Submit 3 Copies To Appropriate District Office	State of .	New Mo	exico		Form C-103	
District I	Energy, Minerals	and Nati	ıral Resources /		May 27, 2004	
1625 N. French Dr., Hobbs, NM 88240	•	•		WELL API NO.		
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERV	ATION	DIVISIØN	30-045-32237		
District III	1220 South St. Francis Dr.			5. Indicate Type of Lease		
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe			STATE	☐ FEE ☒	
District IV	Sama re	5, 1NIVI O	7505	6. State Oil & G	as Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM 87505						
	CES AND REPORTS ON	V WELLS	3	7. Lease Name of	or Unit Agreement Name	
(DO NOT USE THIS FORM FOR PROPO	SALS TO DRILL OR TO DEEP	PEN OR PL	UG BACK TO A	MONTOYA		
DIFFERENT RESERVOIR. USE "APPLIC	CATION FOR PERMIT" (FORM	M C-101) F	OR SUCH	8. Well Number		
PROPOSALS.)  1. Type of Well: Oil Well	Gas Well 🛛 Other			#1C		
2. Name of Operator	Gas well \( \sqrt{\sq}}\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}		<u>-</u>	9. OGRID Num	her 173252	
PATINA SAN JUAN, INC				J. OGIGE Hum	001 175252	
3. Address of Operator	<del></del>			10. Pool name o	r Wildcat	
5802 U.S. HIGHWAY 64 FARM	INGTON, NEW MEXIC	O 87401		BLANCO MESA VERDE		
4. Well Location				1		
	1100 6-4 6-41	COLITI	T 1' 1 147	75 Co. 4 Co 41	EACT !	
Unit Letter O					EASI	
Section 35 Township				UAN County		
	11. Elevation (Show wh	ether DR	, RKB, RT, GR, etc.			
Pit or Below-grade Tank Application x⊠	5840' GL					
1		_				
	ndwater <u>&gt;100'</u> Distance from		esh water well <u>&gt;1000'</u>	_Distance from nearest	surface water1000'	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volu	ume	bbls; Co	nstruction Material	SYNTHETIC	
12. Check A	appropriate Box to Inc	dicate N	ature of Notice,	Report or Other	· Data	
				•		
NOTICE OF IN	= -	_		SEQUENT RE	PORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON		REMEDIAL WOR		ALTERING CASING	
TEMPORARILY ABANDON	CHANGE PLANS	$\boxtimes$		ILLING OPNS. 🔲	P AND A	
PULL OR ALTER CASING	MULTIPLE COMPL		CASING/CEMEN	T JOB 🔲		
OTHER:			OTHER:		П	
OTHER:	eted operations. (Clearly	state all	OTHER:	d give pertinent dat	tes including estimated date	
13. Describe proposed or comp.			pertinent details, an			
13. Describe proposed or comp.			pertinent details, an		tes, including estimated date ram of proposed completion	
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# Montoya #1C General Drilling Plan Patina San Juan, Inc. San Juan County, New Mexico

#### 1. LOCATION:

SWSE of Section 35, T32N, R13W San Juan, New Mexico

Field: Blanco MV Surface: Fee Minerals: Fee

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

Surface formation - Nacimiento

<b>Formation</b>	Estimated Formation Top (Ft)
Ojo Alamo	1124
Fruitland	1424
Pictured Cliffs	2132
Cliff House**	3666
Menefee**	3964
Point Lookout***	4498
TD	4488

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 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:

Hole Data					
Interval	Bit Size (Inches)	Casing Size (Inches)	Top (Ft)	Bottom (Ft)	
Surface	12.25	9.625	0	275	
Production	7.875	4.5	0	4900	

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:

0.5 psi/foot

Maximum anticipated reservoir pressure:

1,250 psi

Maximum anticipated mud weight:

9.0 ppg

Maximum surface treating pressure:

3,800 psi

# Float Equipment:

Surface Casing: Guide shoe on bottom and minimum of one centralizer on each of the bottom 3 joints (minimum of 3 total).

**Production Casing:** 4 1/2" whirler type cement nosed guide shoe and a float collar on top of bottom joint with a minimum of six (6) centralizers over potential hydrocarbon bearing zones.

#### **CEMENTING PROGRAMS:**

# 9-5/8" Surface casing:

165 sx of Type B cement with 3% CaCl<sub>2</sub>, plus ½#/sx cellofakes. 100% excess to circulate cement to surface. WOC 12 hrs. Pressure test surface casing to 1000 psi for 30 minutes.

Slurry weight: 15.6 ppg Slurry yield: 1.21 ft<sup>3</sup>/sack

Volume basis: 40' of 9-5/8" shoe joint 17 cu ft

 275' of 12-1/4" x 9-5/8" annulus
 86 cu ft

 100% excess (annulus)
 86 cu ft

 Total
 189 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.

# 4.5" Production Casing:

1<sup>st</sup> Stage:

Lead: 175 sx of Type III cement w/additives

Slurry weight: 12.0 ppg Slurry yield: 2.55 ft<sup>3</sup>/sack

Tail: 190 sx of Type III cement w/additives

Slurry weight: 13.0 ppg Slurry yield: 2.00 ft<sup>3</sup>/sack

#### Note:

1. Design top of stage one cement is  $\pm 3000$ '

 $2^{nd}$  Stage: (Stage tool at  $\pm 3000^{\circ}$ ): Lead: 270 sx of Type III w/additives

Slurry weight: 11.5 ppg Slurry yield: 2.96 ft<sup>3</sup>/sack

Tail: 175 sx of Type III w/additives

Slurry weight: 12.0 ppg Slurry yield: 2.55 ft<sup>3</sup>/sack

#### Note:

1. Design top of stage two cement is surface.

2. Actual cement volumes to be based on caliper log plus 30% if open hole logs are run.

Volume Basis: 40' of 4.5" shoe joint 4 cu ft

 4625' of 4.5" x 7-7/8" annulus
 1054 cu ft

 275' of 4.5" x 9 5/8" annulus
 89 cu ft

 80% excess (annulus)
 915 cu ft

 Total
 2062 cu ft

#### 5. MUD PROGRAM:

The surface hole will be drilled with a native spud mud. Gel and polymer sweeps will be used from surface to 275 feet as necessary to keep hole clean.

The production hole will be drilled with water until mud up at about 3100 ft. From 3100' to TD the well will be drilled with a 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.

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: Surface Hole:

1) None

Production Hole:

1) No open hole logs planned.

2) Cased hole resistivity & porosity logs from TD to base of

surface casing.