

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 18 2016

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No. **SF-077317**

6. Indian, Allottee or Tribe Name  
**Farmington Field Office**  
**Bureau of Land Management**

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☐ Oil Well

☒ Gas Well

☐ Other

2. Name of Operator

**Burlington Resources Oil & Gas Company LP**

3a. Address

**PO Box 4289, Farmington, NM 87499**

3b. Phone No. (include area code)

**(505) 326-9700**

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

8. Well Name and No.

**Cooper 4**

9. API Well No.

**30-045-08401**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**Surface**

**Unit B (NWNE), 955' FNL & 1550' FEL, Sec. 18, T29N, R11W**

11. Country or Parish, State

**San Juan**

**New Mexico**

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☒ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof.

If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Burlington Resources requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematics. The Pre-Disturbance Site Visit was held on 4/13/2016 with Bob Switzer/BLM. The Re-Vegetation Plan is attached. A Closed Loop system will be used.

**BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS**

Notify NMOCD 24 hrs  
prior to beginning  
operations

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**



**H<sub>2</sub>S POTENTIAL EXIST**

**OIL CONS. DIV DIST. 3**

**APR 25 2016**

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

**Dollie L. Busse**

Title **Regulatory Technician**

Signature

*Dollie L. Busse*

Date

**4/18/16**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*[Signature]*

Title

**PE**

Date

**4/20/16**

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

**FFO**

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.

(Instruction on page 2)

**NMOCD**

*5*



**ConocoPhillips**  
**COOPER 4**  
**Expense - P&A**

Lat 36° 43' 47.996" N

Long 108° 1' 44.364" W

**PROCEDURE**

This project requires the use of a steel tank to handle waste fluids circulated from the well and cement wash up.

1. Hold pre-job safety meeting. Comply with all NMOCD, BLM, and COP safety and environmental regulations. Test rig anchors prior to moving in rig. **Before RU, run slickline to remove downhole equipment. If an obstruction is found, set a locking-3-slip-stop in the tubing.**

2. MIRU workover rig. Check casing, tubing, and bradenhead pressures and record them in WellView. **If there is pressure on the BH, contact the Wells Engineer.**

3. Remove existing piping on casing valve. RU blow lines from casing valves and begin blowing down casing pressure. Kill well as necessary. Ensure well is dead or on a vacuum.

4. ND wellhead and NU BOPE. Pressure and function test BOP to 250 psi low and 1000 psi over SICP high to a maximum of 2000 psi held and charted for 10 minutes per COP Well Control Manual. PU and remove tubing hanger.

5. TOOH with tubing (per pertinent data sheet).

**Tubing size:** 2-3/8" 4.7# J-55 EUE

**Set Depth:** 6,415'

**KB:** 10'

6. PU 3-3/4" bit and watermelon mill and round trip as deep as possible above top perforation at 6,331'.

7. PU 4-1/2" CR on tubing, and set at 6,281'. Pressure test tubing to 1000 psi. Sting out of CR. Load hole, and pressure test casing to 800 psi. If casing does not test, spot or tag subsequent plugs as appropriate. POOH with tubing.

8. RU wireline and run CBL with 500 psi on casing from CR at 6,281' to surface to identify TOC. Adjust plugs as necessary for new TOC. *Email log copy to Wells Engineer, Troy Salyers (BLM) at [tsalyers@blm.gov](mailto:tsalyers@blm.gov), and Brandon Powell (NMOCD) at [brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us) upon completion of logging operations.*

**All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Class B mixed at 15.6 ppg with a 1.18 cf/sk yield.**

**9. Plug 1 - Dakota Formation Top and Dakota Perforations, 6181' - 6281', 12 Sacks Class B Cement**

Mix 12 sx Class B cement and spot a balanced plug inside the casing to cover the Dakota top and perforations. PUH.

**10. Plug 2 - Gallup Formation Top, 5436' - 5536', 12 Sacks Class B Cement**

Mix 12 sx Class B cement and spot a balanced plug inside the casing to cover the Gallup top. PUH.

**11. Plug 3 - Mancos Formation Top, 4527' - 4627', 51 Sacks Class B Cement**

RIH and perforate 3 squeeze holes at 4,627'. Establish injection rate into squeeze holes. RIH with a 4-1/2" CR and set at 4,577'. Mix 51 sx Class B cement. Squeeze 39 sx outside the casing, leaving 12 sx inside the casing to cover the Mancos top. POOH.

