

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒ OTHER

SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Williams Production Company, LLC

3. ADDRESS AND TELEPHONE NO.

P.O. Box 316— Ignacio, Colorado 81137-0316

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface **1,140' FNL, 1560' FWL (C)**
At proposed prod. zone **660' FNL, 1,950' FWL (C)**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

7.99 miles NW of Cedar Hill, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)

+/- 270'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED TO THIS WELL

320 acres

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

+/- 135'

19. PROPOSED DEPTH

+/- 6,101' TVD / 6,186' MD

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,659' GR

22. APPROX. DATE WORK WILL START*

June 1, 2005

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" K-55	36#	+/- 300'	150 sacks Type III cement + 2% CaCl ₂ + 1/4 #/sk. Cello-Flakes
8-3/4"	7" K-55	20#	+/- 2,885'	350 sacks Lead and 50 sacks Tail (see Drilling Plan)
6-1/4"	4-1/2" K-55	10.5#	+/- 2,785-6,186'	75 sacks Lead and 110 sacks Tail (see Drilling Plan)

Other Information:

Drilling Plan, Surface Use Plan and pit application are attached.



2005 APR 11 PM 3 23
RECEIVED
070 FARMINGTON NM

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen, give data 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.

HOLD C104 FOR Directional Survey

24.

SIGNED Don Hamilton Don Hamilton TITLE Agent for Williams

DATE April 6, 2005

(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 [Signature] TITLE AFM

DATE 8-15-05

***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 or the

NMOC

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, 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		Pool Code 72319	Pool Name BLANCO MESAVERDE
Property Code 17034	Property Name COX CANYON UNIT		Well Number 7B
GRID No. 120782	Operator Name WILLIAMS PRODUCTION COMPANY		Elevation 6659'

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
C	17	32N	11W		1140	NORTH	1560	WEST	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
C	17	32N	11W		660	NORTH	1950	WEST	SAN JUAN

12 Dedicated Acres 320.0 Acres - (E/2 W/2 & W/2 E/2)	13 Joint or Infill	14 Consolidation Code	15 Order No. NWU #162
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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

<p>16</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><u>Don Hamilton</u> Signature</p> <p><u>Don Hamilton</u> Printed Name</p> <p><u>Agent</u> Title</p> <p><u>4-6-05</u> Date</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Survey Date: DECEMBER 20, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p></p> <p><u>JASON C. EDWARDS</u> Certificate Number 15269</p>

RECEIVED
OIL CONSERVATION DIV.
DIST. 8
AUG 2005
2005 APR 11 PM 3 23
5120.94'

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.

5. Indicate Type of Lease
Federal

6. State Oil & Gas Lease No.
NM-03190

7. Lease Name or Unit Agreement Name
Cox Canyon Unit

8. Well Number 7B

9. OGRID Number
120782

10. Pool name or Wildcat
Blanco MV

SUNDRY NOTICES AND REPORTS ON WELLS
(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.)

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

2. Name of Operator
Williams Production Company

3. Address of Operator
P.O. Box 316, Ignacio, CO 81137

4. Well Location

Unit Letter C 1,140 feet from the North line and 1,560 feet from the West line

Section 17 Township 32N Range 11W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6,659' GR

Pit or Below-grade Tank Application ☒ or Closure

Pit type Drilling Depth to Groundwater >50' Distance from nearest fresh water well >2,000' Distance from nearest surface water 12,500'

Pit Liner Thickness 12 mil Below-Grade Tank: Volume 10,971 bbls; Construction Material: Native

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.

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 will be constructed and closed according to NMOCD guidelines ☒ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Don Hamilton TITLE Agent DATE April 6, 2005

