

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

5. Lease Serial No.  
**JICARILLA CONTRACT #97**

6. If Indian, Allottee or Tribe Name  
**JICARILLA APACHE TRIBE**

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
**TRIBAL 08 #12**

9. API Well No.  
**30-039-29514**

10. Field and Pool, or Exploratory  
**Explosive PC/Basin DK/Blanchard**

11. Sec., T. R. M. or Blk. and Survey or Area  
**L SEC 08 T26N-R3W**

12. County or Parish  
**RIO ARRIBA**

13. State  
**NM**

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
**PATINA OIL AND GAS**

3a. Address **5802 US HIGHWAY 64  
FARMINGTON, NEW MEXICO 87401**

3b. Phone No. (include area code)  
**505-632-8056**

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface **2470' FSL and 660' FWL**

At proposed prod. zone **SAME**

14. Distance in miles and direction from nearest town or post office\*  
**21 MILES SOUTH OF DULCE, NM**

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) **660'**

16. No. of acres in lease  
**320+ ACRES**

17. Spacing Unit dedicated to this well  
**SW 1/4 160 acres PC; W/2 320 acres DK**

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. **1810'**

19. Proposed Depth  
**8200'**

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**6912' GR**

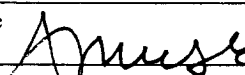
22. Approximate date work will start\*  
**07/01/2005**

23. Estimated duration  
**16 DAYS**

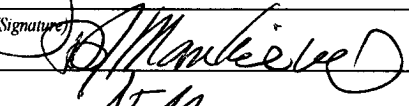
24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  Name (Printed/Typed) **JEAN M. MUSE** Date **03/28/2005**

Title  
**REGULATORY/ENGINEERING TECHNICIAN**

Approved by (Signature)  Name (Printed/Typed) **AFM** Date **9/22/05**

Title  
**FFO**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".



NMOCDD

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

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

OIL CONSERVATION DIVISION

PO Box 2088, Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

RECEIVED

OTD EXAMINATION UNIT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-039-29514</b>	*Pool Code <b>85920-72319-71599</b>	*Pool Name <b>TAPACITO PICTURED CLIFFS BLANCO MESA VERDE BASIN DAKOTA</b>
*Property Code <b>35155</b>	*Property Name <b>TRIBAL 08</b>	*Well Number <b>12</b>
*OGRID No. <b>173252</b>	*Operator Name <b>PATINA SAN JUAN, INC.</b>	*Elevation <b>6912'</b>