**12. Plug 4 - Mesaverde Formation Top, 3414' - 3514', 51 Sacks Class B Cement**

RIH and perforate 3 squeeze holes at 3,514'. Establish injection rate into squeeze holes. RIH with a 4-1/2" CR and set at 3,464'. Mix 51 sx Class B cement. Squeeze 39 sx outside the casing, leaving 12 sx inside the casing to cover the Mesaverde top. PUH.

**13. Plug 5 - Pictured Cliffs Formation Top, 1828' - 1928', 12 Sacks Class B Cement**

Mix 12 sx Class B cement and spot a balanced plug inside the casing to cover the Pictured Cliffs top. POOH.

**14. Plug 6 - Fruitland Formation Top, 1290' - 1390', 51 Sacks Class B Cement**

RIH and perforate 3 squeeze holes at 1,390'. Establish injection rate into squeeze holes. RIH with a 4-1/2" CR and set at 1,340'. Mix 51 sx Class B cement. Squeeze 39 sx outside the casing, leaving 12 sx inside the casing to cover the Fruitland top. POOH.

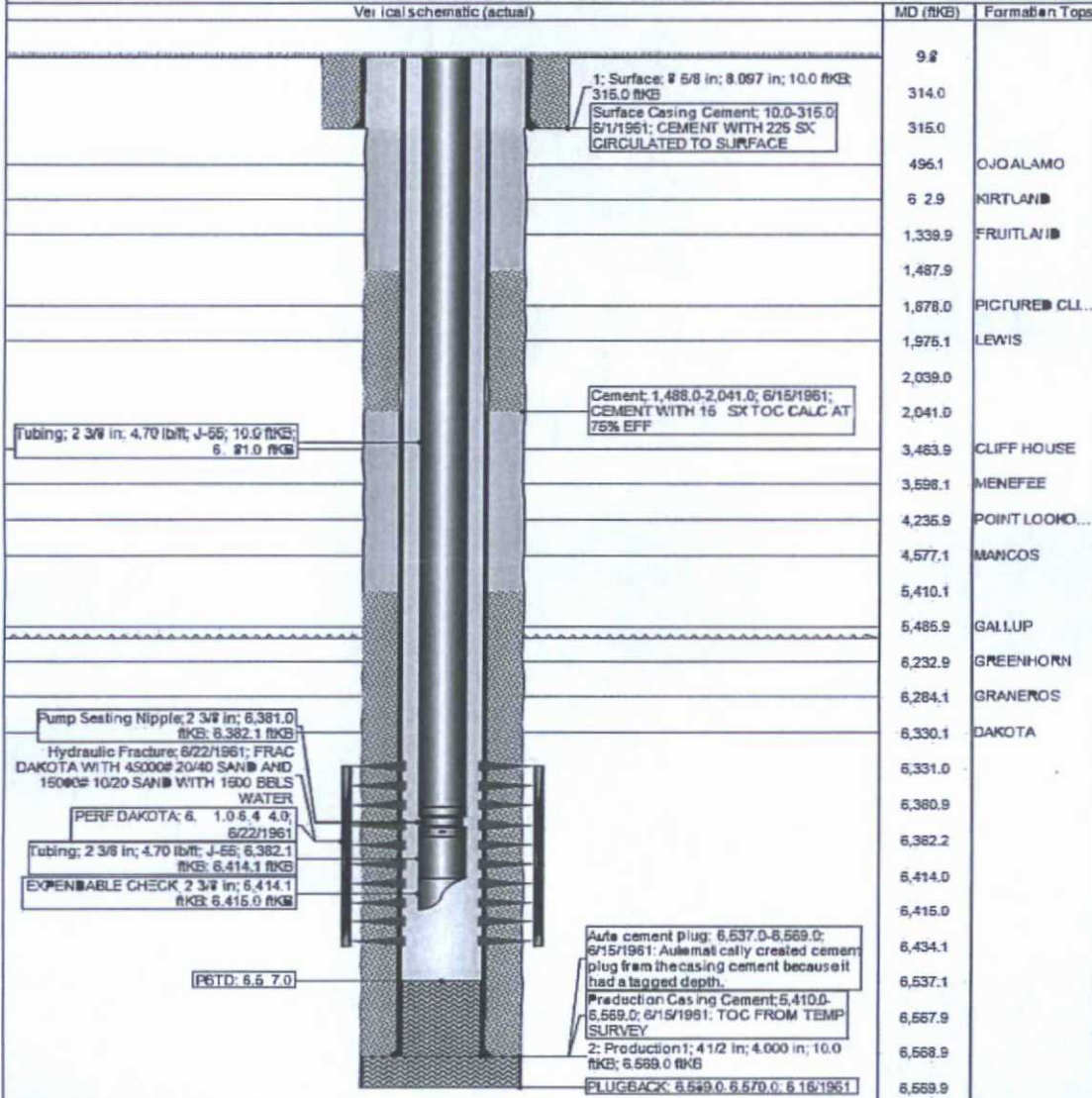
**15. Plug 7 - Ojo Alamo and Kirtland Formation Tops and Surface Plug, 0' - 723', 293 Sacks Class B Cement**

