

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.

NM 010910

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

Cox Canyon Unit

8. Lease Name and Well No.

Cox Canyon #9C

9. API Well No.

30-046-33851

10. Field and Pool, or Exploratory

Blanco MV/Basin DK

11. Sec., T., R., M., or Blk. and Survey or Area

F
Sec 20, 132N, R11W

12. County or Parish

San Juan

13. State

NM

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 1980 FNL & 1905 FWL

At proposed prod. zone same

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

Approximately 12 miles northwest of Aztec, NM

15. Distance from proposed*

location to nearest
property of lease line, ft.
(Also to nearest drg. unit line, if any) 1905'

16. No. of Acres in lease

328.2

17. Spacing Unit dedicated to this well

320 (N/2)

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 455'

19. Proposed Depth

8165'

20. BLM/BIA Bond No. on file

BG01576

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

5711' OR

22. Approximate date work will start*

March 1, 2006

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 plan certified by a registered surveyor.

2. A Drilling Plan

3. A Surface Use Plan if the location is on National Forest System Lands, the
SUOP 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 office.

Signature

Name (Printed Type)

Date

Larry Higgins

2-28-06

Title

Signature

Name (Printed Type)

Date

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 drill a vertical well to develop the Blanco Mesa Verde and Basin Dakota formations at the above described location in accordance with the attached drilling and surface use plans. This LOCATION HAS BEEN BUILT UNDER PREVIOUS APPROVED PERMIT, API #30-045-31238.

Surface is on Fee lands

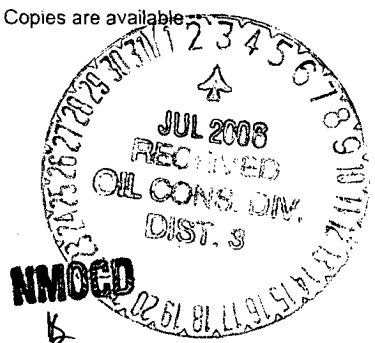
This location has been archaeologically surveyed by ICA. Copies of their report has been sent and reviewed at the FFO. Copies are available.

1232.1 foot pipeline tie would be required for this location and it is also located on Fee lands.

950' new access road will be needed to access this well.

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

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.8
and appeal pursuant to 43 CFR 3165.4



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

Form C-102

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

MAR 2 AM 9:53

AMENDED REPORT

RECEIVED

OTO FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33851	*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code 17036	*Property Name COX CANYON UNIT COM	*Well Number 9C
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 6711'