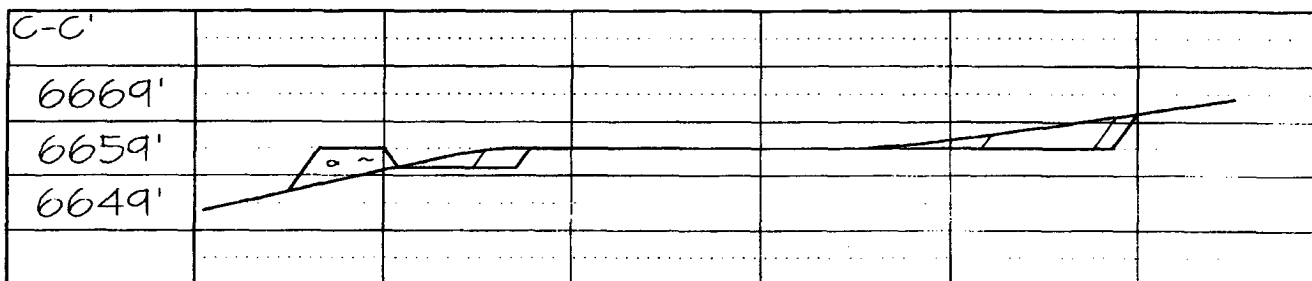
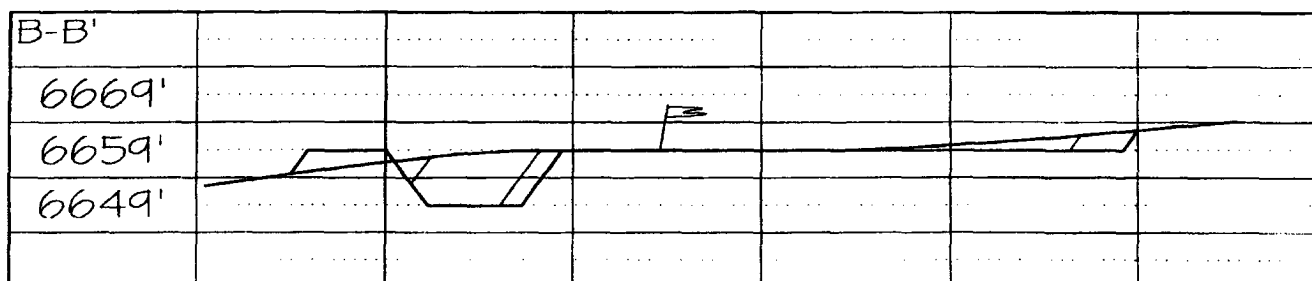
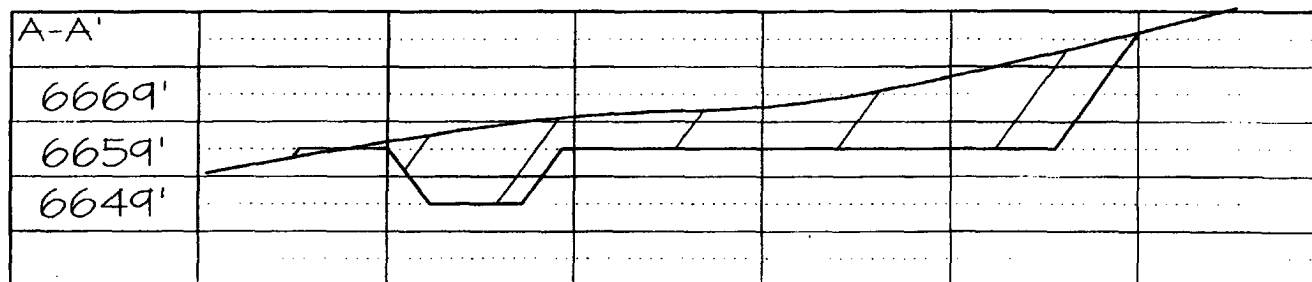
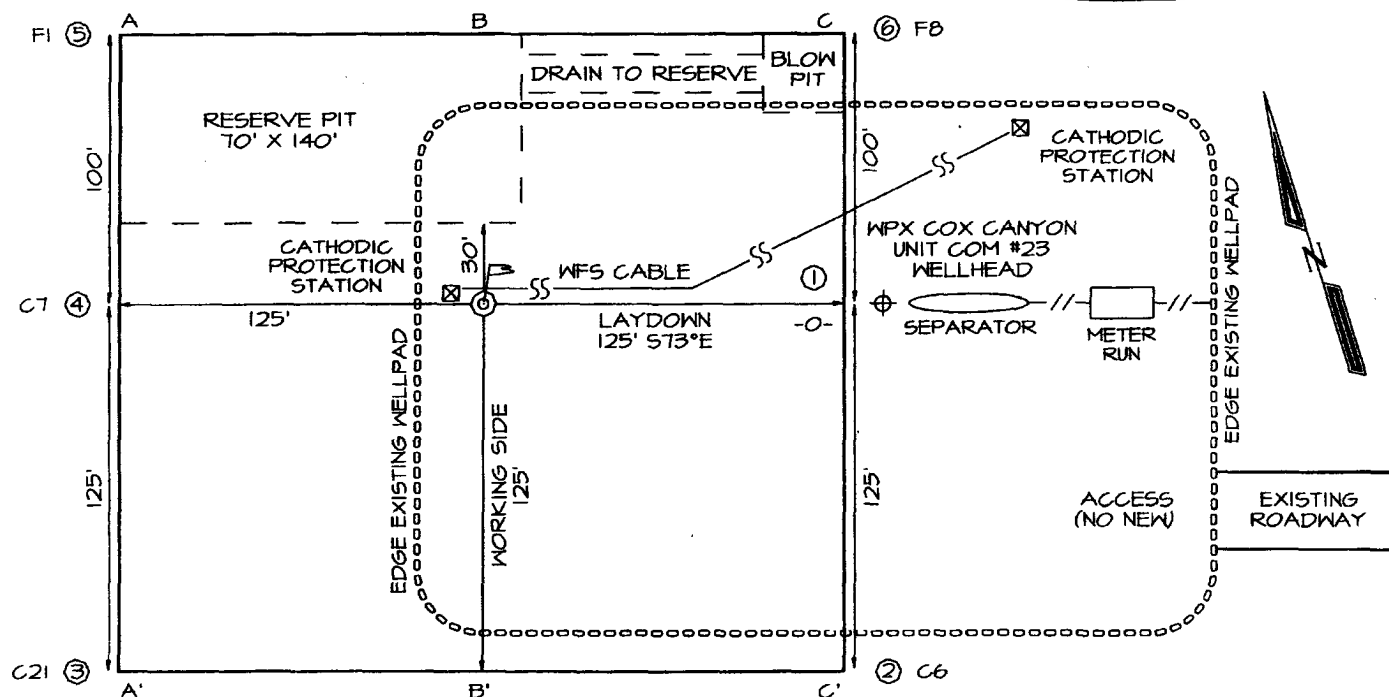
Type or print name Don Hamilton E-mail address: starpont@etv.net Telephone No. (970) 564-9220

