

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, 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-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONEXX

¹ Operator Name and Address Patina San Juan, Inc. 5802 U. S. Highway 64 Farmington, NM 87401 (505) 632-8056		² OGRID Number 173252
³ Property Code 34333	⁴ Property Name ALAMO 22	⁵ API Number 30-045-32599
⁹ Proposed Pool 1 BASIN FRUITLAND COAL		⁶ Well No. #10
⁹ Proposed Pool 1		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. J	Sec. 22	Township 31N	Range 13W	Lot Idn J	Feet from the 1630	North/South line SOUTH	Feet from the 2035	East/West line EAST	County SAN JUAN
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8 Proposed 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
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Additional Well Information

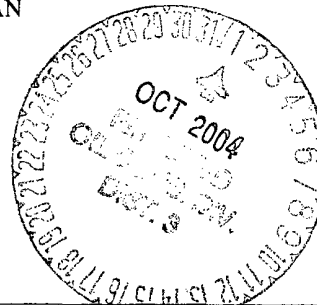
¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 5607
¹⁶ Multiple N	¹⁷ Proposed Depth 2450	¹⁸ Formation FC	¹⁹ Contractor N/A	²⁰ Spud Date NOVEMBER 2004
Depth to Groundwater <100'		Distance from nearest fresh water well >1000'		Distance from nearest surface water >1000'
Pit: Liner: Synthetic X 12_mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____				
Closed-Loop System <input type="checkbox"/> Fresh Water X Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	9 5/8"	36#	250'	140 sx	SURFACE
8 3/4"	7"	23#	2450' +/-	220sx	SURFACE
					"

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED WELL PLAN



²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Jean M. Muse		Approved by:	
Title: Regulatory/Engineering Technician		Title: DEPUTY OIL & GAS INSPECTOR, DIST. #1	
E-mail Address: jmuse@patinasanjuan.com		Approval Date: OCT - 1 2004 Expiration Date: OCT - 1 2005	
Date: 10/01/04	Phone: 505-632-8056	Conditions of Approval Attached <input type="checkbox"/>	

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32599	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 34333	*Property Name ALAMO 22	*Well Number 10
*GRID No. 173252	*Operator Name PATINA SAN JUAN, INC.	*Elevation 5607'

¹⁰ Surface Location

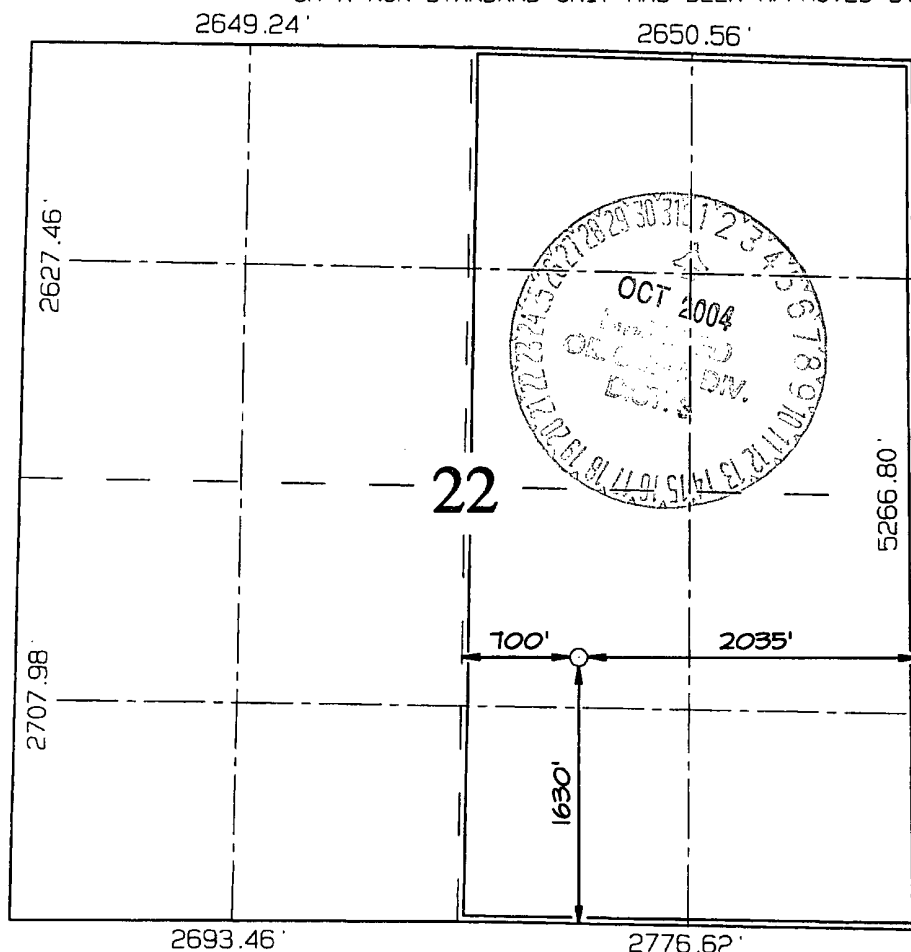
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	22	31N	13W		1630	SOUTH	2035	EAST	SAN JUAN

