

**RECEIVED**

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB 12 2010

**APPLICATION FOR PERMIT TO DRILL OR REENTER**  
Land Management  
Fruitland Field Office

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. Rosa Unit <b>NM NM-78407X</b>	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. Rosa Unit 374A	
2. Name of Operator Williams Production Company, LLC		9. API Well No. <b>30-039-30918</b>	
3a. Address P.O. Box 640 Aztec, NM 87410	3b. Phone No. (include area code) (505) 634-4208	10. Field and Pool, or Exploratory Basin Fruitland Coal	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1335' FSL & 1375' FEL At proposed prod. zone		11. Sec., T., R., M., or Blk. and Survey or Area <b>5</b> Section 16, 31N, 5W	
14. Distance in miles and direction from nearest town or post office* approximately 33 miles northeast of Blanco, New Mexico		12. County or Parish Rio Arriba	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1335'	16. No. of Acres in lease 2,560	17. Spacing Unit dedicated to this well 320.0 - (E/2)	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,820' Rosa 361	19. Proposed Depth <b>3203'</b> 4,257'	20. BLM/BIA Bond No. on file <b>UT0899 UTB 000138</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,274' GR	22. Approximate date work will start* April 1, 2010	23. Estimated duration 1 month	

24. Attachments

RCVD OCT 19 '10  
OIL CONS. DIV.

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Larry Higgins</i>	Name (Printed/Typed) Larry Higgins	Date <b>2-12-10</b>
<b>SEE ATTACHED FOR CONDITIONS OF APPROVAL</b>		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date <b>10/14/2010</b>
Title Drilling COM	Office FFO	

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, are attached.

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.

\*(Instructions on reverse)

Williams Production Company, LLC, proposes to develop the Basin Fruitland Coal formations at the above described location in accordance with the attached drilling and surface use plans.

The surface is under Jurisdiction of the Carson National Forest, Jicarilla Ranger District.

This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the CNF.

A new access road of 1,920.5 feet will be required for this proposed well.

This APD is also serving as an application to obtain a pipeline right-of-way. An associated pipeline tie of 2,420.4 feet would be required for this well.

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

**NMOCD**  
**OCT 25 2010**

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
1301 W. Grand Avenue, 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 & Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED

FEB 12 2010

Bureau of Land Management  
Farmington Field Office

Form C-102  
Revised October 12, 2005  
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 <b>30-034-36918</b>		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 374A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6274'

#### 10 Surface Location

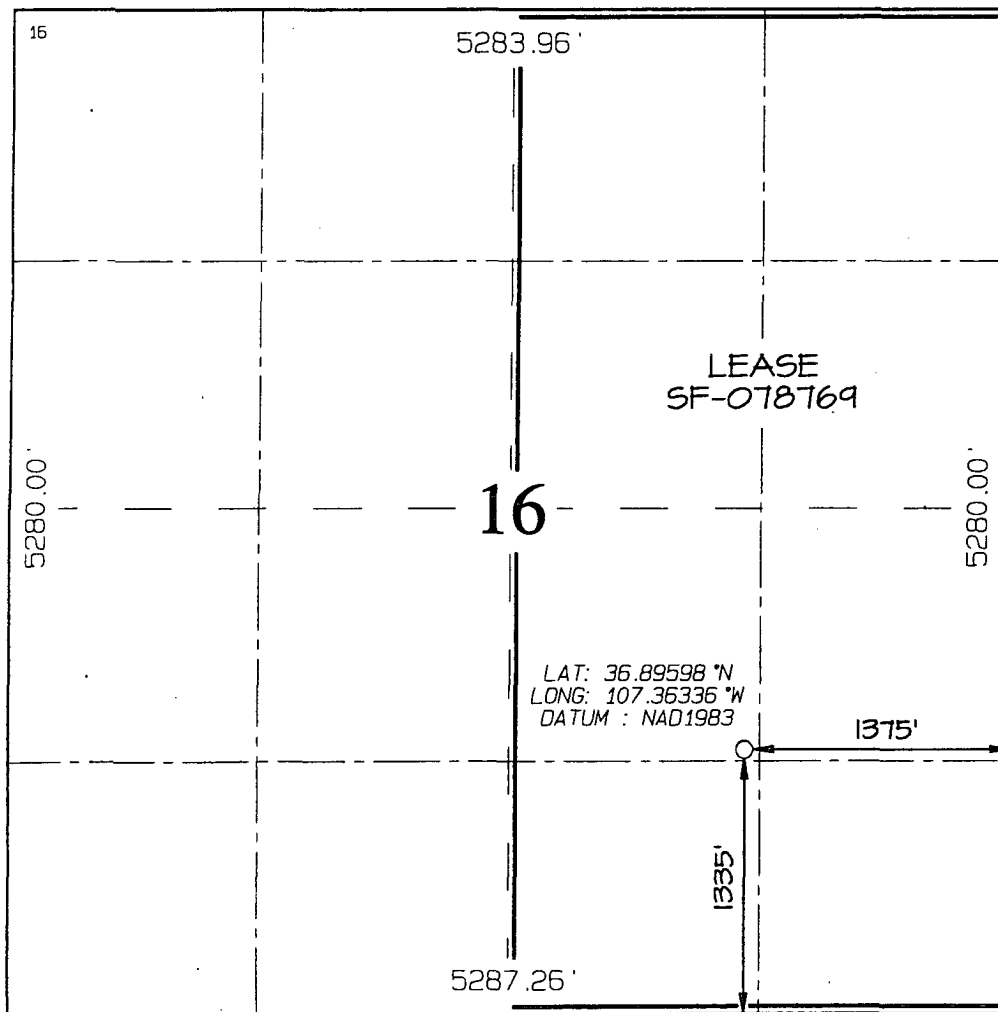
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	16	31N	5W		1335	SOUTH	1375	EAST	RIO ARRIBA

