

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural ResourcesOil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-101

May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

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

Operator Name and Address Pogo Producing Company- 300 N Marienfeld Suite 600 Midland, TX 79701		OGRID Number 233194-12891
Property Code 300181	Property Name Northridge	API Number 30-045-33793
Proposed Pool 1 Basin Fruitland Coal		Proposed Pool 2

## Surface Location

UL or lot no. A	Section 3	Township 29N	Range 13W	Lot Idn ①	Feet from the 679'	North/South line North	Feet from the 923'	East/West line East	County San Juan
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## Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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## Additional Well Information

Work Type Code N	Well Type Code G	Cable/Rotary Rotary	Lease Type Code P	Ground Level Elevation 5550'
Multiple N	Proposed Depth +/-1595	Formation Basin Fruitland Coal	Contractor Availability	Spud Date ASAP
Depth to Groundwater +/- 35'		Distance from nearest fresh water well +/- 1000'		Distance from nearest surface water +/- 1000'
Pit: Liner: Synthetic <input type="checkbox"/> 20 mils thick Clay <input type="checkbox"/> Pit Volume: 160 bbls Drilling Method: Rotary <input checked="" type="checkbox"/> Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

## Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8-3/4"	7"	20#	390'	150sx	Surface
6-1/4"	4-1/2"	10.5#	1595'	200sx	Surface

<sup>22</sup> 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.

Pogo plans to drill a vertical well with a 8-3/4" surface hole to approx. 390' with spud mud and set and cement to surface 7", 20# casing with 150 sx (175 cu. ft.) of type 5 with additives. A double ram, 2000 pound psi rated BOP will be installed and pressure tested to 1000 psi. A 6-1/4 hole will be drilled using clear water, natural mud, and water loss control additives to approx. 1595'. New 4-1/2" casing will be set and cemented to surface, with type 5 additives. Cement volumes will be determined based on open hole logs.

KB elevation: approx. +/- 5550'

Surface formation: Ojo Alamo

Top Kirtland formation: 410' (+5140') Top Fruitland Formation 1060' (+4490') Top Pictures Cliffs Formation 1445' (+4105') Top Lewis Shale 1600' (+3950')

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOC guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Brad Salzman

Title: Drilling Consultant

E-mail Address: brads@titusconsulting.net

Date:

Phone: 505-486-1701

## OIL CONSERVATION DIVISION

Approved by:

Title:

DEPUTY OIL &amp; GAS INSPECTOR, DIST. 8

Approval Date: JUN 09 2006

Expiration Date:

Conditions of Approval Attached ☐

No sub-grade pits or tanks

State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

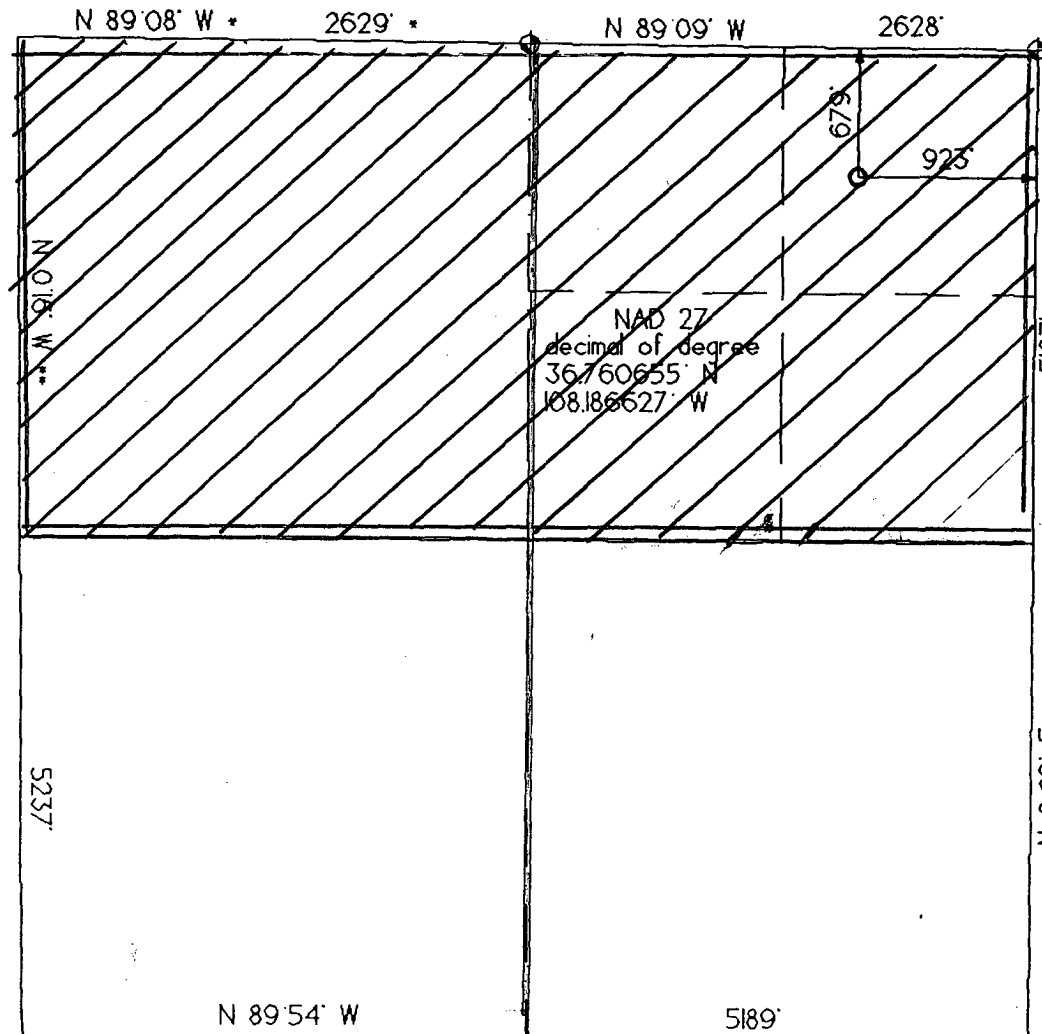
APA Number <i>30-045-33793</i>	Pool Code <i>71629</i>	Pool Name <i>Basin Fritland coal</i>
Property Code <i>300781</i>	Property Name NORTHIDGE	Well Number 3
OGRID No. <i>233194</i>	Operator Name POGO PRODUCING CO.	Elevation 5552'

