

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

2005 JUN 23 08 10 36
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

2,010' FNL, 15' FWL SW/4 NW/4 (E)

At proposed prod. zone

2,010' FNL, 15' FWL SW/4 NW/4 (E)

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

13.23 miles NE of Navaho City, NM

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

+/- 15'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320 acres *W/2*

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

+/- 1,400'

19. PROPOSED DEPTH

+/- 5,997' MD

20. ROTARY OR CABLE TOOLS

Rotary

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

6,263' GR

22. APPROX. DATE WORK WILL START*

August 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# | +/- 3,557' | 450 sacks Lead and 50 sacks Tail (see Drilling Plan) |
| 6-1/4" | 4-1/2" K-55 | 10.5# | +/- 3,457-5,997' | 50 sacks Lead and 100 sacks Tail (see Drilling Plan) |

Other Information:

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



N 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.

4.

SIGNED Don Hamilton Don Hamilton TITLE Agent for Williams

DATE June 20, 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 Roland Adams TITLE Acting Asst

DATE 08/09/05

*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

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

NMOCD

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

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 17033 | *Property Name ROSA UNIT | | *Well Number 180C |
| *GRID No. 120782 | *Operator Name WILLIAMS PRODUCTION COMPANY | | *Elevation 6263' |

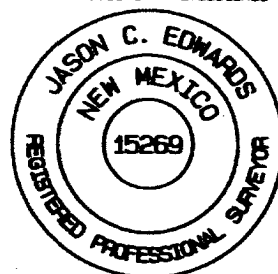
¹⁰ Surface Location

| | | | | | | | | | |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| E | 9 | 31N | 6W | | 2010 | NORTH | 15 | 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 |
| | | | | | | | | | |
| *Dedicated Acres 320.0 Acres - (W/2) | | | | | *Joint or Infill | | *Consolidation Code | *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

| | | |
|--|--|--|
| <p>15</p> <p>5270.76'</p> <p>2010'</p> <p>5280.00'</p> <p>RECEIVED JUN 28 09 10 38 FARMINGTON NM LEASE F-078765</p> <p>9</p> <p>5277.36'</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>6-20-05</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 22, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p></p> <p><u>JASON C. EDWARDS</u> Certificate Number 15269</p> |
|--|--|--|

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

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

| |
|---|
| WELL API NO. |
| 5. Indicate Type of Lease Federal STATE <input type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No. SF-078765 |
| 7. Lease Name or Unit Agreement Name Rosa Unit |
| 8. Well Number 180C |
| 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, LLC

3. Address of Operator
999 Goddard Ave, Ignacio, CO 81137

4. Well Location

Unit Letter **E** : **2,010** feet from the **N** line and **15** feet from the **W** line
Section **9** Township **31N** Range **6W** NMPM County **San Juan**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6,263' GL

Pit or Below-grade Tank Application ☐ or Closure ☐

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

Pit to be located approximately 50 to 75 feet from well head. Pit will be for 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 ☐.

