Form 3160-5 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### INDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2001

5. Lease Serial No.

JICARILLA CONTRACT #101

20NDK1	MOTICES AND REP	ORIS ON W	ELLS	JICARII	ELA CONTRACT #101
	nis form for proposals t ell. Use Form 3160-3 (			]	Allottee or Tribe Name  LLA APACHE TRIBE
SUBMIT IN TR	IPLICATE- Other insti	ructions on rev	erse side.	7. If Unit or 0	CA/Agreement, Name and/or No.
1. Type of Well Oil Well	Gas Well Other			8. Well Nam	
2. Name of Operator PATINA S	SAN JUAN, INC.			9. API Wel	LLA C #1C
3a Address		3b. Phone No. (incl. 505-632-8056	ude area code)	30-039-2	
5802 US HIGHWAY 64 FART 4. Location of Well (Footage, Sec.,		10. Field and Pool, or Exploratory Area  Basin Dakota/Blanco Mesa Verde			
2380' FNL, 2070' FEL				11. County o	r Parish, State
G Sec 11 - T26N - R4W				RIO AR	RIBA CTY, NEW MEXICO
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NAT	URE OF NOTICE,	REPORT, OR	OTHER DATA
TYPE OF SUBMISSION		Т	YPE OF ACTION		
	Acidize	Deepen		(Start/Resume)	Water Shut-Off
✓ Notice of Intent	Alter Casing	Fracture Treat	Reclamation		Well Integrity
Subsequent Report	Casing Repair  Change Plans	New Constructio Plug and Abando	, , , , , , , , , , , , , , , , , , , ,	Abandon	Other
Final Abandonment Notice	Convert to Injection	Plug Back	Water Dispo		
determined that the site is ready  PATINA SAN JUAN R  PLAT ARE ATTACHED	EQUESTS A CHANGE TO T	HE APPROVED D	RILLING PLANS.	THE REVISED I	DRILLING PLAN AND WELL
		SHEIGHT OF SHEET OF S	JUN 2005		JUN 14 RM 11 4 RECEIVED TO FARMINGTON III
		£6.67	10 G Y S W		₹ 5
14. I hereby certify that the fore Name (Printed/Typed)	going is true and correct  EAN M. F	14SE Title	REGULATORY/E	NGINEERING T	ЕСН
Signature	MAR	Date		06/10/2005	
	THIS SPACE FOR		STATE OFFIC	E USE	
Approved by	Isl Adrienne Bruml		Title	Da	ate 6/21/05
Conditions of approval, if any, are certify that the applicant holds lega which would entitle the applicant to	l or equitable title to those rights i		Office	FFO	
which would entitle the applicant to	oconquet operations thereon.	I	ロエレ		

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.

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

Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

AMENDED REPORT

Form C-102

10	API Number			²Pool Cod	e		REAGE DED		Pool Name	9	N DVK	<b>ΩΤ</b> Δ
*Property	Code	72319 \ 71599   BLANCO MESAVERDE \ BASIN Property Name JICARILLA C								11 Number		
'OGRID I	No.		*Operator Name *Elevatio									
17325	2				DILLERA		VERGY, INC					7110
UL or lot no.	Section	Township	Range	Lat Idn	<sup>10</sup> Surfac		_ocation	- Fac	it from the	East/Wes	st line	County
G	11	26N	4W		2380		NORTH		2070	EAS		RIO ARRIBA
UL or lot no.	Section	11 B(	ottom Range	Hole L	ocation		Different		om Surf	ace East/Net	at line	6
	Section	10512	. Ici ago	200 101	PEC ITOII		na ciy soccii The	'*		Edst/ Nes	ar IING	County
Dedicated Acres		).O Acres	s - (E	L [/2)	13 Joint or In	fill	<sup>14</sup> Consolidation Code	<sup>15</sup> Orde	r No.	<u> </u>		
NO ALLOV				· · ·	l	 ETI(	ON UNTIL ALL	INT	ERESTS H	IAVE BE	EN CON	NSOL TRATER
		OR A	NON-57	ANDARD	UNIT HA	S BE	EN APPROVED	BY	THE DIVI	SION		
. 00 . 05				11 -			2070'	5280.00	Signatur Paul Printed A46 Title 4 Date  18 SURV I hereby shown on notes of my super and corre and corre Date Signature	Name  C.  Name  C.  Name  Certify the this plat actual survision, and cet to the of Survision, and Seal  Seal  Seal  Seal  Seal	CERTI hat the wing plots of Profest C. EDW	FICATIO all location ted from field by me or unde same is true my belief. AY 8, 2002 assional Surveyor
		} :	F	     1290 . 56	s '				UAS	on C	<u> </u>	DWARDS 15269

