Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2005 MAR 30 AM 10

RECEIVED

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, Allotee or Tribe Name
JICARILLA APACHE TRIBE

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

1a. Type of work: ☑ DRILL ☐ REENTER			7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone			8. Lease Name and Well No. TRIBAL 05 #09
2. Name of Operator PATINA OIL AND GAS			9. API Well No. 30-039-29515
3a. Address 5802 US HIGHWAY 64 FARMINGTON, NEW MEXICO 87401	3b. Phone No. *(include area code)* 505-632-8056		10. Field and Pool, or Exploratory Tapacito PC/Basin DK/Blanco MV
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface 1970' FSL and 660' FEL At proposed prod. zone SAME			11. Sec., T. R. M. or Blk. and Survey or Area I SEC 05 T26N-R3W
14. Distance in miles and direction from nearest town or post office* 21 MILES SOUTH OF DULCE, NM			12. County or Parish RIO ARRIBA; 13. State 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 SE/4 160 acres PC; E/2 320 acres MV, DK	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8400'	20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7104' 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 *(signed)*	Name *(Printed/Typed)* JEAN M. MUSE	Date 03/28/2005
Title REGULATORY/ENGINEERING TECHNICIAN		
Approved by *(Signature)* *(signed)*	Name *(Printed/Typed)*	Date 10/26/05
Title AFM	Office 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)

OCT 2005 RECEIVED OIL CONS. DIV. DIST. 3

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

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

NMOCD

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹API Number	²Pool Code	³Pool Name	
30-039-29515	85920-72319-71599	TAPACITO PICTURED CLIFFS-BLANCO MESAVERDE-BASIN DAKOTA	
⁴Property Code	⁵Property Name		⁶Well Number
34947	TRIBAL 05		09
⁷OGRID No.	⁸Operator Name		⁹Elevation
173252	PATINA SAN JUAN, INC.		7104'

¹⁰ Surface Location

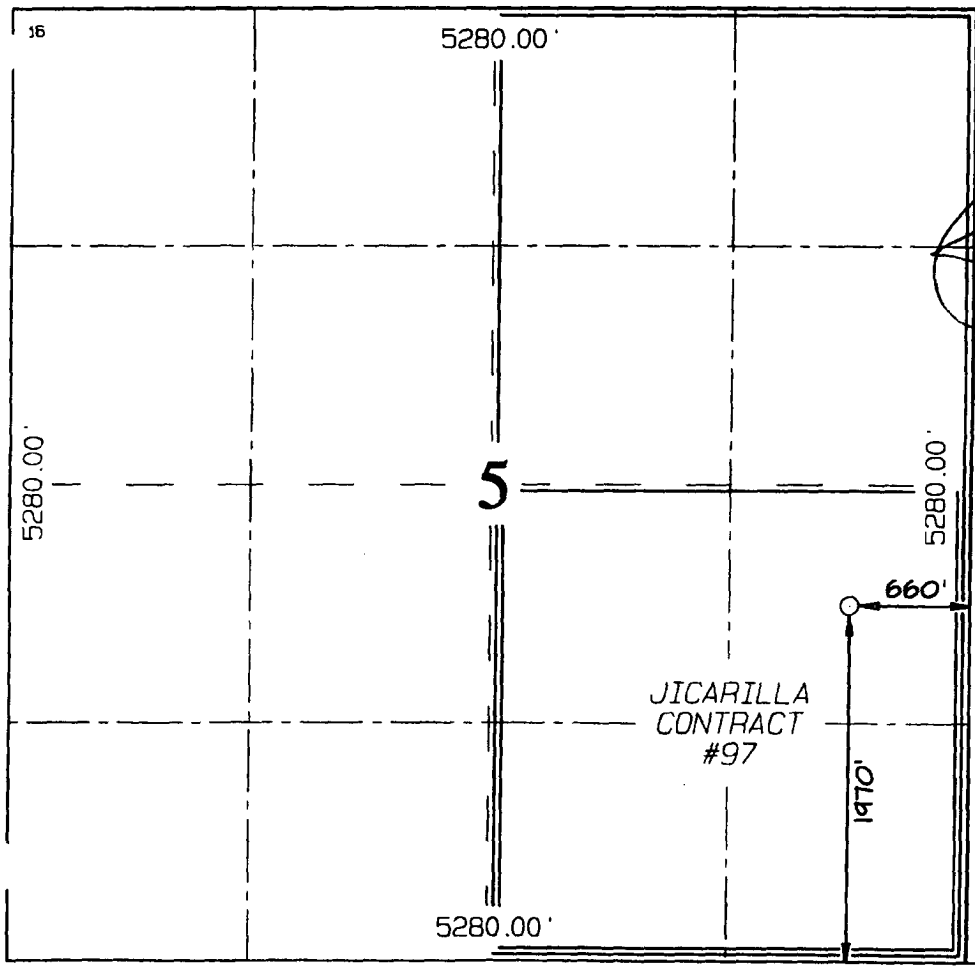
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	5	26N	3W		1970	SOUTH	660	EAST	RIO ARRIBA

