

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 12 2009

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 Form 3160-1, "NOTICE TO DRILL" for permit for such proposals

Bureau of Land Management  
Farmingington Field Office

5  
Bureau of Land Management  
Farmingington Field Office

Lease Designation and Serial No.  
NM-03189

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA, Agreement Designation  
Cox Canyon

8. Well Name and No.  
Cox Canyon Unit #4C

9. API Well No.  
30-045-33170

10. Field and Pool, or Exploratory Area  
Blanco MV

11. County or Parish, State  
San Juan, NM

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 634-4208

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Surface: 1675' FSL & 1690' FEL Sec. 21, T32N, R11W

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 Formation Change and Casing Design Change  
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, plans to drill this well as a Mesaverde stand alone and has changed the casing design as per the attached Operations Plan.

CONDITIONS OF APPROVAL  
Adhere to previously issued stipulations.

RCVD NOV 16 '09  
OIL CONS. DIV.  
DIST. 3

APD will expire 4/30/2010

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

Signed Heather Riley  
Heather Riley

Title Regulatory Specialist

Date 11/12/09

(This space for Federal or State office use)

Approved by Troy L. Salyers

Title PE

Date 11/13/2009

Conditions of approval, if any:

NMOCB 10



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

<b><u>DATE:</u></b>	11/12/09	<b><u>FIELD:</u></b>	Blanco MV ✓
<b><u>WELL NAME:</u></b>	Cox Canyon Unit #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>	Federal
<b><u>ELEVATION:</u></b>	6,578' GR	<b><u>LEASE #</u></b>	NM-03189 ✓
<b><u>MEASURED DEPTH:</u></b>	6,049' ✓		

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

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

Name	MD	Name	MD
Ojo Alamo	1,454	Huerfanito Bentonite	3,959
Kirtland	1,509	Cliff House	5,094
Fruitland	2,819	Menefee	5,189
Picture Cliffs	3,284	Point Lookout	5,549
Lewis	3,424	Mancos	5,874
		TD	6,049

##### **B. MUD LOGGING PROGRAM:** None

##### **C. LOGGING PROGRAM:** DIL from intermediate csg to TD, CNL/FDC over intervals of interest

##### **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:** Use Water + Gel/Polymer sweeps to drill Surface hole. Convert to a LSLD - EZ-MUD system mud (+/-50 Vis.) to drill 8-3/4 in. Intermediate Hole. Increase vis to +/-60 to run Casing. **Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.** Use Air , Air Hammer and 6-1/4 in. Flat btm. bit to drill-out of 7 in. csg. and to TD well at +/- 6,049. (MD). **Run TOTCO Survey at 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 <sup>pressure</sup> 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. &amp; GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 2,769	7"	23# K-55
Prod. Liner	6-1/4"	+/- 2,669'-6,049'	4-1/2"	11.6# 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" 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: 120sx (215 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. **- 30 min**
2. INTERMEDIATE: 20 bbl Water Spacer + Lead - 225 sx (614.2 cu.ft.) of "EXTENDACEM" + 5 #/sk pheno-seal + 5% Cal-Seal 60 + 0.5% D-Air-3000 (Yield = 2.73 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.). **SHOULD CIRCULATE TO SURFACE** Total volume = 732 cu.ft. Bump Plug to 1,500 psi. **Test csg. to 1800psi - 30 min**
3. PRODUCTION LINER: 20 bbl Gelled Water spacer. Cement: 345 sx (452 ft<sup>3</sup>) of "FRACCEM" + 0.4% Halad-9 + 2.5 lb/sk Kol-Seal + 0.05% HR-5 + 0.3% D-AIR 3000 + 0.4% Halad-413. (Yield = 1.31 ft<sup>3</sup>/sk, Weight = 13.5 #/gal.). Displace cement at a minimum of 8 BPM. **SHOULD COVER 150 FEET INTO 7" CASING** Total volume (452) ft<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 is not circulated to surface. ✓

##### B. PRESSURE TEST

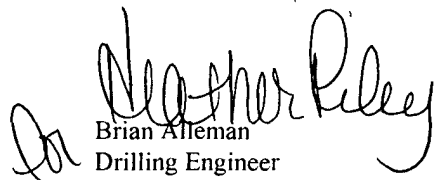
1. Pressure test  $7'' \times 4\text{-}1/2''$  casing to 3300# for 15 minutes.

##### 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.

  
Brian Alleman  
Drilling Engineer