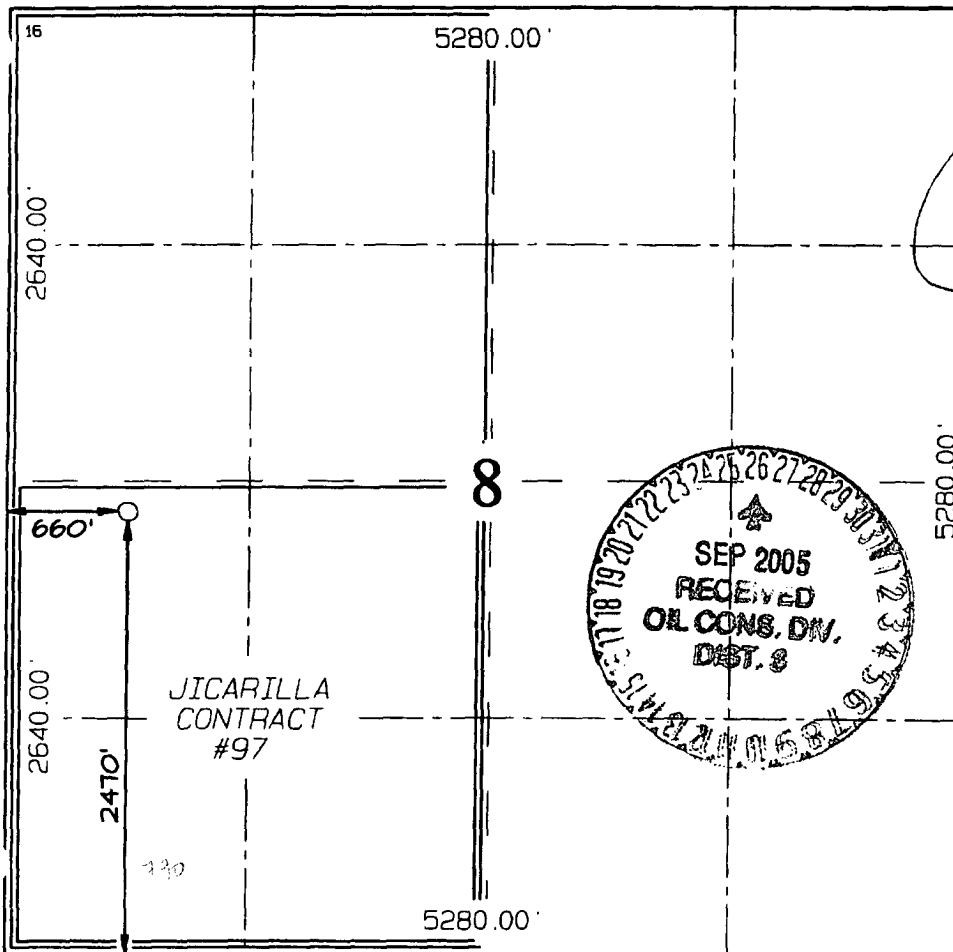

10 Surface Location

UL or lot no. <b>L</b>	Section <b>8</b>	Township <b>26N</b>	Range <b>3W</b>	Lot Idn	Feet from the <b>2470</b>	North/South line <b>SOUTH</b>	Feet from the <b>660</b>	East/West line <b>WEST</b>	County <b>RIO ARriba</b>
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11 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
12 Dedicated Acres <b>150.0 Acres (SW/4) - PC</b> <b>320.0 Acres (W/2) - DK</b>					13 Joint or Infill	14 Consolidation Code	15 Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>16</p> <p>5280.00'</p> <p>2640.00'</p> <p>660'</p> <p>2470'</p> <p>5280.00'</p> <p>8</p> <p>JICARILLA CONTRACT #97</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Jason M. Muse</i></p> <p>Signature</p> <p>Jason M. Muse</p> <p>Printed Name</p> <p>Reg/Engineering</p> <p>Title</p> <p>12/21/04</p> <p>Date</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>Date of Survey: JULY 19, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p></p> <p><i>Jason C. Edwards</i></p> <p>Certificate Number 15269</p>	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007**SUNDRY NOTICES AND REPORTS ON WELLS****Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.****SUBMIT IN TRIPLICATE- Other instructions on reverse side.**1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator **PATINA SAN JUAN, INC.**3a. Address  
**5802 US HIGHWAY 64 FARMINGTON, NM 87402**3b. Phone No. (include area code)  
**505-632-8056**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2470' FSL AND 660' FWL  
L Sec 8 - T26N - R3W**

5. Lease Serial No.

**JICARILLA CONTRACT #97**

6. If Indian, Allottee or Tribe Name

**JICARILLA APACHE TRIBE**

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

**TRIBAL 08 #12**

9. API Well No.

**30039 29514**

10. Field and Pool, or Exploratory Area

**BASIN DAKOTA**

11. County or Parish, State

**RIO ARriba CTY, NEW MEXICO****12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Withdraw PC/MV FORMATIONS</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

**PATINA SAN JUAN REQUESTS THAT THAT THE TAPACITO PICTURED CLIFFS AND BLANCO MESA VERDE FIELDS/POOLS BE DROPPED FROM THE APPROVED PERMIT TO DRILL, PER INSTRUCTIONS OF ADRIENNE BRUMLEY.**

2005  
SEP 21 PM 2 50  
RECEIVED  
FARMINGTON NM14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)**JEAN M. MUSE**Title **REGULATORY/ENGINEERING TECHNICIAN**

