

Submit 3 Copies To Appropriate District Office  
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

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Jun 19, 2008

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

WELL API NO. <b>30-045-07809</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. FEE
7. Lease Name or Unit Agreement Name <b>Mangum</b>
8. Well Number <b>4</b>
9. OGRID Number <b>14538</b>
10. Pool name or Wildcat <b>Basin Dakota</b>

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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator <b>Burlington Resources Oil Gas Company LP</b>	
3. Address of Operator P.O. Box 4289, Farmington, NM 87499-4289	
4. Well Location Unit Letter <b>K</b> : <b>1750</b> feet from the <b>South</b> line and <b>1770</b> feet from the <b>West</b> line Section <b>28</b> Township <b>29N</b> Range <b>11W</b> NMPM <b>San Juan County</b>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5438' GR	

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 ☐  
DOWNHOLE COMMINGLE ☐

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.

Burlington Resources requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematics. A Closed Loop System will be used on Location for this P&A

\* Adjust mannos plug to 4215-4315  
Adjust Fruitland plug to 1160-1260

Well is under review for a groundwater concern.

Perform the following actions within 90 days of approval and submit the results for evaluation.

- Take a gas analysis from the bradenhead including H2S
- Perform a noise log to determine the source of the gas migration.
- Additional stipulations may be added after the evaluation of the results.
- Plugging above the Picture Cliff formation top is not approved until the information has been evaluated and approved.

OIL CONS. DIV DIST. 3

MAY 27 2015

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Arleen White TITLE Staff Regulatory Technician DATE 5/26/15

Type or print name Arleen White E-mail address: arleen.r.white@conocophillips.com PHONE: 505-326-9517

For State Use Only

DEPUTY OIL & GAS INSPECTOR

APPROVED BY: Bob Bell TITLE DISTRICT #3 DATE 6/30/15

Conditions of Approval (if any):

PC 5

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

Lat 36° 41' 39.516" N

Long 107° 59' 57.408" W

**PROCEDURE**

**NOTE:**

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. **Before RU, run WL 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.

5. 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. PU and remove tubing hanger.

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

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

**Set Depth: 6,117'**

**KB: 11'**

7. PU 3-7/8" bit and watermelon mill and round trip as deep as possible above top perforation at 6,033'.

8. PU 4-1/2" CR on tubing, and set a 5,983'. Pressure test tubing to 1,000 psi. Sting out of CR. Load hole, and pressure test casing to 800 psi. *If casing does not test, then spot or tag subsequent plugs as appropriate.* POOH w/ tubing.

9. RU wireline and run CBL with 500 psi on casing from CR 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.

10. **Plug 1 (Dakota Perforations, Dakota and Graneros formation tops, 5,883'-5,983', 12 Sacks Class B Cement)**

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

11. **Plug 2 (Gallup formation top, 5,113'-5,213', 12 Sacks Class B Cement)**

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

12. **Plug 3 (Mancos formation top, 4,238'-4,338', 51 Sacks Class B Cement)**

RIH and perforate 3 squeeze holes at 4,338'. Establish injection rate into squeeze holes. RIH with a 4-1/2" CR and set at 4,288'. Mix 51 sx Class B cement. Squeeze 39 sx outside the casing, leaving 12 sx inside the casing to cover the Mancos formation top. PUH.

13. **Plug 4 (Mesaverde formation top, 3,090'-3,190', 12 Sacks Class B Cement)**

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

14. **Plug 5 (Chacra formation top, 2,519'-2,619', 12 Sacks Class B Cement)**

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

15. **Plug 6 (Pictured Cliffs formation top, 1,499'-1,599', 12 Sacks Class B Cement)**

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

16. **Plug 7 (Fruitland formation top, 945'-1,045' 51 Sacks Class B Cement)**

RIH and perforate 3 squeeze holes at 1,045'. Establish injection rate into squeeze holes. RIH with a 4-1/2" CR and set at 995". Mix 51 sx Class B cement. Squeeze 39 sx outside the casing, leaving 12 sx inside the casing to cover the Fruitland formation top. POOH.

**17. Plug 8 (Surface, Surface Casing Shoe, Ojo and Kirtland formation tops, 0'-517', 199 Sacks Class B Cement)**

Part 1: Mix 4 sx Class B cement and spot a balanced plug inside the casing from 467'-517', POOH.

Part 2: RU WL and perforate 4 big hole charge (if available) squeeze holes at 517'. 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 467'. Mix 155 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 467'. Mix 36 sx Class B cement and pump inside plug. TOOH and LD Tubing. SI well and WOC.

18. 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.





