

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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 079033	
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 29-5 Unit	
3. ADDRESS OF OPERATOR P.O. Box 90, Farmington, New Mexico 87401		8. FARM OR LEASE NAME San Juan 29-5 Unit	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1020' FSL & 1170' FEL At proposed prod. zone As Above		9. WELL NO. #94	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 4 Miles East of Gobernador Camp		10. FIELD AND POOL, OR WILDCAT Gobernador Pictured Cliffs	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 1020'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC 23, 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 N.M.	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA		19. PROPOSED DEPTH 4010'	
20. ROTARY OR CABLE TOOLS Rotary		21. APPROX. DATE WORK WILL START*	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6921' GR		22. APPROX. DATE WORK WILL START*	

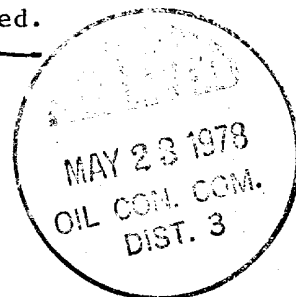
## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	150'	85 sks
6-3/4"	2-7/8"	6.4#	T.D.	160 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 23 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 D. H. Maioncelli TITLE Sr. Drilling Engineer DATE 5/17/78  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 5/18/78  
CONDITIONS OF APPROVAL, IF ANY:

*claf*

\*See Instructions On Reverse Side

**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.

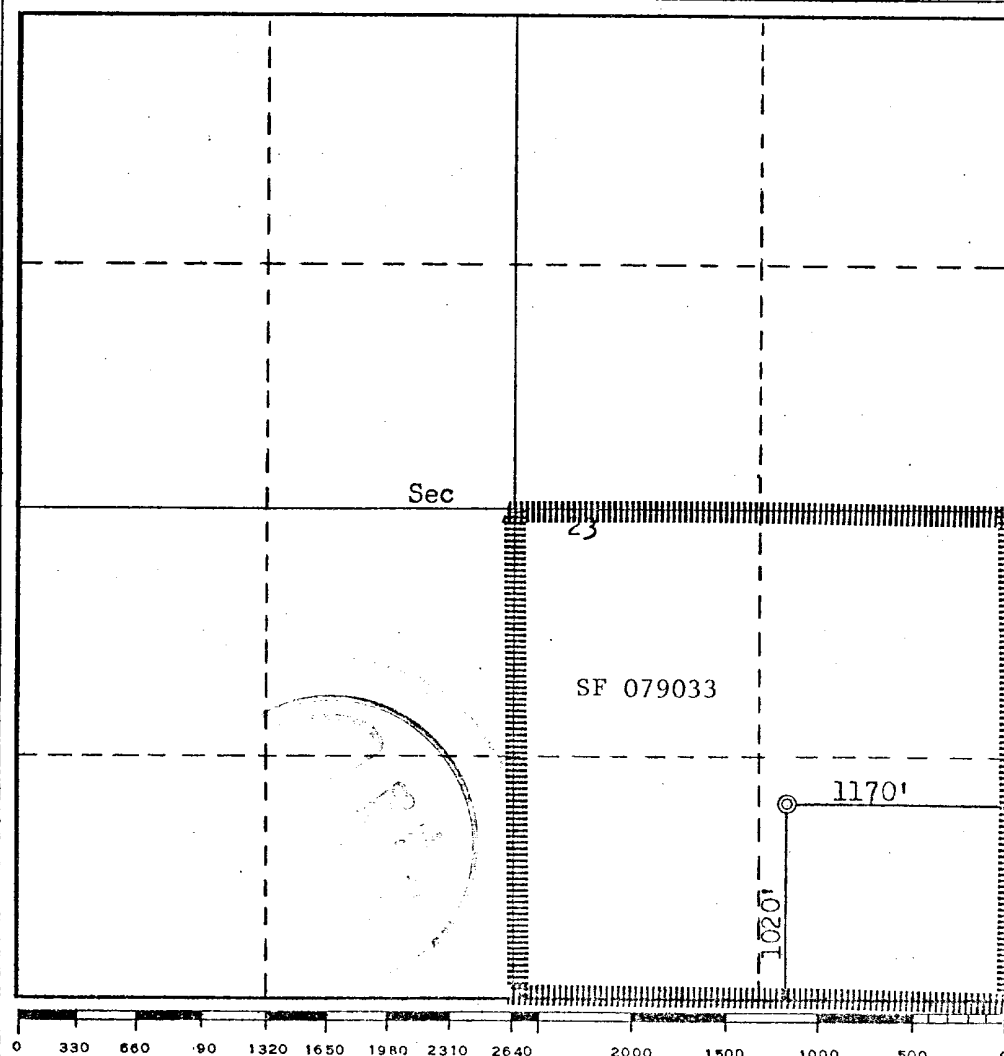
Operator <b>NORTHWEST PIPELINE CORPORATION</b>			Lease <b>San Juan 29-5 Unit</b>		Well No. <b>94</b>
Unit Letter <b>P</b>	Section <b>23</b>	Township <b>29N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1020</b> feet from the <b>South</b> line and <b>1170</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6921</b>	Producing Formation <b>Pictured Cliffs</b>		Pool <b>Gobernador Pictured Cliffs ext</b>		Dedicated Acreage; <b>160</b> 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 \_\_\_\_\_