Signature

Date

**09/21/2005****THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Office

Date

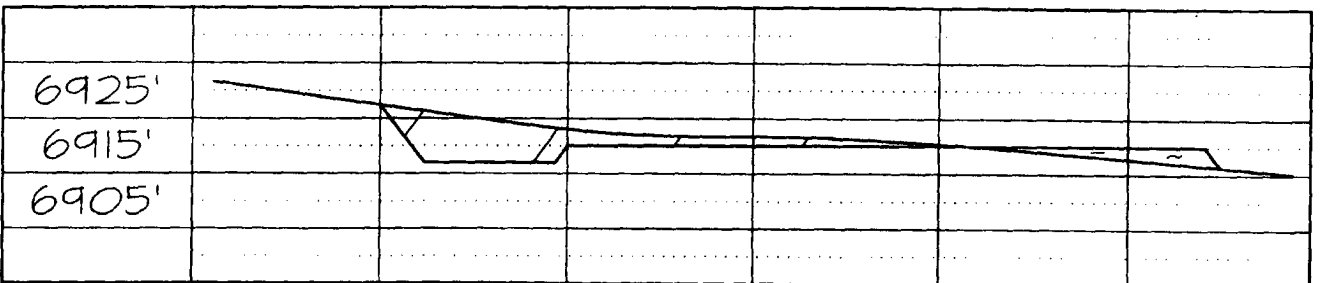
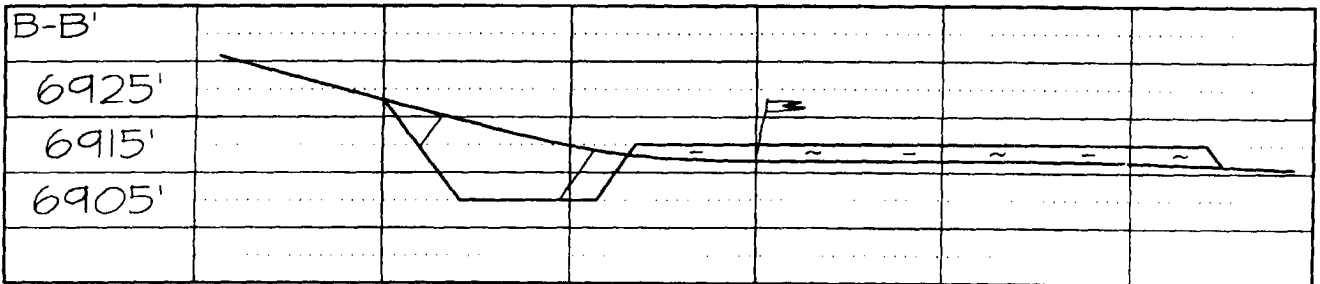
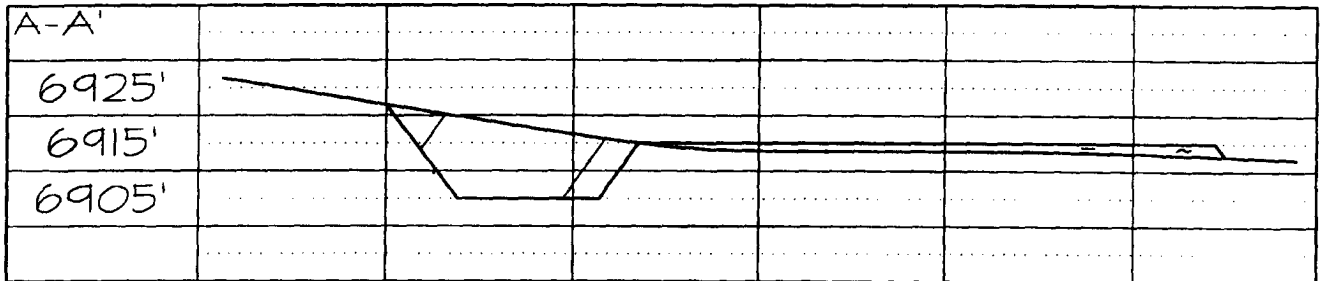
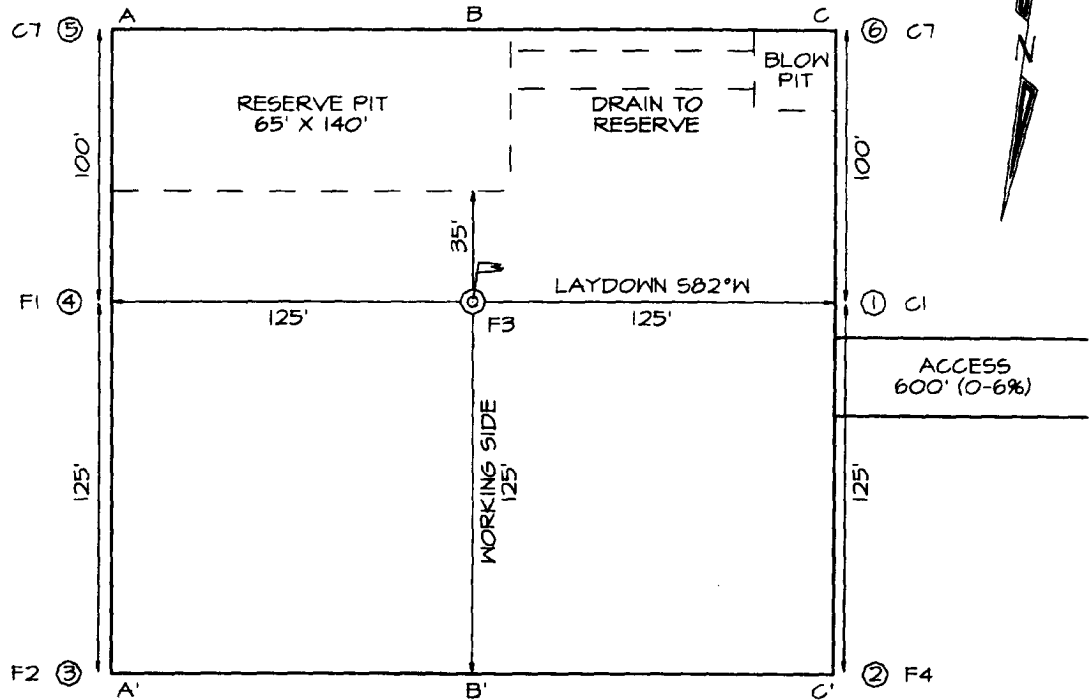
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(Instructions on page 2)