#### 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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Larry Higgins* 2-12-10  
Signature Date  
*LARRY HIGGINS*  
Printed Name

#### 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: OCTOBER 6, 2005

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

APD Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 12th day of February, 2010.

Name Larry Higgins

Position Title Drilling COM

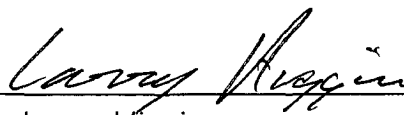
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 634-4208

Field representative (if not above signatory) \_\_\_\_\_

E-mail [larry.higgins@williams.com](mailto:larry.higgins@williams.com)

Date: 2-12-10

  
\_\_\_\_\_  
Larry Higgins  
Drlg COM  
Williams Production Company, LLC



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 7/16/2009

**WELLNAME:** Rosa Unit #374A **FIELD:** Basin Fruitland Coal

**BH LOCATION:** NWSE Sec. 16-T31N-5W **SURFACE:** Forest  
Rio Arriba, NM

**ELEVATION:** 6,274' GR **MINERALS:** BLM

**TOTAL DEPTH:** ~~3,430'~~ **3,203'** **LEASE #** SF-078769

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

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

NAME	MD	NAME	MD
San Jose	Surface	Top Coal	2,983
Nacimiento	1,228	Bottom Coal	3,103
Ojo Alamo	2,403	Pictured Cliffs	3,103
Kirtland	2,513	TD	3,203
Fruitland	2,888		

B. **LOGGING PROGRAM:** HRD from TD to Intermediate casing. DSN from TD to surface casing.

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

D. **MUD LOGGING PROGRAM:** Mud logger will be on location at drill out below 7" casing to TD. Mud log 5"=100'. Mud logger to pick TD.

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 2,903', **DO NOT** drill deeper until Engineering is contacted.

B. **DRILLING FLUID:** Coal section will be drilled with Fruitland Coal water.

- 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 BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

### III. **MATERIALS**

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

<b><u>CASING TYPE</u></b>	<b><u>OH SIZE (IN)</u></b>	<b><u>DEPTH (MD) (FT)</u></b>	<b><u>CASING SIZE (IN)</u></b>	<b><u>WEIGHT(LB)</u></b>	<b><u>GRADE</u></b>
Surface	12 1/4	300	9 5/8	36	K-55
Intermediate	8 3/4	2,963	7	23	K-55
Liner	6 1/4	2,863   3,203	5 1/2	15.5	J-55

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

1. **SURFACE CASING:** 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
2. **INTERMEDIATE CASING:** 7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) Turbulent centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. (**NTL-FRA 90-1**).
3. **PRODUCTION LINER / CASING:** 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place centralizers as needed across selected production intervals.

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

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

1. **SURFACE:** Use 125 sx (224 cu.ft.) of "Type III" + 2% Cal-Seal 60 + 1/4 # of poly-e-flake/sk + 0.3% Versaset + 2% Econolite + 6% Salt (Yield = 1.796 cu.ft./sk, Weight = 13.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. **INTERMEDIATE:** Lead - 245 sx (667 cu.ft.) of "EXTENDACEM" + 5 #/sk pheno-seal + 5% Cal-Seal 60 (Yield = 2.723 cu.ft./sk, Weight = 11.5 #/gal.). Tail - 100 sx (117.8cu.ft.) of Premium cement + 0.125 #/sk Poly-E-Flake, (Yield = 1.178 cu.ft./sk, Weight = 15.6#/gal.). **NO EXCESS PUMP AS WRITTEN SHOULD CIRCULATE TO SURFACE** Total volume = 785 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**

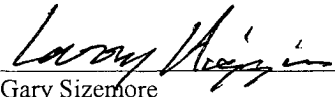
1. Pressure test 7" casing to 1500# for 15 minutes as per state regulations.