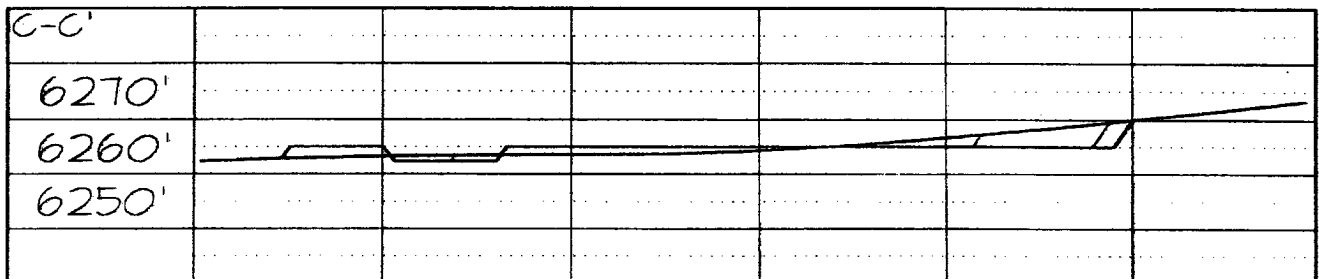
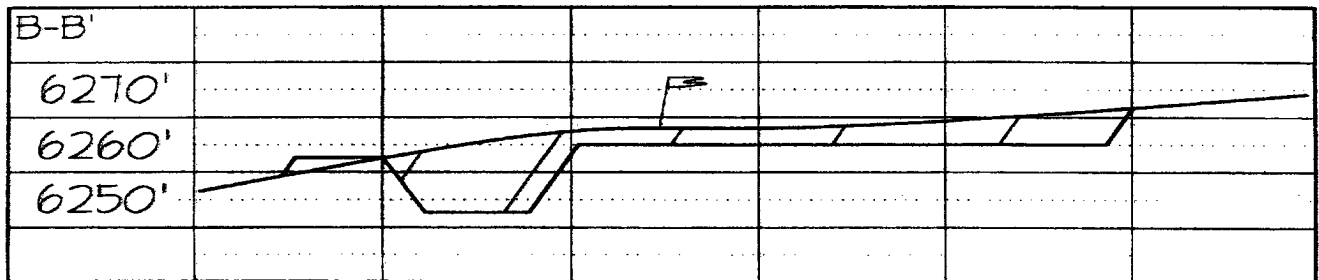
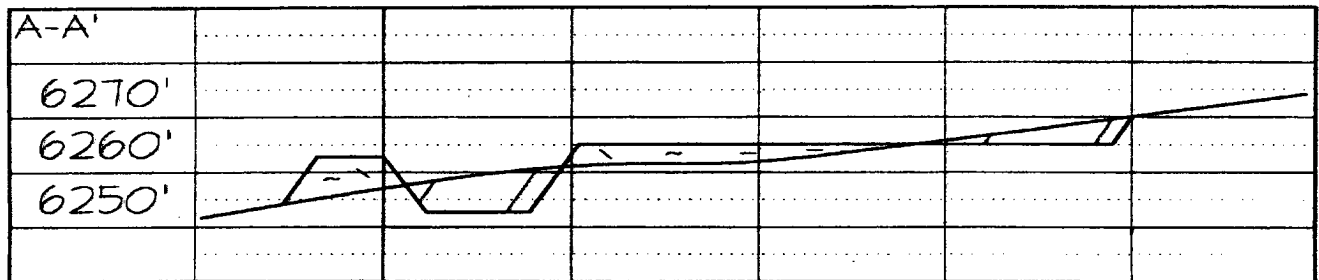
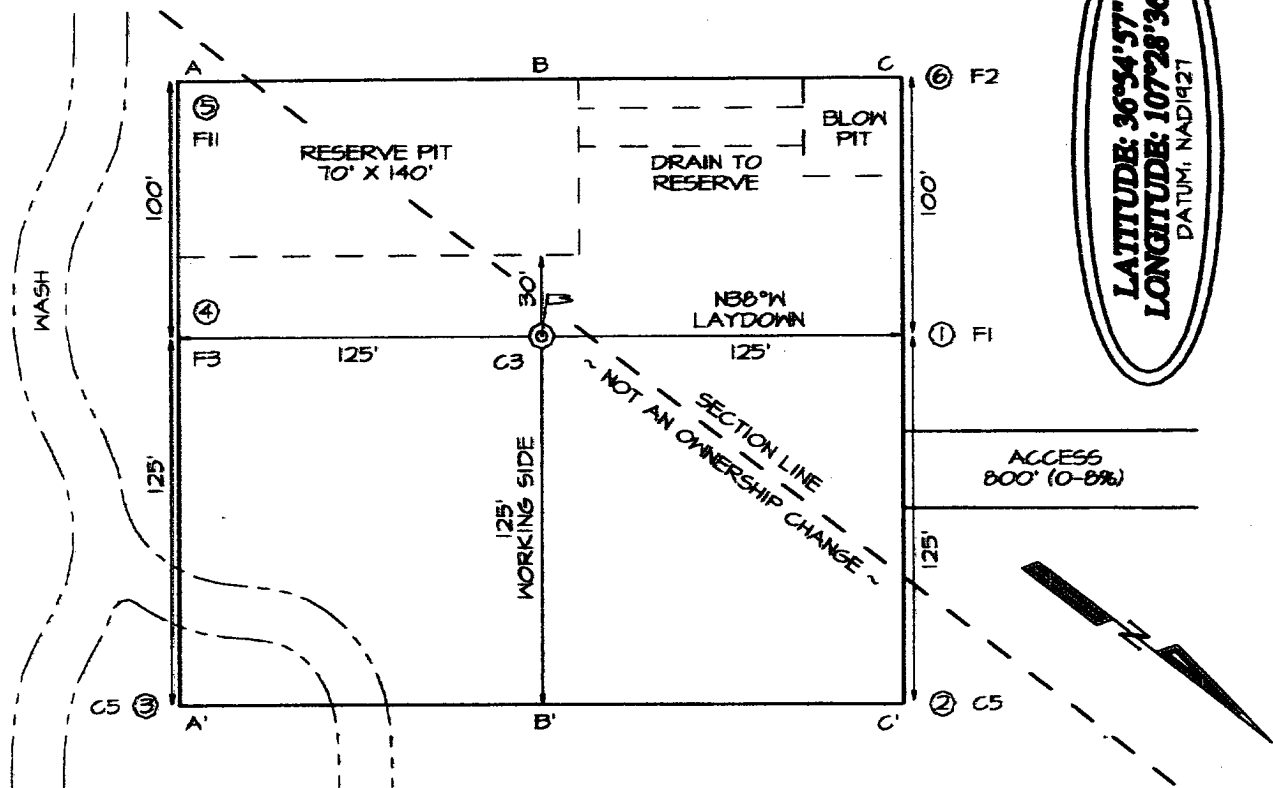
SIGNATURE Don Hamilton TITLE Agent DATE 6/20/05

