

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTRECEIVED  
FEB 20 PM 3:12

5. LEASE DESIGNATION AND SERIAL NO. <b>SF- 078764</b>
6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>070 Farmington, NM</b>
7. UNIT AGREEMENT NAME <b>Rosa Unit</b>
8. FARM OR LEASE NAME, WELL NO. <b>200A</b>
9. API WELL NO. <b>30 039 27624</b>
10. FIELD AND POOL OR WILDCAT <b>Basin Fruitland Coal</b>
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>0 Sec. 29, T31N, R5W</b>
12. COUNTY OR PARISH <b>Rio Arriba</b>
13. STATE <b>NM</b>
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* <b>25 miles NE of Blanco, NM</b>
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) <b>975'</b>
16. NO. OF ACRES IN LEASE <b>2507.3</b>
17. NO. OF ACRES ASSIGNED TO THIS WELL <b>320 - E/2</b>
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. <b>1100'</b>
19. PROPOSED DEPTH <b>3417'</b>
20. ROTARY OR CABLE TOOLS <b>Rotary</b>
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>6522' GR</b>
22. APPROX. DATE WORK WILL START* <b>April 1, 2004</b>

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36.0#	+/- 300'	~206 cu.ft. Type III with 2% CaCl <sub>2</sub>
8-3/4"	7"	20.0#	+/- 3247'	~836 cu.ft. 65/35 poz & ~70 cu.ft. Type I
6-1/4"	5-1/2"	15.5#	+/- 3147' - 3417'	Open hole completion - no cement

Williams Production Company proposes to drill a vertical well to develop the Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by Independent Contract Archaeology. Copies of their report have been submitted directly to your office.

This APD also is serving as an application to obtain BLM road and pipeline right-of-ways. This well will require 1500ft of new access road (see Pipeline & Well Plats #3 & #4). This new road will cross the E/2 of sec 29 where it joins FS road #309 in the NE qtr of sec 29, T31N, R5W.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Larry Higgins TITLE Larry Higgins, Drlg COM DATE 2/20/2004

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY WAYNE TOWNSEND TITLE Acting AFM DATE 3/10/04

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-039-27624</b>		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 200A
*CGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6522

<sup>10</sup> Surface Location



UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
0	29	31N	5W		975	SOUTH	1515	EAST	RIO ARriba

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County

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

<sup>16</sup> 	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  <i>Larry Higgins</i> Signature <b>LARRY HIGGINS</b> Printed Name <b>DRILLING COM</b> Title <b>2-20-04</b> Date
	<sup>18</sup> 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: <b>NOVEMBER 21, 2003</b> Signature and Seal of Professional Surveyor   <b>JASON C. EDWARDS</b> Certificate Number 15269



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

*(Note: This procedure will be adjusted on site based upon actual conditions)*

<b><u>DATE:</u></b>	2/20/2004		
<b><u>WELLNAME:</u></b>	Rosa Unit #200A	<b><u>FIELD:</u></b>	Basin Fruitland Coal
<b><u>LOCATION:</u></b>	SWSE Sec. 29-T31N-R5W Rio Arriba, NM	<b><u>SURFACE:</u></b>	Federal
<b><u>ELEVATION:</u></b>	6522' GR	<b><u>MINERALS:</u></b>	Federal
<b><u>TOTAL DEPTH:</u></b>	3417'	<b><u>LEASE #</u></b>	SF-078764

**I. GEOLOGY:** Surface formation - San Jose

**A. FORMATION TOPS:** ( KB)

San Jose	Surface	Top Coal	3,267
Nancimiento	1,462	Bottom Coal	3,397
Ojo Alomo	2,682	Pictured Cliffs	3,402
Kirtland	2,797	TD	3,417
Fruitland	3,157		

**B. LOGGING PROGRAM:** None

**C. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

## **II. DRILLING**

**A. MUD PROGRAM:** Clear water with benex to 7" casing point. Treat for lost circulation as necessary. Expect 100% returns prior to cementing. Notify Engineering of any mud losses. If coal is detected before 3028' DO NOT drill deeper until Engineering is contacted.

**B. Drilling Fluid:** Coal section will be drilled with Fruitland Coal water. Mud logger will pick TD at +/- 3417'.

**C. MUD LOGGING PRORAM:** Mud logger will be on location at drill out below 7" casing to TD.

**C. BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the rams will be tested to 1500 psi. The surface and intermediate casing strings will be pressure tested to 1500 psi in conjunction with the BOP test before drilling out cement. The drum brakes will be inspected and tested each tour. All tests, inspections and SPR's will be recorded in the tour book as to time and results.

### **III. MATERIALS**

#### **A. CASING PROGRAM:**

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. &amp; GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 3247'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 3147' - 3417'	5-1/2"	15.5# K-55

#### **B. FLOAT EQUIPMENT:**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place float one(1) joint above the shoe and five(5) centralizers, spaced every other joint, starting with the float collar. Place turbulent centralizers, at 120' intervals, starting at 1585' to the surface. Total centralizers = 5 regular and 14 turbulent.
3. PRODUCTION LINER: 5-1/2"liner with notched collar on bottom.

