

District I
PO Box 1980, Hobbs, NM 88241-1980

District II

PO Drawer DD, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-101

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

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APR 25 1994

OIL CONSERVATION DIVISION

PO Box 2088

Santa Fe, NM 87504-2088

OIL CON. DIV.

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. NORTHWEST PIPELINE CORPORATION c/o Walsh Engr. & Prod. Corp. 7415 E. Main Farmington, New Mexico 87401		OGRID Number 16189
(505) 327-4892		API Number 30-034-25389
Property Code 008480	Property Name Rosa Unit	Well No. #32

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South Line	Feet from the	East/West Line	County
H	21	31N	6W		1481	North	1035	East	Rio Arriba

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South Line	Feet from the	East/West Line	County
72319 Blanco Mesa Verde					96175 Wildcat; Rosa-Pictured Cliffs				
N 1/4 345.32					176.88				

Work Type Code N	Well Type Code M	Cable/Rotary R	Lease Type Code S	Gross Level Elevation 6316
Multiple Y	Proposed Depth 5960'	Formation Mancos	Contractor N/A	Spud Date 6/1/94

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36.0#	500'	265 (315 cuft)	Surface
8-3/4"	7"	20.0#	3640'	500 (958 cuft)	Surface
6-1/4"	4-1/2"	10.5#	3490-5960'	235 (407 cuft)	3490

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Northwest Pipeline proposes to drill a vertical well to develop the Pictured Cliffs and Mesa Verde formations at the above described location in accordance with the attached drilling plan. After surface pipe is set, a 3000# BOP will be installed for the remainder of the well. Please refer to the attached BOP and Choke Manifold Diagrams.

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

Signature:

Paul C. Thompson

Printed name:

Paul C. Thompson, P.E.

Title:

Agent

Date:

4/22/94

Phone:

505 327-4892

OIL CONSERVATION DIVISION

Approved by:

Erica Burch

Title:

DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date:

APR 25 1994

Expiration Date:

APR 25 1995

Conditions of Approval:

Attached ☐

16			
1 48.44	2 48.44	3 48.44	1035'
SEC.	21		

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

Paul C. Thompson
 Signature

Paul C. Thompson, P.E.
 Printed Name

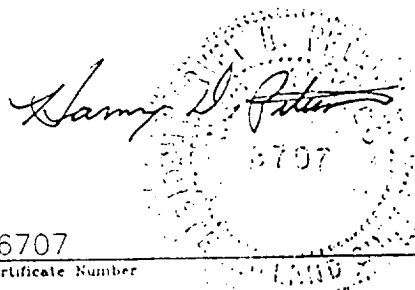
Agent
 Title

4/18/94
 Date

18 SURVEYOR CERTIFICATION
 I hereby certify that the well location shown on this plan 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 belief.

APRIL 1, 1994
 Date of Survey

Signature and Seal of Professional Surveyor:



Larry J. Fisher
 6707
 Certificate Number

RECEIVED
 APR 25 1994
 OIL CONL. DIV.
 DUSTIN

☐ AMENDED REPORT

Certificate Number

NORTHWEST PIPELINE CORPORATION
OPERATIONS PLAN

DATE: 03/24/94

WELLNAME: ROSA UNIT #32

FIELD: Blanco PC/MV

LOCATION: NE/4 NE/4 Sec. 21, T31N, R6W
Rio Arriba Co., NM

SURFACE: Bureau of Rec.

ELEVATION: 6316' GR

MINERALS: State

TOTAL DEPTH: 5960'

LEASE # E-289

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS:

Ojo Alamo	2353'	Cliff House	5338'
Kirtland	2463'	Menefee	5378'
Fruitland	2898'	Point Lookout	5608'
Pictured Cliffs	3198'	Mancos	5773'
Lewis	3488'	Total Depth	5960'

B. LOGGING PROGRAM: IND/GR, CDL/SNL. Log the Pictured Cliffs from TD to the Kirtland. Log the Mesa Verde from TD to 500' above the Cliff House.

C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: Clear water with benex to 7" casing point. LSND to log and run pipe.

B. BOP TESTING: While drill pipe is in use, the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. The drum brakes will inspected and tested each tour. All tests and inspections will be recorded in the tour book as to time and results.

III. MATERIALS

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	500'	9-5/8"	36# K-55
Intermediate	8-3/4"	3640'	7"	20# K-55
Prod. Liner	6-1/4"	3490-5960'	4-1/2"	10.5# K-55

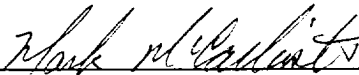
B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place float one(1) joint above the shoe and five(5) centralizers, spaced every other joint, starting with the float collar. Place turbulent centralizers, at 120' intervals, starting at 2463' to the surface.
3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a float collar and an insert float on top of bottom joint.

