

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 13 2013

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

Farmington Field Office

5. Lease Serial No.

SF-078385A

6. If Indian, Allottee or Tribe Name

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.

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

1. Type of Well

☐

Oil Well

☒

Gas Well

☐

Other

8. Well Name and No.

Howell L 4R

2. Name of Operator

Burlington Resources Oil & Gas Company LP

9. API Well No.

30-045-27576

3a. Address

PO Box 4289, Farmington, NM 87499

3b. Phone No. (include area code)

(505) 326-9700

10. Field and Pool or Exploratory Area

Blanco PC / Blanco MV

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

Surface Unit G (SWNE), 1850' FEL, 1450' FNL, Sec. 34, T30N, R8W

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	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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.



H₂S POTENTIAL EXIST

Notify NMOCD 24 hrs
prior to beginning
operations

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RCVD APR 25 '13
OIL CONS. DIV.
DIST. 3

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

Dollie L. Busse

Title Staff Regulatory Technician

Signature

Date

2/13/13

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

PE

Date

APR 24 2013

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

FAO

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)

OPERATOR
NMOCD A

ConocoPhillips
HOWELL L 4R
Expense - P&A

Lat 36° 46' 17.616" N

Long 107° 39' 34.344" W

PROCEDURE

This project requires a NMOCD C-144 CLEZ Closed-Loop System Permit for 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 work over rig. Check casing, tubing, and bradenhead pressures and record them in Wellview.
3. When an existing primary valve (i.e. casing valve) is to be used, the existing piping should be removed and replaced with the appropriate piping for the intended operation.
4. RU blow lines from casing valves and begin blowing down casing pressure. Kill well with water, as necessary, and at least pump tubing capacity of water down tubing.
5. ND wellhead and NU BOPE. Pressure and function test BOP. PU and remove tubing hanger.
6. TOOH with tubing (per pertinent data sheet). Round trip 4-1/2" watermelon mill to 3712' or as deep as possible and found trip 7" watermelon mill to 3228'.

Rods:	No	Size:		Length:	
Tubing:	Yes	Size:	2-3/8"	Length:	4338
Packer:	No	Size:		Depth:	

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 Type II mixed at 15.6 ppg with a 1.18 cf/sk yield.

7. Plug 1 (Mesaverde Perforations and Formation Top, Intermediate Shoe and Liner Top, 3178-3662', 51 Sacks Class B RIH and set CR for 4 1/2" casing at 3662'. Load tubing with water and circulate clean. Pressure test tubing to 560 psi. Mix 51 sx Class B cement and spot inside the casing above CR to isolate the Mesaverde Perforations and Formation top, Intermediate Shoe and Liner Top. POOH

8. Plug 2 (Pictured Cliffs Perforations and Formation Top, 2790-2890', 29 Sacks Class B Cement)
RIH and set CR for 7" casing at 2890'. Pressure test casing to 800psi. If casing does not test, then spot or tag subsequent plugs as appropriate. Mix 29 sx Class B cement and spot inside the casing above CR to isolate the Pictured Cliffs Perforations and Formation Top. PUH

2676 2576

9. Plug 3 (Fruitland, 2372-2472', 29 Sacks Class B Cement)

Mix 29 sx Class B cement and spot a balanced plug inside the casing to isolate the Fruitland Formation Top. PUH