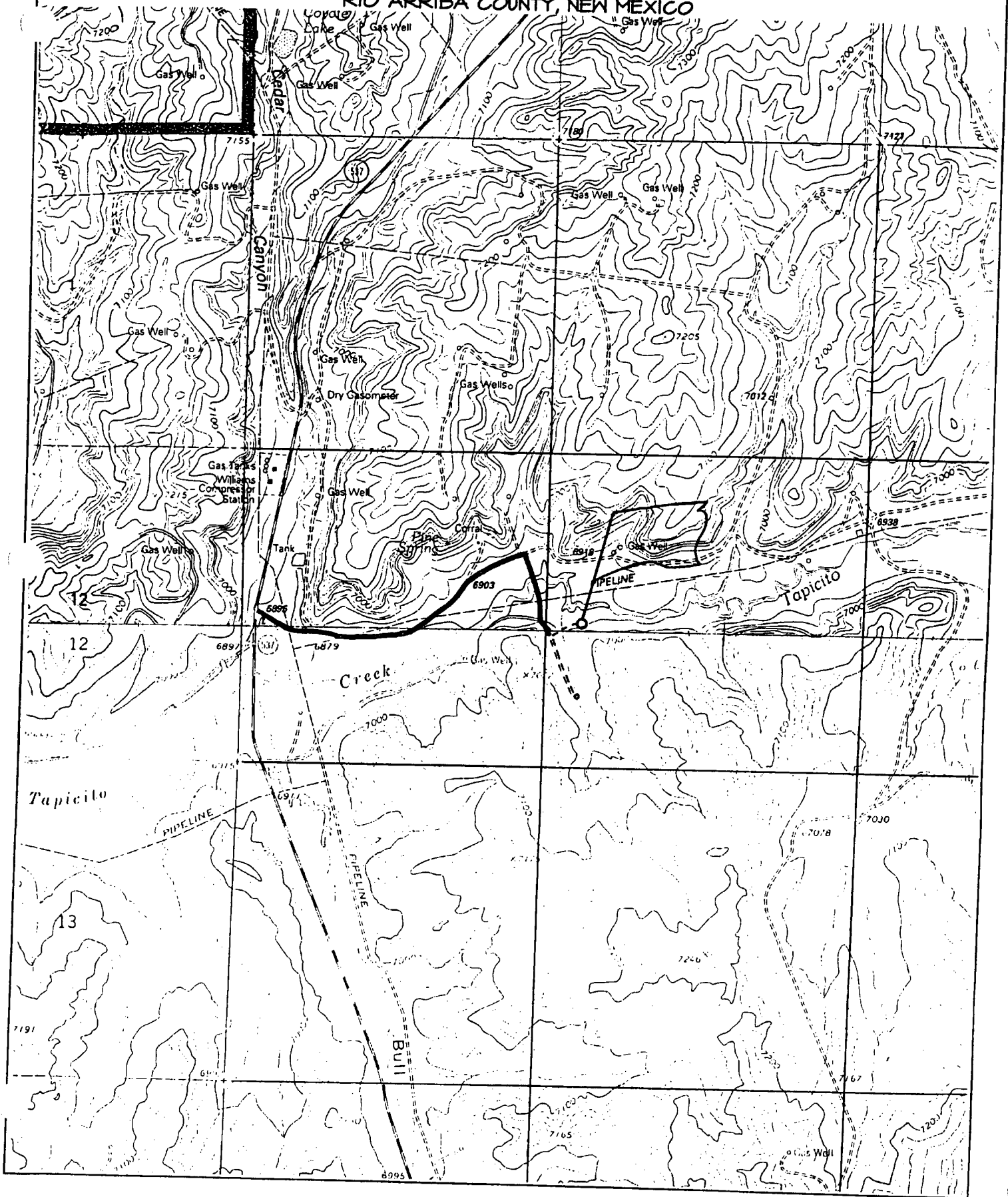
NMOC

**PATINA SAN JUAN, INC. TRIBAL 08 #12**  
**2470' FSL & 660' FWL, SECTION 8, T26N, R3W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6912'**

**LATITUDE: 36°30'02"**  
**LONGITUDE: 107°10'27"**  
 DATUM: NAD1927



PATINA SAN JUAN, INC. TRIBAL OS #12  
2470' FSL & 660' FWL, SECTION 8, T26N, R3W, N.M.P.M.  
RIO ARriba COUNTY, NEW MEXICO



**Tribal 08 No. 12**  
**General Drilling Plan**  
**Patina San Juan, Inc.**  
**Rio Arriba County, New Mexico**

**1. LOCATION:**

NWSE of Section 08, T26N, R3W  
San Juan, New Mexico

Field: Blanco MV & Basin DK  
Surface: Jicarilla  
Minerals: Jicarilla Contract #97

**2. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS (TVD):**

Surface formation – Nacimiento

<b><u>Formation</u></b>	<b><u>Estimated Formation Top (Ft)</u></b>
Ojo Alamo	1500
Fruitland	2170
Pictured Cliffs**	3320
Cliff House**	5360
Menefee**	5470
Point Lookout**	5740
Gallup	7310
Greenhorn	7708
Graneros	7774
Dakota***	7912
TD	8200

Legend:      \* Freshwater bearing formation  
             \*\* Possible hydrocarbon bearing formation  
             \*\*\* Probable hydrocarbon bearing formation  
             # Possible H2S bearing formation

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

### 3. **PRESSURE CONTROL EQUIPMENT:**

BOP equipment will be tested to the lesser of its rated working pressure, 70-percent of the internal yield of the surface casing or 1,000 psi. See attachments for BOP and choke manifold diagrams.

#### **Production Hole BOP Requirements and Test Plan**

11" – 2,000 psi single ram (blind)

11" – 2,000 psi single ram (pipe)

Test as follows:

- |                              |                  |               |
|------------------------------|------------------|---------------|
| a) Pipe rams:                | 1,000 psi (High) | 250 psi (low) |
| b) Choke manifold and lines: | 1,000 psi (High) | 250 psi (low) |

All ram type preventers and related equipment will be hydraulically tested at nipple-up. They will also be retested in either of the following events:

- A pressure seal is broken.
- 30 days have elapsed since the last successful test of the equipment.

Furthermore, BOP's will be checked daily as to mechanical operating condition. All ram type preventers will have hand wheels, which will be operative and accessible at the time the preventers are installed. See attached Exhibit for details on the BOP equipment.

#### **AUXILIARY EQUIPMENT:**

- a) Manually operated kelly cock (upper and lower)
- b) Full opening manually operated safety valves in the full open position, capable of fitting all drill stem connections.