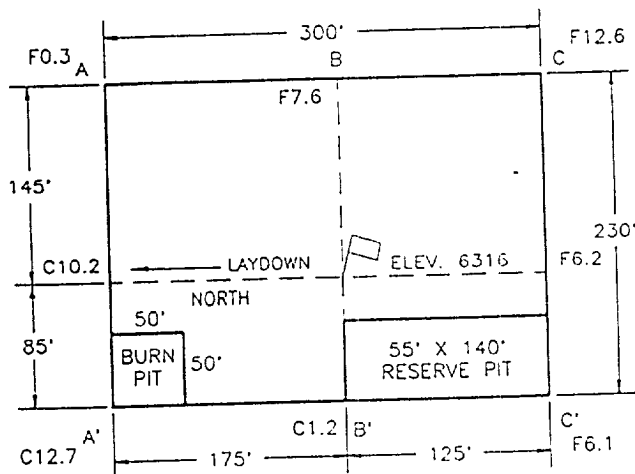
C. CEMENTING:

1. SURFACE: Use 265 sx (315 cu.ft.) of class "B" with 3% CaCl₂ and 1/4# of cello-flake/sk (Yield = 1.19 cu.ft./sk, Weight = 15.6 #/gal.). Use 100% excess to circulate the surface. WOC 12 hours. Test to 1500#.
2. INTERMEDIATE: Lead - 400 sx (840 cu.ft.) of class "B" 65/35 poz with 12% gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 100 sx (118 cu.ft.) of class "B" with 1/4# cello-flake/sk (Yield = 1.18 cu.ft./sk, Weight = 15.6 #/gal.). Use 75% excess to circulate the surface. Total volume = 958 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
3. PRODUCTION LINER: Use 235 sx (407 cu.ft.) of class "B" with 4% gel, 6-1/4# fine gilsonite/sk and 0.5% Halad 9 (Yield = 1.73 cu.ft./sk, Weight = 13.5 #/gal.). Displace cement at a minimum of 10 BPM. Use 60% excess to cover liner top. WOC 12 hours. Run a temperature survey after 8 hours if liner top is not circulated. Test to 1500#.

file:#32oppl


Mark McCallister
Sr. Engineer, Production & Drilling

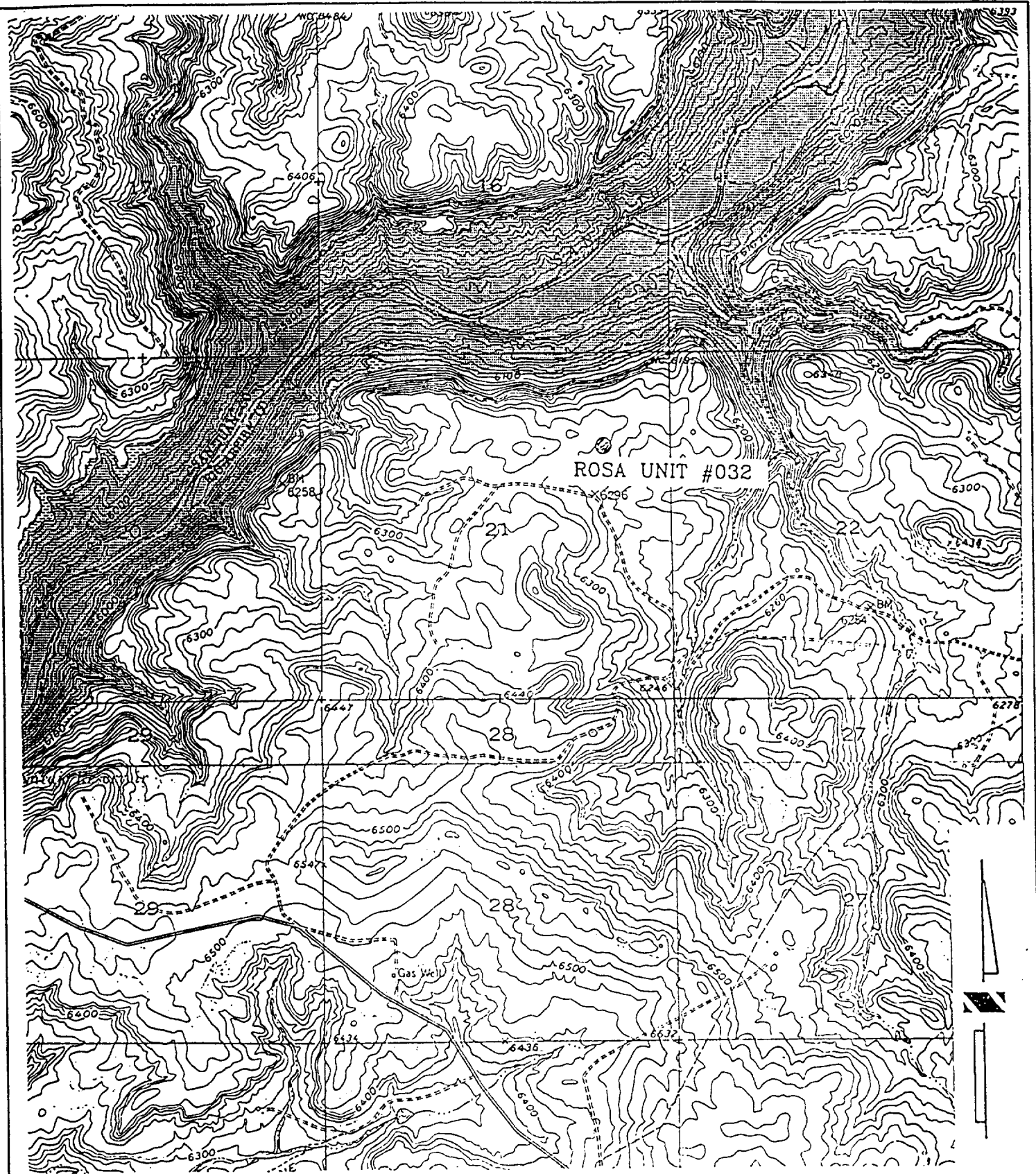
COMPANY: NORTHWEST PIPELINE CORPORATION
 LEASE: ROSA UNIT #032
 FOOTAGE: 1481' FNL. 1035' FEL
 SEC: 21 TWN: 31-N RNG: 6-W NMPM
 GROUND ELEVATION: 6316