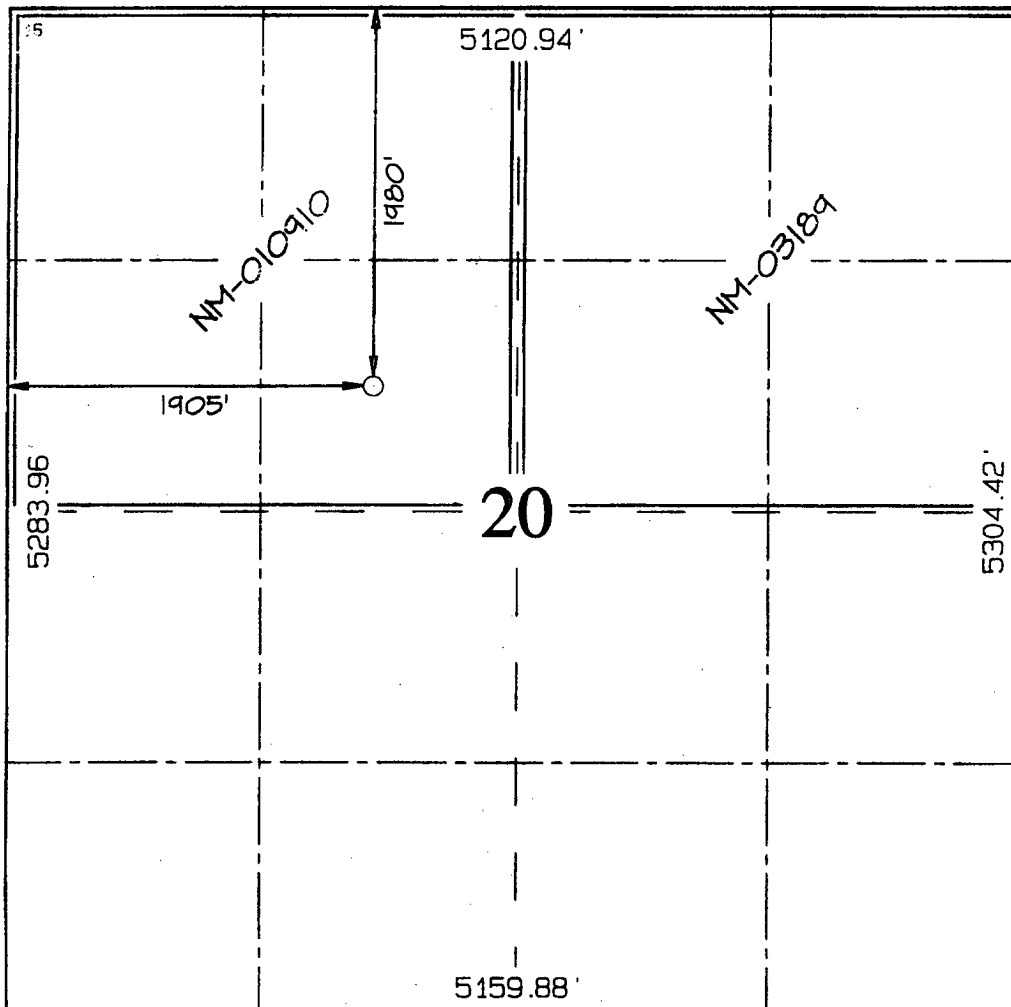
10 Surface Location

UL or lot no. F	Section 20	Township 32N	Range 11W	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 1905	East/West line WEST	County SAN JUAN
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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 - (N/2)					13 Joint or Infill	14 Consolidation Code	15 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



17 OPERATOR CERTIFICATION

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

Signature

Printed Name

Title

Date

Date

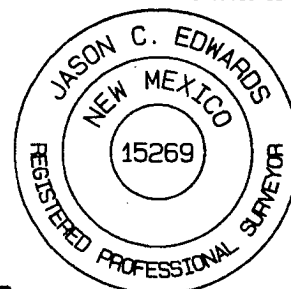
18 SURVEYOR CERTIFICATION

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.

Date Revised: DECEMBER 12, 2005

Date of Survey: JULY 10, 2002

Signature and Seal of Professional Surveyor



Signature

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

Form C-103
May 27, 2004

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

WELL API NO. 30-045- 5238 33851
5. Indicate Type of Lease Fee
6. State Oil & Gas Lease No. NM 010910
7. Lease Name or Unit Agreement Name Cox Canyon
8. Well Number #9C
9. OGRID Number 120782
10. Pool name or Wildcat Blanco MV/Basin DK

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6711' GR

Pit or Below-grade Tank Application ☒

Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbbs 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 50-75 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. Reserve pit to be constructed in accordance with NMOCD Interim Pit and Below-Grade Tank Guidelines

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 2-28-06

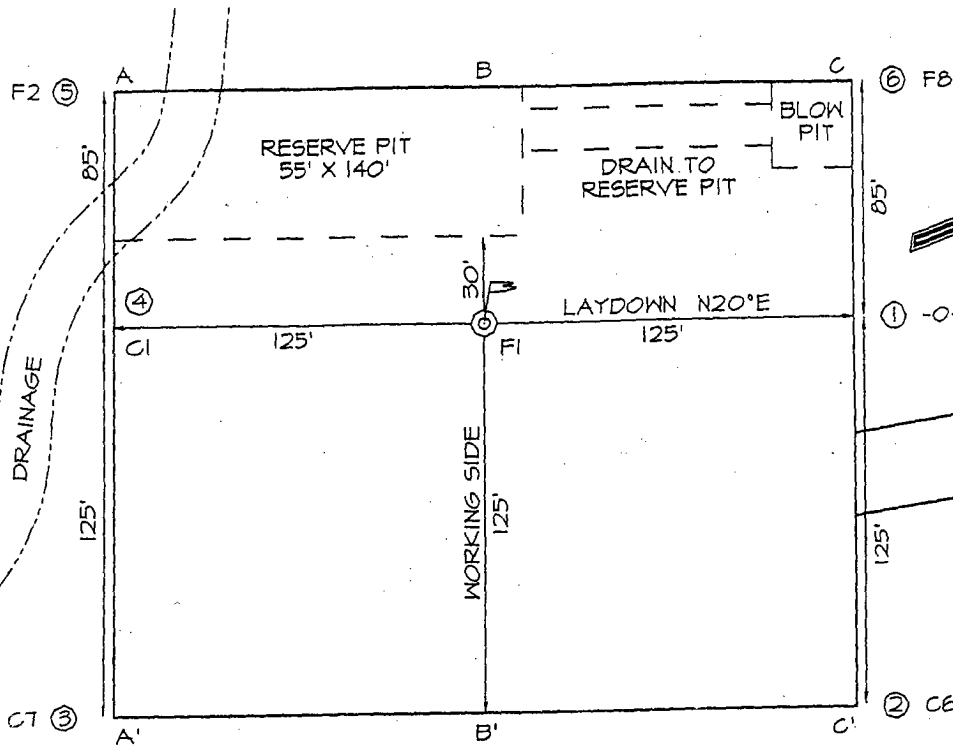
Type or print name Larry Higgins E-mail address: larry.higgins@williams.com Telephone No. (970) 563-3308

