

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.*

**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**

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

**UL K (NESW), 1785' FSL & 1575' FWL, SSEC. 22, T30N, R10W**

5. Lease Serial No.

**NM-0555078**

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

**HELMS FEDERAL 2**

9. API Well No.

**3004523678**

10. Field and Pool or Exploratory Area

**AZTEC PICTURED CLIFFS**

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 onsite was held with Bob Switzer on 8-13-15. The re-vegetaton plan is attached. A closed loop system will be utilized for this P&A.

**OIL CONS. DIV DIST. 3**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**AUG 28 2015**

**Notify NMOCD 24 hrs  
prior to beginning  
operations**

**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**

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

**Patsy Clugston**

Title

**Staff Regulatory Technician**

Signature

Date

**8/19/2015**

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

Approved by

**Troy Salvess**

Title

**PE**

Date

**8/23/2015**

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)

**ConocoPhillips**  
**HELMS FEDERAL 2**  
**Expense - P&A**

Lat 36° 47' 42.936" N

Long 107° 52' 29.604" W

**PROCEDURE**

**NOTE:** Insert note here

**This project requires the use of an A-Plus 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 COPC safety and environmental regulations. Test rig anchors prior to moving in rig.
2. MIRU workover rig. Check casing 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 1,000 psi over SICP high to a maximum of 2,000 psi held and charted for 10 minutes as per COP Well Control Manual.
5. RU wireline. Run gauge ring for 2-7/8" 6.4# casing as deep as possible above top perforation @ 2,851'. **If unable to run gauge ring, contact Wells Engineer.**
6. PU 2-7/8" CIBP on wireline, and set @ 2,800'. Load hole, and pressure test casing to 800 psi. If casing does not test, then spot or tag subsequent plugs as appropriate.
7. RU wireline and run CBL with 500 psi on casing from CIBP to surface to identify TOC. *Adjust plugs as necessary for new TOC. Email log copy to 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.**

**8. Plug 1 (Pictured Cliffs Perforations, 2700-2800', 5 Sacks Class B Cement)**

Mix 5 sx Class B cement and spot a balanced plug inside the casing to cover the Pictured Cliff Perforations. PUH.

*See CoA*

**9. Plug 2 (Fruitland Coal Formation Top , 2227-2327', 39 Sacks Class B Cement)**

RIH and perforate 3 squeeze holes at 2327'. Establish injection rate into squeeze holes. PU a 2-7/8" Cement retainer on Wireline and set at 2,277'. Mix 39 sx Class B cement. Squeeze 35 sx outside the casing, leaving 5 sx inside the casing to cover the Fruitland formation top. POOH.

**10. Plug 3 ( Kirtland and Ojo Alamo formation tops, 1465-1699', 89 Sacks Class B Cement)**

RIH and perforate 3 squeeze holes at 1,699'. Establish injection rate into squeeze holes. PU a 2-7/8" Cement retainer on Wireline and set at 1,649'. Mix 89 sx Class B cement. Squeeze 81 sx outside the casing, leaving 8 sx inside the casing to cover the Kirtland and Ojo Alamo formation tops. POOH.

**11. Plug 4 (Surface Plug, 0-307', 72 Sacks Class B Cement)**

RU WL and perforate 3 squeeze holes at 307'. TOO H 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. Mix 72 sx Class B cement and squeeze until good cement returns to surface out BH valve. Shut BH valve and squeeze to max 200 psi. SI well and WOC.

12. Nipple down BOP and cut off casing below the casing flange. Install P&A marker with cement to comply with regulations. Rig down, move off location, cut off anchors, and restore location.





# Schematic - Current

## HELMS FEDERAL #2

District NORTH	Field Name AZTEC PICTURED CLIFFS (GAS)	API / UWI 3004523678	County SAN JUAN	State/Province NEW MEXICO
Original Spud Date 1/9/1980	Surface Legal Location 022-030N-010W-K	East/West Distance (ft) 1,575.00	East/West Reference FWL	North/South Distance (ft) 1,785.00
North/South Reference FSL				

VERTICAL - Original Hole, 7/29/2015 2:03:16 PM

Vertical schematic (actual)	MD (ftKB)	Formation Tops
	-65.2	
	11.2	
	135.5	
1; Surface; 7 5/8 in; 6.969 in; 11.0 ftKB; 257.0 ftKB	259.8	
Surface Casing Cement; 11.0-260.0; 1/10/1980; Cm'd w/100 sxs. Circulated to surface.	887.5	
	1,515.1	OJO ALAMO
	1,582.5	
	1,649.9	KIRTLAND
	1,963.9	
	2,277.9	FRUITLAND
	2,364.0	
	2,450.1	
	2,649.1	
	2,848.1	PICTURED CLI...
	2,849.6	
	2,851.0	
PERF - PICTURED CLIFFS; 2,851.0- 2,927.0; 4/3/1980	2,888.9	
	2,926.8	
	2,965.9	
	3,004.9	LEWIS
	3,030.0	
PBTD: 3,065.0	3,055.1	
2; Production1; 2 7/8 in; 2.441 in; 11.0 ftKB; 3,062.0 ftKB	3,060.0	
Production Casing Cement; 2,450.0- 3,065.0; 1/13/1980; Cm'd w/225 sxs. TOC @ 2450' per Temp Survey (1/14/1980).	3,065.0	
Auto cement plug; 3,055.0-3,065.0; 1/13/1980; Automatically created cement plug from the casing cement because it had a tagged depth.	3,141.3	

