

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. <b>30-045-32611</b>
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 <b>JACQUEZ 02</b>
8. Well Number <b>#04</b>
9. OGRID Number <b>173252</b>
10. Pool name or Wildcat <b>Blanco Mesa Verde/Basin Dakota</b>

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 **D** : **660** feet from the **NORTH** line and **660** feet from the **WEST** line  
Section **2** Township **31N** Range **13W** **NMPM** **SAN JUAN** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**5786' 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: ☐

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 SAN JUAN REQUESTS A CHANGE TO THE DRILLING PROGRAM FOR THE DRILLING OF THE DAKOTA AND MESA VERDE FORMATIONS.**

**ATTACHED IS A REVISED DRILLING PLAN FOR THE CHG IN SURFACE CASING.**



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 **02/15/06**

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY: [Signature] TITLE **DEPUTY OIL & GAS INSPECTOR, DIST. 3** DATE **FEB 16 2006**  
Conditions of Approval (if any):

## CASING DESIGN:

Hole Data				
Interval	Bit Size (Inches)	Casing Size (Inches)	Top (Ft)	Bottom (Ft)
Surface	13.50	9.625	0	300
Intermediate	8.75	7.0	0	4600
Production	6.25	4.5	4300	6600

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
7.000	6.366	23.0	L80	LTC	3,830	6,340	435,000
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: 2,500 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.

**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 Cliffhouse 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:

225 sx Type III cement with 3%  $\text{CaCl}_2$ , 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: 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%  $\text{CaCl}_2$  for top out purposes.

### 7" Intermediate Casing:

1<sup>st</sup> Stage:

150 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  $\pm 3000'$ )

Lead: 235 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 7" shoe joint	9 cu ft
	4300' of 7" x 8 3/4" hole	647 cu ft
	300' of 7" x 9 5/8" casing	50 cu ft
	<u>30% excess (annulus)</u>	<u>209 cu ft</u>
	Total	915 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:**

175 sx of Type III cement plus additives

Slurry weight: 12.5 ppg

Slurry yield: 2.06 ft<sup>3</sup>/sx

Volume basis:	40' of 4 1/2" shoe joint	5 cu ft
	2000' of 4 1/2" x 6 1/4" hole	205 cu ft
	300' of 4 1/2" x 7" casing overlap	33 cu ft
	200' above 4.5" liner (without drill pipe)	44 cu ft
	<u>30% excess (annulus)</u>	<u>72 cu ft</u>
	Total	359 cu ft

Note:

1. Design top of cement is ±4100' (200' above the top of the 4.5" liner w/out drill pipe).
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 3100 ft. From mud up point to intermediate casing depth (±4600'), 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.

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

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.