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.*

*D. H. Maroncelli*  
Name

D.H. Maroncelli

Position

Sr. Drilling Engineer

Company

Northwest Pipeline Corp.

Date

5/16/78

*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

May 12, 1978

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.

Certificate No. **3950**

NORTHWEST PIPELINE CORPORATION

MULTI - POINT SURFACE USE PLAN

For The San Juan 29-5 Unit

Well Number 94

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 run off and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other 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. The pipeline will be constructed adjacent to the access road where possible.
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. Well Site Layout: See attached layout sheet.
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 the site. For this well code number 959-34127, 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.

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: D.E. Richardson, P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension #62.

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.

5/16/78  
Date

D.H. Marionelli for DER  
D.E. Richardson  
Drilling Engineer

DER/ch

## OPERATIONS PLAN

San Juan 29-5 Unit #94

May 17, 1978

I. LOCATION: SE/4 SEC 23, T29N, R5W

LEASE NUMBER: SF 079033

FIELD: Gobernador Pictured Cliffs

ELEVATION: 6921 GR

### II. GEOLOGY:

#### A. Formation Tops:

Ojo Alamo:	3002'	Total Depth:	4010'
Kirtland:	3242'		
Fruitland:	3589'		
Pictured Cliffs:	3857'		

B. Logging Program: IES & GR-Density at T.D.

C. Coring Program: None

D. Testing Program: None

### III. DRILLING:

A. Anticipated starting date and duration of activities: June 15, 1978 for 10 days.

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 3300'

Viscosity: 25-30 sec/qt.  
Weight: 8.9-9.0 #/gal.  
Water Loss: 7-12 cc  
Ph: 8.5-9.5

- c) From 3300' to T.D.

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:

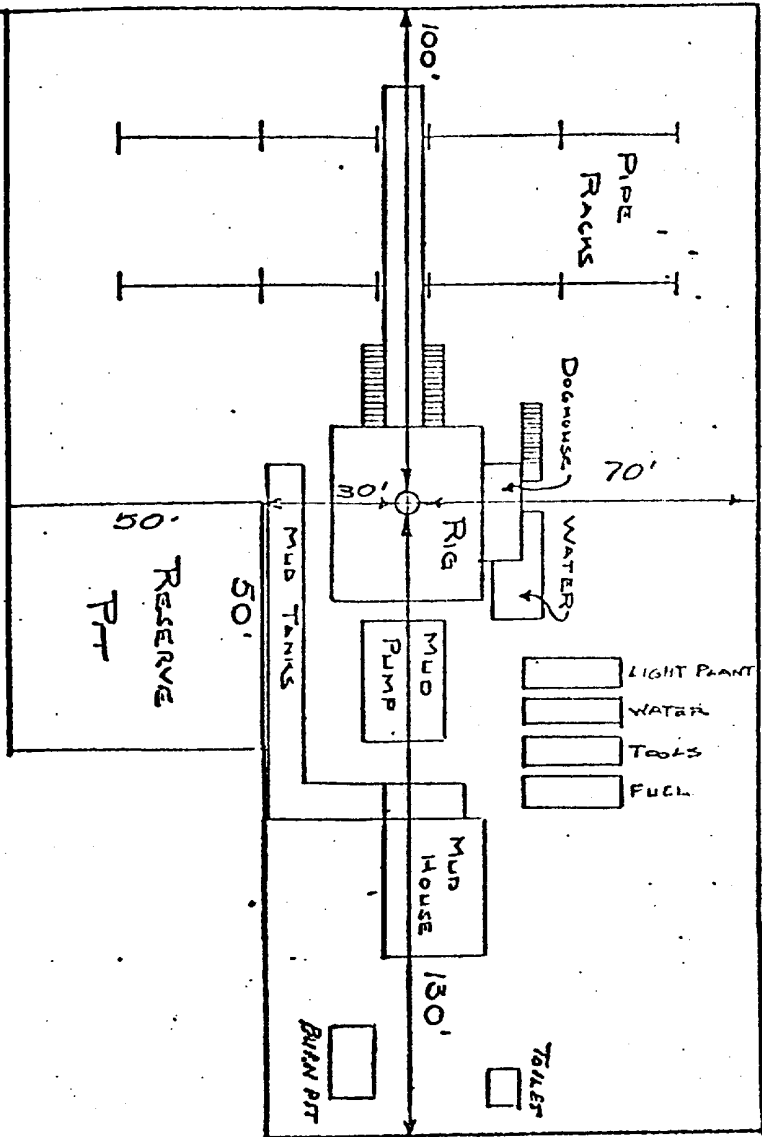
<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>
12 1/4"	150	8 5/8"	24# K-55	150'
6 3/4"	4010	2 7/8"	6.4# J-55	T.D.

V. CEMENTING:

- A. Surface Casing 8 5/8" - Use 85 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 160 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.

DHM/ch

NORTHWEST PIPELINE CORPORATION  
LOCATION Layout  
SAN JUAN 29-5 Unit #94





# PLAN VIEW-- CHOKER MANIFOLD

Flanged cross with pressure gauge in outside opening

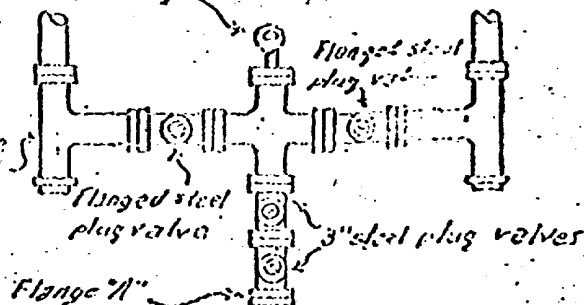
Screw connections are permissible but discouraged.

Drilling Nipple

Flow Line

Fill-up line

Long port type choke



PIPE RAMS

BLANK RAMS

Cameron SS, 2" Q.R.C. or Shaffer Hydraulic Double Gate.

"Emergency flow line

Flange "A" See Plan View

4" valves

2" or 3" valves with latter preferred.