**Proposed Schematic**

API / UWI 3004523678	Surface Legal Location 022-030N-010W-K	Field Name ACTED PICTURED CLIFFS (SAB)	License No.	State/Province NEW MEXICO	Well Configuration Type VERTICAL
Ground Elevation (ft) 6,271.00	Original KB RT Elevation (ft) 6,262.00	KB-Ground Distance (ft) 11.00	KB-Casing Flange Distance (ft) 6,282.00	KB-Tubing Hanger Distance (ft) 6,282.00	

**VERTICAL - Original Hole, 1/1/2020 12:02:00 AM**

Vertical schematic (actual)	MD (ftKB)	Formation Tops
	11.2	
	255.9	
	255.9	
	259.8	
<p>Plug #4: 11.0-307.0; 1/1/2020</p> <p>1; Surface; 7 5/8 in; 6.969 in; 11.0 ftKB; 257.0 ftKB</p> <p>Surface Casing Cement; 11.0-260.0; 1/10/1980; Cmt'd w/100 sxs. Circulated to surface.</p> <p>PERF - OTHER: 307.0; 1/1/2020</p> <p>Plug #4: 11.0-307.0; 1/1/2020; Mix 72 sx Class B cement squeeze until good cement returns to surface.</p>	307.1	
	1,464.9	
	1,515.1	OJO ALAMO
	1,849.0	
<p>Cement Retainer: 1,649.0-1,651.0</p> <p>PERF - OTHER: 1,699.0; 1/1/2020</p> <p>Plug #3; 1,465.0-1,699.0; 1/1/2020; Mix 89 sx Class B cement.</p> <p>Squeeze 81 sx outside casing leaving 8 sx inside casing to cover Kirtland &amp; Ojo Alamo formation tops.</p> <p>Plug #3: 1,465.0-1,699.0; 1/1/2020</p>	1,649.9	KIRTLAND
	1,650.9	
	1,699.1	
	2,227.0	
	2,276.9	
<p>Cement Retainer: 2,277.0-2,279.0</p> <p>Plug #2; 2,227.0-2,327.0; 1/1/2020; Mix 39 sx Class B cement squeeze 36 sx outside casing leaving 6 sx inside casing to cover Fruitland formation top.</p> <p>Plug #2: 2,227.0-2,327.0; 1/1/2020</p> <p>PERF - FRUITLAND COAL: 2,327.0; 1/1/2020</p>	2,277.9	FRUITLAND
	2,278.9	
	2,327.1	
	2,450.1	
	2,700.1	
<p>Bridge Plug - Permanent; 2,800.0-2,802.0</p> <p>Hydraulic Fracture; 4/3/1980; FRAC PICTURED CLIFFS WITH 70q FOAM AND 30000# 20/40 SAND</p> <p>Hydraulic Fracture; 10/25/1999; FRAC PICTURED CLIFFS WITH 425 BBLs 36# LINEAR GEL AND 493000 SCF N2 WITH 177000# 20/40 SAND</p> <p>Plug #1; 2,700.0-2,800.0; 1/1/2020; Mix 5 sx Class B cement spot balanced plug inside casing to cover Pictured Cliff perms.</p>	2,799.9	
	2,801.8	
	2,848.1	PICTURED CLIFFS
	2,851.0	
	2,926.8	
	3,004.9	LEWIS
	3,055.1	
<p>PBTD: 3,055.0</p> <p>2; Production 1; 2 7/8 in; 2.441 in; 11.0 ftKB; 3,062.0 ftKB</p> <p>Production Casing Cement; 2,450.0-3,065.0; 1/13/1980; Cmt'd w/225 sxs. TOC @ 2450' per Temp Survey (1/14/1980).</p> <p>Auto cement plug; 3,055.0-3,065.0; 1/13/1980; Automatically created cement plug from the casing cement because it had a tagged depth.</p>	3,061.0	
	3,062.0	
	3,065.0	

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: Helms Federal #2

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 #2 (2532-2432) ft. inside/outside to cover the Fruitland top. BLM picks top of Fruitland at 2482 ft.

Operator will run a CBL to verify cement top. Submit the electronic copy of the log for verification to the following addresses: [tsalyers@blm.gov](mailto:tsalyers@blm.gov) [Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)

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.