2042 - 1739

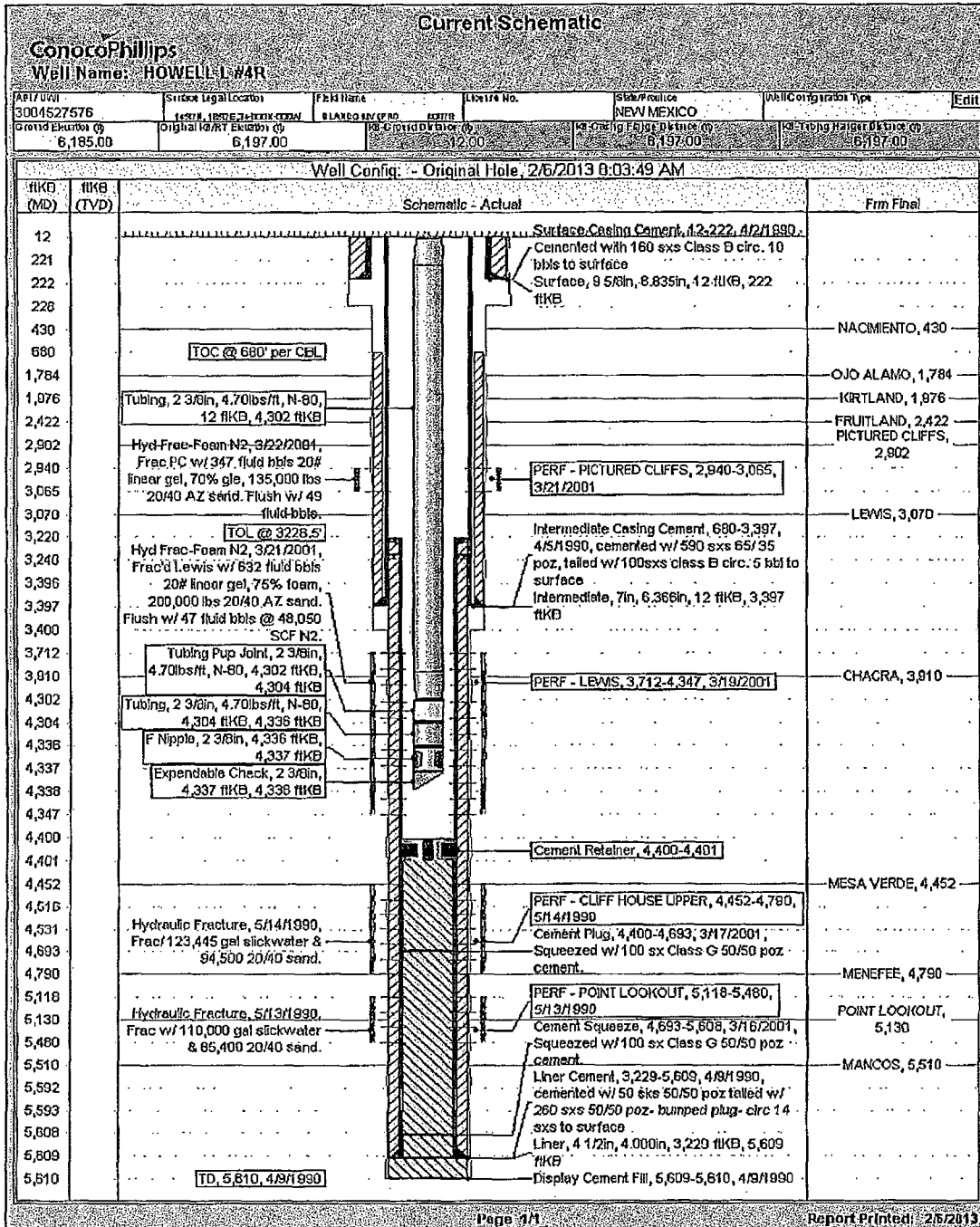
10. Plug 4 (Ojo Alamo and Kirtland, 1794-2026', 65 Sacks Class B Cement)

Mix 65 sx Class B cement and spot a balanced plug inside the casing to isolate the Ojo Alamo and Kirtland Formation Tops. POOH

11 Plug 5 (Surface Shoe and Nacimiento Top, 12-480', 137 Sacks Class B Cement)

RIH and perforate 3 HSC holes @ 480'. Establish circulation through squeeze holes. Mix 137 sx Class B cement. Squeeze Class B cement into HSC holes and circulate cement to surface through bradenhead to isolate the surface casing and bradenhead. Shut in well and WOC. Tag cement top and top out cement as necessary.

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.