# Jicarilla C #1C General Drilling Plan Patina San Juan, Inc. Rio Arriba County, New Mexico

#### 1. LOCATION:

Est. GL elevation: 7110'

SESE 2380' FNL & 2070' FEL

Section 11, T26N, R4W

Field: Blanco MV & Basin DK Surface: Jicarilla Apache Tribe Minerals: Jicarilla contract #101

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

Surface formation - San Jose

<u>Formation</u>	Estimated Formation Top (Ft)
Fruitland	3508
Pictured Cliffs**	3826
Lewis	4172
Cliff House	5490
Menefee	5594
Point Lookout***	5963
Gallup	7154
Greenhorn	7918
Graneros	7972
Dakota ***	7992
TD	8350

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**

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11" – 2,000 psi single ram (blind)
11" – 2,000 psi single ram (pipe)
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#### 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 CARLOS BONDERS AND A CONTRACT

- 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			
Intermediate	8.75	7.0	0	4350			
Production	6.25	4.5	4050	8350			

	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: 5,000 psi

#### Float Equipment:

stable in a material to a

**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 Fruitland Coal. One centralizer below stage tool and one centralizer above stage tool.

<u>Production Casing:</u> 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:

245 sx Type III cement with 2% CaCl<sub>2</sub>, 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: 15.2 ppg Slurry yield:  $1.27 \, \text{ft}^3/\text{sx}$ 

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 100% excess (annulus) 147 cu ft 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.

# 7" Intermediate Casing:

1<sup>st</sup> Stage:

165 sx of Type III cement plus additives

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

2<sup>nd</sup> Stage: (Stage tool at ±2500')

Lead: 165 sx of Type III cement plus additives

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

Tail: 60 sx of Type III cement plus additives

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

Volume Basis:

40' of 7" shoe joint	9 cu ft
4050' of 7" x 8 3/4" hole	609 cu ft
300' of 7" x 9 5/8" casing	50 cu ft
30% excess (annulus)	198 cu ft
Total	866 cu ft

#### Note:

of was hearth to be at

1. Design top of cement is surface.

2. Actual cement volumes to be based on caliper log plus 30%.

3. Intermediate TD @  $\pm 4350$ ', cement stage tool @  $\pm 2500$ '.

# 4 1/2" Production casing:

370 sx of 50/50 Type III/POZ cement plus additives

Slurry weight: 12.5 ppg Slurry yield: 1.78 ft<sup>3</sup>/sx

Volume basis: 40' of 4 1/2" shoe joint 5 cu ft

	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
4000' of 4 ½" x 6 1/4" hole	410 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
40% excess (annulus)	177 cu ft
Total	669 cu ft

#### Note:

- 1. Design top of cement is  $\pm 3850$ ' (200' above the top of the 4.5" liner w/out drill pipe).
- 2. Intermediate casing @ ±4350'.
- 3. Estimated TD @  $\pm 8350$ ', estimated TOL @  $\pm 4050$ ' (300' overlap).
- 4. 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 a LSND mud from the base of surface casing to intermediate TD. 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.

## **6. EVALUATION PROGRAM:**

Mud logger:

From base of surface casing to TD.

Testing:

No DST is planned

Coring:

None Planned

Electric logs: Intermediate Hole:

1) DIL-GR-SP: TD to base of surface casing.

2) LDT-CNL-GR-CAL-PE: TD to base of surface casing

**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	175° F
Lost Circulation	Possible
Hole Deviation	None
Abnormal Pressures	None
Unusual Drilling Problems	None

# **8. ANTICIPATED STARTING DATE:** July, 2005

Anticipated duration: 18 days

Start Charles and Armst