ELEV.	A-A'	C/L
6346		
6336		
6326		
6316		
6306		
6296		

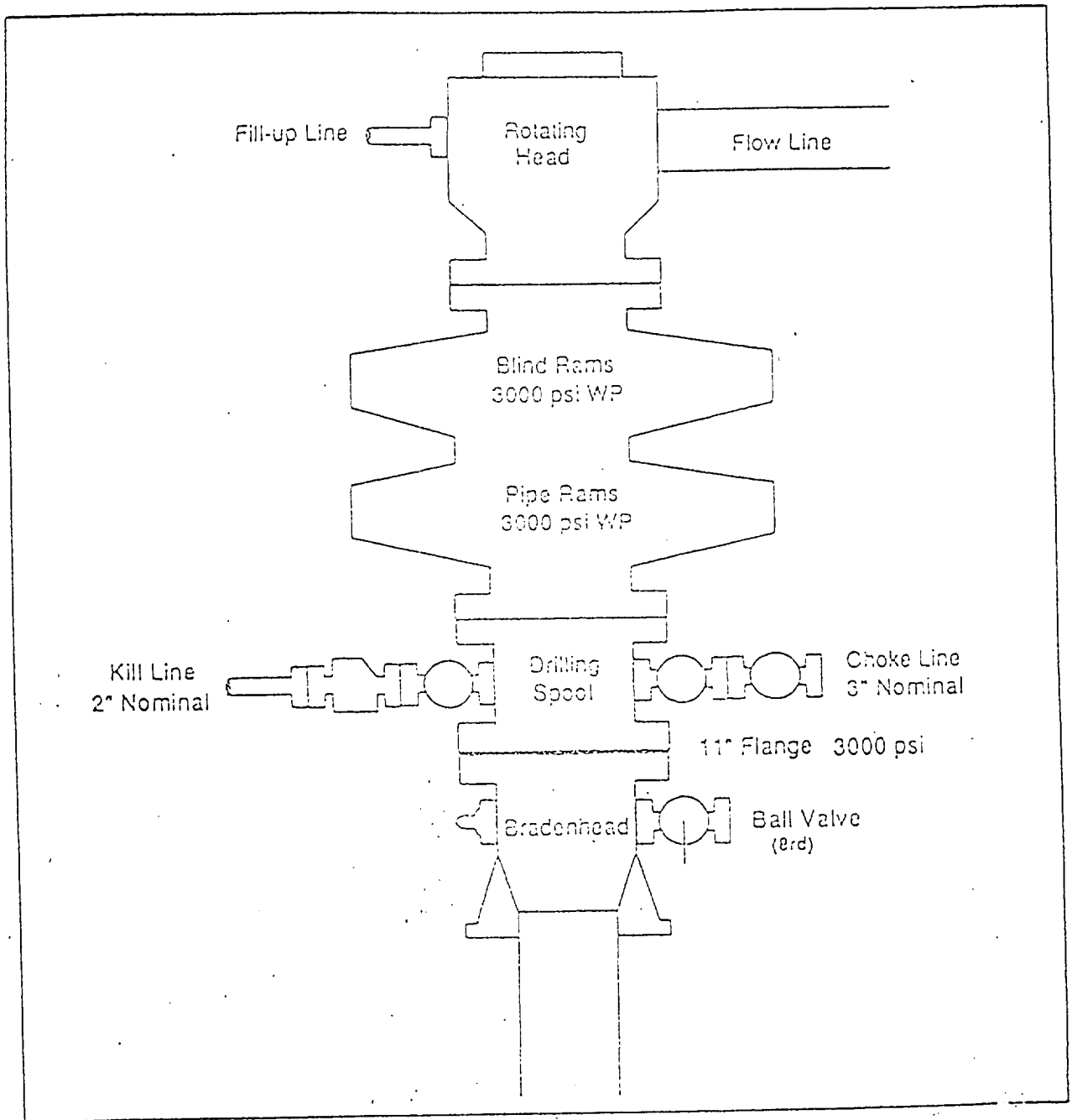
ELEV.	B-B'	C/L
6346		
6336		
6326		
6316		
6306		
6296		