¹¹ 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

¹² Dedicated Acres 320.0 Acres - (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: *JEAN MUSE*
Printed Name: JEAN MUSE
Title: Reg/Engn Tech
Date: 9/30/04

¹⁸ SURVEYOR CERTIFICATION

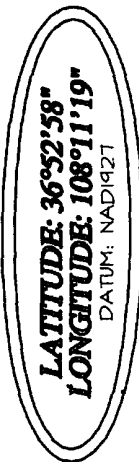
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.


Survey Date: SEPTEMBER 24, 2004

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



C-C'						
5617'						
5607'						
5597'						

Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

**Alamo 22 No. 10
Operations Plan
Patina San Juan, Inc.
San Juan County, New Mexico**

CASING DESIGN:

Casing Program:

Hole Size	Depth	Casing Size
12 ¼"	250'	9 5/8"
8 ¾"	2450'	7"

Csg. Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	250'	36.0	J55	STC	New
7"	Production	0'	2450'	23.0	J55	STC	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"	23.0 lbs.	J55	STC	3,270	4,360	284,000

MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125

BURST: 1.00

TENSION: 1.80

Area Fracture Gradient Range: 0.85 to 1.30 psi/foot

Maximum anticipated reservoir pressure: 900 psi

Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 1,500 psi

Float Equipment:

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

Production Casing: 7" 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:

140 sxs Type III cement with 2% CaCl₂, 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 ft³/sack

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	250' of 12-1/4" x 9-5/8" annulus	78 cu ft
	100% excess (annulus)	78 cu ft
	Total	173 cu ft

Note:

1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2% CaCl₂ for top out purposes.

7" Production casing:

220 sacks of Premium lite high strength 35/65 pozmix cement.

Slurry weight: 12.4 ppg
Slurry yield: 1.91 ft³/sack

Volume basis:	40' of 7" shoe joint	9 cu ft
	7 " x 8 3/4" hole	322 cu ft
	250' of 9 5/8" x 7" casing overlap	42 cu ft
	15% excess (annulus)	48 cu ft
	Total	421 cu ft

Note:

1. Design top of cement is the surface.
2. Actual cement volumes to be based on caliper log plus 15%.

5. MUD PROGRAM:

The surface hole will be drilled with spud mud. Gel and polymer sweeps will be used from surface to 250 feet as necessary to keep hole clean.

The production hole will be drilled with LSND mud from base of surface casing to TD. 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: None planned