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 6 DATE AUG 17 2005

WILLIAMS PRODUCTION COX CANYON UNIT #7B
1140' FNL & 1560' FWL, SECTION 17, T32N, R11W
NMPM, SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6659'

LATITUDE: 36°59'21"
LONGITUDE: 108°00'53"
 DATUM: NAD1427





WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 4/1/2005 **FIELD:** Blanco MV
WELL NAME: Cox Canyon #7B **SURFACE:** BLM
BH LOCATION: NENW Sec 17-32N-11W
San Juan, NM **MINERALS:** BLM
SURF. LOCATION: NENW Sec 17-32N-11W
ELEVATION: 6,659' GR **LEASE #** NM-03190
MEASURED DEPTH: 6,186'

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	TVD	MD	Name	TVD	MD
Ojo Alamo	1,481	1,512	Cliff House	5,086	5,171
Kirtland	1,496	1,528	Menefee	5,251	5,336
Fruitland	2,826	2,911	Point Lookout	5,601	5,686
Picture Cliffs	3,296	3,381	Mancos	5,911	5,996
Lewis	3,441	3,526	TD	6,101	6,186
Huerfanito Bentonite	3,976	4,061			

B. MUD LOGGING PROGRAM: None

C. LOGGING PROGRAM: Cased Hole Logs

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" 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. 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 (MD)</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 2,885'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 2,785'-6,186'	4-1/2"	10.5# K-55

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) 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 CASING: 4-1/2" & 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: 150sx (205 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 - 350 sx (727) 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 = 797 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION LINER: 10 bbl Gelled Water space. Lead: 75sx (194ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 110 sx (236 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/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 430 ft³. 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 is not circulated to surface.