Type or print name Don Hamilton E-mail address: starpont@etv.net Telephone No. 435-719-2018
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE AUG 11 2005
Conditions of Approval (if any):

WILLIAMS PRODUCTION COMPANY ROSA UNIT #180C
2010' FNL & 15' FWL, SECTION 9, T31N, R6W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6263'

LATITUDE: 36°34'57"
LONGITUDE: 107°28'36"
 DATUM: NAD1927





WILLIAMS PRODUCTION COMPANY

Operations Plan

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

| | | | |
|-------------------------------|------------------------------------|-------------------------|-----------|
| <u>DATE:</u> | 6/13/2005 | <u>FIELD:</u> | Blanco MV |
| <u>WELL NAME:</u> | Rosa #180C | <u>SURFACE:</u> | BLM |
| <u>BH LOCATION:</u> | SWNW Sec 09-31N-6W San Juan, NM | <u>MINERALS:</u> | BLM |
| <u>ELEVATION:</u> | 6,263' GR | <u>LEASE #</u> | SF-078765 |
| <u>MEASURED DEPTH:</u> | 5,997' | | |

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

| Name | MD | Name | MD |
|----------------|-------|---------------|-------|
| Ojo Alamo | 2,222 | Cliff House | 5,267 |
| Kirtland | 2,342 | Menefee | 5,312 |
| Fruitland | 2,772 | Point Lookout | 5,547 |
| Picture Cliffs | 3,082 | Mancos | 5,857 |
| Lewis | 3,402 | TD | 5,997 |

B. MUD LOGGING PROGRAM: None

C. LOGGING PROGRAM: High Resolution Induction/ GR and Density/ Neutron log from surface to intermediate casing point and High Resolution Induction/ GR and Density/ Neutron log from intermediate shoe to TD. Onsite geologist will pick Density/ Neutron log intervals on both 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. & GRADE</u> |
|--------------------|------------------|-------------------|--------------------|------------------------|
| Surface | 12-1/4" | +/- 300' | 9-5/8" | 36# K-55 |
| Intermediate | 8-3/4" | +/- 3,557' | 7" | 20# K-55 |
| Prod. Liner | 6-1/4" | +/- 3,457'-5,997' | 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 - 450 sx (929 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 = 999 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: 50sx (130ft³) 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: 100 sx (215 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 325 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

Adjustable
Choke