RU WL and perforate 4 big hole charge (if available) squeeze holes at 723'. TOOH and RD wireline. Observe well for 30 minutes per BLM regulations. RU pump, close blind rams and establish circulation out bradenhead with water. Circulate BH clean. TIH with 4-1/2" CR and set at 673'. Mix 239 sx Class B cement and squeeze until good cement returns to surface out BH valve. Shut BH valve and squeeze to max 200 psi. Sting out of CR and reverse circulate cement out of tubing. TOOH and LD stinger. TIH with open ended tubing to 673'. Mix 54 sx Class B cement and pump inside plug. TOOH and LD Tubing. SI well and WOC.

16. Nipple down BOP and cut off casing below the casing flange. Install P&A marker with cement to comply with regulations. RDMO.

|                                |  |                                     |                              |                                     |
|--------------------------------|--|-------------------------------------|------------------------------|-------------------------------------|
| District<br>NORTH              | Field Name<br>BASIN DAKOTA (PRORATED)<br>G #0068 | API UWI<br>3004508401               | County<br>SAN JUAN           | State/Province<br>NEW MEXICO        |
| Original Spud Date<br>6/1/1951 | Surface Legal Location<br>018.029N 011W-B        | East/West Distance (ft)<br>1,550.00 | East/West Reference<br>FEL   | North/South Distance (ft)<br>955.00 |
|                                |  |                                     | North/South Reference<br>FNL |                                     |

VERTICAL - Original Hole, 3/1/2016 10:31:32 AM





|                                |  |                                     |                            |                                     |
|--------------------------------|--|-------------------------------------|----------------------------|-------------------------------------|
| District<br>NORTH              | Field Name<br>BASIN DAKOTA (PRORATED<br>G #0068) | API / UWI<br>3004508401             | County<br>SAN JUAN         | State/Province<br>NEW MEXICO        |
| Original Spud Date<br>6/1/1961 | Surface Legal Location<br>018-029N-011W-B        | East/West Distance (ft)<br>1,550.00 | East/West Reference<br>FEL | North/South Distance (ft)<br>955.00 |
|                                |  |                                     |                            | North/South Reference<br>FNL        |