#### 4. CASING DESIGN:

##### Casing Program:

Hole Size	Depth	Casing Size
12 1/4"	250'	9 5/8"
8 3/4"	4100'	7"
6 1/4"	8200' / through Dakota	4 1/2"

Casing Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	250'	36.0	J55	STC	New
7"	Intermediate	0'	4100' +/-	23.0	N80	LTC	New
4 1/2"	Production	3900'	8200'	11.6	N80	LTC	New

Casing Data				Collapse	Burst	Min. Tensile
OD	Wt/Ft	Grade	Thread	(psi)	(psi)	(Lbs.)
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
7"	23.0 lbs.	N80	LTC	3,830	6,340	442,000
4 1/2"	11.6 lbs.	N80	LTC	6,350	7,780	223,000

#### MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125

BURST: 1.00

TENSION: 1.80

Area Fracture Gradient Range: 0.7 – 0.8 psi/foot

Maximum anticipated reservoir pressure: 2,500 psi

Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 3,500 - 3,750 psi





## Float Equipment:

**Surface Casing:** Guide shoe on bottom and 3 centralizers on the bottom 3 joints.

**Intermediate Casing:** Float shoe on bottom joint and a float collar one joint up from float shoe. One centralizer 10 ft above float shoe and nine centralizers spaced every joint above the float collar. Stage tool above the Pictured Cliffs formation. One centralizer below stage tool and one centralizer above stage tool.

**Production Casing:** 4 1/2" whirler type cement nosed guide shoe and a float collar on top of bottom joint with centralizers over potential hydrocarbon bearing zones.

## CEMENTING PROGRAMS:

### 9-5/8" Surface casing:

165 sxs Type III cement with 2%  $\text{CaCl}_2$ , 1/4#/sx cellofakes. 100% excess to circulate cement to surface. WOC 12 hrs. Pressure test surface casing to 1000 psi for 30 minutes.

Slurry weight: 15.2 ppg  
Slurry yield: 1.27 ft<sup>3</sup>/sack

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	300' of 12-1/4" x 9-5/8" annulus	94 cu ft
	<u>100% excess (annulus)</u>	<u>94 cu ft</u>
	Total	205 cu ft

Note:

1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2%  $\text{CaCl}_2$  for top out purposes.


### 7" Intermediate Casing:

1st Stage: 100 sacks of Type III cement

Slurry weight: 14.5 ppg  
Slurry yield: 1.4 ft<sup>3</sup>/sack

2<sup>nd</sup> Stage: (Stage tool at 3500' +/-): 365 sacks of Premium Lite FM

Slurry weight: 12.4 ppg  
Slurry yield: 1.92 ft<sup>3</sup>/sack

4 

Volume Basis:	40' of 7" shoe joint	9 cu ft
	3800' of 7" x 8 3/4" annulus	586 cu ft
	300' of 7" x 9 5/8" hole	50 cu ft
	<u>30% excess (annulus)</u>	<u>176 cu ft</u>
	Total	821 cu ft

Note:

1. Design top of cement is surface.
2. Actual cement volumes to be based on caliper log plus 30%.

#### **4 1/2" Production casing:**

Stage 1: 220 sacks of Premium Lite High Strength FM out guide shoe.

Slurry weight: 12.3 ppg  
Slurry yield: 2.13 ft<sup>3</sup>/sack

Volume basis:	40' of 4 1/2" shoe joint	5 cu ft
	4 1/2 " x 6 1/4" hole	318 cu ft
	4 1/2" x 7" casing	33 cu ft
	<u>30% excess (annulus)</u>	<u>107 cu ft</u>
	Total	463 cu ft

Note:

1. Design top of cement is 3800 +/- ft. or 300 ft. into 7" intermediate casing.
2. Actual cement volumes to be based on caliper log plus 30%.

#### **5. MUD PROGRAM:**

The surface hole will be drilled with spud mud. Gel and polymer sweeps will be used from surface to 300 feet as necessary to keep hole clean.