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	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160.0 Acres (SE/4) - PC 320.0 Acres (E/2) - MV, DK			

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



¹⁷ OPERATOR CERTIFICATION

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

Signature

Printed Name

Title

Date

¹⁸ SURVEYOR CERTIFICATION

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.

Date of Survey: AUGUST 10, 2004

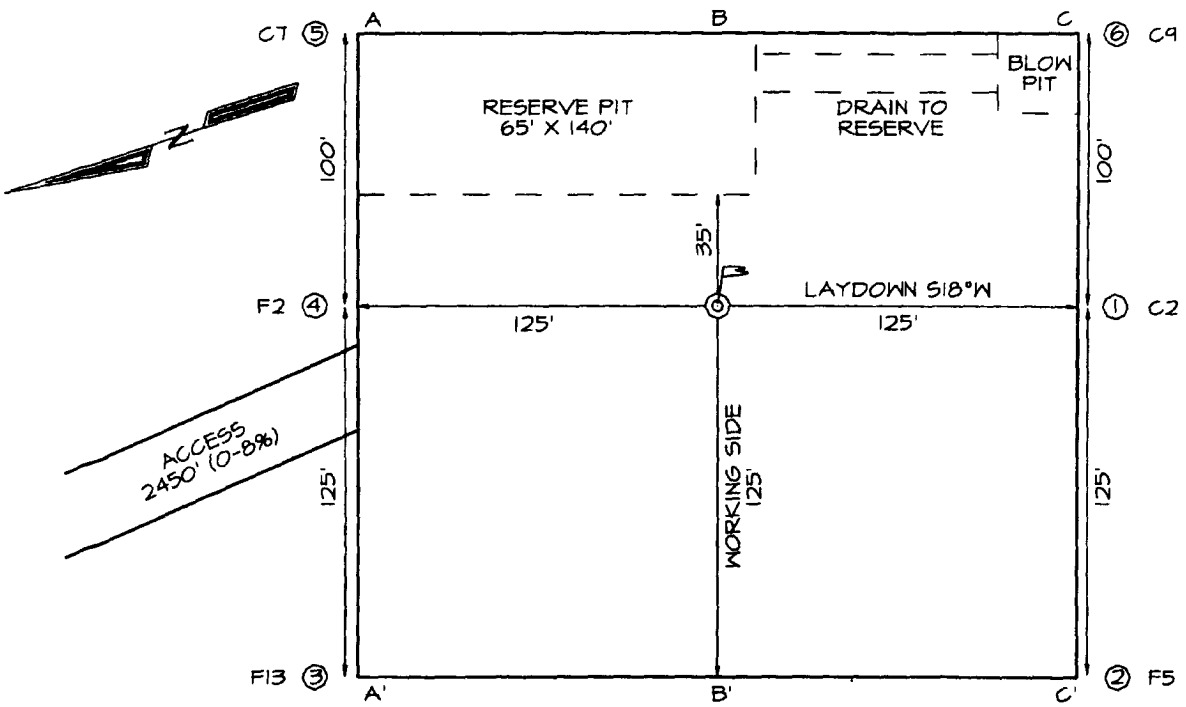
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