Proposed Schematic

ConocoPhillips

Well Name: HOWELL L #4R

AP #1001	CAT# Legal Location	PERMIT	License No.	STATE/LOCALITY	Well Completion Type	Edit
3004527578	14207, 8320E3+030X6007	BLANCO II / PPO	00018	NEW MEXICO		
Original Depth (ft)	Original True Depth (ft)	True Depth (ft)	True Depth (ft)	True Depth (ft)	True Depth (ft)	
6,185.00	6,197.00	6,197.00	6,197.00	6,197.00	6,197.00	

Well Config - Original Hole, 1/1/2020

ftKB (MD)	ftKB (TVD)	Schematic - Actual	From Final
12		Surface Casing Cement, 12-222, 4/2/1990, Cemented with 160 sxs Class B circ. 10 bbls to surface	
221		Surface, 8 5/8in, 8.835in, 12 ftKB, 222 ftKB	
222		SQUEEZE PERFS, 480, 1/1/2020	
226		Plug #5, 12-480, 1/1/2020	NACIMIENTO, 430
430		Plug #5, 12-480, 1/1/2020, Mix 137 sx Class B cement. Squeeze Class B cement into HSC holes and circulate cement to surface through bradenhead to isolate the surface casing and bradenhead.	
480		Plug #4, 1,734-2,026, 1/1/2020, Mix 65 sx Class B cement and spot a balanced plug inside the casing to isolate the Ojo Alamo and Kirtland Formation Tops.	OJO ALAMO, 1,784
680		Plug #3, 2,372-2,472, 1/1/2020, Mix 29 sx Class B cement and spot a balanced plug inside the casing to isolate the Fruitland Formation Top.	KIRTLAND, 1,976
1,734		Cement Retainer, 2,890-2,891	
1,784		Hyd Frac-Foam N2, 3/22/2001, Frac PC w/ 347 fluid bbls 20# linear gel, 75% gel, 135,000 lbs 20/40 AZ sand. Flush w/ 48 fluid bbls.	FRUITLAND, 2,422
1,976		Plug #2, 2,790-2,890, 1/1/2020, Mix 29 sx Class B cement and spot inside the casing above CR to isolate the Pictured Cliffs Perforations and Formation Top.	
2,026		PERF - PICTURED CLIFFS, 2,940-3,065, 3/21/2001	PICTURED CLIFFS, 2,902
2,372		Plug #1, 3,178-3,228, 1/1/2020, Mix 51 sx Class B cement and spot inside the casing above CR to isolate the Chacra Perforations and Formation top, Intermediate Shoe and Liner Top.	
2,422		Intermediate Casing Cement, 680-3,397, 4/5/1990, cemented w/ 590 sxs 65/35 poz, tailed w/ 100sxs class B circ. 5 bbl to surface. TOC at 680' per CBL.	LEWIS, 3,070
2,472		Intermediate, 7in, 8.368in, 12 ftKB, 3,397 ftKB	
2,790		Plug #1, 3,229-3,662, 1/1/2020	
2,890		PERF - LEWIS, 3,712-4,347, 3/19/2001	
2,891		PERF - CLIFF HOUSE UPPER, 4,452-4,790, 5/14/1990	
2,902		Cement Plug, 4,400-4,693, 3/17/2001, Squeezed w/ 100 sx Class G 50/50 poz cement.	
2,940		PERF - POINT LOOKOUT, 5,118-5,480, 5/13/1990	MESA VERDE, 4,452
3,065		Cement Squeeze, 4,693-5,608, 3/16/2001, Squeezed w/ 100 sx Class G 50/50 poz cement.	
3,070		Liner Cement, 3,229-5,609, 4/9/1990, cemented w/ 50 sxs 50/50 poz tailed w/ 260 sxs 50/50 poz - bumped plug - circ 14 sxs to surface	MENESEE, 4,780
3,178		Liner, 4 1/2in, 4.000in, 3,229 ftKB, 5,609 ftKB	POINT LOOKOUT, 5,130
3,228		Display Cement Fill, 5,609-5,610, 4/9/1990	
3,240			MANCOS, 5,510
3,396			
3,397			
3,400			
3,662			
3,663			
3,712			
3,910			
4,302			
4,304			
4,336			
4,337			
4,338			
4,347			
4,400			
4,401			
4,452			
4,616			
4,531			
4,693			
4,780			
5,118			
5,130			
5,480			
5,510			
5,592			
5,593			
5,608			
5,609			
5,610			

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: 4R Howell L

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) Place the Fruitland plug from 2676' - 2576'.
- b) Place the Kirtland/Ojo Alamo plug from 2042' - 1739'.

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.

**GENERAL REQUIREMENTS FOR
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densimeter/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously run or cement circulated to surface during the original casing cementing job or subsequent cementing jobs.

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H₂S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 1235 La Plata Highway, Suite A, Farmington, NM 87401. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.