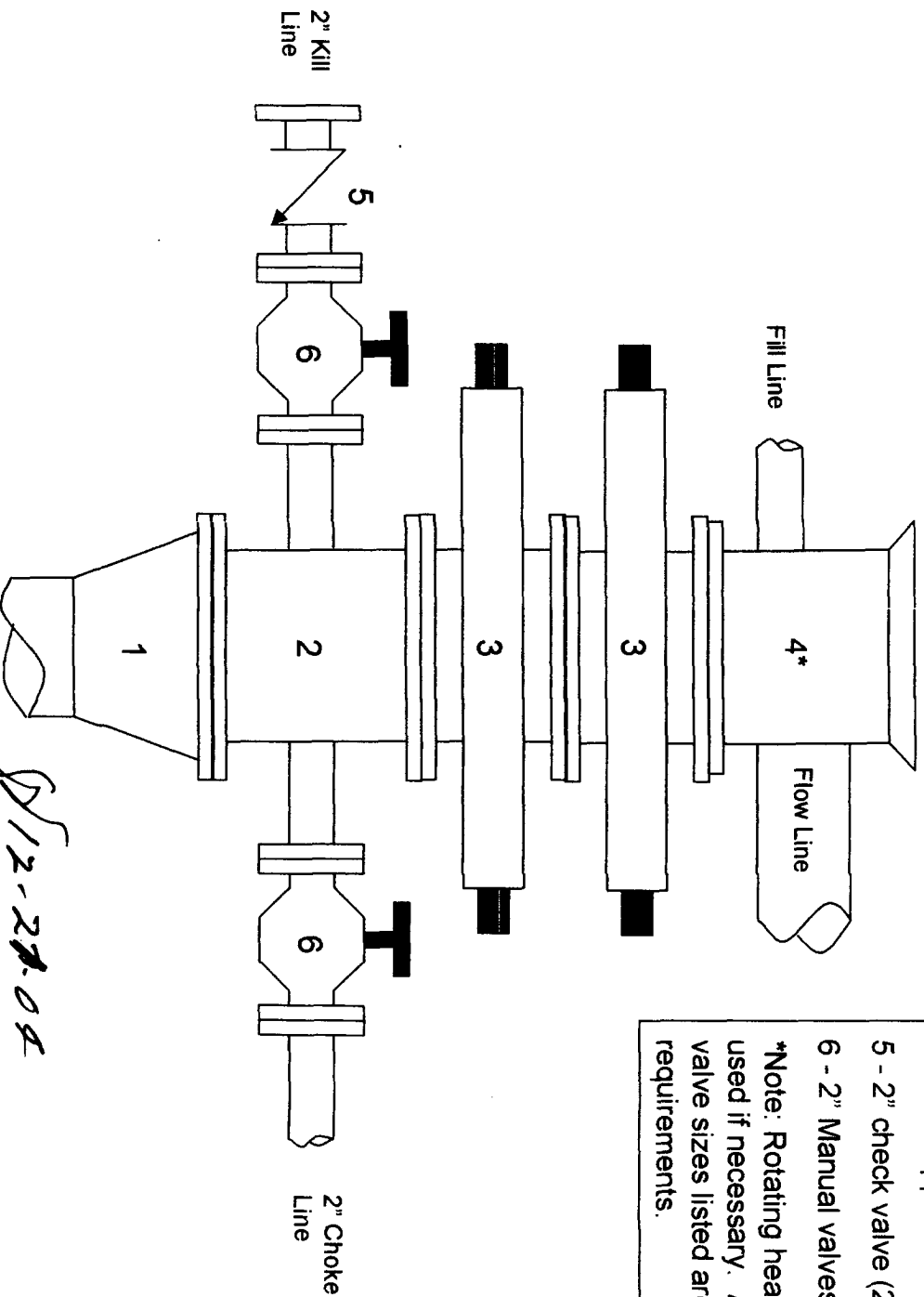
The intermediate hole will be drilled with water until mud up at about 3000 ft. From 3000' to 4100', intermediate casing depth, will be drilled with LSND mud. Anticipated mud weight ranges from 8.5 – 9.0 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

The production hole will be drilled with air or air/mist.

Sufficient mud materials to maintain stable wellbore conditions (for either well control or lost circulation scenarios) will be maintained at the well site.

No chrome-based additives will be used in the mud system.

