

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

SF-078768

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

☒ Single Zone

☐ Multiple Zone

2. Name of Operator

Williams Production Company, LLC

3a. Address

P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

(505) 634-4208

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 660' FSL & 1940' FEL, Section 25

At proposed prod. zone 660' FSL & 1940' FEL, Section 25

14. Distance in miles and direction from nearest town or post office*

approximately 33 miles northeast of Blanco, New Mexico

15. Distance from proposed*

location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

2,560.00

17. Spacing Unit dedicated to this well

320.0 (S/2)

18. Distance from proposed location*

to nearest well, drilling, completed,
applied for, on this lease, ft.

2500'

19. Proposed Depth

3,436'

20. BLM/BIA Bond No. on file

170847-UT3000178

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6502 GR

22. Approximate date work will start*

June 1, 2007

23. Estimated duration

1 month

24. Attachments

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.

2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature

Title

Drilling COM

Name (Printed/Typed)

Larry Higgins

Date

1-2-07

Approved by (Signature)

Title

Name (Printed/Typed)

Office

Date

5/30/07

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

The surface is under jurisdiction of the U.S. Forest Service, Jicarilla Ranger District, Carson National Forest.

This location has been archaeologically surveyed La Plata Archaeological Consultants. Copies of their report have been submitted directly to the USFS,
Jicarilla Ranger District.

This APD is also serving as an application to obtain a road and gas pipeline. Required for this location is a 800.00-foot access road, and a gas pipeline of
931.60 feet to be placed adjacent to the access road.

RCVD JUN1'07
OIL CONS. DIV.
DIST. 3

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT
DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOC

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

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

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

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

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

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

4-2088
2001 JUN 3 PM 4 14 AMENDED REPORT

RECEIVED

RCVD JUN1'07
OIL CONS. DIV.

WELL LOCATION AND ACREAGE DEDICATION PLAT DIST. 3

'API Number 30-039-30151	'Pool Code 71629	'Pool Name BASIN FRUITLAND COAL
'Property Code 17033	'Property Name ROSA UNIT	'Well Number 344A
'OGRID No. 120782	'Operator Name WILLIAMS PRODUCTION COMPANY	'Elevation 6502

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
0	25	31N	5W		660	SOUTH	1940	EAST	RIO ARRIBA

¹¹Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
²² Dedicated Acres 320.0 Acres - (S/2)					²³ Joint or Infill	²⁴ Consolidation Code	²⁵ Order No.		

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

16

5284.62'

5280.00'

25

LEASE
SF-078768

5280.00'

1940'

660'

LAT: 36.86518°N
LONG: 107.31116°W
DATUM: NAD83

5280.00'

17 OPERATOR CERTIFICATION

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

Larry Higgins
Signature

Larry Higgins
Printed Name

DRILLING COM
Title


1-2-07
Date

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 21, 2006

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., 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 and Natural Resources

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

Form C-103
May 27, 2004

SUNDRY NOTICES AND REPORTS ON WELLS 007 JAN 3 2007 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. <u>30-039-30151</u>
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease FEDERAL <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Williams Production Company, LLC		6. State Oil & Gas Lease No. SF-078768
3. Address of Operator P.O. Box 640 Aztec, NM 87410		7. Lease Name or Unit Agreement Name Rosa Unit
4. Well Location: Surface and Bottom Hole: Unit Letter O: 660 feet from the south line and 1940 feet from the east line Section 25 Township 31N Range 5W NMPM County Rio Arriba		8. Well Number 344A
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6,496' GR		9. OGRID Number 120782
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type <u>reserve</u> Depth to Groundwater <u>230'</u> Distance from nearest fresh water well <u>>1,000'</u> Distance from nearest surface water <u>160'</u>		
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Drilling/Completion pit to be located approximately 50 to 75 feet from well head. Pit multi-use drilling and completion to avoid additional site disturbance and pit will be considered out of service once production tubing set. Pit to be constructed, operated and closed in accordance with NMOCD guidelines and Williams procedures.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