## Basic- Schematic - Current

## MANGUM #4

District SOUTH	Field Name BASIN DAKOTA (PRORATED GAS)	API / UWI 3004507809	County SAN JUAN	State/Province NEW MEXICO
Original Spud Date 8/6/1961	Surface Legal Location 028-029N-011W-K	East/West Distance (ft) 1,770.00	East/West Reference FWL	North/South Distance (ft) 1,750.00
North/South Reference FSL				

Original Hole, 4/20/2015 9:11:18 AM

Vertical schematic (actual)	MD (ftKB)	Formation Tops
	11.2	
	314.0	
	315.0	
	323.2	
	377.0	OJO ALAMO
	467.8	KIRTLAND
	1,029.9	FRUITLAND
	1,049.9	
	1,284.1	FRUITLAND C...
	1,549.9	PICTURED CLI...
	1,717.8	LEWIS
	2,569.9	CHACRA
	3,140.1	UPPER CLIFF...
	3,211.9	MASSIVE CLIF...
	3,259.8	MENEFEE
	3,930.1	POINT LOOKO...
	4,120.1	
	4,121.1	
	4,288.1	MANCOS
	4,625.0	
	5,163.1	GALLUP
	5,929.1	GREENHORN
	5,987.9	GRANEROS
	6,032.2	TWO WELLS (...)
	6,033.1	
	6,081.0	
	6,085.0	
	6,113.8	PAGUATE
	6,115.2	
	6,116.1	
	6,117.1	
	6,164.0	CUBERO
	6,200.1	
	6,211.0	
	6,212.9	
	6,213.9	
	6,215.9	ENCINAL
	6,249.0	
	6,250.0	

1; Surface; 8 5/8 in; 8.097 in; 11.0 ftKB;  
315.0 ftKB

Surface Casing Cement; 11.0-323.0  
8/7/1961; CEMENTED W/ 225 SX  
CEMENT. CIRC CMT.

TOC @ 1050' (8/61 Temperature Survey)

Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 11.0 ftKB;  
6,081.0 ftKB

Production Casing Cement; 1,050.0-  
4,121.0; 8/19/1961; 2nd Stage: 110 sx  
HYS-400 followed by 100 sx reg. TOC @  
1050' per TS.

TOC @ 4625' (8/61 Temperature Survey)

Tubing Pup Joint; 2 3/8 in; 4.70 lb/ft; J-55;  
6,081.0 ftKB; 6,085.1 ftKB

Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 6,085.1  
ftKB; 6,115.2 ftKB

Profile Nipple; 2 3/8 in; 6,115.2 ftKB;  
6,116.2 ftKB

Hyd Frac-Other; 8/22/1961; FRAC'D W/  
60,000# 20/40, 20,000# 10/20 SAND AND  
1540 BBLS WTR, FLUSHED W/ 160  
BBLS WTR

PERF DAKOTA; 6,033.0-6,200.0;  
8/22/1961

Expendable Check w/ Mule Shoe; 2 3/8  
in; 6,116.2 ftKB; 6,117.0 ftKB

PBTD; 6,211.0

Production Casing Cement; 4,625.0-  
6,250.0; 8/19/1961; Cemented 1st Stage:  
150 sx, followed by 100 sx reg. TOC @  
4625' per TS.

Auto cement plug; 6,211.0-6,250.0;  
8/19/1961; Automatically created cement  
plug from the casing cement because it  
had a tagged depth.

2; Production1; 4 1/2 in; 4.052 in; 11.0  
ftKB; 6,250.0 ftKB

Comstock Phillips  
Well Name: MANGUNCA

# Proposed Schematic

API / UWI 3004507809	Surface Legal Location 028-029N-011W-K	Field Name BASIN DAKOTA (PROPRATED GAS)	License No.	State/Province NEW MEXICO	Well Configuration Type
Ground Elevation (ft) 5,200.00	Original KBART Elevation (ft) 5,211.00				

Original Hole, 1/1/2020 12:12:00 AM

Vertical schematic (actual)	MD (ftKB)	Formation Tops
	11.2	
	315.0	
	377.0	OJO ALAMO
Cement Retainer: 467.0-470.0	467.8	KIRTLAND
	517.1	
Cement Retainer: 995.0-998.0	995.1	
	1,029.9	FRUITLAND
TOC @ 1050' (8/61 Temperature Survey)	1,049.9	FRUITLAND COAL
	1,499.0	PICTURED CLIFFS
	1,599.1	LEWIS
	2,519.0	CHACRA
	2,619.1	
	3,140.1	UPPER CLIFF HOUSE (...)
	3,211.9	MASSIVE CLIFF HOUSE
	3,930.1	MENEFEE
	4,121.1	POINT LOOKOUT
Cement Retainer: 4,288.0-4,291.0	4,288.1	MANCOS
TOC @ 4625' (8/61 Temperature Survey)	4,337.9	
	5,112.9	GALLUP
	5,212.9	
Cement Retainer: 5,983.0-5,986.0	5,929.1	GREENHORN
	5,985.9	
	6,032.2	GRANEROS
	6,113.8	TWO WELLS (DK)
	6,200.1	PAGUATE
PBTD: 6,211.0	6,212.9	CUBERO
	6,215.9	ENCINAL
	6,250.0	