Surface Location									
UL or Lot A	Sec. 3	Top. 29 N.	Rge. 13 W.	Lot Id. <i>1</i>	Feet from 679'	North/South NORTH	Feet from 923'	East/West EAST	County SAN JUAN

Bottom Hole Location If Different From Surface									
UL or Lot	Sec.	Top.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

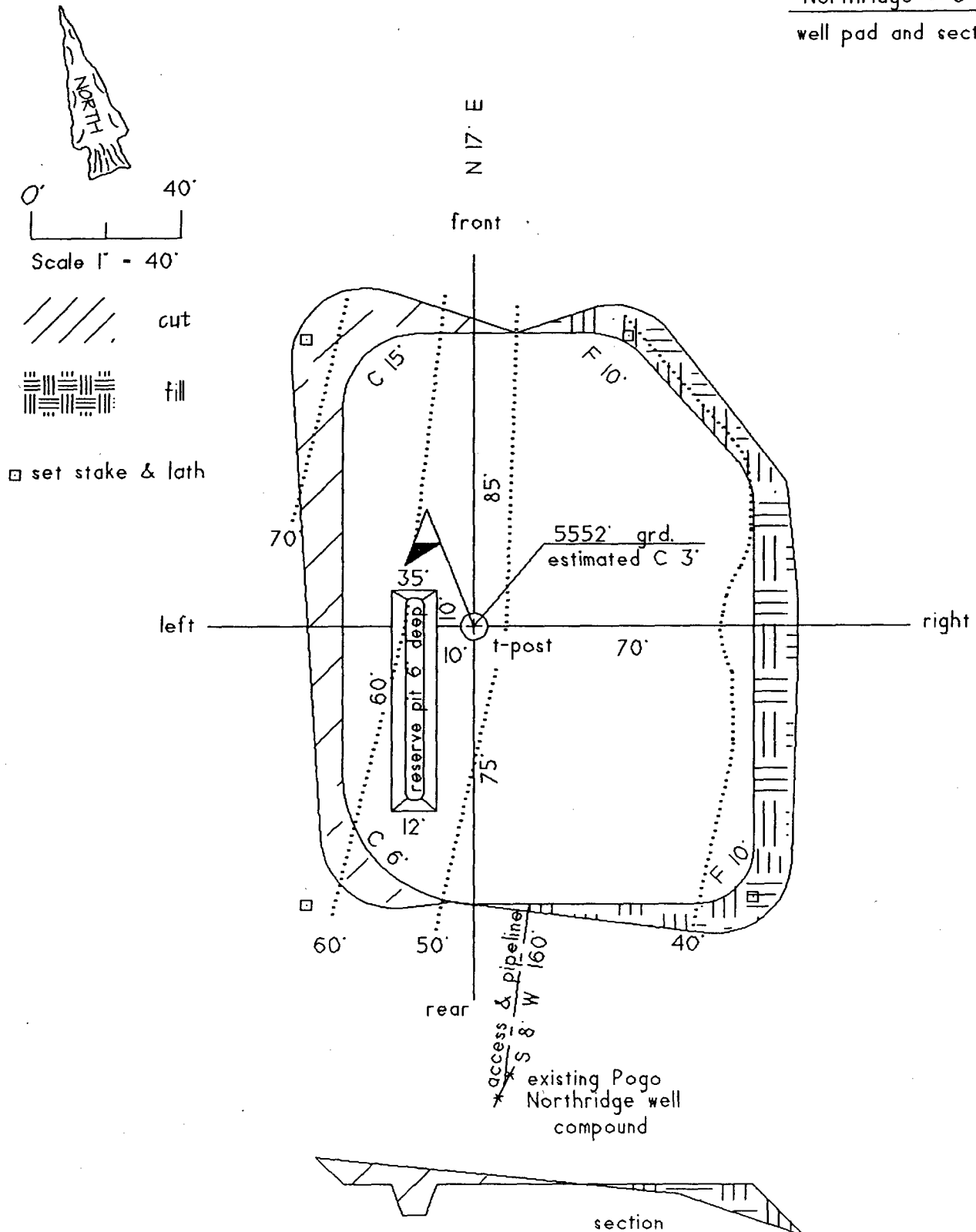
Dedication <i>N/A</i>	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature <i>B.W. Faltzman</i>	
Printed Name <i>B.W. Faltzman</i>	
Title <i>CONSULTANT</i>	
Date <i>6-7-06</i>	
<b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location 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 belief. Date of Survey <i>09/22/05</i>	
Signature and Seal of Professional Surveyor 	