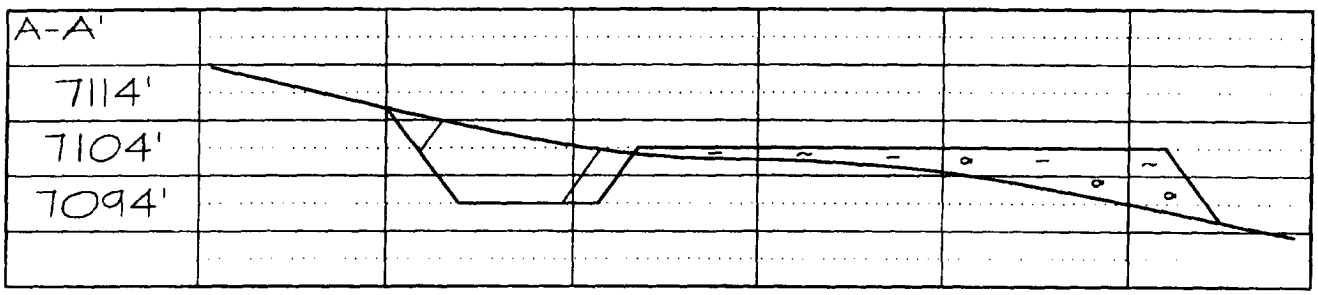
JASON C. EDWARDS

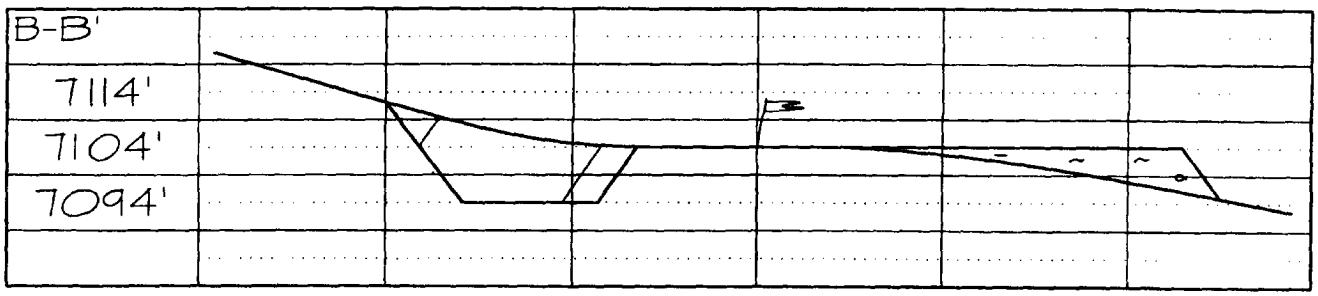
Certificate Number 15269

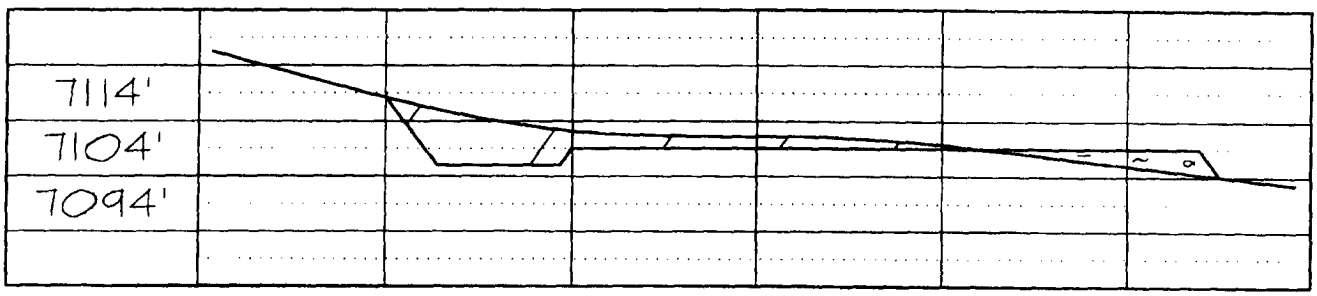
PATINA SAN JUAN, INC. TRIBAL 05 #09
1970' FSL & 660' FEL, SECTION 5, T26N, R3W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 7104'



LATITUDE: 36°30'49"
LONGITUDE: 107°09'39"
DATUM: NAD1927







FILENAME: 26351T	SHEET 2 OF 3	NCE SURVEYS, INC.	DRAWN BY: EDO	CHECKED BY: JCE

Tribal 05 No. 09
General Drilling Plan
Patina San Juan, Inc.
Rio Arriba County, New Mexico

1. LOCATION:

NESE of Section 05, 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

Formation	***Estimated Formation Top (Ft)***
Ojo Alamo	1700
Fruitland	2370
Pictured Cliffs**	3520
Cliff House**	5560
Menefee**	5670
Point Lookout**	5940
Gallup	7510
Greenhorn	7908
Graneros	7974
Dakota***	8112
TD	8400

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 ¼"	250'	9 5/8"
8 ¾"	4300'	7"
6 ¼"	8400' / 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'	4300' +/-	23.0	N80	LTC	New
4 ½"	Production	3900'	8400'	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% $CaCl_2$, ¼#/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^3/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
	100% excess (annulus)	94 cu ft
	Total	205 cu ft

Note:
1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2% $CaCL_2$ 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^3/sack

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

Slurry weight: 12.4 ppg
Slurry yield: 1.92 ft^3/sack

Volume Basis:	40' of 7" shoe joint	9 cu ft
	4000' of 7" x 8 ¾" annulus	586 cu ft
	300' of 7" x 9 5/8" hole	50 cu ft
	30% excess (annulus)	176 cu ft
	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^3/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 ½" x 7" casing	33 cu ft
	30% excess (annulus)	107 cu ft
	Total	463 cu ft

Note:
1. Design top of cement is 4000 +/- 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 4300', 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.