Kill Line - 2" valves

CASING HEAD

Conductor pipe

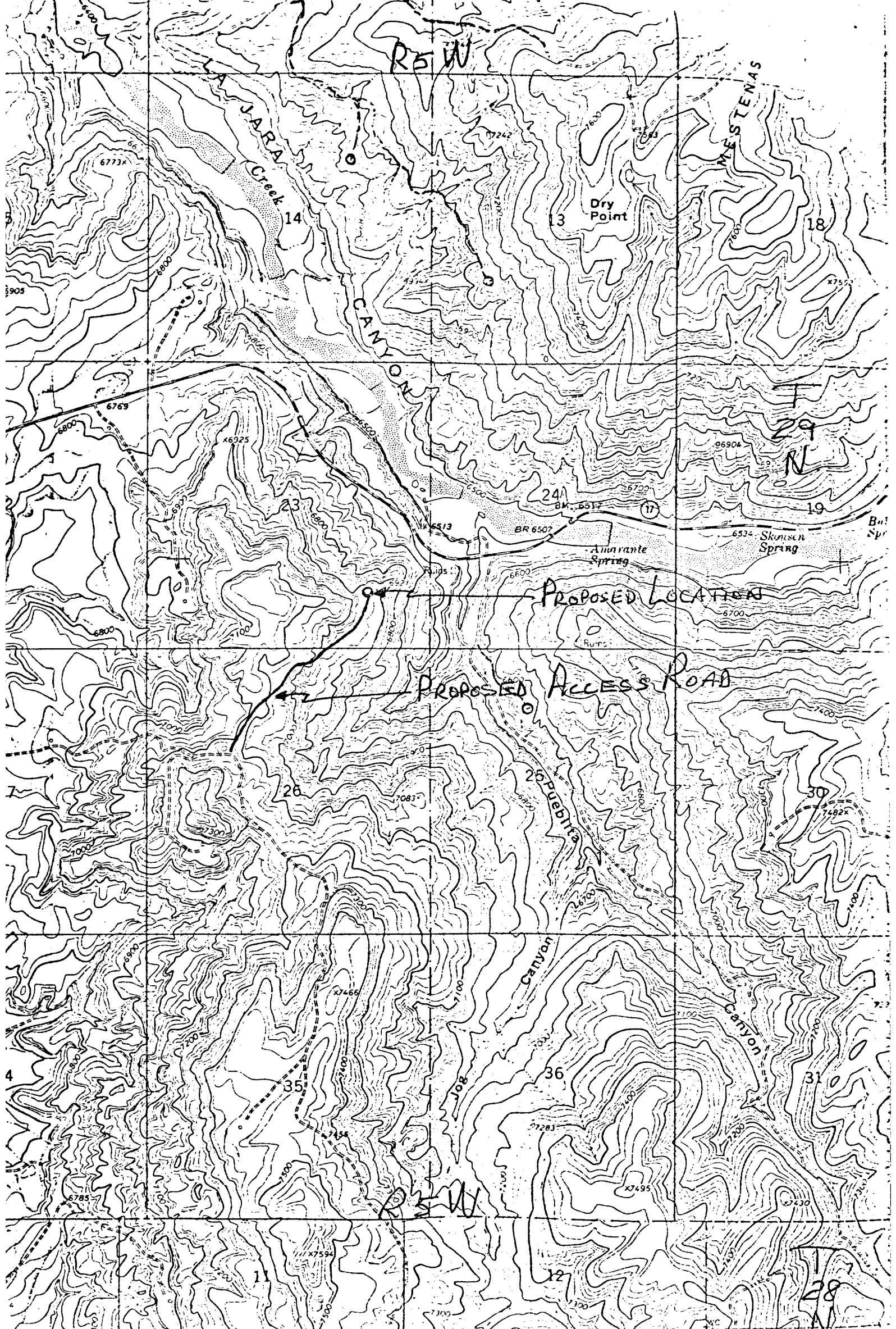
IF NEEDED

## NOTES

All valves to be same test pressure capacity as BOP's.  
Compare minimum ID of BOP equipment with OD of casing hangers to be passed thru. Everything flanged where shown. Cameron Double-O Rubber Ring Guard gaskets are to be used in flanges indicated by \* on sketch. New metal rings are to be used each time a flange is assembled. 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



Vicinity Map for  
NORTHWEST PIPELINE CORP. #94 San Juan 29-5 Unit  
1020' FSL 1170' FEL Sec 23-T29N-R5W  
Rio Arriba County, New Mexico