Northridge # 3  
well pad and section



## TEN-POINT PROGRAM/ OPERATIONS PLAN POGO PRODUCING COMPANY

**Well name:** Northridge #3  
**Location:** 679' FNL & 923' FEL, A, Sec. 3, T-29-N, R-13-W, NMPM  
San Juan County, NM  
**Formation:** Basin Fruitland Coal

1. The geological surface formation is: Ojo Alamo
2. The tops of important geological markers: (based on existing log information)

Top Kirtland	410'
Top Fruitland	1060'
Top Pictured Cliffs	1445'
Top Lewis Shale	1600'

3. Estimated depths of anticipated water, oil, gas, or minerals:

<u>Substance</u>	<u>Formation</u>	<u>Anticipated Depth</u>
Gas	Fruitland Coal	1645'

#### 4. The Casing Program:

<u>Depth</u>	<u>Hole Size</u>	<u>Casing O.D.</u>	<u>Wt.</u>	<u>Grade</u>	<u>Type</u>	<u>New/Used</u>
0-650'	8 3/4"	7"	20#	J-55	ST&C	New
0-1645'	6 1/4"	4-1/2"	10.5#	J-55	ST&C	New

Proposed Cement Program: To effectively isolate and seal off all water, oil, gas and coal bearing strata encountered by the utilization of spacer, centralizers and swirling centralizers at the base of the Ojo Alamo formation as specified by NTL-FRA 90-1 III.B and API standards; and by using cement volumes as follows: (Exact volumes to be determined from logs):

Surface: Type 5 w-025 pps celloflake and 2 % CaCl  
Final volumes will be calculated using 100% over gauge hole volume.

Production: Type 5 with 2% metasilicate and 0.25 pps celloflake @ 12.5 ppg lead. Type 5 with 0.25 pps celloflake and 2% CaCl @ 15.6 ppg tail. Final volumes will be determined using 35% excess and tail will provide 500' cover over basal coal.

#### 5. Operators Minimum Specifications for pressure control:

Expected bottom hole pressure 250 psi or less.

Attached is a schematic of the blowout preventer used by a local contractor for other wells in the area. The BOP to be used is a double ram type BOP with flanged connections and high-pressure inlet and outlet hoses, all tested to 250 psi low and 1000 psi high.

In the event drill floor height precludes the use of a lower BOP spool, the rams will be tested in conjunction with the surface casing.