B. PRESSURE TEST

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

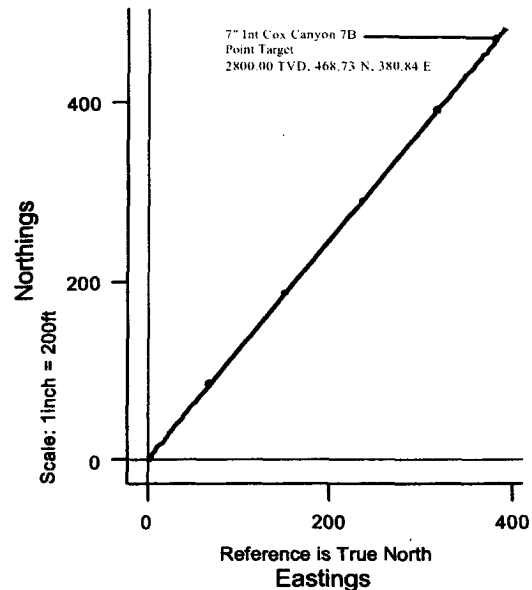
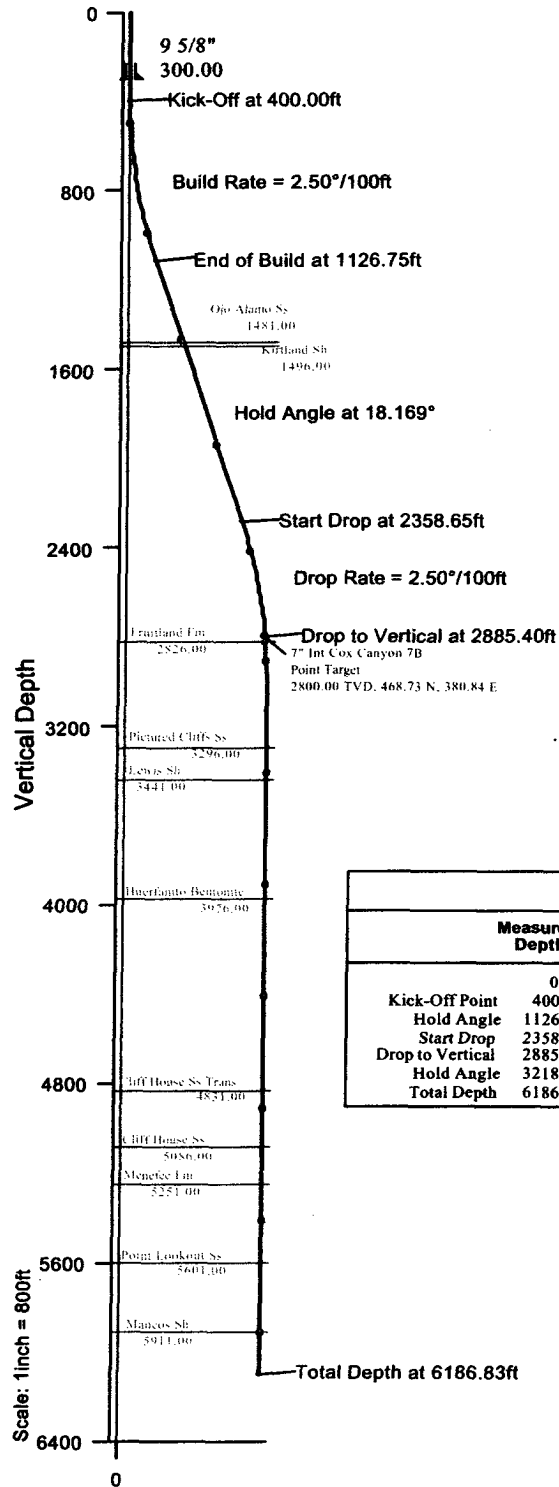
1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 80,000# of 20/40 sand in slick water.
3. Isolate Point Lookout with a CIBP.
4. Perforate the Menefee/Cliff House as determined from the open hole logs.
5. Stimulate with approximately 80,000# of 20/40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

D. RUNNING TUBING

1. Mesa Verde: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Gary Sizemore
Sr. Drilling Engineer

**New Mexico
San Juan County
Sec. 17-T32N-R11W
Cox Canyon Unit #7B
Plan 033005**



Cox Canyon Unit #7B Surface Location

RKB Elevation: 6671.00ft above Mean Sea Level
Ref. Structure: 1140.00 S, 1560.00 E
Ref. Global Coordinates: 2179376.14 N, 447024.14 E
Ref. Geographical Coordinates: 36° 59' 21.0000" N, 108° 00' 53.0000" W

Plan 033005 Proposal Data

	Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
Kick-Off Point	0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	0.00
Hold Angle	1126.75	18.169	39.094	1114.63	88.68 N	72.06 E	114.27	2.50
Start Drop	2358.65	18.169	39.094	2285.11	386.81 N	314.28 E	498.39	0.00
Drop to Vertical	2885.40	5.000	39.094	2800.00	468.73 N	380.84 E	603.94	2.50
Hold Angle	3218.74	0.000	0.000	3132.91	480.01 N	390.01 E	618.48	1.50
Total Depth	6186.83	0.000	0.000	6101.00	480.01 N	390.01 E	618.48	0.00

Plan 033005 Bottom Hole Location

Ref. RKB(6659' +12' KB): 6101.00ft
Ref. Structure: -570.00ft
Ref. Wellhead: 480.01 N, 390.01 E (True North)
Ref. Structure: 659.97 S, 1949.98 E (True North)
Ref. Global Coordinates: 2179855.40 N, 447415.06 E
Ref. Geographical Coordinates: 36° 59' 25.7465" N, 108° 00' 48.1926" W

Vertical Section

Prepared by:
Dennis Cook

Date/Time:
30 March, 2005 - 12:28

Checked:

Approved:

Williams

Well Control Equipment Schematic for 2M Service

Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