For State Use Only

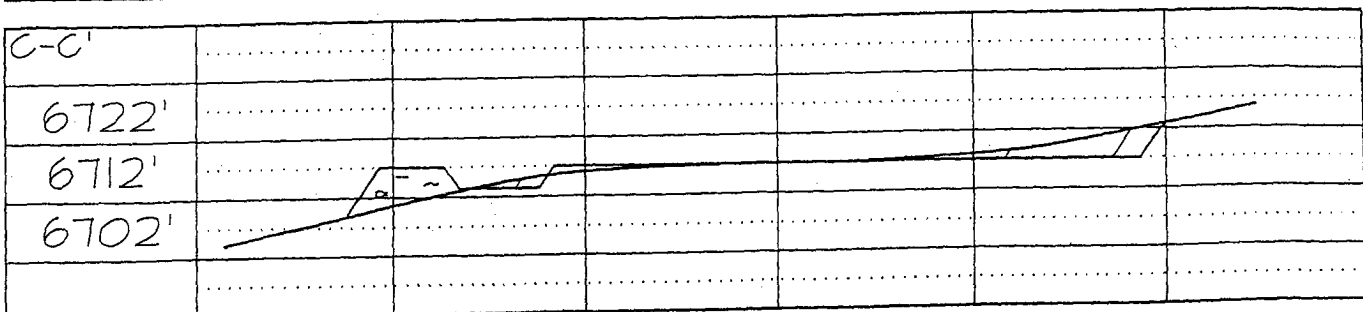
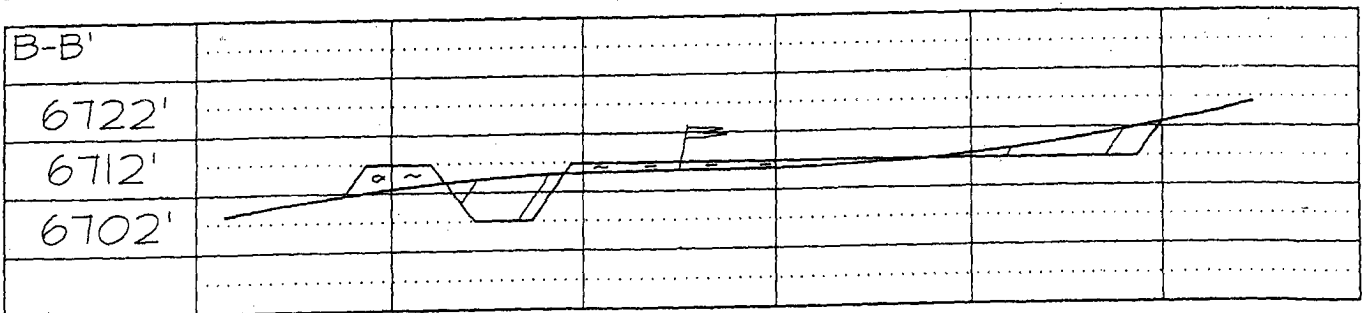
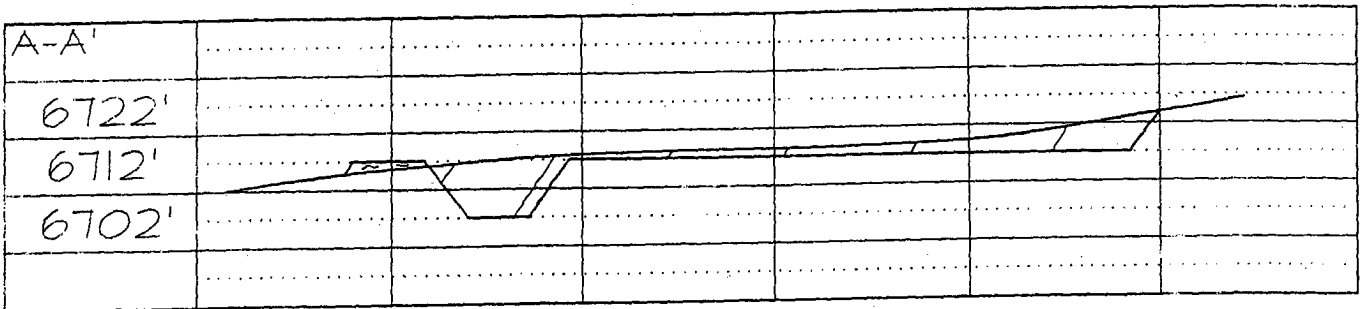
APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE JUL 03 2006