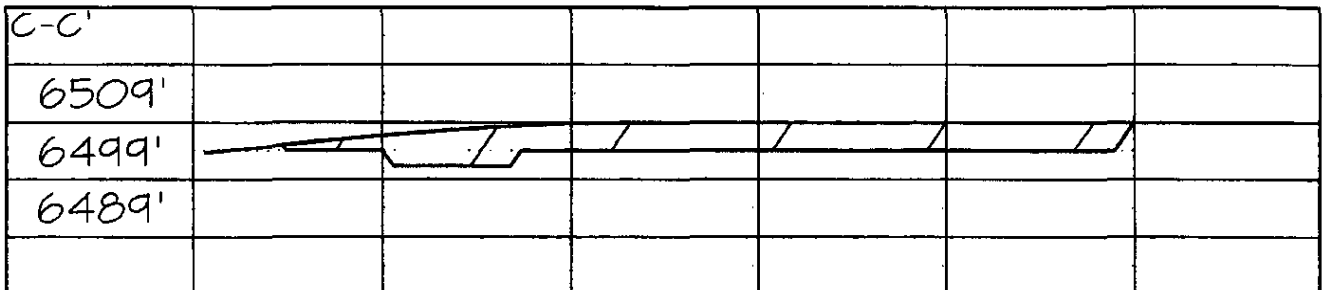
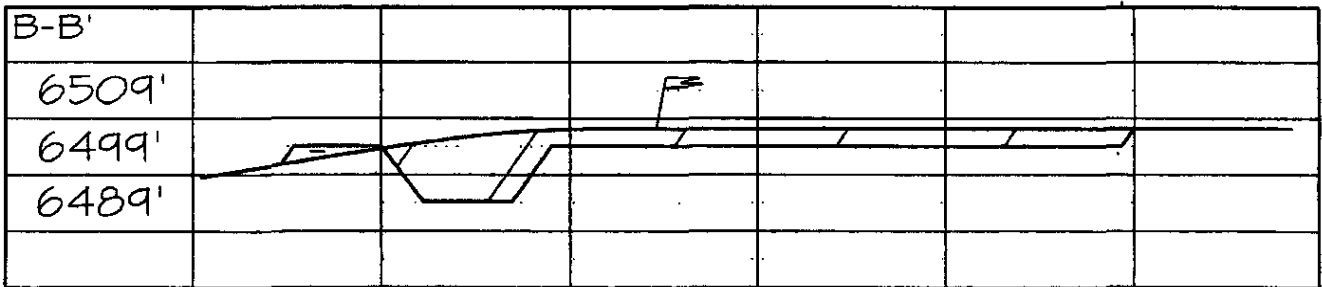
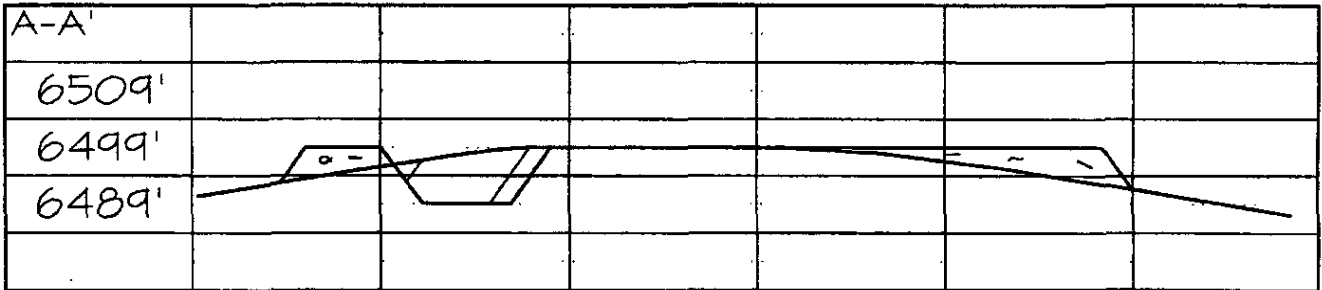
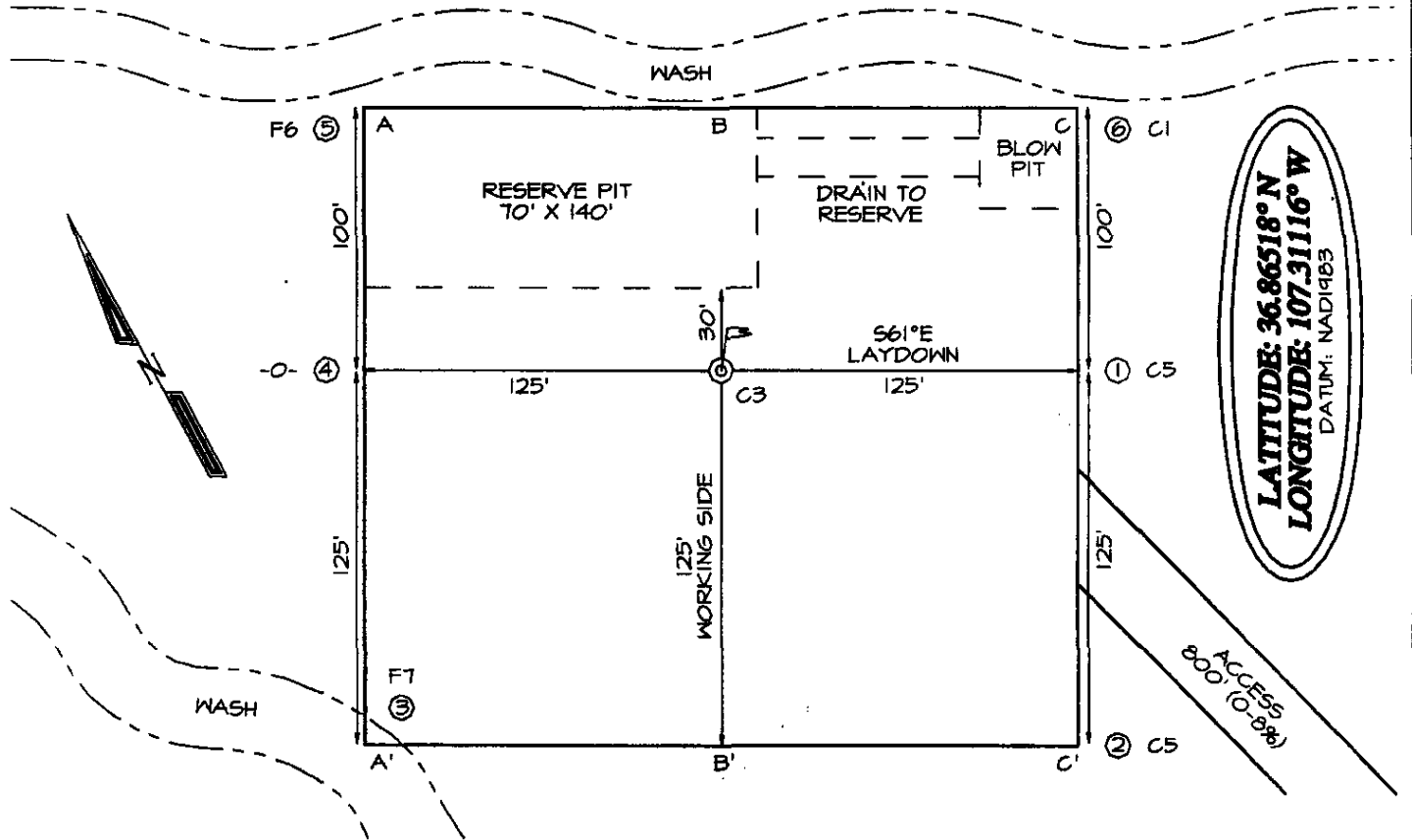
SIGNATURE Larry Higgins TITLE Drilling COM DATE 1-2-07
Type or print name Larry Higgins E-mail address: larry.higgins@williams.com Telephone No. (505) 634-4208