ELEV.	C-C'	C/L
6346		
6336		
6326		
6316		
6306		
6296		

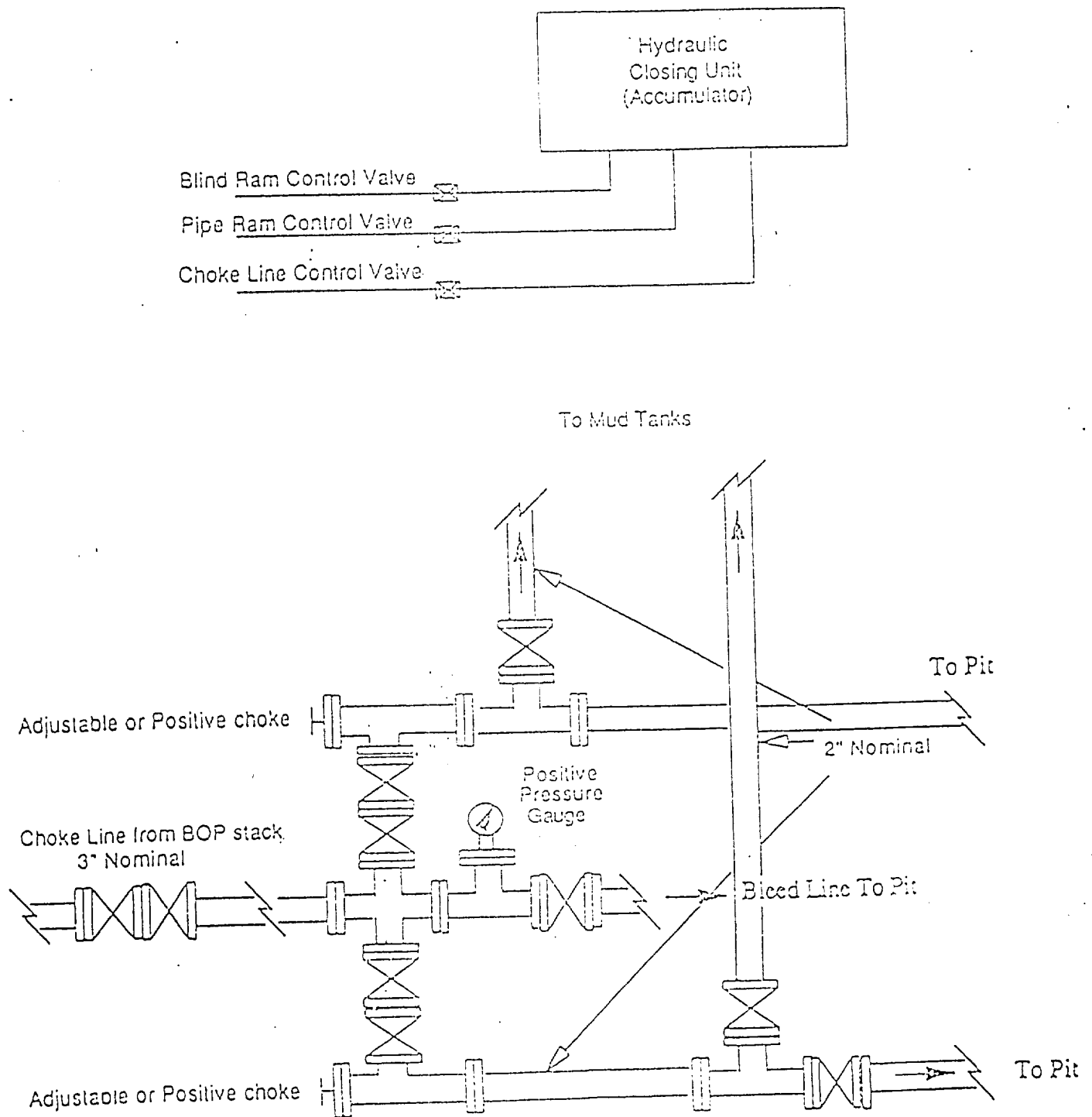


ROSA UNIT #032 NORTHWEST PIPELINE CORPORATION
 1481' FNL, 1035' FEL, SEC. 21, T.31 N., R.6 W. N.M.P.M.
 RIO ARriba COUNTY, NEW MEXICO
 BANCOS MESA NW
 ELEV.= 6316