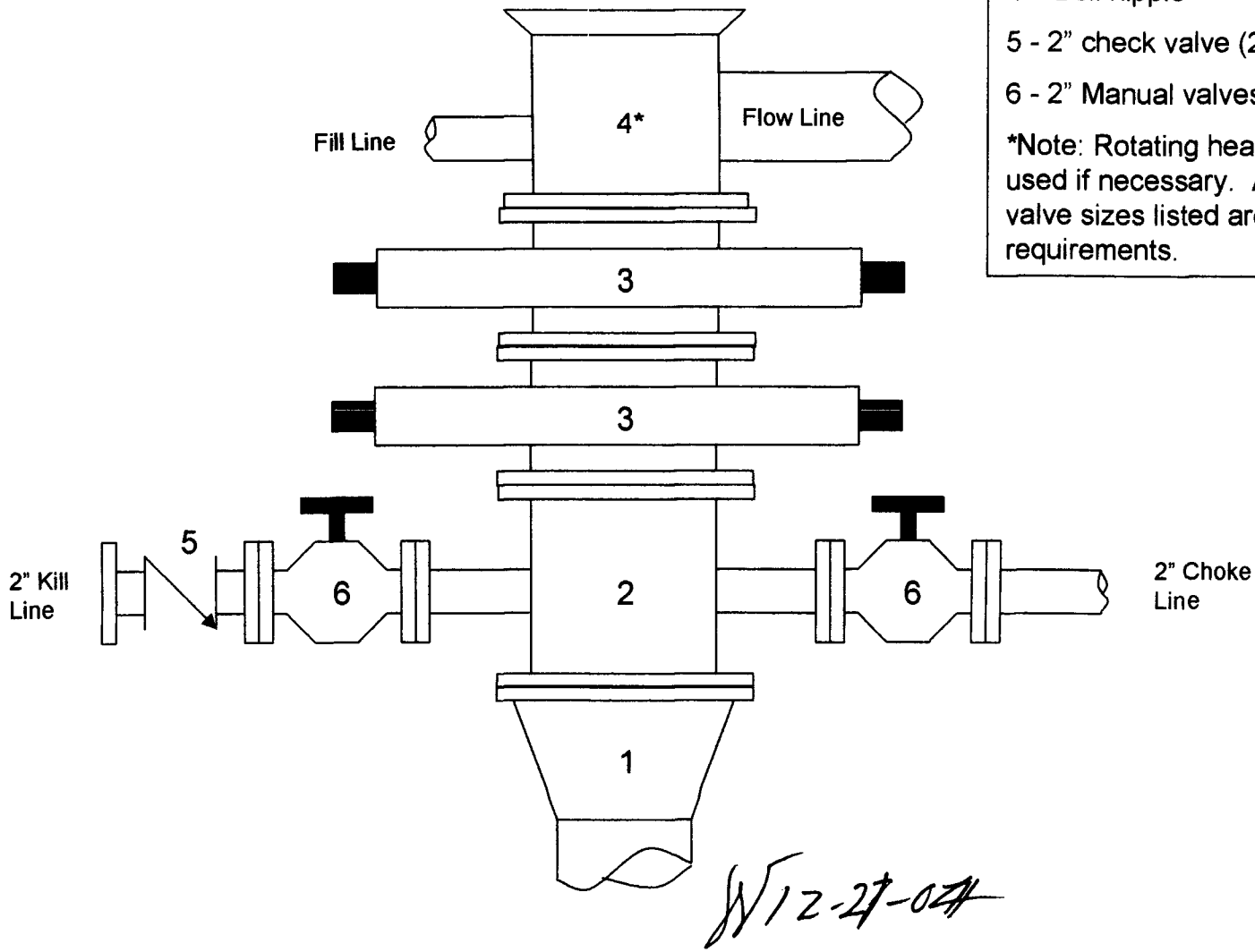
The production hole will be drilled with air or air/mist.

