

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

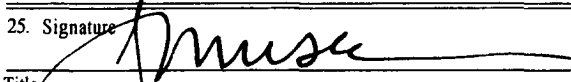
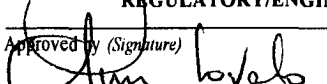
FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>JICARILLA CONTACT #97</b>	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>JICARILLA APACHE TRIBE</b>	
2. Name of Operator <b>PATINA OIL AND GAS</b>		7. If Unit or CA Agreement, Name and No.	
3a. Address <b>5802 US HIGHWAY 64 FARMINGTON, NEW MEXICO 87401</b>		8. Lease Name and Well No. <b>TRIBAL 05 #1</b>	
3b. Phone No. (include area code) <b>505-632-8056</b>		9. API Well No. <b>3003929238</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>660' FNL and 660' FEL</b> At proposed prod. zone <b>SAME</b>		10. Field and Pool, or Exploratory <b>Basin DK/Blanco MV/</b>	
11. Sec., T. R. M. or Blk. and Survey or Area <b>A SEC 5-T26N-R3W</b>		12. County or Parish <b>RIO ARRIBA</b>	
13. State <b>NM</b>		14. Distance in miles and direction from nearest town or post office* <b>21 MILES SOUTH OF DULCE, NEW MEXICO</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>		16. No. of acres in lease <b>320 ACRES</b>	
17. Spacing Unit dedicated to this well <b>E/2 320 Acres MV, DK, 160 Acres PC</b>		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>8450'</b>	
19. Proposed Depth <b>8450'</b>		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>7105' GR</b>		22. Approximate date work will start* <b>11/01/2004</b>	
23. Estimated duration <b>21 DAYS</b>		24. Attachments	

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

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

25. Signature 	Name (Printed/Typed) <b>JEAN M. MUSE</b>	Date <b>09/17/2004</b>
Title <b>REGULATORY/ENGINEERING TECH</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>Delia Field Manager - Minerals</b>	Date <b>7/13/05</b>
Title <b>Delia Field Manager - Minerals</b>		

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.

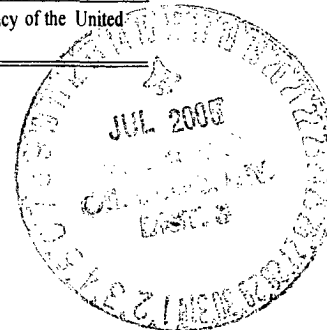
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

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

2004 SEP 20 AM 8 42

☐ AMENDED REPORT

RECEIVED  
WELL LOCATION AND ACREAGE DEDICATION PLAT  
070 FARMINGTON NM

*API Number 30-039-29238	*Pool Code 72319-71599	*Pool Name <del>TACTIC PICTURED CLIFFS</del> BLANCO MESAVERDE-BASIN DAKOTA
*Property Code 34941	*Property Name TRIBAL 05	*Well Number 01
*GRID No. 173252	*Operator Name PATINA SAN JUAN, INC.	*Elevation 7105'

<sup>10</sup> Surface Location

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

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres <del>100.0 Acres (NE 1/4) PC</del> 320.0 Acres (E/2) - MV, DK	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

<div><p>15</p><p>5280.00'</p><p>5280.00'</p><p>5280.00'</p><p>5280.00'</p><p>5</p><p>JICARILLA CONTRACT #97</p></div>	<div><p><sup>17</sup> 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>Signature: <i>J Muse</i></p><p>Printed Name: JEAN MUSE</p><p>Title: Reg/Engr Tech.</p><p>Date: 9/17/04</p></div> <div><p><sup>18</sup> 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: AUGUST 10, 2004</p><p>Signature and Seal of Professional Surveyor</p><div><p>JASON C. EDWARDS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15269</p></div><p>JASON C. EDWARDS Certificate Number 15269</p></div>
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**Operations Plan  
Patina San Juan, Inc.  
Tribal #05-01  
Rio Arriba, New Mexico**

**1. LOCATION:**

NE NE  
Section 5, T26N, R3W  
Rio Arriba, New Mexico

Field: Tapacito Pictured Cliffs, Blanco MV & Basin DK

Surface: Jicarilla Apache Tribe

Minerals: Jicarilla Contract # 97

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

Surface formation – San Jose

<i><b>Formation</b></i>	<i><b>Depth</b></i>
Fruitland**	3547'
Pictured Cliffs**	3827'
Lewis	3994'
Cliff House**	5509'
Menefee**	5659'
Point Lookout**	5989'
Gallup**	7087'
Greenhorn	7873'
Graneros	7951'
Dakota**	7997'
TD	8450'

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 1,000psi. 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"	300'	9 5/8"
8 3/4"	4400' +/-	7"
6 1/4"	8450'	4 1/2"

Hole Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	300'	36.0	J55	STC	New
7"	Production	0'	4400' +/-	23	N80	LTC	New
4 1/2"	Production	0	8450'	11.6	N80	LTC	New

Casing Data				Collapse (psi)	Burst (psi)	Min. Tensile (Lbs.)
OD	Wt/Ft	Grade	Thread			
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
7"	23 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 Picture Cliffs. 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. Stage tool above the Gallup. One centralizer below stage tool and one centralizer above stage tool.