**TEN-POINT PROGRAM  
POGO PRODUCING COMPANY**

**Well name:** Northridge #3  
**Location:** 679' FNL & 923' FEL, A, Sec. 3, T-29-N, R-13-W, NMPM  
San Juan County, NM  
**Formation:** Basin Fruitland Coal

**6. The type and characteristic of the proposed circulating muds:**

Surface: Spud flocculating bentonite with lime.  
Production: Freshwater - Bentonite

<u>Interval</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>Ph</u>	<u>Additives</u>
0-650'	8.4	32	----	7.5	Gel, Lime
650'-TD	8.6 - 9.2	30-50	<15cc	8	Additives as needed to maintain viscosity

**7. Auxiliary Equipment to be used is as follows:**

- a. Float valve above bit.
- b. Monitoring of mud system will be visual.
- c. A safety valve and subs to fit all drill strings will be used.

**8. Testing, logging and coring will be as follows:**

- a. Cores: None
- b. Drill stem tests: none anticipated.
- c. Logs will include: High Resolution Induction w/ Gamma Ray, SP, Caliper, Microlog, Spectral Density and Dual Spaced Neutron Microlog; all from total depth to the surface casing shoe.

**9. Anticipated Abnormal Pressures and temperatures:**

No abnormal pressures, temperatures, or Hydrogen Sulfide gases are anticipated during the completion of this well.

**10. Anticipated starting date and duration of operations:**

The anticipated starting date is July, 2006. The drilling operations should be completed within 10 days after rig-up date. Completion will be done as equipment availability and weather permit.

Date: 6-07-06 Drilling Engineer: B. H. Salzman

# BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

## TESTING PROCEDURE

### 1. Test BOP after installation:

Pressure test BOP to 200-300  
psig (low pressure) for 5 min.

Test BOP to Working Press or  
to 70% internal yield of surf csg  
(10 min).

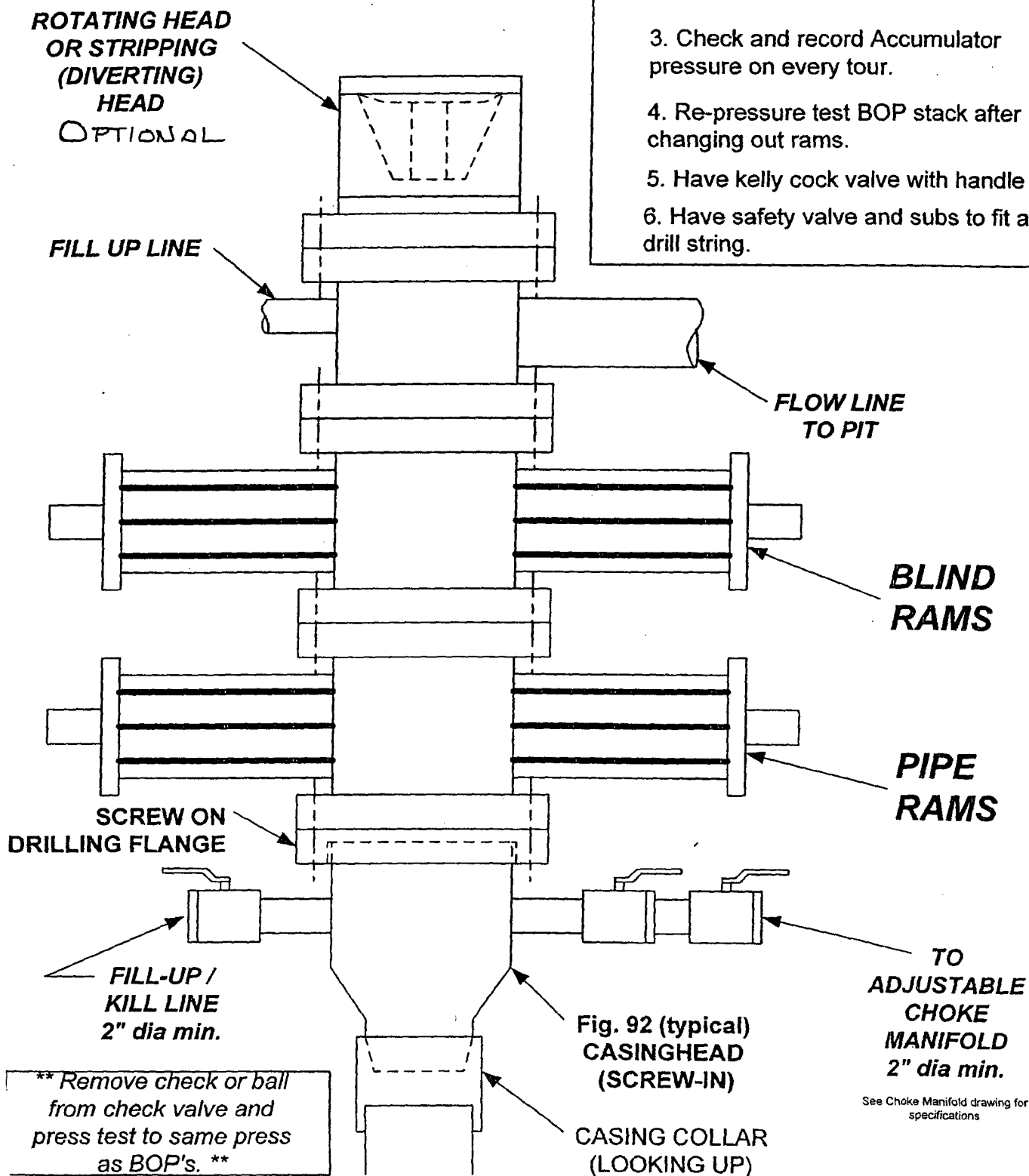
### 2. Test operation of (both) rams on every trip.