Testing: No DST is planned

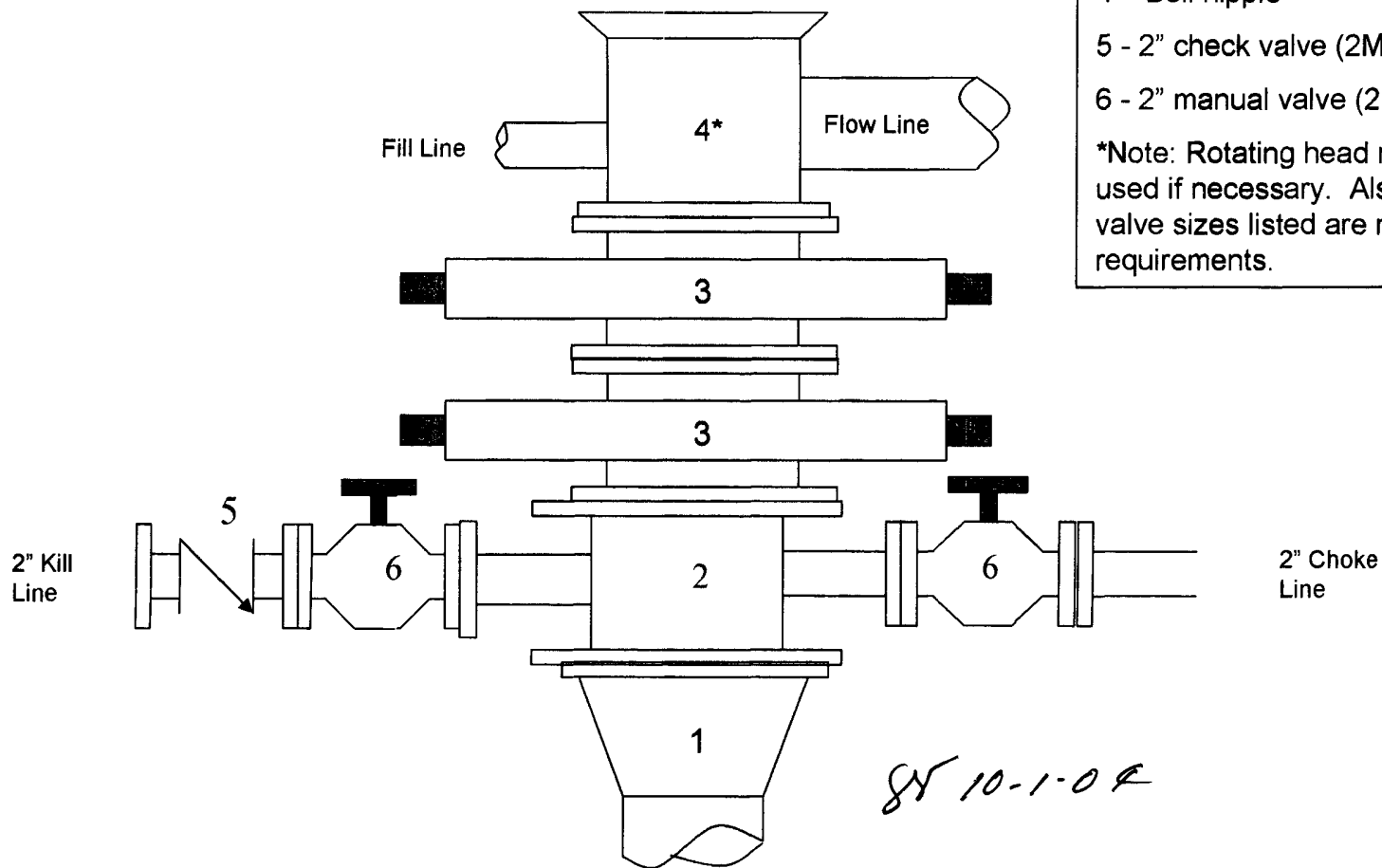
Coring: None Planned

Electric logs: 1) DIL-GR-SP: TD to base of
surface casing. 2) LDT-CNL-GR-CAL-PE: TD to
base of surface casing

Alamo 22 No. 10

2000 psi BOP stack

Minimum requirements



Components

- 1 - Wellhead 9-5/8" (2M)
- 2 - Drilling spool 11" (2M)
- 3 - A double or two single rams with blinds on bottom 11" (2M)
- 4 - Bell nipple*
- 5 - 2" check valve (2M)
- 6 - 2" manual valve (2M)