# **Tribal 08 No. 12** 2000 psi BOP stack Minimum requirements



## Components

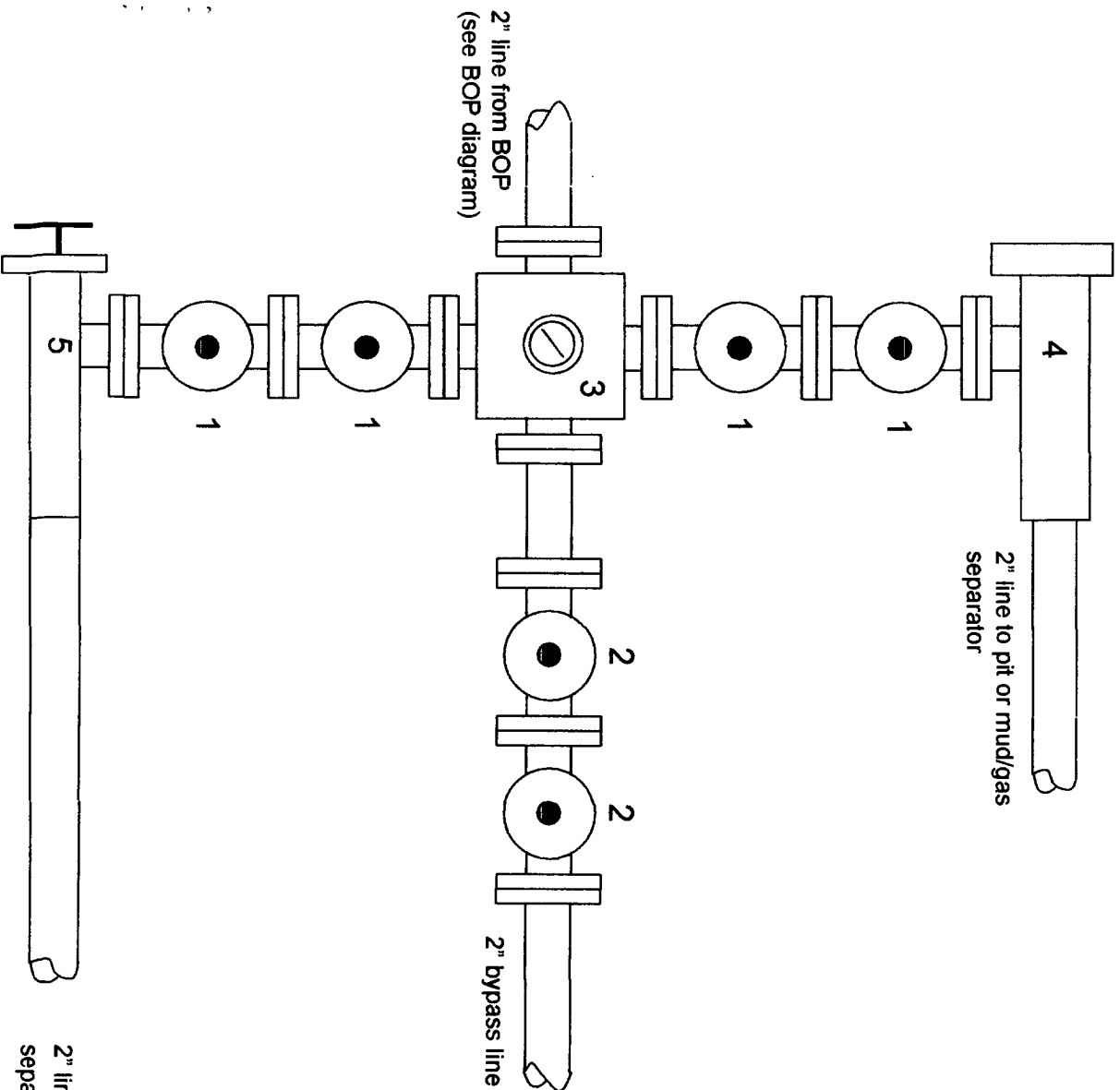
- 1 - Wellhead 9-5/8" (2M)
- 2 - Drilling spool 1 1" (2M)
- 3 - A double or two single rams with blinds on bottom 1 1" (2M)
- 4 - Bell nipple\*
- 5 - 2" check valve (2M)
- 6 - 2" Manual valves (2M)

\*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.

*SI 12-27-04*

# **Tribal 08 No. 12** **2000 psi Choke Manifold** **Minimum requirements**

<u>Components</u>	
1 – 2" Valve (2M)	
2 – 2" Valve (2M)	
3 – Mud cross with gauge (2M) flanged below the gage.	
4 – Adjustable beam choke (2M)	
5 – Adjustable needle choke (2M)	
Note: All line and valve sizes listed are minimum requirements.	



8/12-21-04