**B. STIMULATION**

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

**C. RUNNING TUBING**

1. Fruitland Coal: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing approximately 50' above TD.

  
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Gary Sizemore  
fde Sr. Drilling Engineer

# Well Control Equipment Schematic for 2M Service

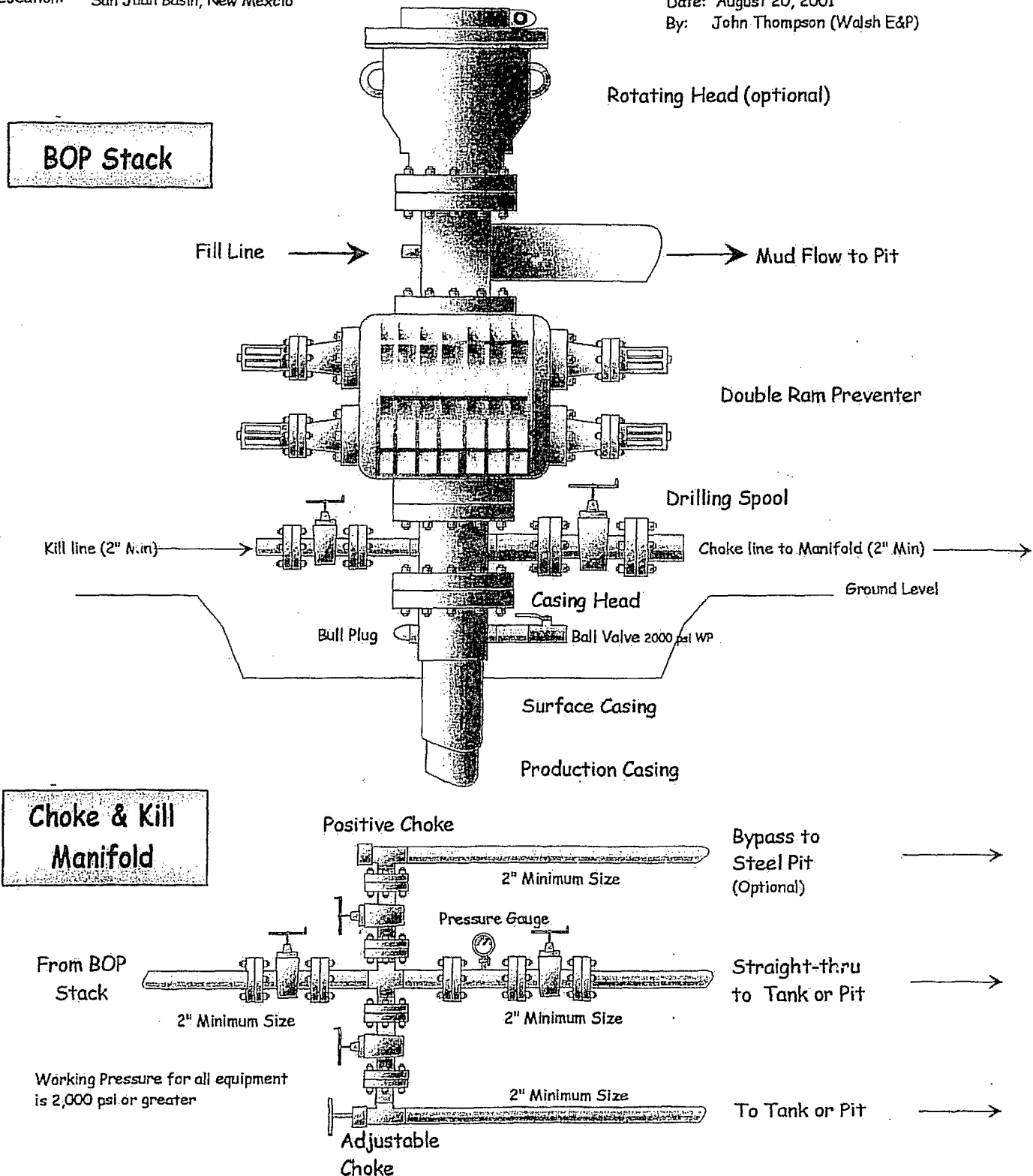
Attachment to Drilling Technical Program

## Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)



## ***DRILLING CONDITIONS OF APPROVAL***

**Operator:** Williams Production Company  
**Lease No.:** NMSF-078769  
**Well Name:** Rosa Unit #374A  
**Well Location:** Sec.16, T31N, R5W; 1335' FSL & 1375' FEL

- 1) Pressure test the surface casing to a minimum of 600 psi for 30 minutes.**
- 2) Pressure test the 7" casing to minimum of 1500 psi for 30 minutes.**



After hour contact: Troy Salyers 505-360-9815