#### **C. CEMENTING:**

*(Note: Volumes may be adjusted onsite due to actual conditions)*

1. SURFACE: Use 155 sx (206 cu.ft.) of "Type III" with 2% CaCl<sub>2</sub> and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). Use **100% excess** to circulate the surface. WOC 12 hours. Total volume = 206 cu.ft. Test to 1500#.
2. INTERMEDIATE: Lead - 400 sx (836 cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl<sub>2</sub> and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 50 sx (70cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl<sub>2</sub> (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use **100% excess in Lead Slurry** to circulate to surface. **No excess in Tail Slurry.** Total volume = 906 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION LINER: Open hole completion. No cement.

#### IV COMPLETION

##### A. PRESSURE TEST

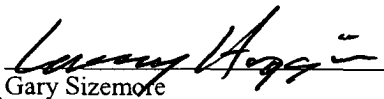
Pressure test 7" casing to 3300# for 15 minutes.

##### B. STIMULATION

Cavitate Well with reciprocation and rotation. Surge wells with water and air and then flow back to pit.  
Cavitate for 2 to 3 weeks. Maximum pressure not expected to exceed 2,000 psi.

##### C. RUNNING TUBING

1. Fruitland Coal: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above TD.

  
for Gary Sizemore  
Sr. Drilling Engineer

file:Rosa200A

# Williams Production Company, LLC

## Well Control Equipment Schematic for 2M Service

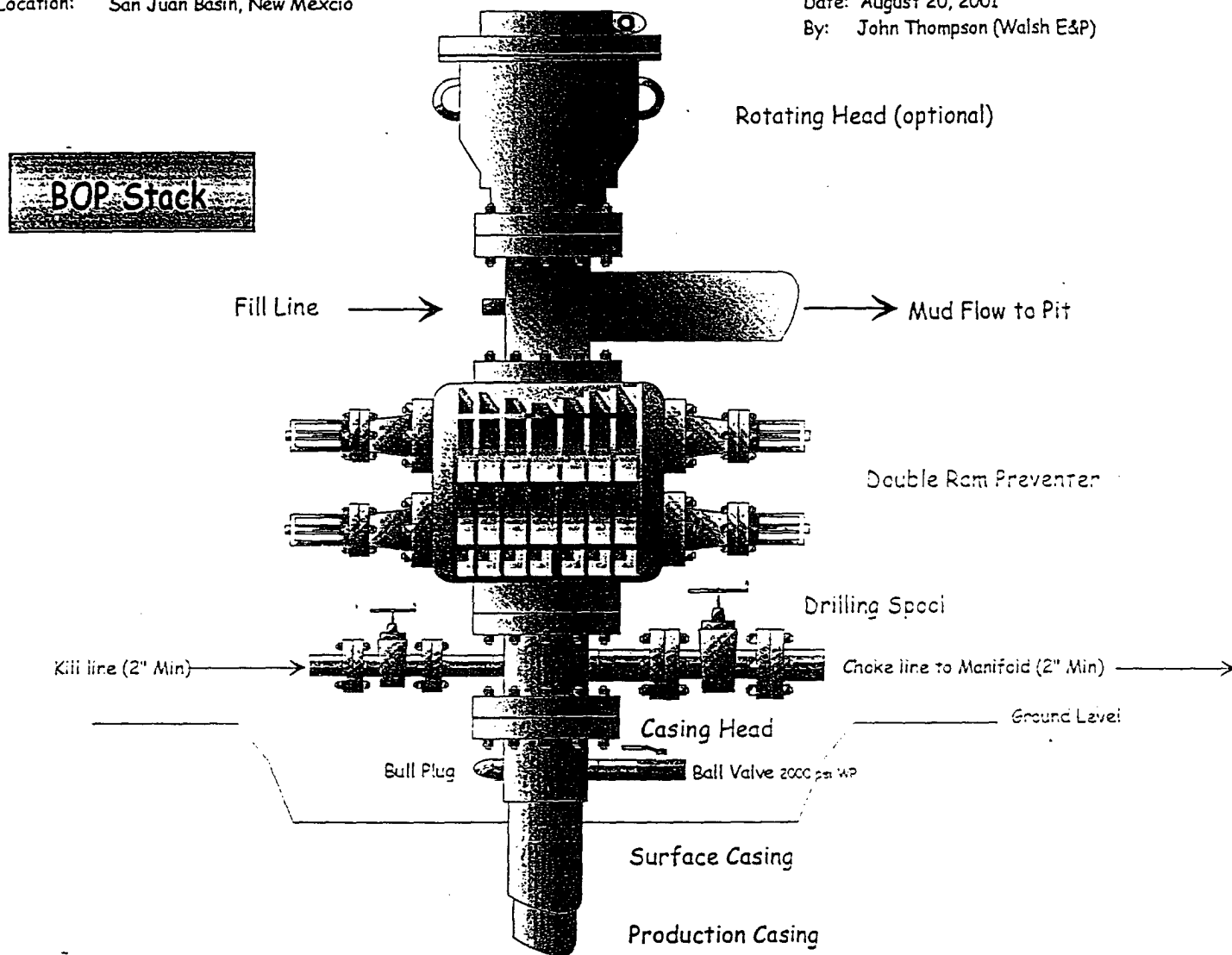
Attachment to Drilling Technical Program

### Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)



### Choke & Kill Manifold