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 05 No. 09

2000 psi BOP stack
Minimum requirements



Components

1 - Wellhead 9-5/8" (2M)

2 – Drilling spool 11" (2M)

3 – A double or two single rams with blinds on bottom 11" (2M)

4 – Bell nipple*

5 - 2" check valve (2M)

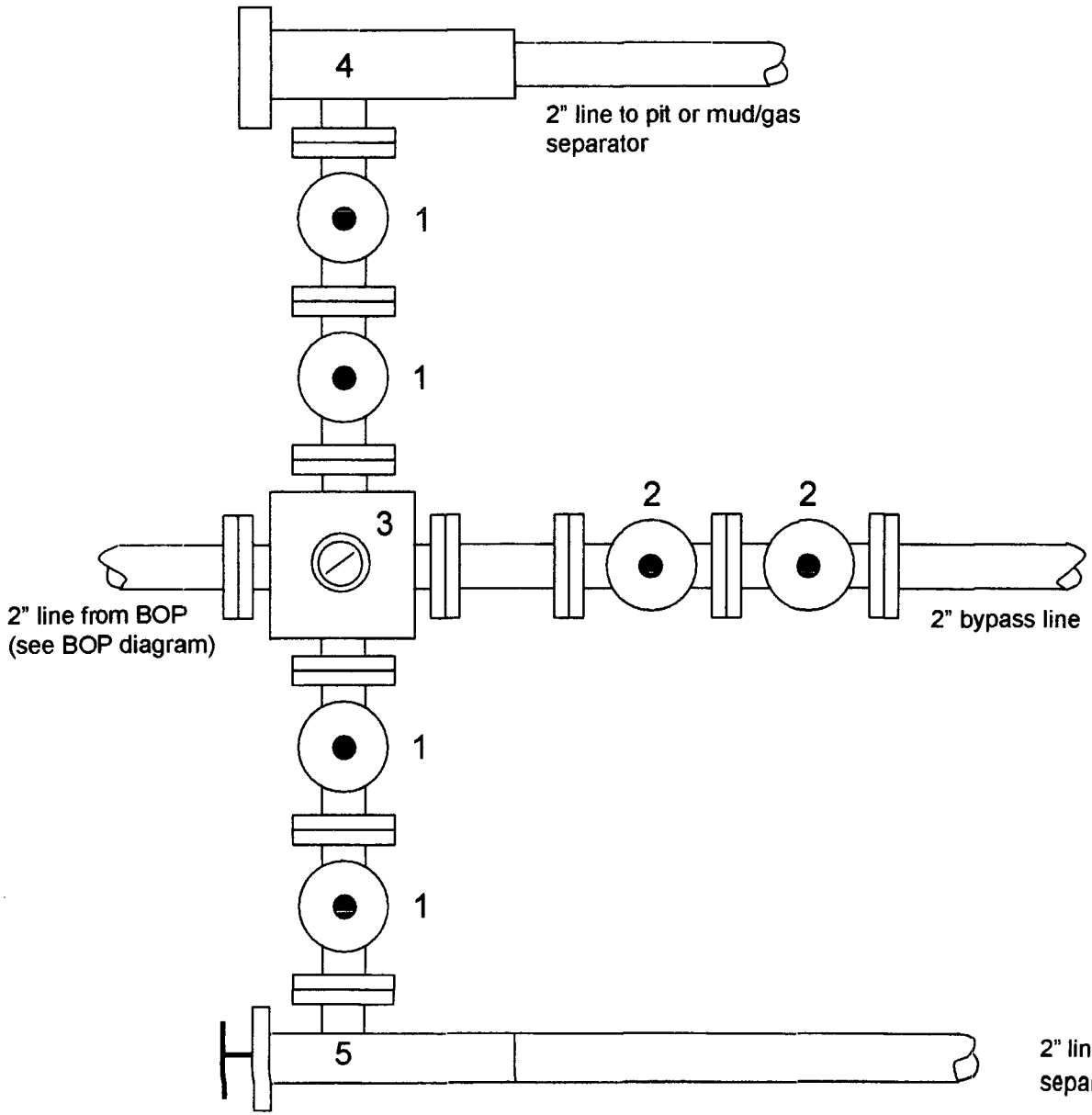
6 - 2" Manual valves (2M)

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

12-27-04

Tribal 05 No. 09

2000 psi Choke Manifold
Minimum requirements



Components
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.

12-21-04