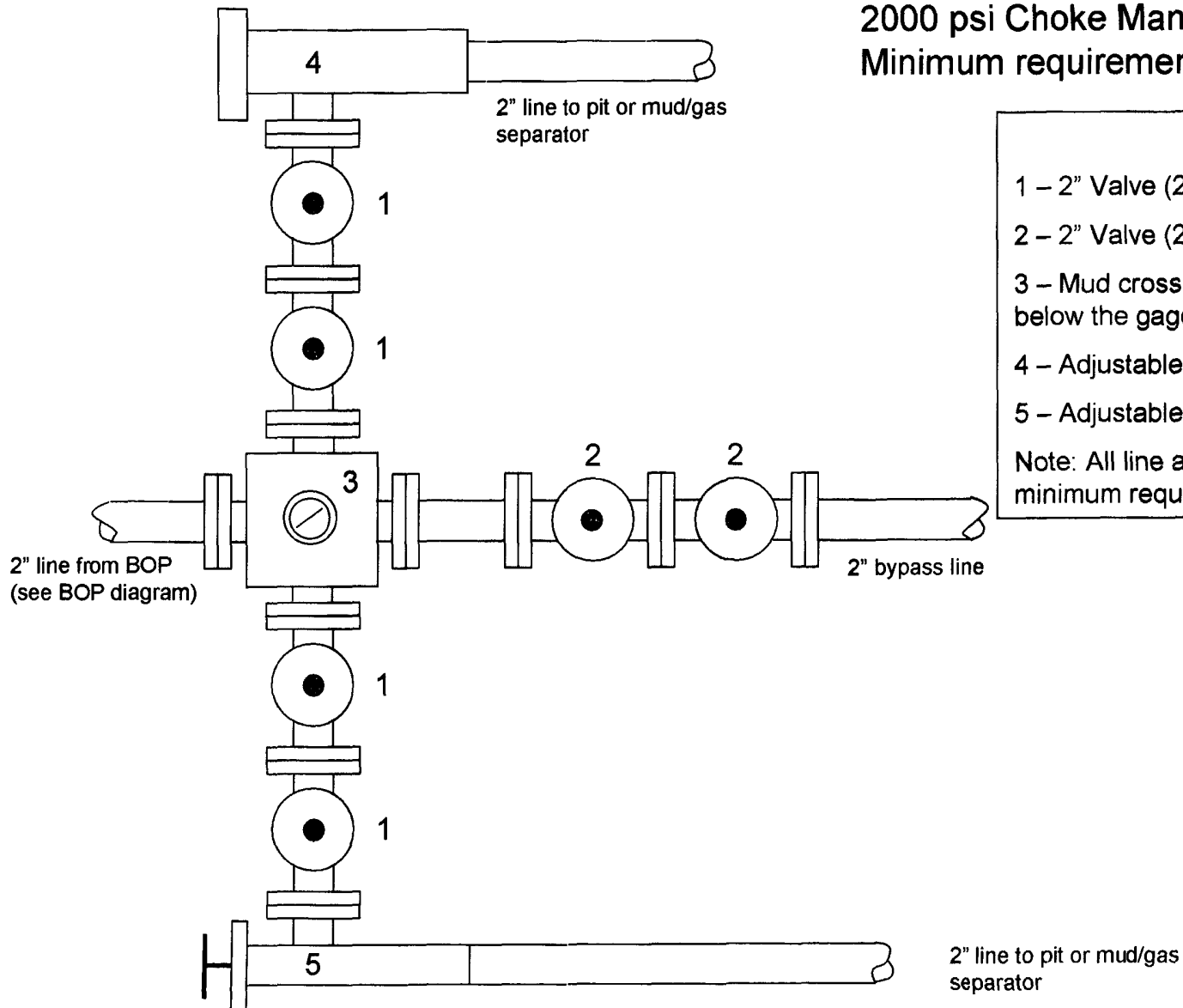
*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.

8/10-1-08

Alamo 22 No. 10

2000 psi Choke Manifold

Minimum requirements



Components

1 – 2" Valve (2M)

2 – 2" Valve (2M)

3 – Mud cross with gauge (2M) flanged below the gage.

4 – Adjustable beam choke (2M)

5 – Adjustable needle choke (2M)

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

SW 10-1-08