VERTICAL - Original Hole, 1/1/2020 12:30:00 PM

| Vertical schematic (actual)   | MD (ftKB) | Formation Tops |
|---|-----------|----------------|
| 1; Surface; 8 5/8 in; 8.097 in; 10.0 ftKB; 315.0 ftKB   | 9.8       |                |
| Surface Casing Cement; 10.0-315.0; 6/1/1961; CEMENT WITH 225 SX CIRCULATED TO SURFACE   | 314.0     |                |
| Plug 7 : 10.0-723.0; 1/1/2020   | 315.0     |                |
|   | 485.1     | OJO ALAMO      |
| Cement Retainer; 673.0-675.0; Plug 7  | 672.9     | KIRTLAND       |
| SQUEEZE PERFS; 723.0; 1/1/2020  | 674.9     |                |
| Plug 7 : 10.0-723.0; 1/1/2020; Mix 239 sx Class B cement and squeeze until good cement returns out BH valve. Mix 54 sx Class B Cement and pump inside plug. | 723.1     |                |
|   | 1,290.0   |                |
| Plug 6 : 1,290.0-1,390.0; 1/1/2020  | 1,339.9   | FRUITLAND      |
| Cement Retainer; 1,340.0-1,342.0; Plug 6  | 1,341.9   |                |
| SQUEEZE PERFS; 1,390.0; 1/1/2020  | 1,390.1   |                |
| Plug 6; 1,290.0-1,390.0; 1/1/2020; Mix 51 sx Class B Cement, squeeze 39 sx outside the casing, leaving 12 sx inside the casing.                             | 1,487.9   |                |
|   | 1,828.1   |                |
| Plug 5; 1,828.0-1,928.0; 1/1/2020; Mix 12 sx Class B cement and spot a balanced plug inside the casing.   | 1,878.0   | PICTURED CL... |
|   | 1,928.1   |                |
|   | 1,975.1   | LEWIS          |
| Cement; 1,488.0-2,041.0; 6/15/1961; CEMENT WITH 160 SX TOC CALC AT 75% EFF  | 2,039.0   |                |
|   | 2,041.0   |                |
| Plug 4; 3,414.0-3,514.0; 1/1/2020   | 3,414.0   |                |
| Cement Retainer; 3,464.0-3,466.0; Plug 4  | 3,463.9   | CLIFF HOUSE    |
| SQUEEZE PERFS; 3,514.0; 1/1/2020  | 3,465.9   |                |
| Plug 4; 3,414.0-3,514.0; 1/1/2020; Mix 51 sx Class B Cement, squeeze 39 sx outside the casing, leaving 12 sx inside the casing.                             | 3,514.1   |                |
|   | 3,598.1   | MENESEE        |
|   | 4,235.9   | POINT LOOKO... |
|   | 4,526.9   |                |
| Plug 3; 4,527.0-4,627.0; 1/1/2020   | 4,577.1   | MANCOS         |
| Cement Retainer; 4,577.0-4,579.0; Plug 3  | 4,579.1   |                |
| SQUEEZE PERFS; 4,627.0; 1/1/2020  | 4,627.0   |                |
| Plug 3; 4,527.0-4,627.0; 1/1/2020; Mix 51 sx Class B cement, squeeze 39 sx outside the casing, leaving 12 sx inside the casing.                             | 5,410.1   |                |
|   | 5,436.0   |                |
| Plug 2; 5,436.0-5,536.0; 1/1/2020; Mix 12 sx Class B Cement and spot a balanced plug inside the casing  | 5,485.9   | GALLUP         |
|   | 5,536.1   |                |
|   | 6,181.1   |                |
| Plug 1; 6,181.0-6,281.0; 1/1/2020; Mix 12 sx Class B Cement and spot a balanced plug inside the casing  | 6,232.9   | GREENHORN      |
|   | 6,280.8   |                |
| Cement Retainer; 6,281.0-6,283.0; Plug 1  | 6,283.1   |                |
| Hydraulic Fracture; 6/22/1961; FRAC DAKOTA WITH 45000# 20/40 SAND AND 15000# 10/20 SAND WITH 1500 BBLs WATER  | 6,284.1   | GRANEROS       |
| PERF DAKOTA; 6,331.0-6,434.0; 6/22/1961   | 6,330.1   | DAKOTA         |
| PBTD; 6,537.0   | 6,331.0   |                |
| 2; Production 1; 4 1/2 in; 4,000 in; 10.0 ftKB; 6,569.0 ftKB  | 6,434.1   |                |
| Production Casing Cement; 5,410.0-6,569.0; 6/15/1961; TOC FROM TEMP SURVEY  | 6,537.1   |                |
| Auto cement plug; 6,537.0-6,569.0; 6/15/1961; Automatically created cement plug from the casing cement because it had a tagged depth.                       | 6,567.9   |                |
| PLUGBACK; 6,569.0-6,570.0; 6/15/1961  | 6,568.9   |                |
|   | 6,569.9   |                |

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: Cooper 4

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - a) Set plug #3 (4659-4559) ft. inside/outside to cover the Mancos top. BLM picks top of Mancos at 4609 ft.
  - b) Set a cement plug (2940-2840) ft. inside/outside to cover the Chacra top. BLM picks top of Chacra at 2890 ft.
  - c) Set plug #6 (1608-1508) ft. to cover the Fruitland top. BLM picks top of Fruitland at 1558 ft.

Operator will run CBL from CR @ 6,281 ft. to surface to identify TOC. Submit the electronic copy of the log for verification to the following addresses: [jwsavage@blm.gov](mailto:jwsavage@blm.gov) [Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)

H<sub>2</sub>S has not been reported in this section, however, **Very High concentrations of H<sub>2</sub>S (900 ppm GSV)** have been reported in the Cliff House Ss at the Crawford GC B #1 well located NWSW/4 Sec. 24, 28N, 12W. **It is imperative that H<sub>2</sub>S monitoring and safety equipment be on location during P&A operations at this well site.**

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.