BOP STACK ARRANGEMENT

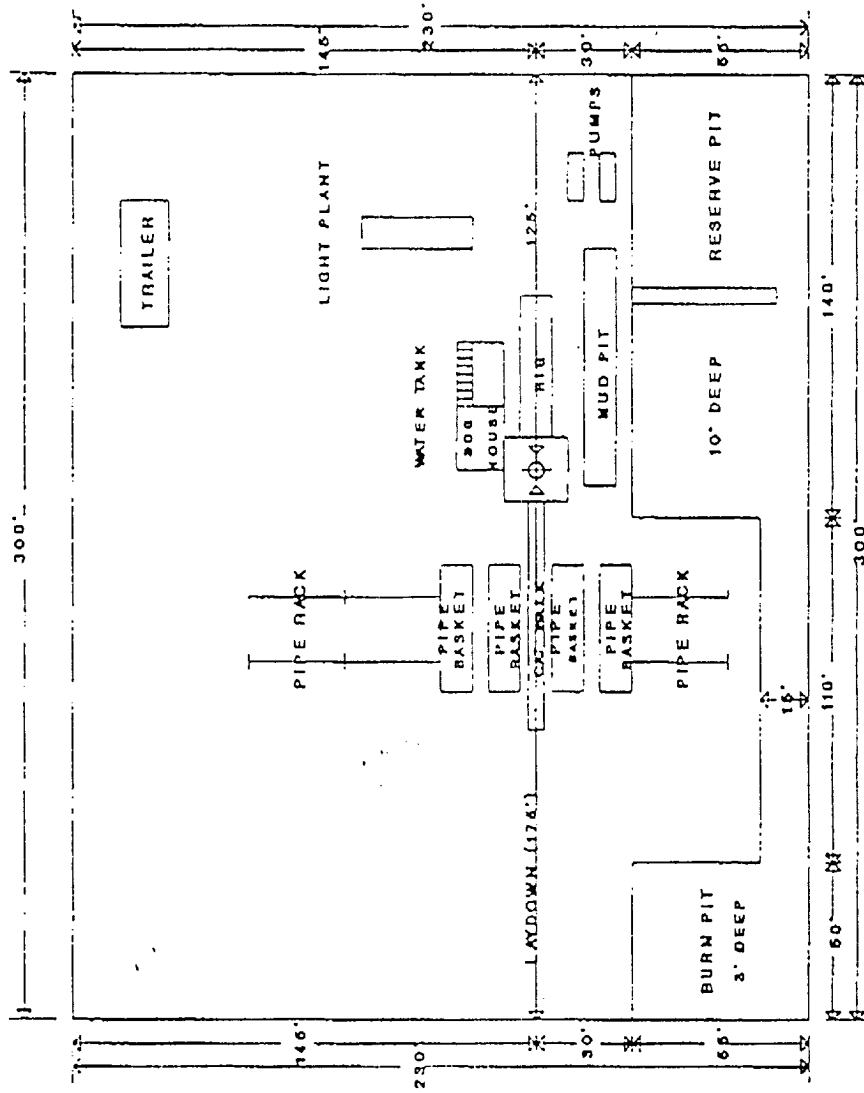


Choke Manifold & Accumulator Schematic



NORTHWEST PIPELINE CORPORATION

LOCATION DIAGRAM



NORTHWEST PIPELINE CORPORATION

ROSA UNIT #32

1481'FNL, 1035'FEL, SEC. 21, T31N, R6W

Rio Arriba County, New Mexico