For State Use Only

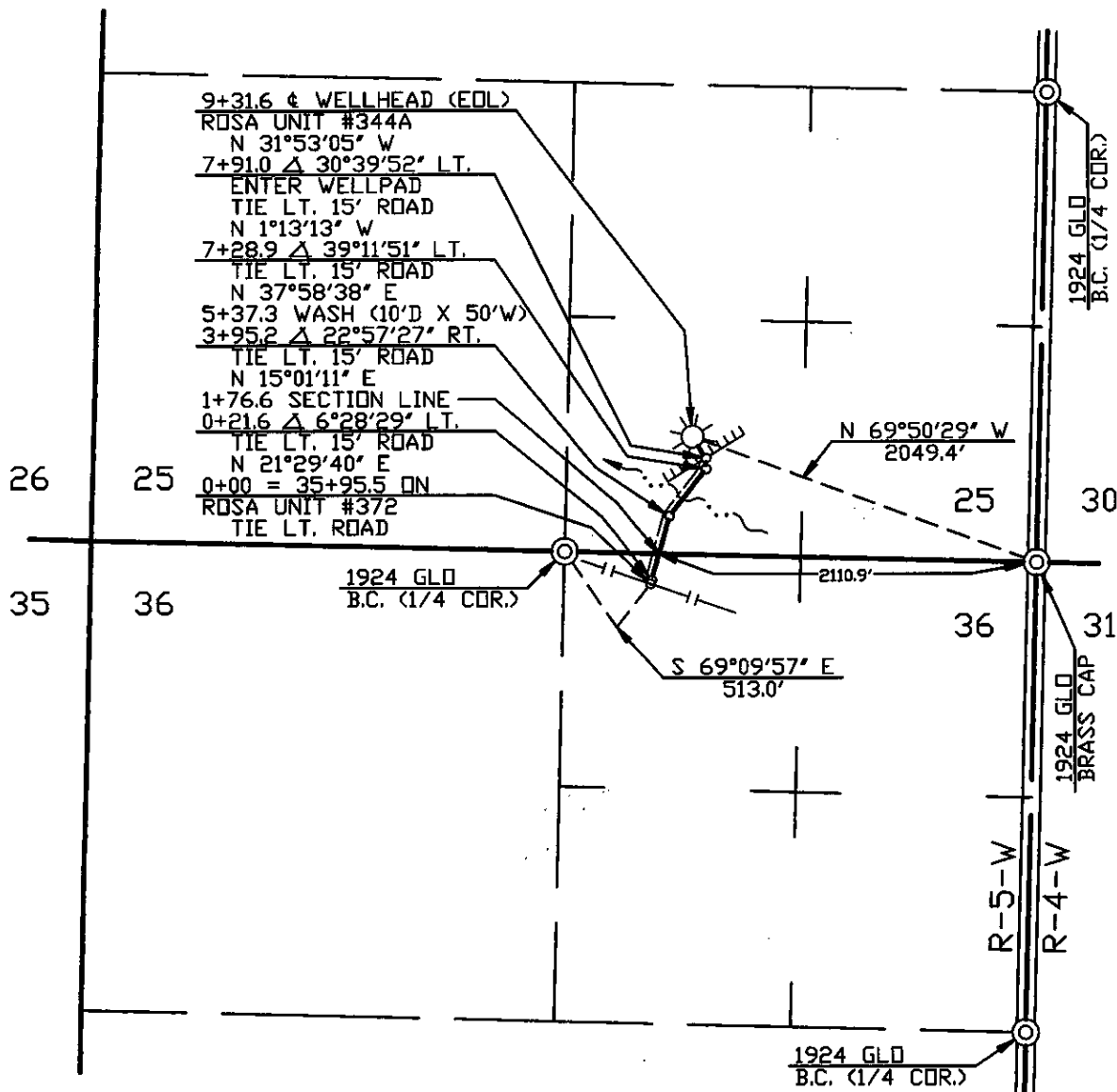
APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 8 DATE JUN 08 2007
Conditions of Approval (if any): well is in vulnerable area. Must be closed - according to Rule 60. F.1

PLAT #1

WILLIAMS PRODUCTION COMPANY ROSA UNIT #344A
660' FSL & 1940' FEL, SECTION 25, T31N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6502'



NOTE: BEARINGS ARE BASED ON A GRID BEARING.
ALONG THE SOUTH LINE OF THE SE 1/4 OF
SECTION 25, T-31-N, R-5-W, NMPM
BEARS, N 88°37'31" W



**PRELIMINARY
DRAWING**

PIPE DATA

SUBDIVISION		OWNER		FEET	MILES	ACRES	RODS
0+00 TO 9+31.6		CARSON NATIONAL FOREST		931.6	0.176	0.855	56.461
1		12/02/06		AD		ISSUED FOR REVIEW	
NO.		DATE		BY		DESCRIPTION	
1		12/02/06		AD		ISSUED FOR REVIEW	
NO.		DATE		BY		DESCRIPTION	
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NO.		DATE		BY		DESCRIPTION	
1		12/02/06		AD		ISSUED FOR REVIEW	



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 11/15/2006

WELLNAME: Rosa Unit #344A **FIELD:** Basin Fruitland Coal

BH LOCATION: SWSE Sec. 25-T31N-5W **SURFACE:** Forest
Rio Arriba, NM

ELEVATION: 6,502' GR **MINERALS:** BLM

TOTAL DEPTH: 3,436' **LEASE #** SF-078768

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

NAME	MD	NAME	MD
San Jose	Surface	Top Coal	3,256
Nacimiento	1,566	Bottom Coal	3,336
Ojo Alamo	2,656	Pictured Cliffs	3,341
Kirtland	2,761	TD	3,436
Fruitland	3,136		

B. LOGGING PROGRAM: SDR 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. Five to seven desorption samples (one per seam) will be caught throughout the Fruitland Fm. Coal interval.

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 3,236', **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:**

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	12 1/4	300	9 5/8	36	K-55
Intermediate	8 3/4	3,236	7	20	K-55
Liner	6 1/4	3,136	5 1/2	15.5	J-55

3436'

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 160 sx (224 cu.ft.) of "Type III" with 2% CaCl₂ and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). Use **120% excess** to circulate the surface. WOC 12 hours. Total volume = 206 cu.ft. Test to 1500#.
2. **INTERMEDIATE:** Lead - 400 sx (833 cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl₂ 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% CaCl₂ (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 = 903 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.

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)

