

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals.

2006 JAN 11 AM 8 23

RECEIVED

OTO FARMINGTON III

SUBMIT IN TRIPLICATE

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

2. Name of Operator  
WILLIAMS PRODUCTION COMPANY

3. Address and Telephone No.  
PO Box 640 Aztec, NM 87410-0640

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1675 FSL & 1690 FEL, Sec 21, T32N, R11W

5. Lease Designation and Serial No.  
NM-03189

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
Cox Canyon

8. Well Name and No.  
Cox Canyon #004C

9. API Well No.  
30-045-33170

10. Field and Pool, or Exploratory Area  
BLANCO MV/BASIN DK

11. County or Parish, State  
San Juan, New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other Multiple zone completion

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

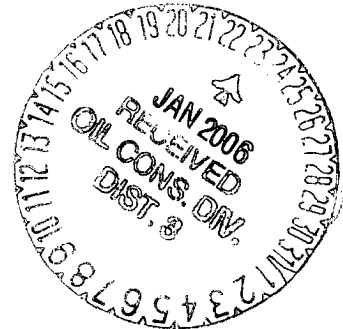
☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Williams Production Company, LLC. hereby requests authority to drill this as a Mesa Verde/Dakota dual as per attached operations plan.



14. I hereby certify that the foregoing is true and correct

Signed Larry Higgins  
Larry Higgins

Title Drilling C.O.M.

Date January 9, 2006

(This space for Federal or State office use)

Approved by Shirley Drueley

Title Ret. Eng

Date 1/17/06

Conditions of approval, if any:

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.

NMOC

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

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

2005 JAN 11 AM 8 23 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33170		*Pool Code 72319 / 71599	*Pool Name BLANCO MESAVERDE / BASIN DAKOTA
*Property Code	*Property Name COX CANYON UNIT		*Well Number 4C
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6578'

<sup>10</sup> 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	21	32N	11W		1675	SOUTH	1690	EAST	SAN JUAN

<sup>11</sup> 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

<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>17</sup> 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

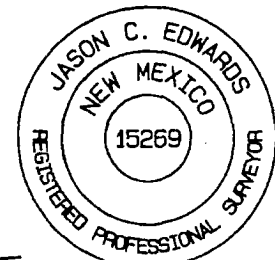
<sup>18</sup> SURVEYOR CERTIFICATION

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.

Date Revised: DECEMBER 28, 2005

Survey Date: FEBRUARY 15, 2005

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

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>	1/9/2006	<b><u>FIELD:</u></b>	Basin/DK/Blanco/MV
<b><u>WELL NAME:</u></b>	Cox Canyon #4C	<b><u>SURFACE:</u></b>	BLM
<b><u>BH LOCATION:</u></b>	NWSE Sec 21-32N-11W San Juan, NM	<b><u>MINERALS:</u></b>	BLM
<b><u>ELEVATION:</u></b>	6,578' GR	<b><u>LEASE #</u></b>	NM-03189
<b><u>MEASURED DEPTH:</u></b>	8,047'		

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

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

Name	MD	Name	MD
Ojo Alamo	1,447	Cliff House	5,092
Kirtland	1,507	Menefee	5,187
Fruitland	2,817	Point Lookout	5,547
Pictured Cliffs	3,282	Mancos	5,872
Lewis	3,422	Gallup	6,917
Huerfanito Bentonite	3,957	Greenhorn	7,622
		Graneros	7,687
		Dakota	7,752
		Morrison	8,017
		<b>TD</b>	<b>8,047</b>

**B. MUD LOGGING PROGRAM:** Mud logger on location from approximately 7,707' 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" 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 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. &amp; GRADE</u>
Surface	14-3/4"	+/- 300'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	+/- 2,742'	7-5/8"	26.4# K-55
Prod. Casing	6-3/4"	+/- 7,707'	5-1/2"	17.0# N-80
Production Liner	4-3/4"	+/- 7,607' - 8,047'	3-1/2"	9.3#

### 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:** 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% CaCl<sub>2</sub> + 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 - 430 sx (900) 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 - 100 sx (139cu.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 = 1089 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.

1089

3. PRODUCTION CASING: 10 bbl Gelled Water space. Lead: 100sx (259ft<sup>3</sup>) 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 = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Cement: 120sx (251 ft<sup>3</sup>) 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 ft<sup>3</sup>/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 510ft<sup>3</sup>. WOC 12 hours
4. PRODUCTION LINER: 10 bbl Gelled Water space. Cement: 50sx (100 ft<sup>3</sup>) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake. (Yield = 2.15 ft<sup>3</sup>/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 108ft<sup>3</sup>. 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