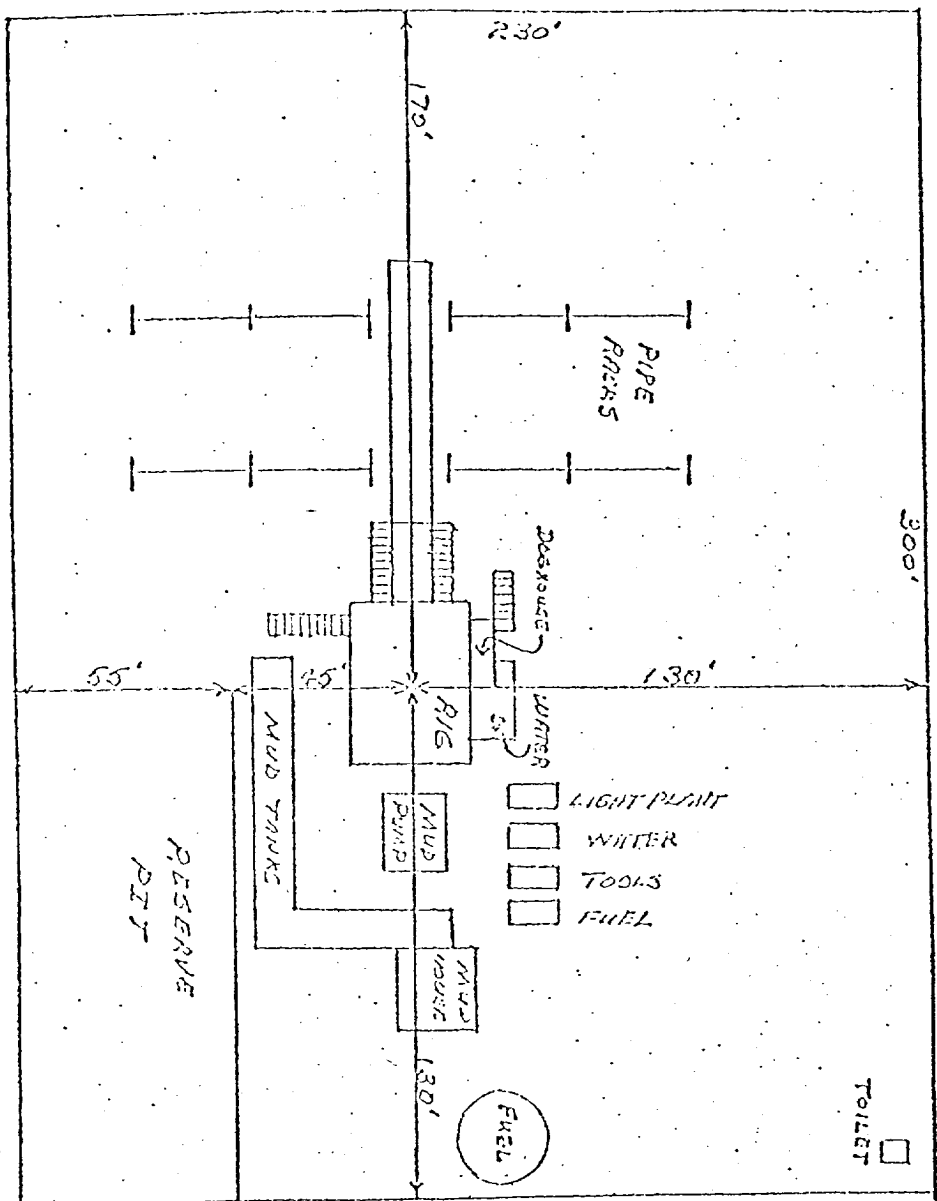
S.G. Katirgis
Production Engineer

SGK/ch



Vicinity Map For
Northwest Pipeline #97 San Juan 29-5 Unit
1160' FSL & 950' FWL
San Juan County, New Mexico

NORTHWEST PIPELINE CORP. San Juan 29-5 Unit #97



DATE: 6-11-79

SCALE: 1cm = 20'