## **CEMENTING PROGRAMS:**

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

162 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: 245 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 2700' +/-): 270 sacks of Premium Lite FM

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

Volume Basis:	40' of 7" shoe joint	9 cu ft
	4100' of 7" x 8 3/4" annulus	617 cu ft
	300' of 7" x 9 5/8" hole	50 cu ft
	<u>30% excess (annulus)</u>	<u>185 cu ft</u>
	Total	861 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: 115 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	177 cu ft
	<u>30% excess (annulus)</u>	<u>55 cu ft</u>
	Total	237 cu ft

Note:

3. Design top of cement is stage collar at 6600 +/- ft. *Cement to overlap intermediate*
4. Actual cement volumes to be based on caliper log plus 30%. *csg shoe by 100' minimum*

Stage 2: 90 sacks of 35/65 pozmix: Type III cement out stage collar at 6600 +/- ft.

Slurry weight: 9.5 ppg  
Slurry yield: 4.05 ft<sup>3</sup>/sack

Volume basis:	4 1/2" x 6 1/4" hole	226 cu ft
	300' of 4 1/2" x 7" csg	33 cu ft
	<u>30% excess (annulus)</u>	<u>78 cu ft</u>
	Total	337 cu ft

Note:

5. Design top of cement is at 4100' or 300 ft into 7" casing.
6. Actual cement volumes to be based on caliper log plus 30%.

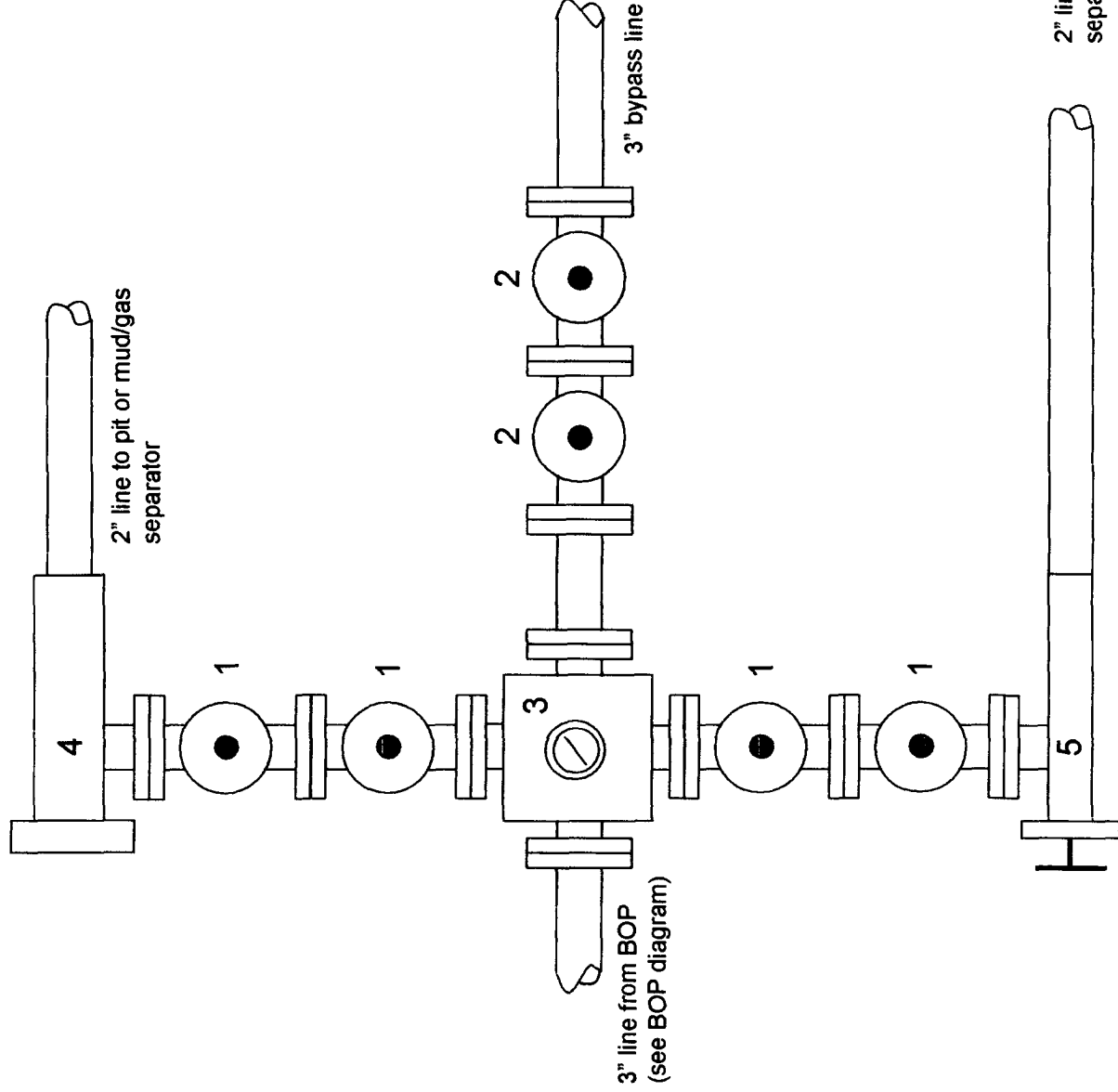
# Tribal No. 05-01

## 2000 psi Choke Manifold Minimum requirements

### Components

- 1 - 2" Valve (2M)
- 2 - 3" Valve (2M)
- 3 - Mud cross with gauge (2M) flanged below the gage.
- 4 - Beam Adjustable choke (2M)
- 5 - Needle Adjustable choke (2M)

Note: All line and valve sizes listed are minimum requirements.



8/9-17-08