WILLIAMS PROTECTION COMPANY COX CANYON UNIT COM #9C
 1980' FNL & 1905' FWL, SECTION 20, T32N, R.11W, NMPM
 SAN JUAN COUNTY, NEW MEXICO
 GROUND ELEVATION: 6711'

LATITUDE: 36°58'21"
 LONGITUDE: 108°00'46"
 DATUM: NAD1921



Plat #2





WILLIAMS PRODUCTION COMPANY

Operations Plan

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

<u>DATE:</u>	2/28/2006	<u>FIELD:</u>	BasinDK/BlancoMV
<u>WELL NAME:</u>	Cox Canyon #9C	<u>SURFACE:</u>	FEE K.Decker
<u>BH LOCATION:</u>	SENW Sec 20-32N-11W San Juan, NM	<u>MINERALS:</u>	FED
<u>ELEVATION:</u>	6,711' GR	<u>LEASE #</u>	NM-010910
<u>MEASURED DEPTH:</u>	8,165'		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	Name	MD
Ojo Alamo	1,540	Cliff House	5,130
Kirtland	1,595	Menefee	5,290
Fruitland	2,910	Point Lookout	5,670
Pictured Cliffs	3,350	Mancos	5,995
Lewis	3,555	Gallup	7,030
Huerfanito Bentonite	4,050	Greenhorn	7,735
		Graneros	7,800
		Dakota	7,870
		Morrison	8,135
		TD	8,165

B. MUD LOGGING PROGRAM: Mud logger on location from approximately 7,820' to TD.

C. LOGGING PROGRAM: High Resolution Induction/ GR and Density/ Neutron log over zones of interest from surface casing to intermediate casing then to protection casing TD. Cased hole logs over Dakota/ Morrison Onsite geologist will pick Density/ Neutron log intervals logging runs.

D. 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 7-5/8" casing point. Convert to a LSND mud to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer from 7 in. csg.to TD.
- B. **BOPE 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:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH (MD)</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	14-3/4"	+/- 300'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	+/- 2,835'	7-5/8"	26.4# K-55
Prod. Casing	6-3/4"	+/- 7,820'	5-1/2"	17.0# N-80
Production Liner	4-3/4"	+/- 7,720' - 8,165'	3-1/2"	9.3#

B. FLOAT EQUIPMENT:

1. **SURFACE CASING:** 10-3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
2. **INTERMEDIATE CASING:** 7-5/8" 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:** 3-1/2" & 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place marker joint above 5,400'. Place centralizers as needed across selected production intervals.

C. CEMENTING:

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

1. **SURFACE:** Slurry: 255sx (356 cu.ft.) of "Type III" + 2% CaCl₂ + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. **INTERMEDIATE:** Lead - 425 sx (885) 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 - 100 sx (139cu.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 = 1024 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.

3. PRODUCTION CASING: 10 bbl Gelled Water space. Lead: 100sx (259ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake and 4% Phenoseal. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Cement: 120sx (251 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft³/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in lead and tail should cover 100 ft into intermediate casing. Total volume 518ft³. WOC 12 hours
4. PRODUCTION LINER: 10 bbl Gelled Water space. Cement: 50sx (100 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake. (Yield = 2.15 ft³/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess should cover 100 ft above liner top. Total volume 100ft³. WOC 12 hours

IV COMPLETION

A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement not circulated to surface..

B. PRESSURE TEST

1. Pressure test 7 5/8" & 5-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Stimulate Dakota with approximately 70,000# of 20/40 sand in x-link foam.
2. Isolate Dakota with a RBP.
3. Stimulate Point Lookout with approximately 80,000# of 20/40 sand in slick water.
4. Isolate Point Lookout with a RBP.
5. Perforate the Menefee/Cliff House as determined from the open hole logs.
6. Stimulate with approximately 80,000# of 20/40 sand in slick water.
7. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. Dakota: Run 2-1/16", 3.25#, J-55, IJ tubing with 1/2 mule shoe on bottom, SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.
2. Mesa Verde: Run 2-1/16", 2.9#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforations.



Gary Sizemore
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)