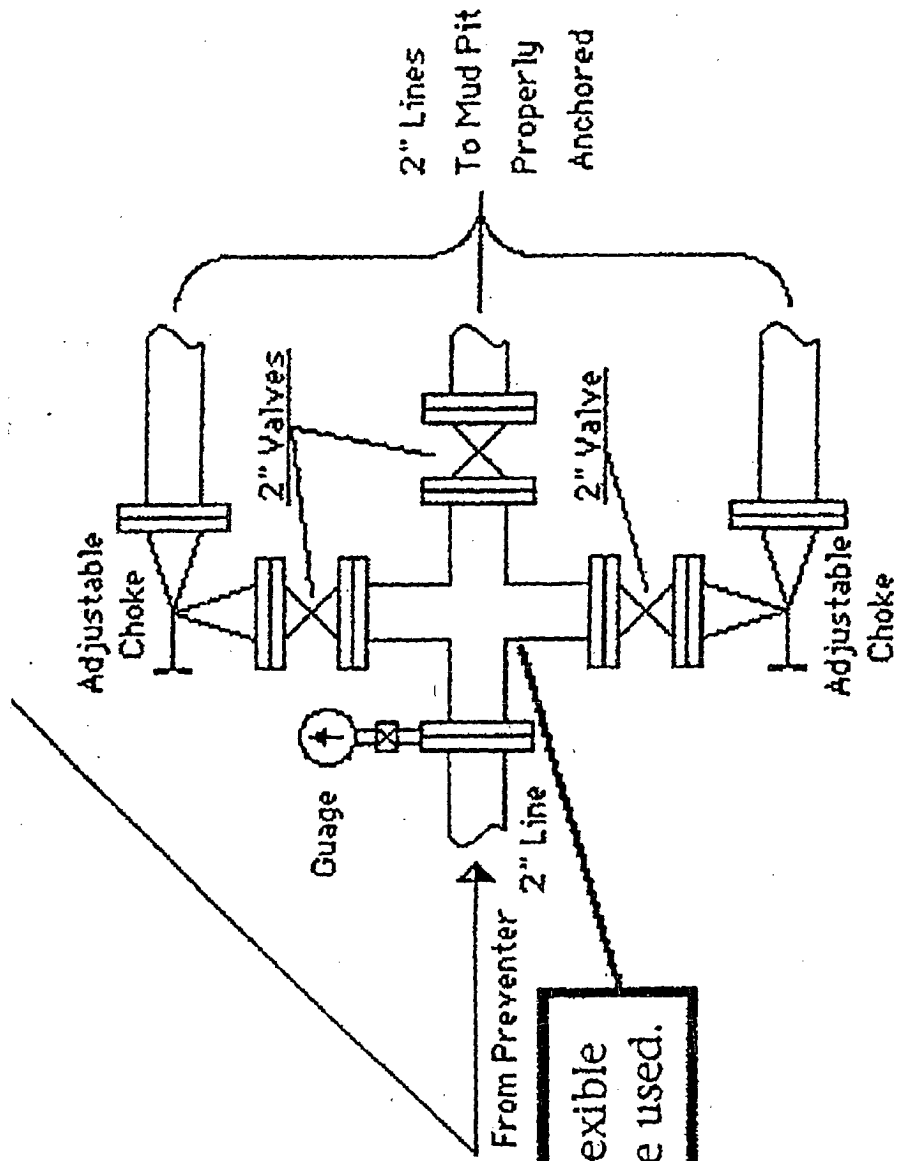
### 3. Check and record Accumulator pressure on every tour.

### 4. Re-pressure test BOP stack after changing out rams.

### 5. Have kelly cock valve with handle available.

### 6. Have safety valve and subs to fit all sizes of drill string.





High-Pressure, threaded flexible inlet and outlet lines will be used.