

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-045-32336
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name MONTROYA
8. Well Number #1B
9. OGRID Number 173252
10. Pool name or Wildcat Blanco Mesa Verde/Basin Dakota

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator  
PATINA SAN JUAN, INC

3. Address of Operator  
5802 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401

4. Well Location  
Unit Letter A : 660 feet from the NORTH line and 660 feet from the EAST line  
Section 35 Township 32N Range 13W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5879' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water 1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material SYNTHETIC

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: change hole size ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PATINA OIL AND GAS REQUESTS THAT THE HOLE SIZE BE CHANGED FROM 12.25" TO 13.5" FOR SURFACE CASING AND FROM 8.75" TO 7.875" LONG STRING.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE [Signature] TITLE Regulatory/Engineering Technician DATE 12/01/05

Type or print name [Signature] E-mail address: \_\_\_\_\_ Telephone No. \_\_\_\_\_  
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE DEC 07 2005  
Conditions of Approval (if any): \_\_\_\_\_

**Montoya #1B**  
**General Drilling Plan**  
**Patina San Juan, Inc.**  
**San Juan County, New Mexico**

**1. LOCATION:**

Est. elevation: 5879'  
NENE of Section 35, T32N, R13W  
San Juan, New Mexico

Field: Blanco Mesa Verde  
Surface: Fee  
Minerals: Fee  
API#: 3004532336

**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	480
Kirtland	596
Fruitland**	1490
Pictured Cliffs**	2200
Lewis	2350
Cliff House**	3810
Menefee**	4080
Point Lookout***	4540
Mancos	4893
Gallup	N/A
Greenhorn	N/A
Graneros	N/A
Dakota	N/A
TD	5100

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 its rated working pressure or 70-percent of the internal yield of the surface casing, but not to exceed 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:	1,000 psi (High)	250 psi (low)
c) Choke 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:

Hole Data				
Interval	Bit Size (Inches)	Casing Size (Inches)	Top (Ft)	Bottom (Ft)
Surface	13.50	9.625	0	300
Production	7.875	4.5	0	4850

Casing Data							
OD (Inches)	ID (Inches)	Weight (Lbs/Ft)	Grade	Thread	Collapse (psi)	Burst (psi)	Min. Tensile (Lbs)
9.625	8.921	36.0	J55	STC	2,020	3,520	394,000
4.5	4.276	11.6	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: 1,600 psi

Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 3,750 psi

Float Equipment:

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

**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:

225 sx Type III cement with 3% CaCl<sub>2</sub>, 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: 14.5 ppg  
Slurry yield: 1.42 ft<sup>3</sup>/sack

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	300' of 13-1/2" x 9-5/8" annulus	147 cu ft
	<u>100% excess (annulus)</u>	<u>147 cu ft</u>
	Total	311 cu ft

Note:

1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2% CaCl<sub>2</sub> for top out purposes.

### 4 1/2" Production casing:

#### 1<sup>st</sup> Stage:

285 sx of Type III cement plus additives

Slurry weight: 12.3 ppg  
Slurry yield: 2.22 ft<sup>3</sup>/sx

#### 2<sup>nd</sup> Stage: (Stage tool at ±3000')

Lead: 350 sx of Type III cement plus additives

Slurry weight: 12.3 ppg  
Slurry yield: 2.22 ft<sup>3</sup>/sx

Tail: 50 sx of Type III cement plus additives

Slurry weight: 14.5 ppg  
Slurry yield: 1.40 ft<sup>3</sup>/sx

Volume basis:	40' of 4-1/2" shoe joint	5 cu ft
	4800' of 4 1/2" x 7-7/8" hole	1094 cu ft
	300' of 4 1/2" x 9-5/8" casing overlap	33 cu ft
	<u>30% excess (annulus)</u>	<u>338 cu ft</u>
	Total	1473 cu ft

Note:

1. Design top of cement is surface.
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 production hole will be drilled with water until mud up at about 3100 ft. From mud up point to total depth, it will be drilled with a LSND mud. Anticipated mud weight ranges from 8.5 – 9.2 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

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.

**6. EVALUATION PROGRAM:**

Mud logger: From base of surface casing to TD.

Testing: No DST is planned

Coring: None Planned

Electric logs: Production Hole:

1) No open hole logs

2) Cased hole resistivity & porosity logs

**7. ABNORMAL PRESSURE AND TEMPERATURE:**

H <sub>2</sub> S	None
Coal	Fruitland
Minerals	None
Water	None
Static BHT	140° F
Lost Circulation	Possible
Hole Deviation	None
Abnormal Pressures	None
Unusual Drilling Problems	None

**8. ANTICIPATED STARTING DATE: Q4, 2005**

Anticipated duration: 12 days